

**AN INVESTIGATION
INTO GEOCAPABILITY
AND FUTURE 3
CURRICULUM
THINKING IN
GEOGRAPHY**

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PhD

I, Richard Bustin, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm this has been indicated in the thesis.

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ABSTRACT

This thesis explores the extent to which the concept of the 'capability approach' can be applied to thinking about the value, aims and outcomes of a geography education. 'Geocapability' articulates the extent to which the powerful knowledge of geography is an essential component of a school geography curriculum. The thesis includes an empirical study of geography departments in two contrasting schools. Through interviews with teachers, pupils, parents, school leaders and governors, an understanding was gained about the way teachers view the curriculum, and the considerations and influences on their work. A teacher workshop was held to provide an insight into the 'curriculum making' process. Analysis of the data indicated that there was a variety of views of the aims of education, the significance of knowledge within it and the responsibility teachers have for the curriculum content. Discussion of the data identified that geocapability can provide a structured way for teachers to conceptualise a geography curriculum as it links broad educational aims, with geography as powerful knowledge to pupil outcomes in terms of life choices.

The thesis makes an original contribution to the field of geography education in a number of ways. Although a capability approach is familiar in several fields within education studies this is the first that links capabilities with the subject curriculum. It is the first school-based empirical study into geocapability which has helped to further and refine the concept. A conceptual model of geocapability is proposed to structure curriculum thinking for school geography teachers which enables teachers to conceptualise a knowledge led geography curriculum with broader educational aims and outcomes. A practical curriculum planning tool, the geocapability 'Framework' is developed, tested and presented

to help teachers ensure that powerful geographical knowledge is at the heart of a geography curriculum.

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CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

This thesis is about how the value of geographical knowledge in schools can be expressed. This research contributes to the understanding of what we teach young people in their secondary school geography lessons, and why, and what this knowledge enables young people to be able to do and think. At the heart of this research is an understanding of how teachers go about making curriculum decisions in their professional practice.

As a secondary school geography teacher running a busy and successful department I have continually been fascinated by the bigger questions which underlie my professional practice. It is very easy to focus on the day to day teaching of young people and never engage with the discipline of geography, or the discipline of education but by not engaging with these discourses, I believe teachers can become swept up in the latest teaching craze promoted by organisations with big voices, teaching unions, or the latest ideas from central government. By engaging with curriculum, teachers are in a position to be able to question, and to influence decisions which will ultimately affect the quality of education our young people receive.

In this first chapter I set the scene at the start of my research in 2010. I report on what I observed around me as a teacher, and how I felt helpless to stop what I felt was a move away from subject knowledge. The observations and ideas I report here are my own; I have used some selected references from sympathetic authors to substantiate some of the claims I make but this is my own reflection on the educational landscape in England in the 2010s. I review

the ideas and scrutinise them much more in the literature review of chapter 2. In section 1.2 I set the scene with observations about the changing educational landscape in the 2010s, before relating these ideas to the subject of geography in section 1.3. In section 1.4 I illustrate these struggles with real examples of two schools to show how these debates manifested themselves in schools. Having outlined a bleak picture of schools, and of school curricula I then offer some positive thoughts about the potential of school geography to engage with these debates (section 1.5) and this leads on to a discussion about the idea of 'geocapability' and the questions I ask in this thesis (section 1.6). In section 1.7 I outline the funded projects that have taken place into geocapability, and outline my role and the status of my research in the projects. Finally I offer an overview of the whole thesis (section 1.8) to help navigate through the complexity of ideas and empirical data before drawing the chapter to a conclusion (section 1.9). I start by offering my interpretation of the educational landscape in 2010.

1.2 SETTING THE SCENE: MY READING OF THE ENGLISH EDUCATIONAL¹ LANDSCAPE IN THE 2010s

In this section I set the scene of my research by outlining my observations and frustrations about the teaching profession at the start of the 2010s. These frustrations take a number of forms which I will consider in turn; firstly the changing balance between a subject based and skills based curriculum; then the perceived lack of overall vision for the aims of education; the changing place of moral issues in the curriculum; and the movement of teacher training away

¹ 'Education' is a vast term encompassing a variety of ideas. Throughout this thesis, references to education refers to the formal process of schooling.

from universities and into schools. To set the scene, I offer a brief historical interpretation of some of these issues and how they affected me over the course of my career to date.

School subjects being at the heart of a school curriculum has been the traditional experience of the British education system, and with the introduction of the National Curriculum in 1988 into all state run schools in England, the content of the school curriculum was 'fixed' into a series of subjects. Although independent schools have always been exempt from the National Curriculum, the vast majority offered a subject based curriculum. The idea was simple: all children across the country irrespective of background would receive a similar educational experience. They would all study a mixture of 10 subjects; English, mathematics, science, technology, history, geography, a modern foreign language, music, art, and physical education. These subjects were not new creations, but had been the basis of schooling since the turn of the century. As White (2006) asserts "the 1988 curriculum could almost have been lifted from the 1904 regulations for the newly created state secondary schools" (p2). Each subject had a specified list of content, and the role of the teacher was to deliver, and assess this content to children in classrooms. The teacher's professional role since 1988 has been to identify ways of delivering this prescribed content in dynamic and engaging ways, rather than worrying about grander ideas about aims, values and knowledge content. Yet there was no overall set of aims driving the creation of the National Curriculum. As White (2006) claims "when the National Curriculum appeared in 1988, it was all but aimless. It consisted of a range of subjects, but lacked any account of what these subjects were for" (p1). Aims were not created until 1999, but this was problematic as "the aims came after the laying down of the subjects. Almost all of these subjects had

been compulsory since 1988 and dominant for decades before this” (ibid p4). The aims of education were therefore imposed on a curriculum structure that already existed.

It was due to this lack of overall vision for education that subsequent re-writes of the National Curriculum seemed to me to change the nature of subjects. With each re-write, there was a slow but gradual change to the traditional subject based curriculum. New subjects were added to fill a perceived inadequacy in a school’s educational provision, which perhaps traditionally would have been the responsibility of parents. The boundaries between parenting and education seemed to blur with each new subject addition. ‘Personal, social and health education’ (PHSE) was introduced in 2000 to teach children the importance of healthy lifestyles, sex education, and relationships; ‘citizenship’ was introduced in 2002 to teach children the importance of voting, and what it means to be part of British society. As QCA (1998) argued,

“...citizenship education is urgently needed ... if we are to avoid a further decline in the quality of our public life and if we are to prepare all young people for informed participation, not only in a more open United Kingdom, but also in Europe and the wider world, as we move into the next century” (p14).

Yet these new subjects did not have a long heritage, unlike their traditional counterparts. It seemed they were amalgamations of bits of existing subjects; much of PHSE could be covered in both biology and through English Literature; citizenship in history, geography and RE. I felt that academic subject teachers were increasingly using curriculum time to not teach their subject; time allocated

to the traditional subjects was reduced which meant children learnt less geography, less history, less science.

By 2008, just as I was finding my feet as a classroom geography teacher, and after a decade of rule by the modernising Labour government, the National Curriculum 'big picture' (QCA 2008) appeared, a model of the school curriculum (shown in appendix 1), and it showed a small and diminished role for subjects. There was, however, a clear aim of education being articulated, which was to create "successful learners, confident individuals, and responsible citizens". This reduced education to a set of ideals which Ledda (2007) asserts "are worse than irrelevant. They are anti educational" (p15). These aims make no mention of knowledge, or of subjects. These three aims could equally apply as aims of good parenting, rather than aims of a national education system. The school curriculum was influenced by the 'learning power' philosophy, summed up by this quotation from the 'campaign for learning':

"Since we cannot know what knowledge will be most needed in the future, it is senseless to try to teach it in advance. Instead, we should try to turn out people who love learning so much and learn so well that they will be able to learn whatever needs to be learned" (Holt, 2015).

The view suggests that subject knowledge is irrelevant and archaic and no longer suitable for young people. It suggests that the only reason knowledge is taught to young people is in case it is 'needed in the future'. This perhaps explains why PHSE and citizenship were introduced; knowledge in these subjects has perhaps a greater direct relevancy to everyday life than a Shakespeare poem, or understanding the reasons behind the Second World War. The more traditional knowledge had seemingly become defunct and

outdated. With a 'love of learning' young people should be able to discover these things for themselves if they want to in the future. I felt there was a problem with this assumption; the exact mechanisms by which this would occur are problematic without a grounding in the disciplined thought processes offered by subjects but these pro-subject, pro-knowledge arguments were considered outdated. In some schools geography, history and RE were combined to form 'humanities' for 11 to 14 year olds. This does free up curriculum time for other 'subjects', but does mean that if a humanity teacher was a historian this could result in a generation of children not being taught any geography or RE in their school career.

Formal education at the end of the first decade of the 2000s was becoming much more child centred and personalised; with teachers expected to know and respond to each child's preferred learning style, and to differentiate their learning activities accordingly. The in-school teacher training days I took part in at this time certainly seemed to focus on these themes. Emphasis for teachers was all about *how* to teach and not *what* to teach. Classrooms were busy places full of thinking skills activities and children were taking part in what Lambert (2005) has described as a 'pedagogic adventure' where children do all manner of engaging activities without a deep reflection on the knowledge they were learning. These educational ideals, as Lambert (2008) argues,

“...have become the new orthodoxy, buoyed up with the beguiling rhetoric of 'learning to learn' and 'personalisation' but impoverishing the language of education to such a degree that I fear we may have lost track of its moral purpose” (p209).

This lack of a moral purpose of education is a sentiment that Furedi (2004) had noticed pervading many areas of social policy and modern society, arguing we had created a “therapy culture” in which everything is about creating well adjusted, happy young people but at the expense of any knowledge development.

I also had gained a sense that the place of moral issues in the curriculum had become distorted over this time. Many subjects, though particularly the humanities of geography, history and RE, enable children to engage with values. Through subjects, with good subject specialist teachers, children are able to understand climate change, different political opinions, varying religious ideals and through these subjects can arrive at their own understanding which in turn will influence how these young people live and behave in the future. I felt some of these ‘new’ subjects on offer seem to bypass knowledge and get children to engage directly with opinions. Children are expected to engage with ‘citizenship’, and ‘British values’ with an aim to voting in national elections without understanding the need for voting, or the historical fights that have existed in the past which have ensured our current freedom and right to hold democratic elections. As Morgan (2008) has argued, “since 1988 the work of... teachers has become increasingly tied to the needs of the economy and operated through the mechanisms of the state” (p20). As the think tank CIVITAS (2007) continued, “Teachers are expected to help to achieve the government's social goals instead of imparting a body of academic knowledge to their students” (p1). Through the notion of a ‘body of academic knowledge’ CIVITAS recognised the importance of academic, subject knowledge. Standish (2009) continues,

“...rather than teaching pupils about the world so that they can decide the most appropriate course of action, global citizenship education is tied to the specific non-academic values that tend towards the replacement of knowledge with morality as the central focus of the curriculum” (p39).

Knowledge was slowly being taken out of the school curriculum and was being replaced with a set of predetermined national values. As Furedi (2007) argued,

“...everyone with a fashionable cause wants a piece of the curriculum... increasingly the curriculum is regarded as a vehicle for promoting political objectives... (and) transmitting the latest fashionable cause or value” (Furedi 2007 p1- 2).

Without knowledge, children would be unable to query or question the nature of the values they were being promoted, nor given the chance to understand the importance or relevance of these values. Children simply needed to obey, and be unquestioning in the following of the values that were being promoted. I felt uncomfortable with this inevitability.

A change of government in 2010 to the coalition between the Conservatives and Liberal Democrats saw an education policy change, continued into the Conservative government of 2015, dubbed by Lambert (2011a) the ‘knowledge turn’ in education. A focus on ‘knowledge’ was back on the National Curriculum for schools, as a response to the skills agenda of the previous decade. Each subject community was asked to create a list of ‘core knowledge’ of what children should be learning in schools in that subject. Michael Gove, the then education secretary along with his education minister Nick Gibb held a view of knowledge in education that was similar to that espoused by Hirsch (1988) who wrote a book detailing ‘what every American needs to know’. These are lists of

facts and ideas deemed to be appropriate for each age of child. But knowledge in this tradition is static, uncritical and assumes that each subject does have a 'list of content' than can easily be drawn and created and passed down 'from generation to generation'. It is akin to the early versions of the National Curriculum with its detailed prescriptive content that simply needed to be learnt.

The knowledge turn influenced much of the educational policy in the 2010s, and it was not just at key stage 3 where changes were afoot. Whole scale rewrites of the GCSE and A Level courses occurred in 2015 and 2016. The content of the new A Level courses was influenced by the newly created ALCABS, 'A Level content advisory boards' made up of a seemingly random selection of academics from various fields keen to ensure their research interest was part of the new A Level courses. These new courses were very detailed on content to be learnt. The 'knowledge turn' seemed to promote a 'traditional' approach to knowledge in which children learn page after page of facts with little critical engagement or reflection on what was being learnt.

The knowledge turn was happening against a backdrop of a perceived recruitment crisis in teaching, which itself prompted changes in the way teachers were being trained (see Tapsfield 2016 for a discussion related to geography teachers). The changes saw a reduction in the numbers of university based initial teacher training courses and a shift towards more school based training. In the university based 'post graduate certificate of education' (PGCE) courses, groups of subject specialists trained together under the supervision of university and school based mentors. This meant beginning teachers are able to learn theory and practice and reflect on this within subject groupings.

Conversely, school based training reduced the amount of theory being taught by subject education experts, with an increase in more practical training. More

significantly through school led routes, however, new recruits were often trained individually in schools. As Tapsfield (2016) observed “the single trainee model, common in many school led routes, limits opportunities for trainee... teachers to work together and share best practice” (p108). In schools, there may have been only one new teacher in a given subject which meant they could not work together with other new teachers in that subject. I would question the extent to which teachers trained in this way could really develop a strong, subject based professional identity. Ironically, just as schools needed subject specialist teachers to fulfil the needs of the ‘knowledge turn’, opportunities to develop high quality subject specialist teachers, as opposed to more ‘generically’ trained teachers, reduced.

To me, the story of the English education system since 2000 has been a battle of curriculum ideology. On the one hand there was a need to enable children to develop values and beliefs befitting a 21st century child whilst at the same time enabling them to develop skills valuable for the modern post-industrial workplace. This position has been summarised by Young (2003), who argues,

“...a growing tension has become apparent between the fluidity and openness to innovation of successful advanced economies—what some have termed ‘fast capitalism’—and the persistence of relatively rigid divisions between the different school subjects and disciplines and between curriculum knowledge in general, and the knowledge that people use in employment and more generally in their adult lives” (p99-100).

For Young (2003), the tension is between the rigidity of subject knowledge and the sort of knowledge children will be engaging with in their adult lives. Subject

knowledge has been deemed old fashioned and subjects have taken a diminishing role in some schools. This ideological battle has had implications for the subject of geography and in the next section I relate these observations to the place of geography as a school subject.

1.3 SETTING THE SCENE: MY READING ON THE CHANGING PLACE OF GEOGRAPHY IN SCHOOLS IN THE 2010S

In the last section I offered my understanding of the changing educational landscape in which I was teaching at the start of the 2010s, and placed this in a brief historical setting. In this section, I relate how these changes have impacted on the subject of geography in secondary schools. First I outline the challenge of defining what the subject of geography is about before mapping out what I feel are the biggest changes to the nature of geographical knowledge over time. Finally I relate this to the state of geography education at the start of the 2010s, with non-subject specialists teaching geography (e.g. Tapsfield 2016), traditional geography knowledge content being taken up by other subjects and declining pupil numbers opting to study the subject post 14 (Butt 2008). As a school subject, geography was enshrined in the National Curriculum of 1988 and in subsequent rewrites has retained its place as a subject but continued curriculum pressures has seen its content change, as it adapted to various curriculum demands. In an attempt to produce a timeline of what I see as the most significant changes to the discipline of geography in both schools and universities, I have created figure 1.1, based on the work of Walford (2000) and Boardman and McPartland (1993 a, b, c, d).

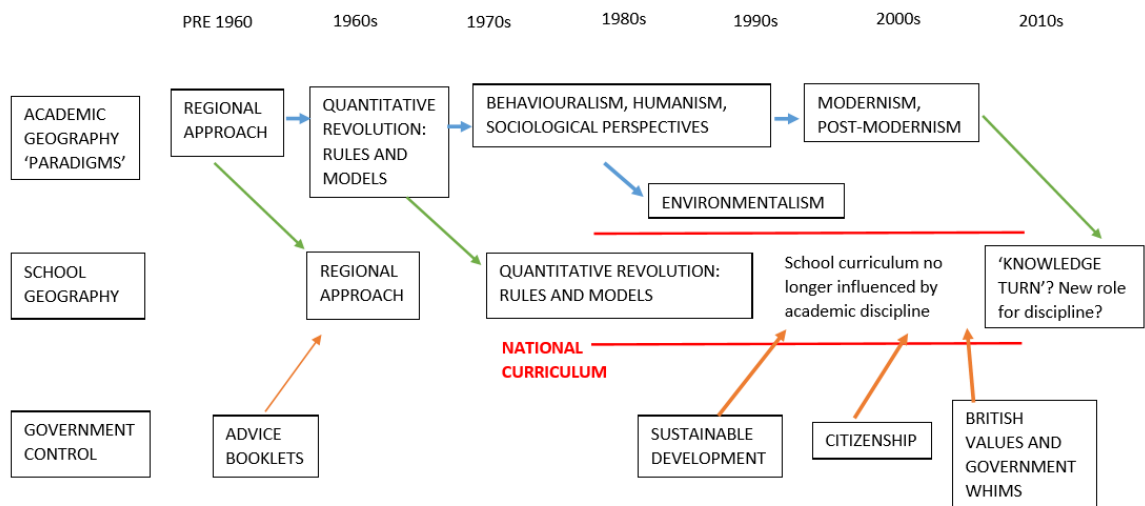


Figure 1.1: A timeline of the changing nature of geography as an academic discipline and school subject (based on Walford 2000, Boardman and McPartland 1993 a, b, c, d).

Figure 1.1 shows a timeline of changes from pre-1960 through to the 2010s. The top set of boxes shows the development of geography as an academic discipline in universities. It shows how the subject developed through a series of 'paradigms'; the relationship shown here suggests a linear progression (with blue arrows) but in fact these ideas are often developed concurrently, what I have tried to show is the main time they have become the dominant paradigm in the discourse. The 'regional approach', often dubbed the 'capes and bays approach' due to its descriptive nature of naming landforms and places, gave way to quantitative methodologies in the 1960s when the subject was attempting to use statistical methods to add rigour. This gave way to a swathe of more humanistic and behavioural approaches throughout the 1970s and 1980s which in turn influenced modernism and post modernism in the 1990s and beyond (e.g. Walford 2000). This suggests geography is a vibrant and

dynamic academic discipline, constantly evolving to help explain a changing world.

The second row of boxes maps out what was going on in schools at the same time. I am suggesting that school geography seemed to mirror academic geography, but with a 20 year time lag, shown by the green arrows. Ideas from academic geography informed a generation of graduates but these were not incorporated into school curricula until those graduates were in influential positions in schools and as textbook writers and examiners. This relationship between academic and school geography did not last long as the National Curriculum of 1988 'fixed' the content of geography for the next 20 years, shown by the red lines. Thus school geography of the 2000s was still influenced by many of the advances made in the quantitative revolution of the 1960s and seemed untouched by many of the later humanist and modernist paradigms (e.g. Boardman and McPartland 1993 a,b,c,d). This has meant the geographical knowledge component of school and university geography has been drifting apart in what Goudie (1994) described as the "great divide". I was acutely aware of this myself as a young geography teacher. At university I had been fascinated by postmodern urban geographies but in schools I was now teaching, as fact, urban land use models, simplified maps of a cityscape that were developed in the 1930s through to the 1960s to help describe cities. I found this a frustration; cities are fantastic places and geographers have unique ways to help understand the landscape but somehow teaching land use models as facts to be learnt was too simplistic. The lack of complexity was part of the reason geographers moved on from models to find new ways of understanding cities. Smith and Ogden's (1977) observation that "students entering university are often unprepared for the kind of geography that awaits them" (p47) was

even more acute in the 2000s. It was this frustration that inspired me to research the 'great divide' as part of Master's level research. In this research, subsequently published (Bustin 2011a, 2011b), I taught postmodern urban geographies to secondary school children as part of their urban studies geography course to attempt to bridge this 'great divide'. Other teachers and writers were also drawing on contemporary geographical ideas to create inspiring classroom activities (e.g. Oakes 2004) but these were often small scale and piecemeal.

The final part of Figure 1 shows the influence of the national government. In the 1960s and 1970s, advice to teachers came in the form of advice booklets (e.g. HMI 1978), but with the introduction of the National Curriculum the control becomes even tighter. In recent decades the geography taught in schools has become increasingly influenced by government curricular changes, shown by the orange arrows in the diagram. I have sensed geography has increasingly become a vehicle for education for sustainable development, citizenship, and other political projects. Part of the reason the subject seems to be able to embrace curricular changes is due to its vast potential knowledge base. This has always meant the subject knowledge base has been 'malleable', and has allowed various 'fashionable causes' (as described by Furedi 2007) to infiltrate and dominate the geography curriculum. It is this increasing dominance of the 'social education' component of the geography curriculum that unbalances what Marsden (1997) described as his idealised geography curriculum. For him, there are three parts of a geography curriculum which should be kept in balance. These are the *subject* component, *educational* component and *social education* component. As he warns,

“...unhealthy stresses arise when the three basic components of curriculum planning are not kept in reasonable balance. One imbalance occurs if the *subject component* is given too high a priority, resulting in a domination of content...the second problem emerges when the *educational component* is over- stressed... the third tension arises when the *social education component*, often associated with a contemporary good cause or issue, holds sway” (original emphases p242).

In particular, during the 2000s, the importance of responding to climate change and other environmental causes, pro-European sentiment and buying fair trade products were all promoted through the geography curriculum. Thus by the 2010s, much had been written about the geography curriculum’s political causes, with an article in the Times newspaper entitled “School children are victims of a green conspiracy” (6th October 1997) followed on by an article in the Independent “is geography brainwashing?” (6th February 2003). The ideas were explored more fully in two important books that had a huge influence on me, and my thoughts about geography education. The first, “The Corruption of the Curriculum” (Whelan 2007) took a holistic view on the whole curriculum, and Standish’s (2007) chapter ‘geography used to be about maps’ argued strongly for the case of the overt politicisation of school geography. The second book is a continuation of these ideas, “Global Perspectives in the Geography Curriculum” (Standish 2009) which focussed on the increased politicisation of the school geography curriculum. Standish (2009) illustrates the issue with regards to the teaching of ‘Fairtrade’ in geography lessons of the 2000s,

“...pupils are not necessarily told what to think but the information presented is unlikely to lead one to question... the issue is presented to the students in simplistic, narrow and personal terms. There is no

evaluation.... the issue has been removed from its wider social and political context making it solely a matter of individual consciousness” (p.45).

Knowledge of Fairtrade and global consumption patterns has been removed. What Standish (2009) calls for is the teaching of Fairtrade to occur within a broader framework of geographical knowledge. He argues that only by understanding what fair trade, and therefore presumably unfair trade, actually is, and how it develops, can children engage with the concept. This critique made much sense to me. By increasing the knowledge basis and introducing children to ideas about globalisation, trade patterns and global economics children can gain an understanding of these issues, and are then in a much stronger position to form their own values and opinions about their consumption patterns, rather than being told what to do and how to behave by their geography teachers. This was how I saw the subject, and Standish (2009) articulated many of my frustrations at the time, but I felt it was not how the subject was perceived by many teachers in the 2000s.

Whilst Standish (2007, 2009) was an advocate of an increased knowledge base for school geography, the type of ‘core knowledge’ Standish (2007, 2009) was promoting appeared to me to be similar to the ideas of Hirsch (1988); that there was a set of core geographical knowledge that can define the content of school geography. It was this belief that set Standish apart from his peers, and from me. As Lambert and Morgan (2009) explain,

“Standish writes almost with a kind of wistful sense of loss, using the title ‘geography used to be about maps’ with only the slightest irony. His response to the particular concern of political interference is to laud the subject itself, as if subject knowledge *itself* were natural, stable and

legitimate, and not a human creation subject to change... he argues for the importance of the body of knowledge in its own right and the need to pass this tradition on to young people ” (p154).

Trying to define what knowledge might make up the ‘core knowledge’ of geography became the topic of debate amongst teachers, academics and subject communities at the end of the 2000s around the time of National Curricular reform. Standish put forward his version of a core knowledge based curriculum, and these were considered alongside proposals from the Geographical Association (GA 2011), the subject association for geography teachers, and the Royal Geographical Society (with Institute of British Geographers). The knowledge content of the secondary geography curriculum was an important topical debate in geography education at this time, but was dominated by definitions of the subject and expressions of what core geographical knowledge actually was rather than trying to look more widely at why we want children to learn geography and some of the broader questions about the aims of education. I couldn’t help but think unless these questions were answered, any attempt at trying to define subject content would end up in further disagreement and confusion.

The final section of the of the diagram in figure 1.1 illustrates the situation with the 2010 version of the National Curriculum; the tight grip on defining content was reduced to a series of ‘topics’ and teachers were able to interpret these for themselves. Yet without engaging with curriculum content for over 20 years, I was concerned how teachers would respond to this challenge.

I also detected other influences that I felt were affecting the quality of geography teaching at this time. There was an increasing number of non-specialist geography teachers teaching geography classes (e.g. Tapsfield 2016). If the

teacher does not have a rigorous understanding of the geography, then the ability to introduce students to, and enthuse them in the discipline becomes impossible. This also coincided with an observation from Roberts (2010) that trainee teachers were not really being assessed on the knowledge content of their lessons. Only 3 out of 33 standards required for qualified teacher status actually refer to subject knowledge. As she observed,

“I have become particularly concerned about the extent to which lesson plans, lessons and debriefing give more attention to general aspects of lessons than to the geography being taught and learned” (p112).

Teachers can be judged ‘outstanding’ with only a cursory mentioning of the knowledge content of geography, or worse still, with knowledge that is factually incorrect, particularly if the lesson was being observed by a non subject specialist. As Lambert (2016) observed of Roberts’ (2010) writing, “that a leading commentator on geography education should need to make such an obvious point is remarkable” (p395). Geography should be at the heart of a good geography lesson but in practice this seemed to be not so.

I was convinced that these trends had a negative effect on the geography studied in schools, and the experience of pupils. These trends included the lack of engagement with the academic discipline; the increasing political curricular influence; the changing status of knowledge in the curriculum; and lack of geographical qualification and experience of some teachers, itself a product of the changing nature of teacher training (e.g. Tapsfield 2016, see the discussion in section 1.2).

The Office for Standards in Education, (Ofsted), the government appointed schools inspectorate concluded in 2008 and 2011 that geography was “boring” and “irrelevant” to many of the pupils in schools (Ofsted 2008, 2011a).

Geography was a compulsory subject in key stage three, up to the age of 14 but then became optional, and at a national level, numbers of students opting for the subject were in decline at GCSE and A Level (Butt 2008). Figure 1.2 shows this decline (ibid p.159) from 1997 to 2007.

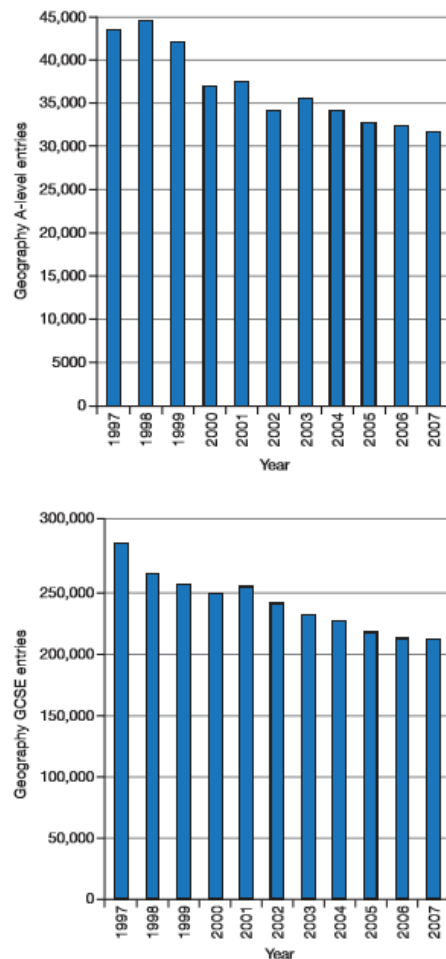


Figure 1.2: The steady decline of national candidates for A Level and GCSE geography 1997- 2007 (from Butt 2008)

The trend in student numbers identified by Butt (2008), and shown in figure 1.2 did reverse in the decade following the publication of the data (JCQ 2016), a product, perhaps, of the introduction of the English Baccalaureate (E Bacc, DFE 2016), a performance measure of schools which forces children to choose either history or geography at GCSE (along with a suite of other supposedly more rigorous subjects). I discuss the E Bacc further in relation to data in this

thesis in section 4.5.2. In spite of more children studying the subject, the quality of the geography they were learning, knowing who was responsible for teaching it, and what would happen to the future of the subject in schools was still, in my mind, questionable.

Despite these challenges, I was convinced there was still a fundamental need for the study of geography in schools. As Boulding (1985) argued,

“What formal education has to do is to produce people who are fit to be inhabitants of the planet. (Otherwise) young people are going to grow up and discover that we have taught them how to live in a world long gone” (Boulding 1985 p1).

With the contemporary challenges of climate change, poverty, globalisation and environmental degradation, geography is the subject to tackle these issues with students. Taught well by geography subject specialists, these contemporary issues could be taught in a way that will not persuade the students to arrive at a pre-determined view, but would enable the children to engage with a variety of knowledge and data to build up their understanding so they can come to their own view about these contemporary issues. I had observed that other subjects, including citizenship and PHSE had started to contain the topics currently part of a modern geography education. Thus there was still a need to ensure these contemporary challenges were seen as being “geographical”, as

“Without a substantial geographical component, it is possible to argue that young people will be restricted in their capacity to make sense of the complex, unequal, fast changing and often dangerous world in which they live” (Lambert 2008 p207).

Geography is the only subject that will enable children to develop the knowledge required to understand, and make sense of these contemporary global issues.

Put simply, I was worried about the future of my subject in schools. I was concerned that geography might become like Latin; still taught in the independent, more academically minded schools but non-existent in the majority of schools, where important geographical ideas would be taught in other subjects, by non-specialists. In this section I explained my views, but in the next section I want to illustrate these ideas by outlining what I saw going on in schools around the country at this time, and how schools had responded to many of the fears I have identified.

1.4 SETTING THE SCENE: TWO SCHOOLS IN 2015

In the last section I outlined my thoughts about where I saw education in the 2010s. In this section I illustrate what impact some of these changes have had in real schools by describing the curriculum of two schools. The inclusion of these schools is simply to illustrate how some of the frustrations I identified in the previous section manifested themselves in schools. The creation of 'academies' by the Labour government, which was continued and expanded to include 'free schools' under the coalition government meant that new schools were created that sat outside local authority control, despite receiving national funding. The curriculum on offer to the children in these schools did not have to follow the National Curriculum at all; and this created a diversity of pupil experience across the country. A look at two schools in England in 2015 helps illustrate this varied pupil experience, section 1.4.1 illustrates the RSA Academy

in Tipton, followed by a look at Chessington Community College, Surrey in section 1.4.2. The information about these schools comes from their own school publicity, and what I offer here is my understanding, and my interpretation of what they claim about themselves.

1.4.1 The RSA Academy, Tipton, West Midlands

In this section I illustrate the nature of a school curriculum in a newly created academy, the RSA Academy in Tipton, West Midlands, opened in 2008. Its curriculum is inspired by the ‘Opening Minds’ philosophy, which is,

“...an innovative approach to the curriculum for school-aged students that aims at integration, rather than a subject-based and thus fragmented approach to knowledge. It lends itself to a more holistic and learner-centred approach that encourages interdisciplinary enquiry, the stimulation of learning power, and the acquisition of transferable skills” (Jaros and Deakin-Crick 2007, p. 436).

The curriculum is not centred on academic subjects but instead around projects and learning experiences that are, by their nature ‘interdisciplinary’. Students experience four 90 minute lessons per day. Subjects do appear in the curriculum, but alongside these are projects and competency based activities. As Lambert (2016) observes,

“...the school subjects that get sacrificed to make room for such innovative curriculum initiatives are rarely mathematics, science or languages. It is the arts and humanities that are deemed suitable for experimentation” (p393).

GCSE courses start in Year 9, and geography, history and IT appear as separately taught subjects only in Year 8. This means a young person coming from a primary school, where geography and history could well be taught as part of an integrated humanities programme only receives one year's worth of subject lessons before they start the GCSE course. Most schools will give young people three years (the whole of key stage 3) to develop the knowledge and skills to enable access to a GCSE course that starts in Year 10.

Ofsted's comments about the curriculum in the first and second inspections (2011b, 2014) were revealing; "The key competencies approach of the 'Opening Minds' programme promoted by the Royal Society of Arts, the academy's sponsors, is used well in the better lessons" (Ofsted 2011b, p4). However, their main criticism was around the acquisition of subject specific knowledge. As they argue, "some students were constrained because they did not have the subject specific vocabulary they needed across the curriculum subjects to develop their understanding of different concepts". (ibid, p4-5). The inspection was similar in 2014, when the academy was graded 3 which 'requires improvement'. A response might be, of course, that Ofsted still measure success on traditional criteria that does not fully capture the benefits of the holistic vision that the Opening Minds philosophy can give. My feeling is that Ofsted were correct in criticising children not being taught knowledge, and I agree that their curriculum 'requires improvement' for the sake of the children who have to go to school there. Pupils were also achieving below the national average results in GCSE subjects, and I think this could be because they did not have the grounding of knowledge in those subjects from key stage three. My interpretation is that the development of the young people who live in the catchment area of this school has been hindered by a non-subject based curriculum. Despite much publicity

and positive rhetoric, in my view, this school is denying children access to knowledge, and therefore, denying them an education. In the next section I illustrate the curricular organisation of Chessington Community College in Surrey.

1.4.2: Chessington Community College, Surrey

The second school I illustrate is Chessington Community College, a state school that still falls under local authority control and which is a large, ethnically diverse secondary school in north east Surrey. It has introduced a skills based key stage three called 'Skill 7' in year 7 and 'Skill 8' in Year 8. As they promote in their prospectus,

“At Chessington Community College we have an innovative curriculum for Year 7. Called Skill 7, it incorporates English, history, geography, religious education, drama, citizenship and ICT, and it has received plaudits across the borough... Pupils are taught by their tutors and study Skill 7 lessons for 18 lessons every fortnight. On one day a fortnight, they are taught Skill 7 for a whole day to deepen learning and allow a range of project activities and challenges to take place” (Chessington Community College 2014, p4).

This cross curricular approach at least acknowledges the existence of subjects, but children's exposure to and experience of these subjects varies. As their prospectus continues,

“In the first half term, we focus on team building, orienteering, making a presentation to an invited audience and we visit the Battle of Hastings

site... Other projects include organising and planning your own business as well as becoming investigative journalists where we contribute to a blog and newspaper.” (ibid p5).

These ‘projects’ may have huge benefits for children, but not, in my mind, for the development of their understanding of academic subjects which seems restricted by the skills agenda. Subject knowledge again has been marginalised for the sake of skills and competencies.

These two examples tell a similar story of how the ‘skills agenda’ has undermined confidence in a subject based curriculum. These schools are not independent schools in which parents make a positive choice to send their children along to. If they were, at least the children’s lack of academic progress, but strong skill development, becomes a choice for parents to make. It is the idea that parents who cannot afford to send their children to more academic private schools, where rigorous knowledge is taught through traditional subject disciplines, have to send their children to these schools that highlights the inequality and unfairness of the system in the 2010s. Despite this negative view of schooling, I was positive about the future. In the next section I want to illustrate why I felt so confident about the future of school geography at this time despite the challenges previously identified.

1.5 SETTING THE SCENE: EXPRESSING THE POTENTIAL OF SCHOOL GEOGRAPHY

In the last section I illustrated my worries about the nature of the school curriculum during the 2010s, with schools seemingly free to pursue a skills based agenda at the expense of teaching rigorous academic knowledge to

children. In this section I offer some hope by outlining the ways the more topic based National Curriculum for geography, with the support of the teacher subject associations such as the 'Geographical Association' (GA), provide exciting opportunities for geography teachers.

The arguments and examples of the last two sections sets up a bleak picture of school geography in the 2000s, and in 2009 Lambert (2009) described geography in education as being "lost in the post"². He meant the subject community seemed too concerned with arguments over definitions of content, knowledge, skills, and assessment when really there was a much bigger argument to make about the aims, values and purposes of geography as a subject in schools. If this could be expressed, if the subject community was able to articulate why geography mattered in schools, then decisions about what to teach would be easier to make.

It was this grand thinking that led to the Geographical Association's (GA) (2009) manifesto for geography. The GA was moving discussions about the subject away from a content driven set of facts, to be seen more as a "curriculum resource" as they argue "contemporary challenges... cannot be understood without a geographical perspective" (GA 2009 p5). The manifesto was a "re-affirmation of geography's place in the curriculum" (ibid p5). It was an ambitious mission statement about the nature and role of geography in the school curriculum. It was aimed at inspiring teachers in schools where geography had been marginalised or lost to 'humanities', such as the two illustrated in the previous section, or where an outdated and boring set of 'factual delivery' of knowledge dominated classrooms. It was aimed too at teachers whose real

² It was in Lambert (2009)'s inaugural professorial lecture in 2009 entitled 'Geography Education: Lost in the post' that the idea of 'capabilities' was first alluded to.

world case study examples of phenomena had not been updated. As Lambert (2009) in the manifesto urges “we may need to throw out crusty old favourites ... in favour of... lessons that challenge students to make geographical sense of their own lives and experiences” (p1). This quotation was a response to those ‘boring’ and ‘irrelevant’ lessons (as identified by Ofsted 2008 and 2011a) which were dominated by dry facts, but it too can be misinterpreted as promoting a child centred approach to education which downplays any sort of knowledge development. Lambert (2009) was able to move the debate in the geography education community beyond defining facts that needed to be learnt, but at this time he had not grasped the significance of trying to define the educational aims of the subject and the importance of knowledge as part of these aims.

Throughout National Curriculum re-writes of 2007 and 2013 the prescribed content of geography reduced, with the 2013 version being printed on two sides of A4 and with series of topic statements to cover the whole of key stage three. Figure 1.3 is the knowledge component of the 2013 National Curriculum requirements for geography (DFE 2013).

Pupils should be taught to:

Locational knowledge

extend their locational knowledge and deepen their spatial awareness of the world’s countries using maps of the world to focus on Africa, Russia, Asia (including China and India), and the Middle East, focusing on their environmental regions, including polar and hot deserts, key physical and human characteristics, countries and major cities

Place Knowledge

□ *understand geographical similarities, differences and links between places through the study of human and physical geography of a region within Africa, and of a region within Asia*

Human and physical geography

□ *understand, through the use of detailed place-based exemplars at a variety of scales, the key processes in:*

□ *physical geography relating to: geological timescales and plate tectonics; rocks, weathering and soils; weather and climate, including the change in climate from the Ice Age to the present; and glaciation, hydrology and coasts*

□ *human geography relating to: population and urbanisation; international development; economic activity in the primary, secondary, tertiary and quaternary sectors; and the use of natural resources*

□ *understand how human and physical processes interact to influence, and change landscapes, environments and the climate; and how human activity relies on effective functioning of natural systems*

Figure 1.3: Extract from the 2013 National Curriculum showing the slimmed down content requirements for geography (DFE 2013).

Geography teachers were now responsible for interpreting the themes above into meaningful geography lessons. After two decades of being told what to teach and only having to decide on how best to do it, a generation of teachers were now having to innovate and decide on knowledge content for themselves. It was Morgan and Lambert (2005) who argued that lesson planning was an 'intellectual activity', not just a technical activity but I believed doing this 'intellectual activity' successfully required an understanding of the overall aims of geography education. The interpretation of, for example, "the use of natural

resources” required teachers to understand what aspects of natural resources they want to teach, and the ideological basis for these decisions. They would need to decide what sort of knowledge and understanding they wanted their children to gain from a course on natural resources.

My fear was that teachers could teach ‘the use of natural resources’, or any of these topics without actually engaging with any geographical knowledge, but instead use the lessons as a vehicle for promoting another of the school or governments agendas, for example, healthy eating. If pressed, a geography teacher could argue that ‘food’ is a resource and so healthy eating was a legitimate way to spend geography lesson time. This would arise out of a misunderstanding of the power of geography as a school subject. I felt, therefore, that there was a strong argument that needed to be made about the role of geography in schools that would help teachers to understand the nature and relevance of their subject and to ensure that there was a strong geographical element to their teaching. To convince teachers, the argument needed to be framed within a broad framework of ideas, linking the geographical knowledge taught in the classrooms with the aims of schooling. This is the challenge of this thesis, using the notion of the capability approach to provide this framework of ideas.

Ensuring that the geography on offer to children is not ‘boring’ or ‘irrelevant’, and ensuring that it actually contains rigorous geographical knowledge is a challenging task. I have attempted to help teachers think about approaches to teaching about ‘natural resources’ (Bustin 2015a) and published a set of 10 fully resourced exemplar lessons (Bustin 2015b) as part of the GA’s ‘teacher toolkit’ series but in order for teachers to construct rigorous geography lessons around the themes prescribed in the National Curriculum, a more structured framework

was needed. This is potentially where the idea of 'geocapability' (Lambert and Morgan 2010) could help. In this section I outlined a range of ideas that underpinned my professional practice during the 2010s and in the next section I introduce the concept of geocapability, the focus of this research.

1.6 GEOCAPABILITY: THE SETTING UP OF A RESEARCH PROJECT

The concept of 'geocapability' is explained more fully in the next chapter (see section 2.4.5) but in this section I briefly illustrate the origins and nature of the concept, and how I think it might provide a way for geography teachers to link educational aims with subject knowledge, and to relate this to student outcomes. First, I outline the origins of geocapability as a concept before linking it to some ideas about a 'Future 3' school curriculum, based on the work of Michael Young and Johan Muller (2010). Finally, I introduce the key research questions which underlie this thesis.

'Geocapability' is an approach to thinking that originates from the 'capability approach' by the economist Amartya Sen (e.g. Sen 1980) and philosopher Martha Nussbaum (e.g. Nussbaum 2000). As an approach it attempts to focus on what human functioning and abilities can result from education, as an alternative to looking at what grades or scores a child can achieve. The capability approach to education seeks to understand the purposes of education from the perspective of the outcomes for a child. It asks what we want a young person to be able to 'be like', or to 'think like', or to 'do' as a result of their education. These qualities are the 'capabilities' of a young person. The thinking offered through an engagement with geocapability attempts to express this through the subject of geography. As Lambert and Morgan (2010) argue

“geography education can contribute to developing the capability of young people” (p63), suggesting the knowledge component of geography lessons has a significant role to play in helping young people to develop their capabilities.

Using the capability approach to think about the geography curriculum could provide an opportunity to articulate an underlying purpose to the subject; as Lambert and Morgan (2010) continue “capability provides a framework for clarifying the educational goals” (p64). An understanding of this helps teachers to devise engaging contemporary lessons with a strong geographical knowledge component, and with a full appreciation of why they are doing it and how it leads to developing pupil’s capabilities.

Envisioning a curriculum with a progressive view of the importance of subject knowledge could link to ideas around a ‘Future 3’ (F3) curriculum (Young 2008, Young and Muller 2010) which is discussed more in section 2.2.5. In an F3 curriculum, knowledge is at the heart of a curriculum but not in a static way in which inert facts are passed on from one generation to the next, but in a way that treats knowledge as contested, vibrant, and open to discussion; what Young (2008) has called ‘powerful knowledge’ (discussed in section 2.2.5). The notion of a capability perspective on geography education could have implications to how teachers and educationalists see themselves as geography educators, and the role of geographical knowledge in education. A capability perspective on geography education could provide a means by which teachers can envision an ‘F3’ curriculum, and structure their curriculum thinking.

This thesis is setting out to investigate some of these possibilities. These discussions are ongoing, and in the next chapter I review the literature on all these concepts, but what was missing in the geography educational literature at

the start of 2010 was any evidence for these discussions; an empirical basis to these discussions was needed and this is what this thesis is contributing to. This thesis, therefore, is framed by a series of research questions which will be returned to in later chapters and responded to in the final chapter. These questions are outlined below.

The overall research question is: *How useful is geocapability as a framework for Future 3 curriculum thinking in geography?*

This main enquiry question has been subdivided into three further research questions:

- 1. How do the 'structural features' of education promote curriculum making in geography?*
- 2. How can capability develop student agency?*
- 3. What contribution does geographical knowledge make to the development of capability?*

The purpose of introducing these questions here is simply to help focus the discussions that will come later. Terms such as 'structural features', 'curriculum making' and 'student agency' are discussed in the next chapter. I return to these questions, and provide a full justification of their wording in section 2.5.

In this section I outlined the possibility of the capability approach to geography education providing a means by which geography teachers can conceptualise their work. The exploration of geocapability has already begun, with two internationally funded research projects, GeoCapabilities 1 (2012-13) and GeoCapabilities 2 (2013- 2016) taking place, and I discuss these projects, and my positioning in relation to them in the next section.

1.7 THE GEOCAPABILITIES³ PROJECTS

In the previous sections I outlined and illustrated what I felt were some of the biggest issues facing the British school curriculum in the 2010s, with a focus on the subject of geography. In the last section I introduced the concept of geocapability as a possible way for teachers to move beyond some of these debates and I ended the last section by posing my research questions. In this section I introduce two funded research projects into geocapability that have taken place, running concurrently with my research. The first section outlines these projects (1.7.1) before I clarify my relationship with the projects and how my thesis fits into this research (1.7.2).

1.7.1 The GeoCapabilities 1 and 2 projects

In this section I give an overview of the two projects that have taken place into geocapability. The 'GeoCapabilities 1' project (2012- 2013), discussed in Solem et al (2013), was led by the Association of American Geographers (AAG) with funding from the US National Science Foundation's Geography and Spatial Science program. It was an international study comparing the stated national aims of the geography curriculum in three countries, USA, England and Finland to identify if there were any shared values within those countries about how school geography can contribute to a set of capabilities identified by Nussbaum (2000). Despite differences in geography education internationally the idea of geocapability as a means of valuing geographical knowledge resonated with

³ The projects capitalise the G and the C and uses it as a proper noun, 'GeoCapability'. I continue to use the word in its original formulation of 'geocapability' which is consistent with how it first appeared in publication (Lambert and Morgan 2010). I am also not hyphenating geocapability, which it sometimes has been in some of the project outputs.

people in the project and so this was followed by a much more ambitious three year, European Union 'Comenius' funded project, GeoCapabilities 2, (2013-2016), discussed in Lambert et al (2015). This project involved nine project partners, subject associations, universities and schools across the world. The project outputs included a website as well as a range of teacher training materials aimed at teacher educators to enable engagement with the powerful knowledge of geography within a capability framework. It attempted to empower teachers to be 'curriculum leaders' and to take responsibility for the nature and knowledge content of their own geography curricula. I played a role in the second of these projects, and I outline this in the next section.

1.7.2 My role in the GeoCapabilities projects

In the last section I outlined the two projects that have taken place into geocapability. In this section I clarify my position in regards to these projects, and the place of this thesis within the research projects. I made a decision at the start of the first of the GeoCapabilities projects to separate my research from the work of the projects. The reason for this was that I did not want to be constrained by the projects and I would therefore have more control over the direction of my research. The projects themselves had an international element and this could have led me into researching the realms of comparative education which I did not want to do; as outlined in this chapter, my motivations for undertaking this research were embedded within the English school context of geography education. Another key difference between my research and the projects was in the intended outcomes of each. The second project was seeking to create teacher training materials and I was in many ways asking a more

fundamental question, which questioned how useful the concept of capability is for teachers in the first place. Answering this question did involve me generating some form of material for teachers to use, but this was not an intended outcome of my research.

I was, however, actively involved in the GeoCapabilities 2 project as the lead staff member from partner 8, the City of London Freeman's School which is the school where I work as Head of Geography. This meant I was actively involved at the heart of project discussions. The project was therefore able to influence my thinking about geocapability, and I was able to contribute my own ideas back to the project, particularly as many of the early project meetings were spent unpicking key concepts and I was able to offer my understanding of these having already done much reading. As a school partner, my practical involvement in the project was more in the latter stages, where the school was required to host teacher training opportunities. Another key similarity between my research and the projects is the role of Professor David Lambert, who was both supervising this research and leading the second of the research projects. In this section I clarified my role in the GeoCapabilities projects, and in the next section I give an overview of my whole thesis before drawing the chapter to a conclusion.

1.8 THESIS OVERVIEW

This chapter has acted as an introduction to some of the key themes of the research. In chapter two I review the literature that underpins this research, identifying some key curriculum debates (section 2.2), and how these relate to geography (2.3), before reviewing the capability approach (2.4). I also fully

explain the origin and justification of the research questions (2.5). In chapter three I go through some of the methodological considerations and research plan for the empirical element of the research, namely the interviews and teacher workshop that I used to investigate geocapability. In chapter four I analyse the data, through a set of five themes that I identified from the interview and workshop data before discussing the data and responding to the key research questions in chapter five.

1.9 CONCLUSIONS

In this introductory chapter I set the scene for the thesis, arguing that, for me, geography as distinct subject in secondary schools in England has been under threat from both an increasingly skills based curriculum, and latterly from a curricular model that has reduced the importance of knowledge to a set of 'core' facts to be learnt. I used some examples of schools to illustrate the implications of some of these political decisions in the real world, with children not being able to access high quality geography education. I introduced the notion of geocapability as a means to articulate a more ambitious role for geographical knowledge in schools. I have introduced my research questions that frame this thesis, answering the need for empirical research into the aims of a geography education and the notion of geocapability, building on the work in recent publications (Butt 2011, Young and Lambert 2014) and funded research (GeoCapabilities 1 and 2 projects). This chapter was my own interpretation of what I saw going on in education, it was an argument put forward with selected references to substantiate some of the claims I made. In the next section, I review the literature in the key themes that underlie this thesis.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

In the opening chapter of this thesis the scene was set for the research by illustrating my thoughts and frustrations about the English educational system during the 2010s. In essence, a series of curriculum debates were opened up about the changing nature of knowledge in schools and the status of subjects and this was related to curriculum debates in the subject of geography. The chapter highlighted how this has impacted on children by outlining the curricular arrangements of two schools to act as an illustration of some of the points made. The chapter went on to discuss how the idea of 'geocapability' might provide a way beyond some of these debates.

In this chapter the literature that underpins these debates is reviewed. There are three sections that follow. In section 2.2 some key curriculum debates are opened up, in section 2.3 these are related to discussions around the school geography curriculum. In section 2.4 the genesis of the concept of capability is explained; how it developed through welfare economics to education, and then to geography education. In the final section (2.5) the research questions that were outlined briefly in section 1.6 are restated and justified. This enables the research questions to be understood within their broader conceptual framework. The chapter starts by investigating the literature around some contemporary curriculum debates.

2.2 CURRICULUM DEBATES

In this section the literature that exists about some of the key debates around the school curriculum are reviewed. The debates selected are those that have direct relevance to the ideas introduced in the last chapter. Firstly the section offers a definition of what is meant by the concept of 'curriculum' (section 2.2.1) before a review (in section 2.2.2) of how discussions around the school curriculum have gone from the language of a 'problem' (a term used by Graves 1975) to that of a 'crisis' (e.g. Wheelahan 2010). The next section reviews the literature into the nature of one of these crises, the place of knowledge in the curriculum (section 2.2.3). The two sub sections that follow then map out the nature of that crisis, discussing the contentions between a knowledge led 'Future 1' curriculum (section 2.2.4), and an aims led 'Future 2' curriculum (section 2.2.5). The final sub section (2.2.6) moves discussions beyond these crises by reviewing the ideas around the possibilities of a 'Future 3' curriculum. At the start of the discussions, however, is a definition of the term 'curriculum'.

2.2.1 The concept of curriculum

In this section the concept of 'curriculum' is discussed. First is a discussion of how 'curriculum' is both a theory and a practical consideration for teachers, then the ways contemporary writers have expressed this concept. This then leads on to a consideration of the aims of a curriculum in term of a clarification between the 'outputs' and 'outcomes' of a secondary school curriculum.

'Curriculum' is one of the most significant and profoundly important concepts in educational discourse. As Lambert (2016) explains,

“...the idea of ‘curriculum’ is arguably one of the very few powerful concepts genuinely to have emerged from the practice and study of education in modern times” (p395).

The term itself is derived from Latin for ‘race course’, as Lovat (1988) explains,

“...curriculum is, literally, a *course of action* designed to do a job, normally the job of educating an individual, a group or even an entire nation... A curriculum... is a *course to be run*.” (p205 original emphasis).

This analogy suggests that a curriculum therefore requires a sequentially interrelated set of ideas that runs and develops over time. The origins of the word in contemporary education derive from Bobbit (1918) who argued that the very existence of a curriculum was an ‘ideal’ rather than a concrete reality, and that it helps shed light on all interactions in the ‘social engineering arena’, how children gain and interact with knowledge and ideas in order to become an ‘adult’. As Stenhouse (1975) defined,

“As a minimum a curriculum should provide the basis for planning a course, studying it empirically and considering the grounds of its justification” (p5).

Thus, curriculum is a concept to be studied and understood.

Yet in schools, ‘curriculum’ has taken on a much more pragmatic definition, as an expression of how learning is organised. It defines the knowledge content as well as the skills, understanding, dispositions and ideals that students are to gain. For teachers, curriculum therefore has two meanings. One is the theoretical consideration of curriculum including its aims, why learning is designed in a particular way; what we want the children to be able to do by the

end of their learning; and ideologies and the belief system which underlies the way teachers work. The second is the practical definition: how the school day is structured to enable children to learn. Teachers cannot do the second without a clear understanding of the first, and the relationship between these two distinctions is an important consideration. In an attempt to show the relationship between the theoretical definition of curriculum, and its more practical outcome, Lovat (1988) devised a model (figure 2.1).

