Children's Lived Experiences of 'Ability' in the Key Stage One Classroom

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Abstract

This empirical research examined evidence of children's lived experience of 'ability' from two case study classes of 5-7 year olds in primary schools in England. 'Thick description' (Geertz 1973) of the children's lived experiences was created using children's classroom tours, classroom representations and interviews alongside non-participant observation of everyday classroom life and interviews with the class teachers. For these children, findings are that their lived experience of 'ability' is highly individual and shaped by the scope of their awareness and their attention to an individual combination of features of classroom life, particularly structural, social and pedagogic. The class teachers partially shaped the children's experiences through their teaching choices, underlying beliefs about 'ability' and own experiences (as a child and as a teacher) but this varied significantly for each child depending upon how their individual lived experience was shaped. The findings from these two classes suggest that policy and research into 'ability' in early schooling should be considered with a recognition that there could be significant variation in how this is experienced by individual children. Therefore, in making teaching choices at classroom level we might consider a wide range of aspects as potentially influential in shaping children's experiences of 'ability' and therefore pay close attention to the individual children in the class and what they attend to most in their classroom, as well as well as our own beliefs and experiences.

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Dedication

For Susie, Lois and Vanessa

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List of Abbreviations

APP	Assessing Pupil Progress (appendices only)
DfE	Department for Education
EI	Emotional Intelligence
GB	Great Britain
H/a	Higher attaining
Ht/a	Highest attaining
IQ	Intelligence Quotient
IWB	Interactive Whiteboard (appendices only)
L/a	Lower attaining
M/a	Middle attaining
NCETM	National Centre for Excellence in Teaching Mathematics
NUT	National Union of Teachers
NZ	New Zealand
OECD	Organisation for Economic Co-operation and Development
Ofsted	Office for Standards in Education
PISA	Programme for International Student Assessment
QTS	Qualified Teacher Status
ТА	Teaching Assistant
UN	United Nations
UNCRC	United Nations Convention on the Rights of the Child
UK	United Kingdom
US	United States (of America)

Glossary

Grand narratives	The large scale and significant explanations or pervasive stories created by the findings of large-scale research and significant literature within an academic field of study.
Knowledge	Socially constructed human understanding.
Pedagogy	The teaching choices employed relating to the type of activities used to support learning in classrooms (such as questioning, play, work, behaviour). Whilst definitions of pedagogy are varied and contested, it is used narrowly in this study as choices relating to activity type.
Play	Term used by the children for typically self-chosen or self-directed activity (such as block play, role-play or games).
Setting	The segmenting of a group of pupils (sometimes a year group or cohort) into classes on the basis of attainment for a specific curriculum subject.
Small stories	The contextualised personal stories that provide a grounded perspective from culturally and temporally located human experience.
Streaming	The segmenting of a group of pupils (sometimes a year group or cohort) into classes on the basis of attainment for the entire curriculum.
Thick description	Capturing detail and complexity via a multi-method approach with analysis and presentation which aims to make meaning of and preserve nuances and complexity.
Within-class `ability' grouping	The segmenting of a class group into smaller sub- groups on the basis of their attainment.
Work	Term frequently used by the children for typically written/recorded output that they were expected to complete within lessons.

There is a voice inside of you That whispers all day long, "I feel this is right for me, I know that this is wrong." No teacher, preacher, parent, friend Or wise man can decide What's right for you-just listen to The voice that speaks inside.

Shel Silverstein, 'The Voice'

Introduction

'It's not about what it is, it's about what it can become'

Dr Seuss, 'The Lorax'

This thesis examines 'ability' as an educational phenomenon. Within a constructivist paradigm of knowledge development, this research gained insight into children's lived experiences of 'ability' in their classrooms in order to illuminate the child's perspective and provide small, contextualised case study exemplars (Flyvebjerg 2006, Bourdieu 1998) to contribute to knowledge in the field of 'ability' in education. Griffiths (2003, p.55) argues that 'small stories', such as those described by this research, are needed alongside 'grand narratives' in order to have collective understanding or 'knowledge' within a social constructivist definition. The stories presented in this research belong to the children and teachers of two classes of 5-7 year olds in two primary schools in England. Through 'thick description' (Geertz 1973) of the children's lived experiences and teachers' perspectives, this study aimed to answer the research questions outlined in table 1.

Table 1. Research questions

Research Questions
How do children experience 'ability' in the classroom?
In what ways and to what extent does 'ability' influence children's experiences in the classroom?
What are children's perceptions of their individual school experiences?
How are children's everyday experiences of 'ability' shaped in the classroom? What are the factors which shape how children experience 'ability' in school and how do these effect individual children differently?
What do teachers feel shape their pedagogic choices within the classroom? What are teachers' perceptions of the nature of 'ability'? How are these evident within teachers' articulation of their perceptions, within their classroom practice and within children's experiences of school?
What is the relationship between teacher perceptions of 'ability' and children's experiences in everyday classroom contexts?

Children have the right to express their opinion about decisions that affect them and to have their opinions listened to (UNCRC, UN 1989). This is often not entirely evident in either educational research (Shaw, Brady and Davey 2011, Freeman and Mathison 2009) where adult voices take the focus (Burke 2010, Atkinson and Delamont 1990) or in schools where young children have little influence over what is done (Einarsdóttir 2010). Lundy's quotation (below) points to the power and potential of children's lived experience in listening to children and effecting positive change. This enquiry focuses upon 'lived experience' of 'ability' in order to respect, acknowledge and capture children's perspectives, which are fundamental within the axiology of the research.

In truth, the strongest argument for guaranteeing the implementation of this right [article 12 of UNCRC] derives from its capacity to harness the wisdom, authenticity and currency of children's lived experience in order to effect change.'

Lundy (2007, p.940)

Understanding of what constitutes experience is varied (Freeman and Mathison 2009). Within this study, lived experience is defined as layered emotions, actions and conceptions (Løndal 2010) and essentially an internal construct (Pring 2015). Lived experience is fluid and temporal so can never be fully understood by another (Pálmádóttir and Einarsdóttir 2016). A researcher's understanding of an individual's lived experience will therefore only ever be partial snapshots of being within time, space and context (Heidegger 2010) which are socially mediated within the research process (Dewey 1938) but of significant human value (van Manen 1990). Through conscious participation (Greene and Hogan 2005), children's individual lived experiences are researched in this study through accessing individual children's constructed meaning (Van Manen 1990) of the everyday (Van Manen 2017).

'Ability' is a commonly used term within education (Hart et al. 2004) and is mostly unchallenged a priori knowledge. 'Ability' is evident within accepted classroom practices such as 'ability' grouping but is much broader than this and is an underpinning 'ability ideology' within education (Marks 2016, p.2). Despite being largely accepted as a 'common sense' concept in everyday (Francis et al. 2017) and educational contexts (Bourne and Moon 1995), it lacks a clear and consistent definition. For the purposes of this study, it is deemed to be 'intelligence', conceived as a human trait (Gardner 2001), as applied to education. Drawing upon Collins' (2003) notion of 'ability profiling' (although Collins was more focussed upon learning disabilities), children's generalised external comparative capabilities are determined and used to describe children and shape practice. Some, such as Hart et al. 2004, question the existence of 'ability' (likening it to unicorns, p.5) within a more positivist ontological position. The position of this study is that it exists within a social constructivist conception of knowledge (it exists as a social construct).

This thesis presents the culmination of research from four shorter studies (unpublished documents from the Professional Doctorate programme). The literature review in Document 2 challenged the dominance and clarity of 'ability' within educational discourse and practice, establishing the need for small-scale expositional research and research into children's perspectives. The focus of the research in Document 3 was children's lived experiences of 'ability' whilst Document 4 centred on the teachers' perspectives. This thesis (Document 5) draws these perspectives together, synthesising rather than comparing them, to provide a distinctive piece of research which provides a deeper and more comprehensive picture of 'ability' within children's lived experiences in these case study classes.

This report is presented in four chapters. Chapter 1 attempts to synthesise, rationalise, consolidate and update the more extensive critical literature review presented in Document 2 and positions the research focus within the wider context of what is currently known about 'ability' in schools. Within this, there is a philosophical and neuroscientific consideration of the nature of intelligence as the 'real world' equivalent of educationalists' use of 'ability' (Stobart 2014).

Chapter 2 examines the ontological roots of the research, applied as epistemology, thereby positioning the research as essentially social constructivist with research ethics deemed epistemic within values-framed ways of knowing. Case study, as neither method or methodology (Thomas 2011) but more strategy (Punch and Oancea 2014), is deemed appropriate for researching phenomena not easily distinguished from the context (Yin 2013) such as 'ability' which is deeply embedded within classroom practice (Wrigley 2012, Hart et al. 2004). The theoretical and philosophical underpinnings of the research are considered as it is argued that a symbolic interactionist methodology is most appropriate, supported by elements drawn from feminist critical theory, grounded theory (for data analysis), videography and ethnography. Chapter 2 frames aspects of research quality within which this research is most suitably evaluated, including authenticity and trustworthiness.

The research findings in Chapter 3 are presented as summaries of the data from each child and teacher so as to present their stories without fragmentation or decontextualisation (Denscombe 2014) which could compromise the integrity of the case study approach (Stake 1995). These findings are discussed in Chapter 4 where structural, social and pedagogic aspects of classroom life are examined in turn in order to better understand how these aspects interplay within each child's individual lived experience of 'ability' within the scope of their awareness. Chapter 4 is followed by the conclusion where findings are presented in relation to the research questions and implications of the research are suggested. It is argued that the research makes a contribution to knowledge and 'stands up to critique' (Murray 2011, p. 121) in terms of trustworthiness and authenticity despite limitations such as the small and non-representative sample of child participants from the two classes.

> 'We can't go over it. We can't go under it. Oh no! We've got to go through it!' Michael Rosen, 'We're Going on a Bear Hunt'

Chapter 1. Literature Review

'So Matilda's strong young mind continued to grow, nurtured by the voices of all those authors who had sent their books out into the world like ships on the sea. These books gave Matilda a hopeful and comforting message: "You are not alone."

Roald Dahl, 'Matilda'

Introduction

Whilst individual beliefs and experiences shape understanding of language (Foucault 1972), there is apparent consistency in the use and acceptance of the term 'ability' within the education system in England (Gillborn and Youdell 2001). It is problematic to define with so many aspects to it and influences upon it (Wechsler 1975). Whilst argued by some, such as Nicholls, Patashnick and Mettetal (1986), that 'ability' (task performance) and 'intelligence' (intellectual skill) differ, it seems within education that 'ability' is used in place of 'intelligence' (Stobart 2014), effectively summarised by Gillborn and Youdell:

'This is the new IQism where talk of 'ability' replaces (and encodes) previous talk of intelligence'

Gillborn and Youdell (2001, p.65)

Across the relevant literature, different terminology is used to communicate knowledge within different regions and education phases. This archive is a 'system of functioning' (Foucault 1972, p.146) where these terms are infused with epistemological and contextual nuances that communicate perspectives in themselves. For example, 'tracking' and 'setting' are both used to describe the process of attribution to separate classes for a particular subject on the basis of attainment (Loveless 2013). 'Tracking', however, suggests close assessment and monitoring of individual progress whereas 'setting' suggests group segregation into levels of instruction. These language choices communicate conscious or subconscious standpoints (individual, shared or cultural). Alternatives to the term 'ability' include 'attainment' (learning demonstrated) and 'achievement' (learning gained) (Baines 2012, Ofsted 2017) which seem less deterministic and predictive than 'ability' (Hay and

MacDonald 2010, Boylan and Povey 2014). All appropriate literature using this range of terminology are included within this literature review.

The focus in this research upon children's lived experiences of school guides the literature reviewed so that the experiences of parents and teachers as well as children's out of school experiences are beyond the scope of this study. Evidence of teacher perceptions, however, is relevant as teachers play a pivotal role in children's experience of schooling and therefore such evidence is included in this review. Research relating to education systems other than England are included as there is significant relevant evidence from countries which has similar 'ability thinking' within their education systems, such as the United States (Boylan and Povey 2014). References to school systems, curriculum and policy pertain to England throughout unless stated. Similarly, evidence from the education of older children and young people is also included as similar issues regarding 'ability' are apparent (Marks 2011). This literature is explored in terms of the nature of 'ability', schools, policy, teachers and the children's perspective.

The Nature of 'Ability'

Academic positions about the nature of 'intelligence' or 'ability' are entrenched with social, political, ideological and religious beliefs (Laosa 1996, Dorling 2010, White 2005, Deary 2006) and therefore promote 'intense and often bitter public debate' (Laosa 1996, p155). They are important as they have significant political implications around issues of 'social stratification, education and eugenics' (Hayes 2000, p.178) but differ enormously leaving 'ability' essentially 'undefined' (Marks 2016, p.21). As Blakemore and Frith (2005) point out, a key debate in this area is the extent to which 'intelligence' is genetically (heritable) or environmentally determined.

Nature/Nurture

There is now general neuroscientific agreement that every behaviour is caused by a complex interaction of both genetic and environmental factors (GB 2014). Therefore, intelligence is not partially inherited but inherited genes are an influential factor in all behaviours that might be deemed intelligent without directly causing these behaviours (Pinker 2004, Asbusy and Plomin 2014). Environmental and social factors can act as 'multipliers' (Stobart 2014) so that initially small talents, interests and needs can be amplified by attention and reinforcement. Debate exists over how this knowledge can be applied with Asbury and Plomin (2014) suggesting direct application to educational practice, framing the purposes of education narrowly as learning basic skills in reading, writing, arithmetic and computing. Herein longstanding issues with applying scientific research to educations. These issues of application, in conjunction with there being much that remains unknown about the brain (Blakemore and Frith 2005), means that varied perceptions of intelligence persist within education which can lead to uninformed or erroneous views (GB 2014, Howard-Jones 2007, Reid and Anderson 2012).

Fixed 'Ability'

A fixed or stable view of intelligence is premised upon the assumption that 'ability' is inborn, unaffected by effort or environment, and therefore inherited. Key proponents of this view, such as Galton (1892), suggest that intelligence is inherited in the same way as physical traits. This perception can lead to classification of people by intelligence and extreme positions such as Terman's (who refined the Stanford-Binet intelligent quotient test):

'That every feeble-minded woman is a potential prostitute would hardly be disputed by anyone.'

Terman (1916, p.12)

Direct application of fixed views can therefore result in exclusion, enforced sterilisation and genetic deselection of those deemed less intelligent (White 2005, Chitty 2009). Burt's (1957, 1972) research was particularly influential in education with his finding of 'innate, general, cognitive ability' (1972, p.188) which has been since discredited due to significant errors (Kamin 1977). The fixed view has been further undermined by changes in the measured intelligence of populations over time (Wrigley 2012, Flynn 1987)

and neuroscientific discoveries of brain plasticity (Blakemore and Frith 2005, Howard-Jones 2007). Despite this, fixed intelligence continues to bear influence within intelligence testing (such as IQ) with the assumption of a normal distribution of test scores leading to regular re-calibration of the tests (Dorling 2010, Flynn 2006). In education, fixed 'ability' is unhelpful to learning and teaching as it denies efficacy of education (Gorard and See 2013, Benn 1982). It ignores effort (Dweck 2008) but yet it underpins practice in schools (Wrigley 2012, Hay and MacDonald 2010) and continues within some research. Craig and Plomin, for example, deeming intelligence 'highly heritable' (2006, p.32).

Intelligence Quotients

For over a hundred years, the notion that there can be a singular measurement of intelligence has maintained (Lucas 2007), despite being highly controversial (Groth-Marnat 2009), and is widely accepted (Howe 1997, Chitty 2009). There is an 'allure of numbers' (Gould 1996, p105) where intelligence can be neatly reduced to a single faculty (Lucas and Claxton 2010) and measured on a single scale using tests such as the Wechsler Intelligence Scale for children (Wechsler 2003) or Stanford-Binet/IQ test for adults (Thorndike, Hagen and Sattler 1986). The value of such tests is supported by a statistical correlation, g, found by Spearman (1904). g is a 50-60% (Lucas 2007) correlation found between cognitive tests, depending upon the tests used (Jensen 2003). There are differences in the interpretation of g, with Plomin and Craig (2001) claiming that it is intelligence or 'general ability' but this affords g 'enormous explanatory power' (Gardner 2006, p.505). g could be explained by similarities in the tests (Howe 1997) or could actually be working memory (Kyllonen 2013). There is also the suggestion that such tests do not measure intelligence at all (Flynn 1987) which perhaps cannot be measured (Howe 1997). They could measure experience (Vernon 1973) or learning (Stern 1956) instead. This idea is supported by test practice leading to improved scores (Boylan and Povey 2014) and the strong alignment found between test scores and school qualification outcomes (Deary et al. 2007).

Intelligence testing has had a profound effect on education (Ireson and Hallam 2001). Tests have been widely used in educational research (Richardson and Johanningmeier 1998) and are popular with scientists who typically score highly in them (Stobart 2014, Dorling 2010). Intelligence testing is, however, not fit for such purposes (Detterman 1979, Howe 1997), prioritising precision over validity (Sternberg 1984). Tests contain language, cultural and other biases (ibid; Cattell 1940; Peoples, Fagan and Drotar 1995; Scarr and Weinberg 1976) and it is unwise to use them in educational practice (Thorndike 1975) or research (Brown and French 1979). The use of such tests can lead to unequal educational opportunities (Weinberg 1989) and reinforce class, race, ethnic and other inequalities (Richardson and Johanningmeier 1998, Gillborn and Youdell 2001). Conversely, the use of such tests (for measurement and comparison) seemingly aligns with UK policy in favour of evidence-based educational research and randomised controlled trials (Goldacre 2013, Denzin 2009). This is in spite of academic opposition (James 2013, Denzin 2009) to this focus and criticism that such measures consider only a fraction of 'ability' (Goleman 1996, Sternberg 2000) that 'amounts to an amalgam of linguistic and logical-mathematical skills' (Gardner 2006, p.2). These criticisms are supported by the weakness of intelligence tests in measuring aspects such as bodily/kinaesthetic intelligence (Visser, Ashton and Vernon 2006) or subjects such as Drama and Art (Deary et al. 2007) which require a broader view of intelligence.

A Broader View of Intelligence

A broader view of intelligence as a 'polymorphous concept' (Ryle in Altman 1997 and Miles in Wechlser 1975) considers it as multifaceted and therefore more complex than the fixed or singular views of 'ability' discussed above. These broader views include a range of intelligences: emotional intelligence (Goleman 1996, Cherniss et al. 2006), personality (Cherniss et al. 2006; Sternberg, Grigorenko and Zhang 2008), ecological intelligence (Goleman 2012), social intelligence (Goleman 2012), bodily intelligence (Claxton 2012) and practical intelligence (Sternberg 2000; Zhang and Sternberg (2005). Gardner (1984) included multiple broader aspects of intelligence within his multiple intelligences theory. EI, for example, is equivocal to intrapersonal and interpersonal intelligences according to Gardner (2006). Effort (Dweck 2008, Boaler 2013) and conscientiousness (Poropat 2009) are similarly key factors in academic success with 'high ability' children arguably more accurately described as having a growth mindset (Dweck 2008) or being highly conscientious (Poropat 2009). Challenges to the notion of fixed 'ability' are not new (Dewey 1910 for example) but these broader conceptions of 'ability' have gone further in challenging its presence in education, arguing that it can limit learning (Stobart 2014, Hart et al. 2004, Wrigley 2012).

'Ability' in Schools

Despite notable challenge (from Ball 1986, Hart et al. 2004, Boaler, Wiliam and Brown 2000, Swann et al. 2012, Peacock 2016 amongst others), 'ability' thinking is pervasive in education (Ansalone 2010, Boylan and Povey 2014, Marks 2016). There are varied notions of 'ability' (explored earlier in this chapter) which can bear influence upon children's experiences through the people and communities around them (Bronfenbrenner 1979). A key influence here can be the underlying beliefs of adults in school (discussed later in this chapter). Marks' (2014a) case study with older primary school children, for example, found underlying notions of 'ability' within the choices made by school staff. She found that pressure to get children to meet targets in tests had unintended negative consequences for the lowest attainers. Attention to how children experience these notions of 'ability' is therefore a pertinent area of study.

The considerable body of research into the impact of 'ability' in schools predominantly considers group allocation, attainment and attitude (Marks 2014a) and shows reasonably consistent results (Higgins et al. 2013). There is, however, some lack of clarity within this due to the different subjects, grouping systems and statistical models applied in individual studies (Ireson, Hallam and Plewis 2001, Ireson and Hallam 2009) as well as different tests (Lou, Abrami and Spence 2000) and sample sizes (Slavin and Smith 2009, Lou et al. 1996). Notwithstanding these issues, meta-analyses of a large number of studies generally confirm that 'ability' grouping does not raise achievement (Hattie 2012, Kutnick et al. 2005, Higgins et al. 2013 and Coe et al. 2014). They find that 'ability' grouping across classes is generally advantageous to higher attaining pupils (Kulik and Kulik 1982; Steenbergen-Hu and Moon 2011) and detrimental to the lower attaining (Kutnick et al. 2005, Blatchford et al. 2008, Sukhnanden and Lee 1998). Research finds there to be no (Slavin 1987, Goldberg, Passow and Justman 1966) or slightly negative (Higgins et al. 2013, Dar and Resh 1986) overall impact upon attainment. Where research found a negative impact, the impact size varied across individual studies due to methodological differences (Slavin and Smith 2009) and between different countries due to cultural differences (Thiemann 2016).

Despite the relatively small number of studies into within-class grouping (Baines 2012) of the type used in the case study classes in this research, the issues identified for other forms of 'ability' grouping similarly apply (Worthy 2010, Marks 2011). Lou, Abrami and Spence (2000) and later Steenbergen-Hu, Makel and Olszewski-Kubilius (2016) (in their second stage meta-analysis where the same studies were included multiple times) found a small positive effect of within-class grouping on attainment. This positive effect could be due to social learning in groups, when compared with whole class or individual instruction, rather than 'ability' grouping specifically. Most research on withinclass grouping reports similar attainment impact to across-class setting or streaming (Roberts-Holmes and Bradbury 2017, Catsambis et al. 2011). The small positive impact for higher attainers and negative impact for lower attainers, widens the attainment gap (Parsons and Hallam 2014) with effects increasing over time (Tach and Farkas 2006). Younger children, who are more likely to experience within-class grouping than other forms of 'ability' grouping, continue to have low attainment in the long term when deemed to be lower attaining as a four-year-old (Alvidrez and Weinstein 1999). Young children are more susceptible to internalising 'ability' labels into self-concept (Weinstein et al. 1987), negatively impacting the lower attainers (Marsh 1986), although older children do this also (Hallam, Ireson and Davies 2004). Researching 'ability' in the early years of primary school is therefore an important, if less researched, area of study.

Research suggests that 'ability' grouping produces negative outcomes for some children in terms of a range of non-attainment measures. These include: social grouping (Boaler 1997a); emotional well-being (Alpert and Bechar 2008); self-esteem (Kususanto, Ismail and Jamil 2010); stress (Lesser 1972); self-concept (Moller and Pohlmann 2010, Ireson, Hallam and Plewis 2001, Ireson and Hallam 2009; Preckel, Gotz and Frenzel 2010); friendships (Hallam 2002, Baines 2012); stigmatisation (Hallam, Ireson and Davies 2004) as well as attitude and engagement (Higgins et al. 2013). Such negative outcomes are important to social mobility (Shaw et al. 2017) and individual well-being with McGillicuddy and Devine (2018) summarising allocation to 'ability' groups as acts of symbolic violence against children. There are some reported positive outcomes for higher attainers, such as motivation (Lesser 1972) and social-emotional development (Steenbergen-Hu and Moon 2011) but these are contrasted by negative outcomes for higher attainers in terms of anxiety (Boaler 1997b) and pace (Boaler, Wiliam and Brown 2000). Current research in the field is crucially unable to explain how these outcomes are shaped (Francis et al. 2017, Higgins et al. 2013). Quality/style of teaching (Ireson and Hallam 2001, Chorzempa and Graham 2006, Kutnick et al. 2005) and teacher expectations (Boaler, Wiliam and Brown 2000; Rosenthal and Jacobson 1968, Rosenthal 1995) could contribute to the outcomes found for 'ability' grouping. Similarly, less conducive social contexts could partially account for negative outcomes in lower groups (Eder 1981). Other factors may also shape the negative outcomes of 'ability' grouping' (Francis et al. 2017) and clearly further research is needed (ibid). Academic exploration of how 'ability' manifests within the classroom is clearly warranted and where this study can make a contribution to knowledge.

In addition to the outcomes of 'ability' grouping, there is also some evidence of rigidity in these groupings (Ireson and Hallam, 2001; Rigg 2012) with a lack of movement between groups (MacIntyre and Ireson 2002; Marks 2016) meaning that 'a child's educational trajectory is determined at a very early age' (Hallam and Parsons 2013, p.541). Within this, there could be misplacement of children in groups which is difficult to determine (dependent upon a valid measure of 'ability') but has been found to be an issue for withinclass 'ability' grouping (MacIntyre and Ireson 2002) and for boys in particular (Catsambis et al. 2011). Children can be dissatisfied by perceived misplacement where their self-concept does not match their group label (MacIntyre and Ireson 2002), feeling insufficiently or overly challenged (Robinson and Fielding 2007). They can also be unhappy with their allocated group where they are separated from friends (ibid).

It is clear therefore that 'ability' grouping is not deemed beneficial to children in terms of attainment and other outcomes yet it endures in educational practice and policy (Baines 2012, Ansalone 2010, Francis et al. 2017) despite the prominence of accessible research digests (such as Higgins et al. 2013, Cambridge Maths 2017, Kutnick et al. 2005, NUT 2016). 'Ability' grouping is, indeed, prevalent and increasing in the UK (Campbell 2013; Hallam, Ireson and Davies 2004; Francis et al. 2017), US (Loveless 2013), NZ (Anthony, Hunter and Hunter 2016) and across the world (OECD 2013). The reasons for this endurance are unclear but could be due to underlying beliefs about the nature of 'ability' and 'types' of children' (Ball 1981, p.286) informed by fixed 'ability' or intelligence quotient thinking (discussed earlier in this chapter). 'Ability' grouping is also commonly associated with the powerful rhetoric of 'standards, natural order and aspirations' (Francis et al. 2017, p.11) in educational policy with decisions driven by accountability (Hamilton and O'Hara 2011) and 'market forces' rather than values or research (Ireson and Hallam 2001, p.8). There is therefore a significant gap between research evidence and classroom practice, identified by Clarke (2014); Hornby, Witte and Mitchell (2011); Blatchford et al. (2008) and Loveless (2013) amongst others. This study is situated within this gap, seeking to describe 'ability' at classroom level.

'Ability' in Educational Policy

Educational policy is aligned with fixed notions of 'ability' according to Stobart (2014) who cites accountability measures, rhetoric and assessment as evidence (this could, at least partially, account for the prevalence of 'ability' grouping identified above). Certainly, there is evidence of 'ability' labels in national policy, such as 'more able' (GB 2012, Ofsted 2013 and 2015) and 'high ability' in the Teachers' Standards for QTS (GB 2011a, p.12) with teachers expected to set 'stretching work' for children with above expected attainment in the current National Curriculum (GB 2013). Some policy provides clear guidance and has a direct impact upon teachers' practice with regards to 'ability' (Hallam, Ireson and Davies 2004; Burton 2003; Ofsted 2013) but other policy can also indirectly impact even where no specific recommendations are made (Marks 2016) including through language and tone. Policy hiatus or lack of specific policy guidance can also lead to reduced critical consideration about 'ability' from teachers (Clark 2014). Where clear direction is given to teachers, the impact of a policy can remain for longer than the policy is in place. For example, where five 'ability' groups were recommended in the non-statutory National Literacy Strategy (GB 1998), this practice has continued in many schools (Beard 2000, Hart et al. 2004, Marks 2016). Historical policy relating to 'ability' is therefore relevant to this study as it has contributed to the educational climate of the collected data.

The most significant 'ability' related educational policy in the UK was the 'great debate' (Ball 1986) about selective schooling. Sides were either opposed or supportive of selective three tier secondary education (under the Education Act 1944) which was informed and supported by ideas of an intelligence quotient (GB 1924, Burt 1957). This policy had led to widespread streaming in primary schools (Jackson 1964, Alexander 2010) with pressure to secure grammar school admissions (Chitty 2009). The selective schooling debate led to the 1976 Education Act preventing school admissions on the basis of 'ability', mixed implementation in secondary schools (Gillard 2011) and then repeal in the 1979 Education Act. Despite international pressure to end selection (UN 2008, 2016) it still operates in localised areas (Burgess et al. 2004; Adams 2016; Foster and Long 2016) with entry grades set locally (Chitty 2009). Evidence that it lowers motivation (PISA 2014), leads to disadvantage (Aynsley-Green et al. 2008), exacerbates social segregation (Hallam and Parsons 2013) and does not ultimately raise attainment (Wespieser et al. 2017) is not apparent in national policy. Conversely, selective schooling is likely to continue and expand with relaxation of restrictions (GB 2016), government support (Williams 2017) and specialist schools (Burton 2003, Whitty 2002).

The selection debate did lead to pedagogic change (Bernstein 2000) and a proliferation of research into 'mixed ability' teaching (such as Dooley, Smith and Kerry 1977 or Evans 1985). There was also, however, a shift in focus to smaller-scale 'ability' grouping such as setting or within-class grouping (Alexander 2010) based upon the same underlying notions of 'ability' as selective schooling (Worthy 2010). With concerns over the gap between the highest and lowest attaining (Ireson and Hallam 2001), characterised as the 'long tail of underachievement' (Smith 2005), mixed 'ability' teaching was criticised as 'same ability' teaching with setting expected as the 'norm' for secondary (GB 1997). Despite government published research evidence of comparable attainment in mixed 'ability' classes (Whitburn 2001), government support for setting has continued (GB 2005). Compulsory setting was considered but not adopted as policy (Wintour 2014) with mixed 'ability' classes judged to only work in the 'very best schools' (Ofsted 2013, p.19). This was perhaps influential in the funding of research at King's College London into best practice in grouping for year 7 and 8 (King's College 2015) which is ongoing. Setting has been advocated for primary in the past (Ofsted 1998) although within-class 'ability' grouping became the norm. The national strategies were highly influential within this (Ireson and Hallam 2001, Ofsted 2002, Oates 2011) advising 4/5 within-class 'ability' groups for numeracy and Literacy respectively (GB 1999/8). This form of 'ability' grouping has continued in many classrooms (Hallam, Ireson and Davies 2004; Marks 2016) from the Reception year onwards (Ofsted 2012).

International comparisons have become prevalent within an increasingly globalised educational market (Ball 2012) and significant economic pressures (Hamilton and O'Hara 2011, OECD 2010, Flint and Peim 2012). Dorling (2010), amongst others, argue that national policy in favour of 'ability' grouping and using 'ability' labels is driven by international comparison (for example PISA 2013) and the 'datafication' of education (Roberts-Holmes and Bradbury 2016). This is in spite of research using such international evidence cautioning against 'ability' grouping (PISA 2014) with concerns over inherent bias' within the tests (Chitty 2009, Gorard and Smith 2004) and misreading of the data (Boylan and Povey 2014, Askew et al. 2010). There are also difficulties in applying practice from one nation to another (Loveless 2013) as results differ greatly (Stewart 2013), can be misleading due to different

statistical models (Ochsen 2011) and data can be misinterpreted (Jerrim 2011, Jerrim and Choi 2014) with particularly low predictive accuracy for highperforming nations (Coyle and Rindermann 2013). Nevertheless, international comparisons are influential in adapting national policy (GB 2011b), with advice against 'ability' grouping in mathematics adopted over fears of mathematical 'ability' labelling (Stripp 2016). Government policy supporting a 'teaching for mastery' approach in mathematics (Gibb 2016) is influenced by East and South-East Asian practices (NCETM 2014a). The guidance supports all children working on the same tasks rather than different ones to match 'ability' (NCTEM 2014b) as explained by Charlie Stripp:

'I think it may well be the case that one of the most common ways we use differentiation in primary school mathematics, which is intended to help challenge the 'more able' pupils and to help the 'weaker' pupils to grasp the basics, has had, and continues to have, a very negative effect on the mathematical attainment of our children at primary school and throughout their education, and that this is one of the root causes of our low position in international comparisons of achievement in mathematics education.'

Stripp (2014)

This policy is in line with the National Curriculum for mathematics statement that all children should move through the yearly programmes of study at broadly the same pace (GB 2013). This in some way echoes moves in the United States (Stripp 2016) to avoid negative mathematical mindsets (championed by Jo Boaler) created through testing and grouping related to 'ability' (Boaler 2013 and 2016). Teachers therefore have a range of influences upon them from national policy with regards to 'ability' in practice.

Teachers and 'Ability'

'Ability' in national policy impacts upon teachers (Hallam, Ireson and Davies 2004, Burton 2003, Ofsted 2013 and Marks 2016). Pressures upon teachers for higher test scores and high-stakes accountability significantly shape practice (Wiliam and Black 1998) including practice relating to 'ability' in schools (Ireson and Hallam 2001) and has resulted in increased use of 'ability'

grouping, according to Ollerton (2001). Teachers prefer 'ability' grouping (Ansalone 2010) as they feel that it raises attainment (Hamilton and O'Hara 2011) and helps them to meet children's needs (Chorzempa and Graham 2006). Teachers' assessment and standardised test results are often in agreement (Alvidrez and Weinstein 1999) suggesting that teacher perceptions of 'ability' are perhaps informed by statutory assessment requirements and what is testable (Boylan and Povey 2014).

Much fixed 'ability' thinking is evident within teacher practice (Wrigley 2012, Hart et al. 2004, Boylan and Povey 2014) and teachers have been much criticised for their misunderstanding of neuroscience (OECD 2007, Reid and Anderson 2012, Adey and Dillon 2012), enacting beliefs about 'ability' that are unfounded. There is significant evidence that these teacher perceptions of 'ability' shape their classroom practice (Brophy 1983, Pajares 1992, Watson and De Geest 2005) including use of 'ability' grouping (Rosenholtz and Rosenholtz 1981). Teacher perceptions are the largest difference between 'ability' grouped and not 'ability' grouped schools (Macqueen 2010) and are the greatest determinant in whether 'ability' labelling occurs within classrooms (Schrank 1970). Their perceptions of 'ability' directly affect their practice with teaching strategies matched to the perceived needs of the 'ability' group (Zohar, Degani and Vaaking 2001) and perceptions of homogeneity resulting in a narrower range of strategies (Macqueen 2010).

It is widely accepted that teacher perceptions impact upon children (Alvidrez and Weinstein 1999, Pruyn 2003, Rubie-Davies et al. 2014). Whilst criticised (Thordike 1968, Alpert 1974, Snow 1995), the impact of Rosenthal and Jacobson's (Rosenthal and Jacobson 1968, 1992) seminal work on the Pygmalion Effect suggests that 'ability'-related teacher expectations have a significant impact upon achievement with the children studied performing in line with the 'ability' label randomly assigned to them. Since the original work that resonated with many in education (Rosenthal 1987), further studies have been conducted and there is now is consistent evidence that teacher expectations act as 'self-fulfilling prophecies' (Cooper 1979, Rosenthal 1995, Alvidrez and Weinstein 1999, Rubie-Davies et al. 2014). The extent of this is contested (Alvidrez and Weinstein 1999, Brophy 1983) and mitigated by how open initial judgements are to correction over time (Brophy 1983). One issue in determining impact of teacher expectations is that they are continually shaped by knowledge from a range of sources (not least their own ongoing informal assessment) with test data being only one of these (José and Cody 1971). Deeper analysis of how teacher expectations translate into practice within authentic classroom contexts (as in this study) is perhaps more beneficial (and ethical) than artificial situations where teachers have been fed false test information.

The Missing Perspective of the Child

Teacher beliefs about the nature of 'ability' are crucial to children's experience of 'ability'. Teacher perceptions impact upon children's self-esteem (Skaalvik and Hagtvet 1990). They inform the child's self-concept of their own 'ability' (Upadyaya and Eccles 2014, Skaalvik and Hagtvet 1990) and can lead to lower attaining children internalising failure within the 'self-serving effect' (Marsh 1986). Children experience 'ability' in the classroom through the learning environment (Eder 1981), 'ability' labels (Schrank 1968, 1970), type of feedback (Cooper 1979), attribution of resources (Gripton 2013) and teacher behaviour (Kususanto, Ismail and Jamil 2010). Teaching strategies are significant in children's experiences of 'ability' as they change depending upon the perceived 'ability' of the children (Macqueen 2010). Differentiation is conflated with 'ability' grouping (Park and Datnow 2017). This matching of activity to levels of 'ability' ('differentiation by task' in McNamara, Moreton and Newton 1996) leads to children labelling themselves in these terms (James et al. 2011). Children are aware that teachers' expectations vary (Robinson and Fielding 2007) and they interpret the verbal and non-verbal cues of their teachers (Weinstein et al. 1987) as well as the teaching choices made.

Testing also impacts upon children's experiences of 'ability' in school (Robinson and Fielding 2007, Griffiths 2000) where testing has led to narrow teaching, test rehearsal (Oates 2011) and a narrowing of curriculum (Robinson and Fielding 2007) to English and Maths (Einarsdóttir 2010). There are also concerns that the focus upon testing adversely effects children's well-being (Aynsley-Green et al. 2008) within a fear of failure (Holt 1982). Assessments of children's learning tend to focus upon current and past performance and do not take sufficient notice of 'what is possible' (Donaldson 1978, p.94), accepting and defining the child as they are now rather than how they can be (Feuerstein and Rand 1997).

There is relatively little empirical research into 'ability' in schools where the focus is the child's perspective. Relevant research suggests that from the child's perspective, early labelling and categorisation are not supportive of learning (Donaldson 1978, Holt 1982) and are often confused with language development which is misinterpreted as 'ability' (Vygotsky 1978). Early 'ability' judgements endure throughout schooling (Alvidrez and Weinstein 1999) and favour children from more language rich home environments. The notion of 'ability' as a 'single unalterable faculty' is therefore unfair to children at the earliest stages of schooling (Dewey 1910, p38). 'Ability' is perhaps not as useful to educators as desire to learn which all children have as inborn (Donaldson 1978) and positive dispositions for learning which can be developed (Carr 2001). Levelling and comparison of children by 'ability' not only adversely effects children's curiosity and inquisitiveness (Dewey 1910) but also their valuing of these qualities (Carr 2001) which can impact upon their lived experiences of school.

Children's school experiences are influential in the development of identity and development through identity (Pollard 1996). Early experiences are vitally important as they predict children's future school experiences (Rubie-Davies et al. 2014, Viljaranta et al. 2014, Alvidrez and Weinstein 1999) and are personally so important to children and parents (Benn 2011, Freeman and Mathison 2009) and society (Pollard 1996). Research into their experiences suggests that children have little influence over what is done in school (Einarsdóttir 2010). Young children express liking school overall (Robinson and Fielding 2007) but would like greater choice and space within which they could make choices for themselves (Kostenious 2011, Robinson and Fielding 2007, Grieble and Nielson 2002, Torstenson-Ed 2007). Friendships (Kostenious 2011), social activities (Torstenson-Ed 2007) and social spaces (Einarsdóttir 2010) at school are important to children. From the limited

available evidence, it seems clear that the democracy of education which Dewey (1916) asserts is not experienced by young children in school (Einarsdóttir 2010) as they perceive primary school to be a place of compliance to teachers whom hold the power (Robinson and Fielding 2007, Einarsdóttir 2010). Research is therefore needed to provide the missing perspective of the child that can challenge accepted notions of schooling including existing hegemonies (explored further in Chapter 2b).

The Value of this Study

Considering there are approximately 8.7 million school pupils in the UK (GB 2017) and the statutory duty to educate all children (Education Act 1996), the lack of research into UK children's experiences of school is perhaps surprising. Globally, education for all children is a priority (Sustainable Development Goal 4, UN 2015) yet there is surprisingly little empirical evidence about young children's experience of school education (MacDonald 2009). With the 'new sociology of childhood' (James and James 2004) and a focus upon children's rights (UN 1989), research with children (Harcourt and Einarsdóttir 2011) is a developing field. There are a growing number of empirical studies attending to children's viewpoints and experiences (Harcourt 2011), commonly within the Early Childhood Education research community (Harcourt, Perry and Waller 2011) with some studying school experiences specifically but more research is clearly needed. This requires a perception of children as more than 'social actors' (Vygotsky 1978) but as 'social agents' (James 2009) acknowledging that they construct schools (as social structures) as well as operate within them (Giddens 1976). From this standpoint, all school-based research should include the child's perspective including research into 'ability' in schools.

Most children in the UK have significant experience of 'ability' in the form of grouping with Campbell (2013) reporting that 78.8% of seven-year olds in year 2 classes in England were 'ability' grouped most or all of the time. Streaming appears to have increased where 16.4% of children in year 2 are in streamed classes (Hallam and Parsons 2013) compared to fewer than 2% ten years before (Hallam et al. 2003). There are suggestions that this can have a negative impact upon social mobility (Boaler 1997a) amongst fears that 'ability' judgements can be grounded in social beliefs and values (Stobart 2014). Diversity is not proportionally represented across 'ability' groups on the basis of family background, ethnicity (Ansalone 2010) and gender (Rist 1970, Eder 1981); socioeconomic status (Condron 2007, Alvidrez and Weinstein 1999); pre-school experience (Yeo and Clarke 2006) and age (Campbell 2014; Upadyaya and Eccles 2015). 'Ability' is commonplace in classrooms (Hart et al. 2004, Marks 2016, Bradbury and Roberts-Holmes 2017) with questions over outcomes for children and society meaning that it is an important area for academic study.

Academic debate around 'ability' in schools has become polarised and focussed upon organisation rather than pedagogy (Hart et al. 2004, Kutnick et al. 2005, and Blatchford et al. 2008). There is a need for both large-scale longitudinal (such has since been undertaken by Hallam and Parsons 2013) and smallscale rich expositional and explanative studies (Blatchford et al. 2008) including research taking experimental and descriptive approaches (Sukhnanden and Lee 1998). This study seeks to contribute a small-scale study through describing 'the diversities and commonalities that give shape and structure to children's everyday experiences' (James and James 2004, p.12). Children's 'small stories' (Griffiths 2003, p.55) 'unravel the complexities of everyday interaction in schools' (Apple and Weis 1980, p.149). The contribution of the child's perspective on 'ability' in schools, therefore, attempts to build bridges with childhood rather than erect fences around it (Harcourt 2011) thus crossing this conceptual threshold (Wisker et.al 2009) and making an original contribution to what is known (Trafford and Lesham 2009).

Chapter 2. Epistemology, Methodology and Methods

Chapter 2 explores the theoretical and conceptual framing of the study, including assumptions upon which it is premised, and explains the research design. It outlines the type of knowledge it intended to generate and therefore the measures of quality through which it is evaluated. Perceived as a hierarchy of research design, this chapter considers issues of ontology, epistemology, methodology and methods. These shape the research on different levels from the perception of reality (ontology) and the nature of knowledge (epistemology) at the top of this hierarchy (Hammond and Wellington 2013) to the rationale for methodological approaches taken and research methods employed. The chapter is therefore presented as three chapters: 2a, 2b and 2c. Axiology, as values within the research, is explored throughout.