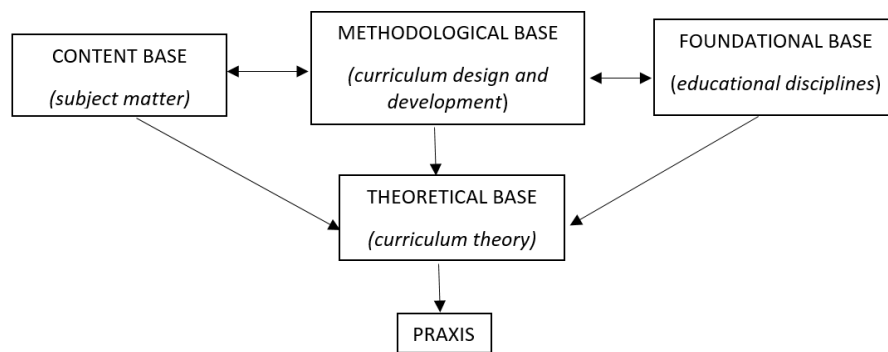


Figure 2.1: A model of curriculum linking content, methodologies and education to inform curriculum theory which directly informs practice redrawn from Lovat (1988 p212).

Lovat's (1988) model suggests that curriculum theory and curriculum practice are closely interlinked. The theoretical base which directly informs teacher practice is informed by three major considerations. First is the content base of curriculum, which includes subject knowledge and skills. The second is the foundational base of educational discipline, the understanding of educational discourse, such as how children learn. These combine to form the third consideration, the methodological base, how curriculum is designed and developed to enable children to learn subject knowledge. This then leads on to the theoretical base, how the curriculum is conceptualised, and what ideologies

underlie their creation. These careful considerations, all part of the curriculum theory, then lead on to 'praxis', the practical aspect of the curriculum; the classroom teaching and learning. Teachers working in schools bring the curriculum to life with a clear and defensible understanding of how these curricular ideas were developed through a strong curricular conviction.

Yet Lovatt (1988) also concedes that teachers do not have a clear understanding of 'curriculum'. Despite this long heritage of curriculum theory by educationalists, "we belong to a philosophical tradition which has tended to downplay the relation of theory to practice" (Lovat 1988 p206). Curriculum theory seems to have little impact on the actual school curriculum experienced by students since the 1980s. The reason, as Priestly (2011) explains,

"...may be attributed to the tendency for curriculum policy to become more prescriptive since that time. Initiatives such as England's National Curriculum undermined teacher autonomy through prescription of content, and increasingly methods" (p225).

The National Curriculum has defined the knowledge content of subjects, as I outlined in section 1.3. The result has been a generation of teachers from the late 1980s through to the present day who have become technicians, delivering a pre-determined curriculum resulting from government policy (e.g. Biesta 2010) rather than reflexive professionals working within the deep grounding of their subjects and mediating more flexible, less prescriptive curriculum policies (e.g. Osbourn et al 1997). With the broadening out of the National Curriculum in 2007, subject knowledge became less prescriptive so teachers were in a position to develop their own curricula. As I outlined in chapter 1, this has enabled a broad range of content to infiltrate traditional subjects, and in some

cases, the very existence of subjects has diminished as schools identify new ways to structure a curriculum to educate their young people.

In contemporary educational discourse, 'curriculum' has been conceptualised in many ways, and both Scott (2008), and Beck and Earl (2003) discuss what constitutes a school curriculum. For Scott (2008), four key aspects of curriculum are important: objectives, content, methods and assessment. First are aims or objectives; this dimension considers the purpose of a curriculum, and what it sets out to achieve either explicitly or implicitly. The content of subject matter focuses on knowledge, and what knowledge is selected to be taught and what is not. Methods or procedures is a consideration of pedagogy, or the way in which learning is organised, and this would include ideas such as discrete subject teaching or interdisciplinary lessons, types of learning activity, the use of textbooks and resource material. Evaluation or assessment is a way of checking if the aims have been met, either through summative tests such as national examination systems, or more classroom based formative assessment.

These four dimensions are similar to the theories outlined by Beck and Earl (2003) who argue a curriculum can be defined in terms of three ideas: scope, content and structure. For them, the scope of a curriculum describes how schools transmit knowledge and has two aspects, the 'overt' scope and 'hidden' scope. 'Overt' refers to explicit curricular aims, clear objectives and organisational aspects of pedagogy such as how pupils are grouped for learning, and which different forms of learning are recognised. This is directly linked to Scott's (2008) idea of 'aims'. Beck and Earl (2003) also identify the 'hidden' curriculum, which relates to implicit aims of education, ideas about which values the school does and does not transmit. These values are not explicit, and are not made obvious to school pupils or parents, but are instilled

into pupils through their time in school, and through the knowledge that they engage. Gordon (1982) has expressed the hidden curriculum in terms of “attitudes, values, dispositions, (and) certain social skills” (p188) that underlie interactions between individuals within the school. The scope of the hidden curriculum is particularly wide, as Gordon (1982) reviews,

“...for example, we are told the hidden curriculum teaches kids to be passive (Silverman 1970); to be independent (Dreebenr 1968); that conflict is unimportant (Appelm 1971); that girls are inferior to boys (Fraziern and Sadkerm 1975); (and) that escalating consumption is a prime value (Illich 1971)” (p193).

Teachers, and those who create a curriculum, are in a position to use the ‘hidden’ curriculum to promote values and attitudes. More recently, the hidden curriculum has been discussed in relation to notions of ‘politicalisation’ (e.g. Marsden 1989) and ‘corruption’ (Whelan 2007, Standish 2007, 2009, see section 1.3), with an increasing influence over the school curriculum being held by political groups and organisations.

Beck and Earl’s (2003) thoughts about curricular content are similar to Scott’s (2008) notions of content. For Beck and Earl (2003) “any curriculum is a selection from all the worthwhile knowledge which schooling could potentially transmit” (p14). Rather than discussing this from a knowledge perspective, and a discussion about what the content of a curriculum might be, Beck and Earl (2003) offer a series of principles which underlie the decision of what content to select. They argue that this should be based on,

“...children’s and student’s own interests and choices; economic relevance; vocational relevance; shaping national identity and allegiance;

a humanistic conception of a liberal education, emphasising the value of knowledge and understanding for its own sake” (p15).

Beck and Earl (2003) here suggest that the curriculum should be determined by a set of principles and curriculum ideologies rather than simply a list of facts drawn up to be learnt. If the former is the basis on which to select curriculum content, those creating a curriculum, whether teachers in schools or governments or ‘corrupting’ influences, need to have an understanding of often conflicting ideological traditions that underlie the curriculum and this in part is why understanding curricular aims is a central concern in educational discourse. Beck and Earl’s (2003) final consideration of curriculum structure refers to how the content is organised,

“The nature of the elements that make up the curriculum and relationship to one another... for example, ... a set of discrete subjects, each separately timetabled and (often) taught by specialist teachers” (p15).

It combines Scott’s (2008) third and fourth dimensions of curriculum as it combines both pedagogy and assessment. Scott (2008) seems implicitly to support a curricular structure of separate subject disciplines, taught in discrete timetabled blocks. Yet for Beck and Earl (2003) it does not necessarily follow that separate subjects form the basis of curriculum structure, and as chapter one showed, there is now a broad variety of curricular structures in English schools in which ‘content’ is organised and classified in different ways for students.

The aims of a curriculum refer to decisions taken at the outset of curricular design, and one way of expressing this is through a consideration of what we want young people to have achieved by the end of their education, and Green (1980) differentiates between the secondary and primary ‘goods’ of education

that occurs as a result of education. Secondary goods, or 'outputs' are diplomas, certificates, awards and grades which can be measured and used to compare schools with other schools and educational institutions offering the same qualifications. The primary goods, or 'outcomes' are knowledge, skills and understanding developed by children whilst in schools. Outputs are measurable, whereas outcomes are intangible, more holistic understandings and skills. This distinction is significant in this thesis, as discussions around 'geocapability' express the outcomes of an education.

Since the creation of the National Curriculum in 1988, as discussed in chapter one, due to the direct control of the school curriculum by successive British governments, school teachers and academics have not been able to engage with curriculum theory, and as such "the field of curriculum studies, at least in the UK, has declined in both status and practice in the universities and in the wider educational community" (Priestly 2011 p222). This lack of status for academic curriculum studies has also had an impact on schools, and Green (1980) argues that developed societies often put more value and emphasis on the outputs of education, rather than the outcomes of education, due to the ease of being able to quantify and measure examination grades and achievements. This has created a results orientated school system in which the importance of exam achievement is a central focus of school curricular and drives the ideology of schools. League tables of schools based on examination results and inspection scores are published each year and these are hugely influential in ascertaining the success of a school. Yet examination scores only record what children have been able to achieve as part of the examination system, and do not recognise any of the personal qualities that might derive from education, such as the development of values or morality. It also says

nothing about the ability of that young person to think and work independently, to apply understanding to the real world, or to make decisions and choices for themselves about how to live. For Green (1980), the success of schools can be ascertained based on a narrowly defined and restrictive set of easy to measure criteria rather than by any form of assessment of a broader range of personal qualities. As Carr (2004) explains,

“...the most pressing problems facing educational practitioners were no longer the kinds of questions that, in its initial twentieth century embodiment, the philosophy of education had sought to address. Instead, they were narrow technical questions about how the externally imposed goals set for the educational system by the state were most effectively to be achieved” (p64).

This focus on outputs has resulted in teachers being encouraged to ‘teach to the test’, ensuring children have the facts and skills needed to pass nationally set examinations to retain the school’s positioning in league tables.

Yet, as explained in chapter one, the 2007 curriculum rewrite, and subsequent reforms loosened the government’s control of the curriculum, allowing teachers to innovate in the classroom and devise their own curricula. Teachers had to re-engage with curriculum theory on order to devise meaningful lessons for their students. This could only have been achieved if teachers had a clear idea about the aims of a school curriculum, what it was trying to achieve and why; yet advice from central government on this was non-existent, and there was distinct disagreement among academics and professionals about what a curriculum in the 21st century should look like, and what it should try to achieve. In the next section the roots of this problem is traced.

This section has outlined how educational discourse has theorised the idea of 'curriculum', focusing on the various aspects of what a modern school curriculum is like. The next section outlines how the lack of engagement in curriculum theory has enabled a curriculum 'problem' to develop into a 'crisis' at the start of the 21st century.

2.2.2 The Curriculum: from 'problem' to 'crisis'

In this section the nature of the contemporary curriculum 'crisis' is discussed. First the section outlines how there has been a lack of shared aims of the school curriculum and how this links to the idea of a school ethos. This leads on to a second discussion over the crisis of differing ideologies that underlie a curriculum, and how the idea of curriculum 'framing' can model how ideologies can infiltrate the knowledge basis of a curriculum. This sets up the final crisis over the balance between a knowledge based and skills based curriculum (2.2.3), and the final sections describe different curricular visions that underlie the school curriculum (2.2.4, 2.2.5 and 2.2.6). First the nature of the aims of a curriculum are discussed.

The curriculum 'problem' was a term coined by Graves (1975), working in the field of geography education, when he identified the challenges in deciding what the aims and nature of a school curriculum should be. The National Curriculum failed to provide adequate answers to the problem, and so the challenges were never truly resolved and as such has led to a curriculum 'crisis' at the start of the 2010s (Wheelahan 2010). The crisis takes many forms: a crisis over the aims of what a curriculum should seek to achieve; a crisis in the balance of knowledge and vocational skills; and a crisis in the role of traditional academic

subjects. The crisis has been picked up by other writers. As Carr (2004) explains,

“...amongst the questions that the contemporary educational discourse excludes are, of course, substantive philosophical questions about the fundamental aims and values that should provide the intellectual basis for contemporary educational policy and practice” (p57).

Part of the problem, as Carr (2004) identifies, is the discrepancy between the different groups of people, or stakeholders, who all have an interest in education, and who have different ideas about the aims of education, such as educational philosophers, politicians and teachers. As he continues,

“...on the one hand, we have a small academic community of educational philosophers whose members examine these issues in accordance with the canons of rational inquiry but whose arguments and conclusions have little practical effect. On the other hand, we have a diverse group of politicians, policy makers, teachers and other educational professionals who make and implement practically effective educational decisions but do so in a way which generally lacks intellectual rigour and in which serious and systematic reflection on the fundamental philosophical standpoint that informs their decisions is conspicuously absent” (p57).

This highlights the intellectual divide that exists between education academics, policy makers and teachers in schools. What has been missing in these discussions is a shared ideology about the aims of a school education that are informed by the academic discipline of education, and enacted upon by politicians, teachers, school leaders, parents, pupils and society.

This ideological basis for a school curriculum could be expressed in the form of a school's 'ethos'. An ethos sets out what a school is trying to achieve; it is an embodiment of the school's aims. It is idealistic, and could promote academic success, or develop the 'whole person' or a multitude of other broad aims of education. John and Osborn (1992) identify a clear link between a promoted school ethos and the attitudes and values of the pupils in terms of citizenship ideals, democratic rights and individual freedoms. Schools are often very keen to set out their ethos in promotional literature and websites, though Donnelly (2000) has argued that there can be discrepancy in what schools promote as their ethos and what is observed in the interactions of the school community. An ethos is the manifestation of an ideology; a belief about the aims of education, and different ideologies give rise to different curricular organisations. An ethos of academic success might create a curriculum that is different from one which promotes a more holistic skills based ethos. Rawling (2000) summarises the main ideological traditions that have underpinned curriculum debates in the late 20th century, and this is shown in figure 2.2.

Ideological tradition	Characteristics
Utilitarian/ informational	<ul style="list-style-type: none"> - Education primarily aimed at ‘getting a job’ and ‘earning a living’. - A focus on useful information and basic skills.
Cultural restorationism (as promoted by the New Right in English policy making in the 1980s and 1990s)	<ul style="list-style-type: none"> - Restoring traditional areas of knowledge and skills (cultural heritage). - Providing students with a set package of knowledge and skills which will enable them to fit well-defined places in society and the workplace.
Liberal humanist (also called classical humanist)	<ul style="list-style-type: none"> - Worthwhile knowledge as a preparation for life; the passing on of a heritage from one generation to the next. - Emphasis on rigour, big ideas and theories, and intellectual challenge.
Progressive educational (also called child-centred)	<ul style="list-style-type: none"> - Focusing on self-development or bringing to maturity the individual child/ student. - Using academic subjects as the medium for developing skills, attitudes, values and learning styles which will then help them to become autonomous individuals.
Reconstructionist (also called radical)	<ul style="list-style-type: none"> - Education as an agent for changing society, so an emphasis on encouraging students to challenge existing knowledge and approaches. - Less interest in academic disciplines, more focus on issues and socially critical pedagogy.
Vocational or industrial trainer (Note: in some ways this cuts across all the other traditions)	<ul style="list-style-type: none"> - Provides students with knowledge and skills required for work. - Or use workplace and work related issues as a stimulus for learning skills/ abilities. - Or use work related issues for questioning the status quo.

Figure 2.2: A range of different curriculum ideologies that influenced curriculum debates in the late 20th century (Rawling 2000).

The coexistence of these different ideological traditions underlies much of the current curriculum crisis. An education through a ‘utilitarian’ or ‘vocational’ ideology, is an ideology which “establish(es) a clear link between... education and the needs of the economy” (Trowler 1998). A school curriculum with this ideology is aimed at skills training which is specific to the labour market of the

time, and if certain skills were needed by sectors of the economy, teachers in schools would adapt their curricula to suit. The power and control of curriculum design is from industry leaders. Schools would take on a more vocational curriculum, offering trades and skills at the expense of traditional academic knowledge through subject disciplines.

In contrast, the reconstructionist or radical ideology is one “in which... (education) is seen as a vehicle for criticality and for transforming society” (Trowler 1998). Education from this perspective looks at children’s actions and lifestyles and uses these as a means to envision other lifestyles to “facilitate the construction of a new and more just society” (Schiro 2007 p6). Teacher’s work through a ‘radical’ ideology would enable children to challenge rather than accept societal norms, and encourage changes in behaviour and lifestyle. A reconstructionist agenda seeks to enable children to develop attitudes and views different from the socially accepted viewpoints, yet whose views are taught opens up further debates about who has power and control over the school curriculum. Encouraging young people to develop values and attitudes implicitly through the ideology of their education is linked to the ideas of the ‘hidden curriculum’ (as discussed in section 2.2.1). Knowledge through traditional subjects plays less of an important role in this approach, with the aims of education being the taking on of radical beliefs.

Ideologies can be expressed in the classroom through the ways teachers ‘frame’ knowledge for their pupils. Curriculum ‘framing’ (Bernstein 1971) is a concept which identifies how knowledge is presented to children in the classroom; in the same way that an artist will carefully select the content of a picture to sit within a frame to tell a particular story, so a teacher can select

appropriate knowledge and pedagogy for children to engage with in a classroom. As Bernstein (1971) explains,

“... (the) frame refers to the degree of control teachers and pupils possess over the selection, organization, pacing and timing of the knowledge transmitted and received in the pedagogical relationship” (p. 88).

To frame the curriculum for children, into which ideological belief about education can be passed from teacher to pupil, teachers need to ‘recontextualise’ knowledge. The concept of ‘recontextualisation’ (Bernstein 2000) models the process through which teachers take academic knowledge from their specialist subject and translate it to enable children to access and engage with it. This ‘translation’ involves carefully selecting knowledge and then choosing the best pedagogy to enable children to engage with it to create meaning, yet it is during this recontextualisation process that ideologies can be expressed. The considerations of framing have been modelled by Chien and Wallace (2004), and figure 2.3 shows their model, along with some additional considerations which I have added (in yellow).

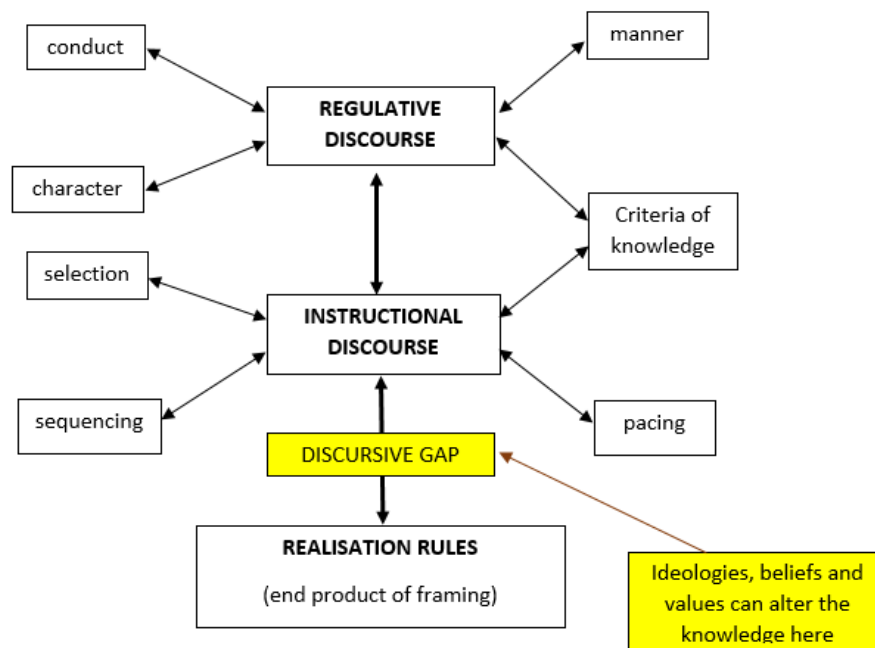


Figure 2.3: A model to show the various aspects of curriculum framing based on Chien and Wallace (2004) with additions to show the nature of the discursive gap and the influence of ideologies.

The base of the model is the ‘realisation rules’, the end product of framing. This articulates how meaning is made by the pupils. It is the product of two distinct ideas: the regulative discourse and the instructional discourse. The regulative discourse (RD) refers to the nature of the subject discipline. As MacDonald and Jonsdottir (2008) explain,

“...the regulative discourse is a discourse of order, relation and identity... regarding for example behaviour, conduct, ethics, manner and character as well as criteria of knowledge” (p6).

In the case of a school subject, the RD refers to the nature of the parent academic discipline, its knowledge content, its epistemological traditions, ideologies and the rules about how knowledge is created and furthered.

The instructional discourse (ID) is the process of recontextualisation, how the ideas from the RD can be sequenced, paced and selected in order to be taught to others. As MacDonald and Jonsdottir (2008) continue,

“...the instructional discourse is a discourse of competences relative to a given discipline. It is about choices of tasks, how they are done, sequence, pacing and which knowledge is considered of value in a given context” (p6).

In the case of a subject discipline it would refer to the choices made by a teacher about what is being taught, how, and why. Knowledge plays an important role in both the RD and the ID, being the only consideration in both discourses. In the situation of a subject discipline, the ‘criteria of knowledge’ in the RD would be the place of knowledge creation, where new knowledge in that discipline is created, mediated and made sense of. It would also contain the knowledge that might make up that particular discipline and therefore be part of its nature, manner and culture. In the ID, the knowledge is what is selected to be taught, as part of that discipline. Knowledge becomes ‘recontextualised’ which “selectively appropriates, relocates and relates other discourses to constitute its own order” (Bernstein, 2000 p33). It is the difference between the knowledge from the RD (in which knowledge is being produced) and the knowledge from the ID (in which it is being recontextualised) which is dubbed the ‘discursive gap’ (Bernstein 2000), this is labelled in the model in figure 2.3. It is in this discursive gap in which values and ideologies are able to enter into the frame which may not be implicit in the discipline of the RD. These influences can be new knowledge, new interpretations of knowledge which are not in keeping with the disciplinary rules of the subject, or values to be transmitted. This external influence can be from a variety of sources, from the teacher’s own beliefs about education through to demands from awarding authorities and National Curriculum requirements. This can create the ‘corrupted’ curriculum

alluded to in previous discussions (see sections 1.3, 2.1.1), either explicitly or as part of the 'hidden' curriculum.

A further addition to the discussion of framing expresses the extent to which there is a prescription of content within a curriculum. In a curriculum that is 'strongly' framed, teachers have limited control over the curriculum. The content, pacing of lessons, type and timing of assessment is all pre-determined and teachers simply follow the curriculum plan. In a 'weakly' framed curriculum, teachers have more autonomy over their practice; they are able to select content, go through this at their own chosen pace and devise suitable assessment, utilising the voice and opinions of students in the process. For well-trained subject specialists who are confident with the nature of their knowledge a weakly framed curriculum can provide an exciting opportunity for teachers to devise an enticing and relevant curriculum. Yet it is in a more weakly framed curriculum that external voices can enter the curricular frame. The curriculum 'crisis' can be illustrated through these different ideologies that teachers have which can underlie the nature of the school curriculum, and how teachers interact with and present knowledge to students.

This section outlined how curriculum ideologies create varying aims of education, and how a lack of engagement with aims has turned a curriculum 'problem' into a more serious 'crisis'. The next section explores the nature of the most significant aspect of this crisis, the role of knowledge in the curriculum, and the ways in which knowledge creation has created challenges for the curriculum.

2.2.3: Mapping the crisis: the role of knowledge in the curriculum

This section outlines another of the contemporary crises in education, the role of knowledge in the curriculum. First this section outlines the differences in the ways knowledge is created, drawing on literature from the sociology of education (e.g. Young 2008) before discussing the ways in which this has been translated into the school curriculum.

The acquisition of academic knowledge is a key feature of any educational system (e.g. Young 2008). Even an education system based around developing children's skills and values still requires knowledge as a means to inform debate, but in contemporary education there is an antipathy between the knowledge dominant ideologies of the cultural restorationists and liberal humanists, and the child centred ideologies of the progressive educationalists (see figure 2.2), in which knowledge in the curriculum is deemed less important.

Much of the current knowledge crisis relates to the way knowledge is produced, with an antithesis between 'objectivist' or scientific knowledge and the role that people play in socially 'constructing' knowledge (e.g. Young 2008). The idea of objectivism suggests that there is a set of knowledge that is universally verifiable and testable. The role people play in this knowledge is 'discovering' it through reliable and replicable methodologies. As Trigg (1973) distinguishes, "a fundamental distinction must be drawn between the way the world is and what we say about it, even if we all happen to agree. We could all be wrong" (p1). For Trigg (1973) objectivist knowledge exists and describes the way the world 'is' and Dawson (1981) agrees, arguing knowledge should not rely on opinions of people despite them being labelled as 'experts'. As he argues, "It is difficult to disagree with the objectivist contention that there is more to truth than the

opinion of the majority or of a hegemonic social group” (p415). Yet there is a distinction between ‘objectivist’ knowledge that has been discovered by communities of specialists, who work with specific methodologies and knowledge that is presented as ‘truth’ without any disciplinary basis. It is this latter type of knowledge that Young and Muller (2010) dismiss as being “under socialised” (p14), as people have not been involved in creating or challenging this type of knowledge.

An alternative stance on knowledge production is ‘social constructivism’, which argues all knowledge is claims made by people. These various ‘voice discourses’ (Moore and Muller 1999) include those from scientists working to a strict methodology to folk traditions and personal experiences. Postmodern approaches to the sociology of knowledge give these types equal status (e.g. Usher and Edwards 1994); under this view there is no such thing as ‘better’ knowledge, just alternatives. But Young (2008) asserts “there is ... only the power of some groups to assert (that) their experiences should count as knowledge” (p5). For Young (2008), legitimate knowledge can be produced by societal elites, leading to the creation of what he once dubbed “knowledge of the powerful” (1971), where powerful people and groups create what becomes accepted as knowledge in the scientific communities and popular culture. In later work Young and Muller (2010) argued this type of knowledge production is ‘over-socialised’ (p14) as it relies on the attitudes of people, their opinions and ideas, more than deriving from a testable, set methodology.

As an alternative to ‘under socialised’ knowledge production, and the ‘over socialised’ constructivist knowledge, Young and Muller (2010) argue for a ‘social realist’ approach. In social realism, knowledge is ‘realist’ in the sense that it recognises that real knowledge exists, whether it has been ‘discovered’ or

not. The 'social' element of social realism identifies that all human knowledge is in some way socially constructed, including that which is from expert communities. A further distinction of social realism is made with regards to Maton's (2010) discussion of 'knower structures'; that for every knowledge structure there is also a knower structure (p161). Knowledge becomes specialised not only in terms of what is known but also by who is knowing it, and how they are knowing it. 'Social realism' argues that some knowledge is 'better' and more reliable than others. Rather than being the societal elites creating this knowledge, it is generated through 'epistemic communities' of subject experts who create knowledge according to the methodologies of that community of experts. According to this approach,

“...social realism understands knowledge as emergent from the specialised collective practices of knowledge generation within epistemic communities” (Firth 2011 p293).

This knowledge therefore “relies on a regulatory rather than an absolute notion of truth” (ibid p293), meaning the means for creating new social realist knowledge is about following a regulatory pattern of values and norms developed within knowledge disciplines rather than there being some form of objectivist, absolute truth. As Young (2008) argues, “there are rules, codes and values associated with different specialist traditions which make well-grounded claims about knowledge and how it is generated and acquired” (p63). It is the specialist nature of the knowledge claims that gives it its status and validity as social realist knowledge. New scientific knowledge can only be created by groups of scientists following scientific methodologies; historical knowledge can only be generated by historians following the norms that have developed in their discipline.

The ways knowledge is produced, has implications for its role in the school curriculum, and how choices are made about what to teach young people. It is through these differences that the contemporary 'knowledge crisis' of the curriculum can be best expressed. Young and Muller (2010) identified a framework to express these differences, which can also express the challenges of differing curriculum ideologies outlined earlier, although their work was not in response to this. Their framework identifies three possible curriculum 'futures'; 'Future 1' (F1), 'Future 2' (F2) and 'Future 3' (F3). Each alternate future seeks to identify what a school curriculum would be like with a different emphasis on the importance of knowledge or skills. These 'futures' express the nature of the knowledge and skill input to a curriculum, and they are not concerned at all with pedagogy, or how teachers teach. Some of the curricular futures do lend themselves to particular pedagogies, and this is explained in the next section but their work is concerned with what is being included in a curriculum, and not how that is being taught. Rather than existing far into the future, many schools in the 2010s, and in the past, have exhibited curricula that can fit into one of the tripartite descriptors.

This section explored the nature of knowledge production, and how the challenge of what counts as legitimate knowledge impacts on what is chosen to teach children in schools. In the next section the notion of a 'Future 1' curriculum is discussed.

2.2.4 Mapping the Crisis: A knowledge led 'Future 1' curriculum

This section outlines the theory of a 'Future 1' (F1) curriculum (Young and Muller 2010) before questioning whose knowledge is promoted in such a curriculum vision. The cultural restorationist and liberal humanist ideologies

(Rawling 2000, figure 2.2) are both similar in the importance they place on learning knowledge. Schiro (2007) argues proponents of these ideologies,

“...believe that over the centuries our culture has accumulated important knowledge that has been organised into academic disciplines... The purpose of education is to help children learn the accumulated knowledge of our culture” (p4).

Through this ideology, subject knowledge is the central consideration of school teachers, and discussions about what is being learnt are more significant in informing practice than how learning takes place. This belief is the central part of an F1 curriculum.

In an F1 curriculum, knowledge is still created by ‘epistemic communities’ of experts, but unlike a social realist approach once this knowledge has been created it is “treated as largely given, and established by tradition” (Young and Lambert 2014 p59). In F1 schools knowledge is uncontested. Knowledge is regarded as something to be learnt and repeated, and to be transmitted to those capable of achieving, rather than questioned by learners and engaged with. An F1 curriculum appears to be related to the ideas of knowledge as described by Hirsch (1988), when he describes “what every American needs to know”, a list of facts and concepts and “background knowledge (for) necessary functional literacy and effective national communication” (pxi). As children get older, the amount of knowledge they learn in schools increases, and this provides the basis and structure of the school curriculum.

What an F1 curriculum also promotes is the idea of the existence of academic subjects in schools. ‘Core’ knowledge (a term used in the National Curriculum debates of 2007, see section 1.2) is developed by those working in academic disciplines over time and as such the discipline becomes the structure through

which young people engage with knowledge. Teachers in schools are subject specialists, graduates of the subject discipline they teach and they deliver, uncritically, this 'core' knowledge onto children. Children learn this knowledge, being tested on what they can remember at various stages. An F1 curriculum is described in Young and Lambert (2014) as the experience of British schools up to the 1970s, and to the current curriculum of some grammar or independent schools today. Some discussions in 2010 about the return of 'core knowledge' into secondary school National Curriculum could be seen as a return to a F1 curriculum, with the Education Secretary of the time Michael Gove seemingly influenced by the ideas of Hirsch (1988) and his contemporaries, as discussed in chapter 1.

The existence of an F1 curriculum leads to a question of who is in control of knowledge selection, similar to the discussion in Beck and Earl (2003, see section 2.2.1). Not every piece of knowledge can be taught to pupils in schools, as this would be an impossible task, not least as new knowledge is constantly being created, and so a selection needs to be made from all this knowledge about what should, and what should not be taught. This decision relates to who has the power to make these choices, and the ideology to which they subscribe. In an F1 curriculum, there is a set 'core' of knowledge that is undisputed, and it is this knowledge which forms the curriculum content. This is the 'knowledge of the powerful' that underpinned much of Young (2008)'s critique of socially constructed knowledge (see section 2.2.3). It was the social elites who decided upon the content of the curriculum and it is this which forms the 'canon' of academic content with which children need to engage. Young (2008) argued that many children were not given access this knowledge, particularly when referring to the school system that separated the brightest children for grammar

schools and the rest into secondary modern schools, before the introduction of the comprehensive school system⁴. Understanding who does have power and control over curriculum content is still a contentious issue in educational discourse. The government, through the National Curriculum control the curriculum up until the end of key stage 3, but awarding authorities, leading textbook series and resources for teachers as well as teachers themselves also all have attitudes, values and beliefs about what a contemporary curriculum should be like and these factors all influence the nature and type of knowledge found in school lessons.

This section reviewed the literature on what a knowledge centred, F1 curriculum might look like, and some of the ideological and practical difficulties an F1 curriculum might entail. Its corollary is a curriculum which downplays the importance of knowledge, which leaves curriculum time open to pursue activities which are designed to help children to develop skills and competencies. This position is similar to Young and Muller's (2010) F2 curriculum, and so the next section uses this idea to engage in debates about the role of skills in a child centred, 'aims' based curriculum.

2.2.5 Mapping the Crisis: An aims led 'Future 2' curriculum

This section discusses Young and Muller's (2010) F2 curriculum, in which the role of knowledge is weakened at the expense of skills and vocational considerations. First, the components of an F2 curriculum are outlined before

⁴ The 'comprehensive' system was introduced in 1965, but many schools remained as Grammar schools. The Conservative government of 2016 promised an expansion of the Grammar school system.

considering the role of moral issues in a school curriculum. An F2 curriculum may be allied to Rawling's (2000) child centred ideology (see Figure 2.2), in which the perceived needs of the children become the central focus of the curriculum. In F2, "curriculum boundaries between subjects (are) weakened, as new forms of interdisciplinary studies (are) introduced...the curriculum (becomes) open to leisure, sports and other community interests" (Young and Lambert 2014 p60). As Pring (2005) identifies,

"...subjects merge and alter. ...and there are new subjects like media studies, information technology, business and leisure studies and sports studies. Road safety and motor car maintenance are now becoming subjects" (p1).

Some voices are even calling for a school system to be devoid of any subjects, as Pring (2005) continues,

"...there seems to be a deep chasm between those who see the curriculum to be essentially constituted of subjects and those who want very different principles of organisation (practical activities, themes, interests, personal agendas, etc)" (p2).

These new curriculum principles of organisation are the essence of an F2 curriculum. Pedagogic considerations overtake discussions about knowledge, and a child centred education results, with a focus on vocational training and skills. Knowledge becomes material with which to engage with other ideas. Subject disciplines become arbitrary, or even a distraction, as subject teachers are asked how their subject contributes to F2 concerns such as promoting healthy living, developing particular values, or offering careers advice. These ideas are spliced into a curriculum at the expense of subject knowledge. Young

and Lambert (2014) explain how an F2 curriculum developed in British schools “as part of policies of social inclusion and widening participation” (p60) with the ‘comprehensivisation’ of the British school system in 1965. With a broader ability range of children in schools, it was deemed that the sort of ‘knowledge of the powerful’ (Young 1971, see section 2.2.3) found in the grammar schools was not appropriate for all, and alienating to many, and so a more vocational education awaited students in the new comprehensive schools.

Yet this is not just a historical debate. Contemporary writers (e.g. Reiss and White 2013) propose a maintenance of what they call an ‘aims based curriculum’, which bears the hallmarks of an F2 curriculum, whereby they argue that the purpose of schools is to “equip each child to lead a life that is personally flourishing and to help others to do so too” (p1). They do not promote subject specific education but start with social, overarching aims of education, then use this to create a curriculum. As Beck and Earl (2003) explain,

“...children and young people should be offered a curriculum which ... includes... humanistic, aesthetic, social, political and moral education as vitally important elements (not tokenistic add ons)” (p20).

These elements of student’s personal growth and development are most important through this ideology and so an F2 school curriculum is one in which teachers ensure they cater for children with different learning styles and needs. Pedagogical considerations would therefore be at the forefront of lesson design, with ‘thinking skills’ activities dominating teacher activity. It also means that teachers become preoccupied with ensuring lessons are accessible, differentiated to varying learner needs, with a broad range of learning activities at the expense of discussions about what is being taught and why. It removes

the importance of subject knowledge from teachers' curricular discussions. The F2 curriculum is exemplified by the 'learning power' philosophy outlined in section 1.2, which leads to the 'learnification' of the curriculum (as Biesta 2012 would describe). Through this curriculum vision, a 'love of learning' becomes the end point of curriculum in itself, rather than being the means to develop knowledge.

Another consideration of an F2 curriculum is a focus on the role schools play in developing moral citizens (e.g. the work of Wilson 1990). As Gutmann and Thompson (1996) argue,

“Schools should aim to develop their students' capacities to understand different perspectives ...and engage in the give-and-take of moral argument with a view to making mutually acceptable decisions” (p395).

This approach to moral education focuses on taking children beyond the learning of facts, but being active and responsive to the facts they learn. As Wilson et al (1967) continue,

“...the real point of a moral argument is not to examine facts and logic: it is to be able to react psychologically to the facts in a more efficient or discriminating or honest way” (p. 65).

According to this view, knowledge of the issue is unimportant, it is the reaction to it that is key. Developing a sense of morality in young people could be an explicit aim of schooling, or could be part of the 'hidden curriculum', to encourage children to think and respond in prescribed ways. Yet the role that teachers play in moral education has been questioned by Haydon (2000), who argues,

“I think it is fair to say, however, that many teachers are not sure what role, if any, they have in moral education, and may tend to avoid the

terminology of 'moral education' and 'morality' in their own discourse" (p356).

How teachers approach the development of moral education is therefore the subject of much debate. Wilson et al (1967) advise,

"...the pupil should not merely be presented with a series of alternative moral views and allowed to choose between them. This could amount to a form of 'window shopping' with no criteria for reasonable choice being given (p253)... (instead) educating a person in any 'form of thought' or 'department of life' involves... encouraging pupils not merely to believe certain right answers but to make up their own minds" (p251).

Encouraging independent thinking to engage with and develop morality is often at odds with the needs of a prescriptive, examinable content output of schools. In practice, teaching moral issues without indoctrinating students into a set of values can be a challenging task, as teachers are also moral beings, with their own set of religious and moral ideas which can often be passed on to the students. The words that teachers use in the classroom and the way they react and respond to ideas can often convey beliefs and values that are passed, often unknowingly onto students, particularly during the recontextualisation of subject knowledge, with values entering the curriculum through the 'discursive gap' (see section 2.2.2). Teachers have to strike a balance between introducing pupils to a defensible framework of moral beliefs and practices, and indoctrinating children to believe a particular set of values based on their own ideologies, particularly if they subscribe to a radical curriculum ideology (see figure 2.2). As Harrison (1977) argues "teachers do not teach physics, mathematics or history in order to convey their own scientific or political biases, since this way lies indoctrination" (p56). Teachers who do 'indoctrinate' their pupils by encouraging

them to take on viewpoints can be accused of being “morally careless” (e.g. Morgan and Lambert 2005) in the classroom. The extent to which it is possible to avoid being morally careless is problematic, as McLaughlin (2003) argues “education cannot be value free” (p137). Teachers have the challenge of enabling children to engage with morals and values whilst at the same time not indoctrinating them into one narrow, specific view point.

A further challenge of moral education is found in the debate about whose morals, and which values are to be taught and promoted, and which are not. As Harrison (1977) asks “where do they (the morals that are taught) come from, what is their authorisation, how are they defended as the logical and right choice?” (p59). These fundamental questions do not have set answers, though in an attempt to provide an answer, Tubb (2003) distinguishes between ‘public’ and ‘non-public’ values. Public values are those values and morals which are deemed universal, which the vast majority of the population is in agreement over. They are non-arguable and would include ideas such as ‘murder is wrong’, and ‘kindness toward other people is a virtue’. These values are ones that all teachers would promote in schools, often explicitly in the form of set aims, but also implicitly in the way teachers work and behave in schools. ‘Non-public’ values are those contentious issues that require discussion and thought. They may result in students developing a range of ideas and opinions.

Examples of non-public values might include whether foxhunting is right or wrong, or whether abortion is morally defensible. The problem is that there is no clear cut definition of what constitutes public and non-public values in schools. What one teacher may consider a public value another may consider being debateable. Who is able to make this choice is also a key consideration for schools; it could be a classroom teacher’s responsibility or a value promoted

by a whole school as part of its ethos. In a National Curriculum, the role of the government is also significant in deciding which values should be promoted in schools. This makes moral education a challenging task for teachers.

It is the promotion of values in schools under the false auspices of a moral education that has led some writers (e.g. Whelan 2007) to talk of overt politicisation of schools, or 'corruption' (see section 1.3); the promotion of party political views within the classrooms in schools. For school geography, Standish (2007) argues that 'geography used to be about maps' but has now become a vehicle for pro-environmentalist, anti-capitalist sentiments (see my take on his discussions in section 1.3). Furedi (2007) was even clearer, arguing,

“...over the last two decades the school curriculum has become estranged from the challenge of educating children (p1)... increasingly the curriculum is regarded as a vehicle for promoting political objectives and for changing the values, attitudes and sensibilities of children” (p3).

The politicalisation of pupils is a potential consequence of a morally careless, F2 curriculum.

The knowledge led F1 school is one in which knowledge is organised into discrete subject disciplines and 'delivered' uncritically to students in classrooms.

The child led F2 school puts greater emphasis on the perceived needs of the children, and the pedagogical considerations required to develop moral values and vocational skills.

The debate so far has suggested that these two alternate futures are distinctive, and in a sense this is why the curriculum can be said to be in 'crisis'. Chapter 1 outlined how the RSA Academy in Tipton has created a curriculum around the 'opening minds' philosophy, and Chessington Community College is replacing subject lessons with a skills based set of lessons; these are both a

manifestation of an F2 curriculum. It was also suggested that in 2010, Michael Gove and his contemporaries were asking subject communities to define the 'core knowledge' that makes up the knowledge content of their school subjects. This approach to curriculum design seems to be a manifestation of an 'F1' curriculum. Yet Young and Muller (2010) have envisioned an alternative, an 'F3' curriculum, and this view might help move discussions beyond the talk of 'crisis' in the contemporary curriculum. The next section reviews the literature into the F3 'social realist' curriculum, and how this might frame some debates about a more progressive role for knowledge, and thus for subjects in schools.

2.2.6 Beyond the Crisis: A Future 3 curriculum

In an attempt to move discussion beyond the distinctive and irreconcilable ideas of an F1 and F2 curriculum, Young and Muller (2010), and Young and Lambert (2014) have identified a 'Future 3' (F3) curriculum. This section outlines this vision of the school curriculum. First an overview of their curriculum vision is given, which includes the notion of 'powerful knowledge', before identifying the role of teachers in realising this vision through an understanding of powerful pedagogies and the recontextualisation of knowledge.

An F3 curriculum, as Young and Lambert (2014) argue,

“...points to a new and always changing balance between the *stability of subject concepts* (implicit and over emphasised in F1 and underemphasised in F2), *changes in content* (underemphasised in F1) as new knowledge is produced and the *activities involved in learning* (overemphasised in F2)” (p68, original emphasis).

An F3 curriculum therefore attempts to provide an alternative to those advocating an F1 or an F2 curriculum. An F3 curriculum is one which still respects the importance of subject knowledge, but unlike F1 this knowledge is not static and cannot simply be read in a book or found out online. It also respects the need to develop young people's skills, including a set of values and morals, but in a way that is based on understanding, and therefore relies on knowledge.

The type of knowledge that is implicit in an F3 curriculum is 'social realist' (see section 2.2.3), created through epistemic communities of subject experts which is different from the inert and 'given' nature of an F1 curriculum. It is more dynamic, and the curriculum is about introducing children to the epistemic rules of the subject discipline as it is about learning specifics. As Young (2008) explains, Future 3 creates

“...a curriculum space where learning is as much about learning to navigate and negotiate knowledge, its communities, practices, relationships and its ways of constructing objects/subjects as it is about learning particular subject concepts and processes” (p308).

This type of knowledge is what Young (2008) terms 'powerful knowledge', and it forms the basis of an F3 curriculum. In F3, all knowledge in schools is socially constructed by people and communities working within the distinct boundaries offered by subject disciplines; knowledge is open to debate, challenge and discussion by subject experts, hence its status as socially realist knowledge (see section 2.2.3). Powerful knowledge has therefore also been called 'powerful disciplinary knowledge' (e.g. Lambert et al 2015) to highlight the important role that subject disciplines play in creating this type of knowledge. Powerful

knowledge is not simple, is not 'everyday' knowledge but requires deep thought and consideration, and this is what makes it distinct from the sort of knowledge envisioned in an F1 curriculum or from the list of facts identified by Hirsch (1988). Powerful knowledge is complex, often abstract and requires sustained engagement to enable understanding. Figure 2.4 outlines the key features of powerful knowledge as a summary of the ideas presented here.

Powerful knowledge is:

- Created, argued over and considered within academic disciplines according to the norms and values of that discipline, thus it is 'specialised' knowledge.
- It represents the 'best' knowledge available in that subject, created and argued over and as such it is evidence based.
- It is not a given; it can be usurped by 'better' knowledge, can be open to constant reworking and debate by disciplinary specialists.
- It is not 'everyday' knowledge but requires deep thought and sustained engagement.
- The development of powerful knowledge from a subject specialist teacher provides a rationale for a subject based curriculum.

Figure 2.4: My understanding of the key features of 'powerful knowledge', based on Young (2008).

Powerful knowledge is knowledge that children cannot access at home, and which they have to attend school to engage with. As Young and Lambert (2014) assert powerful knowledge,

“...is distinct from the common sense knowledge we acquire through our everyday experience... it is systematic, its concepts are systematically related to each other in groups that we refer to as subjects...and it is specialised” (p75).

For Young (2008), access to powerful knowledge is the reason why children go to school. The acquisition of powerful knowledge is, therefore, an aim of education in its own right. Subject specialist, qualified, professional teachers are key to the process. Teachers enable children to access powerful knowledge. Teachers are trained in subject disciplines, are experts in their subject, and it is this which makes the knowledge they have ‘powerful’.

For Young (2008), talk of powerful knowledge marks a re-statement of his relationship with knowledge, as explained in Morgan (2014). In his earlier writing of ‘knowledge of the powerful’ (discussed in section 2.2.3) Young (1971) described knowledge as being the preserve of the elite, decided by and passed on from those in socially privileged positions to the next generation of powerful people. It was this passing on of knowledge that retained societal inequality through the grammar and independent school systems, with those children who ended up at secondary modern schools who were therefore denied access to this knowledge. The implication of Young’s (1971) early work was to devalue knowledge as simply being part of an outdated elite society. His ideas were hugely influential in the sociology of education and perhaps in part a reason for the rise of an F2 curriculum with the introduction of comprehensive education. The implication of Young’s (1971) work was that access to traditional subject knowledge was unequal, sometimes alienating and therefore unfair. One response was to offer a more child centred, more accessible curriculum that all

children could engage with. This resulted in a move in schools from an F1, elitist 'knowledge of the powerful' education system to an F2 curriculum with an emphasis on skills, but a lack of knowledge. When assessing the impact of his 1971 work, Young (2008) realised that what was needed to reduce inequality was not the complete removal of knowledge from all school curricula, but a way for all children to access what had in the past been seen as the preserve of the elite. According to Young (2008) all children, irrespective of the school they went to and irrespective of their socioeconomic background needed access to knowledge. Hence Young's position was re-stated from writing about 'knowledge of the powerful' (in 1971) to that of 'powerful knowledge' (2008). Powerful knowledge therefore became part of his 'F3' curriculum vision.

Young's (2008) work is about curriculum and not pedagogy; he was interested in what goes in to the curriculum and not how it is taught. Yet the notion of powerful knowledge has pedagogical implications. To engage with the notion of an F3 curriculum, talented teachers are needed. As well as being the subject experts, teachers are also the pedagogic experts, knowing how to help children engage with subject knowledge in meaningful ways. Recent writings of 'powerful pedagogies' (Roberts 2014), whilst not initially discussed in relation to Young (2008), can be of use to explain this notion. Powerful pedagogies describes the way teachers choose to teach their subject. A powerful pedagogy can enable pupils to not only understand the knowledge that is being taught, but to understand the nature of the discipline itself, how knowledge is created in that subject discipline. This may not be explicit, but the way a teacher thinks about the knowledge, and the language they use in the classroom can help pupils to develop powerful disciplinary knowledge. It is the subject teacher who is able to recontextualise knowledge from the academic discipline (the

regulative discourse) into the instructional discourse of the subject that gives it 'power' (see section 2.2.2).

This section has identified and discussed a series of debates in education. After defining what is meant by the idea of curriculum, it discussed how much of the contemporary debate stems from a lack of explicitly shared curriculum aims. A range of curriculum ideologies can help position people's relationships towards education but the main arguments in the debate presented here have been around the role of knowledge in the school curriculum. The arguments have been framed around three alternatives; a knowledge heavy F1 curriculum in which facts are passed down from teacher to pupil; a child centred F2 curriculum which focusses on children's development at the expense of knowledge and a more visionary alternative of an 'F3' 'social realist' curriculum. The next section (2.3) explains how many of these debates have impacted on the nature and status of the school subject of geography.

2.3 THE POSSIBILITY OF A FUTURE 3 GEOGRAPHY CURRICULUM

The last section identified how the curriculum 'problem' (Graves 1975) of deciding what to teach has turned into a curriculum 'crisis' (Whelahan 2010) in the 21st century, with a crisis over shared curriculum aims, ideologies, potential for 'corruption', and the imbalance of knowledge and skills in the curriculum. Young and Muller's (2010) identification of F1 and F2 curricular visions highlight the nature of this crisis, but in an F3 curricular vision they propose an alternative knowledge led, pupil centred approach to curriculum thinking. This section discusses how the notion of Future 3 curriculum thinking provides possibilities for geography teachers in schools. Section 2.3.1 reviews the

literature into geography as a specialised discipline, in particular the ways in which the production of geographical knowledge can be considered a form of social realist knowledge. This is followed in section 2.3.2 by the ways this specialist discipline is 'recontextualised' to the school geography curriculum, and how the notions of an F3 geography curriculum can be expressed through the 'powerful knowledge' of geography. The final section 2.3.3 relates to the role of geography teachers in 'making' the school geography curriculum.

2.3.1 Geography as a 'specialised', social realist discipline.

Geography is a 'specialised' knowledge, a term from Durkheim (e.g. Durkheim 1956). Specialised knowledge is that which is created and maintained due to the 'rules' of a subject discipline. This specialisation leads to a "focus on the shared values on which the objectivity of knowledge depends" (Young 2008, p208). Those shared values are held by academic researchers, working in universities around the world, who create new geographical knowledge within the rules of the academic discipline of geography within which they work. It is the specialisation which enables 'better' knowledge to be created and as such creates 'socially realist' geographical knowledge (see section 2.2.3 for a discussion on social realism).

'Geography' as a specialised knowledge has a long tradition. Translated literally from its Greek origins, the word 'geography' means 'earth description' with *geo* meaning 'earth' and *graphia* meaning 'description'. Yet, as Unwin (1992) describes,

“...geography is one of the oldest forms of intellectual enquiry, and yet there is little agreement among professional geographers as to what the discipline actually is, or even what it should be” (p1).

Geography has been described as the 'world discipline' (Bonnett 2008); a 'field of knowledge' (Walford, 2000), a 'realm of meaning', and even a 'dimension of experience' (Livingstone, 1992). For The Royal Geographical Society,

“...geography is the study of the earth’s landscapes, peoples, places and environments. It is, quite simply, about the world in which we live” (RGS IBG 2016),

Yet Small and Witherick (1995) are quick to point out,

“...it is highly unlikely that any one definition of the subject would satisfy everyone...The fact that geography is located at the interface between the natural and social sciences adds to the difficulty in arriving at a definitive definition” (p100).

This gives geography as a specialised knowledge a broad and ambitious definition. Yet this is problematic. The notion of a 'specialised' discipline suggests a coherence and all these articulations of geography suggest a discipline which is completely 'unspecialised'. Johnston (1997) expresses this clearly when he denies the existence of a separate discipline of geography at all. As he argues,

“...to most of us, there is no such thing as geography, other than as a vaguely defined discipline to which we are attached as much for political and economic (that is, job security) reasons as for intellectual ones... And does it matter? I believe not. There is no such thing as geography, only a lot of separate geographies all of which share characteristics with the others, but are quite considerably self sufficient” (p.35)

Despite the broad definition of the discipline, geography does have internal divisions which can claim more homogeneity, as even Johnston (1997) admits; there are similar characteristics across the different 'geographies'. The

discipline is frequently classified in terms of both 'human' geography, the part of the subject that deals with human interaction, and 'physical' geography, the side that is concerned with the characteristics of the earth. Physical geography follows much of the specialist constructs of the physical sciences.

Understanding coastal geomorphology, for example, requires a knowledge of determinable processes, such as wave erosion and how they impact on the landscape of the coastline. Yet human geography is much more akin to the humanities and sociological subjects with a multitude of methodologies and practices. Much of the knowledge in human geography is based on opinions and understandings of phenomena. Understanding cultural geography of lived spaces, for example, requires the testimony of people living in places which geographers then make sense of. This means the traditional discipline has a schism right at the heart which affects the means by which specialised geographical knowledge is created.

The split of geographical methodologies is evident to such an extent that Eden (2005) identifies, "few academics can now individually be both physical scientists and social scientists" (p285) and Furlong and Lawn (2011) identify "increased fragmentation, certainly between human and physical geography, but also within human geography" (p125). In academic geography the nature of geographical knowledge has been continually changing and one of the more significant changes since the 1990s has been geographers working at the 'edges' of the disciplinary boundaries. As Massey (1999) explains,

"...some of the most stimulating intellectual developments of recent years have come either from new, hybrid places (cultural studies might be an example) or from places where boundaries between disciplines

have been constructively breached and new conversations have taken place” (p421).

The ‘discipline’ of geography is thus able to encompass a variety of methodologies, across a range of other discipline areas. Therefore the ‘social realist’ nature of geography, and what binds the discipline together relates much more to the content of the knowledge, what is being generated rather than a focus on how it is being generated. Whether working with the sciences of physical geography or sociological approaches of human geography, *what* is being researched defines geography more than *how* it has been researched. Defining what geographical knowledge is has proved equally as problematic as finding a unifying geographical methodology. One of the recurring main ideas in various descriptions of geography, is the notion that it is the study of the earth as the home of the human race (e.g. Small and Witherick 1995). Its knowledge scope therefore is vast, as the Editorial from The Times newspaper on 7th June 1990 (the day the final report of the National Curriculum geography working group was published) describes,

“...geography embraces every fact on earth: every aspect of the composition, occupation and history of the planet... As such, geography holds no intellectual boundaries” (reprinted in Boardman and McPartland 1993d p146).

This definition proves equally unhelpful in terms of finding a unifying content for a social realist discipline. Geography is so vast Bonnett (2008) describes it as “one of humanities big ideas” (p2). He created a nine stage definition, which covers a wide range of ideas and concepts, arguing geography,

“...is rooted in the human need for survival, in the necessity of knowing and making sense of the resources and dangers of our human and physical environment... Geography is an attempt to both understand and meet the world” (p121).