Chapter 2a. Epistemology

'For what you see and hear depends a great deal on where you are standing: it also depends on what sort of person you are'

C.S.Lewis, 'The Magician's Nephew'

Issues of Epistemology and Ontology

Epistemology and ontology have, 'a place together at the top of the hierarchy when it comes to shaping a research project' (Hammond and Wellington 2013, p.58). Whilst consideration of both is vital, they do not necessarily rest comfortably alongside each other (Brinkmann and Kvale 2015). In seeking to generate knowledge epistemologically, we risk separating human from knowledge (Heidegger 2010) and should instead perform inquiry into 'the living, acting and knowing human being' (Brinkmann and Kvale 2015, p.56). This study is an inquiry into enacted human knowing of 'ability', which focusses upon personal knowledge throughout to prevent this uncoupling. In this sense, epistemology is tethered to ontology philosophically within human knowing as 'ontology is truly itself only when it is personal, and persons are truly themselves only as ontological' (Lotz 1963, in Christians 2011, p.297). This humanistic approach enables description of the exemplars (Flyvbjerg 2006, Bourdieu 1998), or 'little stories' (Griffiths 2003, p.55), of these two classrooms to come forth to contribute to knowledge of 'ability' in education as case studies (explored in Chapter 2b). Drawing upon Kuhnian understanding, Flyvbjerg (2006) points out that all disciplines and areas of study need exemplars such as this as they illuminate human experience.

The Social Constructivist Paradigm

Defining research paradigms is problematic as it could be argued that underpinning beliefs are individual (Heidegger 2010) more than within a set of external assumptions (Arthur et al. 2012, Punch and Oancea 2014). In this sense, the application of paradigms to research in the social sciences is a distortion of Kuhn's (1962) original intent (Arthur et al. 2012) and cause of 'epistemological ruptures' (Delamont, Coffey and Atkinson 2000) in the research community where understanding and delineation of paradigms is constantly shifting rendering the traditional positivist/interpretivist dichotomy redundant (Pring 2015). Paradigms are, however, significant within the development of educational research (ibid) and the criteria through which research outcomes are evaluated (Waring 2012a) but require clear, transparent explanation within the blurring of genres in research paradigm development (Geertz 1993).

Constructivism (the understanding that all knowledge is constructed, Hammersley 2008) is often conflated with interpretivism (Guba, Lynham and Lincoln 2011) and whilst this research is more interpretivist in approach, it could be more accurately described as social constructivist. 'Ability' is a socially constructed phenomenon for which a social constructivist research approach is well aligned. Within an understanding that 'interpretation is never a presuppositionless apprehending of something presented to us' (Heidegger 2010, p.146), research with teachers and children requires shared construction within social spaces. Here there are overtones of ethnography as epistemology (Denzin 1997) as ethnography treats knowledge as meaning created by people as insiders (Green, Skukauskaite and Baker 2012), drawing upon an ethnographic drive 'to understand how people enact and construct meaning in their daily lives' (Denzin 1999 p.510).

Whilst sitting firmly within a social constructivist paradigm, there are influences from critical theory. Indeed Guba, Lynham and Lincoln (2011) point out that constructivism is 'commensurable' with critical inquiry (p.111) with paradigm plurality generally considered a strength within case study research such as this (Mills, Durepos and Wiebe 2010). 'Ability' is deeply embedded and readily accepted in education (Hart et al. 2004, Marks 2016) so critical theory is evident within the feminist approach to challenging such accepted 'truths' and 'taken for granted practice' (Vendramin 2012) but also with the inclusion of ethics as epistemology.

Epistemology as enacted ethics

'Every mode of knowing contains its own moral trajectory' (Palmer 1987, p.22), therefore the process of research should not move us away from values and morals but towards them with ethics being how research is conceived and considered, at one with rather than part of the process (Green 2012). Ethics and epistemology are entwined within an 'epistemology/ethics nexus' (Guba, Lynham and Lincoln 2011, p.123) or ethical praxis (Palaiologou 2015) within research. Respect for the individual and individuality is therefore at the heart of this ethical stance (Pring 2015) and knowledge is highly personal.

This research is set within an epistemological framework that seeks to construct understanding of individual children's lived experiences. Perceptions of children and childhood are therefore key to the epistemology, which underpins the enquiry as they structure the space within which childhood is researched (Freeman and Mathison 2009). Experience can only ever be partially accessed (Greene and Hogan 2005) but for the adult researcher as an outsider to childhood this is particularly problematic (James, Jenks and Prout 1998). Researching the lived experiences of children requires the research approach to embrace the perception of children as competent, capable and responsible (Harcourt 2011). Whilst this should be afforded to all person's involved in research (Pring 2015, BERA 2011), it is often not fully enacted for research with children (Freeman and Mathison 2009) where teacher and parent voices often take the focus (Burke 2010, Atkinson and Delamont 1990) and children are researched 'on' rather than 'with' (Harcourt and Einarsdóttir 2011).

As ethics is integral to the research epistemology in this study, the individual researcher and their relationship to knowledge is central to the research approach. Buber's notion of the relational self is supportive in recognising the researcher as essentially a relational being (Friedman 1996) in relations with participants, the research focus and potential audience. Denzin (1997) suggests that this notion of the relational self can be further developed towards a theory of ethics that he terms 'feminist communitarianism' (p.274) where these multiple relations form community through which values are negotiated. This feminist epistemology and notion of epistemic responsibility (Vendramin 2012) guides research methods (Chapter 2c) enacting an ethical stance where ethics is viewed as so much more than extrinsic matters (Christians 2011) such as avoiding 'harm' (BERA 2011, p.7) but is where 'human action and conceptions of good are interactive' (Christians 2011, p.74). This study is founded on an assumption of the inherent value and sacredness of human life (which includes the lived experience of humans) within an understanding that every aspect of human existence contains ethical imperatives (Kant 2006). This aligns with a feminist ontology (Denzin 1999) with an intended social good arising from the study in terms of teacher and child voice, as a multidimensional social construction (Harcourt and Einarsdóttir 2011), within the field of research about 'ability' in education and the place of children's perspectives particularly within this:

'What this focus upon children's agency has achieved, therefore, is a reconceptualization not only of what 'childhood' is, but also of ways in which children themselves can be understood as active participants in society.'

James (2009, p.34)

Chapter 2b. Methodology

"Would you tell me, please, which way I ought to go from here?" "That depends a good deal on where you want to get to," said the Cat.

Lewis Carroll, 'Alice in Wonderland'

Case Study

'Ability' permeates everyday practice in UK schools (Wrigley 2012, Hart et al. 2004) to the extent that it is difficult to isolate within the context of classroom practice. Therefore, a case study 'strategy' (Punch and Oancea 2014) is well suited to study of such phenomena which is best researched in context (Yin 2013) with data collected and analysed in a highly contextualised (Denscombe 2014) and focussed way (Stake 1995). The term 'case study' has different uses within as well as outside of research contexts (Gomm, Hammersley and Foster 2000) but for this research denotes the study of an example. Whilst each classroom case was preserved throughout the research process, two classes were studied therefore this study provides two such examples of the phenomenon of 'ability' in the classroom. This collective case study (Stake 1995) adds strength to reliability (Gray 2013) which is commonly criticised in case study research (Flyvbjerg 2006) but also perhaps a less appropriate aim than 'stability' as explored in Chapter 2c. The intention was to provide rich expositional and descriptive research, which can make a powerful contribution to knowledge (ibid). This is particularly important in the field of 'ability' in schools where more research of this type is needed (Blatchford et al. 2008, Sukhnanden and Lee 1998) as it is an area dominated by quantitative research which measures impact of grouping practices (Boaler, Wiliam and Brown 2000).

A range of established methodologies inform the distinctive methodological approach taken in this research which could be deemed similar to bricolage (Denzin 2010, Kincheloe, McLaren and Steinberg 2011) although it could be argued that in that all approaches are hybrids in this sense (Denzin and Lincoln 2011). Primarily situated within a symbolic interactionist methodology, elements of grounded theory methodology and to a more limited extent videography (as a visual methodology) are included. Influences of an ethnographic approach are apparent also. This chapter discusses each, not as conflicting methodologies but as contributing to an integrated theoretical underpinning for the research. They blend within a methodology that is distinctly interpretivist withinthe social constructivist approach (Guba, Lynham and Lincoln 2011).

Symbolic Interactionism

Despite not being a unified perspective (Cohen, Manion and Morrison 2011), symbolic interactionist research is commonly concerned with the everyday (Denzin 2008). It is therefore an appropriate methodological approach for the study of everyday classroom experiences and the social organisation of the classroom (Denzin 1969). Within this study, individual data collection and analysis for each participant is indicative of the symbolic interactionist focus upon the individual throughout the research process (Blumer 1980) and concern that teacher and children's stories emerge. In researching children's lived experience, I was seeking to explore their 'experiences as ways of being within the social, cultural and physical spaces' of their classroom environment (Sumsion et al. 2011, p.114). Attention to the meaning that they have subjectively made of their experiences is distinctly symbolic interactionist (Troman 1999).

Symbolic interactionism seeks to side with the underrepresented, oppressed and less powerful groups within society and tell their stories (Denzin 2008). Children are an oppressed group in terms of lack of agency in school decisions (Davey, Burke and Shaw 2010; Denzin 2008; Einarsdóttir 2010) and power compared to adults (Shaw, Brady and Davey 2011). Teachers are less powerful in educational research (Ball 1981) but not to the same extent as children. Consideration of children as vulnerable (BERA 2011) within research ethics is an element of this which suggests a conception of children as a less powerful 'minority' group (James, Jenks and Prout 1998). Within this study, children are considered as competent (Fisher 2013) and capable which is driven by personal educational philosophy. My child-centred approach to my practice as a primary school teacher underpins the research approach and therefore the research could be described as following a child-centred methodology (Roberts-Holmes 2014); however, this is rarely deemed a methodology on its own and is probably aligned with critical theory. Enacting this perspective, children are referred to throughout as 'children' throughout rather than 'pupils' or 'students'.

In enacting the symbolic interactionist drive to tell the stories of the underrepresented (Denzin 2008), within this research children are conceptually framed as a group distinct from adults ('tribal child', James, Jenks and Prout 1998). This required data collection methods intended to gain access to the children's worlds as unfamiliar territory, as 'anthropologically strange' (Hammersely and Atkinson, 2007, p.9). A range of methods which sought to reveal aspects of the child's experience were therefore needed in order to cross the threshold between the adult primary classroom and the child's primary classroom without a disingenuous pretence of being within the child's world. There is no one set of participatory methods which listen to children, as it is ethical praxis (within epistemology, Chapter 2a) that enables this rather than the methods (Palaiologou 2014). The methods in this study (explored in Chapter 2c) had to therefore take account of the 'asymmetric' (ibid p.691) adult/child power relations within schools including the adult 'interviewer effect' (Denscombe 2014, p.190) which is heightened within school contexts (Kellett 2010). Measures, such as deliberately dressing to appear more like a parent than a teacher, were aimed at reducing this effect but research processes had to significantly take account of this differential to avoid adult voices overpowering the children's within the study.

To illuminate the children's perspectives, research methods were designed in order to really listen to children and hear their voices. This listening had to be more than providing time and space to listen, it needed to be more active than this, more akin to the 'radical listening' purported by Clough and Nutbrown (2012). This listening required data collection methods which utilised activity (Winstone et al. 2014) and symbolic representation (Harcourt 2011, Bruner 1986) in order to listen to the many languages of children (Malaguzzi in Rinaldi 2006). This holistic listening required intuition, tuning in and listening to body language, facial expression, pauses, gesture, what is said and what is unspoken so therefore methods which enabled these to be captured within the data (explored in Chapter 2c). Additionally, Sumsion et al. (2011) suggest that authentic attuning to younger children requires 'humility' (p.115). This humility includes both respect for their agency and an acknowledgement that it is impossible to know their experience fully (Pálmádóttir and Einarsdóttir 2016). This recognition impacts upon the interpretation and discussion of the data collected in this study as these will always be tentative (Sumsion et al. 2011).

Grounded Theory

Conceptions of individual agency are similar between symbolic interactionism and grounded theory (Waring 2012b). A grounded methodology avoids initial theoretical framing, instead allowing this to emerge from the empirical material collected (Glaser and Strauss 1967) with data analysis and collection continuing concurrently until saturation (Strauss and Corbin 2015). This study is not grounded in its theoretical framing (explored in Chapter 2c) but does take a grounded approach within the data analysis. This process, described in Chapter 2c, avoids preconceived analytical frameworks (Goldman et al. 2007) in order for teacher and children's individual stories to be represented. Theories then emerge through continual comparative analysis (Glasser and Strauss 1967) with inductive and deductive analysis approaches (Bendassolli 2013, Gray 2013). These are presented as findings in Chapter 3 and discussed in Chapter 4.

Ethnography

Whilst it could be argued that all qualitative research in schools could be deemed ethnographic (Delamont, Coffey and Atkinson 2000), there are particular aspects of the research methodology in this study that draw upon ethnographic approaches. This influence is evident in several ways including the placing of participants (and their stories) as centrally important within the research process (Pole and Morrison 2003; Pole 2004) aligned with the symbolic interactionism approach. With the focus upon children's lived experiences, children are at the forefront of this study as experts in the experience of being children (Harcourt 2011). This therefore asks the children:

What does it mean to be you in this place now in this present moment, in the past and in the future?' Clark (2005, p.35)

This study takes the question at the heart of phenomenological research, 'what is this experience like?' (Van Manen 2017), and focusses it upon children in their classrooms (an institution of their childhood, Clark 2005).

Whilst grounded theory supports the data analysis approach, this research takes an ethnographic approach in terms of seeking rich or 'thick' description (Geertz 1973) and in seeking to understand situated social action (Pole and Morrison 2003) whilst causing minimal disturbance to the social processes of the classroom (Pollard 1996). This research does not however, comprehensively study all social action, as an ethnographic work would (Pole and Morrison 2003), with the focus upon 'ability' specifically. Despite Jeffrey and Troman's (2004) assertion that time is not necessarily extensive and continuous in conducting ethnographic research, ethnographies need sufficient time for contradictions to emerge, continual analysis and theoretical development (Hammersley and Atkinson 2007). They are therefore typically longitudinal and performed by ethnographers as insiders (ibid). Whilst positioned as an insider within primary education, the researcher is not positioned as an insider within the groups of children (Alderson and Morrow 2011) or these school contexts. This research is therefore not ethnography but does draw upon some of its principles.

Visual Methodologies

Videography or 'video analysis' as a methodology was influential in the theoretical underpinning of the research process. Whilst the use of video or visual tools for data collection does not automatically imply a visual methodology (Karlsson 2012), the adoption of a multimodal approach 'presupposes that 'modes' beyond speech are worthy of analysis and relevant for interpretation' (Mavers 2012, p2). The assumption of the value of the visual as fundamentally interpretive (Knoblauch and Schnettler 2012) is apparent within the research methodology.

Being premised upon the acknowledgement of subjectivity (Rose 2001) and the idea that all action carries meaning (Schutz 1967), videography is well aligned with the symbolic interactionist methodology of this study. It affords much to researchers seeking the views of teachers and children as it includes emphases, hesitations and embodied expressions, the significance of which may not become clear until after the moment (Mavers 2012) but is underused particularly within case study research (Denham and Onwuegbuzie 2013). Videography was important in this research in providing richness and depth. For example, in the sequential 'moment by moment' (Knoblauch and Schnettler 2012, p.335) data analysis used within transcription of teacher interviews (see Chapter 2c) as this was important in preserving the context and order of the interaction (Schutz 1967). Videography is therefore appropriate for this type of phenomenological case study where the aim is this preservation of the integrity of the case (Stake 1995).

Feminist Principles (Critical Theory)

Whilst feminist research is a diverse, complex and dynamic area (Olesen 2011), there are methodological influences that can be considered distinctively feminist within this research. Most significant within these is that the experiences, values and beliefs of the individual researcher are acknowledged and embraced (Brayton, Ollivier and Robbins 2010) as important in driving the research and its potential contribution (see introductory chapter). Alongside

feminist ontological and epistemological influences (explored in Chapter 2a), the critical perspective brought by the feminist influence within the methodology supports the study focus to reconsider 'ability' as a widely accepted phenomenon in education (Vendramin 2012) and to question 'ability' *as* lived experience (Van Manen 2017) for children.

The recognition of the value of the researcher/participant relationship (Fonow and Cook 2005) and representation of teacher and child voices (ibid), within an education system that could be deemed patriarchal in nature (Anderson 1989), could also be considered feminist. Within critical theory such as feminism, perceived created realities (such as 'ability') can be questioned (Guba, Lynham and Lincoln 2011). Whilst this research is descriptive and does not seek to make recommendations, it does look beyond accepted practice regarding 'ability', which is so firmly embedded in schools (Hart et al. 2004, Marks 2016), to find children's and teachers' realities. There is a clear intention to inform and ensure that these perspectives are present within debate in the area of 'ability' in education.

A Blended Methodology

The methodology for this research is essentially symbolic interactionist but also draws upon aspects of videography and visual methodologies, feminist (critical) principles and ethnographic approaches alongside the grounded approach employed solely for data analysis. Drawing upon these overlapping and complementary methodologies strengthens the research approach and enables the realisation of the epistemology stated in chapter 2a. This blended methodology, utilising synergies between existing paradigms, recognises the affordances of existing paradigms but also emphasises their limitations in being neither specifically intended for or wholly sufficient (individually) in supporting research into children's perspectives. This blended methodology effectively supports the crafting of research methods so that 'home grown' or bespoke methods can arise which most effectively answer the research questions.

Chapter 2c. Methods and Methodology

'So be sure when you step. Step with care and great tact and remember that Life's a Great Balancing Act.'

Dr Seuss, 'Oh the Places You'll Go'

Context and Participants

As is common with case study, the classes (cases) were not intended to be representative (Yin 2013) or findings generalisable but schools which seemed more unusual were not selected so the findings might have some potential 'comparability' with other schools (Lincoln and Guba 1985). The two classes studied were essentially a convenience sample (Denscombe 2014) and are from two schools 18km apart. Table 2 provides a summary of their key features but not sociodemographic details or children's ethnicities to prevent identification of schools and children.

	Location	No. of Classes	School type	Age range	Class	Child participants	Teacher participants
School 1	City	7	Faith school, primary academy	3–11 years	30 children 6-7 year olds	6 children 6-7 year olds	7 years of teaching experience (this school)
School 2	Village	5	Primary school (LA)	4-11 years	29 children 5-7 year olds	9 children 3 5-6 year olds and 6 6-7 year olds	14 years of teaching experience (in two schools)

Table 2. Key features of two participating schools

Having initially secured consent from head teachers (as gatekeepers), consent to participate was gained from the teachers and children before and throughout the data collection process. Teachers gave written consent at the beginning of the process and the research focus on 'ability' was shared with teachers despite concerns that this might affect their responses and perhaps even classroom practice as it is essential that consent is sufficiently informed (Shaw, Brady and Davey 2011) otherwise it could be unethically deceptive (BERA 2011). For transparency, letters to the children's parents provided assurances about their right to withdraw (parent and child) and anonymity (including no images of the children). Data storage and security was a particular challenge, as is common with large amounts of video evidence (Derry, Hickey and Koschmann 2007), and reassurances about this were included in the letter to parents. These letters were written to be as accessible as possible whilst providing sufficient information about the nature of the study (appendix A, p.ii) to ensure parental consent was informed (Shaw, Brady and Davey 2011). Parental consent, although essential, was deemed to be a second stage of access rather than permission to work with their child. Ethically, only the children themselves can give their consent (Shaw, Brady and Davey 2011; Kellett 2010). For both teachers and children consent was actively sought (verbal and observed) throughout the research process (Groundwater-Smith, Dockett and Bottrell 2015; Brooks, Te Riele and Maguire 2014) including during analysis of video. This included eupraxia as sensitive attention to embodied well-being (Palaiologou 2014), analysing body language and facial expression for signs of discomfort as withdrawal of consent (in line with visual methodologies discussed in Chapter 2b).

Within data collection and analysis, children were classified as being within four broad 'ability' bands as identified by the class teachers. Following the methodological standpoint of the research, it was important that these were not used to define or label the children and indeed analysis of the data identified no particular trends within the children's experiences according to these bandings. The four bands arose from the grouping structures in place within the classrooms as observed through non-participant observation (discussed later in this chapter). This revealed differences between the two classes in how 'ability' groups were used. In School 1, seating arrangements varied for different subjects and mixed ability groups were used in the afternoon. There were three 'ability' groups with the largest number of children being in the higher attaining group, five of whom were deemed very high attaining by the teacher. In School 2, there were four tables of year 2 children reflecting four 'ability' groups (with two being 'high', one of which was higher than the other according to the class teacher). There were also two tables of year 1 children with a large higher/middle attaining group. For the purposes of this research, these were translated as: 'highest attaining', 'higher attaining', 'middle attaining' and 'lower attaining'. Here, 'attaining' is used to suggest that these are based upon current external evidence of attainment within the class assessment system. Comparative language recognises that this is solely in relation to other children within their class rather than children in general.

Data Collection Methods

Sitting within a social constructivist conception of reality as constructed together by humans (Punch and Oancea 2014), explored in chapter 2a, qualitative methods were used in on order to get closer to the teachers' and children's 'human perspectives' (Denzin and Lincoln 2011). A range of methods were needed to gain a sufficient representation of the complex and multi-dimensional world of the classroom (Corsaro 1996) and to provide the 'thick description' (Geertz 1973) required to capture the 'many-layered interpretations of social life' (Seale 1999, p.94) and plurality of child voice (Palaiologou 2017). The research focus upon 'lived experience' required several data collection methods where the children drew together their perceived experiences to construct and communicate their lived experience. The research focus upon children is evident in the balance of data collection methods (listed below) where all four involved children but only two included teachers. Listed in the order used, the data collection methods were:

- Non-participant observation of everyday classroom life (written)
- Classroom tour by individual child (video)
- Classroom representation by individual child with researcher (photograph and video)
- Semi-structured interviews between individual child/teacher and researcher (video)

Task-based methods with children, such as the second and third in this list, have been criticised for focussing upon meaning making as participation within research rather than this framing research epistemology (Palaiologou 2017). Within the understanding of ethics as epistemology (discussed in Chapter 2a), these methods were intended to engage and interest the children as this seemed 'both philosophically appropriate and pragmatically valuable' (Darbyshire, MacDougall and Schiller 2005, p.430). They provided opportunities for communication beyond merely verbal modes. In this way, there is an attempt to enact Malaguzzi's notion of the hundred languages of children (Smidt 2013), where children have an almost infinite number of ways of communicating and being, and follow a pedagogy of listening approach (Rinaldi 2007) where these are listened to within the research. This is rooted in the view of the child as competent (Fisher 2013), responsible (Thomson 2008; Groundwater-Smith, Dockett and Bottrell 2015) and a natural communicator (OECD 2007) aligned with the research axiology.

Pilot

A small-scale pilot study was conducted in a different school to evaluate the data collection methods (and support reliability, Gray 2013) which informed research design. The adult-child power dynamic was evident in the pilot and the data collection methods were therefore ordered least to greatest in terms of researcher influence in this study to reduce the impact of this. The interview was therefore the final data collection method for each child as researcher influence and control are considerable (Hammond and Wellington 2013) during the shared construction of meaning that is interview (Harcourt and Einarsdóttir 2015; Brinkman and Kvale 2015). The interview seemed the least natural for the children in the pilot study and a more naturalistic conversational flow was needed in order to generate rich empirical child-led data and authentic language. A less structured, more flexible approach was therefore used (conceptualising a more structured to less structured continuum as suggested by Minichielleo 1990 in Punch and Oancea 2014). A 'sustained shared thinking' interaction style was deemed more suitable to support greater co-construction by researcher and child (Sylva et al. 2004) although this cannot be framed as a dialogue due to imbalanced mutuality (Brinkman and Kvale 2015) as was the researcher's purposes that were ultimately being fulfilled.

Non-participant observation of whole class (written)

Purpose: To gain evidence of everyday classroom life.

Following the symbolic interactionist methodology (Chapter 2b), the actions of individuals are explained through studying the interaction between individuals (Siraj-Blatchford and Siraj-Blatchford 1997). Using open, unstructured observational note taking (Hammond and Wellington 2013), this interaction was captured through non-participant observation which immersed the researcher in the practices and culture of classroom environment (Van Maanen 2011), aligned with ethnographic aspects of the research approach (Chapter 2b). This provided researcher knowledge of the world of these classrooms including language, practices and culture to support later interactions with children/teachers and accurate interpretation of data during analysis (ibid). Whilst less intrusive, this method did include some researcher influence within the recording and analysis of the observation and as a presence within the classroom.

Classroom Tour (video)

Purpose: To find what the children thought was important within their classroom.

The children were asked to conduct a tour of their classroom without the researcher present in an empty classroom to capture their perspective with minimal adult influence. The children seemed to take ownership of this with tours ranging from 38 seconds to 26 minutes including between one and five video clips. Each child was shown the camera using consistent instructions (explained verbally and in written form, appendix B, p.xi) to support consistency and therefore reliability. Within this demonstration, video was captured and replayed so that each child was aware of the recording. For data analysis, each demonstration video recording was reviewed alongside the child's to look for evidence of researcher influence in guiding the child but this was not apparent for any of the classroom tours recorded. Many children asked to watch their footage afterwards and this is perhaps a missed

opportunity to capture further child interpretation and seek clarification (Darbyshire, MacDougall and Schiller 2005).

The classroom tour required the child to be alone in the classroom with the video camera without interruptions so were recorded at break times, assembly times and Physical Education (for example sport, gymnastics or dance) lessons when the children were away from the classroom. To enact ethical responsibilities to minimise detriment to participants (BERA 2011), there were some time gaps between the different activities for each child as this ensured that no child missed the whole of a school activity. It was therefore particularly important to look for signs of withdrawal of consent (such as looking distracted) due to not wanting to miss the alternative activity.

Classroom representation (video and photograph)

Purpose: To find the constructed meaning each child made from their classroom experiences.

Children were given a box of small world toys (Playmobil®) with which to make a classroom with the simple instruction, 'make a classroom with the things in the box'. Some children represented their actual classroom whilst some were more imaginary but this choice was theirs as it was important within the research methodology and ethics that children felt responsible and had ownership of their part within the research (Bucknall 2012). Similarly, the children took their own photograph when they felt it was complete, reducing adult influence upon data collection (ibid) and enabling data analysis to assume greater security (trustworthiness).

The small world toys were carefully selected but are clearly an adult influence within the data collection. An alternative might have been to use a more open-ended media such as drawing, which can be a powerful tool for children to communicate lived experience (MacDonald 2009), but this would have been more limiting in terms of manipulability. The small world toys provided substance to the children's representations without restricting or guiding them too significantly. This meant that in addition to books, tables and computers some more ambiguous pieces were provided (for example fences and benches) as well as some less expected pieces such as a skateboard and baby bottle. Many figures were provided and these were deliberately varied in terms of size, clothing and ethnicity with some religious items included (School 1 is a faith school). Using knowledge gained through non-participant observation, figures were included with similar physical characteristics to the children and teachers in the classes so that there was an option to closely represent their actual classroom.

It was important for validity and accuracy that each child interpreted their own classroom representation rather than the study relying upon researcher interpretation (Darbyshire, MacDougall and Schiller 2005; Einarsdóttir 2010). This was notably evident when Diya was asked why she had placed a hat on a figure and responded saying, "it is just for her style". Without the child explanation, the adult researcher might have attributed significance to this that the child had not intended. Some children discussed their choices from the outset but others were initially quieter and were only prompted to explain their thinking after they had made substantial progress. In this way, the constructed classroom has the benefit of not requiring an immediate response which other methods such as interview do (MacDonald 2009). Darbyshire, MacDougall and Schiller (2005) found that a major limitation of their study was that adults interpreted children's photographs, criticising this for engendering of an adultist approach. In this study, capturing children's explanations provided stronger data analysis but the interpretation of this evidence remained within the adult domain. This is a major criticism of this study where the quality of the research could have been improved if the children had been included in the data analysis and presentation processes. For example, an advisory group of children from different schools/classes (Shaw, Brady and Davey 2011) could have supported a more authentic interpretation of the data crucially from within the tribal world of childhood (James, Jenks and Prout 1998).

Semi-structured Interview (video)

Purpose: To find individual children/teacher's perceptions of their everyday classroom experiences (and for teachers, their rationale for their teaching choices).

Following the pilot study, a less structured semi-structured interview approach was taken with children and teachers. With this, there is an element of 'reflection in action' (Schön 1983) in order for the benefits of prompting, probing and adaptation to be realised and the method legitimate (Brinkmann and Kvale 2015). A transparent data analysis process and triangulation with data collected through other data collection methods were therefore essential in order to ameliorate the potential for detrimentally significant researcher influence upon the data.

Video recording rather than audio recording of the interviews enabled capture of verbal and non-verbal (gesture, facial expression, pauses and eye contact) communication. This provided depth and detail and therefore richness to the data which case study research design seeks to generate (Yin 2012) and was particularly 'enlightening' (Mavers 2012, p.2) for the teacher interviews where emphases, hesitations, facial expression and gesture provided much additional communication of thinking.

Video is underutilised in qualitative research (Kissman 2009, Denham and Onwuegbuzie 2013) and case study research in particular (ibid) despite much interest in researching the non-verbal (Knoblauch 2012) and advances in available technology (Jewitt 2012). Video does not capture all aspects of social interaction (Peräkylä 1997 in Gray 2013 and Groundwater-Smith, Dockett and Bottrell 2015) but does provide 'unprecedented access to the minutiae of social interaction' (Knoblauch and Schnettler 2012, p.335). Whilst interpretation remains subjective, video capture of interviews did reduce subjectivity in this study. It provided time for significance to become apparent beyond immediate interpretation (Mavers 2012) and valuable triangulation between the verbal and nonverbal data collected. Video additionally supported research ethics as it provided a constant reminder of the interview purpose and potential future use with the prominent desktop tripod and camera. Indeed, there is evidence within the interviews that both children and teachers did attend to the video camera, referring to it or looking at it and even addressing it, all suggesting ongoing informed consent (Kellett 2010).

Data Analysis Methods

Researching lived experience requires consideration of lived experience in its entirety (Løndal 2010) so data from each child was analysed individually. This avoided the tendency in research, that Einarsdóttir (2010) identified, to listen to the voices of the children who provide the most data whilst also avoiding treating them as a heterogeneous group (Warming 2011). Data from the two case study classes was similarly analysed and is presented separately (Chapter 3) to maintain the integrity of each case, avoiding comparison usurping and simplifying the complex and distinct nature of each classroom (Stake 1995).

Following a grounded approach, without assumed structure or enframing (Waring 2012b), a staged data analysis process was followed. Staged inductive analysis was supportive in ensuring all evidence was duly considered (Gray 2013), in balancing reductionism and complexity (Jewitt 2012) and in acknowledging researcher interpretation.

The stages of data analysis, presented in table 3 (p.54), show a gradual and deliberate progression to grouping data together for analysis (child then teacher then class). Stages 1b and 2a/b were free coding where codes were created freely, arising from the data. These were then matched, grouped and renamed in stages 1c and 2c to provide consistent codes for use in the research. 'Ability' featured throughout the analysis of the teachers' data but only from stage 1c for the children's data allowing the children's experiences to be interpreted holistically as lived experience (Løndal 2010). The staged approach ensured that non-verbal evidence was represented through the data analysis process, recognising that nonverbal evidence is often underrepresented in research findings (Onwuegbuzie and Byers 2014) or omitted from studies (Denham and Onwuegbuzie 2013).

Table 3. Stage of data analysis

Data	Process	Analysis							
	Stage 1a	Summary of data collected from each data collection method for each child							
Child	Stage 1b	Overview summary and initial coding for each child							
	Stage 1c	Standardisation of coding							
	Stage 1d	Grouping of codes into themes							
	Stage 2a	Teacher interview transcription (verbal) and initial coding							
Teacher	Stage 2b	Teacher interview transcription (nonverbal) and initial coding							
Ĕ	Stage 2c	Standardisation of interview coding							
	Stage 2d	Grouping of codes into themes							
	Stage 3a	Coding of non-participant observation records							
	Stage 3b	Standardisation of coding across data sets							
Class	Stage 3c	Collation of summarisation of all data into class sets							
Ū	Stage 3d	Grouping of codes into themes							

Validity and Authenticity

It could be argued that validity is embedded within the research design in terms of the integrity of each method (Richardson and St.Pierre 2005) and efficacy of each method for its intended purpose (Punch and Oancea 2014). Multiple data collection methods enabled the expression of different aspects of children's and teachers' experiences (Darbyshire, MacDougall and Schiller 2005) providing complementary (rather than duplicated) data (ibid). This enabled methodological triangulation (Kumar 2014, Gray 2013), improving the construct validity of the research and therefore the validity of the findings overall (Yin 2013). Research validity is also supported by the 'data triangulation' provided through the two-site case study so two of Denzin's four basic types of triangulation (1970) are included in this research.

Triangulation methods do not, however, strengthen research validity themselves (Denzin 2010). Instead, it is the credible interpretations of the data (Silvermann 2013), within these triangulation methods, that strengthens research validity and therefore the claims for knowledge created (Denzin 2010). The triangulation achieved in this research, is limited in that it is internal (within data from the same classroom context) however triangulation with data from outside of this would have risked a loss or decontextualisation of data and therefore its ethnographic nature (Wilson 2013). The qualitative case study emphasis upon internal triangulation, described by Richardson and St.Pierre (2005) as 'crystallization', is naturalistic (Gomm 2009) or strong in 'ecological validity' (Seale 1999, p107). This authenticity is a more appropriate indicator of research quality than validity for this study and indeed all social constructivist research (Guba, Lynham and Lincoln 2011, Kumar 2014).

Data collection methods were designed to authentically capture children's and teachers' voices and faithfully represent their perspectives within an understanding that their first-hand accounts represent snapshots of multiple and fluid perspectives (Warming 2011) which we can never fully know (Sumsion et al. 2011). Particularly for the children's perspectives, this required deliberate attention to agency (Adair 2014) through providing data collection methods that could act as mechanisms for voice and choices to emerge (James 2009). For example, the classroom representation utilised play (or a play-based approach) as the language of childhood to represent their perspectives authentically. Both data collection and analysis remained contextualised within the social construct of the classroom, as the children's and teacher's life worlds (Husserl 1970), to provide this authenticity.

Reliability and Trustworthiness

Faithful adherence to the research question and the purpose to describe (Yin 2013) support the reliability of this research, however reliability is perhaps a less appropriate measure of research quality for this study. A perception of reduced intrinsic value for qualitative data can arise (Wilson 2013) where reliability is considered as replicability, consistency or generalisability (Cohen, Manion and Morrison 2011; Gomm, Hammersley and Foster 2000; Seale 1999). For research situated in a social constructivist paradigm such as this, trustworthiness is more appropriate (Denzin and Lincoln 2011; Guba, Lynham

and Lincoln 2011). Trustworthiness is essential if research is to make a contribution to knowledge (Hammond and Wellington 2013) and is the stability (Gray 2013) or dependability (Lincoln and Guba 1985) of the findings rather than the 'extent to which a test or procedure produces similar results under constant conditions on all occasions' (Bell 2010, p.103). The pilot study, methodological triangulation, multiple case study approach, method consistency and transparent grounded analysis all support the stability of the findings of this study.

Researcher integrity is a key aspect of trustworthy research that supports this research through open and honest presentation of the research design and data (Gray 2013) within a recognition that all research is persuasive (Clough and Nutbrown 2012) from a post-modernist perspective (Hammersley 2008). Subjectivity can be deemed a problem within qualitative research (ibid) but can be a great strength (Gray 2013), such as in this study, providing insider knowledge and personal investment. Grounded data analysis provided rigour to this work (Seale 1999) by preventing findings arising from preconceived notions (Flyvbjerg 2006, Yin 2013). This is supported by the use of some methods with low inference descriptors (such as non-participant observation and classroom tours) which enhance trustworthiness through lower level researcher influence (Seale 1999, p.158).

Respect for the quality of educational research is an aspect of research ethics (BERA 2011). Ethics are therefore connected to research quality through trustworthiness in case study research (Bassey 1999). An ethical approach underpins this whole study (Wallace and Atkins 2012, Geertz 1973), intrinsic within the social constructivist epistemology discussed in Chapter 2a, and contributes to the trustworthiness of the findings. This is evident in the ethnographic familiarity and approach to relationships, for example. Central to this is the respect for people (Bassey 1999), participants and nonparticipants, achieved in this research. This included gaining initial and continued informed consent (including signs of consent), the familiar classroom context for data collection and anonymised data recording but was more fundamental than a series of measures. Essentially, the aim was to 'support or even enhance their [participants] dignity' (Seidman 2015, p.143).

This was both a moral imperative and a recognition of the imbalance within the researcher/participant relationship due to the lack of reciprocity (Brinkmann and Kvale 2015).

Additionally, both professional ethics and research ethics were fundamental in this research (Fulton et al. 2013). Teacher participants have their own professional code (Teachers' standards, GB 2011a) and professionalism (a code that is individual, shared but unwritten; Wallace and Atkins 2012). There was therefore an ethical responsibility to the teachers as participants (their wellbeing and anonymity) but also to their colleagues and pupils (to whom they have professional responsibilities). The research findings and discussion are therefore presented in the following chapters without images (of the children, teachers and school buildings) and details which might identify the participants even where the information was relevant to the research questions or given freely by the children and teachers. Despite the case study 'thick description' (Geertz 1973) sought, some detail and depth was removed (where it was less relevant) in being cautious to maintain participant anonymity as this is particularly challenging for educational case study research (Bassey 1999).

Chapter 3. Key Findings

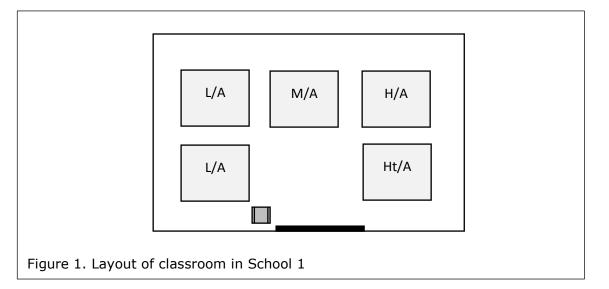
"Anyone can ask questions," said Mr. Wonka. "It's the answers that count."

Roald Dahl, 'Charlie and the Great Glass Elevator'

Remaining faithful to the case study strategy (Punch and Oancea 2014), the findings are considered as cases with 'thick' descriptive summaries (Geertz 1973) to provide a 'rich picture' (Hamilton 2011) of 'ability' in each class. Each are stand-alone exemplars (Flyvbjerg 2006) of children's experiences of 'ability' in primary classrooms that are admittedly snapshots and partial stories due to the fluid and personal nature of experience (Pálmádóttir and Einarsdóttir 2016). Through considering the children's and teachers' experiences together they remain contextualised, retain integrity as cases (Stake 1995) and are ultimately more real (important for research quality as discussed as authenticity and trustworthiness in Chapter 2c). These classroom stories, as 'living' cases of education (Hamilton and Corbett-Whittier 2013, p.179), are intended to align with the educationalist intended audience of this work (ibid).

School 1

School 1 is a one form entry primary and nursery and is a faith school. It is located in a large housing estate in a suburban area of a city. The class is a year 2 class of thirty children whose classroom is in between the school hall and year 1 classroom. The teacher explained that there were three identified within-class 'ability' groups with the largest number of children being in the higher attaining group, five of whom were deemed very high attaining. They were generally seated on five tables with the lower attaining group on two tables to the left of the teacher chair. The middle attaining group were in front of the teacher chair and the two higher attaining groups to the right, with the very highest attaining group nearer the teacher chair (figure 1). Each child was in three different groupings with a set place to sit in each. These were 'ability' related for the maths and English groups then a mixed 'ability' group for all other subjects. The class teacher had been teaching for seven years and had experienced one Ofsted inspection in this time.



In the non-participant observation of classroom life (appendix C, p.xii), the children in School 1 demonstrated significant independence in enacting clearly structured classroom routines. They moved efficiently between a number of different seating arrangements and knew when and how to do classroom 'jobs' without prompting. The class moved between chairs at grouped tables and sitting on the carpeted area of the classroom where there was either teacher instruction or paired talk time. When seated at tables, independence was less apparent than in routines. There was a significant amount of adult / child interaction with the teacher interacting predominantly with higher attaining children and the TA with lower attaining. There was also a substantial amount of child/child interaction where children most commonly interacted with others in the same attainment group as them. 'Work' was a dominant feature of classroom activity within the observed morning (see p.93 for a definition of 'work' within the context of this study).

Summaries of the key findings for the children and teacher are provided here with more detailed summaries of the children's data in appendix D, the teacher interviews in appendix E and the non-participant classroom observation in appendix C (also for individual children in appendix D).

Adam

Adam seemed to have an awareness of behaviour within his experiences of school as he included a 'naughty step' in his classroom representation and explained in his interview that the teacher chose where people were seated, related to where they would sit most 'sensibly'. He was observed receiving a behavioural reminder from the TA in the non-participant observation. The TA seemed important within his lived experience as he included a TA in his classroom representation. This suggests that the TA's interactions with him, observed in the non-participant observation, are significant for him (three of four entries for Adam were adult-initiated interactions with TA). Adam talked about a range of children in his class and had an awareness of their performance within classroom activities including evidence for how he knew this but focussed mainly on his friends in his groups when discussing this in his interview. He talked about reading and writing for most of the interview, classroom representation discussion and the classroom tour suggesting that these are most prominent to him within his experience, perhaps related to his dyslexia, which he discussed in his interview.

Keywords or phrases: mainly aware of his immediate experiences, behaviour, core curriculum

Brooke

Brooke included two separate classroom areas in her classroom representation with the younger children (5 years and under) in a different class. She included a reward for behaviour in this representation and discussed behaviour in her interview as something she would like to improve for some children in her class. From her interview, she seemed clear that if you are doing well with some work then you 'get moved table' and that the table relates to the level of questions you are doing with the teacher sometimes giving easier questions to build confidence. She was observed twice interacting with children deemed lower attaining in the non-participant observation where she helped them with their work (once independently and once under TA instruction). She explained that there was sometimes a difference in the work but not the questions that they were asked on the carpet (observed being asked an individual question in the classroom observation). Keywords or phrases: social, work, wider awareness beyond classroom, behaviour

Christopher

Christopher talked about his friends in his classroom representation and his interview. In both, he talked almost exclusively about the same small group of children that he sits with and knows socially outside of school. He was noted talking once and listening once to these children in the classroom observation. In his interview, he talked about where he sits but seemed unsure about the other tables or the reasons why the teacher sat them there. He expressed a desire to play more at school. From his tour and interview, he seemed keen on topic-based work and would like more of this at school (around his interests). Christopher had six adult-instigated interactions with adults (five with TA) in the non-participant observation but did not explicitly label any figure in his classroom representation as a TA and seemed to attend more to child / child relationships than adult ones.

Keywords or phrases: child/child relationships, awareness of immediate experiences and relationships

Diya

Diya was deemed middle attaining according to her teacher. Diya talked extensively about mathematics and English (grammar and spelling in particular) in her tour of the classroom and interview. She talked about displays 'showcasing' the children's work in her tour and interview. She discussed the different levels of work in mathematics and was very clear about the tables relating to 'ability' and harder or easier work. She explained that the teacher sometimes moved the children to sit in different groups to get easier work if they were struggling with the harder work and this was observed happening for Diya in the classroom observation (he teacher told her "don't worry" when she was moved). Whilst using the term, 'we' throughout her tour and interview she talked little about other children. When prompted, she quickly identified children in her class who were good at particular activities but her awareness seemed more related to her immediate experiences. Keywords or phrases: work, curriculum, system, 'ability' grouping, awareness of her immediate experiences

Hal

Hal was deemed lower attaining by his teacher. He expressed a desire to play more at school explaining how this had changed from his previous class to this in his interview and including some play-based elements within his classroom representation. He represented dinnertime (including mid-day supervisor) and home time in his representation and showed parents waiting to collect their child behind a barrier and a priest visiting the class. He also talked about transition points within the school day and between classes in his interview. He talked about being 'busy busy busy' and different levels of work in his interview, showed exercise books in his tour and showed the teacher marking books in his representation which suggests that he felt that 'work' features strongly within his school experiences. This is borne out by observations of him in class (appendix D, p.xxvi) where he interacted with an adult nine times specifically about his work (out of twelve entries about Hal). He interacted with the teacher only when he initiated this but the TA talked to him about his work on eight occasions during the observation.

Keywords or phrases: work, social, transitions, whole class and whole day awareness, child/child relationships, play, adult/child relationships

Jasmin

Jasmin was deemed middle attaining by her teacher. She included a number of adults in her classroom representation (including helpers, teacher, TA and researcher) and in her interview said that the teacher and TA set the work based upon 'how imaginative you are'. The importance of adult / child interactions within Jasmin's lived experience of the classroom was also apparent in the non-participant observation of her class where she was observed being questioned and supported by the teacher and TA. She included two classes in her representation, showing the other class as playing in the bricks and expressed a wish to play in her interview also. The social aspects of classroom life are evident here and through observing her interact with other children from the middle attaining group in the observation. In her interview, she linked where you sit to how good you are at a subject and connected table groups with A, B and C tasks. This connection between work and tables was also apparent in her discussion of her classroom representation where the TA is calling children to the table to do work.

Keywords or phrases: awareness of whole class and beyond, social, adult/child relationships, play, 'ability' grouping/system

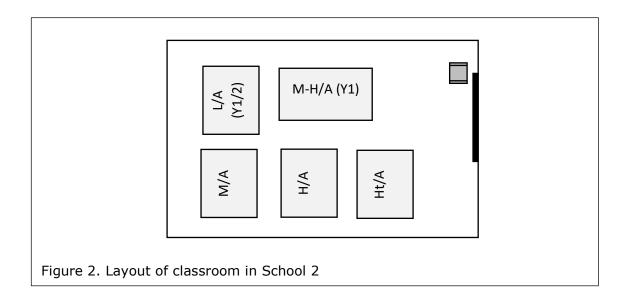
Teacher 1

The teacher in School 1 felt that fostering children's independence was very important in her classroom (expressed through interview and observed in children's routines in the non-participant observation, appendices E and C). She was clear that curriculum was significant (appendix E, 2-4/46-48mins) and discussed this in terms of coverage but that this needs to be taught through contexts or topics that children are interested (evident in the interviews with Adam, Brooke and Christopher's and Christopher's classroom tour). She appeared to have a three level conception of 'ability' and used 'ability' to inform teaching choices in order to meet curriculum demands and children's needs (constant challenge and support/consolidation). 'Ability' was the main factor in assigning children to groups but she drew upon other factors including progress and behaviour (appendix E, 4/8mins). She felt that children had a role in deciding whether work was too difficult or easy for them with flexibility to move children for individual activities (evident in both Diya's interview and observation of her). She was keen that the children felt valued as individuals by her as their teacher with strong teacher/child relationships important within this (related to her own negative experiences as a child). She explained that knowing the individual child was crucial to personalisation and knowing all of their abilities with 'ability' deemed to include academic, social and practical elements (appendix E, 43-49mins).

School 2

School 2 is a small primary school of four classes in a village location. The focus class was a mixed year 1/2 class of twenty-nine children who were mostly in year 2. The classroom was adjacent to a mixed Reception/year 1 class and a shared teaching space. In it, there were five tables (a lower

attaining group of mixed year 1/2s, three tables of year 2 children (middle, high and highest attaining groups) and one table of middle/high attaining year 1 children. The table for the lower attaining group was in the far right corner of the classroom with the middle/high attaining year 1 table in front of this. The year 2 middle attaining group table was in the far left corner with the higher attaining group table in front of this and the highest attaining group table in front of this, to the left of the teacher's chair (figure 2). The children sat in a set place on their group's table all of the time unless changed for a specific activity and had set places to sit within these groups on the class carpet area. The children were mixed with children from another class for phonics lessons into three across class 'ability' groups or sets. The class teacher works as a job share, has been teaching for 14 years since completing a three-year undergraduate teacher-training course and has taught in Key Stage 1 for the last nine years where there have been three Ofsted inspections.



In the non-participant observation in School 2 (appendix F), adult / child interactions dominated with a significant number of behavioural reminders. Child / child interactions were fewer and typically part of curriculum-based learning activities that were teacher directed, for example paired talk to orally rehearse sentences for writing. There were two TAs working with the class. One TA did reading outside the classroom with individual children who left the room for short periods throughout the observation. The other TA generally supported the lower attaining year 2 group and the year 1 group when they were working at tables in the classroom and completed assessments when the

children were on the carpet with the teacher. Classroom systems seemed an important feature of classroom life with an activity per day for registration, a novel read at milk time and class roles for individual children. The 'ability' groups were a key part of this with these groups used for organisation (such as registration, dismissal and book bag storage) as well as lessons. In the non-participant observation, there was evidence of a range of uses of groupings. In one observed lesson the higher and highest attaining groups were given different teaching sessions on the carpet and in another mixed 'ability' pairings were used in a teacher-led activity. Work was an important element of classroom life with three pieces of work for children to complete during the observed morning.

Summaries of the key findings for the children and teacher are provided here with more detailed summaries of the children's data in appendix G, the teacher interviews in appendix H and the non-participant observation in the classroom in appendix F (also for individual children in appendix G).

Chloe

Chloe talked very much about the children in her group and included three children in her classroom representation suggesting her awareness was more focussed around her immediate experiences. In her interview, she did talk about the system for seating all of the children in her class and included four further children in a playground in her classroom representation. Chloe talked about 'work' when discussing this representation and in her interview talked about the different 'work' (easier/harder) that the year 1 and year 2 children receive. In the non-participant observation, her group were given different work by the teacher in a separate carpet time but she was later observed rubbing out her work after looking over at another table and seeing that theirs looked different. Chloe talked significantly about play, showing this in her representation, class tour (role-play) and interview (favourite activities and activities she would like to do) and seemed to view work and play as in conflict (evidenced in her classroom representation where the teacher is telling the children not to play but to do their work instead).

Keywords or phrases: awareness of immediate environment, work, play, system

Freya

Freya expressed a desire to sit with her friends (she calls them her 'friend friends') in class and explained asking her teacher about this, expressing a feeling of isolation without a child to sit next to. She talked at length in her interview about the different groups and the different work they get (also in her classroom tour) as well as their different abilities as she sees them, showing admiration for what the highest attaining children can do. This awareness was perhaps connected to her requests for help with her work (two within the observation) and desire to have a child sit next to her to help her, expressed in her interview. She talked about behaviour (in both her interview and classroom representation) and had two behavioural reminders from the teacher during the observation period.

Keywords or phrases: play, system, behaviour, social, awareness of most of the class

Georgia

Georgia seemed to be keen on play-based experiences and quieter or more orderly ('neater') learning spaces. She said she would like to move groups to a smaller, neater table and her classroom representation was very orderly with smaller and larger children in different rows. She seemed clear, in her interview, that the seating in her class was fixed. She talked about many different children from her class, had an understanding of their individual skills and included fourteen children in her representation. Georgia was praised and helped by the TA during the non-participant observation. In her interview, she explained a two-tier system of work (easier and harder) for the two year groups in the class.

Keywords or phrases: structure, awareness of whole class environment, physical environment

Harry

Harry seemed to evaluate his school experiences and appeared to express preferences with ease in his interview. His awareness of his school surroundings seemed quite extensive from his classroom representation (which included two classrooms, bathroom and head teacher's office) and from his explanation of his group being massive compared to the other groups (interview). He was clear that different groups get different work and gave an example to support this in his interview. He seemed to have interpreted the groups as being age-related with the oldest children being in the highest attaining group. Harry's eight entries in the non-participant observation record are all interactions with adults (four with the teacher and four with a TA). He had help or sought help with his work five times during the observed period but work did not feature strongly in his interview, classroom representation or classroom tour.

Keywords or phrases: awareness of whole class (and beyond), age-related grouping, wider curriculum

Joseph

Within his interview, Joseph expressed a desire to move groups and sit with his friends in the next group as he knows them socially. This isolation within his current experiences were perhaps echoed in his classroom representation where each child was seated on a separate table. He talked almost exclusively about children deemed higher and highest attaining and included five children in his representation suggesting his awareness was related to his immediate experiences. Joseph seemed to have made observations about how classroom systems work as they relate to him but not beyond his immediate experience and did not seem to have reflected further on this, answering 'I don't know' to some 'why' questions (although this could also be a reluctance to answer for his own reasons). In the non-participant observation, Joseph had different work and separate teaching (as part of the highest attaining group) but did not seem to have recognised this difference in his interview, classroom representation and classroom tour. Joseph talked significantly about work and imagines papers (work) on the desks of the children in his classroom representation.

Keywords or phrases: adult/child relationships, core curriculum, work, 'ability' grouping, awareness of immediate environment

Megan

For Megan, the social aspect of schooling seemed important to her as she represented dinnertime first in her classroom representation and stated in her interview that she likes playing with friends, getting helped and being helpful at school. This was further supported by her discussion of role-play and inclusion of the role-play area in her video tour. She was clear that the year 1 and year 2 children get different work (harder and easier) and that some year 2s do the easier work as well as the year 1s but seems to have formed little opinion from this beyond making this observation. Of the two entries about Megan in the non-participant observation record, both were with TAs (her work was praised by a TA on one occasion and she left the classroom to read with a TA on the other occasion).

Keywords or phrases: social, role-play, positive relationships (child/child and adult/child), awareness of the classroom and beyond

Olivia

Olivia seemed to have a keen awareness of her physical learning environment, she did a detailed video tour showing many resources to help the children as well as evaluating them. She represented her actual classroom quite literally with the small world toys. She was aware that not all children get the same work and demonstrated awareness of which group were lower attaining. She had perhaps been attentive to differences in teaching or tasks for particular groups, for example the separate maths teaching and work observed in the non-participant observation. Olivia seemed to have rationalised placement in the lower attaining group as being due to these children having less experience of being in the class. She had noted the amount of adult help individual children received and which reading book each child was on in order to identify which child she thought was the cleverest reader. In her interview, she twice reported that the groups and seating do not change except at the beginning of the school year.

Keywords or phrases: physical cues, awareness of whole class, role of adults, 'ability' grouping, work

Petey

Petey talked about the children on his table and the next table almost exclusively in his interview and seemed to have little awareness of the children beyond his immediate experiences. Petey referred to being clever as putting your hand up and put the hands up on the figures in his represented classroom (one of which was him). He talked about his preference for playbased experiences in his interview and showed a model made using construction toys in his video tour suggesting play was important to him. He talked about following teacher instructions including over where to sit and seemed to accept 'work' as a necessity, talking about 'his job', 'paperwork' and being clever as getting the work 'all done' and doing so independently. Behaviour seemed important within Petey's lived experience of the classroom. He received a specific individual behavioural reminder when a general one was given to the whole class (non-participant observation) and he discussed behaviour in his interview. He explained that he had to stand on the carpet when he had done something wrong (giving the example of punching) and also said that he puts his hand up and does not "shout". Petey's classroom representation did not include a TA and he did not mention a TA in his interview but seven out of his nine entries in the non-participant observation record were TA interactions initiated by the adult.

Keywords or phrases: behaviour, play, children in his immediate environment, work

Rachel

Rachel's classroom representation and interview are evidence of an underpinning consideration of social structures. She discussed and represented families and adult/child relationships in both. Relationships with adults were also evident in the non-participant observation with all four recorded entries being interactions with the class teacher (two initiated by Rachel). She was clear in her interview about the social structure of the classroom. Her group (highest attainers) were separated from the higher attaining children to ensure that they got work that was sufficiently 'tricky' for them and at their 'level', according to Rachel. This suggests that she had attended to times when her group were given different tasks or teaching (for example the separate maths teaching and activity for the highest attaining group in the observation). There is an implication in her interview that this is what the teachers and head teachers wanted (for some children to need harder work than others). Her classroom was not representative of her class (no figures were given real life names) and was perhaps more how she might like it to be (girls only).

Keywords or phrases: social structure, adult/child relationships, 'ability' grouping, segregation (gender, ethnicity and 'ability'), awareness of higher attaining children, work

Teacher 2

The class teacher in School 2 felt that meeting children's needs was important in her teaching. Differentiation was crucial in meeting needs and she expressed frustration at not being able to meet all children's needs (appendix H, 87-88mins). Due to influences from outside the classroom, such as curriculum, assessment and monitoring, the pedagogic choices she employed to meet children's needs were quite overt as the differentiation needed to be explicit in the work given (appendix H, 34mins). This was evident in the children's recognition of different work (Freya, Olivia and Rachel) and TA support (Olivia) for different 'ability' groups. It was also evident in the nonparticipant observation where differentiated work and teaching featured (appendix F). This differentiation seemed to interact with a drive to meet curriculum expectations as this also featured significantly in her interview. There is further evidence of this in the non-participant observation (appendix F) and in Harry, Olivia and Rachel's data (appendix G, p.lxvii/lxxii/lxxv). Teacher 2 appeared to have an understanding of 'ability' as being fixed and largely heritable (appendix H, 74-77mins) and deemed academic 'ability' to be crucially important but included confidence within 'ability' also (appendix H, 67mins) and felt that enjoyment and experience were important in school based upon her own positive experiences of primary school as a child.

Overview of children's data from School 1 and School 2

Table 4 (p.71-72) provides an overview summary of the codes recorded for each child's data from School 1 and School 2.

Table 4. Summary overview of coding for children's data

Key

Scope of Awareness							
Structural							
Social							
Pedagogic							

	Name Deemed Attainment			Awareness of immediate	Curriculum	System	Physical env.	Social activities,	Relationships		Behaviour	Play	Work
School 1		(teacher)	class (and perhaps beyond)	experiences				interests and learning	child / child	adult / child			
	Adam	Lower attaining		Х	х						×		
	Brooke	Higher attaining	Х					х			×		x
	Christopher	Lower attaining		Х					x				
	Diya	Middle attaining		Х	х	х							x
	Hal	Lower attaining	Х				х	х	x	x		х	x
	Jasmin	Middle attaining	Х			х		х		х			

continued over page

	Name Deemed Attainment			Awareness of immediate	Curriculum	System	Physical env	Social activities,	Relatio	nships	Behaviour	Play	Work
School 2		(teacher)	class (and perhaps beyond)	experiences				interests and learning	child / child	adult / child			
	Chloe	Higher attaining		Х		x						x	x
	Freya	Middle attaining	X			х		x			x	х	
	Georgia (Y1)	Mid/high attaining	X			х	х						
	Harry (Y1)	Mid/high attaining	X		х	х							
	Joseph	Highest attaining		Х		x							x
	Megan (Y1)	Mid/high attaining	X					x	×	х		x	
	Olivia	Highest attaining	X		x		х						x
	Petey	Lower attaining		Х							х	x	x
	Rachel	Highest attaining		Х	x	x				х			

Chapter 4. Discussion

'The river still chattered on to him, a babbling procession of the best stories in the world, sent from the heart of the earth to be told at last to the insatiable sea.'

Kenneth Grahame, 'The Wind in the Willows'

Introduction

It is clear from the research findings (Chapter 3) that each child's lived experience of 'ability' was very different. Their interpretation of the same context, activities and systems varied considerably depending upon the focus of their attention, their significant relationships and their individual way of making meaning. Key themes emerged within the data analysis which have been broadly termed structural, social and pedagogic but it was the interplay between these which shaped each individual child's lived experience of 'ability' rather than the themes themselves. The very size or scope of this lived experience varied with some children's attention being on their immediate experiences and relationships and others being much broader.

Scope of Children's Awareness

The size or scope of the children's 'life-worlds' (Merleau-Ponty 2005) within their classrooms was a significant factor in shaping their lived experience of 'ability'. As table 4 (p.71-72) shows, eight children's data was coded as suggesting that the child had a larger scope to their classroom world. These children's data demonstrated an awareness of the whole class and perhaps beyond, evident in their discussion of their peers and classroom activities. Megan from School 2 is an example of a child who was deemed to have a wider awareness within the analysis of her data (figure 3). Her attention seemed to be on her whole class with awareness of children across the groups.

Joseph



Children seated at their desks doing work on paper and the teacher doing a demonstration. He reported spending most of his time in class "at my desk". He gave his group name and listed the children who sat at the same table as him. He was clear that he does not choose where he sits and that the teacher [named] does. He laughed when he said he did not know how she chooses.

Megan



Two tables of children in the dinner hall, four children in class doing work with a teacher and one child on the playground.

She explained that one year 2 group do the same work as the year 1s [lower attaining], "any tables that are on that side [sweeps right hand forwards], they do easy work". She said she did not know why these year 2s did easy work. She said a girl from the table next to her [lower attaining year 2] was really good at running, a year 2 girl from the highest attaining group was good on computers and a boy from her group was good at writing.

Figure 3. Example of the scope of children's awareness

Seven children's data were coded as suggesting that the child has a smaller scope to their classroom world where these children's awareness and attention seemed to be primarily on their immediate experiences. These children's data predominantly included the children regularly around them within the classroom each day, focussing mostly upon the activities with which they and their immediate peers were engaged. Joseph's data suggested that the scope of his awareness was his immediate experiences (figure 3). In his interview, he discussed the children in his 'ability' group and two children on the table next to his, as he had a personal relationship outside of school with them. His lived experience seemed to centre on him and these five children. The scope of the children's awareness is significant throughout all of the emerging themes as it contextualises the data collected for each child. The scope of their awareness significantly shaped the children's lived experiences of 'ability' as it was within this scope that dominant features interacted to form the highly individual lived experience of 'ability' for each child (the central finding of this research). The scope of the children's awareness is discussed, where relevant, throughout this chapter within the sections on structural, social and pedagogic features of children's lived experiences of 'ability'.

Structural Aspects of Classroom Life

Classroom Systems

Both of the case study class teachers perceived structure and organisation as significant within their classrooms. All children in the study identified that it was adults that determined the physical layout and organisation systems within their classrooms (although their interpretation and consideration varied significantly). For Teacher 1, structure and organisation seemed important to promote children's independence (appendix E, 1min) and for Teacher 2 to ensure curriculum demands could be met (appendix H, 72mins).

Apparent across the research data, there were a range of systems in place in the two classrooms including some that were not related to 'ability' such as 'classroom jobs' (both classes) and methods for random selection of children (lolly stick names in class 1 and a pot of names cards in School 2). Most systems were 'ability' related including the main groupings allocated to tables (discussed further below). There were also higher/lower pairs for discussion or 'talk' tasks (School 1) and seating in 'ability' grouped rows (School 2) for whole class carpet sessions as well as phonics 'ability' groups in both classes. In determining 'ability' group allocation, the teachers seemed mostly guided by 'ability' although other factors were influential according to Teacher 1 such as progress and behaviour (appendix E, 4/8mins). Literature suggests, however, that gender, age, culture and socio-economic factors are subconsciously included in 'ability' judgements (Alvidrez and Weinstein 1999, Upadyaya and Eccles 2015, Yeo and Clarke 2006) although, if these were occurring in their judgements, these teachers did not appear aware of them.

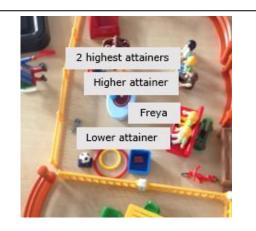
Within their interviews, the teachers connected systems closely with differentiation and personalisation through grouping and seating (which is the main concern of most research into 'ability' in education, Marks 2014b). In both classrooms, children had set places to sit according to group allocation (appendix C and F). These are 'spaces' in School 1 (Adam, Diya and Jasmin in appendix D, p.xxi/xxiv/xxviii, Teacher 1 in appendix E, 4/32mins) and 'places' in School 2 (Chloe and Olivia in appendix G, p.lxiii/lxxii). In School 1, there were three groupings of which two were determined by 'ability' (appendix E, 4mins) whereas in School 2 there was one 'ability' grouping (appendix H, 46mins). This appeared to be generally aimed at meeting children's needs (Teacher 1, appendix E, 8mins and Teacher 2, appendix H, 35/88mins), as suggested by Chorzempa and Graham (2006) although not all children related these to 'ability' with Adam, for example, suggesting that this was who you would sit 'sensibly' with (appendix D, p.xxi). Both teachers indicated feeling that these groupings were not appropriate for all lessons depending upon resources (Teacher 2, appendix H, 34mins) and objectives (Teacher 1, appendix E, 4mins and Teacher 2, appendix H, 8mins).

The emphasis upon the one 'ability' grouping system in School 2 fits with the class teacher's understanding of a notion of a universal underlying fixed 'ability' reported in her interview (appendix H). Six of the nine children in School 2 (table 5, p.77) seemed to have assimilated the system into their lived experience and it could be argued that having one (perhaps default) 'ability' grouping system, emphasised through a set seating arrangement, made this system more significant within the lived experiences of some of the children in the class. Alternatively, the teacher focus upon this system (22% of interview codes, table 4, p.71-72) in School 2 could have translated into her practice and the children's experiences, although this is not supported by a correlation to adult/child relationships being a key feature of their lived experiences for these children (table 4, p.71-72).

Table 5. Structura	themes within	the data for the	children and teachers
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Name	Deemed Attainment	Curriculum	System	Physical
Nume	(teacher)	Curriculum	System	environment
School 1				
Adam	Lower attaining	x		
Brooke	Higher attaining			
Christopher	Lower attaining			
Diya	Middle attaining	x	x	
Hal	Lower attaining			x
Jasmin	Middle attaining		x	
Teacher		11% of	11% of	7% of interview
		interview codes related to	interview codes related to	codes related to the learning
		curriculum and	structure and	environment
		external influences	differentiation	
		initiaciteeo		
School 2				
Chloe	Higher attaining		X	
Freya	Middle attaining		x	
Georgia (Y1)	Mid/high attaining		x	x
Harry (Y1)	Mid/high attaining	x (core and foundation)	x	
Joseph	Highest attaining		x	
Megan (Y1)	Mid/high attaining			
Olivia	Highest attaining	×		х
Petey	Lower attaining			
Rachel	Highest attaining	×	x	
Teacher		18% of	22% of	2% of interview
		interview codes related to	interview codes related to	codes related to the learning
		curriculum and	structure and	environment
		external influences	differentiation	

Two of the children seemed unaware of the grouping systems in their classrooms. Christopher and Petey seemed not to have considered why they were given particular activities or groups with Petey reporting that it was "his



Interview: "I would rather sit next to someone to help me"

"Once, I said to the teacher, um, why can't I go next to them cos they're my *friend* friends?"

"x, x and x sit next to each other so they're like helping each other all the time and I'm like Hi, eeeeh [failing to get their attention]"

Figure 4. Freya's dissatisfaction with group allocation

job" (appendix G, p.lxxiii) and Christopher seemed unsure (putting his fingers in his mouth when considering this during interview, appendix D, p.xxiii). Five children seemed to be aware of grouping and other systems in their classrooms but they did not appear to feature dominantly in their lived experiences (attending to other aspects to a much greater extent). Freya, on the other hand, reported having guestioned her teacher directly about her group placement (figure 4), seemingly dissatisfied with her allocated group due to being separated from her friends, which Robinson and Fielding (2007) suggest, can occur with 'ability' grouping systems.

One might expect a greater

understanding of or attention to class systems from children where adults featured significantly within the child's interpretations of their experiences but this was not apparent within the data. Whilst the children in this study generally attributed classroom choices to their teacher, of the eight for whom systems seemingly featured significantly within their lived experiences, there were only two (Jasmin and Rachel) whose experiences also dominantly featured adult/child relationships (table 4, p.71-72). This suggests that within the experiences of children for whom systems seemed important, they had constructed meaning of classroom systems for themselves rather than from the teacher.

Diya's lived experiences significantly included systems and she explained her understanding of the different "spaces" for the three groupings in her classroom in her interview (figure 5). She seemed clear that these "spaces" were related to whether you needed harder or easier work and that you would move tables to do easier work if you struggled (work is explored further within pedagogic aspects of classroom life, beginning on p.92). This seemed Diya explained that she spends most of her time in the classroom at two desks. These are "our spaces". "They (teacher and TA) choose me to sit someplace else for maths but for normal I sit there and for English I sit there and everyone else has to move".

"Sometime I get some easier work and sometimes I get some harder work".



Figure 5. Diya's experiences of classroom systems

related to her experiences of getting a mixture of easier and harder work being in the middle attainment group for both maths and English (appendix D, p.xxiv). She also experienced being moved to a different table to get "easier work" (appendix C, p.xii and appendix D, p.xxiv) which could have deepened her understanding of the grouping systems. Her attention to systems in general featured strongly throughout Diya's data. She seemed to look for and notice systems in the classroom with systems apparent in her classroom representation (a naughty corner and children sat in rows), tour (lolly stick selection of children and book changing) and interview (identifying children from the highest attaining group as the cleverest in her class). For her, it seemed, that her general propensity for seeing and

making sense of and through systems means that she had experienced 'ability' in her classroom through the systems in place so these have had a more significant impact upon her lived experience of 'ability' than some of her peers.

In schools, differentiation is commonly conflated with 'ability' grouping (Park and Datnow 2017). Differentiated tasks were significant in the practice of both teachers (table 6, p.80) as part of the 'ability' grouping systems in their classrooms. This is the case in many UK classes, according to Campbell (2013) and Marks (2016), and suggests that research evidence of the neutral or negative academic and non-academic effects of 'ability' grouping (Chapter 1) are not prominent within these teachers' thinking. Teacher 1 also explained that children have a role within differentiation by task to inform the teacher if they need more challenge or support (appendix E, 6mins). This approach is suggested by Peacock (2016) to avoid the negative effects of 'ability' labelling but it did not feature significantly in the children's lived experiences according to the data. Some of the children from School 1 did feel that tasks were adapted depending upon how successfully the children were learning. Brooke, for example, suggested that easier tasks might be given by the teacher to build confidence (appendix D, p.xxii) and Hal suggesting that the whole class will go over maths topics if they have found them "tricky" (appendix D, p.xxvi).

Codes	Scho	ool 1	Sch	pol 2	
	Interview	observation	interview	observation	
'Ability' differentiated seating/groups	2	2	4	4	
Differentiation in tasks	2	2	6	3	
Differentiation in support	0	4	1	5	
Differentiated	0	2	5	2	
expectations	2	6	10	5	
Personalised provision					

Table 6. Data analysis codes for 'differentiation and personalisation'

Where children's 'ability' was deemed to be outside of the range of the rest of the children in the class then personalised provision for these children was important to the teachers (Teacher 1, appendix E, 21mins and Teacher 2, appendix H, 86/87mins). This is supported by evidence from the non-participant classroom observations where individual children were observed having an adapted or different task (twice in School 1 and seven times in School 2) and/or working with a TA (four times in School 1 and five times in School 2). This did not feature significantly within the children's lived experiences except for Hal and Olivia who talked about some children needing 'help' (appendix D, p.xxvi and appendix G, p.lxxii). Adam also explained that he had breaks when writing, as he has dyslexia that he explained as "your brain stops for a moment and then your brain gets back onto it" (appendix D, p.xxi).

Curriculum

Six of the children's lived experiences of 'ability' featured 'topic' or thematic work which seemed important to these children (Hal, Brooke and Christopher, appendix D and Harry Joseph and Megan, appendix G) with Harry explaining, "You learn really nice stuff" (appendix G, p.lxviii). Whilst this is less clear from the data, it was perhaps a unifying experience for the class where all children worked within a common context where all could succeed and feel ownership. None of the children seemed to connect 'topic' or thematic work to systems, groupings or tasks although some connected it to specific curriculum activities (writing or construction most frequently).

Both teachers connected learning through 'topics' with enjoyment and Teacher 1 explained that it raised the quality of the children's work (appendix E, 2-3mins). Both teachers connected the importance of engaging 'topics' to statutory curriculum as evident in figure 6. Teacher 1 appeared to feel that she worked within curriculum expectations to make them enjoyable using topics for which the children felt ownership. Teacher 2 seemed to feel restricted with the curriculum preventing her from following 'topics' further with the suggestion that this restriction impeded children's enjoyment of school.

Teacher 1: "Generally, it [topic] comes as much as possible from them and tying it into the skills they need to learn...I hope." "There are things you've got to hit and then my job as a teacher is to try and make these things as enjoyable as possible" (3mins).

Teacher 2: "My primary school experience, if I remember rightly was quite woolly really (smiles) in that in year 6, I remember our teacher saying, 'choose the topic you want to do'." "I *really* liked it, like I didn't want to miss a day really, I liked coming and I knew that learning was important" (23mins). "I think I really want the children to have my experience of school (two hands pointing to own chest) but I am finding that I am battling against the new curriculum that we have to do at the moment (interlaced fingers) not to do with not having fun but the freedom (right hand makes a circular sweeping motion)" (24mins).

Figure 6. Teacher explanations of topic and curriculum

For the children for whom learning in 'topics' or themes was important, their lived experiences of 'ability' were influenced by curriculum in the freedom

interpreted by their teachers. For these children, it seems that their attention to the context for their learning might be more prominent in their lived experiences of 'ability' than other factors. Their attention to contexts or 'topics' might not indicate differences in 'abilities' in the same way as other factors such as grouping or task might. Although for individual children, as with all aspects, their lived experience of 'ability' is shaped by the interplay between this and other aspects of classroom life that featured prominently for them.

Adam said that a girl (highest attaining) was very clever as she could spell words that he could not and she could write neater than he could.

Diya: "I get most of my questions in maths right and in writing I have good grammar and ... [pause] spellings". She quickly identified two of the highest attaining children (one the same as Christopher) as the cleverest in the class.

Olivia talked about the coloured stages (levels) of the reading books in her classroom tour.

Olivia: "sometimes our table does harder work than any other table" and "Joseph [highest attaining group] is the best reader because he is on the highest reading book". She explained that Rachel and her [both in highest attaining group] are really good at writing.

Rachel: "I am at the stage that's harder than [name of higher attaining group] so [name of highest attaining group] the tricky table and this isn't that tricky [gesturing with hands to placement of groups on desk top, pointing to the higher attaining table when saying 'this table']. If I went on [name of higher attaining group] and I did twenty when I was meant to do a hundred work I would find it really really easy."

Figure 7. Adam, Olivia and Rachel's experiences of 'ability' and curriculum

Statutory curricula are connected to classroom systems as they shape classroom practice (Silvernail 1996), as the teacher in School 2 explained, curriculum demands informed her choice to group by 'ability' (Teacher 2, Appendix H, 72mins). Learning within specific curriculum areas featured within Adam, Diya, Harry, Olivia and Rachel's lived experiences of 'ability'(appendix D/G). This was exclusively mathematics and English (usually as reading or writing) with the exception of Harry. Harry included a broad range of curriculum areas in his classroom representation, interview and also video tour (although to a lesser extent) but did not seem to have connected curriculum to 'ability' in the same way as the other four did (appendix G, p.lxviii).

Adam, Diya, Olivia and Rachel seemed to have interpreted their experiences of learning mathematics and English and made connections with their understanding of their own and others' 'ability' from this. This is evident in their discussion of their classmates, particularly how they connected cleverness to success in English and mathematics (figure 7). Adam seemed not to connect this to a broader class 'ability' structure or grouping whereas for Diya, this seemed implied but not explicit. As Figure 7 shows, Olivia and Rachel explicitly connected success in English and mathematics with the grouping systems.

The Physical Environment

All of the children in the study identified that it was adults that determined the physical layout of their classroom but it only featured substantially in their lived experiences for three of the children. Other children used the physical classroom layout to explain groupings (such as Megan and Freya) but seemed to attend more to the grouping than the layout. For Hal, Georgia and Olivia, the physical environment seemed particularly important within their lived experiences but they did not generally seem to connect this directly with 'ability'. Interestingly, these children all displayed a wider awareness of their class and perhaps this is connected to their attention to their physical classroom (although not all children with a seemingly wider awareness attended to the physical environment to the extent that these children did).

Children's attention to the physical environment meant that resources and displays seemingly influenced their understanding of what was most important. Georgia explained a display as "really good for people for learning" (appendix G, p.lxiv) and Olivia explained that charts displayed on the walls could be used or copied by the children (appendix G, p.lxxii). They seemingly connected features of the physical classroom environment with other aspects of classroom life, which related to their lived experiences of 'ability' rather than connecting the environment to 'ability' directly. Social aspects were evident in Georgia's desire for a smaller, quieter table and types of activity were evident in Olivia's assertion that desks were of paramount importance because they are for work. Only Olivia explicitly discussed differences in children's 'ability' by relating them to features within the physical environment such as reading books for individual children's reading stages and tables for harder work (appendix G, p.lxxii). For her, these resources and how they were used indicated much about 'ability'. Although other children, such as Rachel and Freya, discussed 'tables' as groups, this seemed more of the language of the classroom (the names of the groups) rather than attention to the physical classroom layout within their lived experiences of 'ability'.

Social Aspects of Classroom Life

Social factors were apparent in seven of the children's experiences supporting social constructivist notions of children as 'social actors' (Vygotsky 1978). These social aspects of classroom life featured prominently in five children's lived experiences as general social activities, interests and learning or as relationships. Three children's lived experiences were highly social with both relationships and general social aspects featuring strongly. Of the relationships, these were child/child relationships for three children and adult/child relationships for four children (see table 4, p.71-72).

Child/child Relationships

For the children where key friendships were with children in the same 'ability' groups as them, child/child relationships were significant within their lived experiences of 'ability' and this seemed supportive. Christopher and Hal, in particular, seemed to feel supported by peer relationships and these featured significantly within their individual experiences. Whilst Hal talked about many children in his class, both he and Christopher focussed mostly on children in the same 'ability' group as them (appendix D, p.xxvi/xxiii). When asked what helped him learn at school, Christopher answered, "our friends" and named his friends (appendix D, p.xxiii). Christopher seemed to be mainly aware of his immediate experiences, as discussed in the section on the scope of lived experiences earlier in this chapter (p.73).

Christopher and Hal appeared to have a more limited understanding of any 'ability grouping' in their class in School 1. They had some awareness of the 'abilities' of the children in their class but seemed not to relate this to groups despite being aware of having set "seats" (as explained by Christopher, appendix D, p.xxiii). Christopher named a child deemed highest attaining as the cleverest in the class "because she puts her hands up a lot" (appendix D, p.xxiii) but explained that all children have the same work in class. He explained that he sits next to children because they are kind (appendix D, p.xxiii). Hal connected being clever with how much work you produce (appendix D, p.xxvi). Christopher and Hal did not seemed to have assimilated children doing different work into their lived experiences. It could be that the potential labelling effect (Hart et al. 2004) or emphasis of difference (Minow 1990) that can be associated with lower attaining pupils was not present for Hal and Christopher in their lived experiences of 'ability' due to the importance of child/child relationships to them and their attachments to children in the same groups as them. They did not seem to have internalised low 'ability' labels into self-concept, which Preckel, Gotz and Frenzel (2010) found with 'ability' grouping, particularly for young children (Weinstein et al. 1987).

It is unclear (and beyond the scope of this research) whether Hal and Christopher's friendships with other children had developed within and because of the grouping but it is possible as 'ability' grouping impacts upon social groupings according to Boaler (1997a) in her study of older children. It is also likely that the children had been in broadly the same 'ability' groups' in previous classes as movement between 'ability' groups tends to be minimal according to MacIntyre and Ireson (2002). This is particularly the case for children placed in lower attainment groups, such as Christopher and Hal, where low achievement maintains in the long term (Alvidrez and Weinstein's 1999) with 'ability' determined very young (Hallam and Parsons 2013).

All social aspects of classroom life seemed particularly important for Megan whose lived experience of 'ability' featured social activities and interests as well as child/child and adult/child relationships. She appeared to have a much clearer sense of 'ability' groups than Christopher and Hal (School 1). Megan explained that three tables have "hard ones" and two tables have "easy ones". She indicated with her hand, "any tables that are on that side [sweeps right hand forwards], they do easy work", to indicate the lower attaining and year 1 groups from her class (appendix G, p.lxx). Whilst this could be due to Megan also having attended to adult/child relationships, Hal similarly attended to these so this seems an unlikely explanation. Perhaps, instead, it is related to the different groupings used in the two classes with Megan's class having one 'ability' grouping that she interpreted within her lived experience. She was, however, unclear why the groups get different work so had apparently not related this to 'ability' or children's 'abilities'.

Adult/child Relationships

Relationships with adults seemed significant within four of the children's lived experiences of school. For these children, adult perceptions (or children's interpretation of their perceptions) of 'ability' were particularly significant in determining the influence of 'ability' on their experiences overall. Rachel, for example, appeared to recognise social structures within her lived experience which seemed to give her quite a linear, fixed understanding of 'ability' (see figure 7, p.82) which could be argued echoes her teacher's perception of 'ability' (discussed later in this chapter). In her interview, Rachel suggested that she is the cleverest child in her class and alluded to a heritable notion of 'ability' when she said, "I am quite clever! I've got a really clever Mum and a really clever Dad and a really clever brother". This is similar to her teacher's explanation of 'ability', "I think a lot of it is down to genes as in, if you've got two intelligent parents" (appendix H, 74mins). Whilst this could be coincidence or due to familial influences, adults and adult/child relationships do feature significantly within the evidence of Rachel's lived experience of `ability'.

Teacher 1 connected the teacher/child relationship to valuing children as individuals explaining this as crucial in her practice, as evident in figure 8 (p.87) and within her classroom practice where she greets individuals informally as they arrive (appendix C, 8:45am). For her, this seemed connected to her own experiences of school where she indicates that this relationship was lacking for her as a child (appendix E, 26mins). In line with existing research findings (for example Pianta and Stuhlman 2004 or O'Connor and McCartney 2007), she crucially connects this teacher/child relationship directly to children's academic attainment and 'ability'. Discussion of children's individual academic targets, in figure 8, suggests that she feels this relationship is the foundation of her practice in relation to 'ability'. "The more and more I teach, the more I think that is <u>so</u> crucial, that you look at them in the eye and ask them to look at you in the eye" (finger tips touching in air on 'so').

"I think those things [children's academic targets] come when you have good relationships and a nice classroom ethos then those things come (pause) and where you are a bit (pause) they need you to care about them!" (eye contact). "They need you to be proud of them!" (eye contact and leaning forwards, forcefully stated).

Figure 8. Extracts from interview with Teacher 1 about adult/child relationship (appendix E, 40mins)

For Hal and Jasmin, in Teacher 1's class, the teacher/child relationship was indeed significant in their lived experience but both interpreted and focussed upon adult actions differently in relation to 'ability'. Hal noticed which children the adults worked with and identified these children as needing 'help' but appeared not to notice different groups or work, which is very different to Jasmin. As figure 9 (p.88) shows, Jasmin had a very clear understanding of the 'ability' groups and the children's 'abilities' in the class. Her lived experience of 'ability' was partially shaped by the adult choices (as she perceives them) involved in allocating children to 'ability' groups. She also connected her understanding of 'ability' groups to peer support (child/child relationships) explicitly when she explained that the highest attaining children assist the other children. She explained, "if you are finding it a bit tricky then they will come over and help you, like if you got all the questions wrong or if you were only on the first question" (appendix D, p.xxviii). This is perhaps through her attention to teacher choices to use peer support in this way but could also be through the experience of being supported by her peers.

"I sit in my normal space, on the same table, for writing and I sit at the desk across, that's my maths space." She explains that they sit in different spaces to make it more exciting and the teacher puts you somewhere that she knows you will be sensible. Where you sit "depends on how good you are at maths or English, so if they think you are um like the seco...well on B yeah B you would be on my table if you were on C table you would be on the table across from mine and the table across from the hardest table. It is how clever you are at maths or English." When asked about PE she says that they would be put in groups by who they would be most sensible with and the teacher may or not move them for art.

Children do different work, the more imaginative people get different work (chosen by teacher or TA). If you are finding it a bit tricky then they will come over and help you, like if you got all the questions wrong or if you were only on the first question.

Figure 9. Extracts from interview with Jasmin regarding 'ability' groups

Nine of the children included an adult other than the teacher in their classroom representations. These included parents (2), Head Teachers (2 children), other teachers (3) and TAs (4). Interestingly, the class teachers did not mention TAs in their interviews, although Teacher 2 alluded to TAs as 'support' (appendix H, 86mins). This is despite both classroom observations including TAs working for the whole observed period (predominantly with the children deemed to be lower attaining). According to Sharples, Webster and Blatchford (2015), supporting groups of children deemed to be lower attaining is common practice. Indeed, the four children in this study that were deemed lower attaining by their teachers, interacted with TAs significantly more than their peers within the non-participant observation of their classes (table 7, p.89). Of these four, only Adam and Christopher (although this is less clear for Christopher) included TAs in their classroom representations. Hal, Jasmin, Megan and Rachel, as children for whom adult/child relationships seemed significant in shaping their lived experiences of 'ability', only Jasmin included TAs in her classroom representation (and had a very clear understanding of 'ability' groups as evident in figure 9). Megan seemed more focussed on the teacher and Rachel on the teachers and parents (and teacher spouses). Hal seemed more focussed on the teacher, parents and midday supervisor but did explain that some children needed more adult help, naming these children in his interview (appendix G, p.xxvi).

Table 7. Number of recorded interactions with TAs within non-participant observations of classrooms

Deemed Attainment (Teacher)	School 1	Number of Interactions with TAs / number of entries in non- participant observation record	School 2	Number of Interactions with TAs / number of entries in non- participant observation record
Lower	Adam	2/4	Petey	7/9
Attaining	Christopher	5/8		
	Hal	8/12		
Middle	Diya	1/9	Freya	1/5
Attaining	Jasmine	1/5	Georgia (Y1)	2/4
			Harry (Y1)	4/8
Higher	Brooke	0/5	Megan (Y1)	2/2
Attaining				
			Chloe	0/3
Highest			Joseph	0/2
Attaining			Olivia	0/1
			Rachel	0/4

Social Activities, Interests and Learning

In contrast to Christopher and Hal's experiences (discussed earlier), Freya at School 2 seemed acutely aware of some of the other groups in her class as the children she referred to as her best friends (her '*friend* friends', figure 4, p.78) were in different groups to her (one deemed higher and one deemed to be lower attaining). Her understanding of the 'ability' grouping system and the relative 'abilities' of her classmates could be due to her social understanding arising from her experience of having significant relationships with children in other groups. This social aspect to Freya's school experience seemed to be more than a preference for sitting with her friends (she reported being friendly with children in her group) and more about social learning as she expressed a desire to learn together and help each other (appendix G, p.lxiv). Having significant relationships with children in other groups might have contributed to Freya's wider awareness of the whole class. Indeed, where social factors were identified as significant for children in this study, the children tended to have a wider awareness of their whole class (highlighted in table 8, p.90).