The knowledge content of geography has been expressed by a number of writers in terms of a series of ‘key concepts’ which underlie the nature of knowledge in the discipline. Taylor (2009), working in geography education, has collated these in figure 2.5.

<p>Leat (1998) Cause and effect Classification Decision making Development Inequality Location Planning Systems</p>	<p>Geography Advisors’ and Inspectors’ Network (2002) Bias Causation Change Conflict Development Distribution Environment Futures</p> <p>Inequality Interdependence Landscape Location Perception Region Scale Uncertainty</p>	<p>Rowley and Lewis (2003) Describing and classifying Diversity and wilderness Patterns and boundaries Places Maps and communication Sacredness and beauty</p>
<p>Holloway et al (2003) Landscape and environment Physical systems Place Scale Social formations Space Time</p>	<p>UK 2008 Key Stage 3 curriculum (QCA 2007) Cultural understanding and diversity Environmental interaction and sustainable development Interdependence Physical and human processes Place Space Scale</p>	<p>Jackson (2006) Proximity and Distance Relational thinking Scale and connection Space and place</p>

Figure 2.5: The key concepts of geography (Taylor 2009)

Taylor’s (2009) lists of concepts do reveal some common themes that effectively express the knowledge of the discipline; ‘place’, ‘space’ and ‘scale’ appear on multiple lists. ‘Place’ could be studied from a variety of perspectives;

it has a physical and a human geography rooted in a location. Geographers are able to create knowledge of these concepts using a variety of methodologies.

Another means by which geography could be seen as a distinctive, social realist discipline is through the skills embedded within the subject discourse. Yet again there is no distinctly 'geographical' skill; geographers use a variety of skills to enable knowledge development. One such skill is the use of spatial data and statistical information, and whilst the mathematical aspects of this would not be distinctly geographical, the accurate representation and interpretation of spatial information through cartography could be seen to be a geographical skill.

Referring to the work of geography teachers, Lim (2005) argues,

“a challenge for all geography teachers, regardless of experience, has been to help students form in their minds a three-dimensional understanding of a given place, using only the information from a two-dimensional topographic map” (p187).

A map on its own, however, is not distinctly geographical as other subjects can use them in their discourse. It is how maps are used to enhance geographical knowledge and understanding that makes them geographical. Balchin and Colman (1971) described this skill as 'graphicacy', and the ability to represent, interpret and analyse information cartographically can be seen to be a geographical skill, and this includes both traditional and digital mapping such as Geographical Information Systems (GIS).

One of the best articulations of the ways geographical knowledge can be specialised, is from the field of geography education. Lambert (2004) suggests geography is a specialised 'language', and he differentiates between the 'vocabulary' and 'grammar' of geography. As Jackson (2000) continues,

“(the)... *vocabulary*, (is) an apparently endless list of place names, and its *grammar*, (is) the concepts and theories that help us make sense of those places” (p199, original emphasis).

This ‘grammar’ is the various concepts that hold the pieces of knowledge (vocabulary) together, and this has been called ‘thinking geographically’ by Jackson (2006). It is this way of conceptualising geographical knowledge that resists the temptation of listing content, but by offering a set of principles about how geographical knowledge can be created, it gives the knowledge content its specialist status. Thinking geographically is able to articulate the work of those geographers for whom the concepts and theories are related to physical processes such as erosion and deposition as well as those whose processes involve human migration and global flows of ideas.

The significance of geographical knowledge, skills and thinking has been illustrated by Hulme (2008) in relation to the academic discourse on climate change. He was concerned about the lack of geographers contributing to debates at policy level. As he argued,

“...the construction of narratives around global warming remain strongly tied to roots within the natural sciences... I am increasingly convinced that making human sense of climate change needs the distinctive intuition and skills of the geographer. These intuitions include long familiarity with working at the boundaries between nature and culture ... a tradition of understanding the subtleties of how knowledge, power and scale are inseparable ... We need new ways of thinking about and understanding the hybrid phenomenon of climate change. Geographers have a unique role to play in this task” (p5- 6).

For Hulme (2008), although climate change is a concept that crosses disciplines, geography has a unique role to play in developing understanding of the concept. He is convinced that there is a unique geographical knowledge content of climate change and his expressions of how geographers can contribute to the debate have close links to many of the concepts identified by Taylor (2009) and discussions of the interdisciplinary thinking of Massey (1999) and geographical thinking of Jackson (2000); scale, place and boundary thinking. It is through these concepts that geography can claim to be a specialised knowledge.

This section reviewed the literature into the social realist production of geographical knowledge, arguing that whilst the discipline is itself 'ill-disciplined', a focus on key concepts such as place and thinking geographically, unites the discipline. The next section relates these ideas to geography as a subject in schools.

2.3.2 Geography as a school subject: The F3 geography curriculum and powerful geographical knowledge.

The articulations of geography as a broad knowledge based discipline have implications for what is taught in school geography lessons and this section explores this notion, relating discussions to the Future 3 curriculum and the powerful knowledge of geography (see section 2.2.6 for a discussion of these ideas). Firth (2011) explained the relationship between the university disciplines and the associated school subject, suggesting "social realist theory seems to imply that... the discipline inevitably precedes and delimits the school subject" (p305). Yet despite its classical origins, geography as an organised subject in schools predates the formal university discipline, with the latter starting to

ensure a supply of well qualified geography teachers (Young and Lambert 2014). This suggests that there has always been something inherently valuable about geographical knowledge in schools.

The geography curriculum can be expressed through both F1 and F2 considerations. An F1 geography curriculum would be concerned with lists of facts and content to be learnt uncritically. As experienced in chapter 1 (see section 1.2), this is how the subject of geography has been conceived in schools with the National Curriculum listing content for teachers to teach in schools; a professional discussion amongst geography educators in the 2010s sought to define geography's 'core knowledge' and most attempts listed topics and facts to be learnt (see the discussion in section 1.2). Conversely an F2 curriculum sees geographical knowledge reduced and an increased emphasis on generic educational, but not 'geographical' skills.

Part of the challenge of creating an F3 geography curriculum comes through the nature of the classification and framing of the specialised knowledge of geography, and the curriculum of which geography is part, based on ideas from Bernstein (1973). Knowledge 'framing' (introduced in section 2.2.2) identifies the ways knowledge is selected and bounded to form a discrete set of curriculum 'content', and allied to this is the notion of 'classification', which refers to "the degree of boundary maintenance between (these) contents" (Bernstein 1973 p. 205). In a curriculum that is 'strongly' classified, knowledge is bounded in discrete subjects that have no crossover or integration with each other. Conversely a 'weakly' classified curriculum is one in which there is a large amount of crossover between traditional subject areas, and where knowledge is integrated, perhaps within broader topics or themes. In the strongly classified National Curriculum, geography has retained its place as a

separate discreet subject, but the subject has internal classifications into 'human' and 'physical' geography, which often remain separate (as discussed in the previous section). The 'framing' of geographical knowledge (see section 2.2.2) has changed over time; the once highly prescriptive National Curriculum provided a strong frame, but changes in 2008 and 2010 (see section 1.3) loosened that control and so teachers now have much more autonomy over content. This has created a much more weakly framed subject, which is more open to curricular 'corruption' (e.g. Standish 2009).

Classification and framing of knowledge can be combined to outline not only the challenges facing geography in schools, but also the changing importance of a subject based school curriculum. Figure 2.6 attempts to explain this relationship with the addition of plus and minus signs after the letters C for classification and F for framing, which were devised by Daniels (1987) to indicate the relative strength of the classification and framing (+ for strong and – for weak).

	F++	F--
C++	<p>Strong classification and strong framing: Indicative of the National Curriculum for secondary schools of 1991 in which discrete subject disciplines existed to deliver a pre-determined set of content with national examinations. For geography, the subject would contain lists of highly prescriptive 'core' knowledge likely to incite an F1 curriculum.</p>	<p>Strong classification and weak framing: Pre-National Curriculum school curricular, and post 2008 reforms of the National Curriculum provide a weak frame, by reducing specified content and returning more control to teachers, though still within subject disciplines. Geography teachers are able to choose their own content in geography lessons.</p>
C--	<p>Weak classification but strong framing. This could be indicative of the experience of primary schools. Teachers are not bound by distinct subject disciplines, and those that do exist such as maths and English have close links. Teachers have more autonomy over the topics they teach but do have predetermined competencies and skills they need to deliver such as literacy, numeracy and IT skills. Geography is unlikely to be a discreet subject, but 'world knowledge', and some generic skills such as map interpretation would be integrated within a topic based curriculum.</p>	<p>Weak classification and weak framing. This would be indicative of a school not bound by traditional subjects or any pedagogic expectation. Teachers would have complete autonomy in the classroom. Harley (2010) suggests in the USA school curricula "both classification and framing have been historically weak" (p8), and in the English system some new schools now seem to be developing this form of curriculum, such as the RSA academy in Tipton (see section 1.4.1) where geography is either non-existent or combined as part of 'humanities'.</p>

Figure 2.6: The relationship between classification and framing of the geography school curriculum based on Bernstein (1973) and Daniels (1987).

The notions of classification and framing help to position many of the observations of the geography curriculum outlined in chapter 1. For some schools free from government curricular control, the classification of subject boundaries is weakening, such as in the RSA Academy (see section 1.4.1), where some subjects like geography are completely lost from the curriculum.

The resultant curriculum, free from the 'constraints' of subjects tends towards an F2, skills and competency based curriculum. On the contrary, a strongly classified and highly framed curriculum has a rigid prescription of content which tends towards an F1 curriculum interpretation in which 'core' knowledge has to be 'delivered'. A strongly classified, but relatively weakly framed curriculum opens up possibilities for an F3 curriculum; classified to enable subjects to exist within a curriculum but weakly framed enough to encourage geography teachers to select knowledge for themselves and to not see content as something to 'deliver'.

A key component of an F3 curriculum is its emphasis on powerful knowledge (Young 2008, see section 2.2.6). Section 2.3.1 discussed the ways in which geographical knowledge is created in a highly specialised and fractured university discipline. For teachers of geography in schools, presenting a coherent discipline for pupils becomes a challenge given this vast potential knowledge base. Defining the powerful knowledge of geography that needs to be taught in schools becomes as much of a challenge as delimiting the knowledge in the academic discipline.

Yet to teach 'powerful knowledge' to achieve an F3 geography curriculum, teachers need to have an understanding of the discipline. Not all teachers believe this to be an important consideration in their practice. In research into 'place' education, Fanghanal (2009) researched a geography teacher in Higher Education who,

“...strongly de-emphasised the disciplinary input in her approach, stating that she didn't feel that her 'duty was to turn out geographers' and underplaying her own sense of belonging: 'I have no big disciplinary allegiance. I like geography because it allows me to do the things that I

like doing'. For her, the link to the discipline was less important than a sense that her students should access a broader understanding of the social world through her input" (p112).

This teacher, despite being a geographer, does not see the value of geographical knowledge in the curriculum. Her child centred ideological approach is akin to F2 curriculum thinking, in which skills replace knowledge as the central concern of a curriculum. This ill-disciplined thinking cannot provide a coherent structure for students to make sense of the world; it simply enables them to access small pieces of information that have no coherence or underlying ideology. Her views may not be alone. It is this sort of teaching, often by non-specialist geography teachers that may be responsible for the 'boring and irrelevant' geography teaching in the 2000s (e.g. Ofsted 2008, 2011). F3 curriculum thinking is more ambitious, and relies on the teaching of powerful geographical knowledge.

Defining the powerful knowledge of geography is problematic in part due to the 'horizontal structure' of geographical knowledge, which Bernstein (1996) identifies, and which he differentiates from 'hierarchical' knowledge structures. Horizontal knowledge structures are,

"...a series of specialised languages, each with its own specialised modes of interrogation and specialised criteria... with non-comparable principles of description based on different, often opposed assumptions" (Bernstein, 1996 p172-3).

Knowledge here is described as a way of understanding and communicating a phenomena, as a 'language'. It is characteristic of a weakly framed curriculum, and would characterise subjects such as art and history. These subjects can be accessed at a higher level without a gaining of the lower level knowledge. A

student could study a series of geographical topics in any order, there is no reason why a topic on 'coasts' should follow on from a topic on 'rivers'; they are distinct horizontally structured areas of geographical knowledge. In the same vein a pupil could start a geography A Level without studying geography at GCSE. By contrast, hierarchical knowledge structures are "an explicit, coherent, systematically principled and hierarchical organisation of knowledge, which develops through the integration of knowledge at lower levels" (p172-3). This type of organisation would see a progression in complexity of knowledge, and so access to later knowledge relies on the gaining of earlier knowledge. In schools, this would be characterised by subjects such as maths and physics. A student needs to learn to multiply and divide before they can access algebra. A student could not start an A Level in maths without a GCSE in the subject. Defining what constitutes 'powerful geographical knowledge' is not simple (see section 2.3.2). Any attempt to define powerful knowledge creates a tick list of content (e.g. Hirsch 1988), and immediately suggests an F1 curriculum. Taylor's (2009) list of core concepts, figure 2.5, simply group and classify what has traditionally been part of prescriptive geographical content of the past.

Rather than defining lists of the powerful knowledge of geography, recent work has used Young's definition of what powerful knowledge is (see figure 2.4) and applied this thinking to geography. This work has been part of the GeoCapabilities 2 project (see section 1.7.1), and the topic of associated project workshops. In an attempt to provide a real life example of what powerful knowledge in geography might look like, figure 2.7 is a short 'reflective piece'. In this piece, the notion of powerful geographical knowledge in relation to the teaching of coastal geomorphology with a class is described then discussed.

DESCRIPTION

My Year 10 class (15 year olds) know that 'the Holderness coastline (on the east coast of England) is made from boulder clay'.

This is not everyday knowledge. But is it 'powerful knowledge'? I would argue it is not, on its own, powerful knowledge. It is just a more or less correct 'fact'.

However, 'boulder clay' (or more precisely glacial till) could be conceptualised in a number of ways by different academic disciplines - chemists would be interested in its chemical composition, physicists might look at its tensile strength and the way it behaves under different stress and pressures.

Geographers could look at it in a number of ways: for example, geomorphologists would develop their knowledge of boulder clay in terms of its physical properties of permeability, its tendency to slump and move under gravity and how it affects and is affected by its environmental context. To fully understand boulder clay geographically it needs to be placed within the context of its origins (from glacial deposition some 10-20,000 years ago) and its surroundings, which in the case of the clay on the Holderness coastline includes its location next to the sea. The actions of the sea (which can also be conceptualised in a number of ways) are of importance to understand the significance of the boulder clay as the wave action erodes the clay cliffs to cause rapid cliff retreat.

DISCUSSION

Our knowledge of 'boulder clay' (or glacial till) is shaped by the way it is conceptualised in the discipline of geography. For instance, we do not fully comprehend the significance of this phenomenon without knowledge of its

origins, composition and location. It is this that makes it 'powerful'. It is almost the 'back story' of boulder clay - the way boulder clay is understood - that is indicative of the way geographers identify and describe it, and its significance.

Figure 2.6: A 'vignette' of powerful geographical knowledge based on the teaching of coastal geomorphology in the geography classroom.

In Figure 2.7, it is suggested that powerful knowledge positions information within its subject context, using the notions of 'thinking geographically' to express geographical knowledge. Part of the GeoCapabilities 2 project (as explained in section 1.7) encouraged teachers to create their own vignettes of powerful knowledge, versions of Figure 2.7, to explore this notion further and these can now be found on the project website (see section 1.7.1).

This section discussed the ways in which geography is a specialised knowledge, using the ideas from Bernstein (1973 and 2000) to illustrate how the subject relates to concepts of classification and framing before considering the nature of geography's 'powerful knowledge'. The next section discusses how powerful knowledge can be integrated into the 'curriculum making' process to reveal the possibilities of F3 geography curriculum thinking.

2.3.3 The 'making' of an F3 geography curriculum

The last section discussed how geography is a specialised knowledge, and articulated some ways that 'thinking geographically' can be used to express the powerful knowledge of the subject. This section discusses how teachers can use their understanding of geography to help children to engage with the

powerful knowledge of the subject (as defined by Young 2008), a process Morgan and Lambert (2010) call 'curriculum making'. Curriculum making articulates the process of linking powerful geographical knowledge to powerful pedagogies (from Roberts 2014, see section 2.2.6). It is allied to discussions of recontextualisation of knowledge (from Bernstein 2000, see section 2.2.2) but takes this further by including considerations of the pupils and the school setting. It is this that has the possibility of creating F3 curriculum thinking.

To achieve successful curriculum making, for Lambert and Morgan (2010), three considerations should be kept in balance; the powerful knowledge of geography as a subject discipline; powerful pedagogies or teacher's choices about how to enable children to engage with geography; and the students themselves, their experiences of the world, their motivations and the ways they learn. This all takes place within the context of the discipline of geography, and the rules and norms of knowledge creation in geography. Figure 2.8 models the process of 'curriculum making' in geography.

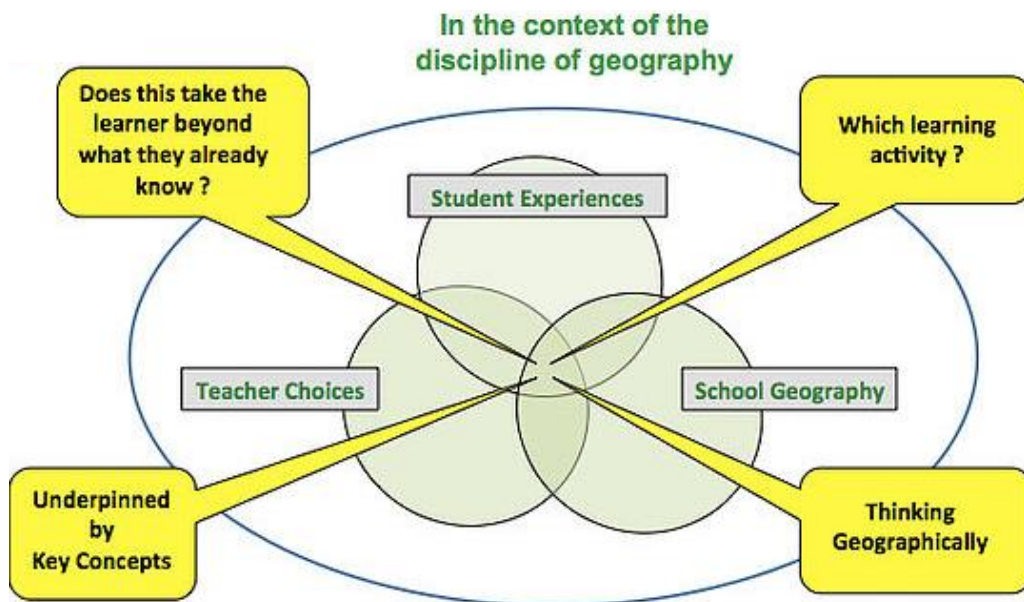


Figure 2.8: A model of 'curriculum making in geography' (based on Lambert and Morgan 2010 p50).

The ideal curriculum for Morgan and Lambert (2010) is at the centre of the conceptual diagram, where all three circles combine. As they argue,

“If the subject was the only real source of creative energy (and students were thought to be passive recipients of what the teacher, literally, had to tell them) then we return to the often caricatured grammar school ways of the mid twentieth century. On the other hand, if the curriculum is made entirely to serve students interests and is entirely ‘child centred’ it risks taking them nowhere new in their learning and could be as deeply unproductive as the previous option. Finally, if the teachers were only really interested in their own performance and the ‘pedagogical adventure’ they can provide, the curriculum risks being emptied of meaning, overtly driven by skills at the expense of knowledge and understanding” (p51).

These discussions can also link to Young and Muller's (2010) Futures curriculum with F1 being an over emphasis on knowledge and F2 being an over focus on teachers performance or children's needs. The ideal curriculum is one in the centre, where all parts are balanced, and teachers are able to mediate between the demands of knowledge, of pupil needs and of pedagogy. It is in this space that envisioning an F3 curriculum becomes possible.

This section discussed how curriculum making embeds powerful knowledge within a broader set of considerations for teachers to 'make' the geography curriculum. Yet to achieve an F3 geography curriculum, there is still a need for some form of curriculum 'framework' to guide teachers in deciding on appropriate 'powerful knowledge' content in a highly classified, but weakly framed curriculum. This is where the notion of 'capabilities' could be of use, and the next section reviews the origins of the concept and how it has translated into thinking about the geography curriculum.

2.4 THE CONCEPT OF CAPABILITY

The last section reviewed the literature into curriculum debates in the 2010s. This section reviews the literature around the capability approach. This research explores the extent to which the concept of capability might provide a means by which geography teachers can express a Future 3 curriculum. The research questions, which are re-stated in section 2.5, tentatively ask if there is a link between the capability approach and an F3 geography curriculum. In the first section the capability approach is outlined (2.4.1) and the ways capability has been 'defined' (2.4.2) before it outlines the ways in which the capability

approach has been used in educational discourse (2.4.3) and ways educational capability lists have appeared (2.4.4). The final part of this section then relates geography education to the capability approach where I review the origins of debates around geocapability (2.4.5). First the capability approach is introduced.

2.4.1 The Capability Approach

This section introduces the 'capability approach' (Sen 1985a, 1985b 1987, 1999, Nussbaum 1995, 2000) which was developed initially in studies of human wellbeing and development discourse, before being considered in educational terms (e.g. Hinchcliffe 2006, see section 2.4.3). The capability approach is a conceptual framework that attempts to enter into discussion about what makes a 'good life', or what people judge and value to be a good life. Rather than focusing on specific measurable data such as the amount of wealth a person has, it looks at what people are capable of doing, thinking, or achieving and what freedoms this affords them to live life in the way that they choose. The capability approach attempts to determine a person's capabilities, or 'capability set', which is an expression of what people are able to 'do' or to 'be'. It looks holistically at what a person is able to achieve, how they are able to think, and what they want to achieve for themselves. It is purposely a loose and fluid framework that can be applied to a wide range of peoples and societies with differing cultures, who have different ideas about what constitutes a good life.

The literature on the capability approach includes a range of terminology as part of this conceptual framework. A person's capability set is the product of their 'commodities' which acts as an input to the framework. This includes a person's

wealth, the health of their diet, the standard of their living conditions and the level of their education. This directly leads to the development of a ‘capability set’, a collection of knowledge, skills and competencies. The creation of the capability set can be inhibited by ‘capability deprivation’; any factor that inhibits the gaining of capabilities. The larger the capability set the more ‘functioning’ this can afford a person, which are the ‘beings and doings’ of everyday life. Choice about how to function is a key aspect of the framework. The purpose of the functioning is ‘utility’, what a person wants to achieve in the world to make them happy and fulfilled. A further distinction is made here with ‘agency’, which is about living and thinking critically as part of a society, with practical considerations such as the taking on of a political cause which may not lead to happiness but are considered an important aspect of a ‘free’ adult life. These aspects of the capability approach can be illustrated in a simple model, shown in figure 2.9.

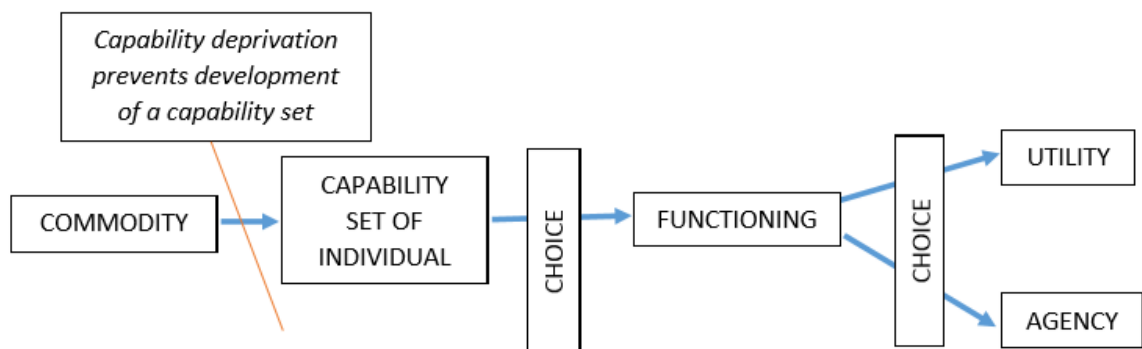


Figure 2.9: A conceptual model to show the various aspects of the capability approach derived from the literature.

The capability approach can be illustrated with reference to development discourse. With more income, people are able to afford more food and better accommodation, all of which counts as the ‘commodity’ input. This in turn could

enable them to be fitter and healthier people who thus have more capabilities, and a better developed capability set to live in the world in the way they would want to. Though we must be careful, as Robeyns (2003) warns,

“...commodities ... should not necessarily be thought of as exchangeable for income or money – as this would restrict the capability approach to analyses and measurement in market-based economies, which it does not intend” (p12).

As she warns, capabilities is not about money. Sen (1985, 2000) does not identify any specific capabilities that may be part of a capability set, as he argues that capabilities will vary across societies, though some have argued (e.g. Nussbaum 2000 and Finnis 1980) that ‘bodily health’ would be a key universal capability as without this, the ability to carry out any sort of functioning in life would be restricted. The ‘functioning’ is a person actually carrying out the doings and beings they are capable of, such as going to work to earn an income, eating a healthy diet, or living in a safe and secure home. Again Sen does not offer any specific functioning that is of value as again this will vary in time and space, and will be dependent on the capability set of the individual. Capability and functioning are two similar ideas, but are significantly different. A person with a capability of bodily health will be able to function effectively by choosing to go out to work to earn an income. The capability is bodily health, the functioning is going to work. As Sen (1987) explains,

“...a functioning is an achievement, whereas a capability is the ability to achieve ... Capabilities... are notions of freedom, in the positive sense: what real opportunities you have regarding the life you may lead” (p. 36).

A person with the capability of bodily health uses that to go to work and earn money (the functioning), this then gives them financial security, fulfilment and

happiness (the utility). The idea of 'utility' will also differ across the globe; what people consider to be valuable outcomes in life by functioning in particular ways will be affected by cultural and social factors as well as societal norms and historical considerations. What is distinctive in the capability approach is that people are able to achieve the utility that they crave, such as happiness or emotional security, and this enables true freedom and thus a more complete picture of 'wellbeing'.

The key to the framework is the personal freedom and *choice* people have about how to behave with the given capability set, hence the idea of 'development as freedom' (Sen 1999). For Sen (1999) measuring a country's development through statistics such as GDP says nothing about the ability of the people in those countries to live a full and fulfilling life in which they are able to make choices about how to live. According to Sen (1999), this is what the capability approach enables, an understanding of the real freedoms that people have. This says far more about development than traditional statistics.

A further aspect of the capability approach is the identification of 'capability deprivation' which describes any factor that inhibits the development of specific capabilities. These 'negative freedoms' as Sen (1992) would identify, "stem from the violation of personal rights as well as the absence of positive freedoms" (Clark 2005 p9). As Iceland (2004) defines, "poverty should be viewed as the deprivation of basic capabilities rather than merely the lowness of income" (p 1). In development discourse, factors that inhibit development of individuals can be regarded as factors of capability deprivation, and might include, for example, rules regarding the role of women in society which would restrict girls from going to school. These rules inhibit the gaining of capabilities

which an education would provide, so these rules are seen as ‘capability deprivation’.

This section outlined the capability approach and some of the ways it has been expressed in the literature. The next section explores the ways in which writers have attempted to define what capabilities might be.

2.4.2 Defining ‘capabilities’

The previous section introduced the concept of capability, and the idea that a person’s capability set enables them to make life choices to live and function in the world. This section discusses the ways that capabilities have been defined in development discourse. The capability approach relies on people being able to create and develop a capability set, to enhance their own wellbeing. Yet exactly what this set might comprise of in practice, or indeed whether an actual list of capability should be defined at all has been argued over.

Sen (1985a 1985b, 1999) has consistently refused to define his own, or to endorse others’ lists of capabilities. For Sen, the capability approach remains a philosophical framework and lists of capability will be specific to each society or group of people wanting to create them. This gives the capability approach the dynamism to be interpreted and evaluated in many different ways by different societies. As soon as a list is created or endorsed it immediately becomes reduced to a check list, and this tick box approach to defining a ‘good life’ removes the complexity of the approach. Despite this, Clark and Qizilbash (2002) suggest Sen often provides examples of intrinsically valuable capability such as being able to live long, escape avoidable morbidity, be well nourished, be able to read, write and communicate, and take part in literary and scientific

pursuits. This lack of a specific list of capability has led others to offer their own sets of universal capabilities in an attempt to further Sen's framework (e.g Alkire and Black (1997), Alkire (2002), Clark and Qizilbash (2002) Clark (2003), Nussbaum (1990; 1995; 2000; 2003) and Robeyns (2003)). Figure 2.10 offers an overview of selected capability sets.

Finnis 1980	Griffin 1986	Gatlung 1980
Life Survival Health Reproduction Knowledge Meaningful Work / Livelihood Authentic Self- Direction Participation / Agency Relationships Inner Peace Environment &Aesthetic	Accomplishment components of human existence deciding for oneself/agency minimum material goods limbs & senses that work freedom from pain & anxiety liberty understanding enjoyment deep personal relations	input-output (nutrition, water, air) climate balance with nature (clothing, shelter) health community symbolic interaction and reflection (education)
Davitt 1968	Lasswell and Holmberg 1969	Qizilbash 1996
Life and reproduction, Protection and Security Title (Property) Sexual Union Decision-Responsibility Knowledge, Art, Communication, Meaning	Skill Affection Respect Rectitude Power Enlightenment Wealth Well-Being	Health/nutrition/ sanitation/rest/ shelter/ security Literacy/basic intellectual and physical capacities Self-respect and aspiration Positive freedom, autonomy or self-determination Enjoyment Understanding or knowledge Significant relations with others and some participation in social life Accomplishment

Figure 2.10: A collection of selected 'universal capabilities sets', based on Alkire (2002)

These authors have all adopted different interpretations of capabilities, and used different methodologies and ideas to create their lists, hence the different ideas proposed. There are many similarities within these sets, with notions of “health” and “life” appearing on multiple lists. However, it is Nussbaum’s (2000) list of capabilities that has become the most celebrated in academic literature and is listed below:

1. *Life*. Being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced as to be not worth living.
2. *Bodily Health*. Being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter.
3. *Bodily Integrity*. Being able to move freely from place to place; to be secure against violent assault, including sexual assault and domestic violence; having opportunities for sexual satisfaction and for choice in matters of reproduction.
4. *Senses, Imagination, and Thought*. Being able to use the senses, to imagine, think, and reason—and to do these things in a “truly human” way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical and scientific training. Being able to use imagination and thought in connection with experiencing and producing works and events of one's own choice, religious, literary, musical, and so forth. Being able to use one's mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech, and freedom of religious exercise. Being able to have pleasurable experiences and to avoid non-beneficial pain.

5. *Emotions*. Being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; in general, to love, to grieve, to experience longing, gratitude, and justified anger. Not having one's emotional development blighted by fear and anxiety. (Supporting this capability means supporting forms of human association that can be shown to be crucial in their development.)
6. *Practical Reason*. Being able to form a conception of the good and to engage in critical reflection about the planning of one's life. (This entails protection for the liberty of conscience and religious observance.)
7. *Affiliation*.
 1. Being able to live with and toward others, to recognize and show concern for other humans, to engage in various forms of social interaction; to be able to imagine the situation of another. (Protecting this capability means protecting institutions that constitute and nourish such forms of affiliation, and also protecting the freedom of assembly and political speech.)
 2. Having the social bases of self-respect and non-humiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails provisions of non-discrimination on the basis of race, sex, sexual orientation, ethnicity, caste, religion, national origin and species.
8. *Other Species*. Being able to live with concern for and in relation to animals, plants, and the world of nature" (Nussbaum 2000).

As she argues, this list "isolates those human capabilities that can be convincingly argued to be of central importance in any human life, whatever

else the person pursues or chooses". (Nussbaum, 2000, p.74). Her ambition was to create a list of universal capabilities. Yet her list has been criticised as offering a white, North American, middle class viewpoint of what everyone in the world ought to crave. Stewart (2001) complains that Nussbaum did not listen to the voices of the poor when generating her list. Clark and Qizilbash (2002) are even more critical, arguing,

"...on closer inspection, however, Nussbaum's...theory...turns out to be derived largely from Ancient Greek Philosophy instead of concrete studies of human values" (p. 3),

Their criticism stems from a seeming lack of empiricism. Yet similar criticisms could be made of each of the capability sets offered in figure 2.10, which were created by different writers for varied reasons.

Sen's refusal to endorse a set list of specific capabilities has given rise to debate between Nussbaum and Sen. As Nussbaum (1988) argues, Sen,

"...needs to be more radical than he has been so far ...by describing a procedure of objective evaluation by which functionings can be assessed for their contribution to the good human life" (p.176).

She accepts he will not endorse a list, but wants him to at least identify the means by which capabilities can be decided upon. Sen (2004) has been equally critical of Nussbaum's (2000) list, arguing,

"...to have such a fixed list, emanating entirely from pure theory, is to deny the possibility of fruitful public participation on what should be included and why" (Sen, 2004, p.77).

For Sen, it is societies who decide on their own capabilities through participation, and should not have any list imposed on them. In an attempt to reconcile these two very different viewpoints, Gasper (2004) argues that

Nussbaum's list should be a starting point for discussion "in each society, as a rational interpretation, implication and evolution of their values" (Gasper, 2004, p.187). Discussions between individuals in communities can enable capabilities to evolve, based on what that society values, and the capability approach provides a structured framework for those discussions to take place.

The discussions outlined here in the development discourse illustrate a key antagonism inherent within the capability approach. On the one hand, it is a conceptual, philosophical framework that presents an idea of development, and a means to discuss what is valued in life. On the other hand, there is a need to define capability in more practical terms, to render it much more applicable and useful in real life contexts. Despite these challenges, as Robeyns argued in 2003,

"...the next decades will show whether the capability approach remains primarily a philosophical framework, or whether it will grow into a mature paradigm for well-being, development, and social policy" (p.54).

For her, the capability approach has much promise and the approach has since been taken on in other academic fields, including in education. As Hinchcliffe and Terzi (2009) explain, "the time for capabilities for educational researchers, writers and thinkers seems to have finally arrived" (p 387). This section has charted the development of the capability approach as a concept, and identified ways in which capabilities have been defined by various writers. The next section goes on to describe how educational discourse has taken on the ideas and aspirations of the capability approach.

2.4.3 The Capability Approach to Education

The last section introduced the capability approach within the discourse of development economics and this section outlines the ways in which the concept has been discussed in relation to education. First the capability approach to education is outlined and related to ideas about the role of the teacher and the nature of a subject based curriculum, before the next section (2.4.4) enters into the question of whether educational capabilities can be defined. After this, the application of the capability approach to geography education is discussed (2.4.5).

The capability approach to education offers a means of expressing what an education allows a person to 'be' or to 'do'. Rather than discussing the success of education based on figures such as pass rates, or exam grades, a person's education enables them to develop a set of capabilities to allow them to function in the world. Thus the capability approach⁵ asks what an education can enable a young person to achieve far beyond any instrumental measure of success. In short, it facilitates a focus on the 'outcomes' of education rather than simply the measurable 'outputs' (terms I discussed in section 2.2.1).

By the 2010s there had been many attempts to introduce the capability approach to areas of educational study (all discussed in Walker 2006); Page (2004) and Raynor (2004) consider capability in teacher development; Terzi (2003, 2004) considers capability in special education; capability and school leadership is discussed in Bates (2004); capability and adult literacy in Alkire (2002); and capability and higher education, the largest field of capability

⁵ The academic literature often use the terms 'capability' and 'skill' interchangeably. For the purposes of this research, references to capability are only those which use the term in the full Sen/ Nussbaum sense.

education research, is discussed in Flores- Crespo (2001), Deprez and Butler (2001), Watts and Bridges (2003), Bozalek (2004) and Walker (2006). When discussing the nature of research into the capability approach to education, Hinchcliffe and Terzi (2009) identify two areas of research,

“One focuses on the nature of capabilities themselves, how they are to be developed and what kinds of functioning their development is likely to afford. The second approach focuses more on the structural features (institutional, social, economic) that govern the development of capabilities” (p.388).

These ‘structural features’ determine the nature of a capability set that develops, with factors limiting capability development again being recognised as ‘capability deprivation’. The capability set then enables a person to have choices in how to function in the world, including the taking on of agency. In education, Hinchcliffe (2006) has identified a further type of functioning, ‘occupational functioning’, to express choices a person would be able to make about their career or job. With a larger capability set, the choice of career would be much wider. Figure 2.11 is a model to identify the way the capability approach to education has been discussed in the literature.

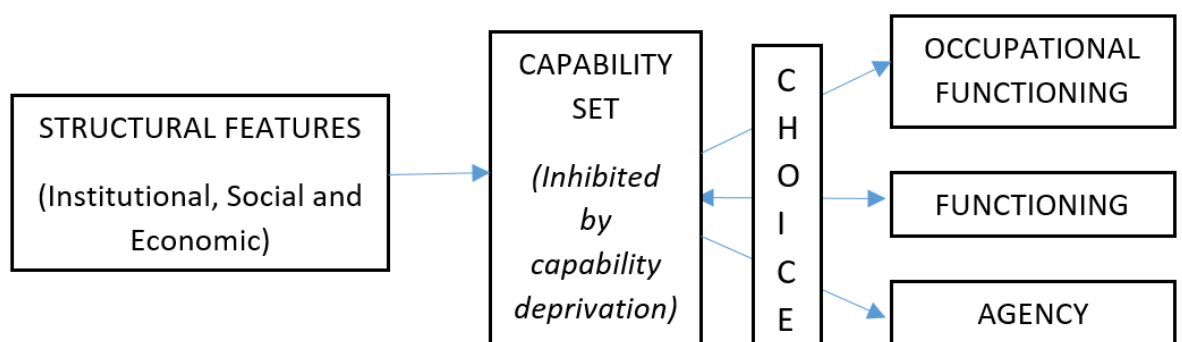


Figure 2.11: A conceptual model of how the capability approach has been applied to educational discourse.

In Figure 2.11, the concept of 'structural features' derives from work on 'structuration theory' (e.g. Giddens 1984). This work suggests that people's actions are the product of a set of societal norms and values which are often unwritten. These norms provide a 'structure' which informs and affects the decisions people take. Structures are often seen as being constraining, affecting the ability of an individual to exercise complete free will. In education discourse, this theory would identify that teachers operate within a set of real and perceived professional 'structures': teachers have to be based predominantly in a school classroom, have to teach within a set amount of time, and have to follow a curriculum structure, for example. Teachers have to work within these structures at a variety of scales, and 'structural features' is a way of expressing the nature of these constraints. Yet Giddens (1984) "redefines the role of structure by realising that it can be both a constraining and enabling element for human action" (Lamsal 2012 p112- 113), suggesting that people are able to react to and interact with potential structures. These structures can be 'constraining' to teacher's work, and can therefore be a negative influence or can be 'enabling', providing more opportunities for teachers. This idea of 'structuration' is an attempt to conceptualise this relationship between the structures imposed on an individual, and their response to it.

Structural features in education are identified by Hinchcliffe and Terzi (2009) in terms of institutional features, social features and economic features.

Institutional features are concerned with the place in which the education is taking place. It refers to the institution's policies and ethos as well as national policies of compulsory education provision. It also includes aspects of the curriculum, how learning is organised and 'delivered', examination criteria, the nature of teaching and learning, and resources. 'Social' features are concerned

with the nature of the learner, their capacity to learn, social background, income and age. 'Economic' features includes the traditional elements of 'commodity' (from the original conception of capability as modelled in figure 2.10), how much finance there is in education and what this can afford the institution in terms of resources, learning environment, and extracurricular opportunities which may also impact on student capability. These structural feature elements need to combine, as Hinchcliffe and Terzi (2009) explain,

“A wonderful pedagogy with first rate teachers will have little impact without being embedded in the right kind of institutional framework. On the other hand, excellent policy initiatives that promote favourable institutions and resources will have little impact (so far as capability is concerned) if the curriculum is impoverished and does not address the development of capabilities” (p. 388).

For them, the institutional framework of schools affects the nature of the curriculum and these promote the development of capabilities in pupils. Structural features can also inhibit the development of capabilities, as Saito (2003) argues,

“...if the education system takes an extremely 'top down' approach and stresses competitiveness, children tend to study subjects that are required for examination success... In this case, the children ... are considered to have limited capabilities” (p27).

This top down competitive nature of curriculum is a form of capability deprivation as the idea of freedoms and choice as a result of education is removed in the quest for examination grades.

The pupil develops a capability set as an outcome of their education and this enables them to make choices about how to live. As White (1973) argues, “in

order for the child to be able to make choices in his/ her life, the child needs to become autonomous through education” (cited in Saito 2003 p27). An educated person is free to make decisions for themselves, choosing their functioning, as modelled in figure 2.11. The more developed the capability set, the more choices are available to that educated person. Functioning takes many forms; it is the beings and doings of life, ‘occupational functioning’ about what career to follow and the taking on of ‘agency’, being active and critically engaged in 21st century society. Agency is about the capacity of individuals to make choices, exercising free will to think and behave in their own ‘free’ way. Agency can include the taking on of a political or environmental cause by joining a pressure group, or campaigning. Although, if teachers actively promote particular values to students, perhaps as part of a hidden curriculum (see section 2.2.1) this could be seen as a form of ‘capability deprivation’.

Prior to discussions of ‘geocapability’, the literature on the capability approach to education had two major omissions and these relate to the role teachers play in enhancing the capabilities of pupils, and the place of subject knowledge in developing such capabilities. Both of these, however, are implicit in the literature. Hinchcliffe and Terzi (2009) identify ‘first rate teachers’ who are able to help pupils to develop capabilities although the process for this is not discussed. The importance of a subject based curriculum to develop capabilities is less clear. Saito (2003) assumes a natural role for subjects, as he illustrates,

“Lisa learns mathematics and as a result, she has ... newly created opportunities and capabilities... (which) may be ones that Lisa was not aware of, and which were not in her capability set before learning mathematics”.

For Saito (2003), there is a direct link between subject knowledge and capabilities which supports a subject based curriculum. However other writers disagree. In order to develop capabilities to enable 'deliberation over career choice', Hinchcliffe (2009) argues,

“...space in the curriculum needs to be made for career choice, from school right through to university” (p.412)...so much time and attention is devoted to the acquisition of knowledge, understanding and skills whilst crucial decisions consequent on this education (what university shall I apply for, what course should I pursue, which occupation best suits me) are often left more or less to chance” (p.412).

For Hinchcliffe (2009), capabilities which enable occupational functionings require their own curriculum time, and cannot be developed through traditional school subjects. This undermines the role of a subject based curriculum. These discussions can be related back to the three curriculum futures heuristic developed by Young and Muller (2010, see sections 2.2.4, 2.2.5 and 2.2.6). The curriculum specifically to develop 'occupational functions' could create an F2 curriculum, whereas the necessity for subjects to develop capabilities has the potential to create an F3 curriculum and it is this contention that underlies this thesis.

This section has outlined the ways the capability approach has been applied to educational discourse, identifying how 'structural features' enable the development of capabilities which leads on to educated pupils being able to make choices about how to live. It identified a discrepancy in the role of subject knowledge in developing capabilities, and a lack of explanation of the role of teachers in the process. These ideas will be returned to in a later section on

'geocapability'. The next section discusses the ways that the idea of 'lists' of educational capability have developed.

2.4.4 Educational Capability lists

This section describes the attempts that have been made to create lists of educational capabilities. First it discusses attempts to define universal educational capabilities, before looking at the role of subjects in developing capabilities. In development discourse, Sen always avoided listing specific capabilities (as discussed in section 2.4.2), and so for education, Saito (2003) asks, "Is it possible to outline a range of capabilities that children should engage with?" (p29). A list of capabilities could form the basis of curriculum planning in schools, but equally could be seen as restrictive and reduce curriculum to a tick list of competencies. The closest attempts to define lists of universal educational capabilities comes from the fields of special educational needs (Terzi 2005) and higher education (Walker 2006). Their lists (slightly abridged) are shown in Figure 2.12.

Terzi (2005)	Walker (2006)
<p>Literacy: being able to read and to write, to use language and discursive reasoning functionings.</p> <p>Numeracy: being able to count, to measure, to solve mathematical questions and to use logical reasoning functionings.</p> <p>Sociality and participation: being able to establish positive relationships with others and to participate without shame.</p> <p>Learning dispositions: being able to concentrate, to pursue interests, to accomplish tasks, to enquire.</p> <p>Physical activities: being able to exercise and being able to engage in sports activities.</p> <p>Science and technology: being able to understand natural phenomena, being knowledgeable on technology and being able to use technological tools.</p> <p>Practical reason: being able to relate means and ends and being able to critically reflect on one's and others' actions.</p>	<p>Practical Reason: Being able to make well- reasoned...choices.</p> <p>Emotional resilience: Able to navigate study, work and life.</p> <p>Knowledge and imagination: Being able to gain knowledge of a chosen subject- disciplinary and/ or professional- its form of academic enquiry and standards. Being able to use critical thinking and imagination to comprehend the perspectives of multiple others and to form impartial judgements.</p> <p>Learning dispositions: Being able to have curiosity and a desire for learning.</p> <p>Social relations and social networks: Being able to participate in a group for learning, working with others to solve problems and tasks.</p> <p>Respect, dignity and recognition: Being able to have respect for oneself and for and from others.</p> <p>Emotional integrity and emotions: Not being subject to anxiety or fear which diminishes learning.</p> <p>Bodily integrity: Safety and freedom from all forms of physical and verbal harassment.</p>

Figure 2.12: A list of suggested universal 'educational' capabilities.

These lists were created for different reasons and for different types of learner. Terzi's (2005) list is for learners with disabilities and those with special educational needs, and the "capability approach helps... to (define) fundamental educational capabilities at levels necessary to function and participate effectively in society" (p7). For Walker (2006), working in higher education, "the idea is for higher education communities... to produce their own flexible, revisable and general list" (p49). What is common in both these lists is the idea

of the capability approach expressing the ideal conditions to learn, rather than any specificities of a curriculum. The focus is on the individual structural features of curriculum, such as the personal qualities of a learner, with the idea of 'learning dispositions' and 'practical reason' being a feature of both lists, which is evocative of F2 curriculum thinking (as discussed in section 2.2.5). These lists can provide a starting point for teachers to think about the pupil focussed outcomes of a school curriculum.

Both lists support the development of capabilities through knowledge. For Terzi (2005), knowledge is in the form of literacy, numeracy, science and technology whereas Walker (2006) identifies "knowledge of a chosen subject- disciplinary and/ or professional- its form of academic enquiry and standards" as a capability in itself. This 'form of enquiry and standards' of a subject identifies that a subject is more than simply a list of facts but is a way of 'thinking' about knowledge, a sentiment which is close to F3 curriculum thinking (as discussed in section 2.2.6). The values dimension of knowledge is also an explicit consideration of capabilities. What Walker (2006) is advocating is 'open mindedness', and an 'awareness' of ethical debates and moral issues, as well as 'listening to and considering other person's points of view in dialogue and debate'. It is an example of values clarification, where complex issues are clarified and this then allows a student to decide their own position on the issue rather than being told what to think as a result of their education, or values 'transmission' from teacher/ lecturer to student. Being told what to think, rather than how to think, would be an example of capability deprivation and the capability approach is able to articulate this difference.

These debates can be of value to secondary school teachers when curriculum making (see section 2.3.3 for a discussion on this). By ensuring subject knowledge is explicitly defined as a form of capability, it advocates a subject based curriculum. Specific subject based capability lists have started to emerge in academic literature. Sharp and Watts (2004) explore the role that capability might play in students of Religious Education (RE) by interviewing former RE students and assessing the extent to which they integrate notions of their RE education in their everyday lives. Whilst they discuss ‘capability’ they do not explore the concept in detail nor do they offer a list of what RE capabilities might be. Hinchcliffe (2006) has devised a list of capabilities for humanities students in higher education (Figure 2.13).

Hinchcliffe (2006)	
1	Critical Examination and Judgement
2	Narrative imagination
3	Recognition/concern for others (citizenship in a globalised world)
4	Reflective learning (ability to articulate and revise personal aims)
5	Practical judgement (in relatively complex situations)
6	Take responsibility for others.

Figure 2.13: A list of capabilities derived from the study of Humanities in higher education (Hinchcliffe 2006)

The creation of this list suggests that humanities education is about more than simply acquiring knowledge for the sake of passing a humanities exam. The capability approach tries to determine what that knowledge can enable a person to be like, to do and to think and that provides a justification for the study of that

subject. Through a humanities education, a person can develop the capability to have, for example, 'practical judgement'. This is expressed directly as an outcome of a humanities education. Teachers could use the capability list of humanities as a starting point for curriculum design, to then plan learning activities to help young people engage directly with the knowledge that will enable that capability to develop.

Values also plays a role in humanities capabilities. The list encourages students to develop 'recognition/ concern for others'. Teachers would need to be careful in interpreting these capabilities for use with students to ensure any 'concern' they were discussing promoted 'public values' (see section 2.2.5) and not the teacher's opinions. 'Concern' could be misinterpreted as encouraging 'agency' whereby values are transmitted, rather than enabling the 'choice' element of the capability approach.

The problem with the list of humanities capabilities, however, is that it is not unique to humanities. Other subjects could cite 'reflective learning' as a desirable capability for students to develop. If all these capabilities could be developed through other subjects on a school curriculum, then in an overcrowded curriculum would be no need for humanities to be part of a curriculum at all. This list also fails to engage with the knowledge content of humanities, expressing the subject through competencies, which follows F2 curriculum thinking (see section 2.2.5). However, if a list of capabilities were created that is unique to a particular subject, and the only way to develop those capabilities was through studying that particular subject, then the capability approach could be a means to express the value of a subject in a curriculum. This is where the notion of powerful knowledge can be of use (see section 2.2.6); the powerful knowledge of subjects can enable capability to develop. It is

this contention, argued through the subject of geography that underlies this thesis. This is explored further in the next section.

This section outlines the ways that lists of capabilities have developed in educational discourse. These lists assume that a subject based curriculum is the best way to develop capabilities, although attempts to define specific lists of subject based capabilities have yet to be fully expressed. The next section discusses these ideas in relation to school geography.

2.4.5 The Capability Approach to Geography Education: Geocapability

The previous section reviews the literature about educational capabilities, and the extent to which they can be defined and expressed through school subjects. This section explores the ways in which the geography education discourse has begun to take on the ideas of the capability approach. The concept of geocapability is in its early stages, and this thesis is designed to add an empirical basis to an otherwise conceptual discussion. First the section outlines the nature of this conceptual discussion, drawing on a range of literature before identifying the teacher's role in developing geocapabilities and a critique of the concept. In the following section (2.5) the research questions of this thesis are restated.

The previous section identified how the capability approach to education can be a means by which teachers can express pupil focussed outcomes of education. It identified that a subject based curriculum can be used to develop capabilities, and suggested that if teachers can identify a list of capabilities that is unique to a subject, then it provides a rationale for that subject to be on the curriculum, as well as a set of aims to guide teachers in their curriculum making.

Geocapability offers a way of thinking about the contribution that geographical knowledge makes to an educated person. It is an expression of how powerful geographical knowledge (see section 2.3.2) can enable children to think and behave in ways that promote freedoms in life. It articulates what studying geography can achieve that no other subject can. Lambert and Morgan (2010) first introduced geocapability, with the idea being developed in Lambert (2011a, 2011b, 2016) then in two papers developed as part of the GeoCapabilities projects (Solem et al 2013, Lambert et al 2015).

A key contention within discussions around the capability approach has been the extent to which 'lists' of capability can be drawn up. Geocapability has been subject to a similar discussion. When Lambert (2011b) initially presented geocapability, he resisted the temptation to define a distinct 'list' of geocapabilities, in a similar vein to Sen's thinking (1985a 1985b) in initial conceptions of the capability approach. By not defining geocapabilities, the concept remains a theoretical framework and teachers themselves are in a position to decide what they consider to be important outcomes of geography education, related to their ideologies of the subject and the way it fits within broader ideas of education. As soon as a list of geocapabilities is produced it might reduce the concept to a tick list which would restrict curriculum planning. Despite not clarifying what geocapabilities might be, Solem et al (2013) define and list "three GeoCapabilities" which they identified as emerging as part of the first of two funded research projects (see section 1.7), shown in figure 2.14.

Solem et al (2013)
<ol style="list-style-type: none"> 1. Promoting individual autonomy and freedom, and the ability to use one's imagination and to be able to think and reason; 2. Identifying and exercising one's choices in how to live based on worthwhile distinctions with regard to citizenship and sustainability; 3. Understanding one's potential as creative and productive citizens in the context of the global economy and culture" (p221)

Figure 2.14: A suggested list of the capability approach to geography: 'Three GeoCapabilities' from Solem et al (2013, p221)

This list of geocapability is in fact a reworking of three of Nussbaum's ideas (see section 2.4.2) about universal capability, "phrased in a manner that enables analysis of the curricular role of geography" (Solem et al 2013 p216).

This list, however, much like the list of humanities capabilities from Hinchcliffe (2006) does not adequately articulate the knowledge component of geography, nor the unique nature of the subject. Other subjects could assist in the development of these capabilities, most significantly the subject of citizenship. Whilst these could be considered a list of educational capabilities based on Nussbaum (2000) it does not express 'geo' capabilities.

An alternative way of approaching an explanation of 'geocapability' is to relate it back to the conception of powerful geographical knowledge (see section 2.3.2). Rather than trying to 'define' powerful geographical knowledge as an input to the curriculum (as some writers have been doing, as I reviewed in section 2.3.2), geocapability can express the ways in which geographical knowledge can be considered 'powerful' for young people. This changes the focus of powerful knowledge as a concept, from one that articulates a social realist

'input' to the curriculum (see section 2.3.1) to one with a focus on curricular outcomes for pupils. This idea is explored further in the work of Maude (2016) who has expressed five 'types' of geographical knowledge that give 'power' to school students. These are outlined in Figure 2.16.