Name	Deemed Attainment (teacher)	Social	Relatio	nships	Awareness of whole class (and	Awareness of immediate experiences
			Child/	Adult/	perhaps beyond)	
			child	child	Deyondy	
School 1						
Adam	Lower attaining					х
Brooke	Higher attaining	x			Х	
Christopher	Lower attaining		x			х
Diya	Middle attaining					
Hal	Lower attaining	x	х	х	Х	
Jasmin	Middle attaining	x		х	Х	
School 2						
Chloe	Higher attaining					х
Freya	Middle attaining	x			Х	
Georgia (Y1)	Mid/high attaining				Х	
Harry (Y1)	Mid/high attaining				Х	
Joseph	Highest attaining					х
Megan (Y1)	Mid/high attaining	x	х	х	Х	
Olivia	Highest attaining				Х	
Petey	Lower attaining					х
Rachel	Highest attaining			x		х

Table 8. Scope of awareness and social aspects of children's experiences

Teacher 1, in particular, emphasised the importance of valuing the 'whole child' in her interview (appendix E). She explicitly connected her perception of the 'whole child' to 'ability' including social and practical aspects as well as academic (appendix E, 43-44mins). She seemed to feel that social learning and specifically child talk are important for sustaining children's engagement and collaborative learning (figure 10, p.91). Teacher 2 also seemed to feel that peer support was important for engagement but also as a strategy to provide access to activities for lower and middle attaining children with other children reading *for* them to "bring them" into the learning (figure 10). Both teachers suggested partner and group work as alternatives to continual teacher instruction (figures 9 and 10, p.88 and 91) and ensuring "it's not all me [teacher focussed]" (Teacher 2, appendix H, 40mins). For the children whose lived experiences of 'ability' appeared significantly shaped by social

aspects of classroom life, the teacher's attention to and use of such pedagogic strategies were clearly important. All pedagogy (including grouping) were, however, important for these children in terms of their relationships and opportunities to learn socially (as can be seen from Freya and Christopher's desire to work with their friends and help each other with learning).

Teacher 1 (28mins):

``I like to have an environment where children can talk to each other. I think talking's very important, very important"



(slams palm of hand on table)

Tecaher 1 (29mins):

"I was one of those children who thrived on having a chat about it beforehand". Not "big-headed enough" to want to have own voice heard all day (hand flat on own chest). Children would be bored.

"They need chances to share and boss each other around a little bit and to work collaboratively and share ideas"

Teacher 2

14mins: "...in literacy as well if there is quite a lot of reading, I would perhaps put them in a group of three where at least one person is an able reader (points to little finger on left hand and grabs it) so that they can bring in the other children as well (right hand scooping motion twice towards left hand).



"at least one person is an able reader"



two sweeps of right hand towards left for two children to be 'brought in' to a reading task by a "more able reader"

81mins: "at least when you are trying to access texts that are a bit more complex then at least as a mixed group it means that that group over there (hand gestures to I/a table) can access this because they got somebody who can... 'can someone give me an example of a sentence with a connective in it?' none over there (points with arm outstretched to I/a table with open right hand) no-one but (touches ht/a table)".

Figure 10. Social Learning in extracts from teacher interviews

Table 9. Pedagogic aspects of classroom life within the children's lived experiences of 'ability' and non-participant observations

Name	Deemed Attainment (teacher)	Behaviour	Play	Work
School 1	·			
Adam	Lower attaining	x		
Brooke	Higher attaining	х		x
Christopher	Lower attaining			
Diya	Middle attaining			x
Hal	Lower attaining		X	x
Jasmin	Middle attaining			
	Non-participant observations of classroom life (out of twelve, 15 minute periods)		0	8
School 2		1	•	
Chloe	Higher attaining		X	x
Freya	Middle attaining	x	Х	
Georgia (Y1)	Mid/high attaining			
Harry (Y1)	Mid/high attaining			
Joseph	Highest attaining			x
Megan (Y1)	Megan (Y1) Mid/high attaining		X	
Olivia	Olivia Highest attaining			x
Petey	Lower attaining	×	X	×
Rachel	Highest attaining			
Non-participant observations of classroom life (out of twelve, 15 minutes periods)		9	0	7

For some children, it seemed that the learning activities that they did in school each day featured within their lived experience of 'ability' considerably. For these children, these pedagogic aspects of classroom life included how questions were asked, how activities were introduced, the type of activities, resources provided and how behaviour was managed. Examples of these within the data include putting their hands up to answer questions (Petey, appendix G, p.lxxiii) and talking on the carpet for assessment (Brooke, appendix D, p.xxii). The teaching choices made by the adults in terms of the type of classroom tasks and activities seemed particularly important to some children and can be broadly described as play and `work' as shown in table 9 (p.92) which also shows behaviour as an important factor for some children.

Work

Much of the data included examples of 'work', which the children had interpreted within their lived experiences of 'ability'. This was a term used frequently by the children for typically written/recorded output that they were expected to engage in. 'Work', as the children appeared to perceive it, was observed during much of the non-participant observations in the classrooms (table 9, p.92). It appeared to be part of the cultural language of the

classroom, observed in use regularly by the teachers, TAs and children (appendix C, p.xii and appendix F, p.li). It was also used by both teachers in their interviews (for example, appendix E, 38mins) with Teacher 2 explaining that lessons are typically: "It is me teaching then they go to their desk and do their work" (appendix H, 3mins).

During their interviews, Petey explained "you got to copy yourself they do sentence" and Georgia explained that, "the teacher tells us and then we know what to do and then our learning, we do it the first time and then we have to copy that first learned." Joseph, similarly, explained that the teacher is doing "demonstration work" in his classroom representation (appendix G, p.lxix). These descriptions of pedagogy in the classroom, whilst only individual comments, suggests a behaviourist pedagogy (passive and repetitious) as interpreted by these children (rather than as practiced by the teachers).



Classroom representation: Child being collected by family Children eating lunch Child reading Teacher marking Adult and child in playground Children lining up Children moving from carpet to tables

Interview:

Talking to Mum about wanting to play at school

Difference between play in year 1 and year 2

Lack of time to play in year 2

Figure 11. Hal's attention to transitions

For seven of the fifteen children, 'work' (as they referred to it) featured significantly in their lived experience of 'ability'. Brooke, Hal and Jasmin expressed an awareness of how the type of activities they were doing in class had changed as they progressed through school from more play-based to more work-based activities (appendix D, p.xxii/xxvi/xxviii). This also suggests that the data collected, whilst being anchored within this class context, also related to children's experiences of school over time, affirming the suggestion in Chapter 2a that experience is internally constructed and temporally located. As is evident in figure 11 (p.93), this was particularly important within Hal's experience as he demonstrated a keen attention to transitions both within the school day and within the school year.

Children's perceptions of 'ability' were often intertwined with their perception of 'work' so where 'work' featured significantly within their lived experiences of 'ability', differences between tasks emphasised differences in their peers' 'abilities' to these children. This seemed particularly the case where their focus upon 'work' seemingly reinforced perceptions of curriculum (Diya) or classroom systems (Diya, Chloe and Joseph) where work apparently acted as important indicators of these. Here, their interpretation of teaching choices regarding 'work' had apparently shaped their experience of structural aspects of classroom life (table 4, p. 71-72) rather than them making meaning of these structural aspects for themselves as some other children had (notably Rachel and Georgia).

Play

Play was not observed in the non-participant observations in either classroom (table 9, p.92), however play did feature significantly within the data for Hal, Chloe, Freya, Megan and Petey. Christopher was not included in this group despite having talked positively about play in his interview and including some playful activities within his classroom representation. For him, play arose as something he was good at and liked doing but not so much a feature of his school experiences. Generally, the children's understanding of play seemed quite broad and appeared to be much to do with choice. Reading (Adam, Hal and Christopher), construction (Jasmin, Chloe and Petey), singing (Brooke), colouring (Rachel) and role-play (Chloe and Megan) are examples of activities

referred to as play by the children. Freya explained this quite clearly as, "you can choose whatever you want to play with" (appendix G, p.lxiv) with many children expressing a preference for choice (for example Rachel explained that the best thing in her classroom is when she gets to 'choose', appendix G, p.lxxv). For some children, choice and control seemed important and this perhaps connects to feeling invested in class topics (discussed in the curriculum section of this chapter, p.80). Christopher, for example, expressed liking to bring objects from home to contribute to his learning (classroom tour, appendix D, p.xxiii) and following home interests in his learning at school (football and toys in interview, appendix D, p.xxiii).

Out of the five children for whom play seemed to be a particularly prominent feature, three (Hal, Chloe and Petey) explicitly expressed a strong desire to play more at school. For these children, it was significantly the absence of play that shaped their lived experience of 'ability', concurring with Howe's (2016) finding that children 'often express sadness or dissatisfaction that they had less time for play' (Howe 2016, p.752) in Key Stage One (GB 2013) with loss of self-directed time being a factor (Fisher 2011).

Child	Video tour	Classroom Representation	Interview
Hal	Fun trays	Teacher marking and child reading. Child playing football and child on a skateboard. Children moving from play to work after dinnertime.	"when I was in year 1 we always had play time but now we just have break and lunch to play but busy, busy, busy"
Chloe	Role play area	Two areas, one enclosed where the boys can play football. Within the other area, the teacher is "telling the children to stop playing" as they are supposed to be "doing their work on their table".	"We do loads of work and stuff like mathematics and take aways then if it's like wet play then we get to play with some Lego and stuff like that" Favourite thing to do at school is Lego.
Petey	Role play area and construction	The children "all have to work on [by] themselves".	"I am clever cos I can do work all done". "I like playing Lego and drawing, I can draw dragons, dinosaurs, Lego mans and octopuses"

Table 10. Hal, Chloe and Petey's experiences of work and play at school

Hal, Chloe and Petey's experiences featured both play and work prominently. They each showed a similarly strong awareness of these and suggested tensions between these two types of activity from their perspective on their school experiences. For Hal, where adult / child relationships seemed a significant feature of his lived experience of school, he recalled talking to adults about the reduction of play at school. He seemed to accept their explanations and talked positively about work and play at school (table 10, p.95).

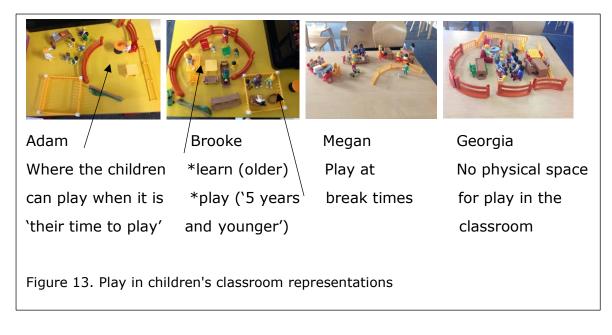


Figure 12. Chloe's classroom representation

As the scope of Hal's lived experience seemed quite broad, he seemed to contextualise this work/play issue more broadly within a wider awareness of social relationships and play outside of the classroom. The scope of Petey and Chloe's lived experiences seemed smaller with the focus more upon their immediate classroom experiences and both seemed more dissatisfied with the lack of play they

perceived in this. For Petey, his focus seemed to be on his behaviour, associating 'good' behaviour with doing work and perhaps (although there is less evidence for this) poor behaviour with playing (appendix G, p.lxxiii). Chloe seemed to perceive 'work' as replacing play within her classroom representation (figure 12). Play is sectioned off in an enclosed area and, according to Chloe, the teacher is telling the children to stop playing because they should be doing their work. She seemed to want more than recreational play, both in her video tour and interview (table 10. p.95), as expressed a desire to play in relation to topic work in her classroom.

There were some indications in the classroom representations of the children's perceived understanding of why play was less possible in their classes. The evidence in figure 13 (p.97) could be interpreted as children perceiving that there is a lack of time and space to play in their classrooms (Adam and Georgia) with them being deemed too old for play at school (Brooke) or that this should only be recreational (Megan).



Behaviour

Within Brooke, Freya, Adam and Petey's lived experiences of 'ability', behaviour seemed an important factor but in rather differing ways. Brooke and Freya seemed to draw this connection from their attention to the social aspects of their classroom experience evident within their inclusion of behavioural rewards in their classroom representations (Brooke's special chair and Freya's skateboard). Conversely, Adam included a behavioural sanction (a 'naughty step') in his classroom representation and Petey, in his interview, talked about having to stand on the carpet when he punched someone, which is also a sanction. Diya was another child who included a 'naughty corner' in her classroom representation but behaviour was not included within the summary of Diya's lived experience as this was the only piece of data where behaviour seemed to be important for Diya whereas for others evidence was triangulated.

Researcher: "Why do you sit with those children in English and maths do you think?"

Adam: "because they are like my friends and they help me" Researcher: "How does she [teacher] choose who should sit together" Adam: "sensibly, who they'll sit sensibly next to"

Petey: "I am clever $\cos I$ can do work all done and put my hand up and didn't shout".

Figure 14. Adam and Petey's lived experiences of behaviour and 'ability'

Freya, Petey and Adam seemed to have internalised their experiences of the behaviour management strategies being applied to them within their lived experiences and indeed three of the four behavioural reminders recorded in the non-participant observations were given to these three children. Their understanding of behaviour seemed connected with their understanding of 'ability' in that they seemed to emphasise behaviour in the rationale for pedagogic choices relating to grouping and seating more than other children did. For Adam and Petey, where the scope of their lived experience was more immediate, behaviour was seemingly perceived as the most important factor in determining grouping and cleverness (figure 14, p.97). With Freya's lived experience having a wider scope, she explained that grouping related to difficulty of work but that seating within these groups was related to behaviour and preventing the children from talking as Freya admitted that she sometimes talks whilst the teacher is talking (appendix G, p.lxiv). Both teachers mentioned behaviour being a factor in 'ability' group allocation in their interviews (appendix E, 4mins and appendix H, 49mins) but it seemed to be minor adjustments rather than a major factor as apparently interpreted by Adam and Petey.



Petey's hands up

Jasmin's group learning (discussion task)

Figure 15. Examples of pedagogy in children's classroom representations

Conclusion

Within their lived experiences of 'ability', specific examples of pedagogy had assumed greater significance for them as individuals than others. Figure 15 provides two illustrative examples of Petey's focus upon putting hands up to answer questions and Jasmin's attention to collaborative group learning in their classroom representations. Seemingly, a pedagogic strategy or approach does not need to be used regularly for it to be significant within children's lived experiences of 'ability'. As figure 16 shows, despite being used only very occasionally, three of the six children in School 1 drew upon a mathematics task where there were A, B and C questions.

Brooke: "Sometimes times we do different things in maths, we do questions A, B or C."

Researcher: Do you do A, B or C? Brooke: "sometimes we do B and C."

Researcher: "Do you ever do A?"

Brooke: "only if [teacher's name] wants us to, to build our confidence". Researcher: "How does she choose who does A, who does B and who does C?"

Brooke: "We've got tables of like, there is a table there for A, table there for B, another table there for B and a table there for C [moving hand in air towards desk top].

Hal: "Sometimes at maths, we get like A, B and C. Now... I was on A then B then C but now I changed tables and I now I've moved back to A."

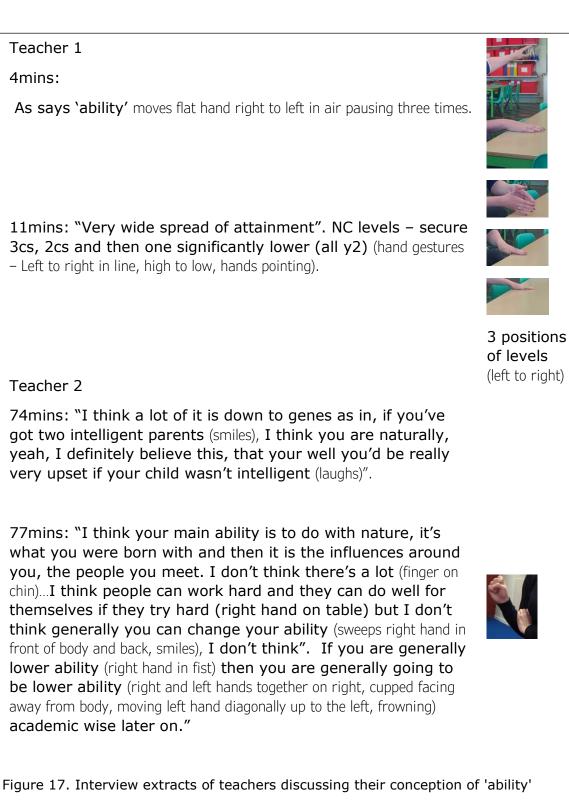
Researcher: "How do they decide where you sit?" Jasmin: "It depends on how good you are at maths or English, so if they think you are um like the seco...well on B yeah B you would be on my table if you were on C table you would be on the table across from mine and the table across from the hardest table. It is how clever you are at maths or English."

Figure 16. Extracts from interviews with children discussing levelled questions in School 1 $\,$

Brooke and Hal explained the specific task with levelled mathematics questions whereas Jasmin did not mention a specific task but apparently used the levels to explain the grouping system. This one pedagogic approach seems to have had significant explanatory power and been absorbed into these children's lived experiences more than others approaches. For teachers, this is perhaps counter-intuitive as they might expect that a rarely used strategy within a range of strategies would not have a significant impact upon the children's lived experiences of 'ability'.

Teacher Beliefs and Experiences

Teacher Conceptions of 'Ability'



Individual conceptions of 'ability' are significant in shaping teachers' practice (Macqueen 2010; Cooper 1979; Kususanto, Ismail and Jamil 2010; Park and

Datnow 2017) and therefore can help shape a child's lived experience of 'ability' where the child attends to aspects of classroom life which are largely determined by the teacher. In their interviews, the two teachers in this study expressly connected their understanding of 'ability' to their own practice (Teacher 1, appendix E, 44/46mins and Teacher 2, appendix H, 62/67mins). As evident in figure 17 (p.100), Teacher 1 seemed to have a broadly linear conception of 'ability' and Teacher 2 a fixed, largely heritable notion of 'ability'. Such notions are common amongst teachers according to Wrigley (2012) and Hart et al. (2004) and have a significant impact upon children (Brophy 1983, Pajares 1992) across several years (Rubie-Davies et al. 2014). In these two classes, this impact was perhaps greatest or most direct for the children for whom adult/child relationships featured significantly in their lived experience of 'ability'. Jasmin in School 1 and Rachel in class 2 seemed to have similar interpretations of 'ability' to their class teachers' conceptions (see the adult/child relationships section on page 86 of this chapter).

Brooke: "Sometimes if we've learned so much then she changes us onto a different table."

Diya: "Sometimes she [teacher] moves us to different spaces and get easier work...that's because of struggling with hard work."

Hal: "I was on A then B then C but now I changed tables and I now I've moved back to A."

Harry: "I normally spend most of my time on the table". "I have to get a partner and sit on their table"

Figure 18. Children's perceptions of flexibility within grouping

Many of the children seemed to feel that grouping within their class was fixed with only Brooke, Diya and Hal suggesting that movement between groups or









within individual lessons was possible (figure 18). Harry, as the only child in School 2 to express perceiving some flexibility in grouping, explained that he sometimes worked with a partner from a different group (figure 18, p. 101). This did seem less common, as Harry explained it, and more a move to mixed ability pairings than a move of groups. The children in School 2 seemed to largely perceive their 'ability' grouping as fixed which echoes the perception of 'ability' expressed by their teacher and also common practice in schools according to Kutnick, Blatchford and Baines (2002).

It is possible that Diya and Brooke's lived experiences of group movement within lessons (Diya did this in one of the lessons recorded in the nonparticipant observation, appendix C) could be connected to their teachers' conception of 'ability' as a linear scale as within a scale, movement up and down is possible. Indeed, the class teacher's perception was that "they do move a lot" based upon assessment (appendix E, 7mins) which seems to have, at least partially, shaped an aspect of Diya and Brooke's lived experience of 'ability' in the classroom.

Hal's lived experience of group movement seemed different to Brooke and Diya's experiences. Hal had experienced moving groups and seemed to have assimilated it into his lived experience of 'ability' with regards to a specific maths activity with three levels of question (A, B and C), as evident in figure 18 (p.101). In other ways, he seemed mostly unaware of 'ability grouping' (see section on child/child relationships, p.84), attending instead to social aspects of classroom life and the learning context in terms of play or work (see table 4, p.71-72). Hal explained that he learned most on the carpet and discussed working with a partner on the carpet (appendix D, p.xxvi). Grouping and working at tables seemed to hardly feature within his lived experience of 'ability'. It was not apparent in his classroom representation or evident much within his tour or interview (appendix D, p.xxvi). Hal's move to a different 'ability' group, and perhaps potential influence of his teacher's conception of 'ability', seems not to have shaped his lived experience of 'ability' to a significant extent. This aligns with the key finding of this research that children's lived experiences of 'ability' are shaped by the combination of the aspects of classroom life that each child attends to.

The teachers in this study were influential in shaping the children's lived experience of 'ability' through the aspects of classroom life that were significant to that child. The teacher's influence upon each child was therefore highly varied, dependent upon the individual combination of aspects for that child and individual's scope of awareness. Despite the variation in this influence, the teachers did have a significant impact for all children. Every child included a teacher within their classroom representations with teachers mentioned between four and eleven times across the data for each child. What shapes the teachers' practice is therefore significant in shaping the children's lived experiences of 'ability' and a research question for this study (table 1, p.13).

The teachers pointed to a range of factors as influential in shaping their classroom practice that were outside of observable classroom practice and the lived experiences of the children but clearly influential according to the teacher interviews. This data was triangulated methodologically *within* the method with visual and verbal analysis (Chapter 2c) of the interviews (appendix E and appendix H). These influential factors were broadly categorised as intrinsic (within the individual teacher) and extrinsic (external influences) within data analysis and the ones that seemed most significant are presented in table 11 (where codes were applied more than seven times to either teachers' interview).

Area	Codes	Teacher 1	Teacher 2
Individual	Teacher (role)	2	12
Teacher	Teacher (qualities)	9	7
	Own experiences (child)	6	9
	Own experiences (teacher)	3	12
External	Curriculum	10	28
influences	Assessment (policy)	0	9
	QA (policy)	0	12
	Whole school	7	6
Total number of coo	les applied to the whole interview	95	164

Table 11. Summary of codes from analysis of teacher interviews

Intrinsic influences on the teachers' practice

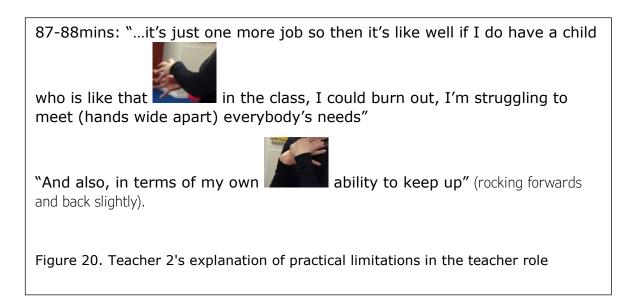
For Teacher 2, the role of the teacher seemed of particular importance in shaping her practice in relation to 'ability'. In her interview, she reflected upon how her perspective on the teacher role, as essentially an adult one, translated into her practice (figure 19) suggesting a 'minority child' perception of childhood where children lack adult capabilities (James, Jenks and Prout 1989). Although there is less supporting evidence, it is possible that this understanding could lead to practice where the teacher makes choices and judgements for the children about level of challenge and 'ability' rather than the children making these choices for themselves.

53-54mins: "...they don't always make the right choices"

"I am very old school in terms of how I am with I'm the adult (two hands on chest) you're the child (right hand moves down), I'm in charge you (right hand to left) listen to what I say" (right hand to right, smiles).

Figure 19. Teacher 2's explanation of her approach to child voice

Teacher 2 suggested that there are practical limitations within the teacher role in her discussion of lack of time to make personalised provision both in terms of attending to all children (appendix H, 87mins) and her preparation time (figure 20, p.105). This suggests that she felt a tension between her role to meet children's 'ability' needs and the practical implications of being able to do this (appendix H, 88mins). Her perception of her role as a teacher seems to have significantly shaped her practice. Mockler (2011) argues that a focus upon teacher role rather than identity has been prevalent in educational policy. This suggests possible correspondence between teacher role and national policy (as an external influence) in the shaping of Teacher 2's practice. National policy is considered later in this chapter with the external influences on the teachers' practice (p.100).



For Teacher 1, the qualities of a 'good' teacher seemed important in shaping her practice (table 11, p.103). She suggested that knowledge of nonacademic 'abilities' but also passion to engage children are qualities of more successful teachers (figure 21) and therefore important in shaping her pedagogic identity (Bernstein 2000) and classroom practice in relation to 'ability'.

46mins: "I do think as teachers we know enough about the children to be able to tell you where children's abilities lie in other areas (hands together forwards on desk), well I think if you are a worthwhile teacher, I think there probably are teachers who don't know how able a child is in digging or cutting out or looking after a friend or packing away their sleeping bag (right hand out to the side, open body language, hand moves to left with each example)".

37mins: "Certain teachers that inspired me that I would be like were teachers like..." gives an example of an English teacher who had wide vocabulary and "total passion that would just have you captured" (narrowed eyes).

Figure 21. Extracts from interview with Teacher 1 about teacher qualities

It seems for these two teachers that their own experiences of school, whether positive or negative, had shaped their teaching practice (figure 22, p.106) suggesting that these experiences acted as a 'frame of reference' in their teaching (Adams 2012, p.9). Indeed, Smith (2005) suggests that educational

beliefs established before engagement with formal teacher education are fundamentally important in determining teachers' practice and, for these teachers, early school experiences seemed particularly important. Teacher 1 was keen to avoid segregation and lack of access (appendix E, 34-36mins) that she had experienced at primary school and was seeking an alternative to this (Nespor's 'alternativity', 1987 and 1985) in using three different groupings in her classroom. Teacher 2 was aware that she wanted to provide the experiential activities from her time at primary school that she felt had a positive effect upon her (appendix H, 23-25/37/67mins) and gave an example in her interview of a pastel drawing activity without an objective (appendix H, 31-32mins). If this is similar for other teachers, then there is a potential skew within education where many teachers are likely to have experienced being in higher attainment groups at school (having succeeded in education to at least degree level) and may therefore continue this practice in their classrooms. This could perhaps be a contributory factor in creating the gap between research evidence and practice with regards to 'ability grouping' (Francis et al. 2017, Clarke 2014), identified in Chapter 1.

Teacher 1:

37mins: "I was really wriggly as a child and I needed something more to do as a child". "I bear that in mind" (points with index finger to forehead).

38mins: "I used to be like, I ain't doing it that way!" "They would just tell you again and that gave you that pressure and so I never wanted a classroom where children felt..., I hate it when children cover their work up and I don't want children to feel that way about their work (two hands on heart)". "You need to know that someone likes you, I always wanted that (hand on heart)".

Teacher 2:

24mins: "I liked the school plays that we did (opening up hands from being together) and my school was very creative and (rotating open hands in air) and we did lots of singing (open right hand rotates in air). So my experience... I think I really want the children to have my experience of school (two hands pointing to own chest).

25mins: "I suppose my own primary school experience helped me sort of have the fun side [to my practice], the singing and that type of thing".

Figure 22. Extracts from interviews with teachers where teachers connected their experiences as a child to their current practice

Table 11 (p.103) shows that whole school approaches and national curriculum seemed significant in shaping Teacher 1's practice and national curriculum, national assessment and quality assurance (particularly Ofsted) for Teacher 2.

46mins: "Well you (puts hand flat on desk)... right its down and down (flat right hand moves top to bottom in air punctuating levels) isn't it, the government agenda followed (highest point with hand then circle motion) down and down and down (hand down) but then I do think as teachers we know enough about the children to be able to tell you where children's abilities lie in other areas (hands together forwards on desk) well I think if you are a worthwhile teacher, I think there probably are teachers who don't know how able a child is in digging or cutting out or looking after a friend or packing away their sleeping bag (right hand out to the side, open body language, hand moves to left with each example)".



"government agenda and down and down and down and down"

Figure 23. Government influence upon Teacher 1's practice

Both teachers discussed national education policy in their interviews and it seemed significant in shaping their practice in relation to 'ability'. Teacher 1 explained that government agenda affected her practice at classroom level (figure 23) in terms of her daily assessment practices. Teacher 2 expressed a lack of freedom (appendix H, 24mins) which directly shaped her practice with teaching choices made in order to "tick the box for when Ofsted ask" (appendix H, 31mins). This is evident in figure 24 (p.108) where she explained exclusively using differentiated tasks due to national accountability pressures which is a general pattern identified by Hallam (2002). Figure 23 presents one of several examples from Teacher 2's interview relating to policy. It suggests that policy can shape practice but also how teachers feel about practice (also found by Day and Kington 2008). As evident from her discussion about curriculum (in the structural aspects section of this chapter, p.75), she would like to include more experiential activity within her practice but saw this as in conflict with national policy. She felt that Ofsted "always need a reason or some sort of outcome" or "that would be a cross (draws cross in air)" for her (appendix H, 33mins).

34mins: I probably wouldn't dare to put (hands wide apart) the same worksheet in every child's folder anymore because when Ofsted come look at your folders, they'll say well why have they got the same? This person's a 1C and this person's 3 so why aren't they different? It's like well, (raises and lowers shoulders) I just wanted them (raises shoulders, smiles and holds hands out) ... it ... (shakes head) that is what I feel, that sometimes I just feel (shoulders raised, hands together to body) there are lots of things you don't do because there is this fear that someone will look and say ... (hands to chest). I feel exposed quite a lot (scratches hand) or worried that I am going to be exposed, it's tiring".



Hands wide apart "I probably wouldn't dare to"



them ..."



just feel ..."



Figure 24. Teacher 2's explanation of perceived external pressures under quality assurance

National assessment policy influences school use of 'ability' grouping (Hamilton and O'Hara 2011) which is the case for Teacher 2 where she connected her use of setting for phonics lessons to passing the national phonics test (appendix H, 9mins). Indeed, national assessment policy seemed to shape practice directly for these two teachers where both discussed attainment levels (as was national assessment policy when the data was collected) in their interviews (Teacher 1, appendix E, 11mins and Teacher 2, appendix H, 62/68/92mins). It also seemed to be shaping their practice indirectly through school assessment systems (Teacher 1, appendix E, 5mins and Teacher 2, appendix H, 42mins). It could perhaps be argued that this is an example of what Mockler (2011) suggests is a privileging of that which is easily measurable which consequently shapes classroom practice in relation to 'ability'.

Summary

Children whose experiences at first might seem very similar can be markedly different in terms of how they are experienced for each individual child. For example, Harry and Georgia in School 2 were both from the same 'ability' group in their class, which determined the table they sat at for most of their time in the classroom. They both displayed a wider awareness beyond their immediate experiences and an understanding of the systems and structures in place within their classroom. From the data, Georgia seemed to take greater account of the physical environment and Harry seemed to attend more to curriculum. This (and other factors) seemed to have led to them wanting and attending to different things within this system. Harry was happy with his group, commenting positively on range of activities from guitar lessons to phonics and data handling to box modelling. Georgia seemed to want a quieter and less chaotic learning space so wanted to move to a smaller, quieter group. The influence of 'ability' for Georgia seems to be the positive creation of order but a mismatch between the learning environment and her needs whereas for Harry his needs were apparently met by his 'ability' group as the curriculum provided activities matched to his need for variety. Whilst this is of course a very generalised interpretation, it is indicative of how the interplay between factors mean that even children with very similar experiences feel the influence of 'ability' very differently.

Conclusion

'At first people refuse to believe that a strange new thing can be done, then they begin to hope it can be done, then they see it can be done-then it is done and all the world wonders why it was not done centuries ago.'

Frances Hodgson Burnett, 'The Secret Garden'

Lived experience is temporal and fluid so can never be fully understood (Pálmádóttir and Einarsdóttir 2016, Schultz and Hultsman 2012). The partial picture of these children's lived experiences of 'ability', presented in this study, provides contextualised 'thick description' (Geertz 1973) of 'ability' in the Key Stage One classroom. Table 12 (p.111) presents the key findings from the analysis of this description in relation to the study's research questions.

Children's lived experiences of 'ability' in these two Key Stage One classrooms were highly individual including the size of their individual world (Husserl's lifeworld 1970). Within this scope, each child attended to a different combination of structural, social and pedagogic aspects of classroom life and it was the interplay between these aspects that shaped their lived experiences of 'ability'.

It seems that what the children did each day in the classroom (such as group placement, type of activity given and whom they interacted with) was only important in terms of the child's lived experience of 'ability' for how it fitted within the interplay between the aspects of classroom life that they attended to. Decisions regarding grouping, tasks, activity types and curriculum were crucial in shaping the child's lived experience of 'ability' where they resided within an aspect of classroom life that was significant for that child (and much less important when they did not). As such, the frequency or extent to which a practice occurred was not as important as whether it was an aspect of classroom life that the child particularly attended to, within the scope of their awareness.

Table 12. Summary of	of findings related	to research questions
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Research Questions	Summary of Findings	
*How do children experience 'ability' in the classroom?	Children seemed to experience 'ability' in these classrooms predominantly through classroom structures, pedagogy and relationships within their individual scope of awareness.	
*In what ways and to what extent does 'ability' influence children's experiences in the classroom?	The influence of 'ability' upon the children's experiences varied significantly between children depending upon the meaning they made within the varied aspects of classroom life to which they predominantly attended.	
*What are children's perceptions of their individual school experiences?	Children seemed generally very positive about their individual school experiences and did indeed seem to have 'expert' knowledge of being a child in school. There was some apparent dissatisfaction from some children due to group allocation (social or physical rather than 'ability'), time pressures, lack of play and amount of work. In terms of their school experiences, these children focussed on different aspects as essentially what school was about for them. For some children school was a social space, for some it was about doing school work and for others it was about behaviour and being 'good'.	
 *How are children's everyday experiences of 'ability' shaped in the classroom? *What are the factors which shape how children experience 'ability' in school and how do these effect individual children differently? 	Children made meaning from their experiences of a range of aspects of classroom life and these shaped children's everyday experiences of 'ability' in the classroom. The dominant aspects for each child were different but included curriculum, systems, physical environment, social activities, relationships, behaviour, work and play. For some children, teachers and/or their pedagogic choices were more directly influential that others.	
*What do teachers feel shape their pedagogic choices within the classroom? *What are teachers' perceptions of the nature of 'ability'? How are these evident within teachers' articulation of their perceptions, within their classroom practice and within children's experiences of school?	The teachers reported that curriculum and classroom systems were important in shaping their pedagogic choices. Their own experiences of school and influences from outside of the classroom shaped their practice in the classroom. Teacher 1, additionally, felt that social aspects of school were important and this consideration shaped her practice. Underlying perceptions of 'ability' also seemed important in shaping their pedagogic choices.	
*What is the relationship between teacher perceptions of 'ability' and children's experiences in everyday classroom contexts?	Teacher perceptions of 'ability' were similar to perceptions of 'ability' that children experienced for some children but not all. For children whom significantly attended to adult/child relationships, the perceptions of 'ability' of their teacher were evident in their experiences in everyday classroom contexts.	

For the children in this study, key structural aspects of classroom life that shaped children's lived experiences of 'ability' included curriculum, classroom systems and the physical environment. Most of the children connected seating with grouping and some connected this to children's 'abilities', commonly as success in mathematics and English where they attended to curriculum too. Where thematic or topic-based learning was a prominent feature of the child's lived experience, a connection to 'ability' was not apparent. Most children whose lived experience of 'ability' was shaped by the classroom systems (often grouping), seemingly made their own meaning of these systems rather than forming this from the behaviour of adults in the classroom. Groupings were generally deemed to be fixed by the children. Out of the children who attended to such systems, the children in School 1 seemed to have more of a sense that these were for maths and English rather than being more general. There were three groupings in their classroom of which two were 'ability' groups for these subjects.

Within the two case study classes, individual children's lived experiences of 'ability' were often shaped by social aspects of classroom life, particularly relationships but also social activities and learning. Adults seemed important to all children but relationships with adults were particularly prominent in a few children's lived experiences of 'ability'. Of these, there was a child in each class who seemed to have a similar conception of 'ability' to their teacher. This suggests that whilst teacher perceptions of their abilities can shape children's self-concepts (Upadyaya and Eccles 2014, Campbell 2015), they can also shape their perception of 'ability' in general if the relationship with that teacher is particularly prominent within the child's lived experience of 'ability'. Where friendships were prominent social aspects of classroom life, whether these friendships were with children in the same or different 'ability' groups seemed to impact upon the child's lived experience of 'ability'. Children whose significant peer relationships were with children in different groups to them seemed to notice the 'ability' grouping structures in their classrooms and the difference in children's 'abilities' (as they perceived it) far more than when these children were in the same group as them. Social interaction and learning was particularly important for some children and 'ability' seemed to act as a barrier to this in some cases.

Direct teacher influence was most evident within the pedagogic aspects of classroom life that shaped children's lived experience of 'ability' in this study. As perceived by the children, these were play (choice), work (tasks) and behaviour. For some children the types of classroom activities that they engaged with were particularly significant within their experience of 'ability'. This seemed to be particularly the case for some children who interpreted the classroom tasks ('work') that they and their peers did as indicative of 'ability' (reinforcing structural aspects of classroom life such as curriculum and classroom systems). A small number of children expressed a tension between

work and play and this seemed to influence their experiences of 'ability' where they associated work with 'ability'. Where children attended particularly to behaviour, they often apparently conceived being well behaved (being 'good') as 'ability'. This conflation was also somewhat evident in the teacher interviews where the teachers explained that behaviour was a factor in group placement as well as 'ability'.

Teachers are significant within children's primary school experiences (Hamre and Pianta 2001) but their beliefs and choices were much more influential within some children's lived experiences than others in this study. The teachers were most significant where the child particularly attended to their relationship with the teacher within their lived experience of 'ability' (four out of the fifteen children in this study). The teacher's influence was also apparent in their pedagogic and structural choices (for example the type of tasks and grouping choices given to the children). In line with previous research, teachers' perceptions of 'ability' in this study both shaped and were shaped by their experiences of practice (Rosenholtz and Rosenholtz 1981, Macqueen 2010) and also their experiences of schooling as a learner (Marks 2011). How these perceptions impacted upon children's lived experiences was highly individual for each child and depended upon the interplay between the structural, social and pedagogic aspects of classroom life that the child attended to (within the scope of this awareness).

Evaluation

As a study into children's lived experience, this research was concerned with their layered emotions, actions and conceptions (Løndal 2010) in relation to 'ability' in the classroom. As an internal construct (Pring 2015), studying children's lived experience required research methods that afforded children the opportunity to externally represent their internal construction. The use of a range of methods (Chapter 2c) was important in enabling the expression of different aspects of children's experiences (Darbyshire, MacDougall and Schiller 2005) and in supporting credible interpretation of internal lived experience through external representations (Lincoln and Guba, 1985, Silvermann 2013). As social constructivist research, authenticity is a key indicator of the quality of this research (Guba, Lynham and Lincoln 2011, Kumar 2014). A central element within the authenticity of this research was the design of data collection methods, aligning with classroom practice and the children's worlds. The individual data collection, analysis of data (minimising fragmentation) and presentation of findings ensured that this authenticity remained faithful and contextualised throughout the research process.

As established in Chapter 2c, trustworthiness is more appropriate as a measure of quality than reliability for research of this type (Denzin and Lincoln 2011; Guba, Lynham and Lincoln 2011). The stability (Gray 2013) and dependability (Lincoln and Guba 1985) of the findings of this study are founded upon the open presentation of data and process. Trustworthiness is enhanced by acknowledgement of researcher subjectivity leading to grounded data analysis to reduce the impact of this subjectivity in determining findings (Seale 1999, Yin 2013) through an imposed analytical framework (Glaser and Strauss 1967).

The ethical stance taken throughout this research was more than a series of measures and parameters for the conduct of the research process; it framed the study as research epistemology (Chapter 2a) and is at the heart of the trustworthiness of this research. The critical approach to challenging existing power dynamics of the status of adults and children within the field of 'ability' in education shaped the research design including data collection methods, data analysis process and research communication. Whilst accepting that these power dynamics cannot be eradicated, measures (such as the staged, grounded approach to data analysis and reduced researcher influence in data collection) meant that adult voices could be quietened in order for children's perspectives to emerge. At times, this limited the quality of the research in that sometimes less data was collected (particularly in the video tour), it was more challenging to interpret or was more general (less focussed upon 'ability' specifically). The use of multiple data collection methods was, however, supportive of strengthening the data where it lacked detail or explanation. Collecting evidence of children's school experiences in general was helpful to the study as it provided crucial contextualisation and supported the richness and comprehensiveness of the data so that whole child narratives were provided (which case study afforded as approach).

This research is limited but not invalidated by the small-scale case study approach taken. It is successful in providing a partial snapshot of children's lived experiences of 'ability' in school, acknowledging that lived experience is fluid so can never be fully understood by another (Pálmádóttir and Einarsdóttir 2016). It could be suggested that the data is compromised by being reflections upon experience rather than experience 'in the moment', with memory and perception issues compounded over time. Memory was, however, crucial to the process as it had a pivotal role in the creation of meaning and interpretations (Torstenson-Ed 2007), enabling children to meaningfully construct their understanding of their school experiences. This was particularly a strength of the classroom representations where children drew together and communicated the meaning they made of the experiences through creating a classroom. Much concern with 'ability' in education is the long-term effect of 'ability' labelling upon children (Hart et al. 2004), measured as attainment, self-esteem, friendships, self-concept and other outcomes (see Chapter 1, p.22-25 for a more detailed discussion of these outcomes). The meaning children have constructed of their experience in terms of what they are taking away from it, within lived experience, is therefore important.

Omissions and Limitations

Francis et al.'s (2017) review of current research evidence in this area suggests that it continues to lack discursive traction in practice in schools. They identify a need for persuasive alternative narratives to challenge the acceptance and pervasiveness of 'ability' in schools. This study provides a small-scale rich expositional and explanative study, as was identified by Blatchford et al. (back in 2008) as missing from this field of research. Whilst it might not have the power of a large-scale randomised controlled trial that Francis et al. (2017) argue for, it does provide an alternative approach, the child's perspective and the authenticity of case study.

As with all research, this study has limitations. The number of children who participated in the study represent a small percentage of the number of

children in the classes so all discussions of these classes refers only to the six or nine children participating children in School 1 and 2 respectively. The schools were also selected as a convenience sample (Denscombe 2014) and an indication of whether they are outliers or more typical in relation to schools nationally might have provided some support to the implications of the findings (the research 'utility'; Cohen, Manion and Morrison 2011). The data collected from the teachers, despite being transcribed twice (for verbal and non-verbal data) could have been enhanced by engaging in the represented classroom and video tour activities as the children did. This additional data might have supported comparability and consistency within data analysis across the teachers and children's perspectives (although these might have been less authentic being more aligned to children's worlds in the case of the represented classroom).

Chapter 3 begins with a foregrounding of the key findings, explaining that experience can only ever be partially understood. It explains that experience is fluid in nature so the findings in this study represent snapshots or temporal glimpses into the experiences of the children and teachers. This provides a further, inherent limitation of a study into lived experience ... that lived experience (as layered emotions, actions and conceptions, Løndal 2010) changes over time. The scope and nature of the children's awareness is likely to change considerably as they mature, experience new educational contexts, relationships develop or adapt and they make new meaning of their experiences. Christopher, for example, may become more aware of the groupings in his class over time even though this was not apparent in the data collected for this study.

Finally, this research is also limited by the omission of non-school factors including crucial familial relationships and societal influences upon children's lived experience of schooling. These were beyond the scope of the research but are nonetheless important to children and teachers.

Further research

Our understanding of how teaching choices are experienced by children is a key question going forwards. This is an area for which there is less research available and perhaps more is needed into the scope and extent of children's classroom worlds as it is conceivable that this interacts with a broad range of educational issues not just 'ability'. Further research is needed into how children experience schooling in general including how to genuinely incorporate children's perspectives more in schools as they currently have little influence on schooling (Einarsdóttir 2010). Research is now needed which goes beyond description to develop approaches to differentiation, for example, which take impact onto children's experiences of 'ability' into account. Action research may afford opportunities to create contextualised knowledge in this area through researching in practice to enact change (Hammond and Wellington 2013; Reason and Bradbury 2008). Teachers' conceptions of 'ability' and how these influence their practice is also an area for further, larger scale, research. This might usefully include head teachers and other school leaders as external influences were apparent for these two teachers (particularly for the teacher in School 2) and included school level as well as national level influences.

Contribution to Knowledge

Situated within the multiple 'fields of qualitative research' (Guba, Lynham and Lincoln 2011, p. 97), this study is underpinned by the social constructivist epistemology articulated in Chapter 2a. It is through this paradigm that the original knowledge generated is framed (and as such have a circular relationship, Kuhn 1962), thus providing the lens through which all aspects of the findings are viewed (Waring 2012a). This positioned conception of (and relationship to) the world is one of knowledge being constructed together by people as 'social actors' (Vygotsky 1978) with 'ability' as a value-laden social construct. Within this, the research methodology took a broadly symbolic interactionist methodological approach, taking a critical approach to the hegemonic discourse of 'ability' in education (Francis et al. 2017) and providing the perspectives of children which are underrepresented within existing knowledge of 'ability' in schools.

This study provides two case study classroom exemplars (Flyvbjerg 2006) of 'ability' in early schooling that are grounded in the sense that they are contextualised and attempted to capture the complexity of classroom life. These exemplars contribute to research in the field of 'ability' in education through providing depth and detail to the large-scale research on attainment and other outcomes and providing evidence of impact upon younger children which is currently a less thoroughly researched area (Chapter 1). Crucially, this research provides children's perspectives, which are significantly underrepresented within existing knowledge of 'ability' in education. The use of case study allowed the children's perspectives to be represented without the fragmentation (Roberts 2008) or quietening of children's voices, which has often led to an unfair or unbalanced picture of childhood in educational research (Harcourt 2011).

This study's primary contribution to knowledge is the highly individual nature of children's lived experiences of 'ability'. This contribution provides exemplification of what is possible at classroom level to support reading of existing and future knowledge of outcomes and impact. This exemplification suggests that we should read policy and research with an understanding that general trends regarding impact on groups of children can be experienced very differently for individual children and this impact might not be experienced at all for some.

Studies into the impact of 'ability' grouping upon identified groups (such as 'low ability') tend to homogenise the experiences of the children in these groups, assuming similar experiences and measuring impact. The findings of this study suggest important caveats might be helpful to aid our understanding and application of research at classroom level. Within any identified group, each child will experience whatever impact is found very differently. This study suggests that there could be some children for whom a positive or negative impact might not be experienced at all. Similarly, a positive or negative impact might be caused by a more complex interaction

between factors than have been accounted (or controlled) for within a research study.

In measuring impact, it may be trickier than anticipated to link impact to specific practices. For example, School 1 in this study used within-class 'ability' grouping less than School 2, however the practice albeit occasional of using three level (A, B and C) questions in mathematics featured considerably in children's interviews and several (depending upon interaction with other factors) had internalised and interpreted this practice as showing key differences between the children's abilities. It is therefore not the extent of the use of an 'ability' related practice that impacted upon these children so much as the sense they made of it when assimilating it into their individual experience. This study suggests that a wide range of aspects of classroom life can shape children's experiences of 'ability', even activities or approaches used infrequently. In making decisions about classroom life, educationalists might draw a wider range of factors into account that previously considered using existing research, policy and practice in the field.

Implications

As descriptive research, this study aimed to describe experience rather than evaluate or change it (Yin 2013). Carr and Kemmis (1986) criticised the failure of descriptive research to contribute to practice but its contribution is valid in terms of providing knowledge for further, more action-orientated, research and for practitioners to know what might be happening in their classrooms in an era of diminished teacher autonomy (as Carr and Kemmis later acknowledged, 2005).

The implications for practice of this research stem from the examples that the case study classes provide and therefore the possibility of similar individual variation in children's lived experiences of 'ability' in other classes. This study raises the possibility of this and poses questions for consideration in determining practice in classrooms. Essentially, if the children in this research had different lived experiences of 'ability', that were shaped by the combination of aspects of classroom life to which they attended, then it is possible that other children might similarly experience 'ability' differently.

The implications for practice of this research suggest that assumptions about the impact of 'ability' used by practitioners require further consideration. The application of research outcomes, such as is suggested by Hattie (2012) and the Education Endowment Foundation (EEF, Higgins et al. 2013), need careful monitoring and evaluation when applied from large scale syntheses to smallscale classroom life in Key Stage 1. Indeed, this research suggests that there are a good deal more factors to consider within teaching choices relating to 'ability' than cost and achievement which are the two factors presented by EEF (ibid). Other such factors might include existing and developing social relationships, the type of activities they engage with at school and the number of groupings used in the classroom.

Although a tentative implication, this research suggests that the extent to which particular practices or teaching choices are used might not be as significant as some practitioners might think. Whilst using a range of grouping, assessment and differentiation strategies might be deemed good practice (GB 2011a; Burnett, Daniels and Sawker 2016) and supportive in avoiding negative effects of labelling effects, it is perhaps more complex than this. This research suggests that it was potentially the strength of the effect rather than the extent of its use that had the greater impact for the children in this study, which could also be similar in other classes. Additionally, this level of change could undermine feelings of security and comfort, particularly if peer relationships are prominent within children's lived experiences of 'ability' as they appeared to be for Christopher, Hal and Megan in these classes.

Whilst this study sought to describe rather than make recommendations, the issues around the application of research to practice which were identified in Chapter 1 could similarly plague this research. The following questions arising from the study are therefore offered to educationalists as points to ponder for classroom practice:

- What sense might different children be making of tasks/activities (even those used infrequently)?
- Are multiple grouping systems (for specific purposes) more inclusive that one 'ability' grouping system?
- Do (all) children *experience* flexibility in grouping?
- Should we connect seating and `ability'?
- How do individual children wish to learn and how do they think they learn best (individually/socially, through play/work)?
- How do groupings impact upon some children's friendships?

'The more he gave away, the more delighted he became.'

Marcus Pfister, 'The Rainbow Fish'

"Are you sure Leo's a bloomer?" "Patience." Said Leo's mother. "A watch bloomer doesn't bloom." ... Then one day, in his own good time, Leo bloomed!"

Robert Kraus, 'Leo the Late Bloomer'

References

Adair, J.K., 2014. Agency and Expanding Capabilities in Early Grade Classrooms: What It Could Mean for Young Children. *Harvard Educational Review*, 84 (2), 217-241.

Adams, G., 2012. Pushing the Boundaries: Women teachers' experiences of learning mathematics. *Proceedings of the British Society for Research into Learning Mathematics*, 32 (2), 5-10.

Adams, R., 2016. Return to Grammar School Selection Would be Disaster, Says Ofsted Chief. Guardian (https://www.theguardian.com/education/2016/jan/29/grammar-schoolselection-disaster-ofsted-chief-sir-michael-wilshaw), 29 Jan 2016.

Adey, P. and Dillon, J., 2012. *Bad Education: Debunking myths in education.* Maidenhead: McGraw-Hill.

Alderson, P. and Morrow, V., 2011. *The Ethics of Research with Children and Young People: A practical handbook.* London: Sage.

Alexander, R.J., 2010. *Children, their World, their Education: Final report and recommendations of the Cambridge Primary Review.* Oxon: Routledge.

Alpert, B. and Bechar, S., 2008. School Organisational Efforts in Search for Alternatives to Ability Grouping. *Teaching and Teacher Education*, 24 (6), 1599-1612.

Alpert, J.L., 1974. Teacher Behavior across Ability Groups: A Consideration of the Mediation of Pygmalion Effects. *Journal of Educational Psychology*, 66 (3), 348-353.

Altman, I., 1997. *The Concept of Intelligence: A philosophical analysis.* Maryland: University Press of America.

Alvidrez, J., and Weinstein, R., 1999. Early Teacher Perceptions and Later Student Academic Achievement. *Journal of Educational Psychology*, 91 (4), 731-746.

Anderson, G.L., 1989. Critical Ethnography in Education: Origins, current status, and new directions. *Review of Educational Research*, 59 (3), 249-270.

Ansalone, G., 2010. Tracking: Educational differentiation or defective strategy. *Educational Research Quarterly*, 34 (2), 3-17.

Anthony, G., Hunter, R. and Hunter, J., 2016. Whither Ability Grouping: Changing the object of groupwork. *In: Opening up Mathematics Education Research, Adelaide, 2016.* Adelaide: Mathematics Education Research Group of Australasia, pp. 117-125. Apple, M.W., and Weiss, L., 1980. Seeing Education Relationally. *In:* C. Grant A., and T. Chapman K., eds., *History of Multicultural Education Volume 2.* Oxon: Routledge, 1980, pp. 149-170.

Arthur, J., Waring, M., Coe, R. and Hedges, L.V., 2012. *Research Methods and Methodologies in Education*. London: Sage.

Asbury, K. and Plomin, R., 2014. *G is for Genes: The impact of genetics on education and achievement.* West Sussex: Wiley-Blackwell.

Askew, M., Hodgen, J., Hossain, S. and Bretscher, N., 2010. *Values and Variables*. London: Nuffiield Foundation.

Atkinson, P. and Delamont, S., 1990. Writing About Teachers: How British and American ethnographic texts describe teachers and teaching. *Teaching and Teacher Education*, 6 (2), 111-125.

Aynsley-Green, A., Lewsley, P., Marshall, K. and Towler, K., 2008. UK *Children's Commissioners' Report to the UN Committee on the Rights of the Child.* London: 11 Million.

Baines, E., 2012. Grouping Pupils by Ability in Schools. *In:* P. Adey, and J. Dillon, eds., *Bad Education: debunking myths in education.* Maidenhead: McGraw-Hill, 2012, pp. 37-56.

Ball, S., 2012. *Global Education Inc: New policy networks and the neo-liberal imaginary.* London: Routledge.

Ball, S., 1986. The Sociology of the School: Streaming and mixed ability and social class. *In:* R. Rogers, ed., *Education and Social Class.* East Sussex: The Falmer Press, 1986, pp. 83-100.

Ball, S., 1981. *Beachside Comprehensive: A case-study of secondary schooling.* Cambridge: Cambridge University Press.

Bassey, M., 1999. *Case Study Research in Educational Settings.* Buckingham: Open University Press.

Beard, R., 2000. *National Literacy Strategy: Review of research and other evidence.* Suffolk: Department for Education and Employment.

Bell, J., 2010. *Doing Your Research Project: A Guide for First-Time Researchers in Education, Health and Social Science.* Maidenhead: McGraw-Hill Open University Press.

Bendassolli, P., 2013. Theory Building in Qualitative Research: Reconsidering the problem of induction. *Forum: Qualitative Social Research*, 14 (1).

Benn, C., 1982. The Myth of Giftedness. Forum, 24 (2), 50-53.

Benn, M., 2011. *School Wars: The Battle for Britain's Education.* London: Verso Books.

Bernstein, B., 2000. *Pedagogy, Symbolic Control and Identity: Theory, research, critique.* Lanham, Maryland: Rowman and Littlefield.

Blakemore, S. and Frith, U., 2005. *The Learning Brain: Lessons for education.* Oxford: Blackwell.

Blatchford, P., Hallam, S., Ireson, J., Kutnick, P. and Creech, A., 2008. *Classes, Groups and Transitions: Structures for teaching and learning.* Cambridge: University of Cambridge.

Blumer, H., 1980. Mead and Blumer: The convergent methodological perspectives of social behaviorism and symbolic interactionism. *American Sociological Review*, 45 (3), 409-419.

Boaler, J., 2016. *Mathematical Mindsets: Unleashing students' potential through creative math, inspiring messages and innovative teaching.* San Francisco: John Wiley & Sons.

Boaler, J., 2013. Ability and Mathematics: The mindset revolution that is reshaping education. *Forum*, 55 (1), 143-152.

Boaler, J., Wiliam, D. and Brown, M., 2000. Students' Experiences of Ability Grouping: Disaffection, polarisation and the construction of failure. *British Educational Research Journal*, 26 (5), 631-648.

Boaler, J., 1997a. Setting, Social Class and Survival of the Quickest. *British Educational Research Journal*, 23 (5), 575-595.

Boaler, J., 1997b. When Even the Winners are Losers: Evaluating the experiences of top set' students. *Journal of Curriculum Studies*, 29 (2), 165-182.

Bourdieu, P., 1998. Practical Reason: On the theory of action. Oxford: Polity.

Bourne, J. and Moon, B., 1995. A Question of Ability. *In:* B. Moon, and A. Mayes Shelton, eds., *Teaching and Learning in the Secondary School.* Oxon: Routledge, 1995, pp. 25-37.

Boylan, M. and Povey, H., 2014. Ability Thinking. *In:* D. Leslie, and H. Mendick, eds., *Debates in Mathematics Education*. London: Routledge, 2014, pp. 28-37.

Bradbury, A. and Roberts-Holmes, G., 2017. *Grouping in Early Years and Key Stage 1: "A Necessary Evil"?* [online]. National Education Union. Available at: <u>https://neu.org.uk/sites/neu.org.uk/files/NEU279-Grouping-in-early-years-KS1.PDF</u> [Accessed 11 December 2017].

Brayton, J., Ollivier, M. and Robbins, W., 2010. *Introduction to Feminist Research* [online]. Available at: <u>http://www2.unb.ca/parl/research.htm</u> [Accessed 11 July 2016].

Brinkmann, S. and Kvale, S., 2015. *InterViews: An introduction to qualitative research interviewing.* 3rd ed. London: Sage.

British Educational Research Association, 2011. *Ethical Guidelines for Educational Research* [online]. Available at: <u>http://content.yudu.com/Library/A1t9gr/BERAEthicalGuideline/resources/index</u>. <u>htm?referrerUrl=http%25253A%25252F%25252Fwww.yudu.com%25252Fite</u> <u>m%25252Fdetails%25252F375952%25252FBERA-Ethical-Guidelines-2011</u> [Accessed 9 September 2013].

Bronfenbrenner, U., 1979. *The Ecology of Human Development: Experiments by Design and Nature.* Cambridge, MA: Harvard University Press.

Brooks, R., Te Riele, K. and Maguire, M., 2014. *Ethics and Education Research.* London: Sage.

Brophy, J.E., 1983. Research on the Self-Fulfilling Prophecy and Teacher Expectations. *Journal of Educational Psychology*, 75 (5), 631-61.

Brown, A.L. and French, L.A., 1979. The Zone of Potential Development: implications for intelligence testing in the year 2000. *Intelligence*, 3 (3), 255-271.

Bruner, J.S., 1986. *Actual Minds, Possible Worlds.* London: Harvard University Press.

Bucknall, S., 2012. *Children as Researchers in Primary Schools: Child voice and participation.* Oxon: Routledge.

Burgess, S., McConnell, B., Propper, C. and Wilson, D., 2004. Sorting and Choice in English Secondary Schools. *CMPO Working Paper*, 4 (111), 1-32.

Burke, T., 2010. *Anyone Listening: Evidence of children and Young People's participation in England.* London: National Children's Bureau.

Burnett, C., Daniels, K. and Sawka, V., 2016. Teaching Strategies. *In:* D. Wyse and S. Rodgers, eds., *A Guide to Early Years and Primary Teaching.* London: Sage, 2016, pp. 125-144.

Burt, C., 1972. Inheritance of General Intelligence. *American Psychologist*, 27 (3), 175-190.

Burt, C., 1957. The Distribution of Intelligence. *British Journal of Psychology*, 48 (3), 161.

Burton, D., 2003. Differentiation of Schooling and Pedagogy. *In:* S. Bartlett and D. Burton, eds., *Education Studies: Essential issues.* London: Sage, 2003, pp. 42-71.

Cambridge Maths, 2017. What are the Effects of Attainment Grouping on Mathematics Learning? *Expresso* [online], (5), 29/06/2017. Available at: <u>http://www.cambridgemaths.org/Images/379782-attainment-grouping.pdf</u> [Accessed 29 June 2017].

Campbell, T., 2015. Stereotyped at Seven? Biases in Teacher Judgement of Pupils' Ability and Attainment. *Journal of Social Policy*, 44 (3), 517-547.

Campbell, T., 2014. Stratified at Seven: In-class ability grouping and the relative age effect. *British Educational Research Journal*, 31 (4), 459-579.

Campbell, T., 2013. *In-school Ability Grouping and the Month of Birth Effect.* London: Institute of Education.

Carr, M., 2001. Assessment in Early Childhood Settings: Learning stories. London: Paul Chapman.

Carr, W. and Kemmis, S., 2005. Staying Critical. *Educational Action Research*, 13 (3), 347-358.

Carr, W. and Kemmis, S., 1986. *Becoming Critical: Education knowledge and action research.* London: Routledge.

Catsambis, S., Mulkey, L.M., Buttaro, A., Jr., Steelman, L.C. and Koch, P.R., 2011. Examining Gender Differences in Ability Group Placement at the Onset of Schooling: The Role of Skills, Behaviors, and Teacher Evaluations. *Journal of Educational Research*, 105 (1), 8-20.

Cattell, R.B., 1940. A Culture-free Intelligence Test I. *Journal of Educational Psychology*, 31 (3), 161-171.

Cherniss, C., Extein, M., Goleman, D. and Weissberg, R.P., 2006. Emotional Intelligence: What Does the Research Really Indicate? *Educational Psychologist*, 41 (4), 239-245.

Chitty, C., 2009. *Eugenics, Race and Intelligence in Education.* 2nd ed. London: Continuum.

Chorzempa, B.F. and Graham, S., 2006. Primary-Grade Teachers' Use of Within-Class Ability Grouping in Reading. *Journal of Educational Psychology*, 98 (3), 529-541.

Christians, C.G., 2011. Ethics and Politics in Qualitative Research. *In:* N. Denzin K. and Y.S. Lincoln, eds., *The Sage Handbook of Qualitative Research.* London: Sage, 2011, pp. 139-164.

Clark, A., 2005. Ways of Seeing: Using the Mosaic approach to listen to young children's perspectives. *In:* A. Clark, A.T. Kjorholt and P. Moss, eds., *Beyond Listening: Children's perspectives on early childhood services.* Bristol: Policy Press, 2005, pp. 29-50.

Clarke, M., 2014. Dialectics and Dilemmas: Psychosocial dimensions of ability grouping policy. *Critical Studies in Education*, 55 (2), 186-200.

Claxton, G., 2012. Turning Thinking on its Head: how bodies make up their minds. *Thinking Skills and Creativity*, 7 (2), 78-84.

Clough, P. and Nutbrown, C., 2012. *A Student's Guide to Methodology.* 3rd ed. London: Sage.

Coe, R., Aloisi, C., Higgins, S. and Major, L.E., 2014. *What Makes Great Teaching? Review of the underpinning research* [online]. The Sutton Trust.

Available at: <u>http://www.suttontrust.com/wp-content/uploads/2014/10/What-Makes-Great-Teaching-REPORT.pdf</u> [Accessed 25 September 2017].

Cohen, L., Manion, L. and Morrison, K., 2011. *Research Methods in Education.* 7th Ed. ed. London: Routledge.

Collins, K.M., 2003. *Ability Profiling and School Failure: One Child's Struggle to be Seen as Competent.* Oxon: Routledge.

Condron, D.J., 2007. Stratification and Educational Sorting: Explaining ascriptive inequalities in early childhood reading group placement. *Social Problems*, 54 (1), 139-160.

Cooper, H.M., 1979. Pygmalion Grows Up: studies in the expectation communication process. *Review of Educational Research*, 49 (3), 389-410.

Corsaro, W.A., 1996. Transitions in Early Childhood: The promise of comparative, longitudinal ethnography. *In:* R. Jessor, A. Colby and R.A. Schweder, eds., *Ethnography and Human Development.* London: The University of Chicago, 1996, pp. 419-456.

Coyle, T.R. and Rindermann, H., 2013. Spearman's Law of Diminishing Returns and National Ability. *Personality and Individual Differences*, 55 (4), 406-410.

Craig, I. and Plomin, R., 2006. Quantitative Trait Loci for IQ and Other Complex Traits: single-nucleotide polymorphism genotyping using pooled DNA and microarrays. *Genes, Brain, and Behavior,* 5 (1), 32-37.

Dar, Y. and Resh, N., 1986. Classroom Intellectual Composition and Academic Achievement. *American Educational Research Journal*, 23 (3), 357-374.

Darbyshire, P., Macdougall, C. and Schiller, W., 2005. Multiple Methods in Qualitative Research with Children: More insight or just more? *Qualitative Research*, 5 (4), 417-436.

Davey, C., Burke, T. and Shaw, C., 2010. *Children's Participation in Decision-making: A children's views report.* London: National Children's Bureau.

Day, C. and Kington, A., 2008. Identity, Well-being and Effectiveness: The emotional contexts of teaching. *Pedagogy, Culture & Society*, 16 (1), 7-23.

De Saussure, F., 2013. *Course in General Linguistics.* Chichester: Columbia University Press.

Deary, I.J., 2006. Intelligence, Destiny and Education: The ideological roots of intelligence testing. *Intelligence*, 34 (6), 621-622.

Deary, I.J., Strand, S., Smith, P. and Fernandes, C., 2007. Intelligence and Educational Achievement. *Intelligence*, 35 (1), 13-21.

Delamont, S., Coffey, A. and Atkinson, P., 2000. The Twilight Years? Educational ethnography and the five moments model. *International Journal of Qualitative Studies in Education*, 13 (3), 223-238. Denham, M.A. and Onwuegbuzie, A.J., 2013. Beyond Words: Using nonverbal communication data in research to enhance thick description and interpretation. *International Journal of Qualitative Methods*, 12 (1), 670-696.

Denscombe, M., 2014. *The Good Research Guide: For small-scale social research projects.* 5th ed. Maidenhead: McGraw-Hill/Open University Press.

Denzin, N.K., 2010. On Elephants and Gold Standards. *Qualitative Research*, 10 (2), 269-272.

Denzin, N.K., 2009. The Elephant in The Living Room: Or extending the conversation about the politics of evidence. *Qualitative Research*, 9 (2), 139-160.

Denzin, N.K., 2008. *Symbolic Interactionism and Cultural Studies: The politics of interpretation.* Oxford: Blackwell Publishing.

Denzin, N.K., 1999. Interpretive Ethnography For the Next Century. *Journal of Contemporary Ethnography*, 28 (5), 510-519.

Denzin, N.K., 1997. *Interpretive Ethnography: Ethnographic practices for the 21st century.* London: Sage.

Denzin, N.K., 1970. *The Research Act: A theoretical introduction to sociological methods.* London: Prentice Hall.

Denzin, N.K., 1969. Symbolic Interactionism and Ethnomethodology: A proposed synthesis. *American Sociological Review*, 34 (6), 922-934.

Denzin, N.K. and Lincoln, Y.S., 2011. *The Sage Handbook of Qualitative Research.* London: Sage.

Derry, S., Hickey, D. and Koschmann, T., 2007. Ethical Concerns in Ethical Video Collection. *In:* S. Derry J., ed., *Guidelines for Video Research in Education: Recommendation from an expert panel.* Illinois: Data Research and Development Center, 2007, pp. 59-77.

Detterman, D., 1979. A Job Half Done: The road to intelligence testing in the year 2000. *Intelligence*, 3 (3), 295-306.

Dewey, J., 1938. Experience and Education. New York: Touchstone.

Dewey, J., 1916. *Democracy and Education: An introduction to the philosophy of education.* London: Free Press.

Dewey, J., 1910. How We Think. Boston: D C Heath & Co.

Donaldson, M., 1978. Children's Minds. London: Croom Helm.

Dooley, P., Smith, A. and Kerry, T., 1977. *Teaching Mixed Ability Classes: Headteachers' reports of procedures and problems in forty schools.* Nottingham: Nottingham University School of Education. Dorling, D., 2010. *Injustice: Why social inequality persists.* Bristol: The Policy Press.

Dweck, C., 2008. *Mindset: The new psychology of success.* New York: Ballantine Books.

Eder, D., 1981. Ability Grouping as a Self-fulfilling Prophecy: A micro-analysis of teacher-student interaction. *Sociology of Education*, 54 (3), 151-162.

Education Act 1944 (7 and 8 Geo 6 c. 31).

Education Act 1976 (c. 81).

Education Act 1979 (c. 49).

Education Act 1996 (c. 31).

Einarsdóttir, J., 2010. Children's Experiences of the First Year of Primary School. *European Early Childhood Education Research Journal*, 18 (2), 163-180.

Evans, J., 1985. *Teaching in Transition: The challenge of mixed ability grouping.* Milton Keynes: Open University Press.

Feuerstein, R. and Rand, Y., 1997. *Don't Accept Me as I Am: Helping retarded performers excel.* Illinois: SkyLight.

Fisher, J., 2013. *Starting From The Child: Teaching and learning in the foundation stage.* Maidenhead: McGraw-Hill.

Fisher, J., 2011. Building on the Early Years Foundation Stage: Developing good practice for transition into Key Stage 1. *Early Years*, 31 (1), 31-42.

Flint, K. and Peim, N., 2012. *Rethinking the Education Improvement Agenda: A critical philosophical approach.* London: Continuum.

Flynn, J.R., 2006. Towards a Theory of Intelligence Beyond g. *Behavioral and Brain Sciences*, 29 (2), 132-134.

Flynn, J.R., 1987. Massive IQ Gains in 14 Nations: What IQ tests really measure. *Psychological Bulletin*, 101 (2,), 171-191.

Flyvbjerg, B., 2006. Five Misunderstandings about Case-study Research. *Qualitative Inquiry*, 12 (2), 219-245.

Fonow, M.M. and Cook, J., 2005. Feminist Methodology: New applications in the academy and public policy. *Signs: Journal of Women in Culture and Society*, 30 (4), 2211-2236.

Foster, D. and Long, R., 2016. *Grammar Schools in England*. Briefing Paper Number 7070 ed. London: House of Commons Library.

Foucault, M., 1972. The Archaeology of Knowledge. Oxon: Routledge.

Francis, B., Archer, L., Hodgen, J., Pepper, D., Taylor, B. and Travers, M., 2017. Exploring the relative lack of Impact of Research on 'Ability Grouping' in England: A discourse analytic account. *Cambridge Journal of Education*, 47 (1), 1-17.

Freeman, M. and Mathison, S., 2009. *Researching Children's Experiences*. New York: Guilford Press.

Friedman, M., 1996. *Martin Buber and the Human Sciences*. Albany, New York: SUNY Press.

Fulton, J., Kuit, J., Sanders, G. and Smith, P., 2013. *The Professional Doctorate: A practical guide.* Hampshire: Palgrave MacMillan.

Galton, F., 1892. *Hereditary Genuis: An enquiry into its laws and consequences.* 2nd ed. London: MacMillan and Co.

Gardner, H., 2006. On Failing To Grasp The Core Of MI Theory: A response to Visser et al. *Intelligence*, 34 (5), 503-505.

Gardner, H., 2001. *On The Three Faces Of Intelligence* [online]. . Available at: <u>http://howardgardner.net/Papers/papers.html</u> [Accessed 18 August 2014].

Gardner, H., 1984. *Frames of Mind: The theory of multiple intelligences.* London: Heinemann.

Geertz, C., 1973. The Interpretation of Cultures. London: Fontana.

Gibb, N., 2016. South Asian Method of Teaching Maths to be Rolled Out in Schools (press release) [online]. Department for Education. Available at: https://www.gov.uk/government/news/south-asian-method-of-teaching-maths-to-be-rolled-out-in-schools [Accessed 15 July 2016].

Giddens, A., 1976. *New Rules of Sociological Method: a positive critique of interpretative sociologies.* London: Hutchinson.

Gillard, D., 2011. *Education in England: A brief history* [online]. . Available at: <u>http://www.educationengland.org.uk/history/chapter07.html</u> [Accessed 17th August 2014].

Gillborn, D. and Youdell, Y., 2001. The New IQism: Intelligence, 'ability' and the rationing of education. *In:* J. Demaine, ed., *Sociology of Education Today*. Hampshire: Palgrave, 2001, pp. 65-99.

Glaser, B.G. and Strauss, A.L., 1967. *The Discovery of Grounded Theory: Strategies for qualitative research.* 2nd ed ed. New York: Aldine de Gruyter.

Goldacre, B., 2013. *Building Evidence into Education* [online]. Department for Education. Available at: <u>https://www.gov.uk/government/news/building-</u><u>evidence-into-education</u> [Accessed 18th August 2014].

Goldberg, M.L., Passow, H.A. and Justman, J., 1966. *The Effects of Ability Grouping.* New York: Teachers College Press.

Goldman, R., Derry, S., J., Erikson, F. and Lemke, J., 2007. Selection in Video. *In:* S. Derry J., ed., *Guidelines for Video Research in Education: Recommendation from an expert panel.* Illinois: Data Research and Development Center, 2007, pp. 15-23.

Goleman, D., 2012. *Ecoliterate: How educators are cultivating emotional, social, and ecological intelligence.* San Francisco, California: Jossey-Bass.

Goleman, D., 1996. *Emotional Intelligence: Why it can matter more than IQ.* London: Bloomsbury.

Gomm, R., 2009. *Key Concepts in Social Research Methods.* Basingstoke: Palgrave Macmillan.

Gomm, R., Hammersley, M. and Foster, P., 2000. *Case Study Method: Key issues, key texts.* London: Sage.

Gorard, S. and See, B.H., 2013. *Overcoming Disadvantage in Education.* Oxon: Routledge.

Gorard, S. and Smith, E., 2004. What Is "Underachievement" at School? *School Leadership and Management*, 24 (2), 205-225.

Gould, S., 1996. The Mismeasure of Man. 2nd ed. London: W.W.Norton & Co.

Gray, D.E., 2013. *Doing Research in the Real World.* London: Sage.

Great Britain. Department for Education, 2017. Schools, Pupils and their Characteristics: January 2017 (SFR 28/2017). London: Department for Education.

Great Britain. Department for Education, 2016. Schools That Work for Everyone: Government consultation. London: Department for Education.

Great Britain. Department for Education, 2013. *The National Curriculum in England: Framework document* [online]. Available at: <u>https://www.gov.uk/government/collections/national-curriculum</u> [Accessed 18 August 2014].

Great Britain. Department for Education, 2012. *Academically More Able Pupils* [online]. Department for Education. Available at: <u>http://www.education.gov.uk/schools/pupilsupport/inclusionandlearnersupport</u>/a00205083/academically-more-able-pupils [Accessed 27 August 2013].

Great Britain. Department for Education, 2011a. *Teachers' Standards.* London: Department for Education.

Great Britain. Department for Education, 2011b. *Review of the National Curriculum in England: What can we learn from the English, Mathematics and Science curricula of high performing jurisdictions?* Research Report DFE-RR178. London: Department for Education. Great Britain. Department for Education and Employment, 1999. *The National Numeracy Strategy: Framework for teaching mathematics from Reception to Year 6.* London: Department for Education and Employment.

Great Britain. Department for Education and Employment, 1998. *The National Literacy Strategy: Framework for teaching literacy from Reception to Year 6.* London: Department for Education and Employment.

Great Britain. Department for Education and Employment, 1997. *Excellence in Schools.* London: HMSO. (Cm 3681).

Great Britain. Department for Education and Skills, 2005. *Higher Standards, Better Schools for All: More choice for parents and pupils.* Nottingham: Department for Education and Skills.

Great Britain. Parliament. Board of Education, 1924. *Report of the Consultative Committee on Psychological Tests of Educable Capacity and Their Possible Use in the Public System of Education.* Harrow: HM Stationery Office.

Great Britain. Parliament. House of Commons. Education Committee, 2014. *Underachievement in Education by White Working Class Children: First report of session 2014-15.* London: The Stationary Office.

Green, D., 2012. Involving Young Children in Research. *In:* I. Palaiologou, ed., *Ethical Practice in Early Childhood.* London: Sage, 2012, pp. 15-31.

Green, J.L., Skukauskaite, A. and Baker, W.D., 2012. Ethnography as Epistemology. *In:* J. Arthur, M. Waring, R. Coe and L. Hedges V., eds., *Research Methods and Methodologies in Education.* London: Sage, 2012, pp. 309-321.

Greene, S. and Hogan, D., 2005. *Researching Children's Experience: Methods and approaches.* London: Sage.

Griebel, W. and Niesel, R., 2002. Co-constructing Transition into Kindergarten and School by Children, Parents and Teachers. *In:* A. Dunlop, and H. Fabian, eds., *Transitions in the Early Years: Debating continuity and progression for childen in early education.* London: Routledge Falmer, 2002, pp. 64-75.

Griffiths, M., 2000. Learning for All? Interrogating children's experiences of primary schooling in Mauritius. *Teaching and Teacher Education*, 16 (7), 785-800.

Griffiths, M., 2003. Action for Social Justice in Education: fairly different. Buckingham: Open University Press.

Gripton, C., 2017. Planning for Endless Possibilities. *In:* A. Woods, ed., *Child-initiated Play and Learning: Planning for possibilities in the early years.* 2nd ed. London: David Fulton, 2017, pp. 8-22.

Groth-Marnat, G., 2009. *Handbook of Psychological Assessment.* 5th ed. New Jersey: John Wiley & Sons.

Groundwater-Smith, S., Dockett, S. and Bottrell, D., 2015. *Participatory Research with Children and Young People.* London: Sage.

Guba, E.G., Lynham, S.A. and Lincoln, Y.S., 2011. Paradigmatic Controversies, Contradictions, and Emerging Confluences, Revisited. *In:* N. Denzin K., and Y.S. Lincoln, eds., *The Sage Handbook of Qualitative Research.* 4th ed. London: Sage, 2011, pp. 97-128.

Hallam, S., 2002. *Ability Grouping in Schools: A literature review.* London: Institute of Education.

Hallam, S., Ireson, J. and Davies, J., 2004. Primary Pupils' Experiences of Different Types of Grouping in School. *British Educational Research Journal*, 30 (4), 515-533.

Hallam, S., Ireson, J., Lister, V., Chaudhury, I.A. and Davies, J., 2003. Ability Grouping Practices in the Primary School: A survey. *Educational Studies*, 29 (1), 69-83.

Hallam, S. and Parsons, S., 2013. Prevalence of Streaming in UK Primary Schools: evidence from the Millennium Cohort Study. *British Educational Research Journal*, 39 (3), 514-544.

Hamilton, L., 2011. *Case Studies in Educational Research* [online]. BERA. Available at: <u>https://www.bera.ac.uk/wp-content/uploads/2014/03/Case-studies-in-educational-research.pdf</u> [Accessed 21 July 2017].

Hamilton, L. and Corbett-Whittier, C., 2013. Using Case Study in Education Research. London: Sage.

Hamilton, L. and O'Hara, P., 2011. The Tyranny of Setting (Ability Grouping): Challenges to inclusion in scottish primary schools. *Teaching and Teacher Education*, 27 (4), 712-721.

Hammersley, M., 2008. *Questioning Qualitative Inquiry: Critical essays.* London: Sage.

Hammersley, M. and Atkinson, P., 2007. *Ethnography: Principles in practice.* 3rd ed. Oxon: Routledge.

Hammond, M. and Wellington, J., 2013. *Research Methods: The key concepts.* London: Routledge.

Hamre, B.K. and Pianta, R.C., 2001. Early Teacher–child Relationships and the Trajectory of Children's School Outcomes Through Eighth Grade. *Child Development*, 72 (2), 625-638.

Harcourt, D., 2011. An Encounter with Children: Seeking meaning and understanding about childhood. *European Early Childhood Education Research Journal*, 19 (1), 331-343.

Harcourt, D. and Einarsdóttir, J., 2011. Introducing Children's Perspectives and Participation in Research. *European Early Childhood Education Research Journal*, 19 (3), 301-307.

Harcourt, D., Perry, B. and Waller, T., 2011. *Researching Young Children's Perspectives: Debating the Ethics and Dilemmas of Educational Research with Children.* London: Routledge.

Hart, S., Dixon, A., Drummond, M.J. and McIntyre, D., 2004. *Learning Without Limits.* Berkshire: Open University Press.

Hattie, J., 2012. *Visible Learning for Teachers: Maximizing impact on learning.* London: Routledge.

Hay, P.J. and Macdonald, D., 2010. Evidence for the social construction of ability in physical education. *Sport, Education and Society*, 15 (1), 1-18.

Hayes, N., 2000. Foundations of Psychology. London: Thompson Learning.

Heidegger, M., 2010. *Being and Time.* Albany: State University of New York Press.

Higgins, S., Katsipataki, M., Kokotsaki, D., Coleman, R., Major, L. and Coe, R., 2013. *The Sutton Trust-Education Endowment Foundation Teaching and Learning Toolkit.* [online]. Education Endowment Foundation. Available at: <u>https://educationendowmentfoundation.org.uk/toolkit/toolkit-a-z/ability-grouping/</u> [Accessed 13 July 2015].

Holt, J., 1982. How Children Fail. 2nd ed. London: Penguin.

Hornby, G., Witte, C. and Mitchell, D., 2011. Policies and Practices of Ability Grouping in New Zealand Intermediate Schools. *Support for Learning*, 26 (3), 92-96.

Howard-Jones, P., 2007. *Neuroscience and Education: Issues and opportunities.* London: TLRP.

Howe, M.J.A., 1997. *IQ in Question: The truth about intelligence.* London: Sage.

Howe, S., 2016. What Play Means to Us: Exploring children's perspectives on play in an English Year 1 classroom. *European Early Childhood Education Research Journal*, 24 (5), 748-759.

Husserl, E., 1970. *The Crisis of European Sciences and Transcendental Phenomenology: An introduction to phenomenological philosophy.* Illinois: Northwestern University Press.

Ireson, J. and Hallam, S., 2009. Academic Self-concepts in Adolescence: Relations with achievement and ability grouping in schools. *Learning and Instruction*, 19 (3), 201-213.

Ireson, J. and Hallam, S., 2001. *Ability Grouping in Education*. London: Paul Chapman.

Ireson, J., Hallam, S. and Plewis, I., 2001. Ability Grouping in Secondary Schools: Effects on pupils' self-concepts. *British Journal of Educational Psychology*, 71 (2), 315-326.

Jackson, B., 1964. *Streaming: an education system in miniature.* London: Routledge and Kegan Paul.

James, A., 2009. Agency. *In:* J. Qvortrup, W.A. Corsaro and M. Honig, eds., *The Palgrave Handbook of Childhood Studies.* Basingstoke: Palgrave Macmillan, 2009, pp. 34-45.

James, A., Jenks, C. and Prout, A., 1998. *Theorizing Childhood.* Cambridge: Polity Press.

James, A. and James, A., 2004. *Constructing Childhood: Theory, policy, and social practice.* Hampshire: Palgrave Macmillan.

James, M., 2013. New (or Not New) Directions in Evidence-Based Practice in Education [online]. BERA. Available at: <u>http://www.bera.ac.uk/system/files/Mary%20james%20-</u> %20New%20%28or%20not%20new%29%20directions%20in%20evidencebased%20policy.%20Response%20to%20Ben%20Goldacre.pdf [Accessed 20 August 2013].

James, M., Oates, T., Pollard, A. and Wiliam, D., 2011. *The Framework for the National Curriculum: a report by the expert panel for the national curriculum review.* London: Department for Education.

Jeffrey, B. and Troman, G., 2004. Time for Ethnography. *British Educational Research Journal*, 30 (4), 535-548.

Jensen, A.R., 2003. Regularities in Spearman's Law of Diminishing Returns. *Intelligence*, 31 (2), 95-105.

Jerrim, J., 2011. England's "Plummeting" PISA Test Scores Between 2000 and 2009: Is the performance of our secondary school pupils really in relative decline? *Department of Quantitative Social Science, Institute of Education,* Working Paper 11 (09), 1-42.

Jerrim, J. and Choi, A., 2014. England's "Plummeting" PISA Test Scores between 2000 and 2009: Is the performance of our secondary school pupils really in relative decline? *Journal of Education Policy*, 29 (3), 349-376.

Jewitt, C., 2012. *An Introduction to Using Video for Research.* 03/12. London: NCRM.

José, J. and Cody, J., 1971. Teacher-pupil Interaction as it Relates to Attempted Changes in Teacher Expectancy of Academic Ability and Achievement. *American Educational Research Journal*, 8 (1), 39-49.

Kamin, L.J., 1977. Burt's IQ Data. Science, 195 (4275), 246-248.

Kant, I., 2006. *Toward Perpetual Peace and Other Writings on Politics, Peace, and History.* New Haven: Yale University Press.

Karlsson, J., 2012. Visual Methodologies. *In:* J. Arthur, M. Waring, R. Coe and L. Hedges V., eds., *Research Methods and Methodologies in Education.* London: Sage, 2012, pp. 94-100.

Kellett, M., 2010. *Rethinking Children and Research: Attitudes in contemporary society.* London: Continuum.

Kincheloe, J.L., McLaren, P. and Steinberg, S.R., 2011. Critical Pedagogy and Qualitative Research. *In:* N. Denzin K., and Y.S. Lincoln, eds., *The Sage Handbook of Qualitative Research.* 4th ed. London: Sage, 2011, pp. 163-178.

King's College, 2015. *Best Practice in Grouping Students* [online]. London: King's College. Available at: <u>http://www.kcl.ac.uk/sspp/departments/education/research/cppr/Research/cu</u> <u>rrentpro/BPGS/index.aspx</u> [Accessed 17 February 2015].

Kissmann, U.T., 2009. Video Interaction Analysis. Frankfurt: Peter Lang.

Knoblauch, H., 2012. Introduction to the Special Issue of Qualitative Research: Video-analysis and videography. *Qualitative Research*, 12 (3), 251-254.

Knoblauch, H., and Schnettler, B., 2012. Videography: Analysing video data as a 'focused' ethnographic and hermeneutical exercise. *Qualitative Research*, 12 (3), 334-356.

Kostenius, C., 2011. Picture This - Our Dream School! Swedish School Children Sharing Their Visions of School. *Childhood: A Global Journal of Child Research*, 18 (4), 509-525.

Kuhn, T.S., 1962. *The Structure of Scientific Revolutions*. London: University of Chicago press.