Type 1:	Knowledge that provides students with 'new ways of thinking about the world'.
Type 2:	Knowledge that provides students with powerful ways to analyse, explain and understand the world.
Type 3:	Knowledge that gives students some power over their own knowledge.
Type 4:	Knowledge that enables young people to follow and participate in debates on significant local, national and global issues.
Type 5:	Knowledge of the world.

Figure 2.16: Types of powerful knowledge in geography (Maude 2016)

Maude's (2016) types of knowledge move beyond many of the descriptions of geographical knowledge that have gone before (such as Taylor's key concepts, Figure 2.5) by highlighting the ways in which geographical knowledge can be powerful to young people, to enable them to think in new ways, and participate in geographical debates and discussions. These 'types' are purposefully broad and gives teachers freedom to choose geographical content for themselves for their pupils to engage with. There are links between these types of knowledge and some of the key concepts of Taylor (2009, Figure 2.5) with 'significant local, national and global issues' being a part of what Taylor might express as 'scale'. The idea that the true 'power' of geographical knowledge is articulated by the ways in which the knowledge is beneficial for young people is close to the aspirations of 'capability'. Yet some of these types are not solely related to geography. The word 'world' recognises the spatial element of this knowledge

but type 3, which recognises the ability of pupils to question sources of knowledge, could be an element of the powerful knowledge of other school subjects. The other critique of defining types of powerful knowledge in this way is that it still does not illustrate exactly what needs to be taught in order to ensure powerful knowledge is developed.

This approach to thinking suggests that what makes knowledge powerful is determined by how it is to be considered and understood in the minds of the learners, or how it might contribute to their 'capabilities'. Thus, geocapabilities are defined by the geographical knowledge on which they are based. This is a different way to approach thinking about educational capability and removes the difficulties of trying to identify 'lists' of either powerful knowledge or capabilities. This notion has been considered by Lambert and Morgan (2010); the capability approach provides powerful knowledge with a rationale. Based on this idea, Lambert and Morgan (2010) identified three 'expressions of powerful knowledge' with which geocapability can be developed. Although it is this initial expression that is the basis for the conceptual understanding of the concept in this thesis, successive publications have developed the concept (Lambert 2011a, 2011b, 2016), with Maude's types of knowledge (figure 2.15) being incorporated into Lambert (2017). Figure 2.16 shows this version (Lambert 2017).

Expressions of powerful geographical knowledge on which capability depends

• **The acquisition of deep descriptive and explanatory 'world knowledge'**. This includes (for example) countries, capitals, rivers and mountains. Also world wind patterns, distribution of population and energy sources. The precise constituents and range of this substantive knowledge is delineated locally influenced by national and regional cultural contexts. **TYPE 2**

• **The development of the relational thinking** that underpins geographical thought. This includes place and space (and scale), plus environment and interdependence. This knowledge component is derived from the discipline. Thus, these 'meta-concepts' are complex, evolving and contested. **TYPE 1**
TYPE 3

• **A propensity to** apply the analysis of alternative social, economic and environmental **futures** to particular place contexts. This requires appropriate pedagogic approaches such as decision making exercises. In addition to intellectual skills such as analysis and evaluation this also encourages speculation, imagination and argument. **TYPE 4**

Figure 2.16: Expressions of the powerful knowledge of geography on which geocapability is based, with reference to Maude (2016) (Lambert 2017).

Firstly, 'deep descriptive world knowledge' does not simply mean lists of capital cities or place names, which could be indicative of an F1 curriculum (as discussed in section 2.2.4). The idea goes beyond this, and is about developing a sense of how places come to be; this could be through a positivist scientific investigation into a place, or understanding people's emotional response to place. This knowledge is 'deep' in the sense that it requires detail, backed up by

evidence, but 'substantive' to express the idea that the potential content could be vast in scale. The words "and explanatory" were added in Lambert (2016) after 'deep descriptive' to clarify the idea that understanding how places are and how they come to be is an important consideration, incorporating Maude's (2016) ideas of 'analysis' and 'understanding'. Children themselves could have a hand in developing this knowledge through their own fieldwork investigations but equally can engage with distant places through other means and teachers reveal the world to children to develop their world knowledge. No other subject offers this. Other subject teachers might mention places in the world, and they may even take the time to show children where they are on a world map but this is superficial. Those teachers will be simply using the place to illustrate a phenomena from their own subject. However, deep descriptive world knowledge treats places as unique, individual and worthy of deep thought and is what occurs in good geography lessons.

The second expression, about 'relational understanding' of people and places in the world is an articulation of physical and human processes. These are theoretically informed; the understanding of the world is derived from a set of thought processes that are distinct to the subject of geography. These create processes such as 'migration' or 'erosion'. The concepts themselves may not be bounded by a specific place but can be applicable to a variety of places. The idea of 'relational thinking' (Lambert 2016) expresses how people are related to other people, and how places are related to other places through 'thinking geographically' about the world (Jackson 2006, see section 2.3.2). This could be through broad physical and human processes, but it also expresses how people and place are interrelated, such as in the understanding of climate change (as articulated by Hulme 2008 see section 2.3.1). Central to 'relational

understanding' is how young people relate to their geographical knowledge and this is why Hulme's (2016) type 1 and 3 are about children taking power over their own knowledge to develop understanding of their place in the world.

The third expression of powerful knowledge on which geocapability is based suggests that geography can enable children to think about alternative social, economic and environmental 'futures'. This has a number of considerations. Firstly it is futures orientated, forcing children to envision life that has not yet taken place. It encourages them to think about how they can contribute to shaping their future, and this links clearly with developing agency, the ideas of a moral education and developing a sense of responsibility for the world. This is engrained into the way students think about the world, hence the 'propensity' to think about these futures. The application of analysis requires the specific thinking of the geographer developed through the discipline of geography. A variety of futures is also a key consideration, how the world might change socially, economically and environmentally, and this offers a variety of viewpoints. It is this understanding that enables Maude's (2016) aspiration for young people to be able to participate in debates and discussions over their futures. However, it also encourages children to think about physical and human processes beyond their control such as cycles of erosion and deposition, climatic changes and how the world might change over both human and geological timescales.

Lambert (2016) describes the powerful knowledge of geography discussed here as a 'bridge' between the aims and aspirations of a geography curriculum and the development of geocapability in young people. Figure 2.17 models this relationship, where powerful knowledge as expressed by Lambert and Morgan (2010) is the bridge between the curriculum and the outcomes of capability as

defined by Solem et al (2013). Curriculum making by teachers (as discussed in section 2.3.3) is the process by which this can occur, and as such teachers play a fundamental role in the development of geocapability in their pupils.

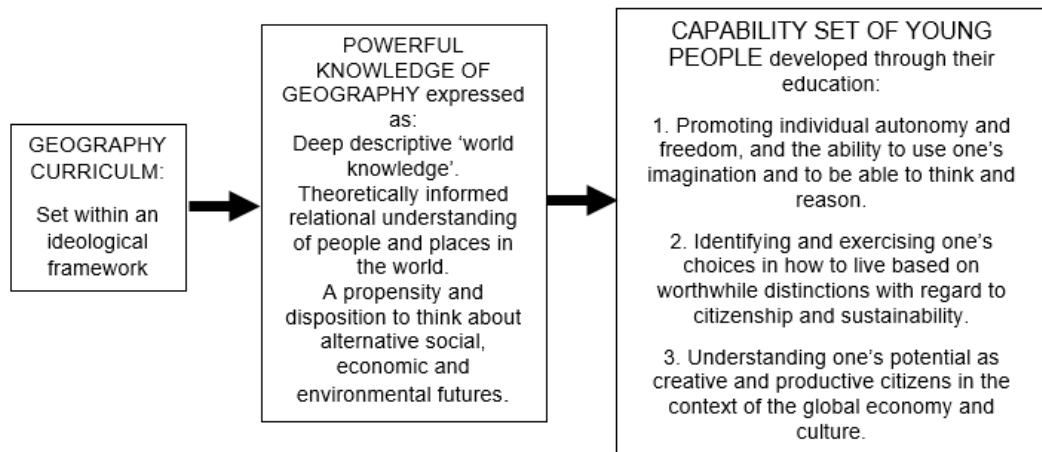


Figure 2.17: Geocapability as expressed by Solem et al (2013), in which powerful knowledge (as expressed by Lambert and Morgan 2010) becomes the bridge to connect the curriculum to capability development.

Geography teachers can use the structured thinking offered by the capability approach when curriculum making, and it is for this reason that Lambert (2016) describes geocapability as a conceptual ‘framework’ for teachers. The framework ensures powerful subject knowledge is at the heart of good geography curriculum, and that powerful pedagogies (Roberts 2014, see section 2.3.3) are the means by which teachers can enable children to engage with geographical knowledge to develop geocapabilities. It enables teachers to ensure the moral dimension of the subject is grounded in its knowledge context so as to avoid ‘morally careless’ teaching, an expression of capability deprivation (see section 2.2.5). It ensures children have a futures dimension, actively thinking about the choices they will be making about how to live and interact in an ever changing world. This in turn enables the educated person to have choices about how to live, how to function (including occupational functionings, see section 2.4.4) and to be active agents in the modern world.

However, geocapability as a concept has drawn criticism. Despite using Young's (2008) ideas of powerful knowledge as the key basis of geocapability, when reviewing the work of Lambert (2011b), Young (2011) himself argues,

“...where he does not convince me is when he draws on Amartya Sen's concept of capability as a way of conceptualising the role the subject (geography) plays in curriculum formation... as a curriculum principle it is too general to underpin the crucial role of schools in transmitting the 'powerful knowledge' on which a student's future 'capability' will depend” (p182).

For Young (2011), the capability approach is not specific enough and thus unable to adequately and suitably reflect the importance of powerful knowledge. Yet the concept of powerful knowledge is only of value if the ways in which knowledge can be considered powerful is articulated. What the capability approach provides is this means; the capability approach is a way of thinking about the curriculum that places powerful knowledge at the heart of a curriculum but is framed within a set of ideas about educational aims and pupil outcomes. Powerful knowledge is not the end point of curriculum, as might be a reading of Young's (2008) work, but the means by which capability can develop. This is why this thesis has been careful to distinguish between a 'led' and a 'focussed' curriculum: 'led' articulates what goes into the curriculum as a starting point, 'focussed' is means to express the outcomes of a curriculum. The idea of a 'knowledge led' curriculum is one in which knowledge is used as the starting point for curriculum making. Pupil 'focussed' means that the outcomes of a curriculum are expressed in terms of pupil achievement, but these are not the basis for curriculum planning. Geocapability is 'knowledge led', but 'pupil focussed' in that it expresses a form of curriculum thinking which uses powerful

geographical knowledge as the starting point for curriculum, but expresses the results of this in pupil outcome terms. This distinction could start to help to address some of Young's (2011) concerns. His critique is addressed further in section 5.3.2.

Arguments around 'curriculum making' and the 'capability approach' are all conceptual debates and there has been a strong need for an empirical basis for these ideas to explore them in more detail. As Lambert and Morgan themselves (2010) concede "more research is certainly needed, and talk of 'geocapability' may be premature" (p64). It is not the intention of this research to directly address Young's (2011) critique, but this research, and the GeoCapability projects (see section 1.7) take on the challenge of providing an empirical basis to the conceptual discussions outlined in this section.

This section has reviewed the literature into geocapability, relating it back to curriculum debates about powerful subject knowledge and the role of teachers. It also identified the need for research into the concept. The next section restates, and justifies the research questions which have been set in this thesis.

2.5 RESTATING THE RESEARCH QUESTIONS

Having reviewed the literature into a set of contemporary curriculum debates and the capability approach to education, this section returns the focus of this chapter back to the research in this thesis. The research questions were introduced in section 1.6, and in this section are explored in more detail, referring back to the ideas developed in the literature.

The overall research question is:

How useful is geocapability as a framework for Future 3 curriculum thinking in geography?

This main enquiry question has been subdivided into three further research questions:

1. How do the 'structural features' of education promote curriculum making in geography?

2. How can capability develop student agency?

3. What contribution does geographical knowledge make to the development of capability?

The first question asks 'how do the 'structural features' of education promote curriculum making in geography?' The 'structural features' of a curriculum is a term identified by Hinchcliffe (2009) and discussed in section 2.4.3. Teachers have a variety of structural features impacting on their work, classified as institutional, social and national and in reviewing the literature it was suggested these features could enhance or inhibit the way teachers go about curriculum making. This question enables an investigation into a variety of structural features that teachers believe affected their work, and the extent to which these have had an impact on their practice. Implicit in this is an understanding of how teachers develop curriculum making.

Along with effective curriculum making developing capability, the second question asks 'how can capability develop student agency?' This question allows an investigation into the extent to which a young person, having developed capabilities through their education, is able to utilise this to make choices about how to live and act, and whether to take on political or social

causes. It is also interested in any issues that prevented effective curriculum making from happening, or the corrupting influences that promote or inhibit student agency, which might be considered 'capability deprivation' (as discussed in section 2.4.1).

The final question, 'what contribution does geographical knowledge make to the development of capability?' investigates the 'powerful knowledge' within school geography (see section 2.3.2). It is suggested in section 2.4.5 that the notion of 'geocapability' could provide a means to bridge powerful geographical knowledge and broader educational aims and this question interrogates the nature of this relationship.

These three questions have been designed to inform the overall enquiry: 'How useful is geocapability as a framework for Future 3 curriculum thinking in geography?' The capability approach might be a useful way to enable teachers to link powerful geographical knowledge to curriculum making within the structural features of their school environment. An F3 curriculum as envisioned by Young and Muller (2010) (and Young et al 2014), and discussed in section 2.2.5 is an ambitious vision of contemporary education and so the overarching enquiry assesses the extent to which the aspirations of the capability approach, within the subject setting of geography, can be applied to the vision of an F3 curriculum.

This section has restated the research questions which underpin this thesis. These questions provide a structure for the empirical element of the research which follows in the next chapter. The final section of this chapter offers some concluding thoughts.

2.6 CONCLUSIONS

This chapter has explored the literature into many of the core themes that underpin this thesis. There were two distinct sections, or sets of ideas discussed. Firstly were the ideas about curriculum debates and some of the contemporary discussions about the role and status of knowledge in the curriculum. These were then related to geography as a school subject. The second set of ideas related to the capability approach, first to development economics discourse then to education. These two sections then led on to the final section where the ideas were combined; the capability approach could provide a way to articulate some of the curriculum debates which were explored in the previous section. The final section set up the research project at the heart of this thesis, providing an empirical basis to an otherwise highly conceptual discussion.

The next chapter (chapter 3) tackles the nature of the empirical study. Both the methodological considerations underpinning the research and the exact and distinct methods of data collection are explained. In the following chapter (chapter 4) the data are analysed in light of the ideas explored in this literature review. In chapter 5 the research questions are responded to, and discussions relate findings back to many of the ideas from this chapter.

CHAPTER 3: RESEARCH METHODOLOGY AND METHODS

3.1 INTRODUCTION

The last chapter reviewed the literature into the concepts that underpin this thesis including ideas around curriculum, capabilities and knowledge. This chapter explores the methodology, the broad decisions that were taken relating to data collection, and the specific methods of data capture used to investigate the potential of the capability approach to geography education. The next section (3.2) introduces the specific research questions which underpin the methodology before an overview is given of the nature of the knowledge being generated through the research (section 3.3). This leads on to an introduction of the main and supporting case study schools (section 3.4) and a consideration of some of the methodological issues faced (section 3.5) before a detailed description of the specific methods is given (section 3.6). After this the research plan is considered in terms of the ethical issues involved (section 3.7) and the final section explains the data reduction process (section 3.8).

3.2 THE RESEARCH ENQUIRY

In this section the overall research enquiry question and sub questions which underpin the thesis are restated. The questions were justified in section 2.5, and the empirical aspect of the research provides the evidence on which responses to these questions is based.

The overall research question is: *How useful is geocapability as a framework for Future 3 curriculum thinking in geography?*

This main enquiry question has been subdivided into three further research questions:

1. How do the 'structural features' of education promote curriculum making in geography?

2. How can capability develop student agency?

3. What contribution does geographical knowledge make to the development of capability?

These are questions derived from the literature. They are addressed conceptually in the final chapter of this thesis, and the data generated through the research informs my understanding of the concept. The next section discusses this further by explaining the nature of the new knowledge to which this thesis is contributing.

3.3 THE KNOWLEDGE GENERATED THROUGH THIS RESEARCH

The previous section reiterated the research questions that frame the empirical part of the research. A doctoral thesis has to make a contribution to new knowledge and in this section outlines the nature of this new knowledge. First the status of the knowledge in informing the conceptual understanding is explained before there is a consideration of the epistemological position taken throughout the research.

The purpose of the empirical element of the research was to inform and confirm the conceptual understanding of the concept of geocapability. This research was not therefore an 'experiment'. It was not a form of action research, it was not practitioner research, nor survey based research. Any attempt to try to

'measure' capability would have been problematic as the concept is intangible. This thesis is suggesting that geocapability is a way for teachers to think about the curriculum and so the key questions set have been approached conceptually, and the data has enabled claims to be made about the nature of geocapability, powerful knowledge and an F3 curriculum. The claims the thesis has been able to make may have derived directly from the voices in this research, or indirectly, as the understanding of the concepts is used to offer an alternative view to the voices and opinions expressed. An example of this is given in relation to the actual data in section 5.2.1. In that sense the thesis is as interested in what people did not say in interviews as much as what they did say. Part of the analysis and interpretations of what was said (and not said) has informed the understanding of the concept. An entirely conceptual thesis which explored the concept of geocapability could have been created. I chose not to do this. My reasons for this form of research is that much conceptual work had already been carried out into capability theory, as reviewed in the previous chapter. Data from teachers working in schools has helped take the concept to the next level of development. Some of the ideas the concept is based on may have been misunderstood or flawed; without speaking to teachers this would not be known. In chapter 1, personal frustrations were outlined, and the concept of capability seemed to be a neat means to address some of these concerns but without an empirical basis the extent to which these frustrations were shared, or the extent to which there has been a need for a concept such as capability would not be known. By investigating teachers views and their professional practices, this thesis is in a position to make claims about the capability approach to education to further the conceptual understanding of this concept.

The research was bounded by specific contexts. First was the context of me being independent and self-funded, and conducting part time doctoral research whilst maintaining a full time teaching career. This inevitably provided a limited timescale for the data collection, and a limit on the number of schools where data could be collected, and what data was able to be collected. The second context was provided by the main (and supporting) 'case study' schools in the research, which are explored further in the next section (3.4).

The data in this research were generated through the social interactions of people, through interviews, and observations of teachers taking part in a workshop. As such, 'ethnographic' methodology was employed. Ethnographic research can be described as "a portrayal and explanation of social groups and situations in their real life settings" (Cohen et al 2007 p170). The real life setting in this research was the case study schools, and the social groups were all those involved in the life of a school; teachers, senior leaders, pupils, governors, and parents. I too was a participant in the research in my role as both researcher and as a teacher in one of the case study schools (a position I explore further in section 3.5.1). Yet the research was not simply an ethnographic portrayal of life in schools. I was actively responding to and reflecting on the activities I saw and interpreting these activities, which gives the knowledge an 'interpretivist' element. The interpretations made were grounded in the existing knowledge and beliefs and experiences of education that were outlined in the first two chapters of this thesis.

This research follows a case study methodological approach, focusing on one main and one supporting school (introduced in the next section, 3.4). A case study enables "the detailed examination of a single example of a class of phenomena" (Abercrombie et al. 1984) which in turn "can enable readers to

understand how ideas fit together” (Cohen et al 2007 p253). By researching the phenomena of a school as a case study, an understanding was gained into the ways that the whole school approached curriculum, and the role that the geography teachers played in this process. The case study method “depends on the use of- and ability to integrate in converging fashion... information from multiple sources of evidence” (Yin 2000 p167-8), the sources of evidence being teachers, school leaders and pupils within the school.

Case study data enables the “triangulation” of data sources (a term from Yin 2000), linking and finding commonality amongst different data sources. This is the importance of the supporting, much smaller case study schools comes in. It enables data from the main case study to be ‘triangulated’ to identify similar themes and ideas.

The usefulness of case study methodologies in social research has been the product of much discussion (e.g. Flyvbjerg 2006) but its justification as a method has been articulated by Eysenck (1976), who argued “sometimes we simply have to keep our eyes open and look carefully at individual cases- not in the hope of proving anything, but rather in the hope of learning something”. In this thesis, the case study enabled an understanding of the nature of the curriculum organisation and structure within a specific school setting.

However, a school does not operate in complete isolation; a school curriculum has national influences and the way the school internalised these external pressures was worthy of study in order to build a holistic picture of the curriculum in the school.

Within each of the case study schools, data were generated through dialogue between the researcher and a series of interviewees. The nature of dialogue

meant there was interaction between me and my interviewees and this 'symbolic interactionism' generated the data in the research. As Cohen et al (2007) explain "interaction implies human beings acting in relation to each other, taking each other into account, acting, perceiving, interpreting, (and) acting again" (p25). It was the interaction between myself as the researcher asking questions, and the adults, teachers and pupils answering those questions, based on their understanding and ideas about education that generated the data. The interviews were semi structured, and this enabled the dialogue to be conversational and two way. I was not listening to a monologue from an expert, rather, I was actively engaging with their testimony, and interacting with their answers to prompt and promote further ideas and opinions from them.

I was then in the position to be able to interpret this transcribed dialogue. As such the data is 'interpretivist'. I went through a process of interpretation whereby I reflected on the transcribed dialogue from the interviews. As Cohen et al (2007) explain "case studies frequently follow the interpretive tradition of research- seeing the situation through the eyes of the participants" (p257). As a researcher with knowledge of education and an understanding of geography teaching, knowledge was generated not just through the testimony given by the participants in the research, but through my understanding and my interpretation of their testimony.

This section outlined the position taken in regards to the nature of the knowledge this research generated. A key idea discussed is that the context of the research was bounded within two case study schools. In the next section these schools are introduced, and their inclusion in the research justified.

3.4 THE CASE STUDY SCHOOLS

Having introduced the nature of the knowledge generated through this research, in this section the main case study school, and the smaller supporting case study school are introduced. The intention of the research was to use one school in detail as a major case study in which to base all empirical evidence. As this ended up being my own school where I work a second, smaller, case study school would enable me to collect a small amount of data that would then enable me to overcome some of the methodological issues associated with researching in my own school (a position I explore in more detail in section 3.5.1).

The case study schools in this research were not my first choice of school to act as case studies. In Chapter 1, two schools were introduced which have taken a unique approach to their school curriculum: the RSA academy in Tipton (section 1.4.1) whose curriculum is based around the Opening Minds philosophy (and therefore geography is not taught as a separate academic subject), and Chessington Community College (section 1.4.2) who have created a 'skills 7' and 'skills 8' curriculum, where geography is taught as part of a humanities programme. Either of these two schools, where geography as a subject has become marginalised would have made interesting case studies as they would have allowed me to assess the nature of the geography education received by pupils in that school and the attitude of the teachers towards a lack of a subject based curriculum. In June 2013 I invited the head teachers of both of these schools to take part in this research as a 'knowledge based' selection of schools. However, both head teachers declined my invitation to take part, with the head master of the RSA academy contacting me to say "thank you for your email ... Unfortunately we are not able to accommodate your request as we do

not offer Geography in Opening Minds” (06/ 2013 email from the PA of the Head, pers comm). It was this very fact that made the school worthy of study and the reason why I wanted to involve them in the research.

To select the case study school an alternative methodology was therefore needed. The school needed to be visited, so needed to be easily accessible from my home. As such I used an online mapping tool (Google Maps) to identify the closest local 10 secondary schools from my house. Each school was written to, with a covering letter and overview of my research. I had responses from six of these schools, all refusing my request for research. Four never responded despite a follow up email sent to the head teacher’s secretaries. I subsequently wrote to a further five schools, the next furthest from my house identified from the online map. All five refused my invitation to be involved in the research despite having sent the head teacher a letter, and research plan.

It was at this stage, where no progress was being made over the selection of a secondary school case study that I chose to use my own school, The City of London Freeman’s School (CLFS) in Surrey where I work as the Head of Geography as the main case study. I contacted the headmaster and he allowed me to conduct research in the school. CLFS held the status as the main case study in the research in which the majority of the interviews were conducted, and it was the site of the teacher workshop in October 2013. It was the central focus of the empirical basis of the research.

This meant I researched my own school, a school with which I was already very familiar. This introduced was the problem of me being a ‘participant observer’ (Iacono et al 2001), studying the school curriculum over which I already had influence. To overcome this, I decided at this point to use a second supporting

case study school. This second case study was simply there to inform the data from the main case study. It would allow me not to be a 'participant observer' but instead to be able to 'triangulate' (Yin 2000) my findings from more than one school. The amount of data collected from this secondary case study was therefore always going to be minimal.

The second case study was the London Academy of Excellence (LAE) in East London⁶, selected due to my personal association with the lead geography teacher. Having spoken to her, and used her as a means to access the head teacher, I formally contacted the school and obtained permission to collect data there. LAE was the supporting case study, chosen to act as verification of the data, explicitly in a contrasting setting to give my findings a broader basis than the experience of just one school

Each school is now introduced, and their inclusion in the research justified, with details about each school taken from their respective websites (CLFS 2015, and LAE 2015) as well as from a book written to commemorate the 150th anniversary of the founding of CLFS (Jenkins 2004). In section 3.4.1 the City of London Freeman's School is introduced, and in section 3.4.2, the London Academy of Excellence.

3.4.1 The City of London Freeman's School

The City of London Freeman's school is a selective independent school for both boys and girls from 11 to 18 years old. It is an academic school, marketing itself

⁶ Both these schools are real and have not had their names changed for this research. Permission has been gained from both head teachers for this, and I explain my reasons for doing this in section 3.5.2.

as the most successful coeducational day school in Surrey based on both A Level and GCSE examination results. In 2015, an Independent School Inspectorate (ISI) inspection rated the school as 'excellent'.

There are around 800 pupils in the school, but unlike many other schools, there is no set 'catchment area' from within which pupils must derive, although the length of a commute for the pupils creates a natural catchment. As such most pupils live in the mainly white, middle class, affluent North East of Surrey and South West London, part of the commuter zone of London. There is a boarding house on site, and an increasing number of pupils come from overseas to live in the boarding house during term time, particularly from Hong Kong. This creates a diverse pupil body, though this is more apparent in the Sixth Form where there is a larger proportion of boarding pupils.

As an academically selective school, prospective pupils sit an entrance exam. These exams are set internally and include tests in maths, English and non-verbal reasoning and the pupils are interviewed, and require a reference from their current school. Although pupils can join at any time, the largest intakes occur at age 11, age 14 and into the sixth form at age 16. Those joining the sixth form do not sit an entrance exam, but pupils require high achievement in GCSE examinations and a successful interview. There is a junior school on site taking pupils from age 7, and those pupils gain automatic entrance into the senior school at 11 years old. This does mean the pupils at Freeman's school are all high 'academic achievers', and along with their parents have high aspirations, and the school curriculum is organised to reflect this.

The school curriculum is comprised of a wide range of traditional academic subjects taught in six one hour long lessons per day. These are, for an 11 year

old, maths, English, biology, physics, chemistry, Latin, geography, history, RE, technology, art, music, and a language (French or Spanish). These are taught by specialist subject teachers. Personal, health and social education (PHSE) is taught by all teachers in the school to a small group of children who are their particular 'form group'. The tutors of these forms are the central part of the pastoral care system of the school.

Geography is taught to all pupils in key stage three (pupils aged 11 to 14). As an independent school, CLFS does not have to follow the National Curriculum and so the school curriculum is decided upon and created by the teachers in the school, working in departments of their academic subjects. At the age of 14, geography becomes an optional subject that can be studied for two years leading to the GCSE exam, taken at age 16. Geography is always one of the most popular optional GCSE subjects in the school with around two thirds of the student body continuing with the subject. The subject becomes optional again for a further two years at A Level. Each year, a large number continue with geography into the Sixth Form, with approximately 20 students in each of the two years. The AQA awarding authority is studied at GCSE and A Level, which clearly defines the subject content of the geography lessons, although the department is able to choose which 'topics' to teach from a limited range. The case studies used to illustrate the topics in the examination years are decided by the teachers themselves, and teachers are able to decide the most appropriate pedagogy for their classes. The process through which this occurs is something I have explored in this research.

The geography department is made up of three full time specialist teachers, including myself, and a further two part time specialists. The classrooms are well resourced with ICT, textbooks and fieldwork equipment and the pupils have

opportunities to take part in a wide variety of fieldwork trips. As well as subjects, pupils have an afternoon of games including rugby and cricket for the boys and hockey and netball for the girls, and an afternoon of 'enrichment' activities each week as well as a wide range of optional extracurricular activities which run during lunch times, after school and at weekends. Enrichment activities are designed to provide a "whole person education" (CLFS 2015), and includes service in the local community, adventurous activities such as canoeing and a cadet force, and a wide range of short courses such as astronomy, geology, orienteering, first aid, and charity awareness which draws on the interests and skill sets of the subject teachers.

The school has links (nowadays mainly ceremonial) with the Livery companies of the Corporation of London who still own the land and buildings of the school and with whom all staff are employed. Members of the City of London Livery companies still form the majority of the governing body. The school is located on a large rural site within Ashted Park and much of the park land forms the school sports pitches and wider open space.

According to the website of the school (CLFS 2015), Freeman's school's aims are:

- "to provide an education of the highest quality in which each individual can reach his or her academic potential;
- to provide a 'whole person' education in which the academic, creative, physical, social and spiritual development of each pupil is promoted in a genuinely co-educational environment;
- to foster an atmosphere of self-respect and care for others in which pupils are confident, fulfilled and happy;

- to prepare pupils to identify and fulfil their role in society and to provide an education for life;
- to work in partnership with parents, governors, staff and former pupils to achieve the School's aims" (CLFS, 2015).

The relationship between these stated aims, how the teachers, pupils, parents, governors and senior leaders understood and related to them, and how they manifested themselves within the school curriculum was an aspect of this research which was explored during the interviews. Understanding the role that geographical knowledge played within these aims, and the possibility of the capability approach as a means of expressing this was a key outcome of this research.

The City of London Freemen's School was included as the main case study school for a number of reasons. Firstly, and pragmatically, it is the school where I work as head of geography, and have done since September 2012. This means I have easy access to staff, parents, governors and pupils and was therefore in a position to ask them to take part in the research, which I conducted after school and during the lunch hour. More significantly, CLFS is an academic school, teaching a subject based curriculum throughout the school and it was this emphasis on traditional subject knowledge that first attracted me to the school and one of the reasons I wanted to apply to be the head of department. I believe, and the 2015 ISI inspection corroborated, that Freemen's is a successful school, and that standards of teaching and learning are high (ISI Inspection report, 2015), and so the way the teachers conceptualise curriculum was of significance to this research. Freemen's School is also a school partner (number 8) in the Comenius funded GeoCapabilities 2 project, as discussed in

section 1.7 and so the outcomes of the research were able to inform ideas in this broader project. In this section I introduced the City of London Freeman's school, and in the next section I introduce the second, supporting case study, The London Academy of Excellence.

3.4.2 The London Academy of Excellence

The London Academy of Excellence was the secondary, supporting case study school in this research. It is a state funded sixth form school in Stratford, East London taking students from 16 to 18 years old. Pupils are drawn from the relatively deprived London boroughs of Stratford, Newham and Hackney and the diversity of the school matches that of the boroughs, consisting of a highly multi-cultural school body. The school is located in a modern redeveloped building in the centre of Stratford within easy walking distance of Stratford station. The curriculum on offer to students comprises academic subjects studied at A Level. Unlike other sixth form colleges, a broader curriculum incorporating a range of post-16 courses is not on offer at LAE and this is why it is considered to be a school and not a college.

The school was created out of a need in East London to fill what was perceived to be an educational problem: there were outstanding secondary schools catering for 11 to 16 year olds in East London, yet only a tiny minority were going on from college to top 'Russell Group' universities at age 18. The Russell Group is a collection of the leading research rated universities in the UK. A variety of factors meant that young people between the ages of 16 to 18 were not applying, nor achieving the grades necessary to go on to higher education. The universities themselves were keen to increase access to ethnic minority

pupils from deprived backgrounds and so LAE was created to be the link between the good schools that already existed in East London, and the top UK universities. This gave the school a very clear mandate. The school was an initiative between the Headmasters of Brighton College and Eton College and LAE's first headmaster was formerly the head of maths at Hampton school. The school has links with leading independent schools who offer resources and share expertise with teachers through sharing of resources within subject specific settings.

The subjects on offer to year 12 and 13 students are only those 'facilitating subjects', a selection of academic subjects as most likely to enable access to Higher Education. These facilitating subjects were chosen by academics from the Russell Group Universities. Eleven subjects are therefore taught at LAE: biology, chemistry, economics, English literature, French, Spanish, geography, history, maths and further maths and physics. Non facilitating subjects such as psychology, art, and drama are not offered at LAE, although religious studies is on offer despite not being a facilitating subject. Pupils also have a games afternoon and PHSE. There are a variety of extracurricular activities on offer though these tend to be in the form of academic talks and advice sessions rather than those that develop a broader range of skills and competencies. The school website presents a modern and dynamic image to the wider world.

As a facilitating subject, geography is one of the subjects on offer at the school. The department is small, with two teachers- the lead teacher is an experienced geography teacher with a background in state school teaching, and her colleague began teaching in 2013 having previously been an academic researcher in volcanology. This colleague came to the school with no school teaching experience and no teaching qualification. The A Level course students

follow is from AQA. Fieldwork opportunities are limited, due mainly to lack of funding of the school and a lack of affordability by the pupils, however pupils do have the opportunity to visit a rural field study centre for two days as part of their course. The department has a formal link with the geography department at James Allen Girl's School, an independent school in Dulwich, and teachers conduct regular visits to share resources and ideas.

The London Academy of Excellence (LAE) was chosen as a supporting case study for a number of reasons. Firstly, the academy is an interesting case study school as it was created in 2012, and welcomed its first cohort of 16 year olds in September of that year. This means the senior leadership team of the school were able to create a new vision of the curriculum. The school was many years in the planning, meaning decisions about the schools aims, ethos, as well as practical decisions about the length and time of the school day, and how the curriculum is organised was discussed at length. The people directly responsible for creating this school all still worked at the school and so they were all able to be interviewed and were in a position to explain and justify their decisions, as well as to critically reflect on this after the first cohort had left the school. This had the potential to be a rich source of data for this research.

Secondly, the geography teachers also make interesting study; how they were able to take the school vision and create a new department with the school aims in mind. The fact that only one of the two geographers has a teaching qualification means that although both are subject specialists, the extent to which they understand education varied and I was interested in how this impacted on the curriculum created. They teach a diverse student body from many different religious and cultural backgrounds and so constructing a

curriculum to take the needs of this into account takes thought, and I was interested in how the curriculum had been created with this in mind.

The final reason the school was chosen was a pragmatic one. I already knew the lead geography teacher, whom I met whilst studying for a Master's degree at the UCL Institute of Education, and she was able to introduce me to the head teacher and help set up the contact between myself and the school. She also facilitated my visits to the school to conduct the research. In this section and the previous, the main and supporting case study schools were introduced; in the next section some comparisons are made between them.

3.4.3 Case Study school comparisons

The previous two sections introduced the case study schools in this research. Each offers a contrasting insight into the running of a successful school and the creation and maintenance of a successful curriculum. What ties both schools together is an emphasis on traditional subject knowledge; however for LAE the curriculum is restricted just to these subjects whereas in CLFS a broader range of subjects are on offer to students alongside a wide range of extracurricular activities. Both schools require a minimum academic standard of pupil intake, for LAE this is decided by GCSE results, where mainly B grades are needed, and for CLFS it is mainly A grades for sixth form entry and a high score on the school's own entrance tests. Both schools offer geography to their students, and both geography departments offer the course from the same awarding authority, AQA, although the exact topics offered differs. Despite these similarities there are key differences between the two schools. The pupil body is very different; despite a large boarding community Freeman's pupils are

predominantly white, affluent and middle class reflecting the socio economic and ethnic mix of the local leafy suburban location of the school. LAE pupils are much more diverse, from a broad range of religious and cultural backgrounds and many live in high rise and social housing in East London. The physical space of the schools differs too; CLFS is located in Ashted Park, with sprawling countryside and a Grade 2 listed former Manor house as the central building, whereas at LAE the school is in a reclaimed office block near Stratford train station with no outdoor space and a lack of sporting facilities. These learning environments, part of what can be considered the 'institutional structural features' of education (see section 2.4.3) may have had an impact on how the teachers conduct their work and that is part of what I was investigating in this thesis.

Before outlining specifically how the research into these schools was conducted, the next section outlines some of the key methodological considerations, and the responses to them at the start of the empirical research process.

3.5 METHODOLOGICAL CONSIDERATIONS

So far this chapter has outlined the nature of the methodology employed in this research, which generated new knowledge by creating qualitative interpretivist data through semi structured interviews, and has introduced the main and supporting case study schools in which the research took place. This section addresses some of the methodological considerations that were encountered as part of the research process, and the responses to them to generate the data.

The first consideration was that of my status as both the researcher and as the head of the department in which the research was being conducted and this is discussed in the next section (3.5.1), then the issue of selecting and naming research participants is discussed (3.5.2). The challenges of using student voice as part of the research process is discussed in the final part of this section (3.5.3). First the potential difficulties of my role as ‘participant observer’ is discussed.

3.5.1 My role in the research as a participant observer

As head of geography at the City of London Freeman’s School, as well as being the researcher, I am innately intertwined in both the professional practice of everyday geography teaching in the case study school, as well as the critically reflective activity of researching and this section explores the potential difficulties with this and my responses to them. My dual role meant I took on the role of ‘participant observer’, I was observing phenomena over which I had direct control. This is what Evered and Louis (2001) identified as ‘inquiry from the inside’, whereby the researcher is involved in the object that is being studied. This has a number of potential difficulties. As Iacono et al (2001) observe,

“...a major criticism levelled at participant observation is the potential lack of objectivity ... The notion of participant observer does presuppose a degree of emotional detachment from the subject matter” (p42).

I was reflecting critically on the geography curriculum that I had helped to create with my colleagues, and as such could not be completely emotionally detached

from the process. In interview, my colleagues could have felt the need to tell me what they thought I wanted to hear, not what they actually believed, and this could have introduced bias into the reflections and reactions my colleagues gave.

There are two responses to this to avoid this potential bias. Firstly is the way I set the research up with my colleagues. I aimed to create an ethos of open mindedness regarding 'geocapability' with my colleagues during the research process. I shared the research questions with them, and these have a tentative nature about them, asking "how can effective curriculum making in geography develop student capability?" It may well have been that the response from my colleagues was 'it can't', and I made sure I was clear with my colleagues that I was not after a particular response. I managed this interaction to avoid any bias in the use of my language.

The second response to the potential criticism of participant observation is the importance of the smaller case study. Although I am an associate of the head of department, I had no professional links at all to the London Academy of Excellence, its teachers or pupils. This means I was not a participant observer, I was much more able to conduct 'research from the outside' (Evered and Louis 2001). The staff had no inclination to tell me what they thought I wanted them to say as they did not know me, and would not have known if I was after a particular response.⁷ The next section addresses the consideration of selecting and naming research participants.

⁷ The full ethical considerations of the methodology is contained in section 3.7.

3.5.2 Selecting and naming research participants

Within both the main and supporting case study schools data were generated through dialogue with a number of individuals. This section justifies the choice of participants, and the way they are identified in this research. Geography teachers' work was a key focus of the dialogue, and so all the geography teachers in both schools were approached for interview. Yet their work was not done in isolation, so it was important to understand how their work related to that of the deputy head teachers responsible for curriculum in each school, and the head teacher of each school, as ultimately it was their vision that drove the academic nature of the schools. These individuals were all named employees within the schools and so they were asked directly if they would be willing to take part in the research and they all kindly agreed.

For CLFS, the main case study school, there were other influential voices that impacted on how geography teachers operate and it was important for the research to gain their views so a member of the board of governors was approached along with a small group of parents of students in the school. In total, this provided the testament of 14 adult interviewees, all stakeholders in education at CLFS or LAE. There was still a need to ensure that the interview technique was yielding data so with that in mind two further teachers were chosen for interview that would form the pilot study conducted before the main interviews began. Given the discussions about the importance of geography as part of humanities in many schools, the inclusion of the attitudes of other humanities teachers would generate interesting results. The pilot interviews were thus conducted at CLFS with the heads of department of history and RE.

The names of both case study schools are real throughout the research, rather than there being a pseudonym created for them. The reasons for this are many; the research is interested in real schools and how they work in practice. School leadership teams take great effort to devise their curricular models and to justify the choices they make. To anonymise the schools might give the impression that there is something the school leaders are trying to hide, or that they are trying to distance themselves from the curricular decisions they have taken. Both head teachers of the main and supporting case study schools felt that being involved in research was a positive experience for the school as they were proud of the schools they had created. The aim of this research was never to cast a judgement on whether or not the curricular model employed by the school was 'good'; the research wanted to understand how the teachers and curriculum leaders had created their curriculum and to use the understanding of the capability approach to reflect on this process. The capability approach, and its applicability to curriculum thinking was what I was critiquing, not the nature and content of their curriculum. Given this lack of a critique, there was no danger of a loss of reputation of the schools upon publication of this research.

The schools are named, however the names of the individual participants in the research have been reduced to a set of initials that are different to their actual initials. This does not guarantee any of them anonymity as their position within the school was accurate at the time of the research, and thus they could be traced. Since taking part in the research in 2013, both headmasters of CLFS and LAE are no longer working at their schools with their roles being taken on by successors who are not part of the research. They were in charge of their schools at the time of the research and gave consent at that time. There are 15 people on the board of governors and around 800 individual parents at any one

time which would make identification and traceability of those few that took part in the research much harder. Their identities have been protected mainly for privacy; future researchers may want to use the data and publish it elsewhere and those in the original research would not have any control over this and would therefore not be able to give consent for such future activities, particularly if they are no longer associated with either of the schools in the research. All adult participants were fully aware of the privacy arrangements when taking part in the research as it formed part of the information given in a covering letter. A verbal reassurance was given at interview too. In this section the nature of selecting and naming the research participants was discussed. In the next section another methodological consideration is discussed which is over the use of pupils in the research.

3.5.3 The role of the student voice in this research

The last section discussed the selection and naming of the adult participants in this research. In addition to the 16 adult voices in this research, interviews were conducted with students from both the major and supporting case study schools and this section justifies and explores this decision. The justification for including what has been called “student voice” (e.g. Cook-Sather 2006) is in part down to the assertion made by McCallum et al. (2000) that student voice is “an increasingly important element in understanding teaching and schooling more generally” (p. 276). Although this research is focusing on what teachers do, and the decisions and actions taken by teachers, the purpose of teachers’ work is for the benefit of the students. In discussions about the capability approach to education (see section 2.4.3), it is the young people in the

classroom whose capability is being enhanced or deprived as a result of the actions of the teacher. Student voice therefore sheds light on many of the themes in the research; aims of education, the role of geographical knowledge and the nature of a subject based education. Student voice was able to “challenge dominant images of students as silent, passive recipients of what others define as education” (Cook-Sather, 2003 p3). The student voice in this research enabled the perspective of the children to be heard and their attitudes and values on the curriculum were compared to the adult voices in the research.

Using student voice was not without its potential difficulties, as Harri-Augstein and Thomas (1991) argue,

“Students may never have previously thought about topics such as how they learn, and may find it difficult to articulate their experiences. Even where an individual is capable of putting into words learning experiences, they are unable to describe the manner in which they control or fail to control, the process of learning” (cited in Robotham 2004 p227).

To overcome this difficulty of student expression, students were interviewed in groups rather than individually, and I was careful to ensure my questioning was appropriate for the age of the child. As a professional teacher I was able to pitch the questions to ensure the children understood what was being asked, and to help elicit the responses from them that answer the question. This approach “can be useful with children as it encourages interaction between the group rather than simply a response to an adult’s question. Group interviews... may be less intimidating for them than individual interviews” (Cohen et al 2007 p374). Children might have found an individual interview a nervous experience on their

own in front of a teacher whom they feel is judging them, and so by having a small group there was a dynamic created whereby they could respond and react to each other's ideas. This enabled the more nervous children to speak up and not everyone always felt the need to respond to every question.

In line with ethical guidelines discussed more fully in section 3.7, parents gave consent for their children to take part in the interviews. The children in the research are known only by their age and a number, they were numbered according to the order in which they started speaking in the group interviews. Given the large number of pupils in the school it is unlikely that comments could be traced directly back to any individual child. The group interviews were conducted in the academic year 2013-14 so by the time the thesis was finally produced the children were older, and many have since left the school, making traceability even harder.

This section outlined some of the broader methodological considerations in this research, as well as identifying and justifying some of the key decisions that were taken. The next section outlines exactly how the data was collected to generate the knowledge to answer the research questions.

3.6 THE DATA GATHERING METHODS

The last section outlined responses to some of the methodological considerations of this research. This section explains the two stages of the data collection. The first involved interviews with adults and children from the two case study schools. The second was to run a focussed workshop with a small number of teachers in which they practised and reflected on curriculum making

in geography (see section 2.3.2) using some of the concepts of powerful knowledge and capabilities discussed in the literature. The first section (3.6.1) outlines the timeline over which the data gathering occurred, in order to provide a context for the research. The following section (3.6.2) discusses the interviews, and explains and justifies the methods. In section 3.6.3 the pilot survey is discussed and some of the changes to the methods employed as a result of this. The final section (3.6.4) outlines the teacher workshop.

3.6.1 Data gathering timeline

This section provides a context for the research. The timeline below (figure 3.7) outlines the stages and timings involved in the creation of the data. Whilst this is presented as a linear process, in fact much of it occurred concurrently, particularly in regards to the writing up of the transcripts from the interviews which took a long time to complete. The purpose of setting this out is to make the stages involved clear, and the sequential nature of the data collection; the workshop, for example, ran after the interviews had been conducted and initially analysed, which meant it was able to bring some insights from the interviews into the workshop.

Date	Activity
April 2013	First draft of literature review completed. Planning of methodology and methods conducted. Initial contact made with case study schools.
June 2013	Confirmation of two case study schools. Detailed planning of interviews. Letters sent to parents of pupils in the study to gain consent for their involvement.
September 2013	Pilot survey completed at CLFS with heads of RE and history departments. Subsequent amendments to methods made.
October 2013	Full one day visit to LAE to conduct all interviews with staff and pupils.
October 2013 to April 2014	Interviews with CLFS staff, governors, parents and pupils at mutually convenient times.
April 2014 to September 2014	All interviews transcribed. Initial analysis of data completed to inform workshop. Workshop planned and materials prepared.
September 2014	Workshop held with staff at CLFS as part of start of year in-service (INSET) training.
October 2014	Workshop transcribed
November 2014	Narrative written. Data reduced into five themes, in preparation for analysis (explained in section 3.8)

Figure 3.7: Timeline of the research in this thesis.

The timeline provides a real life context for the research and can be used to situate the methods within a chronology. The next section outlines exactly how the interviews, the first stage of the data collection, were theorised, planned and conducted.

3.6.2 The Interviews

This section explores the methods of 'interviews', which were used to generate the data on which the analysis is based. The section justifies the choice of interviews, explains each stage in the interview method, and the decisions taken, as well as introducing the participants.

'Interview' was chosen as the principle form of data generation. But as Seidman (2006) explains, "the purpose of ... interviewing is not to get answers to questions, nor to test hypotheses" (p9). Although key questions underlie the empirical element of this research, the interviews did not address them directly. The interviews were used to generate data from which the subsequent analysis would enable the key questions to be addressed. The advantage of interviews, as Seidman (2006) continued, enables "understanding (of) the lived experience of other people and the meaning they make of that experience" (p9). The 'lived experience' in this research being the professional work of people in the case study schools. The concepts were explored through dialogue and so, as Tuckman (1972) argues, interviews help,

"...by providing access to what is 'inside a person's head', (it) makes (it) possible to measure what a person knows (knowledge or information), what a person likes or dislikes (values and preferences) and what a person thinks (attitudes and beliefs)" (in Cohen et al 2007 p351).

This enabled knowledge to develop through symbolic interactionism between the interviewee and myself within the interpretivist perspective previously outlined (see section 3.3).

The thought process for researchers using the interview method has been outlined by Kvale (1996). The first four of his stages are used in this research.

These are: 'thematizing', setting aims and objectives of the interviews; 'designing', writing the interview questions and identifying times and locations of the study; 'conducting' the interviews; and 'transcribing' the interviews.

Important decisions relating to the data collection process were made at each stage and these are outlined below.

The first stage, 'thematizing' forced me to consider exactly what was needed to achieve from the interviews. The interviews needed to obtain a rich, qualitative data set of ideas relating to teachers' work, specifically to understand how teachers conceptualise the aims of education, and how this manifests itself in the curriculum. They needed to enable understanding of how teachers devise lessons and sequences of lessons and how this relates to ideas about knowledge, curriculum and education. They sought to understand how school and subject leaders in geography and humanities construct their aims and values and how this manifests itself in the form of an ethos. The interviews also helped to discover how these ideas were understood by other key stakeholders in a school's educational life such as parents, governors and the pupils themselves. The views obtained on these topics then enabled critical reflection to inform this research.

The second stage was to 'design' the interviews. There were many different types of interview methods and although they all involved interaction between myself as the researcher and the interviewee, they differed in terms of structure, numbers of participants, and rigidity. Interviews can be conducted in different ways, from rigidly structured dialogue between interviewer and interviewee to less structured more conversational interactions. As Robotham (2004) explains,

“In deciding on the structure of interviews, the researcher chooses between providing sufficient control and structure so respondents produce comparable data, and sufficient lack of structure to allow the interviewee to construct their own subjective responses. The use of a semi-structured approach provides a degree of structure to the interview encounter, while retaining flexibility to permit individuals to direct the interview in a particular direction” (p. 226).

For this research, ‘in-depth semi-structured interviews’ were the most suitable type of interviews. These,

“...are useful when the researcher is aware of what they do not know and therefore in a position to frame questions that will supply the knowledge required” (Cohen et al 2007 p345).

A question was asked to the interviewees which they then answered but the semi structured nature of the interview then enabled a follow up question to be asked if appropriate. This meant ideas could really be explored. The semi structured approach worked both ways; interviewees could freely bring in ideas of their own about education and did not feel shackled by a having to stick to a particular question. The structured element ensured a series of broad themes were explored with those being interviewed.

The next decision in designing the interviews was in the choice of interviewee. For those named individuals, discussed later in this section, a direct email was sent to ask them to take part in the research, along with a one page summary of the research. For the other interviewees, governors, parents and pupils, a different approach was adopted. The governing body is made up of a large

number of people and so in order to select one person the chairman of the board of governors was approached and the nature of the research explained. He then forwarded the email request to be involved in the research onto the board and from this an offer from one of the members was received and he subsequently became an interviewee. For the parents, an even larger number of individuals, a similar approach was taken. The chair of the "Freemen's School Association" (FSA), the parent association at the school, was contacted and he forwarded my request onto all of his members. Three parents responded, all with children of different ages and in different school year groups studying different subjects. Rather than selecting between them all were taken up on the offer of an interview so three parent voices were included as part of the research. One was a father whose daughter was a keen sixth form geographer who had applied to study geography at university; one who was a mother with a son in the sixth form who was not a geographer, however her daughter studied geography at A Level in another local independent (girls) school; and a mother with two children in year 7. This provided interviewees with a range of experiences and expectations about education. These participants were therefore self-selected, volunteering to take part in the research.

The next stage of the planning was to prepare for the interviews themselves. Instead of writing specific interview questions a set of aims for each interviewee was written to provide the basic structure of the interviews. These aims outlined the sort of information hoping to be gleaned from the interviewees. This was done because specific questions might restrict the answers given, and there needed to be the freedom in the interviews to make a judgement about the best means by which the information could be received. There needed to be the

freedom to ask new questions, and questions based on an answer previously given. This is why the interviews were ‘semi structured’ as previously discussed in this section. Many of the interviewees categories overlapped, three of the geography teachers are also parents of children, one of whom is in the school, so inevitably their answers to questions will be informed by their dual role as parents and teachers. Similarly, the senior leaders of the schools are also classroom teachers so they will answer from the perspective of both of these roles. Figure 3.8 introduces the participants of the interviews, outlines their role within the schools, and identifies the broad enquiry aims that were set out to be achieved.

CLFS		
Pilot study	Interviewee	Main enquiry: what I wanted to find out
AR	Head of History, Teacher in charge of UCAS applications	<ul style="list-style-type: none"> - Their views about school geography, based on personal recollection. - Their views on the purpose of education - Their thoughts on the nature of humanities subjects in schools within a broad curriculum, and the role of extracurricular activities. - Critical reflection on the process of curriculum making. - Their thoughts about the school facilities in relation to pupil learning.
JH	Head of Religious Studies (and former science teacher)	
Main interviews:		
DH	Headmaster, CLFS and Classics teacher.	<ul style="list-style-type: none"> - Their views about school geography, based on personal recollection - Their views on the purpose of education- the relationship between subjects and broader educational goals, and the extent to which the former affects the latter, and how this is evident in the school. - Their understanding of the school ethos, and how it manifests itself. - How geography as an academic subject fits into the wider school curriculum. - How decisions are taken about which subjects to include and exclude from the school curriculum and the role of extracurricular provision in the school.
FM	Deputy Head Academic and physicist.	

BM	Geography teacher, and current head of Sixth Form. Formerly a Head of Geography in two schools.	<ul style="list-style-type: none"> - Their views about school geography, based on personal recollection. - Their views on the purpose of education, and the role that subjects plays within this, and geography as a discrete subject. - A reflection on the nature of the geographical knowledge they learnt at school and that which they now teach, reflecting on similarities and differences. - How they make the geography curriculum; how they mediate between the differing pressures of the needs of the pupils, national curriculum, exam boards, textbook series, facilities and learning resources available and their values of geography education. - Their thoughts about the school facilities and how it affects pupil learning.
RT	Geography teacher, and former Head of Geography in a local state school.	
FR	Recently qualified Geography Teacher in her third year of teaching.	
RP	Geography and sports teacher, mainly teaches key stage three geography.	
JD	Member of the Board of Governors.	<ul style="list-style-type: none"> - Their views about school geography, based on personal recollection. - Their views on the purpose of education. - Their thoughts about the school facilities and how it affects pupil learning. - The role of the Governing body in directing the activities of the school, and in influencing the curriculum.
MK	Mother of a Sixth Form non geographer, with a daughter who did A Level geography in another (all girls) school	<ul style="list-style-type: none"> - Their views about school geography, based on personal recollection. - Their views on the purpose of education - Their views about the school curriculum, and the balance of academic vs skills. How they and their children made choices about which subjects to study.
IS	Mother who has two small children in the Junior School	<ul style="list-style-type: none"> - What they feel the value and purpose is of extracurricular activities, and how these enhance the curriculum.
BS	Father whose daughter is a sixth form Year 12 geography student	<ul style="list-style-type: none"> - Why they chose to send their children to CLFS over other schools, and what factors made this decision possible.
LAE:		
LG	Headmaster of LAE having previously been a Head of Maths at an independent school in London.	<ul style="list-style-type: none"> - Their views about school geography, based on personal recollection - Their views on the purpose of education- the relationship between subjects and broader educational goals, and the extent to

NG	Deputy Head academic and English teacher	<p>which the former affects the latter, and how this is evident in the school.</p> <ul style="list-style-type: none"> - Their understanding of the school ethos, and how it manifests itself. - How geography as an academic subject fits into the wider school curriculum. - How decisions are taken about what subjects to include and exclude from the school curriculum and the role of extracurricular provision in the school.
MJ	Lead Teacher of geography, with knowledge of the Swedish and Romanian education systems.	<ul style="list-style-type: none"> - Their views about school geography, based on personal recollection - Their views on the purpose of education, and the role that subjects plays within this, and geography as a discrete subject. - A reflection on the nature of the geographical knowledge they learnt at school and that which they now teach, reflecting on similarities and differences.
BT	Geography teacher. Formerly a research scientist in volcanology, was studying education through the GTP programme.	<ul style="list-style-type: none"> - How they make the geography curriculum; how they mediate between the differing pressures of the needs of the pupils, national curriculum, exam boards, textbook series, facilities and learning resources available and their values of geography education. - Their thoughts about the school facilities and how it affects pupil learning. - The role and impact of the partnership schools in enhancing the curriculum.

Figure 3.8: Interviewees in this research, their professional status within the case study schools and an overview of what I wanted to find out through dialogue.

In addition to planning these interviews with adults, the group interviews with pupils was also planned, the rationale for which was outlined in section 3.5.3. Group interviews were arranged with students from every year group in the school at CLFS, from year 7 (11 year olds) to year 13s (17 and 18 year olds). One group per year was organised, and each group contained 5 students. At LAE, as this is a sixth form school, two year 12 and two year 13 group interviews took place to increase the pupil representation from the school. This meant a total of 50 student voices were added to the data.

The aims of the group interviews were to find out from the pupils why they felt they were at school, why they studied geography (either through compulsion or choice) and whether they thought they will or whether they had continued to study the subject post 14 or post 16. The interviews also wanted to seek their views on the wider school curriculum, extracurricular provision and to consider links between their time at school and their future lives, jobs and careers and the role they felt their geography lessons were having in this regard. The pupils had a range of experiences of travelling the world, either through school trips or through family ties and this was again something they were asked to reflect on, particularly the links between how they made sense of the world and the role their geography education played in this understanding.

The next decision was to choose which pupils would take part in the research, as there are over 800 students at CLFS alone. For CLFS pupils, volunteers were sought from the classes that I taught in school, therefore the students were self-selecting. For those pupils at LAE, MJ selected volunteers from the classes she taught. For practicality the interviews had to take place outside lesson time which required the pupils to attend during their 'free time', such as a lunch time. If children were forced to attend they might have regarded it as an obligation or even a punishment and therefore they may have been unwilling to contribute, or they may have contributed in a deliberately negative manner. By volunteering their time they were more willing to be helpful, and to think carefully about the answers they gave to the questions given.

There were some potential disadvantages to using self-selected participants in the research. Those who were willing to give up their time to speak to a teacher could have been the most enthusiastic students, positive about their educational

experience. Therefore they might naturally not dwell on anything which they felt was negative. To overcome this potential source of bias, the students were not told exactly what they would be asked prior to the interviews, only that they would be assisting me in understanding more about education. There is a strong tradition in CLFS of the students voicing their opinions (both positive and negative) to teachers through a 'school council' and it was in this spirit that volunteers were sought. This ensured not only that a variety of children could be spoken to but that they understood a particular set of responses was not required. The questioning enabled the children to be reflective, and the semi structured nature of the interviews gave the freedom to ensure questioning was being critical.

The other way to ensure the pupils were providing depth of opinions to the data was in the smaller case study pupils. MJ selected the pupils for interviews prior to my arrival, based mainly on the makeup of their timetables and when they did and did not have lessons. This ensured that they were not just the positive and enthusiastic student but that they would be able to offer a variety of ideas and suggestions.

The third stage of undertaking interviews (according to Kvale 1996) is 'conducting', actually doing the interviews. This stage, however, also provided a number of considerations. All the interviews were arranged myself, usually via email contact with each interviewee. For teachers at CLFS the task was much easier as they were my colleagues who I saw each day, for those at LAE the interviews were organised by the Head of Geography with whom I had made prior contact, MJ. Each interview was scheduled for an hour, as this would allow sufficient time to explore the range of ideas between each interviewee and

myself. The interviews were arranged for after school and at lunch times within the school day, and all interviews finished naturally within the scheduled hour.

All interviews with staff were held in their own classroom or office meaning that they were relaxed and engaged in the subject matter. I was a guest in their space. The location of the interviews were a key consideration, as Limerick et al (1996) discuss,

“...interviewing people in their own territory (i.e. their home or workplace) meant that different interviews had very different contexts, and the relationship between interviewer, interviewee, and the social and physical context needed to be thoroughly explored” (p454).

The group interviews were held in classrooms familiar to the students. This relaxed environment meant the interviewees may have been more willing to answer truthfully and to offer their opinions.

All dialogue was recorded on a digital voice recorder which was placed on the table between myself and the interviewee. This allowed the dialogue to be transcribed at a later stage. The list of questions was printed out which I referred to during the interview, though a copy of these was not circulated to participants prior to the meeting. This was for a number of reasons. Given time, interviewees may have researched an answer that was different to the one they would have given naturally, and it was their own response that the interviews sought. I was also interested in the way someone immediately responded to a question, even if they then went on to think of further answers within the same interview. For example, LG went back to a previous question later in the same interview when he thought of something else he could say. The initial answer he

gave and the first way he answered the question was still interesting. Not preparing answers could also reveal any gaps in conceptual understanding about an aspect of education which could then have been explored further due to the 'semi structured' nature of the questioning.

The final stage of interviews (according to Kvale 1996) is 'transcribing'. With around 20 hours of voice recording, the dialogue was played and typed manually into a word document, using the convention of 'verbatim transcription' as discussed in Poland (1995). This type of transcription involved recording word for word exactly what was said by each participant. Pauses were not recorded, nor fillers, e.g. 'ums' and 'errs', as a record of the actual words said was needed. There were occasions when a participant gave a 'false start' to an answer, yet often those half started sentences revealed much about the participant's ideas so I decided to include them in the transcriptions.

Punctuation was added to the document that gave an indication as to how the sentences sounded, as this aided analysis.

There was the option of sending the recordings away for another person to type, and this was considered as a timesaving device. This was chosen not to be done for a number of reasons. Firstly, as Poland (1995) asserts, transcription is an "interpretive" activity and so the interpretations whilst transcribing were made in full knowledge of the interviewee, and with the knowledge of what they were saying and the meaning they were conveying in their speech. Only I, and the interviewee, are in a position to be able to recognise this. Also I was able to remember their gesticulations and reactions to my questions from the audible recording and that aided the punctuation I gave their responses, to ensure the meaning I ascribed to their words was grammatically correct. The main reason

why self-transcription was the best option was that during the listening and typing up process I became more and more familiar with the content of the interviews. I was therefore able to begin to reflect on what was being said even during the typing up process. When the more formal data reduction started (as is explained in section 3.8) I was already very familiar with the content of all my data. Had I not put the time in to listen and record what was being said, this would have been a harder task.

The transcript write up occurred in the months following the interviews, as the timeline in figure 3.7 shows. Once completed, the transcripts were presented back to the adult interviewees via email and each participant was asked to check that the transcript accurately represented their views. There was an opportunity at this stage for the interviewees to alter any aspect of the transcript if they wished. None of the participants requested any changes to any of the transcripts.

The method of interviewing does have potential problems and Douglas (1976) identifies 'misinformation', 'evasion', 'lies' and 'fronts'. As Walford (2007) continues,

“...the interviewee may have incomplete knowledge and faulty memory... At best, interviewees will only give what they are prepared to reveal about their subjective perceptions of events and opinions... They may be at some considerable distance from any 'reality' as others might see it” (p147).

In this research, to overcome these potential problems, a wide variety of people were interviewed and as such one person's misinformation would not be replicated elsewhere. If an interviewee was evading a question the semi

structured nature of the encounter would mean I was able to return to that question later in the interview, re-phrased to elicit the information. Subjective opinions were important in the interviews; indeed, it was the purpose of the interviews to identify what these were and to explore these.

This section outlined the methods used to generate the data from the interviews but before the major interviewing phase was started two pilot interviews were carried out and in the next section (3.6.3) the reasoning behind this decision is discussed, along with what was learnt from the process.

3.6.3 The Pilot

This section discusses the pilot interviews. Prior to the start of the major interview phase two pilot interviews occurred with the heads of history and RE at CLFS. As Turner (2010) discusses, a pilot test “will assist the research in determining if there are flaws, limitations, or other weaknesses within the interview design” (p757). These were the first interviews carried out for this research so they enabled me to feel confident that my questioning was eliciting the responses I would be able to use in the analysis phase. I was also able to test the length of time the interviews would take. More practically, I was able to check the reliability of my voice recorder. Although I did not type up the entire pilot interviews prior to starting the main interviews (mainly due to time constraints), I did listen to the recordings in order to ensure the voices were recorded clearly.

A number of important lessons were learnt from the pilot experience that was able to be used in the main interviews. Firstly was the nature of the questioning.

I was not always clear in what I was asking and on a couple of occasions I had to re-phrase a question before the respondent started answering. I also learnt that placing the voice recorder near a mobile 'phone meant there was interference if the phone received a message during the interview which made transcription more of a challenge. I was able to rectify both of these issues for the main interviews.

However, the fundamental lesson learnt was about the nature of what was being researched. The first pilot interview lasted longer than an hour and this was due to the fact that in the first draft of questioning, I chose to engage the interviewees with the concept of the capability approach. I was hoping I could explain the premise of the research, and elicit a response about its potential applicability and validity to education. This would enable me to directly explore capabilities with the interviewees. What I discovered was that the 'capability approach' requires time to explain and in the hour set aside for the interview I did not leave enough time to fully explain the concept, its implications or leave enough time to enable the teachers to reflect and respond to it. If I was to maintain this through to the main interviews I would need to cut down on the earlier questions I was asking, and this would have meant compromising on the data collection which I was not prepared to do. Therefore I decided the interviews would not include any reference to the capability approach and instead I would engage teachers in the ideas of capability in a separate form of data collection.

It was at this stage of the data collection that there was a realisation that there was a need for a second stage of data collection in order to allow teachers to engage with geocapability. Therefore it was decided at this stage to plan and

create the teacher workshop to specifically enable engagement of teachers with the capability approach. The workshop would provide the time and the space to fully engage with the concept, leaving the interviews free to explore the other important concepts in this research (such as the aims of education, and knowledge). The workshop is fully explained in the next section (section 3.6.4).

Despite the issues mentioned, the data from the pilot interviews yielded some important ideas that was important to be incorporated into the analysis. It was therefore decided to include the two pilot interview transcripts into the data along with all the other transcripts for analysis.

3.6.4 The teacher workshop

This section explores the workshop activity created as part of the data collection process. Although the interviews provided a rich data set that helped address some of the specific research questions, there was still a need for geography teachers to engage with geocapability, and take part in a curriculum making activity in a practical way before offering a critical reflection of the process. To address this need a 'workshop' was devised that geography teachers took part in. The workshop took place in CLFS, with RT and FR who had been interviewed as part of the first stage of data collection. The workshop was arranged as part of dedicated departmental training time at the start of an academic term.

The workshop was in four distinct stages. Firstly there was a need for the teachers to work together in a practical curriculum making activity. As explained in chapter 1, the 2013 National Curriculum for geography gave freedom to

teachers to devise their own content around a series of themes that can be interpreted in a variety of different ways. Despite teachers at CLFS not having to be constrained by the requirements of the National Curriculum, I wanted to see how they would approach the planning of lessons around the concept of “Russia”, one of the topics which features on the 2013 Curriculum. This particular theme was chosen for a number of reasons. It is one of the many topics chosen as part of the National Curriculum, and it is not a topic we teach at CLFS at all, so there was not a set of materials or resources already created that could be used. It also suggests a place based approach, whereas the majority of our key stage three courses are concept based and so how this will be envisaged was something of interest. I was particularly interested in any curricular structure the teachers might use to help when developing the lessons and how this structure was devised.

The teachers were given a blank sheet of paper, and asked to work together to construct a series of lessons around the theme of ‘Russia’ for a year 7 class, with the topic lasting around half a term, which roughly equates to ten, one hour long lessons. Their discussions were recorded on a discreetly placed digital voice recorder that was used in the interviews and the notes they made as they went through the process were kept. I chose not to video the participants as this would have placed an added pressure on them, and they may have felt intimidated, and I was concerned this might have affected their discussions. Furthermore, I took on the role of ‘passive observer’ at this stage; I did not want to influence them in any way as it was important that they were able to devise these ideas themselves.

Once they had created a rough outline of the ten lessons on 'Russia', the second stage of the workshop involved me teaching the teachers about the concept of 'geocapability'. I introduced the concept, and gave some background as to its origins and ideals, similar to the discussions in section 2.4.5 of the literature review. I then introduced the 'geocapability Framework'. This is a simple table, with three columns. At the top of each column is one of the three expressions of powerful knowledge on which geocapability is based (from Lambert and Morgan 2010): deep descriptive world knowledge, theoretically informed relational understanding of people and places in the world, and propensity and disposition to think about social, economic and environmental futures (see section 2.4.5 for a full discussion of these). Although the Framework is called the 'geocapability' Framework the three columns are expressions of powerful knowledge on which geocapability can develop. Thus the Framework can help structure ideas to develop capabilities, rather than the Framework directly leading to capability development. Figure 3. 9 shows the top part of the Framework. I developed this framework myself to help me map out the knowledge content of a topic on 'natural resources' (Bustin 2015a). In this book, which I authored around the time of the interviews in this research, I created a set of 10 fully resourced lessons on 'natural resources', one of the other topics introduced in the National Curriculum of 2013. What the Framework enabled me to do was to ensure I had included geographical knowledge in the medium term plans. My version of a completed example of this Framework for the topic of resources is in the appendix (appendix 2). My completed Framework was not published, nor was it shared with the teachers in the workshop.

The Geocapability Framework		
<i>Deep descriptive 'world knowledge'</i>	<i>Theoretically informed relational understanding of people and places in the world</i>	<i>Propensity and disposition to think about alternative social, economic and environmental futures.</i>

Figure 3.9: The Geocapability Framework⁸ devised as part of this research.

The third stage of the workshop tied the first two together. They were asked to take their plan of ten geography lessons on Russia and map the knowledge content into the three columns of the geocapability Framework. In light of this the teachers had an opportunity to review any aspect of the scheme of work they had created. I was interested here how their ideas mapped into the Framework, and if this activity might, in turn, prompt any further amendments to the lesson sequence. Again, discussions were recorded and their filled out Framework collected. This stage was designed to assist the teachers to use the capability approach to practically assist curriculum making. My task was to observe this.

The final stage of the workshop involved a more open ended discussion about how they felt the Framework had assisted or hindered curriculum making in geography. They were critically reflecting on what they had just created, reflecting on how the geocapability Framework had caused them to think about

⁸ References in this thesis to this, what I have called the Framework, will have a capital 'F'. References to a 'framework' will refer more generally to a structured set of ideas.

and consider the knowledge content of the lessons they were planning.

Discussion was prompted but they were allowed to critique freely. The interaction was recorded. The discussions were transcribed from the workshop in the same manner as the interviews.

Once the workshop was over transcripts were made from the dialogue, and their written sheets existed, but there needed to be a way to generate data from these documents. Data 'capture' in the teacher workshop required a different approach from the interviews. For the interviews, transcribing the dialogue was sufficient as it was ideas and concepts about education that was being sought. The workshop was different in that the teachers were working collaboratively, interacting to create a written product, in this case, a set of lessons with aims and ideas. To try to reduce this experience to a series of themes emerging from a transcript loses the sense of the 'whole'. It is understanding the whole process of the workshop that was important to me in this research, how teachers work within the social and cultural setting of a real school. In their interviews I had gained an understanding of how they approached their work, and what their aims and ideas about education were. The workshop was about me observing how they enacted these ideals, and how they worked together to construct a curriculum.

To capture the data the method of narrative inquiry (e.g. Clandinin 2006) was used. This method involves the researcher constructing a 'story' from the experiences they are observing. The story involves linking individual experiences of both the researcher and the subject of the narrative with the cultural context in which the narrative plays out (Clandinin and Connelley 2000). As Clandinin and Huber (2010) explain, "the study of experience as story... (is) first and foremost a way of thinking about experience. Narrative inquiry as a

methodology entails a view of... (a) phenomenon". In this research, the phenomenon was teachers' curriculum making in the workshop. Narrative inquiry as a method in educational research can be traced back to the work of Clandinin and Connelley (1990) and is still developing as a research method (Clandinin 2006). In developing the method, Moen (2006) identifies

"In literature on the narrative research approach, we find three basic underpinnings, or claims.... human beings organize their experiences of the world into narratives. Second, narrative researchers maintain that the stories that are told depend on the individual's past and present experiences, her or his values, the people the stories are being told to, the addressees, and when and where they are being told. The third claim, closely connected to the second, concerns the multivoicedness that occurs in the narratives" (p60).

Clandinin et al (2007) refer to these notions as 'thinking narratively', being mindful about the research nature of the story. They also argue it is important to consider the nature of the (academic) audience of the narrative and the criteria with which the narrative will be judged.

In this research, the narrative was the social interplay of two teachers working collaboratively in a professional setting, and I as the researcher was bringing my understanding of that interaction into the narrative. This creates the multivoicedness in the narrative. Having already interviewed the teachers involved in the workshop, I was bringing their experiences and ideas about education into the narrative to inform the way I interpreted their actions. The 'audience' was me as the researcher, using the ideas from the narrative to

develop the conceptual understanding of geocapability. As such the judgement criteria was the extent to which the narrative could inform the concept.

As I watched the teachers working the narrative was being constructed; a story, told through my experience that would make sense of the actions being seen. A narrative enabled an articulation of thoughts and feelings as the teachers constructed their curriculum.

The data generated from narrative inquiry was interpretivist in nature, as I was interpreting the actions, words and writing from the workshop. Meaning had been co constructed by the two teachers in the workshop and recorded as part of the written materials and dialogue transcripts, with me as a passive observer, but once the workshop was over I then interpreted those documents. Meaning was made from the workshop data.

To collect the data during the workshop I observed the teachers' interactions and recorded their dialogue on a voice recorder. I noted any significant aspects of their interaction on paper, such as who took the lead, who did the writing, who contributed the majority of the ideas and how their interaction generated the ideas. Once transcribed from the voice recorder, the dialogue from the workshop was read and re-read. The original voice recording was listened to again to pick up nuances of language, hesitations and pauses. Pauses in speech were less significant before, when exploring their attitudes to education but now, when enacting curriculum planning, pauses were important as it allowed an identification of when the teachers were thinking, and the time it took them to think of ideas. The notes they created were also read; the first was a list of ideas they had created in the first part of the workshop, which lacked form or structure, the second was these ideas placed within the geocapability

Framework. Armed with all of this, the narrative of the workshop was written; my understanding of what went on was told through a thorough understanding of my research aims. As I was writing the narrative, I did not simply describe the interactions that took place, but offered a critical reflection on what was said and seen. The reflection was created as a result of my understanding of curriculum, and of geocapability and so in a sense, I was offering an initial analysis of the interaction. The narrative was not seen as a finished expression of the ideas in the thesis. Merely it provided an opportunity to make sense of what I was seeing, and to reflect upon it at after an initial period of reflection on the data collected. Rather than constantly change and re-work it, the narrative is presented as written in November 2014 (in appendix 3). The narrative was written before the analysis of the main interviews. The narrative represents my understanding about geocapability at that time, and looking back on it having completed the more detailed analysis, I have realised some of what was suggested was 'hasty'. Claims were made about geocapability not based on the evidence from the data, and conclusions were being arrived at too quickly. It is for this reason that the narrative does not form part of the main body of the thesis; its arguments should be viewed as a 'work in progress'. In the analysis section which follows (chapter 4) quotations and arguments are taken directly from the narrative to support some of the further claims that are made. The narrative should therefore be seen as a reflection of thoughts partway through the research process, rather than at the end.

The interviews and narrative generated considerable data, and this section outlined the methods employed to generate these data. There was a need to reduce these data into a set of themes and ideas ready for analysis and reflection, and this is discussed in section 3.8. However, the next section of this

chapter (3.7) gives an overview of the ethical considerations undertaken prior to commencing the data collection.

3.7 ETHICAL CONSIDERATIONS

This section discusses the ethical challenges of this research, and how they were overcome. The methods themselves were reviewed by the Institute of Education's ethical issues panel prior to commencement, and decisions have been based on the guidance from British Educational Research Association's (BERA) Ethical Guidelines (2011).

To ensure that all participants in the interviews and workshop understood the nature of the research and the subject matter of what I was asking them, I sent them all a one page introduction of my research along with a covering letter outlining why I wanted to include them in my research. This was sent to the headmasters of the two schools in the study, all individual adult participants and the parents of all child participants. This clearly outlined what I was investigating, including the key questions, and the role that they or their children would be taking in the research.

Ensuring consent from the participants of the research was an important part of preparation for the interviews, in line with BERA's guidelines (2011). Each of the adults who either volunteered to take part, or whom I approached to take part did so in the knowledge that they would be able to see and check the transcripts prior to my analysis, and that they would be able to withdraw consent for being involved in the research at any time. It was also important to me that all interviewees felt that their views had been listened to, and accurately recorded,

and that the analysis I was about to undertake was a reflection of their views and not of any views that I had inadvertently imposed on them during the interview process. At the end of the interviews with all adults, the interviewees were asked if there was anything they wanted to add before the recording stopped. This provided the chance for the interviewees to return to a previous question, or to offer their thoughts on an aspect of education that had not been covered during the interview. All interviewees knew about the nature of my research from the initial contact letter and some had given this significant thought beforehand so I wanted to be sure I had correctly understood their viewpoints. No one chose to add any further information at the very end, as I had been able to address their ideas during the main interviews. The transcripts were then typed up fully, and sent back to the interviewees via email. At this point they were asked if they wanted to make any further amendments, to change any of their answers, or to clarify if they felt a point they had made had been misinterpreted. This was their opportunity to again check that I had represented their views in a fair manner. All responses came back from the interviewees saying no amendments were needed. I used this email exchange as a chance to also thank the participants for taking part.

For the group interviews, the idea of checking the transcript for accuracy becomes problematic. Having been transcribed, it is difficult for an individual child to identify their testimony in isolation of others as the interviewees had been numbered and not named. So although I gave each of the group interviewees a chance to offer any final thoughts before the recording finished, they were told there would not be any chance to see or amend the transcripts. They, and their parents were made aware of this prior to the start of the research.

The headmasters of both case study schools in this research consented to the names of the school, and their names being used in the research, as discussed in section 3.5.2. All other participants' names were reduced to a set of initials, although as I have explained this would not guarantee them anonymity. All participants were made aware of this prior to the interviews. Although the chairman of the parents committee knew of my wanting to do research, and forwarded my request onto his parent committee members, the parents involved in the research responded directly to me via email, and all subsequent communication about dates and times of interviews were conducted on a one to one basis via email between the interviewee and myself. The wider parent committee do not know how many of their members, or which individuals were involved in the research. This again means that comments would be difficult to trace back to any individual parent. For the children in the research, letters were produced for their parents so permission could be gained for their involvement in the research. Parents were assured that no child would be identified within the research. Permission to conduct the research with the pupils was also gained from the Deputy heads of each of the schools. For the students at LAE, parental consent letters were again sent home in advance and coordinated by MJ at the school.

In the teacher workshop the two participants RT and FR agreed personally to take part and were fully aware that all the work created as part of the workshop, which included their handwritten notes and filled out geocapability Framework table would be available for my use in this research. They would not be able to check the 'narrative' I created as this was my creation, my thoughts on their actions and they may not have agreed with the interpretations I made, but the importance for this research is that they were my interpretations. They both

agreed to this prior to the commencement of the workshop, and, in fact, were more than happy to be helping and assisting me in my research.

This section highlighted how some of the key ethical issues in the research were tackled to ensure the data collected through the methods were achieved in a fair and ethically sound manner. Having previously explained the methods of data collection, in the next section (3.8) the process through which the collected data was reduced is explained, in order to enable analysis.

3.8 DATA REDUCTION

The previous sections detailed the two stages of the empirical element of the research, the interviews and the teacher workshop. This resulted in a wealth of data in the form of transcripts, a narrative and written material from the workshop. This section outlines the ways in which the data was reduced to enable analysis. First the ways in which a content analysis of the interview data was conducted is outlined (section 3.8.1) in order to identify a series of themes. Following this is detail of how the narrative data was reduced using these themes (3.8.2).

3.8.1 Interview data: 'content' analysis

This section discusses how a 'content analysis' was used to reduce the wealth of data generated from the interviews. The interviews generated text; transcripts of 16 in depth interviews, as well as a further 11 group interviews with over 50 student voices. Content analysis is "a research technique for making replicable and valid inferences from texts" (Krippendorff, 2004, p. 18). The inferences from

the text are related to the themes of the research, and as such enable comparisons between what was said by the interviewees. Content analysis

“...takes texts and analyses, reduces, and interrogates them into summary form through the use of both pre-existing categories and emergent themes in order to generate or test a theory. It uses systematic, replicable, observable and rule governed forms of analysis in a theory dependent system for the application of those categories”

(Cohen et al 2007 p476).

White and Marsh (2006) discuss the evolution of content analysis. They discuss how the analysis itself can generate quantitative data, where text is turned into numbers, or remain as qualitative data where it is grouped into themes. In this research the analysis is qualitative, and achieved through the use of the technique of ‘coding’ data, which is “the ascription of a category label to a piece of data” (ibid p476). If a sentence or short paragraph in one of the interview transcripts could refer to a particular idea that might be of relevance to the research, it was highlighted and ascribed a ‘code’. When a similar idea appeared again in a later interview, the same code was used to identify that sentence. This continued and therefore all sentences that had been ascribed the same code could then be collated and this then might form a ‘theme’ for further investigation.

In this research, an initial set of codes were chosen which would be looked for in the transcripts. Gibson (2013) identifies these as *a priori* codes, as they are decided on at the start of the analysis process. The initial list of codes was created not only from the literature on geocapability but also from the knowledge gleaned from my interviewees. By the time the coding started, I had

listened to the interviews taking place, then again from the recording, and had transcribed them so I had a good working knowledge of the ideas that had been discussed. I was therefore in a strong position to be able to decide on a list of potential codes.

Although it could be claimed that the codes were 'grounded' in the data, I choose not to use 'grounded theory' to generate the list of codes. This was intentional. In grounded theory, codes 'emerge' naturally from the data, possibly derived from words, phrases and sentiments that appear many times. The reason I chose not to use this approach was that I was very familiar with the data, and with the context in which it was generated. By the start of the coding I knew what had been said by the interviewees and so any attempt at allowing codes to 'emerge' would always be prejudiced by my own understanding of the data. This is a theoretical rather than practical position I took in the research. I could not be sure if a code had emerged out of what I saw written in front of me in the transcripts, or from my understanding of the significance of what was written in light of the literature on the subject. By using a set of *a priori* codes I used my broader understanding of geocapability and my understanding of the significance of what was said in order to categorise the data.

The choice of which *a priori* codes to use has the potential to affect the subsequent analysis. As Krippendorff (1989) identified,

"If categories (codes) are obtained from the very material being analysed, findings are not generalizable much beyond the given data. If they are derived from a general theory, findings tend to ignore much of the symbolic richness and uniqueness of the data in hand" (Krippendorff 1989).

In this research the list of *a priori* codes were defined from general theory of geocapability rather than the richness of the data itself. To overcome this, and to enable more of the richness of the data to be more prominent, the initial set of *a priori* codes changed throughout the analysis process. Codes could subdivide, or could combine to form a new set. New codes could be created if a particular idea of importance had not been recognised within the original set. A particular *a priori* code might have been too vast in scope, with too many sentences ascribed to that code so that code might have been divided into two or three new codes. Gibson (2013) calls these *post priori* codes, as they developed after the initial analysis had taken place.

The exact methods of content analysis have been explained by many authors. Gibson (2013) offers an overview, and Dalelo (2011) offers 4 stages of analysis, whereas Cohen et al (2007) suggest an 11 step approach. Based on methodological literature, for this research, I created four stages of analysis: deciding potential themes and defining *a priori* codes; conducting the initial content analysis; reflection on the initial analysis and collating and dividing the codes to form *post-priori* codes and re-coding the transcripts; combining the codes into 'themes'. Each of these stages in discussed in turn, relating discussions to the data.

Stage 1: Deciding potential themes and defining *a priori* codes

By the time analysis was due to start I already had a good knowledge of the data and this enabled some initial reflection to take place on what was said in the interviews, related to the ideas from the literature review. I was therefore able to identify a series of possible themes which might be useful for analysis. Based on this initial consideration of the data, these themes were used as the

first set of *a priori* codes. These were: aims of education; control of education; knowledge; education as an experience; subject disciplines; cognitive skills; curriculum making; school ethos; structural features of education; curriculum; National Curriculum; curricular ideologies; capability deprivation; humanities; underlying messages; and skills. This initial list gave a broad sense of what I felt were the key ideas from the data. The next stage was to use these codes to carry out the content analysis.

Stage 2: Conducting the initial content analysis.

The actual analysis itself was conducted using NVivo software. This is a computer software that enables text to be uploaded, and codes ascribed to the text. Multiple codes can be ascribed to the same text which proved useful when a particular response was about two interacting ideas, such as an interviewee talking about the role the role of the National Curriculum in defining the content of school day which could be coded as 'National Curriculum', 'curriculum' and 'control of education'.

To illustrate this process, figure 3.10 is an extract from the interview with AR. This was his response to a question about what he felt were the aims of education. The annotations show how this was coded in the initial content analysis into three of the initial codes: aims of education, skills and underlying message.

AR: That is indeed...a big question! I would say that it is a vast number of

Aims of
education

Skills

Underlying
message

things. Clearly we are wanting to encourage development of talented, skilled, enthusiastic young people who have the basic skills and qualities to go out and make a success, as much as possible, of their lives. So the knowledge that they are required, the skills that will make them into good undergraduates or potentially indeed into people who can enter the workforce. So I think there is clearly a strong skills basis that we need to get across. However, that would be obviously a very morally void situation if we were only concentrating on the skills and knowledge they have. Education has to be also about the generation of young people with awareness of the others round them, of the world round them, of their past, of culture- a kind of a 'whole person', which is very much this school's attitude towards education- a creation of a 'whole person' kind of perspective. And if we don't encourage the creation of that empathetic understanding, rounded human being, then a school has failed as much as if it doesn't give them the right skills and knowledge to pursue their future careers.

Figure 3.10: Extract from interview with AR to show the coding of the text according to the initial set of codes, from lines 78-91.

The number of words and phrases that constituted a code was also a key consideration. I did not code individual words as these are meaningless without consideration of the context in which they were said, and so full sentences or parts of sentences were ascribed to the same code. In the example from figure 3.10, the word 'knowledge' in line 81 was not coded as 'knowledge' because the rest of the sentence is within the context of skills. The word was mentioned but skills was given a greater precedence when the sentence is read in context, and

so it was the second part of the sentence containing ideas about skills that was coded as 'skills'.

All the interview transcripts were coded according to this initial list of codes, but even as I reached the final transcripts I knew that some of the coding had been inconsistent, and other important ideas had not been coded at all, simply because there did not seem to be an appropriate code to use. This led on to a reflection of the analysis, part three of the process.

Stage 3: Reflection on the initial analysis, and collating and dividing the codes to form *post priori* codes. Re-coding the transcripts.

Upon reflection, a number of the initial codes identified were abandoned. Despite a workable number of codes identified, they were not easy to use in practice. Some codes were not used at all, such as 'capability deprivation' (this is a concept that forms part of the capability approach and is discussed in section 2.4). This code was not used as capability deprivation is the result of other factors that I coded in a different way. For example, an over emphasis on skills at the expense of knowledge could result in capability deprivation. Thus this sentiment could be coded as skills, knowledge, curriculum and capability deprivation. For ease, capability deprivation was thus omitted as a specific code.

There was also a frustration that other interesting ideas had no specific codes. The idea of a moral education was not coded initially, instead it was combined with 'underlying message', but these are two conceptually different ideas. There can still be an overt, clear moral education without it being 'underlying'. This is exemplified in fig 3.10 above from AR's interview. He was not suggesting that a moral education is in any way 'underlying' in fact the language he uses

suggests that it is a clear aim of a school. So to code it as an 'underlying message' would not give the idea the true status it deserves in this context. Thus new codes were created to overcome this need, in this case 'moral purpose'.

I also found that some of the initial codes tried to encompass too much text. 'Aims of education', for example, was too broad a category as interviewees were talking about aims being about life choices, about obtaining jobs and taking on careers. This code was therefore split into a series of smaller codes to capture these differing ideas. This led to more codes being created. Once the new list of codes had been created there were 29 *post priori* codes. Figure 3.11 shows the final set of codes.

life choices	facilitating subjects
careers/ jobs	hidden curriculum/ underlying message
university courses/ UCAS	humanities/ interdisciplinary
thinking skills	subjects/ disciplines
knowledge for the sake of knowledge	control of education
moral purpose	teacher choice
school ethos	exam boards
education as experienced vs education formal process	politics/ minister for education
national curriculum	pupil choice
teacher choice	course structure/ schemes of work
structural features	thinking process
buddying	habits of mind
extra-curricular	old school geography
values system	current school geography
knowledge	

Figure 3.11: Final set of codes for the data in this research.

I then went back over all the transcripts, re-coding them according to this new set of codes. This enabled a far more detailed set of coding which was able to capture the full range of ideas expressed in the interviews. The AR quotation from before was now re-coded as in figure 3.12 below:

AR: That is indeed...a big question! I would say that it is a vast number of

Careers/
jobs

Skills

Moral
purpose

things. Clearly we are wanting to encourage development of talented, skilled, enthusiastic young people who have the basic skills and qualities to go out and make a success, as much as possible, of their lives. So the knowledge that they are required, the skills that will make them into good undergraduates or potentially indeed into people who can enter the workforce. So I think there is clearly a strong skills basis that we need to get across. However, that would be obviously a very morally void situation if we were only concentrating on the skills and knowledge they have. Education has to be also about the generation of young people with awareness of the others round them, of the world round them, of their past, of culture- a kind of a 'whole person', which is very much this school's attitude towards education- a creation of a 'whole person' kind of perspective. And if we don't encourage the creation of that empathetic understanding, rounded human being, then a school has failed as much as if it doesn't give them the right skills and knowledge to pursue their future careers.

Figure 3.12: Re-coded extract from interview with AR, lines 78-91.

When comparing the *a priori* codes and *post priori* codes as in the example of figure 3.12, much more of the text has been coded, which means more ideas are captured from the analysis. What was coded previously as 'aims of education' has now been re-coded to 'careers/jobs', as this is the sentiment he is referring to, he even returns to this idea at the end of his answer. Instead of being about an 'underlying message', the central section of this response is

about the 'moral purpose' of education and this new coding is able to take this into account. Having subdivided the text into a series of codes, the next stage of the process involved bringing it back together and re-organising the text into a series of 'themes' for further analysis.

Stage 4: Combining the codes into 'themes'.

The NVivo software enables all the quotations within each code to be collated. This created an unwieldy large 30 sets of quotations which would not enable easy analysis. Thus there was a need to combine the codes into 'themes' which could then be analysed in more detail. This process involved identifying overarching themes that the data naturally fell into. Some of these themes were relatively easy to identify. The larger codes that were split into smaller codes were re-grouped under the theme of the initial large code. An example of this is 'aims of education'. Thus 'aims of education' became a theme, incorporating the smaller codes of, for example, 'life choices', 'careers/jobs' and 'university courses/UCAS' amongst others.

To generate other themes, inspiration was taken once again from the literature on geocapability, and the language of the research questions. A key feature of this was the idea of 'structural features' of education which itself was included in one of the research questions. So this made another useful theme, incorporating the codes of 'National Curriculum', and 'teacher choices' for example.

Other themes seemed to be inspired from the data, such as 'control of education' which was not conceived in the initial coding but which a number of interviewees addressed either directly or indirectly in their responses. 'Teacher choice' and 'exam boards' codes seemed to fit nicely into this theme. In total,

five themes were identified, incorporating all the *post priori* codes, as illustrated in figure 3.13 below.

Post priori code	Theme
life choices	aims of education
careers/ jobs	
university courses	
thinking skills	
knowledge for the sake of knowledge	
moral purpose	
school ethos	
education as experienced vs education formal process	
national curriculum	structural features of curriculum
teacher choice	
structural features	
Buddying	
extra-curricular	
values system	
facilitating subjects	subject disciplines
hidden curriculum/ underlying message	
humanities/ interdisciplinarity	
subjects/ disciplines	
control of education	control of education
teacher choice	
exam boards	

politics/ minister for education	
pupil choice	
course structure/ schemes of work	school geographical knowledge
thinking process	
habits of mind	
old school geography	
current school geography	
Knowledge	

Figure 3.13: The identification of themes in the research through the combining of codes.

These five themes effectively capture the data from the interviews. Within each theme are a range of very different attitudes and ideas but the themes provided a structure for the analysis of the data. This analysis occurs in the next chapter (Chapter 4). The second stage of data collection involved the creation of a narrative as a result of the workshop into geocapability and the reduction of this data is discussed in the next section.

3.8.2 Teacher workshop data analysis: The reduction of the narrative

The previous section explained how the interview transcript data was reduced into a set of themes. This section outlines how the narrative data was incorporated into the research themes previously identified. Creating the narrative itself was the first part of the analysis, as Etherington (2015) explains, with narrative,

“...analysis (meaning making) occurs throughout the research process rather than being a separate activity carried out after data collection...the process of ‘data gathering’ and ‘analysis’ therefore becomes a single harmonious and organic process” (p8).

In the case of this research, writing the narrative became a key component of the ‘research process’ and part of the ‘analysis’.

Having completed the coding of the interviews and its reduction to five themes, the same coding principle was applied to the narrative. In the analysis of each of those themes, the theme was explored in relation to the interview data, as well as my reflections on the workshop. The vast majority of the narrative was coded into the themes of school geographical knowledge, aims of education and structural features. The text of the narrative itself was not used to help generate the codes but had the codes imposed on them. The reason for this was that the interview transcripts recorded exactly what was said by the interviewees, and although I created a set of *a priori* codes from my reading of the transcripts, I had to base my coding on what was said by other people. Much of the narrative is my own opinion and so if I were to use my own set of codes to code my own opinions, it could be a source of potential bias, with my own opinions informing too much of the coding and possible whole themes developing out of what may have been conjecture on my part. Therefore to avoid any bias, I used the interview data to generate the codes which were reduced to the five themes. I then applied these five themes to the narrative text so my opinions would help inform, and not be informed by the emerging themes.

Having completed this process, the data were reduced to five themes, incorporating quotations and ideas from all the interviews and the narrative. The five themes of: aims of education, structural features of curriculum, subject disciplines, control of education and school geographical knowledge, neatly bring together a wide range of attitudes, opinions and values about education. These themes structure the analysis in the next chapter. This section has discussed the nature of the data reduction process, and in the final section are the concluding thoughts on the chapter.

3.9 CONCLUSIONS

This chapter has explained and justified how the research was designed; how data was collected, and how it was prepared for in depth analysis. The methodological considerations were explained, in that the data in this research is interpretivist, and qualitative in nature. The two stage methods involved semi structured interviews with teachers in one main and a smaller supporting case study school, and a teacher workshop with geography teachers from the main case study school which was then reflected upon in the form of a written narrative. This was able to be 'reduced' in order to enable effective analysis. The five resultant themes from the interviews: aims of education, structural features, subject disciplines, control of education and school geographical knowledge, which were also applied to the narrative text, have provided a framework for description and analysis of the data which can now take place. The following chapter (chapter 4) now takes each of the five themes identified and offers a brief description of the data, before an in depth analysis relating back to the ideas of geocapability introduced in chapter two.

CHAPTER 4: DATA ANALYSIS

4.1 INTRODUCTION

The previous chapter identified how the data were generated from individual and group interviews, and subsequently reduced to five themes. It also described how a narrative was created from the workshop designed to explore geocapability and how the five themes were applied to this text. This chapter presents the analysis of the data, taking each of the five themes in turn and identifying similarities and differences between what was said in the interviews and how this relates to the observations from the narrative. This has enabled a series of 'contentions' drawn from the data to be identified, which leads to discussion in chapter five, which by its nature is more integrated into themes. Quotations are taken directly from the interviews and the workshop to substantiate the claims made in the analysis; line numbers from the interviews and narrative are added to locate the reference.

The five themes from the data were identified as described in the previous chapter, but these too have been subdivided to aid analysis. The subdivisions represent distinctions that helped make sense of the theme, and to provide a means by which analysis took place. The theme of 'aims of education' (section 4.2) has been subdivided into sections on 'an aims led curriculum'; 'an outputs led curriculum'; 'an outcomes led curriculum'; 'outcomes: moral development'; and 'aims through an ethos'. The theme of 'structural features of curriculum' (section 4.3) has been divided into 'school facilities'; 'the children'; 'the teachers'; and 'habits of mind'. The third theme, 'control of education' (section 4.4) has been divided into 'stakeholders of curriculum control' and 'the right to

control a curriculum'. The fourth theme 'subject disciplines and the curriculum' (section 4.5) has been split into 'a subject discipline based curriculum'; 'subject choices'; and 'citizenship'. The final theme of 'school geographical knowledge' (section 4.6) has been divided into 'the nature of powerful geographical knowledge' and 'the structuring of geographical knowledge'. Each is analysed in turn, although many ideas fit into more than one theme, and cross theme ideas are discussed. Within each sub theme, data are described, then some analysis of what has been said offered.

4.2 THEME 1: AIMS OF EDUCATION

This section analyses the data concerning the aims of education. Whilst interviewees were asked directly what they felt the aims of education were (and their responses to this question inform most of this theme), educational aims was a topic that was returned to later in the interviews. Later questions, particularly discussing the role of subjects and knowledge in education also enabled respondents to discuss aims, and so some of the responses to these latter questions also formed part of the responses in this theme. In analysing what was said about the aims of education, a number of smaller themes emerged and these were similar to the ideas discussed in the literature review. These form the structure of this section of analysis. Firstly, the section presents the analysis of ideas about an aims led curriculum (section 4.2.1) before focussing on an outputs (section 4.2.2) then outcomes (4.2.3) led curriculum. This leads on to analysis of the moral development of young people as an aim of education (4.2.4) before the extent to which aims are embodied in a school 'ethos' (section 4.2.5) before identifying final thoughts on aims (4.2.6).

4.2.1 An aims led curriculum

This section presents the analysis of the idea of an aims led curriculum. This research has identified a variety of people, often working in the same school, with different ideas about the aims of school education. An aims based curriculum takes the needs of pupils into consideration when determining the nature of a curriculum (see the discussion in section 2.2.5). As DH argued, “at its simplest level, education is about preparing youngsters for adult life... to become members of society” (l.48-9). To him, the adult society is what determines the aims and nature of schools. As he continued “then you could look a bit more in particular, what does society need? Society needs doctors, it needs lawyers... you achieve the aim of the sort of society that we want” (l.107-115). He did not see the results of education from the perspective of individual young people, but from the wider goals and aspirations of societies. A similar view of aims was offered by FM who asked,

“What do we really want the people to be like at the end of their time here? What skills do we want them to have, what qualifications do we want them to have? ... Once you have got that end point you can then start putting in those building blocks” (FM l.99-102).

For FM it was the pupils themselves that are important, not a set of aims derived from a broader society. Despite being more pupil orientated, FM focussed on the importance of education in developing skills and achieving qualifications. His views were pupil centred, but outputs based (see section 2.2.1 for a discussion on an outputs led curriculum). The importance of knowledge in terms of powerful knowledge (as discussed in section 2.2.6) is non-existent, with a greater emphasis being given to skills.

A pupil centred, outputs approach to education aims is echoed by LG, as he explained, “the reason why you have come to LAE is to get good A levels, and we want good A levels to go to a good University (and get) a good degree” (I.20-22). Yet he does link this to a more outcomes approach, arguing the focus is,

“...because that will give you ‘life choices’. And you can choose what career you want to follow and choose whether you want to work in the public sector or private sector; whether you want to not work; whether you want to be a carer; whether you want to work in the UK; whether you want to work overseas. I just think it gives you (the) ability to choose what you want to do” (LG I.22-26).

This notion of education enabling ‘choices’ gives the school a clear aim which the pupils also readily repeated in their group interviews, all saying how the aims of education were about ‘life choices’. LG was unashamedly clear in arguing that the more qualifications students gain, the more they have the ability to make choices in life. As he argued,

“...our purpose here (LAE school) is to be a bridge from excellent schools in the local vicinity... (to) outstanding universities. And to do that we look at what the entrance criteria are of those universities and where they are looking... If education is going to give people choices then what are the people making the choices looking for? Are they looking for success in a certain number of subjects? (If) so that is what we offer” (LG I.208-218).

Thus the aims of education, and in turn the school curriculum, are served less by the needs of society as DH suggested and more by the life choices of the

pupils. My analysis shows that curriculum choices are heavily determined by the needs of universities and employers and as such this has a huge influence on LG's views on the aims of education. This means that although education can develop the abilities of pupils to make their own choices in life, in reality there is still a desire from universities and employers for pupils to have a certain skill set. FM identified this, and the skill and qualification set of individuals is the starting point for his curriculum thinking.

An alternative view of the aims of education was envisioned in the data by BM, who argued "the aim of a school, I think, is... to allow students to be happy and I think if you can make students happy, everything else will fit; that is the aim of the school" (l.82-84). The students' pastoral needs are therefore a central tenet of a school curriculum according to this notion, with a focus on children's wellbeing and perhaps less on the development of knowledge. This sort of curriculum thinking can lead to an F2 curriculum (see section 2.2.5). Yet this view of a child centred curriculum was challenged in the interviews by IS, a parent, who responded in answer to a question about what she felt were the aims of education with,

"...well, you're supposed to say 'I want them to be happy'. No, but that's what you're supposed to say as a mother, isn't it? But I'm sorry. The indulgence of 'I want my child to be happy'... I'm sorry, life isn't always great. It's a bit boring. That's the trouble. They're so overindulged" (l.151-155).

For IS, a school is more than a place to simply provide a happy environment for young people. She saw a greater aspiration for the role of schools.

The idea of creating aims based on the outcomes we want to see for students can also work within subjects, with teachers deciding on aims for sequences of lessons. This was evidenced by the workshop. The teachers seemed to struggle to identify what they wanted the children to understand from a set of lessons on 'Russia'. As I recorded in the narrative,

“...what they had yet to discuss was any sense of overarching aims for the sequence, or an understanding of what they wanted the children to be able to know or do. Their lack of progress seemed to stem from this” (narrative, l.49-51).

To move on from this RT finally asked “what do we want them to take away from 'Russia'?” (l.52) which instantly changed the focus to the outcomes of the lesson sequence. From here, the process of curriculum making seemed much easier.

This section identified that a number of those interviewed put the needs and abilities of the pupils at the heart of the aims of education, but that there is much disagreement about what these needs are and how they can influence a curriculum. The notion of an outputs led curriculum was also discussed, and this is analysed in the next section.

4.2.2 An outputs led curriculum

The previous section presented the analysis of the data with regards to a pupil orientated aims based curriculum and this section presents the data in response to the importance of measurable outputs forming the basis of the aims of education. One of these is the gaining of examination grades, as FM argued

“one of the key aims at school ... is to get kids into top universities. That is what we do, that’s what the parents expect and pay for” (l.380-382). Qualifications enable quantitative comparisons to be made between children, as LG explained, “from an external point of view, so from an employer’s point of view say, you would like there to be some comparability- child A, applicant A, applicant B” (l.44-46). A set of comparable grades from students is the easiest way to compare applicants at job interviews. The importance of achieving qualifications is a central aim of schools identified by many of the pupils in the focus groups. As pupil 2 in the Year 9 focus group stated “you need the qualifications in order to get a job” (l.137), echoed by a pupil in the Year 10 group, “well you have to have a way to assess what you're good at and exams may not be the best way, but they're the way we have at the moment so they're important at the moment” (pupil 4, l.204-206). An externally accredited measurable means to quantify achievement was seen by almost all as a key output of an education.

Yet, despite being identified as a key tenet of school aims, my analysis showed this is a necessary but not popular aim. RP in her interviewed argued,

“I can understand the importance of exams; you have to have set some bench mark of attainment... I think sometimes there is too much emphasis on exams... I think it is (problematic) because you are limiting what you teach, the scope of what you teach ...everything has to be towards that final exam but if you have something interesting that crops up in the world but it’s not on your syllabus and you would like to spend two weeks exploring that, that is when you can’t” (l.91-102).

Her argument was that an over emphasis on examination criteria can limit the curriculum and thus impact on teaching in a negative way by not allowing teachers the chance to explore their subjects with pupils. This feeling was picked up by pupils in the Year 11 focus group, perhaps due to the impending GCSE exams they were about to be sitting:

“Student 3: I wouldn’t say that it (aim of education) is specifically to teach us because most of it is teaching to the test, there are a lot of subjects – especially now in the last couple of weeks – the teachers are just going, ‘this is the bit that we haven’t managed to teach you in the year, this is all you need to know’... and it is like...

Student 1: It is like a memory test.

Student 3: Yes, it is like a memory test.

Student 5: In French, especially French I think, we only learn stuff just to pass the exam” (l.194-204).

For these children, the focus on outputs had forced teachers to ‘teach to the test’, restricting their learning to a simple memory test. It was not just teachers who felt restricted by examinations, RP continued “I think a lot of parents... get quite stressed about how their children perform in tests, I think there is a lot of competition... they can put a lot of pressure on their children” (RP l.114-118). This feeling of adding pressure to pupils is in part behind BM’s view of striving to make children happy in schools; as a pastoral leader of the Sixth Form he regularly helps his pupils deal with stress. MS, a parent, in dialogue with me, agreed, “everything is geared these days to exams, whether you like it or not,

how you progress from lower education to middle to higher education to moving into employment- it's ticking boxes or yes, I've got that ...

Me: Do you think that's a bad thing?

MS: Yes I do. But it is the only quantifiable way to assess performance of the pupils, the teachers, the school, the university whatever... And, it's unfortunate that once they get it then go into the workplace... It's all a big sift first of all, it's qualification. So without the qualification you can't progress" (l.219-232).

For MS, the outputs focussed education system becomes a tick box of achievement for young people and this leads directly to the workplace. This tick box approach to education creates a narrow set of outputs driven aims for a school. This form of curriculum thinking can lead to an F1 curriculum (see section 2.2.4 for a discussion on this).

Analysing these discussions revealed much discrepancy about the aims of education, and the role of examinations within it. The analysis identified that actually what is important in progressing through life and school is the passing of exams. This is the view of exams supported by pupils, teachers and parents in the data. None of the head teachers or curriculum leaders interviewed stated that getting their students to pass exams was an explicit aim of their school's education, yet it seemed to be the basis for much of what they promote in interview. The broad, pupil centred aims based curriculum analysed in the previous section (as promoted by BM) which focussed on making children happy is at odds with a curriculum focussed on passing exams. This analysis has identified the same curriculum 'crisis' identified in chapter 2, with differences in opinion from the people in this research; some promoting an

outputs based, qualifications focussed curriculum which could result in an F1 curriculum, and others supporting a pupil centred, skills based curriculum indicative of an F2 curriculum.

The analysis of the data also suggested that the importance of the outputs of education changes through the 'lifetime' of qualifications. As JD, the CLFS governor who is a successful businessman from the City of London argued,

"I've employed hundreds of people. I've interviewed a lot, employed lots. The normal thing is I put an ad in the paper and I get 350 replies. So; academic qualifications, CV and everything else is important... (but) exams results should only last a certain time in terms of the criteria of when you want to employ somebody. Because life experience and everything else begins to take- you know (more importance)... perhaps the restraints, or the straight jacket, of ... exams might be getting to the end of its useful life" (l. 174-175).

For an employer, exams seem to only last a short time, and after that 'life experience' is more relevant to future employability. The extent to which that 'life experience' is shaped by the knowledge received in school during the learning of subjects, however, was not considered by JD, but is something that is articulated by the concept of capabilities. This discussion is returned to in the next chapter.

This section presented the analysis of the data in terms of ideas about outputs of education informing the aims of education. In chapter 2 another view was identified; the outcomes led curriculum model, and there was much in the data to support this curriculum vision, and this is explored in the next section.

4.2.3 An outcomes led curriculum

The last section presented the analysis of the data, and identified contentions regarding outputs of education forming the basis of curricular aims. This section presents analysis of the ways in which the interviewees discussed the notion of the more intangible 'outcomes' of education (as discussed in section 2.2.1).

One of the most significant identified in the data is the gaining of skills. As DH argued.

"I don't see it as my job to bring children in and educate the academic bit of that child; every child has an intellectual (side)... but every child has other aspects... of their nature, their character that should be developed and that is what we mean by the 'whole person', and the importance that we give to things like sport and drama and music and enrichment address that, so our aim is educating the whole person" (l. 165- 172).