Kulik, C. and Kulik, J.A., 1982. Effects of Ability Grouping on Secondary School Students: A meta-analysis of evaluation findings. *American Educational Research Journal*, 19 (3), 415-428.

Kumar, R., 2014. *Research methodology: A step-by-step guide for beginners.* 4th ed. London: Sage.

Kususanto, P., Ismail, H.N. and Jamil, H., 2010. Students' Self-Esteem and Their Perception of Teacher Behavior: A study of between-class ability grouping. *Electronic Journal of Research in Educational Psychology*, 8 (2), 707-724.

Kutnick, P., Blatchford, P. and Baines, E., 2002. Pupil Groupings in Primary School Classrooms: Sites for learning and social pedagogy? *British Educational Research Journal*, 28 (2), 187-206.

Kutnick, P., Sebba, J., Blatchford, P., Galton, M. and Thorp, J., 2005. *The Effects of Pupil Grouping: Literature Review.* Nottingham: Department for Education and Skills.

Kyllonen, P.C, 2013. Is Working Memory Capacity Spearman's g? *In:* I. Dennis, and P. Tapsfield, eds., *Human Abilities: their nature and measurement*. New Jersey, US: Psychology Press, 2013, pp. 49-76.

Laosa, L.M., 1996. Intelligence Testing and Social Policy. *Journal of Applied Developmental Psychology*, 17 (2), 155-173.

Lesser, G.S., 1972. Pedagogical Adaptations to Individual Differences: Some Research Findings. *In:* L. Sperry, ed., *Learning performance and individual difference: Essays, and readings.* Illinois: Scott, Foresman and Company., 1972, pp. 298-310.

Lincoln, Y.S., and Guba, E.G., 1985. *Naturalistic Inquiry*. London: Sage.

Løndal, K., 2010. Children's Lived Experience and their Sense of Coherence: Bodily play in a Norwegian after-school programme. *Child Care in Practice*, 16 (4), 391-407.

Lou, Y.P., Abrami, P.C. and Spence, J.C., 2000. Effects of Within-class Grouping on Student Achievement: An exploratory model. *Journal of Educational Research*, 94 (2), 101-112.

Lou, Y.P., Abrami, P.C. Spence, J.C., Poulsen, C., Chambers, B. and dApollonia, S., 1996. Within-class Grouping: A meta-analysis. *Review of Educational Research*, 66 (4), 423-458.

Loveless, T., 2013. *The 2013 Brown Center Report on Amercian Education: How well are American students learning?* Houston: Brown Center.

Lucas, B., 2007. *New Kinds of Smart: Emerging thinking about what it is to be intelligent today.* Winchester: The Talent Foundation.

Lucas, B. and Claxton, G., 2010. *New Kinds Of Smart: How the science of learnable intelligence is changing education.* Maidenhead: McGraw-Hill.

Lundy, L., 2007. 'Voice' is Not Enough: Conceptualising Article 12 of the United Nations Convention on the Rights of the Child. *British Educational Research Journal*, 33 (6), 927-942.

MacDonald, A., 2009. Drawing Stories: The Power of Children's Drawings to Communicate the Lived Experience of Starting School. *Australasian Journal of Early Childhood*, 34 (3), 40-49.

MacIntyre, H. and Ireson, J., 2002. Within-class Ability Grouping: placement of pupils in groups and self-concept. *British Educational Research Journal*, 28 (2), 249-263.

Macqueen, S., 2010. Primary Teacher Attitudes in Achievement-based Literacy classes. *Issues in Educational Research*, 20 (2), 118-136.

Marks, R., 2016. *Ability-grouping in Primary Schools: Case studies and critical debates.* Northwich: Critical Publishing.

Marks, R., 2014a. The Dinosaur in the Classroom: What we stand to lose through ability-grouping in the primary school. *FORUM: For Promoting 3-19 Comprehensive Education*, 56 (1), 45-54.

Marks, R., 2014b. Educational Triage and Ability-grouping in Primary Mathematics: A case-study of the impacts on low-attaining pupils. *Research in Mathematics Education*, 16 (1), 38-53.

Marks, R., 2011. 'Ability' in Primary Mathematics Education: patterns and implications. *Research in Mathematics Education*, 13 (3), 305-306.

Marsh, H.W., 1986. Self- Serving Effect (Bias?) in Academic Attributions: Its Relation to Academic Achievement and Self-Concept. *Journal of Educational Psychology*, 78 (3), 190-200.

Mavers, D., 2012. Transcribing Video. 05/12 ed. London: NCRM.

McGillicuddy, D. and Devine, D., 2018. "Turned off" or "ready to fly": Ability grouping as an act of symbolic violence in primary school. *Teaching and Teacher Education*, 70 (Supplement C), 88-99.

McNamara, S., Moreton, G. and Newton, H., 1996. *Differentiation*. Cambridge: Pearson Publishing.

Merleau-Ponty, M., 2005. *Phenomenology of Perception*. London: Taylor & Francis.

Mills, A.J., Durepos, G. and Wiebe, E., 2010. *Encyclopedia of Case Study Research.* London: Sage.

Mockler, N., 2011. Beyond 'what works': Understanding teacher identity as a practical and political tool. *Teachers and Teaching*, 17 (5), 517-528.

Moller, J. and Pohlmann, B., 2010. Achievement Differences and Self-concept Differences: Stronger associations for above or below average students? *British Journal of Educational Psychology*, 80 (3), 435-450.

Murray, R., 2011. *How to Write a Thesis.* 3rd ed. Berkshire: McGraw-Hill Education.

National Centre for Excellence in the Teaching of Mathematics, 2014a. *Maths in High Performing Countries* [online]. Available at: <u>https://www.ncetm.org.uk/resources/47230</u> [Accessed 15 July 2016].

National Centre for Excellence in the Teaching of Mathematics, 2014b. *Mastery Approaches to Mathematics and the New National Curriculum* [online]. Available at:

https://www.ncetm.org.uk/public/files/19990433/Developing mastery in mat hematics october 2014.pdf [Accessed 06 July 2017].

National Union of Teachers, 2016. *Setting and Streaming* [online]. Available at: <u>https://www.teachers.org.uk/edufacts/setting-and-streaming</u> [Accessed 15 July 2016].

Nespor, J., 1987. The Role of Beliefs in the Practice of Teaching. *Journal of Curriculum Studies*, 19 (4), 317-328.

Nespor, J., 1985. *The Role of Beliefs in the Practice of Teaching: Final Report of the Teacher Beliefs Study.* Austin: University of Texas at Austin. Research and Development Center for Teacher Education.

Nicholls, J.G., Patashnick, M. and Mettetal, G., 1986. Conceptions of Ability and Intelligence. *Child Development*, 57 (3), 636-645.

Oates, T., 2011. Could Do Better: Using international comparisons to refine the National Curriculum in England. *The Curriculum Journal*, 22 (2), 121-150.

Ochsen, C., 2011. Recommendation, Class Repeating and Children's Ability: German school tracking experiences. *Applied Economics*, 43 (27), 4127-4133.

O'Connor, E. and McCartney, K., 2007. Examining Teacher-Child Relationships and Achievement as Part of an Ecological Model of Development. *American Educational Research Journal*, 44 (2), 340-369.

Office for Standards in Education, 2017. *RAISEonline methodology guidance* [online]. Available at: <u>file:///C:/Users/cce3hawkscj/Downloads/RAISEonline%20Methodology%20Gui</u> <u>dance%20v3.pdf</u> [Accessed 27 June 2017].

Office for Standards in Education, 2015. *The Most Able Students: An update on progress made since June 2013.* Manchester: Office for Standards in Education.

Office for Standards in Education, 2013. *The Most Able Students: Are they doing as well as they should in our non-selective secondary schools?* Manchester: Office for Standards in Education.

Office for Standards in Education, 2012. *Mathematics: Made to measure.* Manchester: Office for Standards in Education.

Office for Standards in Education, 2002. *The National Literacy Strategy: the first four years 1998-2002 (HMI 555).* London: Office for Standards in Education.

Office for Standards in Education, 1998. *Setting in Primary Schools.* London: Office for Standards in Education.

Olesen, V., 2011. Feminist Qualitative Research in the Millennium's First Decade. *In:* N. Denzin K., and Y.S. Lincoln, eds., *The Sage Handbook of Qualitative Research*. London: Sage, 2011, pp. 129-146.

Ollerton, M., 2001. Inclusion, Learning and Teaching Mathematics. *In:* P. Gates, ed., *Issues in Mathematics Teaching.* London: Routledge, 2001, pp. 261-276.

Onwuegbuzie, A.J. and Byers, V.T., 2014. An Exemplar for Combining the Collection, Analysis, and Interpretations of Verbal and Nonverbal Data in Qualitative Research. *International Journal of Education*, 6 (1), 183-246.

Organisation for Economic Co-operation and Development, 2013. *PISA 2012 Results: What Makes Schools Successful? Resources, Policies and Practices (Volume IV).* Paris: Organisation for Economic Co-operation and Development.

Organisation for Economic Co-operation and Development, 2010. *The High Cost of Low Educational Performance – the long-run economic impact of improving PISA outcomes.* Paris: Organisation for Economic Co-operation and Development.

Organisation for Economic Co-operation and Development: Centre for Educational Research and Innovation, 2007. *Understanding the Brain: the birth of a learning science* [online]. Available at: <u>http://www.oecd.org/edu/ceri/38811529.pdf</u> [Accessed 14 July 2015].

Pajares, M.F., 1992. Teachers' Beliefs and Educational Research: Cleaning up a messy construct. *Review of Educational Research*, 62 (3), 307-332.

Palaiologou, I., 2017. The Use of Vignettes in Participatory Research with Young Children. *International Journal of Early Years Education*, 25 (3), 308-322.

Palaiologou, I., 2015. Ethical Issues Associated with Educational Research. *In:* I. Palaiologou, D. Needham and T. Male, eds., *Doing Research in Education: Theory and Practice.* London: Sage, 2015, pp. 37-58.

Palaiologou, I., 2014. "Do We Hear What Children Want to Say?'" Ethical Praxis When Choosing Research Tools with Children under Five. *Early Child Development and Care*, 184 (5), 689-705.

Pálmádóttir, H. and Einarsdóttir, J., 2016. Video Observations of Children's Perspectives on their Lived Experiences: Challenges in the relations between the researcher and children. *European Early Childhood Education Research Journal*, 24 (5), 721-733.

Palmer, P.J., 1987. Community, Conflict, and Ways of Knowing: Ways to deepen our educational agenda. *Change: The Magazine of Higher Learning*, 19 (5), 20-25.

Park, V. and Datnow, A., 2017. Ability Grouping and Differentiated Instruction in an Era of Data-Driven Decision Making. *American Journal of Education*, 123 (2), 281-306.

Parsons, S. and Hallam, S., 2014. The Impact of Streaming on Attainment at Age Seven: Evidence from the Millennium Cohort Study. *Oxford Review of Education*, 40 (5), 567-589.

Peacock, A., 2016. *Assessment for Learning Without Limits.* London: Open University Press.

Peoples, C.E., Fagan III, J.F. and Drotar, D., 1995. The Influence of Race on 3-year-old Children's Performance on the Stanford-Binet: Fourth edition. *Intelligence*, 21 (1), 69-82.

Pianta, R.C. and Stuhlman, M.W., 2004. Teacher-child Relationships and Children's Success in the First Years of School. *School Psychology Review*, 33 (3), 444.

Pinker, S., 2004. Why Nature & Nurture Won't Go Away. *Daedalus*, 133 (4), 5-17.

Plomin, R. and Craig, I., 2001. Genetics, Environment and Cognitive Abilities: review and work in progress towards a genome scan for quantitative trait locus associations using DNA pooling. *The British Journal of Psychiatry*, 178 (40), 41-48.

Pole, C.J., 2004. *Seeing is Believing?: Approaches to visual research.* Oxford: Elsevier.

Pole, C. and Morrison, M., 2003. *Ethnography for Education*. Berkshire: McGraw-Hill Education.

Pollard, A., 1996. *The Social World of Children's Learning: Case studies of pupils from four to seven.* London: Cassell.

Poropat, A.E., 2009. A Meta- analysis of the Five-factor Model of Personality and Academic Performance. *Psychological Bulletin*, 135 (2), 322.

Preckel, F., Gotz, T. and Frenzel, A., 2010. Ability Grouping of Gifted Students: Effects on academic self-concept and boredom. *British Journal of Educational Psychology*, 80 (3), 451-472.

Pring, R., 2015. *Philosophy of Educational Research.* 3rd ed. London: Bloomsbury.

Programme for International Student Assessment, 2014. *PISA In Focus: Are grouping and selecting students for different schools related to students' motivation to learn?* Paris: Organisation for Economic Co-operation and Development.

Programme for International Student Assessment, 2013. *PISA 2012 Results in Focus: What 15-year-olds know and what they can do with what they know.* Paris: Organisation for Economic Co-operation and Development.

Pruyn, M., 2003. The Power of Classroom Hegemony: An Examination of the Impact of Formal and Post-formal Teacher Thinking in an Inner City Latina/o School. *In:* J.L. Kincheloe, S.R. Steinberg and L.E. Villaverde, eds., *Rethinking intelligence: Confronting psychological assumptions about teaching and learning.* 2nd ed. London: Routledge, 2003, pp. 189-216.

Punch, K. and Oancea, A., 2014. *Introduction to Research Methods in Education.* 2nd ed. London: Sage.

Reason, P. and Bradbury, H., 2008. *Handbook of action research: Participative inquiry and practice.* 2nd ed. London: Sage.

Reid, C. and Anderson, M., 2012. Left-brain, Right-brain, Brain games and Beanbags: Neuromyths in education? *In:* P. Adey, and J. Dillon, eds., *Bad*

Education: debunking myths in education. Maidenhead: McGraw-Hill, 2012, pp. 179-198.

Richardson, L. and St.Pierre, E.A., 2005. Writing: A Method of Inquiry. *In:* N.K. Denzin, and Y.S. Lincoln, eds., *The Sage Handbook of Qualitive Research.* 3rd Ed. ed. London: Sage, 2005, pp. 959-978.

Richardson, T. and Johanningmeier, E.V., 1998. Intelligence Testing: The legitimation of a meritocratic educational science. *International Journal of Educational Research*, 27 (8), 699-714.

Rigg, J., 2012. *Closing the Gap for Groups of Pupils: A primary leadership perspective.* Nottingham: National College for Teaching and Leadership.

Rinaldi, C., 2006. *In Dialogue with Reggio Emilia: Listening, researching, and learning.* London: Routledge.

Rist, R.C., 1970. Student Social Class and Teacher Expectations: The self-fulfilling prophecy in ghetto education. *Harvard Educational Review*, 40 (3), 411-51.

Roberts, H., 2008. Listening to Children: And hearing them. *In:* P.M. Christensen, and A. James, eds., *Research with Children: perspectives and practices.* 2nd ed.. ed. London: Routledge, 2008, pp. 260-275.

Roberts-Holmes, G., 2014. *Doing Your Early Years Research Project: A step by step guide.* 3rd ed. London: Sage.

Roberts-Holmes, G. and Bradbury, A., 2016. Governance, Accountability and the Datafication of Early Years Education in England. *British Educational Research Journal*, 42 (4), 600-613.

Robinson, C. and Fielding, M., 2007. *Children and their Primary Schools: Pupils' voices.* Cambridge: University of Cambridge.

Rose, G., 2001. Visual Methodologies: An introduction to the interpretation of visual materials. London: Sage.

Rosenholtz, S.J. and Rosenholtz, S.H., 1981. Classroom Organization and the Perception of Ability. *Sociology of Education*, 54 (2), 132-140.

Rosenthal, R., 1995. Critiquing Pygmalion: A 25-year perspective. *Current Directions in Psychological Science*, 4 (6), 171-172.

Rosenthal, R., 1987. Pygmalion Effects: Existence, magnitude, and social importance. *Educational Researcher*, 16 (9), 37-40.

Rosenthal, R. and Jacobson, L., 1992. *Pygmalion in the Classroom: Teacher expectation and pupils' intellectual development.* 2nd ed. Carmarthen: Crown House.

Rosenthal, R. and Jacobson, L., 1968. *Pygmalion in the Classroom: Teacher expectation and pupils' intellectual development.* New York: Holt, Rinehart & Winston.

Rubie-Davies, C., Weinstein, R.S., Huang, F.L., Gregory, A., Cowan, P.A. and Cowan, C.P., 2014. Successive Teacher Expectation Effects Across the Early School Years. *Journal of Applied Developmental Psychology*, 35 (3), 181-191.

Scarr, S. and Weinberg, R.A., 1976. I.Q. Test Performance of Black Children Adopted by White Families. *American Psychologist*, 31 (10), 726-739.

Schön, D.A., 1983. *The Reflective Practitioner: How professionals think in action.* New York: Basic Books.

Schrank, W.R., 1970. A Further Study of the Labeling Effect of Ability Grouping. *The Journal of Educational Research*, 63 (8), 358-360.

Schrank, W.R., 1968. The Labeling Effect of Ability Grouping. *The Journal of Educational Research*, 62 (2), 51-52.

Schultz, R. and Hultsman, J., 2012. Education as Lived Experience. *Education*, 132 (3), 568-575.

Schutz, A., 1967. *The Phenomenology of the Social World.* Evanston: Northwestern University Press.

Seale, C., 1999. The Quality of Qualitative Research. London: Sage.

Seidman, I., 2015. *Interviewing as Qualitative Research: A guide for researchers in education and the social sciences.* 4th ed. London: Teachers College Press.

Sharples, J., Webster, R. and Blatchford, P., 2015. *Making the Best Use of Teaching Assistants: Guidance report* [online]. Education Endowment Foundation. Available at:

<u>https://v1.educationendowmentfoundation.org.uk/uploads/pdf/TA_Guidance</u> <u>Report_Interactive.pdf</u> [Accessed 04 January 2016].

Shaw, B., Baars, S., Menzies, L., Parameshwaran, M. and Allen, R., 2017. *Low Income Pupils' Progress at Secondary School.* London: Social Mobility Commission.

Shaw, C., Brady, L. and Davey, C., 2011. *Guildelines for Research with Children and Young People.* London: National Children's Bureau.

Silverman, D., 2013. Doing Qualitative Research. 4th ed. London: Sage.

Silvernail, D.L., 1996. The Impact of England's National Curriculum and Assessment System on Classroom Practice: Potential lessons for American reformers. *Educational Policy*, 10 (1), 46-62.

Siraj-Blatchford, I. and Siraj-Blatchford, J., 1997. Reflexivity, Social Justice and Educational Research. *Cambridge Journal of Education*, 27 (2), 235-248.

Skaalvik, E. and Hagtvet, K., 1990. Academic Achievement and Self-Concept: An analysis of causal predominance in a developmental perspective. *Journal of Personality and Social Psychology*, 58 (2), 292-307. Slavin, R., 1987. Ability Grouping and Student Achievement in Elementary Schools: A best-evidence synthesis. *Review of Educational Research*, 57 (3), 293-336.

Slavin, R. and Smith, D., 2009. The Relationship between Sample Sizes and Effect Sizes in Systematic Reviews in Education. *Educational Evaluation and Policy Analysis*, 31 (4), 500-506.

Smidt, S., 2013. *Introducing Malaguzzi: Exploring the life and work of Reggio Emilia's founding father.* London: Routledge.

Smith, E., 2005. Analysing Underachievement in Schools. London: Continuum.

Snow, R.E., 1995. Pygmalion and Intelligence? *Current Directions in Psychological Science*, 4 (6), 169-171.

Spearman, C., 1904. "General Intelligence," Objectively Determined and Measured. *The American Journal of Psychology*, 15 (2), 201-292.

Stake, R.E., 1995. The Art of Case Study Research. London: Sage.

Steenbergen-Hu, S., Makel, M.C. and Olszewski-Kubilius, P., 2016. What One Hundred Years of Research Says About the Effects of Ability Grouping and Acceleration on K–12 Students' Academic Achievement: Findings of two second-order meta-analyses. *Review of Educational Research*, 86 (4), 849-899.

Steenbergen-Hu, S. and Moon, S.M., 2011. The Effects of Acceleration on High-ability Learners: A meta-analysis. *Gifted Child Quarterly*, 55 (1), 39-53.

Stern, A.W., 1956. The Nature of G and The Concept of Intelligence: The idea of complementarity in psychology. *Acta Psychologica*, 12 (0), 282-289.

Sternberg, R.J., 2000. The Holey Grail of General Intelligence. *Science*, 289 (5478), 399-401.

Sternberg, R.J., 1984. What Should Intelligence Tests Test? Implications of a Triarchic Theory of Intelligence for Intelligence Testing. *Educational Researcher*, 13 (1), 5-15.

Sternberg, R.J., Grigorenko, E.L. and Zhang, L., 2008. Styles of Learning and Thinking Matter in Instruction and Assessment. *Perspectives on Psychological Science*, 3 (6), 486-506.

Stewart, W., 2013. Is PISA Fundamentally Flawed? *Times Educational Supplement* (News), 26 July,.

Stobart, G., 2014. *The Expert Learner: challenging the myth of ability.* Maidenhead: Open University Press.

Strauss, A. and Corbin, J., 2015. *Basics of Qualitative Research: Techniques and procedures for developing grounded theory.* 4th ed. London: Sage.

Stripp, C., 2016. *The Essence of Maths Teaching for Mastery* [online]. NCTEM. Available at: <u>https://www.ncetm.org.uk/resources/47230</u> [Accessed 15 July 2016].

Stripp, C., 2014. *Mastery in Mathematics: What it is and why we should be doing it* [online]. NCTEM. Available at: <u>https://www.ncetm.org.uk/resources/45776</u> [Accessed 15 July 2016].

Sukhnandan, L. and Lee, B., 1998. *Streaming, Setting and Grouping by Ability: A review of the literature.* Slough: NFER.

Sumsion, J., Harrison, L., Press, F., McLoud, S., Goodfellow, J. and Bradley, B., 2011. Researching Infants' Experiences of Early Childhood Education and Care. *In:* D. Harcourt, B. Perry and T. Waller, eds., *Researching Young Children's Perspectives: Debating the Ethics and Dilemmas of Educational Research with Children.* London: Routledge, 2011, pp. 113-127.

Swann, M., Peacock, A., Hart, S. and Drummond, M., J., 2012. *Creating Learning Without Limits.* Berkshire: Open University Press.

Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., Taggart, B., Smees, R., Dobson, A., Jeavons, M., Lewis, K. and Morahan, M., 2004. *The Effective Provision of Pre-school Education (EPPE) Rroject* [online]. Department for Education and Skills. Available at: <u>https://www.ioe.ac.uk/RB Final Report 3-7.pdf</u> [Accessed 14 July 2015].

Tach, L.M. and Farkas, G., 2006. Learning-related Behaviors, Cognitive Skills, and Ability Grouping When Schooling Begins. *Social Science Research*, 35 (4), 1048-1079.

Terman, L.M., 1916. *The Measurement of Intelligence*. Cambridge Mass.: Riverside Press.

Thiemann, K., 2016. *Differences in the Impact of Ability Grouping on Performance According to the Culture of Competitiveness - Evidence from PISA 2012* [online]. Available at: <u>https://www.wiso.uni-</u> <u>hamburg.de/fachbereich-</u>

<u>vwl/professuren/muehlheusser/archiv/differencesintheimpactofag.pdf</u> [Accessed 04 July 2017].

Thomas, G., 2011. *How to Do Your Case Study: A guide for students and researchers.* London: Sage.

Thomson, P., 2008. *Doing Visual Research with Children and Young People.* Oxon: Routledge.

Thorndike, R.L., 1975. Mr. Binet's Test 70 Years Later. *Educational Researcher*, 4 (5), 3-7.

Thorndike, R.L., 1968. Pygmalion in the Classroom by Robert Rosenthal and Lenore Jacobson: Review. *American Educational Research Journal*, 4 (5), 708-711.

Thorndike, R.L., Hagen, E. and Sattler, J., 1986. *Stanford-binet Intelligence Test.* Chicago: Riverside.

Torstenson-Ed, T., 2007. Children's Life Paths through Preschool and School: Letting youths talk about their own childhood – theoretical and methodological conclusions. *Childhood*, 14 (1), 47-66.

Trafford, V. and Leshem, S., 2009. Doctorateness as a Threshold Concept. *Innovations in Education and Teaching International,* 46 (3), 305-316.

Troman, G., 1999. Researching Primary Teachers' Work: Examining theory, policy and practice through interactionist ethnography. *In:* M. Hammersley, ed., *Researching School Experience: ethnographic studies of teaching and learning.* London: Falmer Press, 1999, pp. 33-50.

United Nations, 1989. United Nations Convention on the Rights of the Child: A/RES/44/25 [online]. Available at: <u>http://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx</u> [Accessed 3 January 2018].

United Nations. Committee on the Rights of the Child, 2016. *Concluding observations on the fifth periodic report of the United Kingdom of Great Britain and Northern Ireland (Advance unedited version) [online].* Available at: http://www.crae.org.uk/media/93148/UK-concluding-observations-2016.pdf. [Accessed 17 December 2017].

United Nations. Committee on the Rights of the Child, 2008. *Consideration of reports submitted by states parties under Article 44 of the Convention: Concluding observations United Kingdom of Great Britain and Northern Ireland* [online]. Available at:

http://www2.ohchr.org/english/bodies/crc/docs/AdvanceVersions/CRC.C.GBR. CO.4.pdf. [Accessed 17 December 2017].

United Nations. General Assembly, 2015. *Resolution adopted by the General Assembly on 25 September 2015* [online]. Available at: <u>http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E</u> [Accessed 17 December 2017].

Upadyaya, K. and Eccles, J., 2015. Do Teachers' Perceptions of Children's Math and Reading Related Ability and Effort Predict Children's Self-Concept of Ability in Math and Reading? *Educational Psychology*, 35 (1), 110-127.

Van Maanen, J., 2011. *Tales of the Field: On writing ethnography.* 2nd ed. London: University of Chicago Press.

Van Manen, M., 2017. Phenomenology in Its Original Sense. Qualitative Health Research, 27 (6), 810-825.

Van Manen, M., 1990. *Researching Lived Experience: Human science for an action sensitive pedagogy.* London: Suny Press.

Vendramin, V., 2012. Why Feminist Epistemology Matters in Education and Educational Research. *Solsko Polje*, 23 (1), 87-96.

Vernon, P.E., 1973. Intelligence and ability. *In:* S. Wiseman, ed., *Intelligence and Ability: selected readings.* 2nd ed. Harmondsworth: Penguin, 1973, pp. 101-114.

Viljaranta, J., Tolvanen, A., Aunola, K. and Nurmi, J., 2014. The Developmental Dynamics between Interest, Self-concept of Ability, and Academic Performance. *Scandinavian Journal of Educational Research*, 58 (6), 734-756.

Visser, B.A., Ashton, M.C. and Vernon, P.A., 2006. Beyond g: Putting multiple intelligences theory to the test. *Intelligence*, 34 (5), 487-502.

Vygotsky, L.S., 1978. *Mind in Society: The development of higher psychological processes.* London: Harvard University Press.

Wallace, S. and Atkins, L., 2012. *Qualitative Research in Education.* London: Sage.

Waring, M., 2012a. Finding Your Theoretical Position. *In:* J. Arthur, M. Waring, R. Coe and L.V. Hedges, eds., *Research Methods and Methodologies in Education.* London: Sage, 2012, pp. 15-20.

Waring, M., 2012b. Grounded Theory. *In:* J. Arthur, M. Waring, R. Coe and L.V. Hedges, eds., *Research Methods and Methodologies in Education*. London: Sage, 2012, pp. 297-308.

Warming, H., 2011. Getting Under Their Skins? Accessing young children's perspectives through ethnographic fieldwork. *Childhood*, 18 (1), 39-53.

Watson, A. and De Geest, E., 2005. Principled Teaching for Deep Progress: Improving mathematical learning beyond methods and materials. *Educational Studies in Mathematics*, 58 (2), 209-234.

Wechsler, D., 2003. *Wechsler Intelligence Scale for Children–Fourth Edition* (*WISC-IV*). 4th ed. Oxford: Pearson.

Wechsler, D., 1975. Intelligence Defined and Undefined: A Relativistic Appraisal. *American Psychologist*, 30 (2), 135-139.

Weinberg, R.A., 1989. Intelligence and IQ: Landmark issues and great debates. *American Psychologist*, 44 (2), 98-104.

Weinstein, R., S., Marshall, H., H., Sharp, L. and Botki, M., 1987. Pygmalion and the Student: Age and classroom differences in children's awareness of teacher expectations. *Child Development*, 58 (4), 1079-1093.

Wespieser, K., Sumner, C., Garry, J., Bernardinelli, D. and Coiffait, L., 2017. *The Performance of Partially Selective Schools in England.* Berkshire: NfER.

Whitburn, J., 2001. Effective Classroom Organisation in Primary Schools: Mathematics. *Oxford Review of Education*, 27 (3), 411-428.

White, J., 2005. Puritan Intelligence: The Ideological Background to IQ. *Oxford Review of Education*, 31 (3), 423-442.

Whitty, G., 2002. *Making Sense of Education Policy: Studies in the sociology and politics of education.* London: Sage.

Wiliam, D. and Black, P., 1998. *Inside the Black Box: raising standards through classroom assessment.* London: Nelson.

Williams, B., 2017. Theresa May's Premiership: Continuity or Change? *Political Insight*, 8 (1), 10-13.

Wilson, E., 2013. *School-based Research: A guide for education students.* 2nd ed. London: Sage.

Winstone, N., Huntington, C., Goldsack, L., Kyrou, E. and Millward, L., 2014. Eliciting Rich Dialogue Through the Use of Activity-oriented Interviews: Exploring self-identity in autistic young people. *Childhood*, 21 (2), 190-206.

Wintour, P., 2014. Nicky Morgan Denies She Plans to Back Compulsary Setting in Schools 3 Sept 2014 [online]. Guardian Online. Available at: http://www.theguardian.com/politics/2014/sep/03/nicky-morgan-deniesplans-compulsory-setting-schools [Accessed 17 February 2015].

Wisker, G., Morris, C., Warnes, M., Lilly, J., Robinson, G., Trafford, V. and Cheng, M., 2009. Doctoral Learning Journeys: supporting and enhancing doctoral students' research and related skills development through research evidence-based practices. *Assessment, Teaching and Learning Journal (Leeds Met)*, (5), 19-22.

Worthy, J., 2010. Only the Names Have Been Changed: Ability Grouping Revisited. *The Urban Review*, 42 (4), 271-295.

Wrigley, T., 2012. Rethinking Poverty and Social Class: the teacher's response. *In:* R. Arshad, T. Wrigley and L. Pratt, eds., *Social Justice Re-examined: Dilemmas and Solutions for the Classroom Teacher.* London: Trentham, 2012, pp. 145-163.

Yeo, L.S. and Clarke, C., 2006. Adjustment to the First Year in School - A Singapore perspective. *European Early Childhood Education Research Journal*, 14 (2), 55-68.

Yin, R.K., 2013. *Case Study Research: Design and methods.* 5th ed. London: Sage.

Yin, R.K., 2012. *Applications of Case Study Research.* 3rd ed. ed. London: Sage.

Zhang, L. and Sternberg, R.J., 2005. A Threefold Model of Intellectual Styles. *Educational Psychology Review*, 17 (1), 1-53.

Zohar, A., Degani, A. and Vaaknin, E., 2001. Teachers' Beliefs About Lowachieving Students and Higher Order Thinking. *Teaching and Teacher Education*, 17 (4), 469-485.

Appendices

Appendix A. Letters to Schools and Parents

- Letter to parents
- Letter to class teacher
- Letter to head teacher
- Information sheet



Re: Research Study at xxxxxxx Primary School



Dear Parent/Guardian

My name is Catherine Gripton, I am a mother of three children (aged 7-9 years old) and I live in xxxxxxx. I am a qualified primary school teacher but I currently work as a lecturer at Nottingham Trent University in teacher training. I am conducting research as part of my studies for a Professional Doctorate in Education. I am doing a project about how children experience education in Primary Schools. I want to find out what children think and understand about how learning in their classroom is organised. I would really appreciate your help with this project by allowing me to observe your child in class and to talk to your child about how they learn in class.

I would like to talk to your child, ask them about their classroom and what they think schools are like (using toys and photographs to make it more fun and interesting for the children). This will take up to 30 minutes, depending upon how much each child has to say. I will video record the interview to help me remember what they have said. These interviews will be confidential and the only people who watch the interview will be myself and possibly my supervisors and examiners (who will be checking my work). I would also like to observe them in their normal lessons and make notes about what they do in class.

No real names (children, teachers or schools) and no images or footage of your child will be included in anything I write about this research. The research will be written up for my Doctorate assignments and may also be written up for research articles in academic journals and books. I will also endeavour to share my completed research with the children who have taken part in a child-friendly way.

If you are happy for your child to take part, I would be very grateful if you could sign the attached form and return it to school. You can change your mind in the future and withdraw your consent at any time up to the [date] (by emailing or telephoning me). Your child can also choose not to take part on the day.

If you would like to know more about the research then please do contact me at <u>catherine.gripton@ntu.ac.uk</u> or 01158488376.

Many thanks for taking the time to read this letter and for your help.

Yours faithfully,

Catherine Gripton



I	(parent or guardian's
name)	

consent to allowing my child(child's name) to take part in Catherine Gripton's research into children's school experiences.

- I agree that my child can be observed whilst working in class and that the researcher can take notes about my child.
- I agree that they can be interviewed in school and that this interview can be video recorded.
- I understand that the interview will be confidential.
- I understand that my child can stop the interview at any time.
- I understand that my child will not be identified in any write up of this research and that video and notes will be stored safely in a password protected server at Nottingham Trent University.
- I understand that Catherine Gripton may contact my child again through school to say thank you and to share research findings.
- I understand that I can change my mind and ask for my child to be removed from the study (before the [date]) and that any observation or interview data will be removed from the research write up (as far as this is possible).

Signed.....Parent/Guardian

Please return this form to school as soon as possible



Dear xxxxxxxxx

Re: Research Study

My name is Catherine Gripton and I am conducting research as part of my studies for a Professional Doctorate in Education. I was a primary school teacher for 14 years and currently work as a lecturer at Nottingham Trent University, training primary school teachers. I am researching how children experience education in Primary Schools. I want to find out how children experience everyday classroom life and how their 'ability' effects their experiences. I also want to find out what teachers think about ability and how they think that this works in the classroom.

I would very much like to work with your school on this research. As a teacher, I worked with younger children across the 3-7 age range and feel that these children are often over-looked in research. I want to value their voice and listen to their experiences of everyday classroom life. I seek to find out what they understand about their education.

I attach information about the research and letters of consent for teachers and children.

Ideally, I would like to begin working with you before the Summer holidays but do understand that this is a busy time of year in school and could also come into school in September if that would be more suitable. If you would like to know more about the research then please do contact me at <u>catherine.gripton@ntu.ac.uk</u> or 01158488376.

Many thanks for taking the time to read this letter.

Yours sincerely,

Catherine Gripton



Dear Teacher

Re: Research Study at xxxxxxx Primary School

My name is Catherine Gripton and I am conducting research as part of my studies for a Professional Doctorate in Education. I was a primary school teacher for 14 years and currently work as a lecturer at Nottingham Trent University, training primary school teachers. I am researching how children experience education in Primary Schools. I want to find out how children experience everyday classroom life and how their 'ability' effects their experiences. I also want to find out what teachers think about ability and how this works in their classroom.

I would like to spend time in your classroom. Ideally, I would like to:

- Observe in class for half a day (without interfering), taking notes. This could be any typical morning.
- Interview you after school or at another time (about an hour). This would be video recorded and I will email you the notes from this interview so that you can check that they are a fair record of what you said.
- Interview a sample of children (with parental consent) by getting them to give me a guided tour of their classroom and then ask them about school, using some toys to help them explain their understanding to me (maximum of 30 minutes per child)

These interviews and observations will be confidential and the only people who watch the interview recordings will be myself and possibly my supervisors and examiners. I will store the recordings securely on a password protected server at Nottingham Trent University and would not identify you, the children or the school in any write up of the research by using pseudonyms and no images or footage will be included. The research will be written up for my Doctorate assignments, primarily, but may also be written up for research articles in academic journals and books. I will endeavour to share my completed research with you and the children who have taken part (in a childfriendly way).

You can change your mind in the future and withdraw your consent any time up to the [date] (by emailing or telephoning me). If you would like to know more about the research then please do contact me at catherine.gripton@ntu.ac.uk or 01158488376.

Many thanks for taking the time to read this letter and for your help with my study.

Yours faithfully,

6 A _ G

Catherine Gripton



I(name) consent to taking part in Catherine Gripton's research into children's school experiences of 'ability'.

- I agree that Catherine can observe me teaching and can take notes.
- I agree that I can be interviewed in school and that this interview can be video recorded.
- I understand that the interview will be confidential.
- I understand that I can stop the interview at any time.
- I understand that I will not be identified in any write up of this research and that video and notes will be stored safely in a password protected server at Nottingham Trent University.
- I understand that I will be contacted again to agree interview notes and to be advised of research findings.
- I understand that I can withdraw my consent (before the [date] and that any observation or interview data will be removed from the research write up, as far as this is possible.

Signed.....

Outline of the Research Project for Schools

Research focus:

- Children's everyday experiences of primary school education.
- Focus is not to evaluate practice or to make suggestions about best practice or classroom organisation. It is merely to find out how much of children's everyday experiences in the classroom are related to a child's ability.
- Working title of the whole study is: 'Research into how ability profiling impacts upon young children's lived experiences of primary education taking a case study approach'. The focus of this part of the study is to find out about children's experiences of 'ability' in everyday classroom contexts.
- The children and teachers participating will be in Key Stage One in two different schools.

Researcher:

- Catherine Gripton has QTS and DBS clearance (details available upon request from Nottingham Trent University).
- The researcher works in Primary schools on a regular basis in her role in Primary Teacher Education at Nottingham Trent University and was a primary school teacher (working across the 3-7 age range) for 14 years.

Participation:

- One Key Stage One class
- Parental consent letters (sample enclosed) will be sent out to all children in the class
- A sample of the children giving consent will be interviewed IF the child agrees at the time. Interviews comprise of a child giving the researcher a tour of the classroom and then talking to the researcher (using toys to show what they know about classroom life)
- Interviews will be video recorded
- Interviews will be stopped if the child looks uncomfortable or bored or says that they wish the interview to stop.
- The class teacher will be interviewed (after school) so will also be asked to give written consent to participate
- The researcher will observe classroom life for half a day without interfering or becoming involved class activities. She will take notes but not video record this. Notes will only be made about the children with parental consent.

• Parents and teachers can withdraw their consent (before the [date]) and any data about them will be removed from the research write up as far as possible.

Data Collection:

- Half day or classroom observation. Taking notes without interacting with children or staff. This could be any typical morning.
- Interview a sample of children (with parental consent) by getting them to give me a guided tour of their classroom and then ask them about school, using some toys to help them explain their understanding to me (maximum of 30 minutes per child)
- Interview the class teacher (about an hour). This would be video recorded and the teacher will be emailed the notes from this interview so that they can check that they are a fair record.

Records and write up:

- Children and teachers will be identified by pseudonyms in the data stored and in the write up. School names will also be changed.
- Data will be stored on secure password protected servers at Nottingham Trent University.