DH identified two sides to a person that needs educating, the academic side and the non-academic side, and for him the two are equal. FM continued,

"I think it (aims of education) is a lot about skill development... so I suppose this is broadly preparation for the world of work so to be able to communicate, socialise, put a project together, hit a deadline, all these sort of intangible skills that people need going forward" (l.53-57).

Other teachers were more forthright and even more restricted in their viewpoint;

"I suppose it is really trying to equip them with skills for the workplace isn't it.

That is the ultimate aim" (FR l.45-46). For her, the gaining of skills seems to be the most important explicit element of school outcomes. This was reflected by the pupils. As student 2 in the CLFS U6 focus group commented,

“...human beings live together, they don't live separately, so in school you learn how to deal with other people and get used to communicating with others... when we go to school we kind of learn special skills for future use like analytical skills or thinking skills but the knowledge is not the most important bit, I think it is just a secondary outcome. The primary benefit is both the way you can face people and the way you can think. It is the mind power that you are training” (l.165-172).

The way this pupil described the aims of education, as mind power training, is similar to the 'building learning power' and 'learning to learn' sentiment that pervades F2 curriculum thinking (see section 2.2.5). The view that knowledge is not important shows how little priority seems to be given to the acquisition of knowledge as an aim of education in that student's eyes.

A similar view of skills and knowledge was articulated by MJ, when she argued,

“I think it (the aims of education) is a combination of knowledge and skills and one shouldn't take (precedence) over the other...to apply knowledge you have to create new situations (to) which you don't necessarily have the knowledge ... that is a skill and you have to be able to apply something that you recognise to a completely new situation” (l.82-90).

For MJ, as for the pupils in the interview, the skill becomes about applying knowledge to create understanding. This skill, in geography, has been called 'thinking geographically', which Lambert (2004) has been articulated as a type of knowledge (see section 2.3.2). Thus the analysis shows there seemed to be a confusion over what interviewees consider a 'skill' and what counts as a form of 'knowledge'. This section has presented the data in terms of attitudes towards outcomes of education informing the aims of education. Yet there was

another important set of ideas regarding student outcomes of education, which was about the development of moral values of young people. The data contain much about this, and the next section presents the analysis of the findings on this theme.

4.2.4 Outcomes of education: The moral development of pupils

The previous section presented the analysis of the data in terms of the nature of an outcomes led curriculum and this section analyses another set of ideas which relate to the aims of education and take discussions beyond the knowledge and skills arguments set out above. This is the role of the moral development of young people in education (see section 2.2.5 for a discussion on this). As AR explained, there...

“...would be obviously a very morally void situation if we were only concentrating on the skills and knowledge (the pupils) have... And if we don't encourage the creation of that empathetic understanding, rounded human being, then a school has failed as much as if it doesn't give them the right skills and knowledge to pursue their future careers” (l.84-91).

This suggests that the importance of developing young people morally is as important as developing knowledge and skills. Similar views were offered by DH, who continued, “we want a fair society, we want a just society, we want an open society and we want to prepare children to take part in that...society” (l.71-74). This notion of openness and fairness requires children to know right from wrong, and to develop a moral “compass” (as FM describes, l.58), and this was a key aim of education identified in the data. For the schools in the research, the moral dimension of education is achieved through a subject based

curriculum with PHSE lessons, and not through citizenship lessons (as discussed in section 3.4; the place of citizenship lessons is analysed as part of a later theme, see section 4.5.3).

Another element of moral education analysed in the data was the idea of 'morally careless' teaching (see section 2.2.5). FM argued that we must be careful, as "whenever we go down a path of wanting to send a message through our subjects I think we get into very dangerous territory" (FM I.61-62), with DH continuing, education is "not a political aim. I don't believe in that, I don't believe in education as a political tool" (I.71-77). For these two, neither individual subjects, nor the whole school curriculum should promote specific political messages as these have the potential to 'corrupt' the curriculum (e.g. Standish 2009). The analysis thus far has identified that the aims of education can be expressed through measurable outputs, and outcomes of education, with this section focussing on the role of the moral development of young people being a clear outcome of education. A final set of ideas in the data regard how school aims might manifest themselves in schools in the form of an 'ethos'.

4.2.5 Aims of education expressed through the ethos of a school

This section offers analysis of the data in regards to the 'ethos' of a school (a term explored in section 2.2.2) which "is really almost synonymous with what the schools aims are" (DH I. 155). An ethos is intangible, an organic manifestation of the aims of a school. It is, as FM explained,

"the way things happen, the way things are done, so if you were to walk around a school and observe people interacting with each other (that

would be the ethos)... your ethos may well also be impacted on how you see education, how you see the school and so that might have more of an emphasis on enrichment activities if we like, or more pupil centred learning... so you might have an ethos developing through some ideologies of education” (l.79-93).

If the aims of a school can be written down and agreed upon, an ethos is how these aims are embodied in practice and these could be different. In the data, LG was able to decide on the aims and therefore an ethos from scratch when creating LAE. As he explained,

“...we thought very clearly about what our values what our principles were and what our non-negotiables were, and you write those down and... I would argue that ethos is sort of what comes in the gaps between those and fills it in... you sort of write down the rules and regulations, expectations, requirements and then they fizz together to make what is called an ethos” (l.166-176).

What schools say their aims are, how teachers embody them in the form of an ethos and how they behave and act, could be different. Therefore, ethos can describe how the aims appear in the everyday work of teachers. The analysis has shown that whilst the concept of an ethos can be described, what a school ethos is like is as varied as the curriculum aims that an ethos expresses.

The next section offers final thoughts on the analysis of this theme of aims of education. This is followed by analysis of another of the five big themes to emerge from the data, that of the structural features of education.

4.2.6 Final reflections on aims

What the analysis of these data have identified is a series of contentions about aims of education. Despite schools having a set of written aims (as outlined in section 3.4), there was much variety of opinion from the staff in those schools as to what the aims should be. In the workshop, the teachers struggled in their curriculum making initially as they had ‘no sense of overarching aims’ to guide them. The biggest discrepancy of aims came through the role of knowledge and the importance of examinations. Neither of the schools state explicitly in their literature that passing exams is an aim, and yet this was exactly how many of the teachers, and pupils seem to see the role of schools. Knowledge plays a small part of how all the interviewees regarded the aims of education. The role that knowledge plays is in helping children pass exams. At best, knowledge helps children to develop their morality, at worst, knowledge is reduced to a ‘memory test’. It is as if the teachers were embarrassed to talk of knowledge, instead preferring to speak about skills and linking this to children’s futures as citizens and part of the workforce. There was also confusion about the significance of knowledge and its relationship to skills, with ideas about ‘applying knowledge’ being articulated as a distinct skill rather than part of a young person’s knowledge. There was much here to discuss, and this occurs in chapter 5 where these contentions are responded to directly.

4.3 THEME 2: STRUCTURAL FEATURES OF EDUCATION

The theory of structuration (Giddens 1984, see section 2.4.3) was drawn upon as a means to guide the analysis of this theme, identifying how implicit and explicit structures of education impacted on teachers’ work and the extent to

which teachers felt 'constrained' or 'enabled' by those structures. In the interviews people were asked about a variety of possible features that might have an impact on the way the teachers went about their work, although the words 'structural feature' were not used directly with the interviewees. What I was interested in was the link between how they perceived some of these features, and how it affected their curriculum making. A wide range of ideas resulted, such as the nature of the school buildings themselves, the curricular inputs from the government, awarding authorities and school leaders to the beliefs and aspirations of the teachers, parents and adults involved in education. This section analyses these influences. First is the idea of school facilities and resources (4.3.1), then the children themselves (4.3.2) and the teachers (4.3.3). Finally the Habits of Mind, a curriculum innovation at CLFS is analysed (in section 4.3.4) before some final thoughts on the structural features (4.5.5).

4.3.1 School facilities and resources as a structural feature of curriculum

This section presents the analysis of the nature of school facilities and resources as a 'structural feature' of the curriculum. LAE is an inner city school with little open space, whereas CLFS is based in Ashted Park with money available for teachers to buy a range of teaching resources to assist in the classroom (see section 3.4 for details of the schools). The analysis shows the grounds and learning resources in the latter case are highly regarded by the pupils and teachers. For BM the large grounds of CLFS are an asset to the pupils' wellbeing. As he argued,

“The simplest thing is the space, the outdoor space. Our kids at break time can go and run around, that will stimulate their serotonin levels, it will help them to be happier, it will take anxieties... if a student wants to find a quiet space, they can; they will have to walk to find it, but they can go and find a quiet space... it’s not the facilities, it’s the ability to get out and take a break (that’s) really important” (BM I. 328-345).

The extensive grounds produce children who are calm and quiet and this view was echoed by JH in relation to inside the buildings. As he explained,

“...you don’t get the crowded corridors of pupils all rushing past, when you’re teaching and there’s another class rushing past you’re not really aware of it here as the doors close properly. It’s really quiet in the classrooms! Even at break time! I think that makes a big difference” (JH I. 310-314).

Structuration theory would identify the open space and quiet, calm working environment as ‘enabling’ for teachers, the physical environment of CLFS produced calm and relaxed pupils and teachers could capitalise on this when teaching.

The resources afforded to teachers in the classroom also acted as an enabling factor to assist children to learn. As one pupil commented “the comfy chairs... honestly it does help you concentrate so much more. In the summer I remember plastic chairs and your tights stick to them in the summer and it’s all sweaty” (U5, 2 I. 311-313). The pupils were aware of their privilege, but as one pupil commented,

“but sometimes I think we are kind of too spoiled because they (the teachers) bring out these things, they honestly bring out these things and

they go, 'this is to show you this', and it is like the most pointless thing!
And they have got loads of them stored in the back and we are just so fortunate ... it really does help but then sometimes it is a bit too much"
(U5, 1, l. 366-372).

The pupils in the school were very aware of their learning environment, and were able to reflect on the advantage it affords them.

Despite this, as FM argues, the importance of school facilities in promoting learning to enhance capabilities is,

"...possibly not as much as people think frankly; the thing that is going to affect them (the pupil learning) the most will be the quality of teaching and you can have quality teaching in relatively poor facilities" (FM l. 430-432).

This sentiment is echoed by JD; "the facilities are important (but) I think, to be honest with you, the most important things are teachers. Good teachers can teach out of a tent out in Africa" (JD l.253-260). Despite the cliché, these two quotations sum up an important consideration for teachers about the structural features. It is not simply enough to say that the more resources, or the more facilities there are, the better the teaching and learning. It is how the resources are used that is important, and this highlights the importance placed on well qualified teachers in the classroom. This section has analysed the nature of the institutional features of school facilities and resources, but another consideration identified in the literature was the 'social' structural features, and the next section explores this in relation to the importance of the children as a structural feature.

4.3.2 The children as a structural feature of curriculum

This section presents the analysis of the children themselves as a ‘socio-structural’ feature influencing teachers work. Understanding the students themselves is a key element of the idea of curriculum (see section 2.2) and is included in Lambert and Morgan’s (2010) model of curriculum making (shown in figure 2.8). In the interviews I explored the nature of the children in the two case study schools and specifically how the teachers used the children’s lives and experiences to aid curriculum making. Children as a structural feature can be considered at two main scales, in line with structuration theory. ‘Macro scale’ considerations look at the socio economic make up of children in the catchment area of the school and this has the potential to impact on the whole school curriculum, and this is considered first. The ‘micro scale’ considers the needs and backgrounds of individual pupils and how this affects teachers’ curriculum making. This is considered second.

At a macro scale, the analysis identified that understanding the children in a school is an important consideration for school leaders when planning a whole school wide curriculum. As DH argued, “the sort of (school) curriculum model... very much depends on the school and by that I mean the type of children” (DH I.123- 124). When I probed him on what was meant by the idea of a ‘type’ of children he explained,

“...for instance in a particular school ... Let’s say they are in an area of high ethnic minorities where (the) English spoken at home is minimal, you are going to have to do more basically with English and that might have an impact on another part of the curriculum” (DH I.124-130).

DH's ideas are wholly pragmatic, and he appreciates the idea that a school is a product of its catchment area and so in areas with high rates of non-English speakers in the catchment area then a school curriculum model might have to focus more curriculum time on English language lessons.

The analysis identified much more at the micro scale; that the culture, religion and background of the students is a significant factor for teachers when curriculum making. Both schools in this study (CLFS and LAE) have international students and my analysis identified how this provides a rich opportunity to discuss global issues to build knowledge in geography lessons. As RT explained,

“I am quite good, I think, at trying to bring in foreign students into discussions, so I am not afraid to ask ‘what is it like in Hong Kong?’ ‘What is it like in China?’ ‘Do you have an effect on that?’ And when we did cultural identity I asked the Hong Kong students what they felt their identity was. There are people of mixed race, I asked what they felt their identity was” (RT I. 229-234).

The idea of using children's knowledge as a source of inspiration in the geography classroom is also revealed by the children in their group interviews, when they were asked where they had travelled to and what countries they had personal experience of, and whether this linked to their learning in the classroom. As one student described,

“I think the last time I was there (Bangladesh) was 3 or 4 years ago now. I have been about 3 or 4 times now. I like going quite a lot in fact... yeah it's one thing learning about geography but experiencing it is something else” (LAE U6 student B I. 188-189).

Another one explained “my family are from there (Uganda) so we went there... I am really interested in Uganda in terms of geography. Most of the essays I write ... are about Uganda” (LAE U6 2 student A I. 156- 158). These students readily linked their world experiences to their studies and are able to utilise their experiences to help them build up their knowledge of the world.

Yet the analysis also identified that some children did not see the link between what they had learnt at school and what they experience as part of their everyday lives. One student from Hong Kong explained,

“...when I go back to Hong Kong I look at both British social issues and Hong Kong social issues and I just look at them as ‘news’... But geography is a look at things more specifically like in conflicts which happens all around the world so I think ... going back home... is not closely linked to geography” (CLFS U6, 2, I.277-284).

For this student, the separation of their home life from their school subject life suggests that their teacher has not capitalised on the student experience to enhance their understanding of the world, nor has the student been able to make any connections for themselves between their world experience, and what they have learnt in school. The analysis showed that the student experiences can be capitalised on by teachers but that this is not always consistent. Another key social structural feature is that provided by the teachers, and the next section explores this.

4.3.3 The Teachers as a structural feature of curriculum

This section explores what the analysis of the data identified about the teachers' attitudes and values and how this impacts on curriculum making. In particular, the notion of 'British' and 'Christian' values are discussed, and how these affect the curriculum, as these are inputs to the curriculum actively promoted by various stakeholders, such as the school leaders of CLFS (see section 3.4) before considering how teacher aspiration can have an impact on pupils.

The values system of the teachers is an important consideration as to ensure that 'morally careless' teaching does not take place, where teachers impart their views onto pupils which can take place during the 'recontextualisation' of knowledge process (see section 2.2.2). Yet the previous analysis has shown that teachers still need to enable children to develop a sense of morality. Thus, there is a delicate balance for teachers and this was discussed in the interviews, particularly when promoting 'British Values' which is a key aim of education promoted by central government, or 'Christian values', an aim of the education at CLFS. As DH argued,

“...so the teacher, let's say with no particular Christian kind of background or interest, might well say 'I subscribe to those values of tolerance, fairness, justice, consideration for others, service to the community and all that', (so they are) actually subscribing to values that are important to Christians, so in that sense I suspect they simultaneously tick both boxes” (DH I. 227- 232).

The 'boxes' here being both British and Christian values, although these values are 'public values' (see section 2.2.5 for a discussion on this), part of all cultural and religious beliefs that are binding to all persons. They are not controversial

but do represent the sorts of values we would want young people to gain. FM's views on British Values and Christian values in the curriculum were more pragmatic, as he argued,

“I think you can get yourself bogged down with worrying about these sort of (things)... if you built a school community on solid values ... I think it just sort of happens. I would be worried if people start getting out a tick list and saying ‘do we do this’, ‘have we hit this value’ sort of thing... I think it would be clear if young people (were) coming out of the school without some decent values (and if so), then I would be concerned” (FM l. 269-283).

For FM, this form of structural feature is inherent in the way teachers do their job, and does not need to be explicitly taught by teachers. In a sense, the idea of the promotion of ‘British Values’ forms part of a school ethos, that underlying set of attitudes, values and beliefs. The way teachers’ beliefs impact on curriculum making was evidenced in the workshop, with RT drawing on her own ideas of global responsibility and citizenship. As I recorded in the narrative, “she (RT) felt it important that geography teachers can link their lessons back to the lives of young people. She was attempting here to link the Ukrainian/Russia conflict back to the ‘Surrey’ lives of our young people so they can take responsibility as a ‘global citizen’” (l.267-270). For RT, the belief in what is of value in education enabled her to create her curriculum and it was this that framed much of the lesson sequence that the workshop created. Teacher ideology, and its possible impact on curriculum was discussed in section 2.2.2 in relation to the idea of ‘recontextualisation’ of knowledge. In the ‘discursive gap’, values can enter the curriculum. The ‘weakly’ framed geography curriculum provides more opportunity for values to corrupt the curriculum (see

section 2.2.2 and 2.3.1) and this was evident in the data, with RT's views entering the curricular frame.

The analysis of the data also highlighted another consideration for teachers that can inform the way they approach curriculum making, which is down to the ambition teachers have for their pupils. As LG explained "one of the problems in schools that teachers themselves are not sufficiently aspirational; teachers think that the people they are teaching are not able to apply to these (top) sorts of universities" (LG I. 295- 299). If teachers do not believe children are capable of a successful 'Oxbridge' (Oxford or Cambridge University) application, then they will not promote or prepare them for it. This lack of ambition of teachers also links to the ideas of DH, that some children are not suitable for certain kinds of education. It is this thinking that links to ideas from Young (2008) about 'knowledge of the powerful', with those deemed capable of a more academic education being given a more subject based experience with a tendency towards F1 curriculum thinking, and those deemed not capable being given a more vocational curriculum, possibly resulting in F2 thinking (see section 2.2). The analysis showed that the voices in these data seem to echo some of Young's (2008) observations. The final 'structural feature' identified in the data was about a curricular innovation at CLFS, introduced by FM called 'Habits of Mind'. Many of the teachers and pupils spoke of this, and it is explored in the next section.

4.3.4 The 'Habits of Mind' as structural feature of curriculum

This section presents the analysis of the nature of the Habits of Mind (HoM), a curriculum innovation introduced to CLFS by FM when he joined the school.

First an overview of what the HoM entails is presented, gleaned from the responses in the data and also from my own understanding as a teacher in the school. This is then followed on with the analysis of what the data revealed about the nature of the HoM at CLFS.

The HoM is based on the work of Costa and Kallik (as discussed in the Habits of Mind Website, accessed 05/ 2015) and explained for secondary teachers in a book by Boyes and Watts (2009). As the website explains,

“...the Habits of Mind give learners of all ages and at all stages, a framework for autonomous, lifelong learning. They show us how to behave intelligently, independently and reflectively” (HoM website).

The habits are broad learning competencies that run parallel to the subject curriculum, and offer a way for young people to learn a range of diverse skills through the subject curriculum. Habits include ‘persistence’, ‘thinking flexibly’, and ‘taking responsible risks’. Teachers are able to engage with the HoM and integrate them into their curriculum planning, posters of the ‘habits’ are displayed in most classrooms at CLFS. As FR explained,

“I think about them (the habits)... with the Junior school because they are brought in... early on they are talked about quite a lot and in their classrooms, they have them up on the board so I think that helps to prompt what you could do with your classes... Each class will pick a habit of mind as their termly focus and you can try and work within it. But it is not something that I actually deliberately target I don’t think” (FR I.149-155).

For FR, she is aware of the habits in her planning but sees it more as a tool for reflection for the children, rather than a tool for the teacher in curriculum making.

The children themselves were more critical of the Habits of Mind initiative. Most of those interviewed knew nothing about them. As one questioned, “What are the habits? What do you mean by habits?” (L5 l.266). Those who did know about them were critical. As one year 9 pupil explained,

“...teachers ... stick up their habit of mind for the month ... that would be like a picture – there is one with a picture of a bridge, don’t know what that is, but that could be one- and people would see it, but no one would take it seriously. No one would do anything... the habits of mind, that is just a bit of a waste of paper, a bit cheesy” (U4, 4, l. 181-186).

The teachers consider the HoM a tool for the pupils to reflect on how they learn but the children seem unaware of it, or consider it a tool for teachers. There was no mention of the HoM in the workshop, despite the teachers in the workshop working at CLFS. FM, who introduced the HoM to the school was more reflective on the impact and use his initiative had achieved. As he said,

“...the Habits of Mind don’t necessarily need to be that overt, that is just the way some staff have run with it and that is fine, to a certain extent, it is just the sort of thing that should be covered intrinsically in teaching and ... I don’t think you necessarily have to have them stuck up on the walls to say right, we are doing this, this and this today. If that works for certain staff, fine, I am not going to say don’t do it but I think the idea is that it becomes intrinsic... I know some schools have a ‘value of the week’ (which) is empathy or whatever and fine, maybe putting a spot

(light) on it helps, but I would hope that these things become part of what we do on a day to day thing” (FM I. 289-303).

For FM, developing HoM is synonymous with developing good teaching, and is part of the ethos of good teaching. It is not intended to replace subject teaching, but instead to enhance it. Direct interpretation of the HoM into classrooms would be indicative of F2 curriculum thinking, replacing knowledge with skills. This is an idea I return to in chapter 5. The analysis has shown that the place of HoM as part of the CLFS school curriculum was thus confused. The next section offers some concluding thoughts about the structural features of the capability approach.

4.3.5 Final reflections on structural features

This section offers some concluding thoughts from the analysis about the structural features of the curriculum, returning again to the ideas of ‘structuration’. What the structuration theory considers is the relationship between people and the societal structures that underpins social interactions. In the context of education, the analysis has shown these structures can be identified as the school facilities and learning resources, the experiences and socioeconomic backgrounds of the pupils themselves, the attitudes and beliefs of the teachers and existing curriculum models in schools. These structures influence the professional ‘social interaction’ between teachers and pupils. Structuration theory identifies these structures as being ‘enabling’ or ‘constraining’. The analysis suggests that the facilities and resources of CLFS are enabling for teachers, whereas the Habits of Mind are considered constraining for teachers. The place of British values and personal teacher

beliefs was more confused, with those interviewed being clear that teachers should not promote values, yet the workshop identified a values component aiding curriculum decisions. These contentions are addressed in the next chapter.

This section took the theme of 'structural features', yet another key factor that influences the choices teachers make when curriculum making is the place and role of key players, both national and local who impact on the curriculum. In a sense, those in control of education can be considered a structural feature in their own right, but their influence on education, and the extent to which their ideas were discussed in the data ensured 'control of education' became its own theme, and in the next section this is analysed in more detail.

4.4 THEME 3: POWER AND CONTROL OF EDUCATION

This section presents the analysis of what the data have suggested about another of the main themes, the 'control' of education; the extent to which individuals, groups or organisations exert influence over what gets taught in classrooms. The data for this came through direct questions, interviewees were asked what they felt were the greatest influences on their practice, but the data also came through the ways they spoke about some of the key curriculum stakeholders identified in the literature (see section 2.2.2). The workshop also identified a number of controlling influences that I detected in the narrative. The influence of these stakeholders can be seen as another of the structural features which influences how teachers go about curriculum making. This theme will be analysed by considering of a number of competing ideas that have emerged, and again the ideas of structuration are drawn upon to aid the

analysis. The key ideas are a recognition of the role of curriculum stakeholders (section 4.4.1) which will be discussed first, before the idea of a market led approach discussed and ideas about how education is controlled. These themes are analysed in relation to the ideas of the capability approach before some final thoughts are offered (section 4.4.2).

4.4.1 Stakeholders of curriculum control

This section examines the idea of stakeholders of education. The data identify a large number of people and organisations who exert a 'top down' curricular control, such as the government through the National Curriculum; awarding authorities; the needs of universities in terms of their pupil admissions requirements; the head teachers and senior leaders in schools; heads of departments; as well as the teachers and pupils themselves. Each of these will be analysed in turn using evidence from the data and ideas from the capability approach.

The first of the key influences was from politicians of "an educated government. It is the people in power" (JH I.75). As AR went on to explain,

"I think the Minister for Schools and for Education has an enormous amount of power. Obviously because the kind of weight that they can put behind the exam system, and changes to the exam system, (he) does have a significant impact on the way in which we go about our business" (I.121- 124).

The control in question was through the creation of the National Curriculum which, as chapter 1 identified, has gone through a number of changes

throughout the history of its existence. As an Independent school, CLFS does not have to follow the National Curriculum so it does not exert a large direct influence over the teachers in the school. LAE is a sixth form school; the direct influence of the National Curriculum finishes at the end of key stage 3 (in geography) so LAE is unaffected by changes to the National Curriculum. As RP said “I must admit (on) the National Curriculum side, I am not constantly checking targets ... because that is just the way we are here” (l.226- 228), this is evidence of the low status of control the National Curriculum exerts on her practice.

The analysis of these data identified a much more significant control exerted by awarding authorities which affected the curriculum of both CLFS and LAE. As AR said, “like it or not ... but in terms of curriculum, our independence lasts as far in some ways as key stage 3. Whereas after that, clearly our independence is limited by the fact that these kids have got to pass exams” (AR l.124-126).

Awarding authorities control the content of geography and other subjects, at key stages 4 and 5, to enable the students to sit GCSE and A Level examinations. My analysis showed that these awarding authorities a high level of control. As BM lamented,

“...we are scripted, basically what we are saying ... is you will learn what we will tell you to learn and (this) just comes down to whoever is in power and whoever is pulling the strings at AQA or Edexcel or wherever it may be” (l. 175-178).

These ‘people in power’ behind these awarding authorities are a faceless group, as JH asked,

“...who decides on what goes in the specifications for exams? No one seems to know who these people are! Ofqual? QCA? I think there needs to be more transparency as to who is actually deciding” (I.76-78).

For JH, it was not the awarding authorities themselves that exert control, but the people behind them, and the authorities that control them, revealing further stakeholders in the curriculum that, for him at least, were faceless and unknown. JH’s professional practice was affected by people he had no idea about or connection with⁹.

A further control on secondary school curricular was that exerted by universities. Many young people want to leave school having completed A Levels, and go on to university. What the universities require in terms of subject combinations, and levels of achievement has a huge impact on what goes on in Sixth forms of schools. As LG explained of LAE,

“...we have a very clear utilitarian purpose which is to maximise the changes of successful applications to top universities ...But in the end if they said you’re only going to get in if you write on pink paper, we’d do everything on pink paper” (LG I.223-227).

This shows that universities almost dominate curriculum decisions at LAE. The needs of universities and awarding authorities discussed previously work in tandem; students will be set target grades to achieve in the outputs of their A Level courses which will determine if they can enter that university. It is this form of outputs focussed curriculum that tends towards F1 curriculum thinking.

⁹ This interview took place in September 2013. With the new A Levels of 2015 and 2016, the course content was influenced by the ALCABS (A Level Content Advisory Boards) who are made up of named individuals and organisations (see section 1.2). They are no longer faceless.

Another key curriculum stakeholder was the headmaster, and their senior leadership teams. They can decide the number and nature of the subjects on offer, and the length of time allotted to the study of each subject. As NG explained of LAE, “In terms of the curriculum the headmaster LG and the governing body, in particular the governing chair are making decisions about which subjects are offered” (l.79-82). Despite the calls from some universities to insist on ‘facilitating subjects’, at LAE,

“...we now offer Mandarin. This year we are offering Mandarin to 5 sixth formers at AS and that is because they have studied it at GCSE and when they applied to the school they said they wanted to continue Mandarin” (l. 79-85).

The headmaster chose to allow students to continue with subjects they had been previously taught, and was prepared to employ a teacher to enable that to occur.

Despite the perception that the leadership exerts direct control on a school’s curriculum, FM identified that their influence cannot control the knowledge content of lessons. As he explained,

“...a lot of what is taught in classrooms is governed by GCSE and A Level specifications, however as you will know you can get various learning objectives from a specification, but exactly how those are taught and what goes on outside the classroom and (the) sort of ethos (that) goes through the school can be very much defined by the Head and the (senior leadership) team” (l.67-75).

For him, the influence of the senior leadership team on teachers can focus on pedagogy, and on wider curricular activities but not on the content of subject

lessons, which is controlled by the awarding authorities. The analysis here echoes some of the observations made in section 1.2, that teachers are able to influence pedagogy, how they will teach, but not the curriculum, what is being taught. The analysis showed that teachers felt heavily controlled by external forces, not one voice in the data discussed teacher curricular autonomy for knowledge or content. It is this that capabilities addresses, an assertion discussed in the next chapter. This section identified that those interviewed feel controlled by a range of stakeholders, such as awarding authorities and national government. The next section offers some concluding thoughts on the ideas from this theme.

4.4.2 Final reflections on control of education

In concluding this section, the analysis shows that teachers considered themselves to have very little control over the content of what they teach, with control being exerted from a range of stakeholders, including the national government, awarding authorities and school leaders. These stakeholders control the content of what is taught in classrooms, which forms part of the structural features of curriculum as described in the previous section, as teachers had to work with these influences when curriculum making.

Structuration theory identifies these controls as potentially constraining to teachers' free will. The control exerted on teachers sets the agenda for the type of curriculum they produce, with control from awarding authorities and universities specifying grades that need to be achieved. With these influences, an outputs based curriculum model, akin to F1 thinking, is difficult to avoid. The

next section analyses what these data showed about the idea of 'subject disciplines' forming the basis of curriculum design.

4.5 THEME 4: SUBJECT DISCIPLINES AND THE CURRICULUM

This section analyses the fourth theme of subject disciplines as the basis for a contemporary school curriculum. Interviewees were asked directly about the role of subjects, and the place of knowledge within distinct disciplines. This section analyses what was said in terms of the curriculum structure in schools (4.5.1), subject choice (4.5.2), and the place of citizenship (4.5.3) before some final thoughts (4.5.4).

4.5.1 Curriculum structure in schools

This section analyses how, according to the individuals interviewed, the curriculum is and could be organised in schools. The analysis explores the interviewees' understandings of what constitutes a subject, before analysing the justification of subjects as the basis for the secondary school curriculum.

First, the analysis identifies the ways the notion of a 'subject' was expressed in the data, linking to ideas about specialised knowledge and curriculum classification (see section 2.2.3). For AR, a history teacher who also teaches government and politics A Level, a subject has 'academic value', which makes it unique and different to other subjects. He asked "I suppose, is it very stretching? Is it very challenging? Does it have a skill set which is relatively robust?" (AR L.288-290). For AR, what makes a subject distinct is the skills

basis of the subject, not the knowledge content. This skill basis of subjects enables comparison between subjects, as he continued,

“I mean ‘government and politics’ ...(is) a subject we try and teach and I think it’s an excellent subject and a really interesting discipline. But the skills required to do government and politics are not unique to government and politics. Actually I don’t think there’s anything that is particularly unique to the skills required. So therefore I can see why it might be seen that ‘history’ which does have some greater claims to uniqueness in that capacity, is given value over government and politics” (AR L.290-303).

For AR, subjects have a skills basis, and the more unique that skills basis is within a subject, the more distinct that subject is and therefore the more worthy it is of being considered a ‘subject’. The idea of a subject having unique knowledge, rather than skills, was identified by one year 8 pupil; “biology is more about inside the animals, how the actual animals work and then geography is more about their environment and how they adapt” (Pupil 2 I.84-86). Their distinction was based around the knowledge content of the two subjects rather than skills. The analysis of these data both identified the significance of distinct subjects, but also that the nature of what makes them ‘specialised’ is contentious; subjects are considered in terms of both unique skills and knowledge. The pupil’s suggestion about knowledge being the basis of subjects is heading towards thinking about the ‘powerful knowledge’ of subjects. This is a contention that will be discussed in the next chapter.

An alternative conception of a subject was offered by LG, who suggested that a subject provides a framework through which phenomena can be studied. As he argued in relation to history,

“...the ‘past’ I would argue is what happened- ... there was a King called John and he did certain things. History is the way we in the present write about the past.... Now I never thought I would ever try to articulate this before but presumably you could do the same about geography; which is that there is ‘geography’ and ‘the world’ and the world is what there is- there are cattle and there are rivers and there are mountains and fields; and ‘geography’ is the way we write about the world and the way we respond to the world around us, and the way we interpret the world around us and they are probably two separate things” (LG I.126-143).

For LG, subjects are expressed as human constructs, which help to organise knowledge to make sense of the world. LG is a maths teacher but has articulated clearly the process of ‘thinking geographically’ in geography (see section 2.3.2). He has identified the role that subjects play in schools in terms of providing a structured, or ‘disciplined’ way of thinking about the world. This approach identifies the ways in which subject knowledge is created rather than trying to define subject knowledge as such is akin to the discussions of ‘powerful knowledge’ in section 2.2.6 and 2.3.1. His views are more attuned to the aspirations of an F3 curriculum than some of the other interviewees in the research.

If the analysis of these data revealed a mixed set of ideas about what is meant by a subject, there were equally varied ideas about why subjects should form the basic structure of a curriculum. The analysis showed that most people were

in favour of maintaining a subject based curriculum but could not clearly articulate why. For DH, the direct link between subjects and careers provides the justification for a subject based curriculum. As he argued, “a doctor has got to have basic knowledge in things like chemistry, possibly biology and that is where the justification then for certain subjects comes through” (DH I.110-112). The idea that subjects link directly to careers in a direct and obvious way was also articulated by students, who said in discussion; “say you're awful at maths and you're very good at English, but you want to be an accountant instead of, I don't know, I'll just say a lawyer just for English...” (Year 10, Pupil 3 I.165-168). Both DH and the pupil have directly attributed specific subjects to specific careers. AR's ideas are more ambitious of the role that subjects can play in education. As he argued, “so for me I do think that history is a great training for the brain actually. I think historians, and geographers as well, will come out with a variety of skills that can be used in a number of different professional settings” (I.197-200). Despite recognising the value of subjects beyond specific careers, here it is skills which is promoted rather than subject knowledge being of intrinsic value. When asked about the value of subject knowledge, AR responded,

“I was asked at an interview for my PGCE how useful (history) would be for a plumber. And that was quite a tricky question to answer. I think in that case I'd say it was just that actually studying about the past can be very fun and very interesting and developing of a better understanding of humanity, and that obviously is a useful intellectual skills and emotional skills for any learner” (AR I.193-197).

For AR, justification for studying history is not because historical knowledge is somehow valued but that it is ‘fun and interesting’ to study. He has not

articulated the significance of historical knowledge in education; he has not identified powerful historical knowledge, or any basis on which that could be founded. Despite being a subject specialist, his comments suggest that he has a lack of ambition for the importance of his subject.

Given the lack of ambition for a subject based curriculum identified in the analysis, a number of ideas in support of a non subject based curriculum were discussed. As JH argued “It’s (education) all knowledge about life and it’s quite an artificial distinction to have subjects.” (JH I.109-111). BM agreed, “the problem with education is we put everything in a box and so the kids learn, well that is (e.g. biology)... I’ll only worry about when I get there” (BM I.231-232). For BM, the idea of organising knowledge into distinct subjects restricts thought processes into boxes which children cannot see beyond. He sets up an alternative vision, allied to his child centred ideology described in the previous themes. As he argued,

“In an ideal world ... and in a world where you would set people up for life, I wouldn’t have any discreet subjects... It (the curriculum) would all be problem based and staff would dive in and out as needs be for that problem. So it could be that in year 7 you set them for half a term... ‘construct a method for new production of electricity’ for example. So within that topic... you would have your scientists, your physicists doing some mechanical engineering about wind and pressure you would have your artists doing a landscape of what it would look like if you were to chuck (in) wind turbines, you would have your geographer looking at where would be best to put that wind turbine and you could cover that with coasts and tides ... and you could have your drama re-enacting a debate on whatever it is, you could have your English student looking at

Wordsworth and the impact...; that's how I would, in an ideal world, that's how education would work because when you get out into the real world, that is what you have to do" (BM I. 134-149).

This curriculum vision has similarities to the skills based and holistic curricular on offer in some of the schools outlined in Chapter 1. This would be a very F2 curriculum experience. Despite its idealism, this vision for education still sees teachers and pupils working with specialised knowledge, presumably named as subject disciplines, but with a common 'unifying' theme. One of the interviewees was able to provide some evidence of a curriculum model in which subject boundaries were broken down. As MK, a parent, remembered,

"...years ago when I was at school, I was at a very progressive school for about two terms... They didn't have any timetabled lessons apart from one English and one maths test in a week. The rest was exploring the world as the children felt like it. And it was all just lumped together as one sort of subject area where you did a bit of history, a bit of geography, a bit of maths ...I'd come from a very traditional school, straight into this. I was completely bored because I didn't know where I was! ... It didn't really appeal to me so I just got a book and sat in the corner and read most of the time" (MK I.254-265).

This suggests there is a need for structure in a curriculum and the rigidity of subjects would avoid what MK described as 'boredom' and a feeling of being 'lost' in learning. Subjects provide a means to achieve a sense of structure and stability.

In this section so far the analysis of the data has identified two distinct visions for the place of subjects; a subject based curriculum and a non-subject based

curriculum, echoing the views identified in the literature (see section 2.2). A third vision was identified, and that was about cross curricular teaching, combining subjects. This was a feature of the curriculum in some of the schools identified in chapter one. The analysis of these data shows a united front against this type of curriculum organisation. As AR explained,

“I think a sense of structure is kind of required for learners of all kinds, but in particular for those who find the necessity of structure quite a significant part of their lives. ... It could be done but you know, the ‘history of soil’ would be a struggle. Whereas the ‘science of soil’, absolutely... I think there will never be enough topics which enable you to look at all the disciplines you’ll be wanting to investigate. There are particular skill sets for different subjects and although they might overlap, and their knowledge might overlap as well, you can distinctly understand that something is history; that something is geography by and large. And therefore I think they're not artificial (boundaries) whereas some people think they are” (AR I.174- 185).

AR has identified here that subjects are different and that they can be recognised as being distinct. Whilst still regarding this difference as being based on skills, he does recognise that knowledge forms part of this difference too. FM continued,

“I think there are advantages of combining subjects... (I.136)... I can see that, but I still think at the end of the process you need to have the knowledge and the skills, and there are different ways of doing it (than combining subjects)” (I.148-150).

Geography is often combined with history and RE to form 'humanities', as I identified in some of the schools in chapter one. This type of curricular organisation was equally rejected in the data. As AR argued,

"...as much as there are clear cross curriculum links and we could certainly make them, they (geography and history) are two different disciplines... I think they are very different disciplines and you know I would be loathed to the idea of teaching the two in crossover form" (I.142-146).

For JH, humanities teaching,

"...waters it down and it takes away the credibility of the subjects (I.138)... I think it matters because... for the kids to make sense of what they study they need to know what it is. They've got to see how it fits in. You could just teach them 'lessons' about life, but maybe that would be too vague- so there is a danger of it becoming too vague" (I. 149-153).

For all these interviewees, subject identity was important to maintain, for fear of lessons becoming too ambiguous and ruining the 'credibility' of subject disciplines.

Two teachers in this study did have experience of teaching 'humanities' instead of geography. As FR explained,

"...there is a tendency for it (geography) to be lumped in alongside history. History gets the big coverage of 'these are the events that happened in World War One', let's throw in a map and that is the geography bit – so I think it is quite important to keep it on its own" (FR I. 97-101).

As RT added,

“I think if you have cross curricular it is always one subject dominating another, (the) classic one is that history totally dominates geography when you are doing humanities – it is all the world according to history and lets fit in geography and RE, rather than the other way around ... I have experienced that. Very much so. No one would say let’s study ‘earthquakes and volcanoes’ and history can fit in with that – it is lets study the ‘battle of Hastings’ and geography can fit in with that” (RT I.89-97... 99-101).

For these geography teachers, their experience has been that topics that are selected for a ‘cross curricular’ humanities approach are based in history, which then limits the amount and the nature of geography that can be taught. This links back to some of the criticisms of cross curricular teaching that AR articulated earlier: that no single topic can ever satisfy all subjects and that inevitably some subjects will become lost from the curriculum. This seems particularly relevant within the humanities subjects. This section have identified what the analysis says about the nature of subjects in schools. The next section analyses the notion of subject choice given to pupils in schools.

4.5.2 The nature of subject choice in the curriculum

In a subject based school curriculum, children specialise as they progress through their school careers when they study fewer subjects in greater depth, and in chapter 3 (sections 3.4.1 and 3.4.2) the nature of the choices available to pupils as they progress through both CLFS and LAE was outlined. One contention revealed by the analysis was the extent to which pupils should be

required to study at least one humanities subject (geography, history, RE) at GCSE. The head of RE thought that children should as,

“I think that would probably be quite good (to insist on a humanity)... because it gives them a broader education. It makes them into more rounded people. In fact, I am surprised they do that; that they do give them a free choice, to that extent” (JH I. 197-201).

The idea of studying a humanities subject enables students to be more ‘rounded’ and gives them a ‘broader’ education rather than being restricted and narrowed. One parent articulated the effect that not choosing a humanity at GCSE had had on her son, arguing,

“In my own mind, I think it's a real shame that he didn't do one of (the humanities)... because he's very quickly gone into a very narrowed view of the world... He's very much heading towards the geeky maths scientist area and I can see him being a complete bore at parties.... But that's his group of friends and that's where he'll gravitate to and he'll probably spend his life in that pool of people” (MK L. 410-422).

MK suggests that there are a large number of ‘geeky maths scientists’ who have a restricted world view through not studying a humanity at GCSE. Yet even those ‘geeky maths’ students will have studied geography, and other humanities until the end of year 9, as this is required by the law, so they would have developed knowledge of those subjects in this time.

Despite the analysis revealing the importance of studying a humanity, the Deputy Head responsible for the curriculum, himself a physics teacher, responded by arguing,

“I guess in reality if you analyse the options, as I do, I would say 90% pick a humanity (i.e. a humanities subject). Very, very few don't and so to a certain extent it sort of works... most of our kids do anyway, so what do we do (when) we then force the remaining few to do that... it's sort of pros and cons really” (FM I.192-200).

His argument is that because 90% choose a humanities subject when given a free choice, then there is no point making a rule to force the final 10% of students. It 'sort of works' without a rule in place. This suggests that knowledge of the humanities subjects is deemed important in education, but not significant enough to insist on one of the humanities being studied beyond key stage 3. The 'English Baccalaureate' (briefly mentioned in section 1.3) a school performance measure, requires children to choose either history or geography at GCSE as well as a range of other subjects: English, maths, a science, an ancient or modern foreign language, and one additional GCSE qualification. This was introduced to ensure children were learning academic subjects at GCSE. The importance therefore of young people studying a humanity at GCSE was recognised by the government at national level (through the E Bacc), but this was not replicated in CLFS.

Whilst teachers can structure the curriculum for students to access subjects, the analysis also identified why children made certain subject choices. As one pupil articulated,

“I kind of wanted one that was a bit more – something with a bit more longer questions and somewhere that is less maths based and scientific based and I liked having that difference ... I don't know what I want to do with my career at the moment but geography was the one which I chose

because I just really want to do it not because I need it for anything”
(Year 11 student 2 I.109-115).

For this student, reflecting on their GCSE choices, it was about ensuring a variety of assessment types, knowledge and usefulness for careers although ultimately they chose geography because they ‘wanted’ to study it. Perhaps they were able to see the intrinsic value of geographical knowledge. This section has analysed the nature of subject choice in schools. The next section continues to analyse the theme of subject disciplines and the curriculum by analysing citizenship as a subject on the school curriculum.

4.5.3 The role of citizenship in the curriculum

The nature and status of citizenship as a subject in its own right was discussed in section 1.3, where a number of concerns about citizenship as a subject was raised. Neither CLFS nor LAE teach citizenship as a separate, timetabled subject. The importance of a ‘moral compass’ that children develop through their studies was discussed and was deemed to be important (see section 4.2.4 in this chapter). However, the analysis of these data show that according to those interviewed, specific timetabled citizenship lessons was not considered to be the best way to achieve this aim. As JH argued,

“I don’t like it (citizenship)! Because, it ends up being like trying to teach key skills, and the thing about trying to teach key skills is that I think you have to do it through teaching a subject. ... To actually have it on the curriculum as a subject doesn’t work because I think the kids need more structure to hang those topics on to, than they might get from something like citizenship” (JH I. 179-186).

A structure of subject disciplines is needed, as AR discussed,

“I think the students will themselves see ... (if we) try and manufacture certain messages through a curriculum which is, in many ways, artificial. I think a lot of things we can learn, which we might want to teach through citizenship can be taught very much through history, and no doubt through geography” (l.154- 158).

For AR, the aims of citizenship can be met through humanities subjects, as he illustrated,

“the importance of the vote can be studied through the struggles which people have had for the vote in different societies, even this one, obviously being just over the hill from Epsom where Emily Davidson died trying in the fight for women’s vote. It brings it very close to home, I would like to think, for girls at this school in the local area. I think an awareness of people who are disenfranchised, what they feel in their desire, and how they struggled for the vote should encourage those to believe that it’s something which is valuable and worth having” (AR l.158-165).

For him, subject knowledge is the key to enable him to teach young people about voting in elections. The subject becomes the knowledge base through which citizenship ideas can develop. As AR concluded “so for me, I think yes that citizenship is a little bit of an artificial construct and actually its messages could be got through other disciplines quite naturally and less forced” (AR l.165-168). For AR, the ideals of citizenship are best achieved through subject disciplines rather than separate timetabled lessons.

The analysis of my data also identified that the ideals of citizenship can come through the ethos of the school, as articulated by BM who argued,

“...we do teach it (citizenship) because we are all educated so we teach being good citizen through assemblies; through asking people to pick up litter; through expecting good behaviour in the dining room; through staff reading books; we teach it by being it ... so you are right we don't teach citizenship in terms of 'now we will do a lesson on voting rights' but we do educate and open minds to giving blood and stuff like that. Being a good citizen is being aware of others, that is what I think citizenship is... geography should be able to do it, history should be able, everything should do it” (BM I.218-231).

For BM citizenship is an ideal borne out of the ethos of a school rather than taught in set lessons.

The analysis also identified the role parents play in citizenship education. For FM, the introduction of citizenship in many schools in the UK was a reaction to a lack of knowledge being given to young people about issues which were traditionally part of a parent's role. As he argued,

“...my view would be that one of the reasons that citizenship was introduced was because I think a lot of responsibility (for education) would be traditionally with parents, but it has shifted to schools. So many parents don't teach citizenship, but you would hope some time ago they might have done. Now this might be slightly crass to say but I will; I would hope that at a school like ours the parental body we have would actually be in a better position to teach citizenship than maybe other schools, and so I think our students get a reasonable input from their

parents which in other schools they may not. So I would say it is less of a priority for us” (FM I.347-356).

For FM, parents play a role in educating children, but if they do not or cannot do this then this role switches to schools. MK, a parent, agreed with this sentiment, as she argued,

“I would be probably worried if this school spent too much time teaching those things (citizenship), given we're paying fees for the school to teach things that I can't teach them. I wouldn't want to be paying the school to teach them stuff that I could do at home and would be as adequately experienced” (I.232-237).

MK's sentiment that she sends her child to school to learn things that cannot be taught at home links back to the idea of 'powerful knowledge' (discussed in section 2.2.6), a key aspect of which is that it is not 'everyday' knowledge, but requires a teacher to help develop so therefore cannot be taught at home.

4.5.4 Final reflections on subject disciplines and the curriculum

This theme has identified a number of contentions about the nature of subject disciplines and the curriculum. According to those interviewed, subjects are defined by skills, and whilst almost all those interviewed seemed in favour of maintaining a subject based curriculum the reasons for this were less well argued, and some visions of a non subject based curriculum were expressed. None valued cross curricular 'groupings' of subjects, nor the teaching of citizenship as a separate, timetabled subject. I respond to many of these contentions in the next chapter.

4.6 THEME 5: SCHOOL GEOGRAPHICAL KNOWLEDGE

This section analyses the fifth theme identified from the data, which relates to geographical knowledge. Within the themes already analysed in this chapter the analysis has shown how little status has been given to knowledge, with the aims of education being considered by some to be devoid of subject knowledge, and subjects being considered in terms of a skill set. The first part of this section analyses what the data says about the nature of specialised knowledge in geography (4.6.1), before looking at ways the knowledge of geography has been structured for children (4.6.2) before offering concluding thoughts (4.6.3).

4.6.1 The nature of specialised geographical knowledge

This section analyses what interviewees stated about what constitutes geographical knowledge and how this might be considered 'specialised', relating what was said back to the discussions from section 2.3.1 and 2.3.2. First the ways geography subject specialists define their subject is analysed, before questioning the extent that geographical knowledge needs to have the label of 'geography'.

For those teachers with a geography specialism, and for students of the subject, their conception about what constituted geography seemed to agree with the literature from chapter two; that the idea of 'geography' as a subject that can be easily defined is problematic. As FR argued,

“Geography is everything! There is no text book answer to what it is really, it is a subject that encompasses a lot of different information. I suppose I would look at it at school level as being improving

understanding of the world and issues that are happening... (it) is very synoptic in its nature ... I suppose it does cover a lot of different aspects” (FR I.231-232, I.211, I.241-242).

For her, geographical knowledge can provide ‘understanding’ of ‘issues’ and this is what provides the knowledge basis of geography. The notion of ‘synopticity’¹⁰, a term from the AQA A Level awarding criteria, is the idea of thinking geographically, linking ideas and patterns and processes. As she continued “if you are looking at a higher university level it gets very specialised and it does cover the broadest of subjects- so you might be looking at criminal geography, you could be looking at environmental geography” (FR I.211-219). Here she distinguished geographical knowledge in schools from that in universities, with the university discipline offering highly specialised forms of geographical knowledge. Yet there was evidence that even universities seem to be shy of promoting knowledge, at least to parents of prospective geography students. One of the parents interviewed in this research has “been on the university visits” (BS I.215) with his sixth form daughter, where the admissions tutors had promoted university study by saying how useful a geography degree was “to give them ‘transferrable skills’... (and) all of those buzz expressions!” (BS. I.215-217). The analysis indicates that university undergraduate study is being promoted in terms of generic skills that students will gain, again showing a lack of confidence in the value of geographical knowledge.

¹⁰ The term ‘synopticity’ was used by the AQA awarding authority to reward A Level students for linking their knowledge with other aspects of the subject in essays. In the 2016 A Level the term has been replaced by ‘connectivity’. Both terms articulate the same notion of ‘thinking geographically’.

Despite the problematic nature of defining the subject of geography, a question was raised in the data over whether geographical knowledge needed to have the label of 'geography' when presented to children. As MJ explained,

“they (children) don't necessarily need to know that learning about (an) environment is necessary 'geography' until later but ... If we don't want the label then it doesn't really matter. If they have the knowledge and the skills it doesn't matter if we call it geography or history or RS” (MJ I.142-150).

For MJ, subject identity was less of a consideration as long as children are receiving geographical knowledge somehow. A similar issue over subject identity was raised in the interviews by the head of RE, whose GCSE course is actually called 'philosophy and ethics'. As he argued,

“What I always struggle with in my subject is the name, what you should call it. If you call it RE people think of one thing, call it RS, call it 'philosophy and ethics'; and a lot of it for me is getting that balance between what I call it so that I am being honest about what actually goes on in the classroom and also not playing into people's misconceptions- so if they see RE it can turn people off a lot from the subject because of what they might have experienced before” (JH I.122-127).

For JH, the name of the subject is central to its identity. The analysis has shown that the subject of geography lacks a knowledge based identity, even by geography teachers. Despite a lack of a coherent identity, the way the knowledge of the subject is structured to enable pupil engagement was another consideration identified within this theme, and this is analysed in the next section.

4.6.2 The recontextualising of geographical knowledge: curriculum making

In the previous section the nature of geographical knowledge was analysed and this section analyses the data about how that geographical knowledge is presented to students. The process of curriculum making (see section 2.3.3) models the ways in which teachers 'recontextualise' knowledge (see section 2.2.2), through decisions about what and how to teach; the workshop has provided an insight into this process. Much of the data used for analysis of this section is drawn from the narrative created from the workshop, as well as teachers and pupils reflecting on what they have learnt. First this section analyses the need for a coherent knowledge structure, before the ways teachers consider the knowledge structure of geography, using the three expressions of geography's powerful knowledge (as discussed in section 2.2) as a framework for the analysis.

The workshop identified why a lack of a vertical knowledge structure (see section 2.3.2) makes curriculum making a challenge. Working out a structure for the geographical knowledge of 'Russia' provided many false starts in the curriculum making process, with a number of possible structures being discussed and then rejected. As I made clear in the narrative,

“What they (the teachers) were both struggling for was some sort of broad framework to structure the lessons. The initial frameworks suggested: place based/ issues/physical/ human/ environmental/ historical/ resources/ cultural all seemed possible ways to provide a framework for lessons on Russia. All, potentially, would have been acceptable yet they did not feel easy at all with any of these approaches.

They also discussed possible links with other topics they already teach, suggesting deserts, weather and climate, and even 'Polar' which is another of these broad themes of the National Curriculum, with ideas looking at the geography of Siberia" (1.46-53).

The analysis of this suggests FR and RT were overwhelmed with the potential vast extent of geographical knowledge that could be part of a topic on Russia. What they needed was some way of helping them to structure this vast knowledge. They hit upon the idea of conflicts, and as I recalled "as soon as the idea emerged of allying the Russia course with a conflicts theme, the ideas and enthusiasm began to flow" (1.74-75). The geography of contemporary conflicts is a course taught as part of the A Level, so this structure that helped frame their thinking was in fact a structure from elsewhere in the school geography curriculum. They were using a curricular structure provided by their awarding authority and specified on the A Level examination criteria, rather than identifying or creating one of their own, and this observation links back to the perceived dominating control exerted by these organisations.

For geography, powerful knowledge has been expressed by Lambert and Morgan (2010) as three broad ideas, discussed in section 2.4.5, and these can be used to help teachers in curriculum making. This can provide a structure with which to frame the knowledge content of lessons. This structure was used to analyse teachers' conceptions of geographical knowledge in the data. The first of these expressions of powerful knowledge is through 'deep descriptive world knowledge' which centres learning about the world from a specific location to build up a holistic understanding of that place (see section 2.4.5 for a full discussion of this). The analysis revealed that a place based approach was the experience of school geography of the past. Recalling their school experiences

of geography, RT explained “it was basically physical geography and regional based human geography so you did it through a place, so we studied Europe and we studied a huge topic for A Level on Brazil” (RT I.4-6). This notion of place based geography was echoed by AR who remembered “we also had a teacher who’s a great chap, but he centred on Cairo. So basically it would just be ‘we’re going again and again to Cairo” (I.25-26). AR’s recollection is negative in tone, suggesting that every lesson was based on the same location which did little to engage him. The idea of geography lessons of the past being place based seems to agree with the historical perspective of the school geography curriculum I outlined in section 1.3 (and that is modelled in figure 1.1). This expression of powerful knowledge helps students develop what RT called a ‘sense of place’. When asked to explain what she meant by a sense of place, RT explained,

“...well for children to understand what a place is like, and what creates a place, and what the identity of the place is like. So maybe the regions – we were looking at the regional differences in Britain in year seven- but also looking at settlements, how the rural settlements to urban settlements differ; looking at the desertification in Sahel and the Savana and that type of place; looking at China, what type of place they are, what sort of identity they are, how they link in with the rest of the world, how we link in with them” (RT. L.39-47).

The analysis showed the significance of place as a means to help students develop a ‘sense of place’, which is also expressed through the idea of a deep and descriptive place knowledge. The course on ‘Russia’ from the workshop was a return to a place based approach to geographical curriculum making.

The second of the expressions of powerful knowledge is a 'theoretically informed relational understanding of people and places in the world' and this is an expression of thinking geographically (see section 2.3.2). The analysis showed that this was an alternative, rather than concurrent, way to approach curriculum making. It involves identifying a theme or process then using that to explore various places. This is a more contemporary way of teaching geography, as RT identified,

"...you don't do it through a region (anymore), you don't do it through a place; you teach it through a theme. Therefore you get more of a theme but less of the place. Whereas (before) I think you have more of a sense of place but maybe less of a co-ordinated theme" (RT I.9-12).

This again agrees with many of my observations in section 1.3. This distinction between a theme based or place based approach is similar to curricular organisation in other subjects. As JH recalled,

"...when I taught physics there used to be a big distinction in the syllabus between the more kind of scientifically organised thing where you go through the topics like you do resistance, electricity and magnetism and waves, or there'd be the theme based where you'd look at a satellite, and you'd teach those different distinctions through the technology of the satellite, so you'd look at waves- the electromagnetic radiation that reaches the satellite, how they turn it into electricity, in the solar cells" (JH I.165- 172).

A similar vision can be created for geography, by taking a geographical theme, such as 'rivers' and then exploring the concepts that make up that theme and then applying them to a range of different places.

The third expression of geography's powerful knowledge, 'a propensity and disposition to think about alternative social, economic and environmental futures' was shown by the analysis to be a much more contemporary expression of geographical knowledge. As AR observed,

"...when you talk about things like geopolitics and things like that... that was certainly nothing to do with our geography course and it does sound fascinating and really interesting" (AR I.35-37).

It is also not a recognised way to structure geographical knowledge. When forced to consider the knowledge content of the course on Russia in terms of this notion of futures, the teachers in the workshop altered their language. The geocapability Framework (see figure 4.1) had been filled with ideas in the first two columns, mapping their thoughts into the first two expressions of powerful knowledge but the final column was quite empty. It was only on reflection that they then added in the words 'sustainability', and 'conflict solutions' in that final column. As I recorded in the narrative,

"...the notion of 'sustainability'... makes its first appearance. ...the same is said about conflict solutions... this then enables the children to consider their own responses to the conflict and issue. Their understanding is knowledge based" (I.211-221).

The teachers used notions of global futures to enable a knowledge based, critical engagement with the issues. It was suggested in the narrative that this can link to the curriculum futures heuristic proposed by Young (2008),

"...a Future 2 curriculum would ask children to devise their own futures for the ongoing Russia/Ukraine conflict without a real understanding of the background of the conflict" (I. 215-217).

What was being proposed in the workshop was beyond this, by asking children to engage with knowledge that underpins the conflict issue first, before considering their response to the issue. This creates a knowledge based discussion of issues and as such approaches F3 curriculum thinking.

The analysis of these data identified that teachers saw place-based geography and theme-based geography as separate ways to organise geographical knowledge, and that a knowledge based futures dimension was a more unfamiliar concept. It was with this contention that the geocapability Framework was created (see section 3.6.4). In analysing the usefulness of the Framework, I recorded at the time,

“...by using the geocapability Framework, it forced the teachers to think about what they were teaching, and how this would structure the learning process over the course of a series of geography lessons. Their structure seems to take children on a journey First they learn about Russia’s location and describe the nature of its resources and conflict, then they learn the processes which underlie these phenomena, such as fossil fuel formation, the geography of cultural identity and finally they are asked to consider their own response, to consider alternative futures to the conflicts and contemporary issues” (narrative I.222- 228).

This has mapped the knowledge content of a sequence of lessons through the three expressions of the powerful knowledge of geography, from a place based consideration through processes and themes then onto a consideration of futures. Figure 4.1 shows the completed Framework produced in the workshop, to show the end product of the curriculum making process.

Deep descriptive 'world knowledge'	theoretically informed relational understanding of people and places in the world	Propensity and disposition to think about alternative social, economic and environmental futures
Russia - where / extent cities, physical landscape Natural resources	why cities are where? why oil/gas/coal?	Extraction Supply demand Sustainability Conflict of use.
Contemporary Conflicts - Ukraine - location Eu/Russia divide	why the conflict - cultural identity? Age? Resources?	Future solutions to conflict.
World Stage - Development Russia / BRICS	Classification / globalisation rate / human rights / HDI / Trade	Sustainability

Figure 4.1: The completed geocapability Framework from the workshop (lines 167-8 from the narrative).

The analysis of my data also showed the limitations of using the Framework in curriculum making. As I observed,

“...the geocapability Framework cannot generate ideas. It is not a mechanism by which powerful geographical knowledge can be created. This is still done by the professional geography teacher. Another group of teachers would have devised a set of lesson ideas that were different, and this would not have meant their ideas were no good” (l.240-244).

RT raised a similar concern, as I referenced, “I think it helped, but I think it would have been a hindrance if we had started with that (the Framework)” (l.235- 236). The analysis showed that the usefulness of the Framework for

curriculum making is limited, although it does have a specific function; as I explained,

“...what the Framework does enable, however, once those ideas have been initially gained, is the chance to check there is a strong geographical content of the lessons... The Framework therefore acts as a checklist for a good geography curriculum” (1.240...250).

By a ‘good’ geography curriculum I meant that it contained geographical knowledge that can broadly be placed within the expressions of powerful knowledge of geography. It ensures rigorous geographical knowledge is at the heart of curriculum making. This section has analysed the nature of geographical knowledge, both in terms of how geography is defined and expressed through the ideas about how geography was discussed by the interviewees, and how this fits with some of the ways that powerful knowledge has been expressed in the literature. Some concluding thoughts from this theme are now offered.

4.6.3 Final reflections on geographical knowledge

This section has analysed the data to identify a series of contentions about geographical knowledge. What the analysis showed is that specialist geography teachers found describing the subject a challenge. They saw place based geography as a more traditional approach to the subject, with a conceptual basis being more contemporary and the futures dimension seemed a less recognisable way to structure geographical knowledge. The curriculum Framework, created for this thesis was useful to structure the knowledge in a piece of curriculum making, but did not create the knowledge; that is still the

work of the teacher. The final section of this chapter draws all the ideas from the analysis together.

4.7 CONCLUSIONS

This chapter has presented the analysis of the data collected in the research. It has identified five key themes, but many of the ideas analysed cut across many of the other themes. Although presented in the specific order above, each of the five themes are considered equally. To summarise, the analysis has revealed some key contentions, and figure 4.2 summarises these.

Key contentions identified from the analysis of these data
<p>Aims of education:</p> <ol style="list-style-type: none">1. There is much discrepancy between what people regard as being the aims of education.2. Skills, particularly related to careers, are given a higher status than knowledge when related to the aims of education.3. Developing a sense of moral responsibility was seen as being an important aim of schooling, but this was a separate consideration to knowledge and skills acquisition. Using separate timetabled citizenship lessons was not considered the best means to develop these ideals.4. The passing of exams seems to be an implicit, and fundamental aim of schooling.5. The data also revealed the role and status of knowledge is low; it is seen as a memory test, used to help develop skills.

Structural Features of curriculum:

6. The Habits of Mind, a curriculum structure introduced at CLFS is widely ignored and disregarded by staff and pupils in the school. Some teachers have interpreted the demands of the HoM too literally.

7. The beliefs and perceived nature of the children and teachers are seen as an important starting point when curriculum making by teachers.

Power and control of education:

8. There is a series of structural features all perceived to be imposing power over the teacher, and these are as much about the physical environment as about key stakeholders, such as the government and examination awarding authorities.

Subject disciplines and the curriculum:

9. Subjects are still regarded as the basis of a curriculum organisation in schools, but are defined in terms of a skill set, not a knowledge set.

10. The articulation for the maintenance of a subject based curriculum was less well expressed.

11. Examination grades only have a limited lifespan of usefulness.

School geographical knowledge:

12. What is regarded as 'geography' is ill defined and problematic. The three part expression of geography's powerful knowledge was challenged.

13. There seems to be a variety of ways of structuring geographical knowledge for teachers to assist in curriculum making; teachers in the workshop had a belief in the importance of contemporary issues driving the geography curriculum.

14. The use of the geocapability Framework created for this research can assist teachers in ensuring a balance between place, process and futures geographical knowledge.

Figure 4.2: Summary of some of the key contentions from the analysis of the data. These are not universal generalisations; they are a product of this research.

This chapter has analysed the data collected in the empirical element of the research, arriving at a series of 'contentions' summarised in figure 4.2. In the next chapter these contentions are discussed, relating them back to the key questions underpinning the thesis before offering some concluding thoughts.

CHAPTER 5: DISCUSSION AND CONCLUSIONS

5.1 INTRODUCTION

In the previous chapter the data were analysed through five themes, the results of which revealed a set of key contentions summarised in figure 4.2. In this chapter each of these 'contentions' is responded to, in order to conclude the thesis. In section 5.2 first the status of new knowledge in this thesis is commented on, before the research questions are addressed directly. The findings are opened up to further discussion in section 5.3. In section 5.4 there is a discussion about the ways to take this research further, before conclusions of the research are made in section 5.5. First the key research questions are addressed.

5.2 ADDRESSING THE RESEARCH QUESTIONS

In this section attention is turned back to the research questions that have underpinned the thesis. These were introduced in section 1.6 and discussed in section 2.5. These are able to be addressed as a result of the new knowledge generated in this research. First the nature of the new knowledge is re-stated and illustrated with an example generated from the data (5.2.1). Then the three minor research questions are addressed, showing the ways in which the data provides a response to them, presented in the form of a curriculum model (5.2.2). Then the overall research question is responded to (5.2.3).

5.2.1 The status of new knowledge in the thesis

In this section the nature of the new knowledge that this thesis creates is re-stated. As identified in section 3.3, the data produced in this research, which have been analysed in the previous chapter, have enabled the research questions to be addressed conceptually. It provided an empirical basis to what was, prior to this research (and the GeoCapabilities projects, see section 1.7), a largely conceptual discussion. Thus the findings, which are bounded by the methodological constraints identified in chapter 3, enables claims to be made about the validity and robustness of the various concepts identified throughout, such as F3, powerful geographical knowledge and curriculum making.

What the analysis of these data have enabled is for me to shape the conceptual understanding of the significance of the capability approach. The empirical data were never going to 'prove' the existence or importance of geocapability. It was always going to inform the understanding of the concept. This was achieved by finding examples of where the data agreed with the ideas from the literature, as just illustrated, but also where the data provided an opportunity for the notion of capability to provide clarity. The conceptual understanding was based as much on what the data did say as much as what it did not say. It is important to reiterate the limited nature of the data in this sense; unlike many empirical theses, there is no direct and obvious link between the data and the research questions. It is for this reason the research questions have been 'responded' to rather than 'answered' in a direct way.

The following example illustrates the ways the data affected the conceptual understanding of the concepts. In chapter 1 it was outlined how there was a lack of a coherent idea about the aims of education among teachers and the

role of knowledge within this, illustrated with two schools with different approaches to curriculum. This was personal opinion. In chapter 2 the ideas were explored in relation to the wider literature, in which differing views were identified; Reiss and White (2013) who advocated an 'aims based curriculum' akin to the aspirations of a F2 curriculum, and Young (1971) who identified 'knowledge of the powerful' and F1 curriculum thinking, as well as the possibilities of 'powerful knowledge' and an F3 curriculum (Young 2008). Lambert and Morgan's (2010) notion of geocapability was a conceptual means to enable F3 curriculum thinking. At this stage, the concept of capability as a way of expressing the role of knowledge as part of the aims of education was theoretical. In the interviews in this thesis these ideas were explored, and the subsequent analysis, chapter 4, has identified that even within the same school, people had differing views on the aims of education (contention 1). The analysis also showed that those interviewed were very keen to retain a subject based curriculum but no one could articulate why (contention 10), but that children's beliefs and an understanding of their nature should be at the heart of curriculum making (contention 7). These revelations came directly from the analysis of the data.

This thesis is able to argue that the capability approach can provide those teachers previously illustrated with the means to articulate why a subject based curriculum, which is led by knowledge focussed on pupil outcomes is significant. Thus the data have informed and helped develop the conceptual understanding of the capability approach. The subsequent workshop enabled the ideas to be taken a stage further by actually getting teachers to engage with and comment on the newly formed ideas about geocapabilities. This engagement, and the subsequent insight the teachers gave helped hone the concept further. As the

ideas are presented in this chapter, they are the final stage of ideas about geocapabilities, formulated in the literature and shaped by the analysis.

So this thesis contributes to new knowledge in three main ways. Firstly, it is the first school based empirical research into the capability approach to geography education, and as such is the first to directly engage teachers, pupils, school leaders, parents and governors from the same school about ideas of education and curriculum which have then been used to develop the concept. The GeoCapabilities projects (see section 1.7) engaged teachers and teacher trainers, but not to the same level of depth of this research, nor were they all from the same school.

The second contribution to knowledge is through the creation of the geocapability Framework. This practical curriculum planning tool was developed as part of this research as a means to provide a tangible way for teachers to engage with powerful knowledge. The Framework was created in the early stages of the methodological considerations and used myself when authoring a teacher resource book (Bustin 2015a, with the completed Framework in appendix 2). It was then used as part of the teacher workshop with two teachers, who were able to use it to assist in their curriculum making, who then offered a critique of its applicability and usefulness.

The third contribution of new knowledge to which this thesis contributes is through the creation of an original model of the capability approach to curriculum thinking. This is introduced in the next section, where the research questions are addressed directly.

5.2.2 Responding to the research questions

In this section a response is provided to the research questions which underpin this thesis, introduced in section 1.6, and 2.5. A response to the main enquiry question follows in section 5.2.3, but in this section the three minor research questions are addressed:

- 1. How do the 'structural features' of education promote curriculum making in geography?*
- 2. How can capability develop student agency?*
- 3. What contribution does geographical knowledge make to the development of capability?*

This thesis shows that the concept of capability can unite many of the disparate concepts discussed in previous sections into one model of curriculum thinking for teachers. This model of the capability approach to education, shown in figure 5.1 has been devised as a direct result of this research. Rather than tackling each question separately, the model is discussed as a whole, relating the discussion to the research questions.

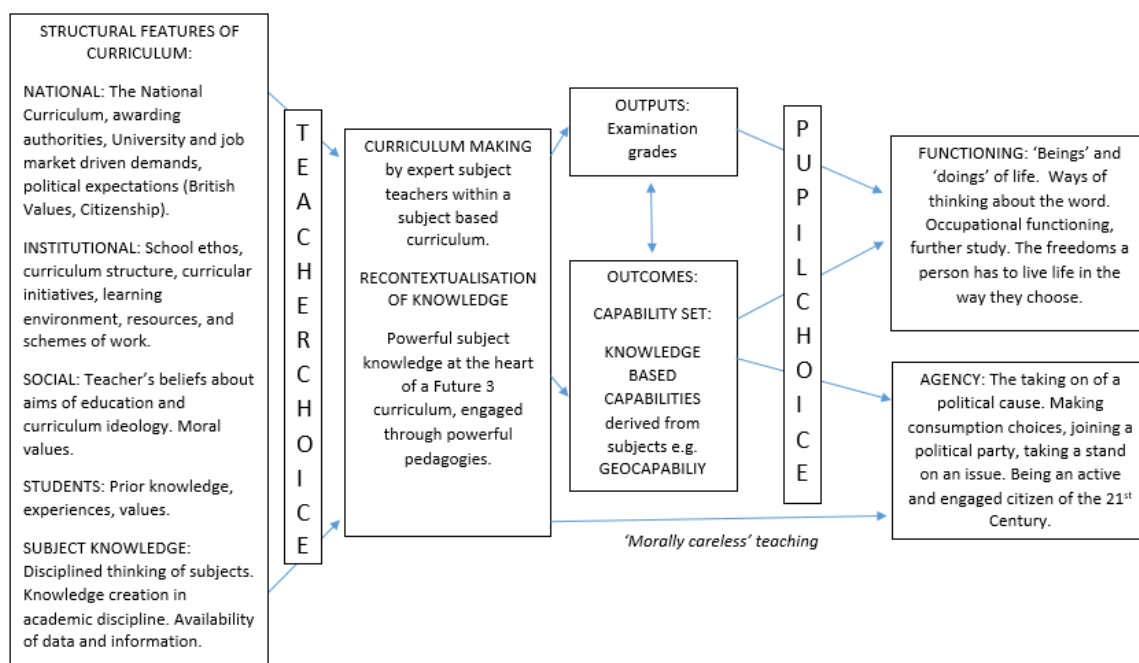


Figure 5.1: A model of the capability approach to education developed in this thesis.

Figure 5.1 is a conceptual model that structures teacher thinking within a capability approach. The start of the model is the left hand side in which there are various 'structural features' that impact on the way teachers conceive the curriculum. The literature identified, and the analysis of the data substantiate the existence of a series of features, both 'real' and 'perceived' which act as inputs to curriculum making. Teachers are influenced by these structural features when curriculum making, which is modelled by the arrows leading to the second of the boxes in the model. These arrows are labelled 'teacher choice' as teachers actively make choices about how to respond to these features, similar to the ideals of the 'structuration theory' (Giddens 1984, see section 2.4.3); for teachers, some of these features help 'enable' whilst others 'constrain' curriculum decision making. The analysis of the data identified the ways in which these features impacted on curriculum making. A key contention revealed in the analysis (contention 8) was the idea that teachers felt heavily

controlled by external forces such as the National Curriculum and awarding authorities, and these are modelled in the structural features box. What this model is able to do is place these constraints in context; although constraints exist, there were other factors that impacted on teacher choice over which teachers did and could have control. The teachers in the workshop used their belief of the importance of contemporary geographical issues to 'enable' their curriculum making (contention 13). This belief is part of the social structural feature of their curriculum ideology, also modelled. The analysis of the data also revealed the significance of teacher choice; teachers could subvert some of the influences when they wanted to, such as the teachers in the workshop ignoring the influences of the 'Habits of Mind' initiative. What could perhaps have been considered a constraining feature has been ignored by teachers (contention 6). Children also form a significant structural feature 'input' to the curriculum. Teachers need to be aware of, and responsive to the needs and experiences of the young people they teach. This discussion addresses the first of the research questions. Teachers in this research, in practice, actually have much more choice about their curriculum making than they articulated in interviews, by actively subverting, and working creatively within the enabling structural features.

The second of the main boxes in the model is the process of 'curriculum making'. It is here that teachers enable the curriculum for their pupils through a knowledge led, subject based curriculum. The model identifies the purpose of this; effective curriculum making leads to a distinct set of pupil focussed results, shown on the model as 'outputs' of examination grades and 'outcomes' of capabilities. The analysis of the data identified that the outputs were given much more significance than the outcomes in the attitudes of those in this research

(contention 4). Achieving examination grades was seen as the aim of education, albeit implicitly. There does need to be a means by which to differentiate between the abilities of young people, particularly in a competitive jobs market. This was deemed an important consideration of the teachers in this research (contention 2). Yet the analysis also identified that examination grades have a limited usefulness in the workplace (contention 11) and this has informed the judgement that whilst exam grades are significant, the emphasis placed on them by those in this research is too great. There is a greater purpose to effective curriculum making which can be articulated by 'outcomes'. The idea that education is more than exam grades was identified in the analysis of the data with regard to the importance of a moral responsibility (contention 3). This is an expression of a holistic, pupil focussed outcome which can be encapsulated by capability. As a result of their education by subject specialist teachers, a young person develops a capability set. This set is able to articulate the ways that person thinks about the world, their understanding, their attitudes and values towards issues. A capability set cannot easily be measured; it is intangible, and is built up throughout education. This is modelled in the outcomes box in figure 5.1. The arrow between outcomes and outputs identifies that the two are linked, pupils with a well-developed capability set might achieve a higher set of outputs, although this is not a given assumption.

The outcomes and outputs alone are not the 'end product' of education. What the capability approach enables, modelled in figure 5.1, is a consideration of the choices that are available to pupils as a result of their education. With a capability set, a young person is able to make choices about how to live, and it is these choices that determine their future. The capability approach identifies two main choices, functioning and agency, terms derived from the literature and

explored in the interviews. Functioning attempts to collate the various 'beings' and 'doings' of life which includes choices about which career or job to take (termed 'occupational functioning', a term from Hinchcliffe 2006, see section 2.4.3), itself identified in the analysis as an aim of education (contention 2). The capability approach enables these functionings to be placed within a broader framework of ideas. Functioning is a holistic term that identifies how a person is able to 'be' in the world. The more developed the capability set, the more choices young people will have available to them, such as the greater the range of career options and university courses that will be accessible to them. If a person has a less developed capability set, their range of choices about how to live is more limited. There is clearly a link to outputs here too; university choices are a product of examination grades as the universities set entrance criteria. But the choice of functioning is directly related to the educational experience of young people, to the powerful knowledge they have learnt through their subjects. An educated person will have developed a range of knowledge based capabilities and skills and with this they can choose to live life in the way they choose. They can decide where to live, what work they want to do, and where to go on holiday. They can decide to keep on studying or not. Subject knowledge is inherent in the choices over functionings that an educated person has. Through subjects young people can learn actions have consequences; ways of behaving; ways to articulate and present coherent ideas and logical arguments and this will all affect the way a person lives and interacts in the world. The capability approach does not, however, identify strictly subject specific functionings; it is not true to say the developing geocapability leads to geographical functionings. Geocapability forms part of a larger capability set on which all functioning can be enabled. Functioning is about the ways a person

interacts with society, in the sense that Nussbaum and Sen envisioned, rather than a more philosophical and insular focus on the ways in which individual minds function.

The concurrent choice available to educated pupils is the idea of the taking on of 'agency'. In capability approach discourse the notion of agency refers to the abilities of people to act freely, to participate actively in society, to play a full part in political and economic decision making. It does not identify what these decisions would be, but simply that a person with a well-developed capability set would be in a better position to be more active as an agent in society. This is not a radical 'call to arms', but simply making moral and ethical choices about how to live and work in the 21st Century.

This notion of a moral education was deemed significant by those in this research (contention 3), with many commenting on the importance of developing a 'moral compass' in pupils (see the discussion in section 4.2.4). These notions fit well with the idea of agency. 'Agency' provides a means by which the needs of moral education can be expressed as part of the outcomes of education.

This thesis can go beyond this simple view, however, by considering the role of knowledge in the process of using a moral education to develop pupil agency. The powerful knowledge of the subjects studied will enable young people to engage with complex issues in new ways. This will enable young people to make moral decisions as active agents in society based on the understanding of these issues. For the subject of geography, the capability to think about the world geographically empowers people to take a geographical stance on their agency. Many examples of how the relationship between geography's powerful

knowledge and agency is articulated have been alluded to in this thesis, such as the ideas of teaching 'Fairtrade' (see the work of Standish 2009 in section 1.3); in this example young people take a stance on their relationship to the idea of Fairtrade (their 'agency') through the knowledge of how fair and unfair trade operate geographically. Those educated pupils may decide to buy Fairtrade products or they may not, but this decision is theirs based on the knowledge of the subject. A further example can be illustrated through the workshop in this thesis. The teachers were keen to teach the geopolitical tensions and conflicts that exist between Russia and many of its neighbouring countries. The educated pupils, with this complex knowledge, can then decide how to respond to contemporary Russia, through engaging with national politics and debate.

The notion of agency, as a product of the capabilities gained through a knowledge based education enables an educated person to make life choices. People may want to change consumption patterns, support a political cause, join a political party, engage in a debate or influence other people. Equally they may not. They are able to choose how to behave as an outcome of their education.

Consideration of agency through the capability approach also identifies the potentially damaging role of 'morally careless' teaching which teaches young people to take on agency without a consideration of the knowledge underpinning the issues, a feature of F2 curriculum thinking. This is modelled in figure 5.1 as an arrow linking curriculum making directly to agency. This would be akin to teachers telling their students what to think and how to behave. They would be encouraging a particular agency, a set way of behaving that is not a free choice of the educated pupil; a teacher telling their pupils to buy Fairtrade products or to vote in a particular way in an election would be an example of not

enabling the pupils to take on agency, but is 'morally careless' geography teaching. This discussion addresses the second of the research questions; pupil agency is developed through building understanding within a knowledge led curriculum framework.

The discussion of this model has responded to the first two of the research questions. The role of knowledge is now discussed to provide a response to the third research question. The analysis has informed the conceptual understanding of the significance of knowledge in a way that enables moving beyond what some of the interviewees stated. A key contention identified in the analysis was that the status of knowledge is low, akin to a memory test for some pupils and far less significant than skills (contentions 2 and 5). However, the capability approach places a far greater emphasis on knowledge at the heart of a curriculum.

Knowledge is modelled in figure 5.1 first as part of the structural features; this includes academic subject knowledge which for geography would include the way the discipline is conceived in universities, as well as world knowledge available to teachers through the media and world experience. Placing knowledge as part of the structural features forces teachers to consider, from the outset, what to teach. The subject specialist geography teachers, driven by a clear justification of why they teach their subject (part of the social structural features) are then able to select from that knowledge in order to inform their curriculum making. The workshop in this research gave an insight into this process. Teachers 'recontextualise' social realist, disciplinary knowledge for pupils in the classroom (see the discussions on the theory of this in section 2.2.2), using their pedagogic skills to enable pupils to access and develop understanding. This has been articulated in the literature as powerful

pedagogies (Roberts 2014), which enable pupils to develop powerful knowledge (Young 2008), and it is this which is an articulation of an F3 curriculum. The analysis of the data, specifically through the role of the teacher workshop, identified the significance of the geocapability Framework; focussing on powerful geographical knowledge in the planning stages of a curriculum ensured a rigorous knowledge content to geography lessons (contention 14). For the subject of geography, powerful knowledge has been expressed in three parts; deep descriptive 'world knowledge'; theoretically informed relational understanding of people and places in the world; and a propensity and disposition to think about alternative social, economic and environmental futures (see section 2.4.5). Though the analysis of the data did question the validity of this expression (contention 12).

The importance of knowledge in the capability approach extends beyond curriculum making to consider the reason why young people develop powerful knowledge. The 'powerful knowledge' that pupils engage with through subjects builds up understanding of those subjects and this develops what is being identified as 'knowledge based capability'. For the subject of geography this is called 'geocapability'. Geocapability includes the powerful knowledge of geography, as expressed through the three part expression of powerful knowledge, which enables the ability to think like a geographer. The powerful knowledge of geography is not defined as a list of facts, it is ill defined, an assertion from both the literature and the data (contention 12). Schools and external assessment criteria such as examinations test a student's geographical knowledge; much of this is about testing what a pupil can remember, though some questions at A Level do encourage pupils to think geographically by linking people, places and processes. Yet this assessment of outputs suggests

a set end point for geographical knowledge; that once a pupil has sat a geography exam their geographical abilities end. Geocapability, whilst less measurable, is a more long lasting outcome of a geography education (responding to contention 11) and affects the way a young person sees and interacts with the world. Once formal education ends, the educated person has a knowledge based capability set, of which geocapability forms a part.

Students do not learn subjects in isolation in schools. Through engagement with a variety of subjects students develop a range of knowledge based capabilities, such as maths capabilities, and history capabilities. Students will also develop some skills, which could be considered 'skills based' capabilities, either as a product of other aspects of the school curriculum, or through the studying of subjects. The combination of skills and knowledge based capability develops a 'capability set' in young people. A well-developed capability set is the product of an effective school curriculum. This has subjects at its basis, and knowledge therefore at its heart. The significance of knowledge enables pupils to make informed choices about 'functioning' and 'agency'. Powerful knowledge from a variety of school subjects helps young people to make choices and decisions about their place in the world, their reactions to issues and ideas. This discussion responds to the contention from the analysis that citizenship ideals are best engaged with through traditional subjects (contention 3), where pupils can base life choices on powerful subject knowledge gained through education, rather than through a potentially knowledge-less 'morally careless' curriculum. The discussions of this section have addressed the three research questions and responded to many of the contentions raised in the analysis. In the next section the main research question is addressed.

5.2.3 How useful is geocapability as a framework for Future 3 curriculum thinking in geography?

In the previous section a model of the capability approach to curriculum thinking was identified, developed as a direct response to this research which provides a means for teachers to consider various aspects of curriculum making to develop capability. The ideas developed out of the analysis of the data. In this section first the ways the capability approach to geography provides a framework for F3 geography curriculum thinking is discussed before there is a consideration of the extent to which this idea might be 'useful' for a variety of educational audiences.

The aspirations of an F3 curriculum are embedded within the capability approach to curriculum thinking. Young and Lambert (2014) argue that F3 "treats subjects as the most reliable tools we have for enabling students to acquire knowledge and make sense of the world" (p67). The concept of capability provides a structured way of thinking to enable this. The educational outcome of pupils able to make sense of the world to affect choices of functioning and agency, are the product of a well-developed capability set made up of knowledge based capabilities. These are achieved through rigorous engagement with powerful knowledge through subject disciplines by expert subject teachers. These ideals are the key principles of an F3 curriculum (see the discussion in section 2.2.6); a subject based curriculum, with the notion of powerful knowledge at its heart. Powerful subject knowledge is that created through specialist thought, it is the best knowledge of that subject, it is evidence based and open to debate (see figure 2.4). The analysis of teachers' evidence presented in this thesis identified skills as being a more significant means to define the nature of subjects than knowledge (contention 9). This type of

curriculum thinking is a feature of an F2 curriculum, so this thesis is concluding, as a result of this, that to achieve an F3 curriculum, knowledge has to define the nature of subjects.

Those in the research were keen to retain a subject based curriculum but could not articulate why (contention 10). This thesis is showing that the capability approach to curriculum thinking can provide that articulation. Capability links the aims of education, via subjects and powerful subject knowledge, to student outcomes. This gives a framework of curriculum thinking that embodies an F3 curriculum vision. This thesis is not suggesting that the capability approach is the only way to achieve an F3 curriculum, nor that the model (figure 5.1) is a model of an F3 curriculum. What it is arguing is that the capability approach can be one way for teachers to enable an F3 curriculum in schools. Geography, as a school subject taught by geography subject specialists, enables pupils to engage with powerful geographical knowledge which develops geocapability and ultimately leads to geography pupils being able to think in new ways. This is an expression of F3 geography curriculum thinking.

The usefulness of the capability approach to curriculum thinking can be considered in terms of a number of audiences. One broad audience is the vast range of educationalists working in schools. One consideration from the analysis of the data was that there were many different articulations of aims of education (contention 1). The conceptual understanding of capability, based on this contention, is clear in its response to this. With the curriculum thinking offered by the capability approach, the purpose of education is to enable a young person to be free to think, to be, to do, and to live life in the way they choose. This is achieved through the development of powerful subject knowledge to develop knowledge based capabilities. This aim is not derived

directly from the needs of examinations, universities, societies or the jobs market, although these have an influence, but from individual young people living the life they choose in the 21st century. This clarity can be useful for teachers as well as school leaders.

The capability approach is useful for teachers, as it enables them to think about and to focus on what they are teaching, and why they are teaching it. For teachers of geography, the idea of what counts as geographical knowledge can be problematic (contention 12), so the Framework of powerful geographical knowledge ensures a geographical knowledge content in the curriculum without dictating its exact contents. The usefulness is in the curriculum planning stages, when courses are being designed that will span more than one lesson; capability is something developed over a sequence of lessons and so teachers can ensure that lessons are developed that will maximise powerful knowledge engagement. For teachers of geography a sequence might involve a mixture of place and topic based material over two or three lessons, with students engaging with a variety of data before considering an issue based on their understanding. This issue can then be considered from a variety of alternative viewpoints suggesting alternative futures. This is how the teachers in the workshop designed their sequence on Russia, within the structure offered by the capability Framework. It is the Framework that has the potential to provide a means to enable an F3 curriculum. The teachers in the workshop saw the relevance of the curriculum thinking structured by the Framework (contention 14).

The usefulness for teachers is also in its flexibility as a concept. Neither the capability approach, nor an F3 curriculum, list what capabilities actually are in practice, nor do they list the powerful knowledge on which that capability is

based. This is in a similar vein to the ideas of Sen (1980) who never advocated a list of development capabilities (see section 2.4.2). What the capability approach does advocate is a subject based curriculum, with subject specialist teachers who are able to work with the subject and pursue 'better knowledge'. By creating a definitive list of what counts as powerful knowledge, it becomes static and something to be learnt rather than an idea to engage with, which can lead to an F1 curriculum. It is the role of the teacher working in specific settings to choose and present the powerful knowledge of their subject to their students. Different teachers working in different schools will have different ideas about what constitutes powerful knowledge, and the capability approach respects these differences as long as the teacher is a subject specialist and working within their subject discipline. Thus the capability approach is empowering for teachers. It is trusting of their professional abilities and their understanding of both their subject and education. In this sense, capability forms part of the professional ethos of teachers' work. It is part of the way teachers see themselves and their role as educators. The workshop, and its subsequent analysis identified the ways that the geography teachers in this research made these curricular decisions.

The usefulness of the capability approach can also be considered from a senior leadership, as well as political perspective. The capability approach, as well as an F3 curriculum require subject specialists to be teaching a subject based curriculum. This was a position supported by almost all interviewed (contention 9). Yet neither of these two requirements are consistent in all schools, as some of the ideas in chapter 1 illustrated, and in an increasingly fragmented educational landscape, a set of principles for rigorous curriculum design is needed. Capability can provide those principles. For school leaders, the

capability approach demands that teachers need to be teaching the subject in which they have a specialism. If they are not specialists, they will not be best placed to develop knowledge based capabilities in those children they teach. This is because powerful knowledge requires an immersion in a discipline and that cannot be offered by a non-specialist. This argument also champions the need for teacher training to be based predominantly in universities, with groups of subject specialist trainees working together to learn their profession, and reflecting critically on subject knowledge together, rather than training individually in isolation in schools where the time for this in depth reflection with other specialists would be more limited.

For local and national educational authorities, schools need to pursue a subject based curriculum, so children will be able to develop knowledge based capabilities. Without knowledge based capabilities young people cannot develop a full capability set to enable choices in life. A lack of access to a subject based education can be considered a form of 'capability deprivation'.

In this section the overall research question which underpinned the research has been responded to, identifying what the analysis of the data was able to conclude, and how it was used to enhance the conceptual understanding of the capability approach to education. In the next section some further areas of discussion that arise from this research are explained.

5.3 DISCUSSION: The significance of the capability approach to geography education

In this section a discussion is opened up as to why the capability approach to education can be considered a significant idea in educational discourse. This discussion is based on the findings from the research, but goes beyond this to consider some wider sets of ideas. First section 5.3.1 discusses the extent to which capability could provide an overarching structural vision for the secondary school curriculum as an alternative to the 'habits of mind' (HoM). Section 5.3.2 directly addresses the concerns of Michael Young (from section 2.4.5), with his concern over the generic nature of capability and the difficulties in reconciling the social realist approach to knowledge and the notion of capabilities. The following section, 5.3.3 discusses how geocapability can provide a rationale for geography in the school curriculum. Finally, section 5.3.4 there is a discussion about how the concept of the F3 curriculum gives teachers agency through the responsibility it places on them as 'curriculum leaders'.

5.3.1 The curriculum 'capability' big picture

The concept of capability can be used as a means to provide a way of thinking about curriculum as it provides a means for teachers and school leaders to consider the curriculum as a 'whole'. It links curricular aims, through a knowledge led, subject based curriculum to pupil outcomes. It recognises that each school subject, such as geography, enables a significant part of a much broader educational outcome, articulated as knowledge based capability, to develop. As a way of thinking it is an alternative to the much critiqued National Curriculum 'big picture' discussed in section 1.2 (the diagram of which is in

appendix 1). It is also an alternative to the Habits of Mind (HoM) at CLFS, which can be considered another way of thinking about the curriculum as it attempts to provide a unifying concept which cuts across subjects (see section 4.3.4). In the analysis of the data, the experience of the HoM was not successful in providing the coherent big picture of the curriculum at CLFS (contention 6), with teachers and pupils actively subverting its influence. The notion of capability could be ignored in a similar way in schools. This contention is now explored.

Both the HoM and the capability approach are curricular concepts that have similar traits. Both are focussed on pupil outcomes, identifying how children can think with the education received, either through the organised disciplinary ways of thinking as offered through the capability approach, or through broad scale competencies of the HoM. These ways of thinking provide an aim for the curriculum. Yet the capability approach to curriculum thinking will not be subverted and ignored in the way that the HoM has been. Capability is fundamentally different to HoM. To incorporate HoM into curricula, teachers actively need to alter the content of what they are teaching to incorporate these ways of thinking. This means changing the knowledge basis of their lessons, splicing extra content into cover a particular habit which takes them away from the subject knowledge. In geography, a teacher preparing to teach a lesson on Russia might feel the need to include something to help the children to “think flexibly”. Rather than being something to reflect on after a sequence of lessons, the HoM have been interpreted too literally by some teachers (as the analysis identified, contention 6) and this additional ‘pressure’ to incorporate these cross curricular competencies has led to teacher resentment, particularly as many teachers will feel they already incorporate these elements into their teaching. There is also a fundamental message about the nature of subject knowledge

that the HoM gives; it suggests that subject knowledge is simply the means to develop the HoM. It suggests that the habits are the more significant curricular idea, more important than subjects and this too adds to teacher resentment.

The capability approach to curriculum thinking does not require teachers to alter their curriculum content. In fact, it raises the importance of subject knowledge as the most important idea in curriculum. The idea of powerful subject knowledge is much more tangible than the HoM, and easier for teachers to see as relevant. Teachers are already subject specialists and capability enhances their professionalism and values their knowledge basis. This is empowering for teachers, and teachers should feel encouraged rather than resentful. Capability is not an idea that is simply tacked on to an existing curriculum structure, unlike the HoM, but is integrated within a subject based curriculum. The teachers in the workshop responded positively to the ideas of powerful geographical knowledge and a subject based curriculum (contentions 9 and 14). This means capability is a much more significant and robust way of thinking about the secondary school curriculum than both the HoM and the National Curriculum (2008) big picture. This section discussed the significance of the capability approach in providing one way to consider an overarching 'big picture' for curriculum thinking. The next section tackles a further discussion to emerge from the thesis.

5.3.2 Social Realism and the Capability Approach: addressing the concerns of Young.

This section provides a discussion of another of the ideas to emerge from the thesis and this is the concern of Young (2011) over the capability approach.

Despite using much of Michael Young's work (e.g. 2008) in this research, Young (2011) was critical of Lambert's early articulations of geocapability (see his critique in section 2.4.5), arguing "as a curriculum principle it is too general to underpin the crucial role of schools in transmitting the 'powerful knowledge' on which a student's future 'capability' will depend" (p182). Although it was not the intention of this thesis to directly address or rebuke his critique, it has provided an opportunity to open a discussion about the perceived mismatch between the central concepts of social realism (see section 2.2.3) and the capability approach (see section 2.4). These concepts are both central to this thesis, and it is the difficulty in reconciling these different approaches which may be behind Young's (2011) views.

The notions of social realism from Young (2008) and geocapability (e.g. Lambert and Morgan 2010) have similar ideals. Both are attempts to ensure knowledge is a central consideration of educational discussions. The type of knowledge to which they both aspire is also similar, created by epistemic communities of disciplinary experts which makes it 'better' knowledge. Both approaches are therefore also clear in the role of subject disciplines; better knowledge is created and maintained within subject groupings. Both concepts also have people at the centre of the approaches. In social realism, these people are the knowledge creating subject experts, and their knowledge is thus socially constructed. The capability approach is a concept for teachers working in schools which emphasises their role as subject experts. Thus both approaches apply to educated people who have a relationship to a wider set of disciplinary norms.

Yet social realism and the capability approach are fundamentally different concepts. Neither social realism nor the capability approach were initially

designed to be applied directly to a school curriculum. Writers have used the concepts and ideas and applied them to discussions in schools. Social realism traces its roots to the sociology of education whereas the capability approach stems from welfare economics, and the discourse on human rights. Thus the capability approach has been applied to issues of education rather than emerging naturally from it. The principle difference between the two concepts goes back to the nature of knowledge. Social realism provides a set of principles under which knowledge can be created. When translated into the school curriculum, this becomes 'powerful knowledge', and this approach therefore focusses on the inputs to a curriculum. Social realism is not concerned with educational outcomes or overarching curricular aims; it is simply about the quality of the knowledge that is the basis for a curriculum. In many ways social realism thus has a narrow focus on a key area of curriculum discourse. The capability approach, conversely, is a much larger scale framework that encompasses curricular aims as well as outcomes. It is concerned as much with *what* is being learnt (the only consideration of powerful knowledge) as to *why* this is being learnt. Capability focusses much more on the outcomes of a curriculum.

The difference between the focussed nature of social realist knowledge as a basis for the curriculum, and the broader framework of the capability approach may help explain Young's (2011) critique of capability being 'too general'. Yet part of Young's critique also stems from a lack of understanding of the principles. He was responding to Lambert (2011b) in which the ideas of the capability approach to education, and geocapability specifically were in their infancy and perhaps at that stage were 'too general'. No empirical basis had been provided at this point, and the international projects were only starting.

Thus Young was responding to a concept that was under developed in the academic literature.

Since his 2011 challenge, Young has remained interested in the notion of the capability approach to education. In a more recent email exchange with David Lambert, he admits a lack of understanding of the initial concept. When referring to the work of Nussbaum (2000, see section 2.4.2) with regards to the initial capability approach he admits,

“... It (the capability approach) has two distinct features which I did not realise- it is a moral/political theory and a normative not an explanatory theory- it tells people what they ought to do... It prescribes, based on principles, but does not set out to explain the why or the how; this makes it very different from sociology and not directly comparable.

And this helps me because at least I (now) know what she is trying to do” (Michael Young, 18th April 2015, personal communication¹¹).

The notion of capabilities being a normative theory is the idea that it sets out a set of principles that should be ‘normal’ practice. For knowledge based capability, these principles are based on powerful knowledge being the basis of a subject based curriculum, and therefore foregrounds the important role of teachers in creating and ‘making’ the curriculum.

This thesis can argue that geocapability is not too general a theory at all; it articulates a means by which powerful knowledge can be embedded in a curriculum by ensuring a subject based, knowledge led curriculum. The capability approach relies on teachers making decisions about what, why and

¹¹ Email communication made available by kind permission.

how to teach with a shared understanding of the importance of subject powerful knowledge and pupil outcomes.

It is hoped that by basing discussion on an empirical set of data, and developing a robust discussion about the nature and possibilities of the capability approach, and how it is different to social realism, that some of the concerns of Young (2011) have been addressed. The next discussion in this section refers to the extent to which the capability approach can provide a rationale for geography on the school curriculum.

5.3.3 The rationale for geography as a school subject and the role of the capability approach

Another discussion to emerge from this thesis refers to the extent to which geocapability provides a rationale for the study of geography in schools. Within the curriculum framework that the capability approach offers, subjects play a central role. If the discussions of pedagogy in subjects is about 'how' to teach that subject, then powerful knowledge articulates 'what' to teach; capability captures 'why' teach it, questioning how the powerful knowledge of that subject will benefit the educated person. For geography, the thinking offered by geocapability identifies the unique knowledge contribution that the study of geography provides young people (expressed as the powerful knowledge of geography). This idea is particularly significant as it suggests that without studying geography, young people will be impoverished in their education; their knowledge based capability will be less developed. This will have an impact on the choices available to that educated person about how to live a free and fulfilling life. Geocapability provides a means to discuss the purpose of geography in a school curriculum. This can provide a direct argument to some

of the leaders of the schools identified in chapter 1 in which geography is no longer on the curriculum, or where it has been combined with humanities. The children in these schools may well experience capability deprivation. They cannot access powerful geographical knowledge, and as such cannot think in disciplined ways about the challenges facing them or the world as they grow and develop. Thus the capability approach to curriculum thinking expresses the need for specialist subjects, such as geography, at the heart of a school curriculum. If this is to be achieved, subject specialist teachers need to be in front of every class. The next section discusses this contention.

5.3.4 Teachers as ‘curriculum leaders’

The final discussion to emerge from the thesis is the significance of the role of well trained, highly qualified teachers in schools and the responsibility that comes with this. The capability approach to curriculum thinking can provide a means for teachers to enact an F3 curriculum. The literature identified the idea of a knowledge heavy F1 curriculum, and an alternative skills based F2 curriculum. These visions of the school curriculum were also identified by those interviewed in the data (contention 1). With the ‘knowledge turn’ in education and the 2016 examination changes, identified in chapter 1 (see section 1.2), there was a danger teachers would rush back to F1, aiming to satisfy the criteria for supposedly more rigorous examinations. This would be done not because teachers would want to teach the ‘tick box’ inert knowledge that characterises F1, but because there would be a pressure to achieve a set of narrowly defined outputs on which a school’s success would be based. An F3 curriculum can provide an alternative curriculum vision. An F3 curriculum gives teachers more

control over their practice. It enables teachers to ensure rigorous knowledge is taught, and examinations prepared for thoroughly, but places this perceived need within a broader context of importance. It provides a means to consider the reasons why subjects are taught. F3 enables teacher agency, giving teachers a responsibility to create and enact a curriculum. It is this teacher responsibility that empowers the idea of an F3 curriculum with its real significance. It is for this reason teachers are considered to be the 'curriculum leaders'; taking the responsibility for *what* is being taught as much as *how*. The notion of curriculum leadership was an important idea in the GeoCapabilities projects and the phrase 'teachers as curriculum leaders' was even used as the sub title for the second project (see section 1.7.1). Teachers are leaders of their classrooms, leaders of their subjects, and leaders of curriculum thinking to develop capability.

This places much responsibility on teachers and calls for the need to ensure all teachers are subject specialists, and that all teachers are trained thoroughly in their subject, subject pedagogy and broader educational discourse. Teachers need to be highly educated, and rigorously trained in order for them all to rise to the significant challenge of curriculum leadership.

In this section some discussions around the significance of the capability approach to education and an F3 curriculum have been opened up, moving ideas beyond the conclusions of this research. In the next section ways in which the ideas in this thesis can continue to be researched are discussed.

5.4 TAKING THE RESEARCH FURTHER

In this section future areas of research to develop these ideas further are discussed. First the discussion is widening the empirical basis of the study before continuing geocapability research internationally, and educational capability research across subject disciplines.

The first way to take the research further is to broaden the empirical basis of the study. It was clear in chapter 3 that I was a lone researcher researching in two schools. Repeating the research by adding voices from truly comprehensive schools, with different approaches to curriculum organisation and a wider ability range of pupils would provide evidence to further the concept of capability. The main and supporting case study schools in this research were both highly academic in their own ways and so the response of the teachers was always likely to be supportive of a subject based curriculum. How comparable the idea of knowledge based capability is to all teachers in all schools is something further to study; this research has shown that the capability approach can be a useful concept for teachers, but this is an area in need of further study.

Another way to broaden the empirical basis is to change the focus; the focus of this research was on teachers' work, and how teachers conceptualised the curriculum for pupil benefit. So follow on research could focus on the pupils themselves, how they respond to and work with notions of powerful knowledge and capability. The use of the 'capability Framework' developed in this research, to map out aspects of powerful knowledge within topics that the pupils learn, could be a means to investigate pupil perceptions of knowledge. Pupils could be asked to complete a version of the capability Framework for the topics

they study in their geography lessons so they can identify the geographical knowledge they have learnt.

The second way to build on this research is through the context of geography education internationally. This research was based in two schools but the terms of reference throughout are in an English context (such as the National Curriculum, GCSE exams, etc). The GeoCapabilities projects (see section 1.7) have identified that the capability approach to geography education has a resonance with other geography educationalists in other national settings (e.g. Solem et al 2013) so one clear further area of study is to develop this idea. The capability approach, and the notion of powerful geographical knowledge enables geography teachers to see the importance and value of learning geography and this notion can be translated internationally. This work has already begun through the projects, including engaging with nations in which geography is not a subject on the school curriculum. The potential importance of geocapability to provide a rationale and thus an argument for its curriculum inclusion could be significant, but further work is needed.

Finally, this research can be extended across subject disciplines. I am a geographer and this research is based in the subject of geography. If the capability approach to education is to be developed and explored as a rigorous curriculum framework, then further research needs to take place to see if other subject specialists can see a value in its principles. For example the value of powerful knowledge and knowledge based capability for other subjects could be explored, and of particular interest would be for subjects which already have a strong curricular 'frame' and vertical knowledge structures such as maths and physics (see section 2.2.2 for a discussion on this). In this section there have been a number of areas of further study identified to expand understanding of

the capability approach, geocapability and an F3 curriculum. Some of this work has already begun, based on the influential work of the GeoCapabilities 2 project (see section 1.7.1). In the final section, this thesis is drawn to a close by offering some concluding thoughts.

5.5 CONCLUSIONS

In this final section this chapter is concluded by reviewing the discussions before offering some final thoughts on the whole thesis. This research gives an empirical basis to what had previously been a conceptual discussion about geocapability. This research marks the first piece of empirical research into geocapability specifically, and adds to the literature into the capability approach to education. As Hinchcliffe and Terzi (2009) stated “the time for capabilities for educational researchers, writers and thinkers seems to have finally arrived” (p 387, also see section 2.4.2), and this research contributes to this literature; but ‘teachers’ can be added to their list of audiences. This research directly addresses the needs and professional work of teachers, and it is this which also gives it distinction.

In Chapter 1 I offered a bleak interpretation of the educational landscape in the 2010s and since beginning this research there has again been curriculum change (see chapter 1). What the capability approach is able to offer teachers is a set of principles and thoughts about education that are immune to seemingly regular curriculum changes. The National Curriculum and awarding authority criteria will change, but teachers as the ‘curriculum leaders’ can use the capability approach to curriculum thinking to remain focussed on the big ideas in their profession; why they teach and why their subject matters. Despite

differences in what teachers perceive the aims of education to be, the ability to influence the lives of the next generation in a positive way is at the core of teachers' values. The capability approach can express this, and empower teachers to make a real difference to the lives of the young people in their classrooms.

REFERENCES:

- Abercrombie N, Hill S, Turner B. (1984) *Dictionary of Sociology*. Penguin Harmondsworth.
- Alkire, S. and Black, R. (1997). 'A Practical Reasoning Theory of Development Ethics: Furthering the Capabilities Approach' *Journal of International Development*, 9 (2), 263- 79.
- Alkire, S. (2002). *Valuing Freedoms: Sen's Capability Approach and Poverty Reduction*, University Press, Oxford.
- Applem, I. (1971). 'The hidden curriculum and the nature of conflict', *Interchange*, 2, 27-40.
- Balchin W and Colman (1971) Graphicacy; the fourth ace in the pack, *Geography*, Vol. 57 (3) p. 185-195.
- Bates, R. (2004). *Developing Capabilities and the management of trust: Where administration went wrong*. Paper presented to the Australian Association for research in Education annual conference, Melbourne, December 2004.
- Biesta, G.J.J. (2010). *Good education in an age of measurement: ethics – politics – democracy*. Paradigm, Boulder, Colorado.
- Biesta G.J.J (2012) 'Giving Teaching back to Education: Responding to the Disappearance of the Teacher', *Phenomenology and Practice*, 6 (2), 35-49.
- Beck, J. and Earl, M. (ed) (2003). *Key Issues in secondary education*. Continuum, London.
- Bernstein, B (1971) 'On the classification and framing of educational knowledge'. In Young M (ed) *Knowledge and Control: New directions for the sociology of education*. London: MacMillan.
- Bernstein, B. (1973) *Class, codes and control, vol. 1*. Routledge. London.
- Bernstein, B. (2000) *Pedagogy, symbolic control and Identity: Theory, Research and Critique (revised edition)* London: Taylor and Francis.
- Boardman, D. and McPartland, M. (1993a) 'Building on the foundations: 1893-1943'. *Teaching Geography*, 18 (1), 3-6
- Boardman, D. and McPartland, M. (1993b) 'From Regions to Models: 1944 to 1969'. *Teaching Geography*, 18 (2) 65- 68.

- Boardman, D. and McPartland, M. (1993c) 'Innovation and Change: 1970-1982'. *Teaching Geography*, 18 (3) 117- 120.
- Boardman, D. and McPartland, M. (1993d) 'Towards Centralisation'. *Teaching Geography*, 18 (4) 159- 163.
- Bobbit, J. (1918) *The Curriculum*. Houghton Mifflin, Boston.
- Bonnett, A. (2008) *What is geography?* Sage, London.
- Boulding E (1985) in Engelson D (ed) *A Guide to Curriculum Planning in Environmental Education* Department of Instruction: Wisconsin.
- Bozalek, V. (2004). *Recognition, Resources and Responsibilities: Using Students' Stories of Family to Renew the South African Social Work Curriculum*. Unpublished Doctoral thesis, Utrecht University.
- Boyes K. and Watts G. (2009) *Developing Habits of Mind in Secondary Schools*. Hawker Brownlow, Australia.
- British Educational Research Association BERA, (2011). *Ethical Guidelines for Educational Research*. Available online: <https://www.bera.ac.uk/researchers-resources/publications/ethical-guidelines-for-educational-research-2011>
Accessed 01/2013.
- Brooks, C. (2006) 'Geography Teachers and Making the School Geography Curriculum', *Geography*, 91 (1), 75-83.
- Bustin, R. (2011a). 'The living city: Thirdspace and the contemporary geography curriculum', *Geography*, 96 (2) 61-2.
- Bustin R (2011b) 'Thirdspace: exploring the 'lived space' of cultural 'others'', *Teaching Geography* (2), p55-57.
- Bustin, R. (2015a) *What's the Use: How can Earth meet its resource need?* *Geography Key Stage 3 Teacher Toolkit*. Geographical Association, Sheffield.
- Bustin, R. (2015b) 'Preparing to teach Natural Resources'. *Teaching Geography*, 40 (1), 6-7.
- Butt, G. (2008). 'Is the future secure for geography education', *Geography* 93 (3), 158- 165.
- Butt, G. (2011). *Geography, Education and the future*. Continuum. London.