Appendix B. Classroom Tour Instructions



your classroom

- show the camera the important parts
- tell the camera what children do
- tell the camera why it happens the way it does

Appendix C. School 1 Non-Participant Observation Record

T = teacher

TA = teaching assistant

Children's name are pseudonyms with teacher 'ability' judgements in brackets:

l/a = lower attaining

m/a = middle attaining

h/a = higher attaining

ht/a = highest attaining

Observation Notes	First Coding -	Second	Third Coding
	Free	Coding -	- Children
		Teacher	
8:45 T says good morning to Asha	Routine	Structure and	Social
(m/a), Tiffany (m/a), Jayden (m/a),		organisation	
Calum (I/a) and Princess (m/a)	Independence		Physical
Children putting books around		Independence	environment
classroom, Chloe (ht/a) gets lunch	Valuing		
bands		Value and	Adult / child
Jayden (m/a) goes to get menu from	Jobs/roles	belonging	
office	,		Child / child
Children bringing in 'treasures'	Teacher/child	Teacher/child	,
Talking to each other	relationship	relationship	
Children self-registering on IWB	· · · · · · · · · · · · · · · · · · ·	· eletere inp	
Chloe (ht/a) pouring milk in cups,			
children drinking at tables (mixed			
'ability'?) John (l/a) pouring milk			
Children signing in for dinner and			
putting bands on wrists			
7 children have books on desks			
Children continue to arrive			
9:00 children come to sit on floor in	Routine	Structure and	Work
	Routine		WUIK
front of teacher chair (in pre-assigned	A ana ana /mana d	organisation	م مان الحار مام : ا ما
places)	Access/need	Developed	Adult / child
T does online register, children read the		Personalised	
plan for the day, T explains what they	Feedback	provision	System
will do in the day (lesson 1-4)			
T Read names of children sitting on	Flexible	Assessment	
each table	grouping/seati	and feedback	
Children go to tables and respond to	ng		
marking in books (written response)		`Ability′	
TA helping Calum (I/a) and Leesha (I/a)		differentiated	
to read marking and decide what to		seating/	
write		groups	
T helping Princess (m/a) and Evie (h/a)		-	
Diya (m/a) moved to different table			
("don't worry")			
TA reads marking to Leesha (I/a) again.			
TA reads marking to Hal (I/a)			

			Curris 1
9:15 TA checks Claudia (m/a) and Jayden (m/a)	Differentiated	Differentiated	Curriculum
TA at I/a table, Christopher (I/a) "You	objectives	expectations	System
need to use a ruler"	Three levels of	Differentiation	System
To Hal (I/a) "remember that you"	task	in tasks	Work
"what time is it there"			
"that's better but next time"	Independence	Independence	Child / child
TA helps Anjelica (m/a) and checks			
Jayden (m/a), Tiffany (m/a) and Luke	Peer support	Peer support	Adult / child
(m/a)	(mixed	(across	
Children writing date and title in maths books	`ability')	`ability' range)	
T helps Diya (m/a) with quarter to	Challenge	Challenge	
times then Tiffany (m/a)	enanenge	enanenge	
Hal (I/a) and Lottie (m/a) come to			
show books to T			
2 children sharpening pencils			
T gives class 1 min warning, check			
target sheets also 9:20 Children get clocks (from tray)			
and come to sit on carpet, sit next to			
talking partner on carpet			
Focus intro by T "some of you will be			
telling the time to the nearest hour or			
half hour and some quarter to and			
past, some solving problems involving			
time using a number line" TA supporting Diya (m/a) and			
Christopher (I/a), talk partners			
House points for self-correction			
T supports Jayden (m/a) and Diya			
(m/a)			
Talk partners with clocks – all same			
questions			
Qs on IWB – targeted questions to Calum (I/a), Imani (h/a), Lily (I/a),			
Brooke (h/a)			
Challenge before we get going, set your			
clocks for six thirty, writes in digital on			
IWB "why have I asked you to find			
6:30?" "you can put your hands up for			
this one"			
9:30 "can you find another time when	Differentiated	Differentiation	System
the hands are overlapping each other?"	tasks	in tasks	5,000
3:15			Work
Time vocab sheets and clocks on tables	TA support I/a	Differentiation	
TA working with I/a group "this group",		in support	Adult / child
T working with h/a group "this group"	Personalised	Doroonalisad	
"this group and this group are doing quarter to and quarter past and that	provision	Personalised provision	Child / child
group will be getting into 5 min chunks	Peer support	μονισιοιί	Behaviour
as well"		Peer support	Schaviour
TA working with I/a group	`ability'	(within 'ability'	Curriculum
T talking to whole h/a group giving	grouped	range)	
instructions for time problem using no.	individual		Physical
line (3mins then moves to another table)	tasks	'Ability' differentiated	Environment
	Independence	seating/	
		groups	

TA, "you should pick one of them up	motivation		
and do it, don't keep changing it" to Hal		Independence	
(l/a)			
TA supporting Calum (I/a) and giving		Effort/	
behavioural reminder to Adam (I/a)		motivation	
		mouvation	
Calum (I/a) has different task, TA using			
Ipad to photograph Calum's (I/a) work			
Anjelica (m/a) "what is after 2 o clock?"			
Claudia (m/a) answers her (peer			
support)			
M/a table discussing. Brooke (h/a)			
points out IWB to John (l/a) to help him			
(peer support)			
T talks to individuals on m/a table			
Katie (ht/a) and Annie (h/a) working			
together, talking about number			
problems (h/a table)			
Jasmin (m/a) talking to Tiffany (m/a)			
about time (m/a table)			
Mia (h/a) and Josie (ht/a) providing			
each other with peer support			
Connie (ht/a) guiding her group, "look			
at question 2, it is"			
T - John (I/a) challenge			
Calum (I/a) moving around classroom			
to ask children times for his separate			
work (data collection)			
Three children getting glue sticks from			
trays			
T supporting Evie (h/a)			
TA support Hal (I/a)			
TA support Calum (I/a) Ipad to			
photograph work			
Lottie (m/a) talks to Mia (h/a) about			
work, Mia (h/a) says "I've got to do			
this" to refuse engagement			
5 5			
Xavi (m/a) and Seb (m/a) talking about			
times (m/a table)			
TA gets glue stick from m/a table for	Social	Social	Social
l/a table			
Diya (m/a) goes to T (on another table)	Feedback	Assessment	Adult / child
with book		and feedback	
T goes to h/a table, "make sure your	Teacher/child		Child / child
answer is really clear" to Annie (h/a)	relationship	Teacher/child	-
9:50 T goes to I/a table	··F	relationship	Work
TA supporting Christopher (I/a),	Recording/		
pointing to clocks in book	work	Recording/	Behaviour
	WUIK	work	Denavioul
T talking to Mia (h/a)		WUIK	
Christopher (I/a) talking to Adam (I/a)	TA I/a	Differenti	
and returns to book		Differentiation	
Emma (I/a) talks to Lily (I/a) about glue		in support	
stick then continues with work in book			
(l/a table)			
Imani (h/a) and Ruth (l/a), John (l/a)			
and Charlie (I/a) talking, T asks John			
(I/a) to bring work to her			
T gives feedback to Xavi (m/a) on an			
error in his work			
Brooke (h/a) and Evie (h/a) laughing			
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TA sat with I/a group T goes to m/a group T goes to Evie (h/a), "what were you			
and Brook laughing about?" Time vocab sheets have time vocab and numbers – all groups have the same sheets except Calum (I/a) who			
has practical task Xavi (m/a) and Seb (m/a) talking off task			
Jayden (m/a) and Connie (h/a) talking about hairstyles 2 min warning Mia (h/a) takes book to T on another			
table. T asks to do challenge from last week TA supporting Christopher (I/a), "what			
hand is the red hand going to be on?" Moves John (I/a) to sit next to Evie (h/a) and Brooke (h/a) so they can show their ideas to him			
Jasmin (m/a) sitting back yawning (page is full) TA reads time to Adam (l/a), "half past			
six"			
10:03 Children go to carpet with talk partner and clock Jayden (m/a) writes quickly in book	Independence Jobs/roles	Independence Value and	System Child / child
TA watches I/a group tidy table but does not tidy it	Challenge	belonging	Adult / child
Calum (I/a) goes around all tables collecting papers Mia (h/a) trims work on guillotine	Routine	Challenge Structure and	Work
(worked on paper) Jayden (m/a) walking around, T questions, "who is your maths		organisation	
partner?" T "what did you find tricky?" T "Jasmin (m/a) you needed three hands for one of the times"			
Gardener comes in and takes three children with a y3 child T "You can wear your watches at			
school" T "quick review of quarter past and quarter to"			
TA supports Christopher (I/a) and Mia (h/a) for both questions Diya (m/a) writes on IWB quarter past			
10 (looks at small clock to help) Mia (h/a) holds up clock for			
Mia/Christopher partnership but then Mia (h/a) passes clock to Christopher (l/a)			
Targeted question to Connie (ht/a) T writes 4:45 on IWB 'Normal' monitors give out drafting			
books to `normal spaces' (Imani h/a and Leesha l/a)			

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Line up in register order John (I/a) begins to read marking, T explains that he doesn't need to respond to marking yet and he joins line, children get pencils and rulers out ready			
10:15 Walk out to assembly in line TA feedback to T during assembly (Leesha I/a and Hal I/a "got there") 10:36 return from assembly, Hal (I/a) arranges books on his table for all children, children go out to break TA helps child with inhaler	Routines Jobs/roles	Structure and organisation Value and belonging	Structure
10:52 return from break	Routine	Structure and	Structure
Children putting date in 'drafting book'		organisation	
T instructs to close book and get 'treasure' brought in from home Children sit in circle	Children's interests	Children's interests /	Teacher / child
Ruth (I/a), Calum (I/a) and Emma (I/a) finish writing date, collect treasure	Access issue	choices	Social
excitedly and join circle T Put hand up if you were not able to	Personalised provision	Personalised provision	Curriculum
bring in treasure, Jayden (m/a) puts hand up T thinking time, why have you brought it and why is it special? IWB 'what is treasure?' Children talking with partner Asha (m/a) doesn't talk to anyone, Calum (l/a) joins another pair to talk Targeted questions to Princess (m/a) and Emma (l/a) T scribes key words Emma (l/a) "something you bought, you had for a long time" Talk partners child Diya (m/a) tries to talk to people on either side but neither talk to her. T talks to Evie (h/a) and Katie (ht/a), TA talks to Xavi (m/a) and John (l/a) T "Why is this object your treasure?" Xavi (m/a) "a shiny ball", "because I made it with my Dad", Teacher repeats. Asks question, doesn't answer, changes question, no answer, changes to yes/no question then he answers Adam (l/a), "she gave it to me" Christopher (l/a) "shoes, makes me think of my Grandma" Seb (m/a) "trophy" T tell us more about it, "my first one" how do you feel when you look at it. Seb (m/a) says "happy" and then "shiny". T "I think you feel pride because it is something you won" T "What adjectives could you use to describe your treasure?" IWB talk partners	Challenge	Challenge	

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Targeted questions with answers of cuddly, fluffy and flashy T asks for better adjectives, improved ones.			
ones. 11:10 Talk partners T talks to Josie (ht/a) and Mia (h/a) TA talks to John (l/a) and Xavi (m/a), Ruth (l/a) and Jayden (m/a) Calum (l/a) talking to Emma (l/a). Emma (l/a) says "shhh" Connie (ht/a) suggests changing "old to tatty". T asks what 'tatty' means and Connie (ht/a) responds "ripped and a bit broken" Talk partners Asha (m/a) not talking to anyone TA talking to Xavi (m/a), Jayden (m/a), Ruth (l/a), John (l/a) and Seb (m/a) as a group Calum (l/a) talking to Emma (l/a) whilst teacher explaining task Targeted question: "have you got a better word than cute or fluffy?" Child responds `its cuddliest than a panda' T corrects grammar T asks Calum (l/a) to turn around	Peer support Access issue Challenge Expectations TA I/a T ht/a, h/a, m/a Routine	Peer support (within 'ability' range) Personalised provision Challenge Differentiation in expectations Differentiation in support Structure and organisation	Social System Adult / child Child / child Work
T "Work in your normal writing places" Child asks to see T's treasure and teacher shows one, Jayden (m/a) now chooses treasure from T treasures box Children sit on tables, writing title (copied from board), TA helps Calum (I/a) to ensure he doesn't miss letters. TA says to Calum (I/a) "describe him to me" T talks to Annie (h/a) then moves to another table and talks to Emma (I/a) L/a table explaining to TA about treasure T talks to Xavi (m/a) then Asha (m/a) (this is the 3 rd table visited by T) Annie (h/a) sharpens pencil Claudia (h/a) and Connie (ht/a) talk to Katie (ht/a) (all on same table – all girls)			
11:25 TA support Jasmin (m/a), puts child's words into a sentence orally for child to write. Calum (l/a) gets whiteboard and pen. TA "you need to tell me, in your words, what to put". Calum copies words from prompt sheet (misses treasure, then 'a' in treasure when corrects following TA instruction) Leesha (l/a) talks to Lily (l/a) about her treasure Xavi (m/a) talks to Tiffany (m/a)	TA I/a Social learning Personal- isation	Differentiation in support Social Personalised provision	Adult / child Work Social Child / child

Chloe (ht/a), Connie (ht/a), Katie (ht/a) and Claudia (h/a) talking as a group about treasure Calum (l/a) says TA name several times, told to wait twice (with hand signal) T supports Imani (h/a) John (l/a) brings work to T Seb (m/a) talks to Tiffany (m/a) Princess (m/a) talks to Emma (l/a) Jayden (m/a) rocks on chair TA supporting Hal (l/a) "not gold, there is no gold on there" Calum (l/a) tapping feet looking around T talking to Ruth (l/a) who has written 'electric' for her rabbit Xavi (m/a), Tiffany (m/a) and Seb (m/a) talk about treasure T talks to Lily (l/a) about writing Claudia (h/a) brings small whiteboard and pen to T			
11:36 Annie (h/a) swinging on chair	Social	Social	Behaviour
Leesha (I/a) and Anjelica (m/a) talking Chloe (ht/a) sucking thumb	Peer support (h/a to l/a)	Peer support (across	Social
Hal (I/a) falls off chair TA supports Hal (I/a), she prompts "I		`ability' range)	Curriculum
have chosen this because" Chloe (ht/a) and Diya (m/a) talking			Child / child
11:42 – T "pencils down". T reminds children to say why it is special T supports Mia (h/a) and Connie (h/a) TA supports Calum (l/a) Calum (l/a) says "Sometimes you have to use your phonics" TA responds "you have to use your phonics all of the time" "fingers spaces Calum" T talks to Diya (m/a) John (l/a) talks to Ruth (l/a) Jasmin (m/a) talks to Anjelica (m/a) Charlie (l/a) and Emma (l/a) talking and Christopher (l/a) listening in Leesha (l/a) talk to Evie (h/a) Josie (ht/a) asks Calum (l/a), "do you need any help?" John (l/a) joins Josie (ht/a) and Calum (l/a) in conversation about Calum's treasure but TA talks to Calum and this stops	Democratica	Democraclised	Work
11:50 TA writes on whiteboard for Calum (I/a) and Hal (I/a) to copy	Personalised provision	Personalised provision	Work
Hal (I/a) asks T "Miss x, can I put the			Adult / child
whiteboards away?" T "yes" 11:52 children go to carpet after	Valuing	Value and belonging	
putting treasures away Asha (m/a) was nervous (according to	Challenge	Challenge	
T) but is reading out. Asha (m/a)	Feedback		

reads writing from book. T praises for description and for brave reading, Asha (m/a) shows mermaid toy Prayers T shows some treasures from box 11:59 One house team at a time get ready for lunch	Assessment and feedback	
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Appendix D. School 1 Summaries of Children's Data

Entries from the non-participant observation record relating to this child specifically are provided at the top of the summary for each child. On the left, there is the child's photograph of their classroom representation (they chose when it was ready to be photographed and captured their classroom using a computer tablet). The text in this column is a summary of their discussion whilst creating their classroom representation (from video footage of this). On the right, there is a summary of the child's classroom tour. This was summarised from the video footage that each child recorded including where they pointed the camera and any verbal commentary they recorded whilst doing this. Underneath the video tour summary is the summary of the semistructured interview between the child and the researcher where the researcher asked the child questions. This was summarised from video footage of these interviews.

Adam (deemed lower attaining)

- Behavioural reminder from TA
- L/a child talks to him whilst working in maths book (same table)
- TA reads time to Adam from task sheet
- Talks to teacher and whole class to answer teacher question



In his classroom representation Adam included a teaching assistant sat at a desk behind the children and a teacher stood in front of 6 children (seated on floor) telling them about animals. The teacher has a computer and is telling the children about animals that are on the computer. He also put books on the tables that had 'facts about animals'. He included a gate 'in case the children can't get out' and a 'naughty step' just outside this. He reinforced his gate with a fence 'so they can't get back in in case they're naughty. He explained that the children would need to 'get onto their work' by moving from the floor to 'their spaces' (seats at tables) although he did not include any chairs for this in his classroom. He made a separate fenced area for 'talking' in a group and stood one child up to be the one talking. He also added two further barriers which denoted an area where children could play when it was 'their time to play'. When asked about what they would play, he said it was like 'something like where there's toys and it is like a play park where they can read books and play'.

On his video tour of his classroom Adam pointed out the following key features of the classroom: books (reading), desks, reading corner (inc. beanbags), models made by children, computers, maths resources, teacher chair, whiteboard, pyramids, exercise books and sink. He said: 'This is where the children read their books'. 'And children work on desks' 'and these are all the books and things that's important (more excited voice)'.

In dialogue with Adam, he explained that the bookshelf, board and garden are the most important bits of his classroom. The garden was important as it was a social area where "we can have a little chat and things" and the reading corner is "for quiet time". The IWB is important as "you can write the answers if you don't know something". The trays were also of importance as you can keep your own things in there. He explained that he spent most of his time in the classroom "sitting in my chair and writing" but also said that he does reading, assembly practice, finishing things off and colouring in. He likes colouring in best. He does different types of writing and talked excitedly about current topic writing. He explained that he has a set seat ("space") for numeracy and a different one for English and then for maths, he felt that he sat next to the specific children for each subject as they help him. He was clear that the teacher chooses where they sit and decides by writing in a book. He seemed to think that the decision was based upon who you would sit sensibly next to, although this was one of a range of suggested reasons by the researcher so there is room for doubt in this. He talked about how he and other child sometimes water the garden when other children are doing writing and he starts writing again because he and the other child have "got dyslexia" as "your brain stops for a moment and then your brain gets back onto it". He explained that there are two groups for phonics (one for each adult) and that this will swap each year so next year it will be different children's turn although not everyone will get a turn. He feels learning is important as you need to know what to do and what's going to happen. He said that a girl (highest attaining) was very clever as she

Brooke (deemed higher attaining)

- Targeted question from teacher in whole class carpet session
- Helps I/a child by pointing out IWB to help him (working on tables)
- Laughing with h/a child at tables
- L/a child is moved (by TA) to sit next to her and another h/a child to show him their ideas



In her classroom representation, Brooke included two classroom type areas, the smaller one for children 5 and younger and the larger one for older children. She pointed to each and said, "these ones learn and these ones play and sing some songs". In the older children's there was a special chair for people who had done "a great job" for which she gave two examples, tidying when it wasn't their mess and being helpful. In this classroom there was a dance teacher and the class teacher. The dance teacher was on a stage type area and the children could stretch and exercise. There was also an area for relaxing. "This is like the chat table and this is where you can have a rest or go to sleep."

On her video tour of his classroom Brooke pointed out the following key features of the classroom: maths area, reading books (twice), RE exercise books, pyramids and photographs of class on the pin board. The maths areas is very important to Brooke as she went straight across the room to it at the beginning of her tour. "If we don't learn about maths then we won't be able to tell maths to each other". The RE exercise books are important because "we write about God and learn about Him". Brooke visited the reading books twice in her tour, explaining "some books are hard and easy but still we learn from them."

In her interview Brooke felt that the carpet areas and tables were most important in her classroom as she seemed to strongly associate these with learning which she explained as being very important. She explained that she spend most of her time on the carpet where the children "talk and check what they've learned and see if they listened". Sometimes times we do different things in maths, we do questions A, B or C. She does B or C. When asked if she ever does A, she said only if the teacher wanted them to, to build their confidence. The tables are related to which level of questions you do. "Sometimes if we've learned so much then she changes us onto a different table". She was clear that the A table had the most to learn. She discussed the current topic whilst smiling enthusiastically. She felt that the teacher chooses where everything goes in the classroom but if she is unsure then she asks the children to decide. The best thing about learning in her classroom is that she can teach others (like her little brother and sister). She thinks that her teacher is the cleverest person in her class as she will tell her the answer if she is really really stuck. Mostly the TA sits with other tables (not hers). She likes working with an adult on her table as sometimes her friends give her the wrong answers and then she gets them wrong (she found this very amusing). She

	explained that there are lots of questions in their class but not everyone gets asked the same questions. She thought long and hard about what she would change in her class and decided that she would change some of the boys to make them more like the girls to help them 'act better'.
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Christopher (deemed lower attaining)

- TA tells him "you need to use a ruler" when working at a table
- TA supporting him and a m/a child in talk partners on the carpet
- TA helping him, pointing to images in the text books (working at table)
- Talks to I/a and whilst working in maths book (same table)
- TA supporting him, asking him a question about his maths work (table)
- TA supports him and h/a child in talk partners on the carpet. H/a child holds up resource for the pair then passes it to Christopher to hold up
- Talks to teacher and whole class to answer teacher question
- Listens in to conversation on his table between two l/a children



In his classroom representation, Christopher used seven large and small figures and named each as a member of his class (sat on the carpet in two rows) but called the teacher, 'the teacher'. The teacher was talking about Jesus and his disciples and the children were listening to the teacher. The teacher was stood whilst the children were sat on the carpet. He initially also had a table with five children around it but removed these later and replaced them with two large chairs and two people (who seemed to be other teachers). He put reading books and a skateboard in a fenced off area and said that the children could use them when the teacher says. One of the children (named friend) was seated on the chair and the figure of him was stood up because they did good listening.

On his video tour of his classroom Christopher pointed out the following key features of the classroom: his football boots and the RE exercise books. He went straight to his boots with the camera before turning it off then filmed two further clips saying the words below. "These are my boots and they're really special to me". "These are our [RE exercise books name] and they're really good".

Together Christopher and the researcher discussed his classroom and he explained that the most important thing in the classroom was the 'prayer focus' [RE] table as it "has all of our treasure on it like my football boots". He explained that these are special because he likes playing football and plays for a local team with a friend from the class. He was quite animated and smiley whilst talking about this. After looking around for inspiration, he also said that the books were important because you write in them. He listed a range of topics that he had written about in his books following prompting from the researcher and smiled as he said each one. Following a guestion about which of the two things he is best at he said that he is better at writing than at maths as he can "write neater in his other writing". He said that out of everything he does at school, he is best at playing. He is good at playing football and 'dob' [chasing game]. He seems to enjoy talking about his classmates but says his teacher (named) is the friendliest person in the class as "she teaches us". He says he spends most time in the classroom on "our seats" and on the carpet where, "she tells us what we have to do then we go to our seats and write it down". He seemed

unsure about why he sits where he does and puts his fingers in his mouth when thinking about this. He smiled as he explained that two of the tables were boring but was unsure why they were boring. He seemed happy with where he sits and said that he sits next to the two people that he does because they are kind. He was quick to answer which child was the cleverest in the class and chose one of the very highest attaining children. He said that she knows she is the cleverest, "because she puts her hand up a lot". He says he answers questions sometimes because he knows the answers sometimes and if he doesn't know the answer he doesn't put his hand up. If they are on the blue table (colour of the table top) you do something different because you have been told off but otherwise everyone does the same work. He says he once messed about "and carried on and didn't do my work" and had to sit at the blue table. He seemed to recall this quite vividly and said he felt sad (when asked by the researcher how he felt). He explained that the teacher chooses where things go in his class and that he likes learning about the current topic because it is about a toy. He said he would like to do more talking about football at school. When asked what helps him learn at school he says "our friends", naming his friends in turn. He only talks about the TA when asked about her directly. In a normal day, he does writing and playtimes. He would like to sit next to his friends if he could choose where to sit.

Diya (deemed middle attaining)

- Moved to a different table by the teacher but told "don't worry"
- Teacher helps her with maths work
- TA supporting her and a I/a child in talk partners on the carpet
- Teacher supports her with answering a question set for whole class (on carpet)
- Takes exercise book to teacher on another table
- Looks to IWB to help find answer and writes it on small whiteboard (on carpet)
- Tries to talk to people on either side of her when class asked to talk to a
 partner but neither talk to her
- Talking to a ht/a child while working on writing (same table)
- Teacher talks to her about her writing



Diva's classroom was carefully constructed with choices made about what should and shouldn't be included. She laughed when she saw a tube of sun cream – "you won't need this at school". She made several changes, for example a smaller table was replaced by a bigger table. She changed the table for the teacher as she said she needed a table that "was more like a table that a teacher would use". She created a triangular fenced off area which she said was the 'naughty corner' which made her smile. The child she put in there had "pinched the little boy". There were 11 children (all small figures) sitting in two rows on the carpet and one child sitting at a desk reading a book and one child sitting at a desk 'working'. She had a teacher on a red armchair and an 'assistant' sat at a table with a computer. She included details such as the rubbish bin and map. "This is the table where you study and this is the reading area and this is the naughty corner. This is the bin and this is the computer". The children are sitting and working learning about the countries of the world.

Diya's video was lengthy (23mins 34secs). In her tour of the classroom Diya pointed out the following key features of the classroom: reading books, pencils, exercise books (twice), prayer focus (twice), computers, IWB, teacher's chair, lolly sticks, nine different displays, number line, calendar, tree in the garden, fire circle, outdoor display, bug hotel, outdoor bench, fruit and veg bed in garden, indoor trays full of exercise books, paper cutter, recycling bin, blue table.

"This is where we change our books and learn...grammar". "These are our books, we use them to write, some are for different subjects [lists subjects]." "These are the computers, we use them for ICT work and ...for research". "These are our English books, we use them every day". Diya explains the lolly sticks with children's names on and says that they are used as an alternative to hands up for questions but you can put your hand up for some questions but for most you can't. "This display is just to showcase our work". Diva spent almost half of the time in the class garden area. "We made this star at forest schools", "We made this all by ourselves, we all made them, do you spot them there? They are handmade". "This is our bench, we use it for work outside and sometimes we read outside with it". "This is the paper cutter, the assistant teacher uses it to cut our work". She explained how the colouring pencils had moved during the year. "This is our maths display we used it to help with our tests in maths".

In dialogue with the researcher, Diva explained that one of the most important bits of her classroom is the displays as they "showcase our work". She explained about a display where her work is. She explained that she spends most of her time in the classroom at two desks. These are "our spaces". "They (teacher and TA) choose me to sit someplace else for maths but for normal I sit there and for English I sit there and everyone else has to move". Teacher and TA write on the computer and print it out to decide where people sit. When asked if all children get the same work she replied, "Sometime I get some easier work and sometimes I get some harder work". She said that she gets harder work because her teacher thinks that she is one of the smartest. When asked how she her teacher knows this, she answered, "because she's been at least...she is going to be with me for this full year, she been for quite a lot of

Hal (deemed lower attaining)

- TA reads marking in his exercise book to him
- TA gives him feedback on his maths work, "remember..." and "that's better but next time..."
- Takes maths book to show the teacher his work (on a different table). M/a child takes hers too.
- T/A helps him get started on the maths task cards, "you should pick one up and do it, don't keep changing it"
- TA support with maths work at table
- TA feeds back to teacher that Hal "got there" in the maths lesson
- Arranges exercise books for all children on his table
- TA talks to him about his picture "not gold, there is no gold on there"
- Falls off chair
- TA supports child with writing by given him a verbal sentence starter
- TA writes on a small whiteboard for him and another I/a child to copy
- Asks teacher if he can put the whiteboards away



Hal excitedly created a classroom, classroom outside area, hall and playground. He explained that it is playtime so the children are outside In his tour of the classroom, Hal introduced his video by explaining that these are all the important things that the children do. He pointed out the following things: RE exercise books, maths exercise books, writing exercise books, whiteboard, computers, teachers [named] chair, space where the teacher 'marks', chairs, maths area, children's trays, fun trays, recycling bin and sink, 3 displays, pyramid (he said cubes), reading books, paper cutter.

"These are the [RE exercise] books where they learn about God" "These are the maths books where they do

all the maths and this the writing where just they do all their writing and these are just the spares if they run out of pages". About

whilst the teacher [named] is inside marking their work. He gave figures names of actual children in his class and his teacher. He also included a priest inside the classroom, who was praying but didn't give him a name until later on in his explanation. He also included a dinner lady (unnamed) who was in the playground looking after the child (named) who was plaving football there. He spent quite some time explaining what each child was doing outside including reading a book, sitting in the sun chatting, learning to 'head butt' a football, etc. He put the children's exercise books under the table and scissors on the table. He put one child on a skateboard as they were going home and included their mother, father and 'little sister', they are outside of the barriers. He developed his classroom to include a school Hall where children were sat at a table having lunch. He finished by excitedly putting children into a line, he put the children in the line by the first letter of their name. When the line fell off the table, he said it wasn't a safe line and moved it to another place putting the dinner lady at the front of the line. He said that when they come into the classroom they "sit down and get to do some marking" but he was more interested in explaining where you go at dinner times. He explained that you sit on the carpet after you do your marking then do some work and then do another task, like maths. When asked what they do when they have finished their work he responded that they "respond to marking" then sit on the carpet for the teacher to tell them what they are doing. He explained that "at the end after lunch we only have two stuff to do cos we have a busy morning and ...what is it called...we have to get our bags and do the end of the day stuff and go home". "When you have run out of time, even if you are only on question 1 you have to put it away". "You have the same amount of time to do the next thing like maths or writing.

the maths area, he said "this is to help us out in maths" and "these are to help us the cubes [pyramids]".

When Hal started his conversation with the researcher he wanted to tell her about his Mum who he says remembers being at school and wanting to play games all the time and not wanting to work from which he went straight into talking about his own school experiences. "When I first came in this classroom I said to [teacher name] when are we going to play cos when I was in year 1 we always had play time but now we just have break and lunch to play but busy busy busy". When asked by the researcher which he preferred he said, "I likes to do both but my favourite working is maths". He explained that he liked to do all the "working out and stuff on the left hand page but I don't really get to use the left hand page yet". He said that he would like to play more in class if he could and would like to play with marbles and a marble run. He said the prayer focus was the most important bit of his classroom as it has all the stuff which reminds us of God. He said the teacher chair was also important and wouldn't sit on it even when I said I didn't think his teacher would mind. He says he spends most of his time on the carpet because this is where you "get to learn". He explained that the whiteboard also helps him learn as that's where his teacher can show them all stuff that they can learn and that they sometimes have resources on the carpet to help them learn (e.g. clocks). They have 'talking partners' on the carpet but sometimes the boys are not allowed to sit next to each other as they are silly. He says that his talk partner talks a lot and he doesn't get to talk much (laughing). Uses word 'crap' when talking about minecraft as he gets excited telling researcher about it. He says he does the same work as the others except sometimes you get "picked out" to do something. He says he is "always busting for it [water fountain] but can't go. He says they sometimes have A, B or C work in maths and that he does A now as he has "moved tables" but used to do B and C. He explained that they do different topics in maths each day but sometimes they have to go back to topics and do them again if people "don't do much work" or find it "tricky". He explained that some people are really good but they still need to do it. He talked quite a lot about how many questions he has done in each lesson. He said that some people need help and named lower attaining children as needing help. He said it is too tricky to say who is the most helpful in his class as each child 'is like a slice'. He said that one of the very highest attaining children is very clever and he knows that because whenever he looks at her work she has done lots of work, like 2 pages. He names a very high attaining child as a friendly person. Throughout the interview he looked and smiled at the camera and once said he knew it was on

and laughed. He explained that you go to school to learn. The best thing about learning in his class is when you get to bring things in from home.

Jasmin (deemed middle attaining)

- Talks to m/a child about her maths work (on table)
- Completes page of work then sits back yawning
- Teacher talks to Jasmin when addressing the whole class about which questions were the trickiest
- TA supports putting ideas into a sentence which she then writes down
- Talks to m/a child on table



All of the children in Jasmin's represented classroom are seated except for the children in a fenced off area. The fenced off area is year 1 class in a 'play area' building with bricks. There are 22 figures when she deems it to be finished. Jasmin takes the hats off her figures as "you don't wear hats in schools". She explains that the teacher is doing some research whilst the children are having a talk about what they think their task is about today. There are additional adult (helpers) to help the children whilst they are working. The adults are watching the children talking. After this "the children are going to do the task and see if they have guessed right". Two assistants are added in to watch the children whilst they are playing. She has a garden area for her classroom. "The assistant calls the children to the table to do some work with some books and start reading". There is a visitor in the classroom on an armchair (researcher). The children around the small yellow table are having their packed lunch.

In Jasmin's video tour she pointed out the following key areas:

Whiteboard, exercise books, reading books, teacher's chair, children's trays, computers, display (months spelling), desk, reading record books, pencil pot, maths desk.

She explains the whiteboard as the 'teacher's whiteboard' and says "sometimes she uses it to help us learn". Exercise books are "so you can do learning and writing inside and stuff". She is clear that the children keep their books and things they need in their trays. "These are the computers that children play on and do work on". Purpose of desks is for children to do work.

Our desks (where we work) and the whiteboards (teacher writes questions and answers on it) are the most important. She says she spends most time sitting at her desk (reading and working). She changes desks for different 'events'. "I sit in mv normal space, on the same table, for writing and I sit at the desk across, that's my maths space." She explains that they sit in different spaces to make it more exciting and the teacher puts you somewhere that she knows you will be sensible. Where you sit "depends on how good you are at maths or English, so if they think you are um like the seco...well on B yeah B you would be on my table if you were on C table you would be on the table across from mine and the table across from the hardest table. It is how clever you are at maths or English." When asked about PE she says that they would be put in groups by who they would be most sensible with and the teacher may or not move them for art. Jasmin's normal day consists of working hard sitting at their desks (reading and writing). When prompted if they do hard work

Appendix E. School 1 Teacher Interview Transcription Record

Mins	Topic/ Question	Summary	Photographic evidence	First Coding	Second Coding
0.	Teaching choices for obs am	Encouraged not to worry about moving hands during interview in response to: "I will try and keep my hand down rather than gesticulate wildly". All decisions – format of the day encourage as much independence as possible. Built up over time from September and through day. Should roll over into the choices they make in teacher led times (moves left hand away from right in stages across desk and then makes rolling gesture with left hand).	Ieft moving away from right	Independence Class routines (over time)	Independence Structure and organisation
1.		Time – teacher led with regards to differentiation (whole hand point left to right across desk). Writing and reading – more open- ended with differentiation particularly through support (hand moves smoothly left to right across the desk with some light random whole hand points on desk). Try to follow the children's choices "although there are certain aspects which need to be covered". Gives an example of one child – l/a, 'personalisation' to give a context	"differentiation" by task and by outcome	Child choice Differentiation in tasks	Children's interests / choices Differentiation in tasks

2.		They like to share with each other. This class are "quite encouragable" they are quite mature in terms of knowing what and how they want their learning to develop. All topic choices are based upon children's initial discussions. 'Unbelievable writing' from their interest in superheroes. All science is based upon topic. 'To try to pull in more of their geography skills we have' (pulling with right hand) related local historic building to Batman's home (circular outward movement with right hand, emphasising each example of integration)	Sweeps right hand left to right, away from left hand – coming from the children's interests	Curriculum Cross curr/hol	Curriculum (policy) Curriculum (wider)
3.		Every link has been made back to superheroes topic, including PE. It has been much easier to link than some other topics e.g. cowboys and Indians. "Generally, it comes as much as possible from them and tying it into the skills they need to learnI hope". "There are things you've got to hit and then my job as a teacher is to try and make these things as enjoyable as possible". Context for them (right hand flexed and left hand pointing then set away from left and drawn together) <i>interviewer prompting</i> e.g. One child asked a TA at break about the time she went to bed (following on from time lesson in the morning)	Points when says "skills" and then summarises putting hand on side and then draws it to the other hand (towards her) "tying it in with"	Role of the teacher Curriculum Cross curr/hol Child choice/interes ts	Teacher (role) Curriculum (policy) Curriculum (wider) Children's interests / choices
4.	Seating for the morning's observed sessions – directed individuals in maths then 'normal places' for RE	Beauty of the primary classroom – you can keep making links so at the end of day ask a follow up question to a child about time following the time lesson in the morning. English and maths spaces and foundation spaces (turns slightly to look around classroom). "Generally, I have let's say the English and maths spaces and foundation spaces but when it comes to something that's a little bit slightly wayward like 'time', my groups just didn't apply" so the normal maths groupings were moved around. They were "working with different		Structure Cross-curr/hol Differentiation through seating/ groups	Structure and organisation Curriculum (wider) 'Ability' differentiated seating/ groups

		people" They are used to it but not all spaces are decided upon these grounds. "One of my provision children" (left hand moves forwards and is then clenched as moved towards her) for example "their space might not be dictated based on their ability (raises hand and gestures to three tables to left) but by the fact that they might be nearer to me or nearer to another form of support or in a space which helps them with their behaviour management".	As says 'ability' moves flat hand right to left in air pausing three times.	'Ability' as a continuum (linear)	'Ability' as a continuum (linear)
5.	Explain to me 'provision children'	"So there's your SEN children, that you'd expect, and then erm we have our provision children that need provision beyond your quality first teaching". Children achieving lower than expected for that child (not lower achievers, all abilities in relation to predicted progress). Extra provision might be more teacher time, moving to a lower table group to consolidate, might be additional practise or buddying Example of I/a child making expected progress (hand up and down to desk on the left of the desk) and then example of h/a child not making expected progress (moves hand to right and points to desk).	Hand up and down to desk on left when discussing lower attaining children.	Wider school Assessment Children's needs	Whole school Assessment and feedback Personalised provision
6.		"We spin a lot of plates", explaining the range of measures in place at any one time. "I wouldn't say we have just four groups" "I would like to think if one of the children found something easy, they would come and say, "I need a challenge"" Worked hard on getting children to say if it is too easy and need more challenge or to persevere if they are finding it too challenging.	Challenge' on right and 'easy' on left.	Flexible groupings/stra tegies Children's responsibility for own learning	'Ability' differentiated seating/ groups Independence
7.	How do you decide upon 'regular' groupings?	Previous class teacher, school benchmarking for first couple of weeks. Then own assessment of their work and then tweak and then continue to tweak throughout year based upon own assessment. "They do move a lot. I have never		Wider school Assessment Empathy	Whole school Assessment and feedback

		found they stay the same" (both hands in front of her with palms facing outwards). "If I was a child I would be upset if I stayed in the same space all day".			Empathy
8.		Researcher offers that one of the children said that they move around so that they get to sit with different people (ethics of transparency and valuing/contributing, not just taking data). Talking partners are tailored slightly (skin reddens). Used to be the same for maths but didn't work due to behaviour. Discussion of behavioural needs and ability needs meaning that partners cannot be purely ability led. Same talking partners as used for visits and forest school (points with right hand and moves it to point further away). One child didn't initially like being given a particular partner but now looks for them for reassurance.		Behaviour and 'ability' (different)	Behaviour 'Ability' as wider than academic (but not behaviour)
9.		Strong bonds as a class and look after each other – are sensitive. Discussion of higher attainers helping lower attainers when they are struggling with their work. Discussed example from obs.		Peer support (HA to LA)	Peer support (across `ability' range)
10.		Emotional support higher attainers give to lower attainers (e.g. spacial awareness). Gives e.g. of when a higher attainer doesn't like getting support from a middle attainer. "I think when they get used to that [peer and self- reflective] it is quite a strong learning position for them to be in" (moves hands forwards and back on desk top, palms down).	Moves hand forwards and backwards to indicate give and take within self and peer support	Children's responsibility for own learning Peer support (across 'ability' range)	Independence Peer support (across 'ability' range)
11.	What are the features of this class group? Probe: What is the spread of	Energy, enthusiasm, bold/brave, sparky, high standards for themselves, want to achieve (reflective facial expression, no hand gestures).		'Ability' as a continuum (linear) Assessment	'Ability' as a continuum (linear) Assessment and feedback

	attainment like?	Very wide spread of attainment. NC levels – secure 3cs, 2cs and then one significantly lower (all y2) (hand gestures – LtoR line high to low, hands pointing). They have always been a high attaining cohort so the older they get the more than gap widens 'obviously' (hands together in desk and sweeps them both in opposite directions, left and right).	3 positions of levels (left to right) middle to wide to show gap widening		
12.	What factors are most important in your mind when planning for this class?	"A challenging class to teach in many ways because you want to keep pushing (hand gesture for push) and you want to keep consolidating (beckoning hand gesture)". Hand gestures seem to be along a L-R continuum high to low ability. (Pause with chin on hand before answering researcher question). Enjoyment and independence. You want to instil high expectations of themselves. Want them to feel positively about school despite having to work hard (they may not come to school with this).	"Pushing" and "consolidating"	'Ability' as a continuum (linear)	'Ability' as a continuum (linear)
13.	Asked for repeat of q. 13:38	Motivated class and form good teacher-child relationships (points to own chest). They give teacher feedback on plans (when things are too much, too quick, etc) which is good for you as a teacher. 'Two way street' (hands back and forth in turn). Children to feel valued – to all have a role (hand gesture two handed point to self). This leads to class jobs, own space where they sit (hand gesture on table for space), being asked their opinion. "They should come in and have a role" (skin reddened).	Hands back and forth in turn, teacher/child relationship	Teacher/ child relationship Children feeling belonging/ valued	Teacher/child relationship Value and belonging

			Emphatic hand gesture on "role"		
14.	Pause for interruption	"This is my space, this is where I sit" (two hand creating space on the table)". Routine works very well (hand gesture single hand moving L-R in a line), knowing what is happening later in week, knowing what they are working towards. 'Even h/a' Hierarchy of need (valued, happy, safe, secure). "That is my philosophy" (points with whole hand to own chest) basis for everything else.	"This is my space"	Children feeling belonging/ valued Children's basic needs	Value and belonging Children's basic needs
15.		Children forming relations with each other, with me (two hands point at own chest), staff (points to door) and wider school (two large arcs in air with hands).		Teacher/child relationships Peer relationships	Teacher/child relationship Peer relationships
16.	How does your teaching support children to make progress?	Pause "I see where these questions are going now". Planning works from their interests as much as possible (sweeps left hand R-L away from right hand repeatedly), basic bit (hands close) so they have a spark from the outset (hand makes star in air). Children's interests, skill to be developed in context, differentiation, classroom management, behavioural expectations, school ethos (each item is an arc hand sweep R-L getting greater each time). "This is hard. It is so many things in one".	Sweeps hand right to left (smaller arc for "differentiation" the increasingly larger arcs)	Children's interests Differentiation Behaviour Wider school	Children's interests / choices Differentiation in tasks Behaviour Whole school

17.	Feeling valued, positive role-models (both hands move away from body with fingers stretching outwards as they move), experiences to draw upon (that school needs to provide). Listed specific school experiences which are basis for learning. It is these altogether (scooping motion with hands) which build self-esteem and self-expectations. Some children may need experiences more than others if they don't get them at home but on a basic level all need to know that you care and are interested.	Scooping motion	Valuing Role-models Self-esteem and high expectations of self First-hand experience	Value and belonging Role-models Aspirations/ self-belief/ confidence First-hand experience
18.	Gives example of m/a quiet child who she makes a point of saying hello to every day (points to eyes with middle finger). "There's the children that you worry that they haven't" gives e.g.s of children who may get missed (goes blotchy and wet eyes, emotional response). Importance of asking them about their personal lives. They need to know that teachers make mistakes.		Valued Teacher guilt Teacher as role model	Value and belonging Teacher (qualities) Teacher (role)
19.	"I remember at school those personal comments, those 'you're going to like this next bit' or 'I know your favourite is" (smiling) Names children (who 'crave attention'). Identity (hand on chest). For quieter member of the class, knowing that it is okay to be quiet (taps on table with finger tips, reassuring gesture). Foundations of teaching. "The more and more I teach, the more I think that is <u>so</u> crucial, that you	Emphasis on 'so' crucial	Own school experiences Experience as a teacher/knowl edge of teaching	Own experiences (child) Teacher (qualities) Teacher/child relationship

		look at them in the eye and ask them to look at you in the eye" (finger tips touching in air on 'so').		Teacher/child relationships	
20.		"They have those standards that they know when they have done the wrong thing". Gives example of a child where she was 'being a little fussy" and she valued the child by telling		Valuing children	Value and belonging
		them not to do this. Sometimes says to children "You've forgotten yourself today".		Teacher/child relationships	Teacher/child relationship
21.	How do different children get different support for progress?	"Some children require <u>more</u> " "extra personalisation" e.g. I/a more explanation, h/a time questions, quiet child saying hello every day. "Personalised learning you drop in when you get to know them". "best results come when they know you, you know them and they know you know them".		Personalisatio n Assessment as knowing	Personalised provision Assessment and feedback
			"dropping		
22.		"That is the foundation of all that in my opinion" (hands tapping lightly on the table spread apart). Relationship with them – "that is when you get the best out of them: when you know where the strengths are know where the gaps are and can draw out the strengths further and you can help consolidate". "The gaps they have and the mistakes they make are not forever" Learn from them. "If you can do this	"Foundation" is the teacher/child	Teacher/child relationship Wider school	Teacher/child relationship Whole school
		from foundation stage you will get really empowered children when they are older" (chin resting on hand).	relationships		
23.	Do you think this will maintain for them going forwards?	"I really hope, it does in this school" "very difficult if they don't have it reinforced at home" "very very difficult". "Children thrive in this environment". Structured, high expectations in this school environment, enthusiasm		Whole school Structure/rout ine High	Whole school Structure and organisation
	iorwards:	throughout and that <u>push</u> (sweeps left hand forwards for each point made). It is really hard for them. Analogy of person on their shoulder asking them is this right. That only lasts for	left hand forwards several times when discussing	expectations	Teacher (qualities)

		year 7 then they are on their own (some emotion on face, bites lip).	children's futures beyond primary	Family/home	Family/home
24.		For some of these children it is the academic side which keeps them in there (left hand patting table to indicate 'academic side'). They have a strong grounding from primary school so they are not at the bottom end. "They might be from the xxx estate but on paper they look good." The more difficult a child's home life is, the more you need to have those high expectations and the more and more they need that structure so when that structure isn't there (looks a little down, bereft at this point).	Left hand patting table to indicate "academic side" of the children	Aspirations Family/home High expectations	Aspirations/ self-belief/ confidence Family/home Teacher (qualities)
25.	How did you decide how to arrange your classroom physically as well as organisation ally?	In terms of routines, the idea is to get them trained up and familiar with this as soon as possible. This enables them to be proactive. The resources are arranged so they can get them themselves and know where everything is and there are monitors for everything. You can then eliminate the need for many teacher instructions as you say get ready for lunch and they know what to do. They neatly stack the glue sticks in little squares, "they satisfy your every whim as a teacher".		Routines/struc ture Independence Teacher/child relationships	Structure and organisation Independence Teacher/child relationship
26.	Interruption continued	Everything is labelled (moves to right and points to areas of classroom behind her). "In terms of display, I like to have a lot that they can draw upon alongside celebration of children's work." "It is unbelievable how much they use the number line" for example.		Independence Physical environment as a scaffold for learning (curriculum)	Independence Physical learning environment Curriculum (policy)
27.					