Carr, W. (2004). 'Philosophy and Education', *Journal of Philosophy of Education*, 38, (1), 55- 73.

Chessington Community College (2014) *Prospectus 2013-2014*. Available online: <http://www.chessingtoncommunitycollege.co.uk/> Accessed 07/ 2014.

Chien, R. and Wallace, J. (2004). *The Use of Bernstein's Framework in Mapping School Culture and the Resultant Development of the Curriculum*. Paper presented at the AARE Conference 2004. Available online: <http://www.aare.edu.au/04pap/chi04732.pdf>. Accessed 03/12.

City of London Freemen's School website (2015) www.clfs.surrey.sch.uk Accessed 01/2015

CIVITAS (2007). *Corruption of the Curriculum - Press Release 11 June*. Available from http://www.civitas.org.uk/blog/2007/06/corruption_of_the_curriculum_p.html Accessed 12/08.

Clandinin, DJ. (Ed.) (2006). *Handbook of narrative inquiry: Mapping a methodology*. Sage: California.

Clandinin, D.J. and Connelly, F.M. (2000). *Narrative inquiry: Experience and story in qualitative research*. Jossey-Bass, San Francisco.

Clandinin, D.J., and Huber J. (2010). Narrative inquiry. In B. McGaw, E. Baker, & P. P. Peterson (Eds.), *International Encyclopaedia of Education* (3rd ed.) Elsevier, New York.

Clandinin D.J., Pushor D. and Orr A.M. (2007) Navigating Sites for Narrative Inquiry, *Journal of Teacher Education*, 58 (1) p. 21-35.

Clark, D. (2005). *The Capability Approach: Its Development, Critiques and Recent Advances*. A working paper of The Global Poverty Research Group. Available online: <http://www.gprg.org/pubs/workingpapers/pdfs/gprg-wps-032.pdf> . Accessed 11/10

Clark, D. (2003). Concepts and Perceptions of Human Well-Being: Some Evidence from South Africa. *Oxford Development Studies*, 31 (2) 173- 196.

Clark, D. and Qizilbash M. (2002). *Core Poverty and Extreme Vulnerability in South Africa.*, Discussion Paper No. 2002-3. Available at:

http://www.geocities.com/poverty_in_southafrica. Accessed 07/2011.

Connelly, FM. and Clandinin, DJ. (1990). Stories of experience and narrative inquiry. *Educational Researcher*, 19 (5) p. 2-14.

Cohen, C., Manion, L. and Morrison, K. (2007). *Research Methods in Education, sixth edition*. Routledge, London.

Cook-Sather, A. (2006) 'Sound, Presence, and Power: 'Student Voice' in Educational Research and Reform'. *Curriculum Inquiry*, 36, 359-390.

Cook-Sather, A. (2003). 'Movements of mind: The matrix, metaphors, and re-imagining education'. *Teachers College Record*, 105 (6), 946-977.

Dalelo, A. (2011). 'Global climate change in geography curricula for Ethiopian secondary and preparatory schools', *International Research in Geographical and Environmental Education*, 20 (3), 227-246.

Daniels, H. R. J. (1987). *An enquiry into different forms of special school organization, pedagogic practice and pupil discrimination*. Unpublished doctoral dissertation, University of London, London.

Dawson, G. (1981). Objectivism and the Social Construction of Knowledge, *Philosophy*, 56 (217), 414- 423.

Davitt, T. E. (1968). *The Basic Values in Law: A Study of the Ethico-Legal Implications of Psychology and Anthropology*. American Philosophical Society, Philadelphia.

Department for Education (DFE), (2013). *The Geography National Curriculum*. Available online: <https://www.gov.uk/government/publications/national-curriculum-in-england-geography-programmes-of-study> Accessed 12/2013.

Department for Education (DFE), (2016). *The English Baccalaureate*. Available online: <https://www.gov.uk/government/publications/english-baccalaureate-ebacc> Accessed 01/2016.

Deprez, L. and Butler, S. (2001). *The Capabilities Approach and economic security for low income women in the US: Securing access to higher education under welfare reform*. Paper presented at the first international conference on the capabilities approach: Justice and poverty, Examining Sen's capability approach, St Edmunds College, Cambridge, September 2001.

- Donnelly, C. (2000). In pursuit of school ethos. *British Journal of Educational Studies* 48 (2), 134- 154.
- Douglas, J. (1976) *Investigative social research*, London, Sage
- Dreeben, R. (1968). *On What is Learned in School*. Addison-Wesley. Reading, Massachusetts.
- Durkheim, E. (1956) *Education and Sociology*. Macmillan, London.
- Eden S (2005) Commentary: Green, gold and grey geography: legitimating academic and policy expertise. *Transactions of the Institute of British Geographers* 30 pp 282–286.
- Etherington, K. (2015). *Narrative approaches to case studies*. Available online: <http://www.keele.ac.uk/media/keeleuniversity/facnatsci/schpsych/documents/coinselling/conference/5thannual/NarrativeApproachestoCaseStudies.pdf>. Accessed 01/2015.
- Evered, R. and Reis Louis, M. (2001). 'Alternative Perspectives in the Organizational Sciences: 'Inquiry from the Inside' And 'Inquiry from the Outside'' in *Academy of Management Review*, 6, (3), 385-395.
- Eysenck, H. J. (1976) 'Introduction', in Eysenck (ed.), *Case Studies in Behaviour Therapy*. Routledge London.
- Fanghanel J (2009) *Pedagogical Constructs: Socio-cultural conceptions of teaching and learning in higher education*. VDM Verlag
- Finnis, J. (1980). *Natural Law and Natural Rights*. University Press, Oxford.
- Firth R (2011) Making geography visible as an object of study in the secondary school curriculum, *Curriculum Journal*, 22 (3), p289-316.
- Flores- Crespo, P. (2001). *Sen's human capabilities approach and higher education in Mexico. The case of the Technological University of Tula*. Paper presented at the first international conference on the capabilities approach: Justice and poverty, Examining Sen's capability approach, St Edmunds College, Cambridge, September 2001.
- Flyvbjerg B (2006) Five Misunderstandings about Case-Study Research, *Qualitative Inquiry*, 12, (2) p. 219-245.

- Fraziern, A. & Sadkerm, Y. (1975). *Sexism in School and Society*. Harper & Row, New York.
- Furedi, F. (2004). *Therapy Culture: Cultivating Vulnerability in an uncertain age*. Routledge London.
- Furedi, F. (2007). 'Introduction: Politics, Politics, Politics' In Whelan (ed) *The Corruption of the Curriculum*. CIVITAS.
- Furlong J and Lawn L (eds) (2011) *Disciplines of Education: Their role in the future of Educational Research*. Routledge.
- Gaspar, D. (2004). *The Ethics of Development*, University Press, Edinburgh.
- Gatlung, J. (1980). 'The Basic Needs Approach'. In Ledrerer, K (ed) *Human Needs*. Gunn & Hain. Cambridge MA, Oelgeschlager.
- Geographical Association (2009). *A different view, a manifesto from the Geographical Association*. Sheffield: Geographical Association.
- Geographical Association (2011). *The Geography National Curriculum: GA Curriculum Proposals and Rationale*. Available online: www.geography.org.uk/.../GA_GIGCCCurriculumProposals.pdf Accessed 02/07/ 2013.
- Gibson, W. (2013). *Qualitative Data Analysis: Thematic analysis*. Course notes from Doctoral Studies Methodology Course, UCL Institute of Education.
- Giddens, A. (1984). *The Constitution of Society: Outline of the Theory of Structuration*. Polity Press, Oxford.
- Gordon, D. (1982). The Concept of the Hidden Curriculum, *Journal of Philosophy of Education*, 16 (2), 187-198.
- Goudie, A. (1993). 'Schools and Universities– the Great Divide', *Geography*, 78 (4), 338–9.
- Graves, N. (1975) *Curriculum planning in Geography*. Heniemann. London.
- Green, T. (1980). *Predicting the Behaviour of the Educational System*, Syracuse University Press.
- Griffin, J. (1986). *Well-Being: Its Meaning, Measurement, and Moral Importance*. Clarendon Press, Oxford.
- Gutmann, A. and Thompson, D. (1996) *Democracy and Disagreement*. Cambridge University Press.

- Haydon, G. (2000). 'John Wilson and the Place of Morality in Education', *Journal of Moral Education*, 29 (3), 355- 365.
- Harri-Augstein, S. & Thomas, L.F. (1991). *Learning conversations: the self-organised learning way to personal and organisational growth*. Routledge, London.
- Harrison, J. L.(1977). 'Review Article: John Wilson as moral educator', *Journal of Moral Education*, 7 (1), 50- 63.
- HMI Inspectorate. (1978). *Curriculum 11-16: geography. A working paper by the Geography Committee of HM Inspectorate*. Department of Education and Science, London.
- Hinchliffe, G. (2006). *Beyond Key Skills: Exploring Capabilities*. Presentation given on 16 Jun 2006 to Networking Day for Humanities Careers Advisers in London. Available online:
[http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cts=1330791142639&ved=0CCYQFjAA&url=http%3A%2F%2Fwww.english.heacademy.ac.uk%2Fadmin%2Fevents%2FfileUploads%2FBeyond%2520Key%2520Skills%2520-%2520Exploring%2520Capabilities%2520\(HUM\).ppt&ei=2UJST5mPMdTY8QP O-b3yBQ&usq=AFQjCNFb2r8hw4htPWDWiZEADCclXF3yJA_](http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cts=1330791142639&ved=0CCYQFjAA&url=http%3A%2F%2Fwww.english.heacademy.ac.uk%2Fadmin%2Fevents%2FfileUploads%2FBeyond%2520Key%2520Skills%2520-%2520Exploring%2520Capabilities%2520(HUM).ppt&ei=2UJST5mPMdTY8QP O-b3yBQ&usq=AFQjCNFb2r8hw4htPWDWiZEADCclXF3yJA_) Accessed 09.10
- Hinchliffe, G. (2009). Capability and Deliberation *Studies in Philosophy and Education*, 28, 403– 413.
- Hinchliffe, G. and Terzi, L. (2009). 'Introduction to the special issue 'Capabilities and Education'', *Studies in Philosophy and Education* 28, 387-390.
- Hirsch, E.D. (1988). *Cultural Literacy: What Every American needs to know*. Random House, New York.
- Holt, J. (2015). 'Campaign for Learning' website. Available online:
<http://www.campaign-for-learning.org.uk/cfl/LearningInSchools/L2L/index.asp>
 Accessed 03/15
- Hulme M (2008) Geographical work at the boundaries of climate change. *Transactions of the Institute of British Geographers*, 33 p5–11.

Iacono, J. Brown, A. and Holtham, C. (2009). 'Research Methods – a Case Example of Participant Observation', *The Electronic Journal of Business Research Methods*, 7 (1), 39 – 46.

Iceland, J. (2004). *Income Poverty and Capability Deprivation: How Strong Is the Association? US Census Bureau*. Available online:
<http://cfs.unipv.it/ca2004/papers/iceland.pdf> .Accessed 12/10.

Illich, V. (1971) 'The breakdown of schools: a problem or a symptom?', *Interchange*, 2, 1-10.

Jackson, P. (2006) Thinking geographically, *Geography*, 91, (3) 199- 204

Jaros M and Deakin-Crick R (2007) 'Personalised Learning for the post-mechanical age'. *Journal of Curriculum Studies*, 39 (4), 423- 440.

JCQ, Joint Council for Qualifications. *Examination results* website:
<http://www.jcq.org.uk/examination-results/A Levels/2015> Accessed 01/2016.

Jenkins, J. (2004). *Their moment to shine: Reflections on the History of the City of London Freemen's School 1854- 2004*, City of London Freemen's School, Ashtead.

John, P. and Osborn, A. (1992). 'The influence of school Ethos on Pupils' Citizenship Attitudes'. *Journal of Educational Review*, 44 (2), 153-165.

Johnston, R. J. (1997) Australian geography seen through a glass darkly. *Australian Geographer* (28), p. 29–37.

Krippendorff, K. (1989) Content analysis, In Barnouw E, Gerbner G, Schramm W, Worth TL and Gross L (Eds.), *International Encyclopedia of Communication*. Oxford University Press.

Krippendorff, K. (2004). *Content analysis: An introduction to its methodology* second edition. Sage, New York.

Kvale, S. (1996). *Interviews*. Sage, London.

Lambert, D. (2004). 'The power of geography', available online:
<http://www.geography.org.uk/download/NPOGPower.doc>. Accessed 02/2006.

- Lambert, D. (2005). '*Why Subjects Matter*'. Nuffield Review of 14-19 Education and Training: Aims, Learning and Curriculum Series Discussion paper 2. Presented 18th February 2005.
- Lambert, D. (2008). 'Why are school subjects important?', *Forum*, 50 (2), 207-14.
- Lambert, D. (2009) *Geography in education: Lost in the post?* An inaugural professorial lecture. Institute of Education press, London.
- Lambert, D. (2011a) 'Reviewing the case for geography, and the knowledge turn in the National Curriculum', *The Curriculum Journal*, 22 (2), 243-264.
- Lambert, D. (2011b). 'Reframing school geography: a capability approach'. In Butt (ed) *Geography, Education and the Future*. Continuum, London.
- Lambert, D. (2016). 'Geography', in Wyse, D., Hayward, L. and Pandya, J. (eds) *The Sage Handbook of Curriculum, Pedagogy and Assessment*, Sage Publications, London.
- Lambert, D. (2017) '*GeoCapabilities*'. Presentation given at the Geography Teacher Educators Conference, University of Plymouth, 27- 29 January 2017.
- Lambert, D. and Morgan, J. (2009). 'Corrupting the Curriculum? The case of geography'. *London Review of Education*, 7 (2), 147- 157.
- Lambert, D. and Morgan, J. (2010) *Teaching Geography 11-18 a conceptual approach*. OUP, Maidenhead.
- Lambert, D. Solem, M. and Tani, S. (2015). 'Achieving Human Potential through Geography Education: A Capabilities Approach to Curriculum Making in Schools'. *Annals of the Association of American Geographers*, 105 (4), 723-735.
- Lasswell, H. D. and Holmberg, A. R. (1969). 'Toward a General Theory of Directed Value Accumulation and Institutional Development.' in Braibanti, R., *Political and Administrative Development*. Duke University Press, Durham, N.C.
- Lamsal, M. (2012). The Structuration Approach of Anthony Giddens. *Himalayan Journal of Sociology and Anthropology*, (5) 111-122.
- Ledda, M. (2007). 'English as Dialect'. In Whelan (ed) *The Corruption of the curriculum*, CIVITAS, London.

- Lim K (2005): Augmenting Spatial Intelligence in the Geography Classroom, *International Research in Geographical and Environmental Education*, 14 (3), p187-199.
- Limerick, B., Burgess-Limerick, T. & Grace, M. (1996). 'The politics of interviewing: power relations and accepting the gift', *International Journal of Qualitative Studies in Education*, 9 (4), 449-460.
- Livingstone, D. (1992). *The Geographical Tradition: Episodes in the History of a Contested Enterprise*. Wiley-Blackwell, London.
- London Academy of Excellence website (2015). Available online: <http://excellencelondon.ac.uk/> Accessed 01/2015.
- Lovat, T. (1988). 'Curriculum Theory: the oft-missing link', *Journal of Education for Teaching*, 14 (3), 205-213.
- Macdonald, A. and Jónsdóttir, S. (2008). *Regulation and innovation: stimulating students' creativity and thinking through innovation education in Ingunnarskóli A* conference paper given at the Nordic Symposium on Teacher Education held in the Iceland University of Education in Reykjavík. Available online: skemman.is/stream/get/1946/7766/.../C7_Jonsdottir_Macdonald.pdf. Accessed 03.12
- Marsden, W. (1989). 'All in a good cause: geography, history, and the politicization of the curriculum in nineteenth and twentieth century England'. *Journal of curriculum studies*, 21, 509- 526.
- Marsden, W. (1997). 'On taking the Geography out of Geographical Education', *Geography* 82 (3) 241- 252.
- Massey, D. (1999) 'Negotiating disciplinary boundaries', *Current Sociology*, 47, 416- 432.
- Maton K (2010) 'Canons and Progress in the Arts and Humanities: Knowers and Gaze', in Maton K and Moore R (ed) *Social Realism, Knowledge and the Sociology of Education: Coalitions of the Mind*. Continuum. London.
- Maude, A. (2016) 'What might powerful geographical knowledge look like?', *Geography*, 101 (1), 70- 76.
- McCallum, B., Hargreaves, E., & Gipps, C. (2000). 'Learning: The pupil's voice'. *Cambridge Journal of Education*, 30 (2), 275-289.

- McLaughlin, T. (2003). 'Values in Education'. In Beck, J. and Earl, M. (ed) *Key Issues in secondary education*. Continuum, London.
- Moen, T. (2006). 'Reflections on the narrative research approach', *International journal of qualitative methodology*, 56- 69.
- Moore, R. and Muller, J. (1999). 'The discourse of 'voice' and the problem of knowledge and identity in the sociology of education'. *British Journal of Sociology of Education*, 20, 189- 206.
- Morgan, J. (2008). 'Curriculum Development in new times', *Geography*, 93(1), 17- 24.
- Morgan, J. (2014) 'Michael Young and the Politics of the School Curriculum', *British Journal of Educational Studies*, 1-18.
- Morgan, J. and Lambert, D. (2005). *Geography: Teaching School Subjects 11-19*. Routledge, London.
- Nussbaum, M. (1988). Nature, Function and Capability: Aristotle on Political Distribution. *Oxford Studies in Ancient Philosophy*, Supplementary Volume, 145- 84.
- Nussbaum, M. (1990). 'Aristotelian Social Democracy', in Douglas, B., Mara, G. and Richardson, H. (eds), *Liberalism and the Good*. Routledge, New York.
- Nussbaum, M. (1995). 'Human Capabilities, Female Human Beings' in Nussbaum, M. and Glover, J. (eds.) *Women, Culture and Development: A Study of Human Capabilities*. Clarendon Press, Oxford.
- Nussbaum, M. (2000). *Women and Human Development: The Capabilities Approach*. Cambridge University Press, Cambridge.
- Nussbaum, M. (2003). 'Capabilities as Fundamental Entitlements: Sen and Social Justice', *Feminist Economics*, 9 (2-3), 33-59.
- Ofsted (2008) *Geography in schools- changing practice*. Available at: www.ofsted.gov.uk. Accessed 1.09
- Oakes, S. (2004) *World Wide Web, Geography in the News*. Royal Geographical Society. Available at http://www.rgs.org/NR/rdonlyres/B1842B47-38FD-45EB-896D-2CB407782232/0/SMA_GP_WorldWideWeb.pdf Accessed 11/13
- Ofsted (2011a) *Geography: Learning to make a world of difference*. Available

at: www.ofsted.gov.uk. Accessed 12.11

Ofsted (2011b) *Inspection report: RSA Academy*. Available online: Ofsted.org. Accessed 12/2014.

Ofsted (2014) *Inspection report: RSA Academy*. Available online: Ofsted.org. Accessed 3/2015.

Osborn, M., Croll, P., Broadfoot, A., Pollard, E., McNess E, and Triggs, P. (1997). 'Policy into practice and practice into policy: Creative mediation in the primary classroom'. In Helsby G, and McCulloch G. *Teachers and the national curriculum*. Cassell: London.

Page, E. (2004). *Teacher and pupil development and capabilities. Work in progress*, presented at the Capability and Education network seminar, St Edmunds College, Cambridge, 1 June 2004.

Pidwirny, M. (2006). 'Elements of Geography'. *Fundamentals of Physical Geography, 2nd Edition*. Available at: <http://www.physicalgeography.net/fundamentals/1b.html> Accessed 05/11.

Priestley, M. (2011) 'Whatever happened to curriculum theory? Critical realism and curriculum change', *Pedagogy, Culture & Society*, 19 (2), 221-237.

Pring, R. (2005). 'The strengths and limitations of 'subjects''. *Nuffield Review of 14-19 Education and Training, Aims, Learning and Curriculum Series*, Discussion Paper 1.

Poland, B. (1995). 'Transcription quality as an aspect of rigor in qualitative research'. *Qualitative Inquiry*, 1(3), 290–310.

Qualifications and Curriculum Authority (QCA). (1998) *Education for citizenship and the teaching of democracy in schools*. QCA, London.

Qualifications and Curriculum Authority (QCA). (2008). *The big picture of the curriculum*. Available online: http://curriculum.qcda.gov.uk/key-stages-3-and-4/organising-your-curriculum/principles_of_curriculum_design/index.aspx?return=/News-and-updates-listing/News/Teaching-of-new-secondary-curriculum-begins.aspx. Accessed: 11/2008.

- Qizilbash, M. (1996). 'Ethical Development', *World Development*, 24 (7), 209-1221.
- Rawling, E. (2000). 'Ideology, politics and curriculum change: reflections on school geography 2000', *Geography*, 85 (3), 209–220.
- Raynor, J. (2004). *Girls' development and capabilities in Bangladesh*. Work in progress, presented at the Capability and Education network seminar, St Edmunds College, Cambridge, 1 June 2004.
- Reiss, M. and J. White. (2013). *An aims based curriculum*. London: IOE Press.
- Roberts, M. (2010). 'Where's the geography? Reflections on being an external examiner'. *Teaching Geography*, 35 (3), 112-113.
- Roberts, M. (2014). 'Powerful Knowledge and Geographical Education'. *The Curriculum Journal*, 25 (2) 187-209.
- Robeyns, I. (2003). *The Capability approach: An Interdisciplinary Introduction*. Available online:
<http://www.capabilityapproach.com/pubs/323CAtraining20031209.pdf> Accessed 03/2011.
- Robotham, D. (2004). 'Using interviews in researching student learning: a true and valid account?' *Teaching in Higher Education*, 9 (2), 225-233.
- Royal Geographical Society website
<http://www.rgs.org/GeographyToday/What+is+geography.htm> accessed 12.16
- Saito, M. (2003). Amartya Sen's capability approach to education: A critical exploration. *Journal of Philosophy of Education* 37, 17–34.
- Schiro, M. (2007). *Curriculum Theory: Conflicting Visions and Enduring Concerns*. Sage Publications, Thousand Oaks, CA.
- Scott, D. (2008). *Critical Essays on Major Curriculum Theorists. Second edition*. Routledge: Abingdon.
- Scott, D., & Usher. R. (1999). *Researching education – data, methods and theory in educational enquiry*. Cassell, London.
- Seidman I (2006). *Interviewing as Qualitative Research: A guide for researchers in Education and the Social Sciences, Third Edition*. Teachers College Press, New York.

- Sen, A. (1980) *Equality of what? The Tanner Lecture on human values* delivered at Stanford University May 22, 1979. Available: <http://tannerlectures.utah.edu/documents/a-to-z/s/sen80.pdf> Accessed 11/15.
- Sen, A. (1985a) 'Well-being, agency and freedom'. *The Journal of Philosophy* 82 (4), 169-221.
- Sen, A. (1985b). *Commodities and Capabilities*. Amsterdam: North Holland.
- Sen, A. (1987). 'The Standard of Living'. In Hawthorn G (ed) *The Standard of Living*, Cambridge: Cambridge University Press.
- Sen, A. (1999) *Development as Freedom*. University Press Oxford.
- Sen, A. (2004). 'Capabilities, Lists and Public Reason: Continuing the Conversation'. *Feminist Economics*, 10 (3), 77-80.
- Sharp, J. & Watts, M. (2004). *Go Tell It on The Mountain: The value of RE beyond school*, Paper presented at the British Educational Research Association Conference, University of Manchester, 2004.
- Silverman, A. (1970) *Crisis in the Classroom*. Random House, New York.
- Small, J. and Witherick, W. (1995). *A modern dictionary of geography. Third edition*. Arnold, London.
- Smith, D. and Ogden, P. (1977). 'Reformation and revolution in human geography', in Lee, R. (ed) *Change and Tradition: Geography's new frontiers*. London: Dept. of Geography, Queen Mary College, University of London.
- Solem, M., Lambert, D. and Tani, S. (2013) 'Geocapabilities: Toward An International Framework for Researching the Purposes and Values of Geography Education', *Review of International Geographical Education*, 3 (3) Available at <http://www.rigeo.org/vol3no3/RIGEO-V3-N3-1.pdf> Accessed 12/2013.
- Standish, A. (2007). 'Geography used to be about maps', In Whelan, R (ed) *The Corruption of the Curriculum*. London: CIVITAS.
- Standish, A. (2009). *Global perspectives in the Geography Curriculum: Reviewing the moral case for geography*. Routledge, London.
- Stenhouse, L. (1975) *An introduction to curriculum research and development*. Heineman, London.

- Stewart, F. (2001). Women and Human Development: The Capabilities Approach by Martha C. Nussbaum., *Journal of International Development*, 13 (8), 1191-2.
- Tapsfield, A. (2016) Teacher education and the supply of geography teachers in England, *Geography*, 101 (2), 105-109.
- Taylor, L. (2009). 'GTIP Think Piece: Concepts in Geography'. Available at: <http://www.geography.org.uk/gtip/thinkpieces/concepts/#5821>. Accessed 10/02/2010.
- Terzi, L. (2003). *A Capability Perspective on Impairment, Disability and Special Needs: Towards Social justice in Education*. Paper presented at the Third International Conference on the Capability approach, university of Pavia, September 2003.
- Terzi, L. (2004). *On Education as a Basic Capability*. Paper presented at the fourth International Conference on the Capability Approach. University of Pavia, September 2004.
- Terzi, L. (2005). *Equality, Capability and Justice in Education: Towards a Principled Framework for a Just Distribution of Educational Resources to Disabled Learners*. Paper prepared for the 5th International Conference on the Capability Approach: Knowledge and Public Action. Paris 11-14 September 2005. Available at: https://www.researchgate.net/profile/Lorella_Terzi/publication/253934371_Equality_Capability_and_Justice_in_Education_Towards_a_Principled_Framework_for_a_Just_Distribution_of_Educational_Resources_to_Disabled_Learners/links/0deec5304cc288b1cd000000.pdf Accessed 02/2011.
- Trigg, R. (1973). *Reason and Commitment*, University Press: Cambridge
- Trowler, P.R. (1998). *Academics responding to change: New higher education frameworks and academic cultures*. Buckingham: Society for Research in Higher Education and Open University Press.
- Tubb, C. (2003). 'Moral Education'. In Beck, J. and Earl, M. (eds) *Key Issues in secondary education*. Continuum.
- Tuckman, B. W. (1972). *Conducting Educational Research*. Harcourt Brace Jovanovich, New York.

- Turner, D. W. (2010). 'Qualitative Interview Design: A Practical Guide for Novice Investigators'. *The Qualitative Report*, 15(3), 754-760.
- Usher, R. and Edwards, R. (1994). *Post Modernism and Education*. Routledge, London.
- Unwin, T. (1992). *The Place of Geography*. Harlow: Longman Scientific and Technical.
- Walford G (2007) Classification and framing of interviews in ethnographic interviewing, *Ethnography and Education*, 2(2), p.145-157
- Walford, R. (2000). *Geography in British Schools 1850-2000*. Woburn, London.
- Walker, M. (2006). *Higher Education Pedagogies. The Society for research into Higher Education*. Open University Press, McGraw Hill, Maidenhead.
- Watts, M. and Bridges, D. (2003). *Accessing higher Education: what injustice does the current widening participation agenda seek to reform?* Paper presented to the Transforming Unjust structures, capabilities and justice, Von Hugel Institute, St Edmunds College, Cambridge, June 2003.
- Wheelahan, L. (2010). 'Competency-based training, powerful knowledge and the working class', in K. Maton and R. Moore (eds) *Social Realism: Knowledge and the Sociology of Education*, London, Continuum.
- Whelan, R. (ed) (2007) *The Corruption of the Curriculum*. CIVITAS.
- White, J. (1973). *Towards a compulsory Curriculum*. Routledge & Keegan Paul, London.
- White, J. (2006). *The Aims of School Education*. Available online: <http://eprints.ioe.ac.uk/1767/> Accessed 02/2011.
- White MD and Marsh E (2006) Content Analysis: A flexible methodology, *Library Trends*, 55 (1), p. 22-45
- Wilson, J. (1990) *A New Introduction to Moral Education*, Cassell, London.
- Wilson, J., Williams, N. & Sugarman B. (1967) *Introduction to Moral Education*, Penguin, Harmondsworth.
- Yin R K (2000) Case Study evaluations: A decade of progress? In Stufflebeam D Madaus G F, Kelleghan T (eds) *Evaluation Methods: viewpoints on*

educational and human services evaluation (second edition) pp 185- 193.
Kluwer: Boston.

Young, M. (1971). *Knowledge and control: New directions for the sociology of Education*. Collier-MacMillan, London.

Young, M. (2003). 'Durkheim, Vygotsky and the curriculum of the future', *London Review of Education*, 1 (2), 99-117.

Young, M. (2008). *Bringing Knowledge Back In: From social constructivism to social realism in the sociology of education*. Routledge, Abingdon.

Young, M. (2011). 'Discussion to part 3'. In Butt, G. (ed) *Geography Education and the Future*. Continuum, London.

Young, M. and Muller, J. (2010) Three educational scenarios for the future: lessons from the sociology of knowledge. *European Journal of Education*, 45(1), 11-27.

Young, M. and Lambert, D. (2014). *Knowledge and the future school: Curriculum and social justice*. Bloomsbury, London.

2. THE COMPLETED GEOCAPABILITY FRAMEWORK (which assisted in the creation of Bustin 2015a)			
	<i>Deep descriptive 'world knowledge</i>	<i>Theoretically informed relational understanding of people and places in the world</i>	<i>Propensity and disposition to think about alternative social, economic and environmental futures</i>
ESSENTIAL RESOURCES: Energy	Arctic Ocean oil and gas reserves, ownership conflicts. Russia oil pipelines UK and Russia energy security data.	Formation and consumption of oil, as a process.	Sustainability of energy resources, fossil fuels vs renewable. Russia superpower status and role of energy.
ESSENTIAL RESOURCES: Food. Tuna fish	Indian Ocean and surrounding countries. Demographic and economic data.	Ecosystems and food webs- how tuna fits into its ecosystem and impacts of overfishing. Globalisation of tuna trade.	Sustainability of tuna resources and choice about consumption patterns. Understanding of key players and their attitudes.
NON-ESSENTIAL RESOURCES: Diamonds	Sierra Leone and surrounding countries. Demographic and development data, comparisons with UK.	Diamond formation process. Globalisation of world diamond trade and concept of resource curse.	Sustainability of diamond industry, possible corruption. Consumption choices.
POPULATION/ RESOURCE INTERACTION	Global population data.	Carrying capacity as a concept.	Over and under population, possible impacts of each on resources. Choices- action plans for future resource sustainability.

3. THE COMPLETED NARRATIVE

1 The task had been set. FR and RT sat in a geography classroom faced with the
2 challenge of constructing lessons on 'Russia'. RT took control, took the pen and
3 paper and immediately wrote the first word, 'location'. As she wrote she said
4 "Location... the only big problem with Russia is that it is so big and it has got so
5 many different cultures, it is practically stretching across to China from the EU"
6 Her immediate thought was to try to get a sense of the scale of the country. This
7 clearly set up her question, "what aspect are we actually going to look at?" Her
8 question was a question of knowledge, immediately questioning what would be
9 taught to the children. Though she was not specifically asking for actual facts,
10 but approaches or 'aspects' of the knowledge of Russia.

11 In year 8 the pupils study China in a place based approach, and RT's
12 immediate thought was to follow the pattern of lessons already in place for the
13 China topic. Her follow up question to FR revealed much about RT's approach
14 to curriculum making. "So are we going to do issues? Are we going to do place
15 knowledge or are we going to just do place knowledge as secondary as a result
16 of issues?" Here she was searching for a structure of the course, either place
17 based, or issues based. What is interesting is that those were the two
18 immediate options she considered- place and issues. She then opted for the
19 more traditional split that geography often engenders, writing 'physical/
20 human/environmental' as a possible structure on the piece of paper. Yet
21 immediately they hit upon a problem: "Physical. Vast... We are talking about
22 one and a half continents across.... So if it is too difficult to do physical, human
23 and environmental then we need to look at some issues instead. So what
24 issues are going to have?" Immediately the traditional structure of physical
25 features was abandoned in favour of a more issues based approach. For the
26 China topic already studied in Key Stage Three, the first lessons place China in

27 its physical context and the children map the key physical and human features
28 of the country. This approach was abandoned for Russia at this stage.

29 FR had remained fairly quiet in the early discussion, agreeing with RT whilst
30 searching for a structure herself, finally offering, “I suppose there is the whole
31 sort of history isn’t there, and the cultural identity of the people there”. For GH,
32 the two key ideas to offer an approach were a historical approach and a
33 humanistic, cultural approach. Opting for a historical approach in a geography
34 sequence of lessons was an interesting suggestion, allied to Doreen Massey¹²'s
35 thoughts that we seem as a nation to give more emphasis on time than on
36 place. If the place based approach had been abandoned, a chronological
37 approach to the country’s history seemed another way of creating that broad
38 overview of Russia. As she defended “It is quite important, if you view
39 communism and how it has moved on through...” The idea of studying the
40 legacy of communism on contemporary Russia is an object of geographical,
41 rather than historical thought, and geo-political issues cannot be studied without
42 an understanding of communist ideals and so the idea of an appreciation of
43 communism seemed to be at the heart of her thoughts. However, before she
44 could continue her argument she was interrupted by RT.

45 RT: “Yes. We don’t want to be too historical though”.

46 GH: “No, no, obviously just zoom through 2000 years or so of issues
47 and history”.

48 RT: “2000 years in 10 minutes!”

¹² A reference here to the work of Massey (1999)

49 A further idea was suggested by FR “I suppose you would have to look at
50 natural resources wouldn’t you?” but this did not seem to register or warrant
51 further discussion at this point. RT wrote the word ‘resources’ down on the
52 piece of paper whilst thinking about her response.

53 What they were both struggling for was some sort of broad framework to
54 structure the lessons. The initial frameworks suggested, place based/
55 issues/physical/ human/ environmental/ historical/ resources/ cultural all
56 seemed possible ways to provide a framework for lessons on Russia. All,
57 potentially, would have been acceptable yet they did not feel easy at all with any
58 of these approaches. They also discussed possible links with other topics they
59 already teach, suggesting deserts, weather and climate, and even ‘Polar’ which
60 is another one of these broad themes for the National Curriculum, with ideas
61 looking at the geography of Siberia.

62 What they had yet to discuss was any sense of overarching aims for the
63 sequence, or an understanding what they wanted the children to be able to
64 know or do. Their lack of progress seemed to stem from this. RT quickly
65 realised this and decisively drew a line under the notes so far.

66 RT: “As well as that you need to be thinking about the pupils, what actually, if it
67 was half a term, that’s only seven lessons, what do we want them to take away
68 from Russia?”

69 This now led to a shift in discussion, away from an attempt at defining the
70 content through themes and moving on to the interests of the pupils. The shift in
71 emphasis from knowledge for the sake of knowledge to knowledge for the sake
72 of children. Her question asks for the aims of the sequence, based on the needs
73 of the pupils. Yet although the question was asked, FR did not answer it, and

74 RT did not continue the discussion, instead going back to the previous
75 discussion on potential topic based themes. This question is central to
76 discussions around capability, it asks about aims and outcomes of education.
77 Despite the question being posed, it was not answered. It was almost as if it
78 was too difficult to answer, or that a structure had to be found first before aims
79 could be considered.

80 RT: "Conflict. Anything else? Conflict, so what is the conflict?"

81 The geography of conflict is a course we teach as part of the A Level geography
82 course. It is essentially a geo-politics course, and by its nature warrants a very
83 contemporary approach. The ethos of the geography department at CLFS is that
84 we want the knowledge to be contemporary, we want children to engage with the
85 real world as it is, and not some idealistic or historical incarnation of the world. As
86 soon as the idea emerged of allying the Russia course with a conflicts theme, the
87 ideas and enthusiasm began to flow.

88 RT: "Ethnic identity, the battle lines between Russia and the EU. We have also
89 the big problem of, is it oil or gas, gas..."

90 GH: "I could bring in something about the links with the Middle East as well, if
91 we are talking about bringing in the Middle East so we could... I know that is
92 quite similar to what we do with China but you could make it different, couldn't
93 you".

94 RT: "They supply all the weapons for Syria".

95 GH: "And their oil and gas and trades, power and money, mafia".

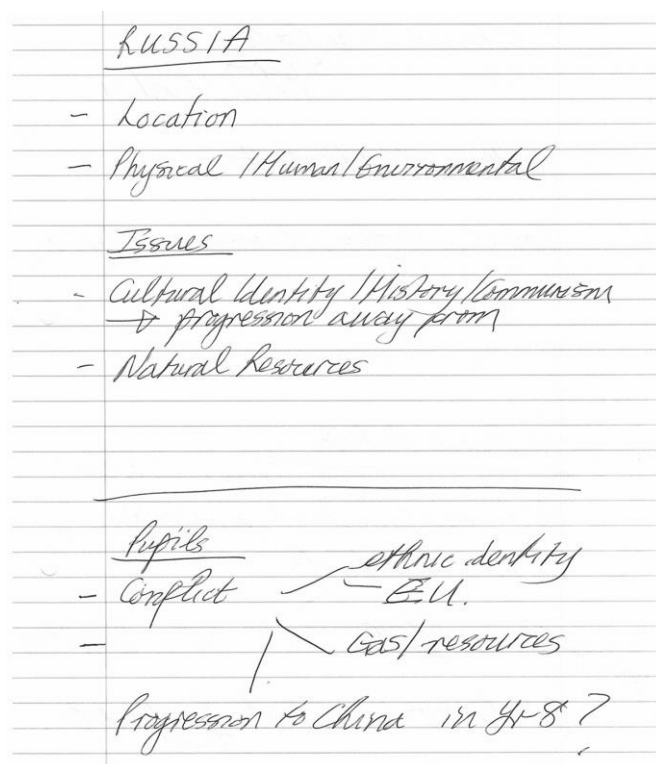
96 RT: began writing these ideas down.

97 RT: "Power, money..."

98 GH: "Don't put Mafia."

99 RT: "Oligarchs, mafia."

100 This workshop was running in October 2014 when Russia had invaded the
101 Crimean region of Ukraine, and when Syria was in the midst of a civil war and
102 these acts of conflict were in the news, and being discussed as part of
103 geography lessons. This seemed to provide the structure they had thus far been
104 craving for; the course was going to be a contemporary, conflicts based course
105 on Russia.



106

107 There were lots of ideas produced at this point, all based around issues rather
108 than knowledge. Aims had still not really been discussed, although there was a
109 sense that the content should be contemporary and drawing inspiration from the
110 news. There was still a need for an overall structure, conflicts was the focus of
111 the place based approach and many ideas had been shared, but there was a

112 need to bring it altogether. RT realised we were looking at about 7 lessons of
113 material so she continued "So if you had to just get seven things that they
114 needed to know about Russia, seven things to know, in rank order, what do you
115 think they should know?" This then produced the final list of seven lesson ideas:

116 RT: "Location and basic features.

117 GH: Yes, so physical features and human features I suppose, where are the
118 cities and why are they where they are.

119 RT: Okay, 2?

120 GH: I suppose you could start looking at issues couldn't you?

121 RT: Do you think present conflicts because, news conflicts.

122 GH: Yes.

123 RT: So there are opportunities there to do Polar.

124 GH: That is when you could bring in a bit of history and social.

125 RT: History. There is also conflicts, we could at that point, its position with
126 the EU, its position with Middle East.. What else, are they, the main conflicts?
127 Resources? What of its own, do we want to know who gets the resources, what
128 and who gets them?

129 GH: Yes.

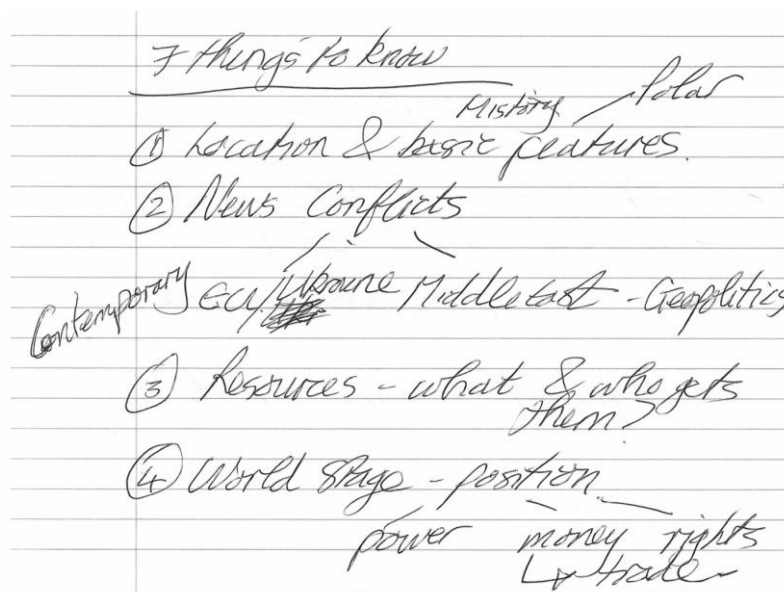
130 RT: 4, next most important thing? Do you think Ukraine? That ought to go
131 there, they will have to be two lessons that may be the same thing as location
132 and history. Human and the physical, EU, Ukraine and Middle East
133 relationships, resources, what and whom gets them.

134 GH: Maybe finish it off with what they are like on the world stage, power and
135 money haven't we, and their links.

136 RT: World stage position, power, money, rights. They are a bit backward on
137 the rights aren't they?

138 GH: Yes because they're anti-gay, that was all on the news when the winter
139 Olympics was on."

140 This final list, the outcome of the discussions on 'Russia' can be seen clearly in
141 the hand written notes. The 'list' approach also gives structure to the sequence
142 of ideas and these seem to build.



143

144 Given the short time period with which to create these lessons, there are some
145 good ideas here, but the outcome is not necessarily what was most important to
146 me. What I was more interested in was the process by which they arrived at
147 their seven lessons, the process of curriculum making in geography. Specifically
148 I was focussing on two factors: one was the role and place of knowledge in the
149 discussions, and secondly the way they structured their conversation to
150 formulate the lessons.

151 I found that knowledge discussions were based around issues. Contemporary
152 ideas such as the geo political position of Russia in the world dominated their
153 thoughts. This could be for a number of reasons. They were heavily influenced
154 by the course on China which is well established in Year 8 and the initial
155 structure of lessons follows this introductory pattern, giving an overview of the
156 location and key features of the country. The China course also has a
157 contemporary, issues feel with ideas like the One Child Policy being part of the
158 scheme of work. By including an issues approach again, this would give
159 continuity to the lessons for the children. Yet issues based geography has been
160 criticised for being anti-knowledge; it could be from the radical ideology, with
161 children formulating their opinions and responses to global issues without a
162 thorough understanding of the knowledge which underpins these issues. This
163 would be a Future 2 curriculum, emphasising values over knowledge. From this
164 short curriculum making episode it is difficult to see the extent to which
165 knowledge is driving the issues or whether the issues will dominate teaching.
166 GH's idea that Russia's 'anti-gay' stance should be included in a geography
167 lesson suggests the creation of a Future 2 curriculum. Taught well, Russia's
168 stance on homosexuality could inform cultural geographical ideas; geographies
169 of gender and homosexuality are existent as knowledge domains in university
170 courses. Yet it could also too easily turn into an opportunity for a lesson on
171 homosexuality per se, which would take the pupils away from the geographical
172 knowledge. Teaching children about homosexuality is important in schools, but
173 using geography lessons to deliver the aims of PHSE is another example of the
174 steady encroachment of curriculum time that takes the focus away from
175 geographical knowledge. FR is a pastoral leader in school, being head of year
176 9, and PHSE concerns are often at the forefront of her mind. The extent to

177 which she felt this was an opportunity to teach about homosexuality rather than
178 geography, however, is not clear.

179 Skills were not discussed at all at this stage. In the China course in Year 8,
180 children learn to construct population pyramids which they then use to discuss
181 aspects of China's population. The omission of any sort of skill, be it mapping,
182 population data analysis shows that knowledge is more significant at this stage.
183 The skills would be introduced as part of the pedagogical processes. Children
184 can learn about Russia by analysing and interpreting a series of data. This more
185 detailed planning would probably come after the main structure was in place.

186 The way the teachers tried to find a structure for the lessons was interesting, as
187 their early conversations struggled to find any way of organising the potentially
188 vast amount of knowledge that Russia could yield. They thought, then rejected,
189 a vast amount of possible structures, before finally hitting upon the idea of
190 contemporary issues. As it stood, the curriculum making episode could result in
191 a Future 2 curriculum, or possibly a Future 3 curriculum, depending on the
192 status and inclusion of knowledge. There is a need, therefore, for a framework
193 to curriculum making to ensure a balance of knowledge, processes and issues.
194 This is what geocapability can potentially offer and this is what the workshop
195 went on to discover.

196 After this introductory activity, I introduced RT and FR to geocapability. I
197 discussed its origins in the field of welfare economics, and then how various
198 authors had applied it to educational discourse before introducing the three
199 branches of 'geocapability'. They listened intently, taking on board and following
200 the ideas through.

201 After the short lecture, RT and FR completed the geocapability Framework,
 202 mapping the ideas from the notes they had previously completed and
 203 transferring them onto the grid. This allowed them to see the knowledge content
 204 of the scheme of work they had put together on 'Russia'. This is shown below.

205

Deep descriptive 'world knowledge'	theoretically informed relational understanding of people and places in the world	Propensity and disposition to think about alternative social, economic and environmental futures
Russia - where / extent, cities, physical landscape Natural resources	why cities are where? why oil/gas/coal?	Extraction Supply demand Sustainability Conflict of use.
Contemporary Conflicts - Ukraine - location EU/Russia divide	why the conflict - cultural identity? Age? Resources?	Future solutions to conflict.
World Stage - Development Russia/BRICS	classification / globalisation rate / human rights / HDI / Trade	Sustainability

206

207 This translation process from their notes to this framework yielded some
 208 interesting findings. The deep descriptive world knowledge identifies and
 209 locates much of what was discussed previously; the location of Russia in the
 210 world, its place on the world stage and the contemporary conflicts. By placing
 211 the conflicts in this column is a clear indication of the importance of knowledge.
 212 If it were just about pupil reactions to the conflicts, a Future 2 concern, then it

213 would not appear in this framework. The knowledge basis of the conflict is
214 included as part of the deep descriptive knowledge geocapability, and a further
215 clue is given in the framework about how this might be approached, with
216 Ukraine and the EU/Russia divide mentioned specifically. This would suggest
217 that there is a strong knowledge basis to the conflict discussion.

218 The second column leads on from the first, with many of the 'descriptions'
219 leading into process understanding in the second column. The geographical
220 situation of Russia leads on to 'why' based questions; why are cities located
221 where they are, why is there coal oil and gas? Notice this is not where, but why.
222 This requires an understanding of the process of fossil fuel formation, rather
223 than a simple understanding that it is just there so its use can be debated as
224 many geography courses would try to do. A similar approach is taken for the
225 conflict section, with attempts to classify the conflict according to processes that
226 underlie the tensions, such as age, cultural identity and resources. The process
227 involved in Russia's place on the world stage has also been embellished here,
228 with the processes of globalisation and trade offering ways to explore this idea
229 of the geopolitical importance of Russia. The word 'globalisation' had not
230 appeared before in the workshop. In earlier discussions there had been talk of
231 many of the ideas that could be explained by globalisation, but the actual
232 concept of globalisation had not been considered so what the framework had
233 provided was an opportunity to think about those concepts that might underlie
234 the ideas they had previously considered. This identifies an important role that
235 consideration of geocapability can have; by forcing teachers to think about
236 geographical processes, it forces the idea of thinking geographically to find
237 conceptual links between some of the descriptive knowledge previously
238 identified.

239 The third column is the most significant in this exercise. Many of the words and
240 phrases in this column had not been discussed in the workshop, specifically the
241 notion of 'sustainability' which makes its first appearance. Sustainability as a
242 concept has become pervasive in geography education, particularly through
243 ideas like 'education for sustainability', and its links with climate change
244 teaching. The same is said about conflict solutions- a Future 2 curriculum would
245 ask children to devise their own futures for the ongoing Russia/Ukraine conflict
246 without a real understanding of the background of the conflict. But this
247 curriculum enables children to first identify Russia and Ukraine and their various
248 political allegiances, then the processes underlying their conflict such as cultural
249 identity and resource distribution and this then enables the children to consider
250 their own responses to the conflict and issue. Their understanding is knowledge
251 based.

252 By using the geocapability framework, it forced the teachers to think about what
253 they were teaching, and how this would structure the learning process over the
254 course of a series of geography lessons. Their structure seems to take children
255 on a journey through the three geocapabilities. First they learn about Russia's
256 location and describe the nature of its resources and conflict, then they learn
257 the processes which underlie these phenomena, such as fossil fuel formation,
258 the geography of cultural identity and finally they are asked to consider their
259 own response, to consider alternative futures to the conflicts and contemporary
260 issues. This to me is powerful knowledge, and social realist knowledge in the
261 sense that much of the understanding about the contemporary conflicts will
262 derive from media outlets and so the geography teachers will need to use their
263 understanding of geography to 'interpret' and re-imagine this knowledge prior to
264 enabling their students to engage with it.

265 I was interested to hear RT and FR's thoughts about the usefulness of the
266 geocapability framework. I asked them if it had helped them in their curriculum
267 making.

268 RT: I think it helped but I think it would have been a hindrance if
269 we had started with that.

270 FR: Yes.

271 RT: I think that (the initial 'notes') was a better starting point, and
272 doing it that way and then it largely fitted into that.

273 RT raised an important consideration. The geocapability framework cannot
274 generate ideas. It is not a mechanism by which powerful geographical
275 knowledge can be created. This is still done by the professional geography
276 teacher. Another group of teachers would have devised a set of lesson ideas
277 that were different, and this would not have meant their ideas were no good. For
278 RT and FR, starting with a blank sheet of paper and their understanding of
279 teaching geography, was preferred. What the framework does enable, however,
280 once those ideas have been initially gained, is the chance to check there is a
281 strong geographical content of the lessons. Another group of teachers could
282 devise a completely different sequence of lessons on Russia, which may also
283 be able to be mapped successfully into the framework. This would also confirm
284 that there is geographical knowledge at the heart of their curriculum. The
285 framework therefore acts as a checklist for a good geography curriculum.

286 I was also interested as to whether FR and RT had identified any ways that
287 placing their ideas into the framework had enabled them to consider new
288 knowledge, and perhaps introduce ideas into their teaching that they might

289 otherwise have not considered. It was the third geocapability that RT identified
290 as being the aspect of geographical knowledge she perhaps omits:

291 RT: I think often you do things like the conflict of the Ukraine in
292 year 7, you would say this is the conflict, this is what is
293 causing it, you would probably not spend a lot on what you
294 think the solution to the conflict is, you know and apparently
295 that is because there wouldn't be enough time but also it
296 would be very media controlled.

297 GH: No one really knows do they?

298 In CLFS the curriculum is highly academic, and previously perhaps evident of a
299 Future 1 curriculum. Young (2008) argued how many highly academic
300 independent and grammar schools would see knowledge in F1 terms; static and
301 needing to be taught. This would have been, arguably, the experience of
302 geography at CLFS in the past. The third geocapability, this idea of a futures
303 dimension, making the curriculum real for students who react and respond to
304 what they have been taught is thus, for our teachers, something unusual. For
305 other schools, particularly perhaps those whose curriculum is more child
306 centred, this third geocapability would probably dominate geography lessons. I
307 therefore wanted to push RT and FR further on this idea; I asked them for
308 further reflection.

309 RT: Yes definitely, I think you have got to do it though in relation
310 to them, particularly in year 7 so I think you would need to do
311 it through what is the implication of gas, the gas thing, I'm not
312 sure of the conflict myself fully, but the gas relates to Britain,
313 how the Ukraine, EU, Russia divide, how that is affecting

314 Britain, I think for year 7s, to a certain extent, you have to
315 bring it back to them.

316 RB: But not so much higher up.

317 RT: But maybe not so much higher up. Because you know
318 people say you have got to be global citizens and everything
319 and I think that is very good but I think there is a tendency for
320 it to detract from your responsibility, the responsibility is at
321 the local level really, where people can have the greatest
322 chance to take responsibility and therefore I think sometimes
323 you have to translate these things into what does it mean in
324 Surrey, the Ukrainian conflict, how is it going to affect that so
325 that they can take some responsibility of what they can do
326 because sometimes there is not a lot of links really.

327 RT was able to discuss geography in relation to the students, and to their lives.
328 She felt it important that geography teachers can link their lessons back to the
329 lives of young people. She was attempting here to link the Ukrainian/Russia
330 conflict back to the 'Surrey' lives of our young people so they can take
331 'responsibility' as a 'global citizen'. Much of this discussion suggests an F2
332 curriculum; ideas of global citizenship and responsibility can be key features of
333 an F2 curriculum but notions of 'choices' about how to live, and the importance
334 of 'agency' is a key aspect of geocapability. Distinguishing between these two is
335 challenging but comes down to the status and role of geographical knowledge.
336 In this task, the idea of the conflict as RT discusses is embedded within the
337 geocapability framework, pupils engage with choices, and responsibility with a
338 solid grounding of the knowledge and processes underpinning the conflict.