28.		Very very difficult. Displays at eye level. "As much as possible displays are developed with them to create a sense of ownership." I like to have an environment where children		Peer support (general) Talk/social	Peer support (general) Social
		can talk to each other. I think talking's very important, very important" (slams palm of hand on table).		learning	500181
29.		Because – own childhood experiences, "I was one of those children who thrived on having a chat about it beforehand". Not "big-headed enough" to want to have own voice heard	Slams hand down,	Own experiences at school	Own experiences (child)
		all day (hand flat on own chest). Children would be bored. "They need chances to share and boss each other around a little bit and to work collaboratively and share ideas". Don't have	emphasising "talk is very important"	Peer support (general)	Peer support (general)
		them working in silence. "There are sometimes points when they seep into silence (smiling, looking away), a really lovely		Social/talk	Social
		silence" (leaning forwards sweep hand in u shapes above desk). Paired writing first which really addressed many errors beforehand. Explanation that children showed sustained	Sweep hands in 'u' shapes	Collaborative learning	Non-physical learning environment
		interest so not writing a bit and then having a chat and then returning to the sentence. They drafted after feedback from teacher. Uses analogy of feedback being like a phone call or responding to a walkie-talkie from teacher.	above desk when discussing 'natural silence'	Non-physical learning environment	
30.		"It is nice that they have that they have those moments of busyness then they have moments of quietness: time to		Time	Time
		think and I still don't give them enough time to think, I don't think any teacher does". Gave example of a child in the class who said indignantly she was thinking when asked why she wasn't writing (smiling).		variety	Teacher (qualities)
31.	If you could have your ideal classroom what would you have?	Don't always keep the table in these formations (rests face on hand and touches table, looks around classroom). "If I had a choice, I would have them in slightly smaller tables, I don't have enough tables for all of the children." There are tables for 28 and 30 in the class (chin on hand). "Child x (I/a) often		Physical limitations/pra cticality	Physical learning environment

	brings himself to here (points to individual table), he says, "I can't concentrate". One table is larger which makes one space for one person who gets a quieter time. <i>Researcher question</i> "If I could have anything I'd have an outdoor space with some sort of roof so children could be outside in all weathers (points to outdoor area of classroom) so you could have a group working outside in all weathers with better terrain so you could walk in and out without damaging carpets".		Teacher ownership of classroom Flexible classroom env (tables)	Teacher (qualities)
32.	"Erm I'd probably have more resources outside, even numberlines and things to continue the provision, just to give you more breathing space and so that there is room for the children" (pensive with fingers to lips). "I'd have more time to do displays, I'd love to have more time to do displays". Discussion of carpet area being not near whiteboard. Done more teaching "in their spaces" [at tables] because of uncarpeted area but "I find they need the variety of moving and moving back and over there andthey need to <u>move</u> (hands in circular motion). I'd like a bit more room".	Back and forth (carpet and 'spaces')	Outdoor learning Variety in seating Physical limitations/pra cticality	Outdoor learning Physical learning environment
33.	"I'd have a lovely little table at the back where you'd have children working individually, I'd have more space around the computers so they could get a book when they are		Physical limitations/pra cticality	Physical learning environment

		drafting (hands cupped either side like holding a ball)." Larger interactive whiteboard and some smaller whiteboards dotted around as "I do find them useful" (looking around room and pointing) and "I'd love some storage, researcher" (shakes head). "I do like it though, it has a nice feel to it". Discussion of classroom size, "they are getting big now [towards end of academic year]".		Teacher directed activity Non-physical learning environment	Teacher directed activity Non-physical learning environment
34.	What has shaped you as a teacher? Prompt q, "in a way that you do or don't want it to be like that?"	(pause before answering) "My experience of school, particularly primary school". Wants her classroom to be different to her experience. "There wasn't much of sort of relationship at my primary school" "nice enough but Monday you'd come in and do page one, and then Tuesday you'd do page 2, Wednesday page 3 of your maths book" (moves hand L-R) "There are certain things I remember from primary school, I wasn't a badly behaved child but I was sparky, like a (m/a)xxxx, and I was a left hander so I used to smudge an awful a lot, I never had bad handwriting, I never had a bad pencil grip or anything like that, I always I had a lot of influence from home (both hands in air move L-R) so there was never linkI was never naughty or anything but I remember that I never got to go in this "quiet room" (make speech marks with fingers)".		Own experiences at school Narrow basis of 'ability' judgements Labelling	Own experiences (child) 'Ability' as wider than academic Labelling
35.		"I was torn between really thinking I have no interest in going in that quiet room and thinking I just want to see what's in that quiet room" (slouches on second part and tilts head back slightly). "The children who were in there were in there day in day out, day in day out" (both hands indicating forwards in air, held and emphasised for several seconds). "It was the well- behaved ones that had the privilege of going in there with the windows that open" "Near the light and I wanted to look out of the window.	quiet room"	Behaviour Own experience Physical learning environment	Behaviour Own experiences (child) Physical learning environment

36.	Same people got to go in the quiet room everyday. "It seemed from my perspective that the year 5 teacher had a wonderful relationship with the ones in that quiet room and the ones who were not in that quiet room it was really sort of (shrugs shoulders and raises eyebrows)" (indicates with hand on left of table) "I had to stay here". "They had nice neat handwriting and they were a bit more passive I'd say and a bit quieter and they would sit and read a book for half an hour". Can name children.	explaining she had to "stay here"	Teacher/child relationship Narrow basis of 'ability' judgements	Teacher/child relationship `Ability' as wider than academic
37.	"I was really wriggly as a child and I needed something more to do as a child". Mostly girls. "I bear that in mind (points with index finger to forehead) and I also bear in mind my teachers at secondary school and older because generally I had a real spilt in my passion for subjects and my passion for subjects depended entirely on the teacher" (pats desk with left hand on two places on desk for connection). Good at everything. "Certain teachers that inspired me that I would be like were teachers like" gave example of an English teacher who had wide vocabulary and "total passion that would just have you captured" (narrowed eyes) that could keep her engaged. "There were a lot of maths teachers who told you this is how you should do it so go and do it this way and I didn't like that".	"bear that in mind" pointing to forehead patting table explaining connection between enthusiastic teacher and subjects she enjoyed	Own experience Teacher qualities Valuing	Own experiences (child) Teacher (qualities) Value and belonging

38.	We've come a long way in education since then particularly in maths, where it was this is how you do it x" (points with thumb and for finger, pointing in a line downwards). "I used to be like, I ain't doing it that way!" tell you again and again the same way. "They would just tell you again and that gave you that pressure and so I never wanted a classroom where children felt, I hate it when children cover their work up and I don't want children to feel that way about their work (two hands on heart)". "You need to know that someone likes you, I always wanted that (hand on heart), like a [I/a child's name] if you just say a couple of things to me and then I'm yours for the lesson, I'll be perfect".	"this is how you do it" pointing in a line downwards	Valuing Emotional well-being Child confidence Teacher/child relationship Teaching qualities	Value and belonging Emotional well-being Aspirations/ self-belief/ confidence Teacher/child relationship Teacher (qualities)
39.	"I wanted there to be lots of answers, lots of ways you could do things, I didn't want a yes/no, I wanted options, I wanted a bit of freedom when it came to tasks, I wanted to have things personalised to me quite a lot" (one hand on back of chair and one hand on table moving back and forth for each things she wanted). Gives e.g. of bringing own object to write about. "Those would be the main things that impacted me before I even started" [teaching]. "I also did quite a lot of youth work before I became a teacher" working with older children and as an LSA with special needs and disaffected children (draw circle on desk with index finger then sweeps arm away from herself across table) and that made me think a lot about the children that you get at primary school who are underachieving already and where they might end up in a few years (clasps right hand for primary and sweeps left had away for 'few years') and the sort of direction that they've got further	right hand primary and left hand secondary (off screen)	Own experience Previous work Aspirations	Own experiences (child) Own experience (teacher) Aspirations/ self-belief/ confidence

40.	interruption	down the line if nothing is done to help them with the things they need help with (hand moves in steps across table left to right incrementally in a sweeping action)". "I like to think I have a long term goal of where I want them to be (left hand in air and right hand pushing up towards it), like you said, about high aspirations in terms of self- regulation, in terms of independence and those sort of things" "it's all a bit airy fairy" discussed targets. "I think those things come when you have good relationships and a nice classroom ethos then those things come (pause) and where you are a bit (pause) they need you to care about them!" (eye contact). "They need you to be proud of them!" (eye contact and leaning forwards, forcefully stated), "because they are only little" (little tearful – acknowledges and puts hand up to video camera).	right hand pushing upwards when talking about aspirations for children	Teacher/child relationships Independence Valuing/care Emotional well-being Aspirations	Teacher/child relationship Independence Value and belonging Emotional well-being Aspirations/ self-belief/ confidence
41.	_	"You need to challenge these children as well." Gives example of a quieter m/a child who needs challenge as part of valuing her.		Challenge Valuing	Challenge Value and belonging
42.	I'm looking at children's experiences of school and how 'ability' might influence	"Oh my goodness" (looks to door) response to question. "Presumably is it a combination of (cups right hand in the air) skills and knowledge (cups other hand in air and joins two) and attitudes (looks to researcher) and expectations and values and (speeds up)"	cups air for "skills"	`Ability' as wider than academic	`Ability' as wider than academic
43.	children's experiences at school. I don't have an answer	"I don't know, I don't know, I might have to mind map it". "When it comes to ability, you've got the academic side of ability haven't you but then you've got the interpersonal		Academic/soci al/practical (whole child)	Whole child

	myself but what would you say your definition of 'ability' is? Would you say 'ability'	side you've got the social side, you've got the practical side of ability" (moves eyes up and down and pauses) Question: "No, no, my gut says no!" So what is the connection between the two? "The problem is you link intelligence with academics and academia but ability, you talk about skills and instantly you think about skills and skill sets."		'Ability' as wider than academic	'Ability' as wider than academic
44.	– and intelligence are the same thing?	"Instantly when you think about it you think about that the more studious academic side of learning and knowledge (left hand moves up and down) and you know facts and figures and dates (eyebrows raised and eye contact) but skills you almost think of ways of applying in between. (right hand move then left hand moves back and forth between position of two hands)". (Pauses and frowns) "Ooh, I don't know (mumbled)". The more I read, the more I find am unsure that anyone really knows. "We would say wouldn't we: 'higher ability child'. It must have to beit can't just be academic when you say 'able' can it because you've got to have that empathy, the interpersonal side of it, the practical side of it, the physical side of itto be physically able to do it" (moves hand from chin to the desk and points with hand on desk to places in a line from top to bottom).	"academic side" and non- academic side of 'ability'	Academic/soci al/physical (whole child) 'Ability' as wider than academic	Whole child 'Ability' as wider than academic
45.		Gives example of one child. "To be physically able to do it, he finds it very difficult to <u>physically</u> do a lot of things, to verbally articulate he doesn't have the <u>ability</u> to do that, erm". Researcher discusses that some people include bodily and emotional intelligence in this and others focus purely on academic.		Whole child 'Ability' as wider than academic	Whole child 'Ability' as wider than academic

46.	What guides you to 'grade' children like this? (mirroring language used)	(Sits up straight) "If you asked me about the ability of the children I would automatically refer to the English and Maths (points left with left hand) and that side of it because that's how we're basically grading the children on a day to day basis" (laughs). "Well you (puts hand flat on desk) right its down and down and down (flat right hand moves top to bottom in air punctuating levels) isn't it, the government agenda followed (highest point with hand then circle motion) down and down and down (hand down) but then I do think as teachers we know enough about the children to be able to tell you where children's abilities lie in other areas (hands together forwards on desk), well I think if you are a worthwhile teacher. I think there probably are teachers who don't know how able a child is in digging or cutting out or looking after a friend or packing away their sleeping bag (right hand out to the side, open body language, hand moves to left with each example)".	"government agenda and down and down and down and down"	Assessment Teacher/policy Whole child Teacher qualities	Assessment and feedback Curriculum (policy) Whole child Teacher (qualities)
47.	When people talk about high 'ability', low 'ability' or whatever, is that something that is guided by policy or curriculum or school evaluation/ inspection? What things do you think guide that?	(thin lipped smile) "It's a much more formal thing isn't it, we assess them very formally (in terms of yeah), very formally." We don't really assess all of their ability? "No!" Discussion of whether we assess creativity, perhaps is assessed in writing but don't generally assess all of 'ability'. "No not really. We don't assess how well they empathise with each other and well as far as school practitioners we would do, that's our objectives there (leans forwards left hand flat on desk) and that's as a school we do have that agenda that needs meeting". "Because we have a whole school, (pauses, left hand flat placed on desk four times sweeping right to left) a whole school commitment to that because we are all those kind of (draws fingers together and points to middle of her chest) soft, cuddly teachers in certain ways. We are all really interested	hand sweeping on table (school "agenda")	Formal/inform al assessment (teacher/ policy) Assessment Teacher (whole child)/policy (English and maths) Emotion Wider school	Curriculum (policy) Assessment and feedback Whole child Curriculum (policy) Emotion Whole school

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	in the emotional wellbeing of those children and how they socialise with each other and we are committed to that".			
48.	"We are not and if we were, (smile and head tilt) if we were (emphasis)" "different world" "it would! I think children would feel much more valued" link to Ofsted inspection. Corners of mouth turn down. Agrees that schools and teachers are judged on English and maths results. Looks up and right. Discussion of future implications in terms of roles such as artist, architect, etc.		Whole child Policy Valuing children	Whole child Curriculum (policy) Value and belonging
49.	Charisma given as example of non-measured aspects of child within a classroom that can impact upon future success in the world. "In classrooms you are trying to pick out how those other things are nurtured and developed." Arms folded (looking away and then eye contact). Discussion of how these non-measured aspects are developed. Conversation turns to individual teacher philosophy. "It makes it so difficult to appoint teachers, doesn't it really? How much do you get an impression of somebody at interview about how they value a child?"		Whole child Teacher philosophy	Whole child Teacher (philosophy)
50.	Reflects back on teacher training. Her tutor had told her of an experience where she realised that all of her colleagues had astoundingly similar values (sweeps left hand in circles on desk) which suggests that "a head teacher would select people that would fit into that" (hand in air and grabbing and pulling downwards several times). "Its amazing that you can look at somebody and think yeah, you (points)".	"values" left hand making circle on desk	Teacher training (own experience) Wider school Teacher recruitment Teacher philosophy	Own experience (teacher) Whole school Teacher (philosophy)

51.	Example of a child (I/a) giving her a high five in the middle of a test as important in connecting with her values. Looks		Emotion	Emotion
	away to left. Discussion of how schools are not all the same.		Wider school	Whole school
52.	Example of when she did some time as a supply TA in a school and was asked to work with a group of ten children in a corridor. When she asked the children why they had been sent out, they said that it was because they talked too loudly in class. Moves chair next to her as she recalls memory. Laughing at similarity with own childhood experience recalled earlier. Open plan school, "there were shouts (points with clasped hand to several places in air as she turns then hands on cheeks), shouts everywhere [researcher name] from every classroom (makes high pitched sound)" "Don't get me wrong (hands up and flat), I think children need to be told when they've done something and I have been cross and I have raised my voice in my career. A lot of the women's voices go up and my tutor told me always go down!" (gestures high then low in air with left hand). "Repeat, even tone, go down" (sat very straight, smiling hands flat on desk).	"shouts"	Teacher training (own experience) Children physically excluded from classroom Wider school	Own experience (teacher) Children physically excluded from classroom Whole school
53.	Discussion about looking for the right school for you.			

Key

Italics = researcher

"" = teacher speech

Change of font = Teacher non-verbal communication

Initial notes from transcription

Having interview in own classroom was very important as it acted as a prompt, a security blanket and a context for the teachers to discuss their classroom practice. Regularly the teacher points to or looks at the physical classroom environment to support or prompt discussion in interview.

There is a genuine exchange of views in the interview. I offer my views as a researcher and also to reassure or praise (encourage) the teacher – power dynamic in terms of my identity as an academic and pseudo-expert in practice. I often agree with or mirror what the teacher says and offer argument in support of her viewpoint.

"Might have to mind map it" – wish I had asked them to do this.

Could I use screen shots of gestures to include in my write up? Hands only so not identifiable?

Had to use some 'ability' labels to make notes on children or groups referred to – this is difficult as this feels that I am imposing these and then generating data suggesting they are significant – need to be highly sensitive to this in analysis.

Makes me consider the limitations of the spoken form of communication (linear, difficult to share what you are seeing) – thinking and representing would have been more powerful.

Levels of involvement/engagement are interesting. For example, min 49 the teacher seems less engaged (arms folded, leaning back more, looking away, drummed fingers at one point).

Appendix F. School 2 Non-Participant Observation Record

T = teacher

TA1 = teaching assistant

TA2 – teaching assistant

Children's name are pseudonyms with teacher 'ability' judgements in brackets:

l/a = lower attaining

m/a = middle attaining

h/a = higher attaining

ht/a = highest attaining

m-h/a = year 1s (middle to high attaining)

Observation Notes	First Coding - Free	Second Coding - Teacher	Third Coding - Child
 9:05 - children put book bags in boxes with same name as table name when entering classroom and then sit in 'places' (chairs around 5 banks of tables). T introduces researcher as a visitor. Skill starter - buildings. Children writing 2 (or more) sentences in 'thinking skills' books about buildings. T says "put your hand up if you are sandwiches today please". As T says their name, children puts hand down (as writing sentences). Rachel (ht/a) puts hand up and asks if she 	Routine/ Structure Class jobs/roles Personalised provision	Structure and organisation Value and belonging Personalised provision	System Work Adult / child
can do a question as one of her sentences. T replies "yes".Children saying good morning to register names, T says "good morning x" and children reply, "good morning [T]".			
Saul (m/a) is out of the classroom reading individually with TA2.			
Alfie (m-h/a) talks to Georgia (m- h/a). T asks if there is a problem and he says that Georgia (m-h/a) is copying, teacher says it is okay. One child on holiday so can't do her taking register 'monitor' job. T therefore picks name out of a pot of names of people who have not had a monitoring job yet, picks out Chloe (h/a) and			

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puts her name card on the board next to the 'monitor job' for 'taking the register'.			
T tells all children that if they have	Challenge	Challenge	Adult / child
written quite a few sentences then they could write a sentence about a tall building or a very wide building.	TA support (adult)	Differentiation in support	Behaviour Work
TA1 talks to Henry (I/a) about what he might write. Moves to m/a table and talks to Freya (m/a) and Dora	Personalised provision	Personalised provision	Curriculum
(m/a) and Annie (m/a) on the same table, helping them to think of ideas	Independence	Independence	System
for writing and suggests capital letter and phonemes for spelling. TA1 returns to I/a table and stands behind	Routine/jobs /roles	Structure and organisation	
Henry (I/a). TA1 moves Henry's (I/a) book and pencil position for him.	Teacher modelling	Teacher directed activity	
Children self-mark work using mark scheme symbols.	Teacher directed activity		
T gives countdown to standing behind chairs. Children with monitor jobs put book bag boxes away. TA1 helps Eva (m-h/a) to put box away.			
TA1 writes observation notes. Children sit on carpet and T discusses what to do when other children are interfering with your learning.			
Abbie (I/a) goes out of classroom to read to TA2 when Saul (m/a) returns from reading.			
T shows children on carpet two sticks of plastic cubes and children say "difference" together on T's instruction.			
T models putting data into a bar chart on the interactive whiteboard for the children sitting on the carpet.			
T shows children a bar chart worksheet then begins to draw a bar chart on the small whiteboard the same as the one on the worksheet.			
T asks the children, "what are the lines called?" T says 'ax' and Maya (I/a) puts her hand up and answers "axe". T asks, "does that answer my question?" and children say "no" in unison and then "axis" in unison. T points to x axis and children count in unison as she points.			

T models how to draw a bar chart	Teacher	Teacher	Adult / child
	modelling	directed	System
T prompts children to count in unison numbers on x axis again.	Differentiation	activity	-
9:35	by support	Differentiation in support	Work
TA1 sits behind Henry (I/a) on carpet.	Differentiation by task	Differentiation	Behaviour
Children read labels on bar chart in	,	in tasks	Curriculum
unison as T points.	Behaviour	Behaviour	
T says "put your hand up if you worked by counting on in 2s yesterday". Some children put their hands up. T says "yes that should be these three tables here" and points to ht/a, h/a and m/a tables in the room.	Grouping by tables (`ability')	'Ability' differentiated seating/ groups	
Abbie (I/a) returns to classroom from individual reading with TA2. Gemma (I/a) goes out for individual reading.			
Children count in 2s in unison. T says "some of you will have a chart which goes up in 2s".			
Rachel (ht/a) says, "you have to count up in 2s". T says "that is right but don't call out".			
T asks for volunteers to show where 7 is on the board. Seven children put their hands up. T chooses Freya (m/a) who comes to whiteboard and points to 7 (in between 6 and 8 on axis).			
Grace (h/a) asks whether they can use coloured pens.			
T warns children not to "shove work in my face when you have finished" adding the names "Henry! Petey!" (both l/a).			
9:40 Children go to the tables (same chairs as before).			
T gives worksheets to children at their tables. Children write the date and then wait for their next instruction. T says "Sky, Olivia, Rachel, Joseph, Archie, come to the carpet" (all ht/a). T gives these five children their worksheets from yesterday's maths lesson.			
T puts sand timer on Y1 (m-h/a) table	Behaviour	Behaviour	Behaviour
and tells them they have to have their			Work

names and date written by the time the timer runs out.	Personalised provision	Personalised provision	System
TA1 gets resources out for Henry (I/a) and reminds group of task then goes to Y1 table (m-h/a) and explains task to Harry (m-h/a), Charlie (m-h/a) and then Georgia (m-h/a). TA1 moves to I/a table and talks to Henry (I/a). T is sitting on the carpet with ht/a	TA support for I/a Teacher support for ht/a and h/a Differentiated	Differentiation in support Differentiation in tasks 'Ability' differentiated	Adult / child Physical environment Curriculum
 group. From the carpet, T asks Matty (m-h/a) to move away from Harry (m-h/a) to move away from Harry (m-h/a) on the y1 (m-h/a) table. T asks Harry (m-h/a) how many boxes he has shaded and he replies "2". T praises. T asks Charlie (m-h/a) to hold up his work so she can see how much he has done. TA1 moves to Y1 (m-h/a) table when T asks her to "look at what they have done". TA1 looks at Matty's (m-h/a) and then Eva's (m-h/a) work. TA1 moves to I/a table and gives an instruction to Petey (I/a). Matty (m-h/a) and Harry (m-h/a) both put hands up and TA1 returns to Y1 (m-h/a) table. TA1 says "well done Georgia and Megan" (m-h/a). TA1 returns to I/a table then moves back to the Y1 (m-h/a) table to draw lines for Eva (m-h/a) on her bar chart using a ruler and pencil. T calls h/a group (by their group name) and they come to carpet. The ht/a group go to their chairs on the ht/a table. From carpet, T says "Eva" as a behavioural reminder. Harry (m-h/a) gets out of seat and walks over to TA1 to show her his worksheet. TA1 tells him to "sit back down and do the questions". He returns to his seat and puts up his hand up. When asked by T he says, "I'm finished". T tells Harry (m-h/a) to do the challenge questions. 	Differentiated tasks 'Ability' tables (seating) Completion of work/task Challenge Differentiated expectations		
Gemma (I/a) tells Nell (I/a) to go and			

 read and she gets book bag and leaves classroom. Oscar (m/a) gets out of seat and takes worksheet to T on the carpet. T says, "you are not bringing that to me are you?". T asks him to show her the back of the sheet and then instructs him to "do the challenge on the back". T stands up and stops the whole class. T explains the challenge activity. Ruby (m/a) starts crying. T says to whole class, "hand up if the person next to you is talking", some children put their hands up and then says "hand up if they are talking about work". T tells the class to "focus on what I'm looking for". 			
 10:03 Other children on m/a table ask Ruby (m/a) if she is crying because she can't do the work. TA1 moves to m/a table and reassures Ruby (m/a) that her work is neat. TA1 moves to I/a group and Maya (I/a) snaps ruler by accident. TA1 reassures Maya (I/a) and tells her "not to worry". From carpet, T asks m/a group (using group name) to come to the carpet. H/a group return to their seats at the h/a table. T leaves classroom to get two children out of the toilet who have gone without asking. 10:06 Nell (I/a) enters classroom from individual reading with TA2. T gives class a reminder about being quiet. TA1 talks to Harry (m-h/a) and Matty (m-h/a) and explains task challenge 	TA emotional support Teacher support m/a Behaviour Differentiation by task Task completion Self- assessment Challenge Differentiated expectations	Emotional well-being Differentiation in support Behaviour Differentiation in task Recording / work Assessment and feedback Challenge Differentiated expectations	Social Adult / child Behaviour System Work
again. TA moves to I/a table and walks all the way around the table. She says "no talking". TA moves back to Y1 table (m-h/a) and explains to Eva (m-h/a) that the			

questions relate to the bar chart and are not questions in general.Children on the h/a table are drawing new charts on the back of their sheets (they don't have questions) and are talking socially.Chloe looks over at the children's work on the ht/a table and then hurriedly rubs out the squares she has drawn on the back.T stops class and asks for everyone to "put your pointy fingers on the name" then repeats for date and learning objective.Children draw self-evaluation faces on sheets.Children put pencils, rubbers and rulers away. T puts pencils away on Y1 (m-h/a) table.10:15 children walk to phonics groups. Some leave the classroom and go to the Reception classroom.Harry (m-h/a) is asked by T to "get the plastic box for phonics". He seems unsure but finds it after a few minutes. T says, "ah you have just moved up to this phonics group haven't you".Some children enter classroom from another class.T says "my turn, your turn then your turn".T asks Katie (m/a) to look at the card "to register the sound with the shape".T shows grapheme cards. T says phoneme then children repeat in unison.	Separate instruction ('ability') Teacher directed Familiar routine	'Ability' differentiated seating/ groups Teacher directed activity Structure and organisation	System Curriculum Adult /child Physical environment
T asks Archie (ht/a)to "shhhh". Children say the phonemes for each grapheme card in unison (same cards as before).	Feedback Teacher modelling Jobs/roles	Assessment and feedback Teacher directed activity	Adult / child Curriculum Behaviour

 10:20 Katie (m/a) and Oscar (m/a) give out whiteboard pens and whiteboards. Children write their names on the boards and T asks for individuals to improve individual letters (e.g taller, on line). T clicks fingers at Freya (m/a) and says "back in the room, back in the room with me, thank youdon't interfere with what she is doing". T says 'ay' three times with children repeating in unison. "Where do we generally find 'ay' in a word?hands up Amy (h/a)". Harry (m-h/a) says he has this sound in his name and T praises for "good spotting" and explains how it makes a different sound in his name. T models blending phonemes in words containing 'ay' with children repeating in unison. T reminds Rachel (ht/a) to "look this way". T gives clues to children to know what word to write. Children write 'play' on whiteboards. T gives clues to the word 'stray'. Children write 'stray' on whiteboards. Some children are not writing so T says "everyone". Petey enters classroom (from other phonics group) and tells T it is "wet break". T gives phonics group clues to the word 'clay'. Children write 'clay' on whiteboards. 	Behaviour	Value and belonging Behaviour	
Katie (m/a) collects whiteboards and Oscar (m/a) collects pens.			
10:50 T reads part of an ongoing novel to the children as children have drinks of milk whilst sitting on the	Jobs/roles	Value and belonging	Social Adult / child

carpet (milk given out by milk monitors).	Personalised provision	Personalised provision	
TA1 sat on a chair at the back of the classroom.			
Henry (I/a) is out of the classroom reading individually with TA2.			
 11:03 Milk monitors return to classroom. One child spills milk on the carpet. Sky (ht/a) goes out of classroom with TA1 to get a new plaster for her knee. Evie (m-h/a) puts hand up and tells T that "Dora (m/a) is fiddling with my hair". T asks if they have apologised and Evie (m-h/a) nods. 11:06 T introduces a report writing session and shows children the WALT on interactive whiteboard. Annie (m/a) puts up hand and tells T that another child is doing something. T reprimands Annie (m/a) for "not having 'self-control" and tells her she needs "to see if it is interfering with her learning". Children read words from the word bank in unison. 	Independence / responsibility Teacher and child modelling Behaviour	Independence Peer support (general) Behaviour	Child / child Adult / child Behaviour
Henry returns and Megan (m-h/a) goes out of the classroom individual reading with TA2.			
T asks Amy (h/a) to stand at the front and ask questions in a report style. T asks Oscar (m/a) to "sit on your bottom".			
T models answering questions in full sentences with "kungfoo punctuation and detail".			
T asks children to sit in pairs at tables in the same places as yesterday. T moves one pair.			
11:15 Joseph's (ht/a) partner Megan (m-h/a) is out of the classroom reading so T becomes his partner.	Peer support (across `ability' range)	Peer support (across `ability' range)	Child / child Behaviour
T tells children to "choose who is A and who is B".	Behaviour	Behaviour	System
	Routine/rules		Play (lack of)

 Henry (I/a) cried because he wants to be person A. T tells him that he can be A next time. TA1 works with Petey (I/a) and Grace (h/a). Henry (I/a) and Oscar (m/a) play with a till from the role-play area. T takes the till away. T shakes a tambourine (as a signal to stop). Freya (m/a) and Robbie (h/a) are chosen by T to model their questions and answers. Megan (m-h/a) enters classroom (returns from reading) and Eva (m-h/a) gets bookbag and goes out of classroom to read with TA2. Freya (m/a) asks Robbie (h/a) "where did the fire start?" (A asks B) Robbie (h/a) asks Freya (m/a) "why did the fire start?" (B ask A) TA1 helps Petey (I/a) and Grace (h/a), prompting conversation, supporting cooperation and modelling questions/answers. Oscar (m/a) given warning by T that their name "will go on the board" (swinging on chair and not engaging). T chooses Eva (m-h/a) and Gemma 	Peer modelling Personalised provision Social Social Adult support Behaviour Peer modelling Peer support across `ability' range	Structure and organisation Peer relationships Personalised provision Social Differentiation in support Behaviour Peer support (general) Peer support	Adult / child Social Adult / child Adult / child Behaviour Child / child Social Work
 (I/a) to model questions and answers. 11:35 T supports Henry (I/a) and Oscar (m/a) to ask and answer a question. TA1 works with Petey (I/a) and Grace (h/a). Freya (m/a) and Robbie (h/a) given reminder by T to "focus". Archie's (ht/a) partner, Eva (m-h/a) is out reading so he does not have anyone to work with. Maya (I/a) and Saul (m/a) are chosen by T to model for the rest of the class. TA reminds Georgia (m-h/a) who is 	Physical/ emotional well-being Feedback	`ability' range) Emotional well-being Assessment and feedback	
returning from the toilet to pull her skirt down.			

T asks all children to get their thinking			
skills books.			
All children stand behind chairs and walk to tables to get books and then return to chairs.			
Eva (m-h/a) enters classroom, returning from reading to TA2 and Annie (m/a) gets book bag and goes out to read individually with TA2.			
Children write one question and one answer in their books.			
Katie (m/a) has something in her eye and T helps her to get it out.			
TA1 helps Gemma (I/a) and then Petey (I/a) explaining that they need to write the question in their book.			
TA2 helps Nell (I/a) with punctuation of her question and answer (5mins).			
11:38 T asks children to put their books away for dinner, wash hands and go to the toilet.			
Freya (m/a) tells T she does not know how to spell 'where' (is looking around the classroom).			
T points to question words above her head on display.			
Three children still writing: Freya (m/a), Robbie (h/a) and Wilson (h/a) Other children have coats and are sitting on the carpet.			
11:43 T discusses with one child that they have lost something (according to mum). Sky (ht/a) says she has it and will bring it in to school.	Feedback Structures/ routine	Assessment and feedback Structure and	Behaviour Curriculum
T address the class and summarises the morning, praising the children's hard work including self-correction. T says that "phonics was fine" and "literacy was okay but I am looking for children showing me and each other super listening skills, sitting on the chair properly, looking at the person talking".	Behaviour 'Ability' seating (own places)	organisation Behaviour 'Ability' differentiated seating/ groups	System Work
Charlie (m-h/a) claps and T asks if he would like that if he was talking.			

T explains that Sky (ht/a) 'calling out' is another example of poor listening.		
Children stand in two lines (one for children having a dinner and one for children having sandwiches).		
Oscar (m/a) is asked by T to push his chair under the table. He says that it isn't his chair (he was sitting in it but isn't his usual 'space'). T asks Wilson (h/a) to push it under instead.		

Appendix G. School 2 Summaries of Children's Data

Entries from the non-participant observation record relating to this child specifically are provided at the top of the summary for each child. On the left, there is the child's photograph of their classroom representation (they chose when it was ready to be photographed and captured their classroom using a computer tablet). The text in this column is a summary of their discussion whilst creating their classroom representation (from video footage of this). On the right, there is a summary of the child's classroom tour. This was summarised from the video footage that each child recorded including where they pointed the camera and any verbal commentary they recorded whilst doing this. Underneath the video tour summary is the summary of the semistructured interview between the child and the researcher where the researcher asked the child questions. This was summarised from video footage of these interviews.

Chloe (deemed higher attaining)

- Gets name picked out of pot to take register to school office
- Working with teacher on the carpet with four other h/a children for feedback and different task in maths
- Looks over at the maths work on the ht/a table and rubs her own out



There were two distinct areas in Chloe's classroom, one enclosed and the other not. She explained the orange fenced off area first, "The boys could play football because they like to play it". The teacher is in the not enclosed area (only large figure represented). Chloe explained that "she is telling the children to stop playing". The children were not supposed to be playing they are supposed to be "doing their work on their table". On her video tour of her classroom Chloe pointed out the following key features: display and role-play area.

"We did the Great Fire of London cos that is our topic" "We got to play with the bakery because that's when the fire started in it"

I asked Chloe what it is like to be a child in her class and she responded by saying "We do like loads of work and stuff like maths and take aways, then if it's like wet play then we get to play with some lego and stuff like that". She explained that she likes playing with games best. She doesn't like doing maths "because they are really quite hard to do", particularly "bigger numbers and stuff like that". She says that she spends most of the time in her class on the carpet with the teacher. I asked her about which children she sits next to on the carpet but she explained that she sits next to "anyone, like our friends" so all different children. She named one child (higher attaining) whom she sits next to at her table and "no-one else". When prompted she said that she sometimes sits in other 'places' as it changes every term [perhaps means year judging by the next comment]. "I was a year 1 before, so I like sitted on that side the room [gestures with right hand]". Chloe's class is mixed year 1 and 2 so some children stay in this class for two years but not all. She explained that there are 3 year 2 tables in her class. She talked about sitting on her [named, higher attaining] table and that the teacher decides this but she says that she is not sure how she decides. She likes sitting on her table as she likes sitting next to her friend. Although she was a little unsure what helps her learn at school she said her maths books help her learn and working in partners. Her favourite thing to do at school is Lego® as you can build stuff like related to your topic. She would like to build a Great Fire of London house (class topic) if she could build anything. When talking about the children in her class, she connected age

Freya (deemed middle attaining)		
 TA helps her think of ideas for writing, suggesting a capital letter and some phonemes for spelling Puts hand up to point to correct answer on IWB, teacher chooses her and she walks over to point to correct answer (maths on carpet) Teacher gestures to her and asks her to concentrate but not interfere with what another child is doing (on carpet) Teacher chooses her to model answer for the class, with h/a child (been working in a pair) Behavioural reminder from teacher Asks teacher how to spell a word Continues writing when other children are going outside for playtime 		
In her video tour of her classroom, she picked out the following key features: Display, interactive whiteboard (pictogram) and children's work on the table.		
	"This is the important bits, these are the bits on the wall that we have been learning about the Great Fire of London"	
	"You had to do it just in twos", discussing work on the wall. "We were doing this learning today and we were figuring out what to do and we	



All of the large figures are adults and all smaller figures are children in Freya's represented classroom. The adult outside of the enclosed areas is in the playground and is the sports coach and caretaker [Freya gave his name and described what he does]. She gave him a sweeping brush in his hand. The enclosed area with table and chairs is the school hall. You have dinner, "down in the hall".

The baby in the basket is a "pretend little baby" as the children are learning about hospitals as the baby has hurt itself. The blue box is where you put your school planner "when you've read". She put equipment such as scissors, ball and hoops at the edges of the classroom.

She named the children on the floor [higher attaining and 2 highest attaining children] and on the bench as her and another child [lower attaining] who is her friend. She also talked about another child in an older class who is her friend that she "can't put in here" [hand gesture] but wanted to talk about. The two children sat on the bench are the "special helpers".

She explains that the teacher [named] is teaching all the children so when they grow up they know what to do. The teacher has something to wipe up if there is a spill. The bike belongs to one child [named] and the skateboard is for a have this key thing and things there and we had to do it in twos and we had to do it...there was a table which is one of these [moves to show papers]."

Twice Freya was disturbed by a child asking her what she was doing during her recording.

When asked what it is like to be her in her class she said, "it's like...its very fun and when we get golden time it's like we can do whatever we want in the class it's like you can choose whatever you want to play with. There's like matching games, there's like games in the class and there's Connect 4". Freya is good at Connect 4 and wins whoever she is playing. She also has it at home and beat her Dad. "Like in my classroom "it is fun, on my table there is [lists all children by name including explaining which child is 'new']." She also named the children on the next table to her. When asked why she doesn't sit on that table she explained that the children on her table are her friends but her best friends are two children on two different tables [named, one higher attaining and one lower attaining]. She explained that she did once ask her teacher why she "can't sit with my friend friends" and she was told that she always talks to them when the teacher is talking (which she admits she does, whilst smiling) and doesn't really talk to [named two children on her table] although she can't anyway. Freya drew out the table arrangement using her finger on the table to show that she is not really next to anyone, that she is "like too lonely on myself". This is because [named child from her group] "always disrupts me so I always go here" [pointing]. She uses a high voice and dramatic sad face when saying, "there's nobody next to me". "I would rather sit next to someone to help me". She would like one of the two children from the next table to sit next to as they are always helping each other and she has to tap them to say "Hi" and have a chat with them. She sits next to one of these children often on the carpet [lower attaining]. She explains that where she sits at the table is near to a window so she looks out of the window and sees the caretaker sweeping leaves. She talked enthusiastically about the equipment in the playground.

When asked what they do in a normal day in their class, Freya talked about morning activities giving an example of `name

good".	writing'. She says that she and another child are the fastest at running [highest attaining]. When asked who is the best at reading, she immediately responded "that's not me definitely, it's probably [named two highest attaining children]". When asked who is the best writer she again immediately responded, "definitely not me again" [high voice] and named two highest attaining children as the best and "second". She gave the same children's names as the best at being friends and added one further name [higher attaining, described as her best friend earlier]. She said that the teacher is the best at drawing. The cleverest children are the same children as named as the best writers. "The year 2s get hardest work and year 1s get the easy work but it's kinda the same [sweeping hand gesture] but [teacher's name] makes it harder for the year 2s." She named all of the children on the highest attainers' table and said that "they are like the oldest table in the class as they get the hardest [emphasised this word] work, like 1000 add 600 and [name child] just gets it, can't believe it!". She explained that her table do adding, "like 20 add like 5". She says that pencils help her learn because she can write with them. She says that the children don't choose where the things go in the classroom and that "the head chooses
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Georgia (deemed middle/higher attaining y1)		
 M-h/a child talks to her and teacher asks if there is a problem. M-h/a child says that Georgia is copying (maths work at tables) Task explained to her by TA (maths work at table) TA praises her and another m-h/a child for their work (maths work at table) TA reminds her to pull her skirt down after returning from the toilet 		
In her classroom tour, Georgia drew the camera's attention to a desk and a display.		
	She explained, "This is where we made um this is really good for people for learning. Also, it is good for making things".	



In Georgia's represented classroom, she used larger and smaller figures to represent children, initially sitting them mixed within rows but later changing to put the larger figures (bigs) on the back row and smaller ones on the front as they need to be able to see. It seemed important to her that they were in rows. She sat all of the children (twelve) on the floor with the teacher looking at them on a chair. One child has one arm in the air and one has their arm almost up. "They are all listening to the teacher". When asked what they are listening to the teacher say she explained that she is telling them that they are going to do a drawing. She included five tables with chairs around them and walls around the classroom plus a teacher table. She initially spread the tables out more but moved them saying "they need to be closer together and a bit more scruffier" before putting walls around using barriers. She was careful to match the chairs around each table (searching through the box to find the right chairs). She explained that she needed more people and commented on the hair and clothes of the people she selected.

Georgia whistled whilst creating her classroom representation.

When asked what it is like to be here in her class, she said, "quite fun cos you get to make things and draw things and do things and all the teacher has to do is tell you and show you things and then you sit around doing boring stuff. She went on to explain, "the teacher does work" which is "looking and sitting on the chair and drinking tea so it's quite fun being a child". She said that it is better to be a child than a teacher as on rainy days you get to stay inside and "do some playing stuff and playing stuff is really good". "We normally do some work and some drawings". She spends most of her time in her class 'colouring at my desk' which is a table "where you do your things". She named the children who sit on her table. When asked why she sits there she explains that she sat there on the first day and then the next day and next day after that so "how long you sit on that table you have to stick on it". She seemed distracted when explaining this as she was looking away but then explained again using finger to emphasise and looking at interviewer. The second time she made it clear that the teacher decides that you stay there. She said she would like to sit on a named different table [Y2 higher attaining] as it is quite small and loads of people aren't on it so the chatting won't come from there". Georgia's table has 8 children compared to 5 or 6 on other tables. She explained that sometimes the older ones do harder work (year 2) and year 1s do easier but "sometimes the easier work is quite hard". "When [teacher name] can't work make up a hard plan for year 2s, they have to do same easy as us". Georgia is in year 1. When asked what helps her learn in her classroom, "the teacher tells us and then we know what to do and then our learning, we do it the first time and then we have to copy that first learned". Talking about the children in her class, she chose a year 1 child as the fastest runner in her class [higher/middle attaining], a year 2 as the best at reading [highest attaining], herself as the best at writing, the cleverest as probably the teacher [laughing] and a year 1 from her table as the best at drawing [higher/middle attaining y1]. She said that "we choose where everything goes, we tidy up all the stuff". She would like to do more baking and making stuff in her class.

Harry (deemed middle/higher attaining y1)

- Task explained to him by TA (maths work at table)
- Teacher asks a m-h/a child to move away from Harry and asks Harry how much work he has done. He answers and she praises him.
- Puts hand up to request TA help (working on maths activity on table)
- Goes to show TA (on another table) his work. She tells him to sit back down which he does and puts his hand up.
- With his hand up, teacher asks him what he needs and he says he is finished. Teacher tells him to do challenge questions.
- TA talks to m-h/a child and Harry to explain challenge activity.
- Teacher asks him to get the plastic box for phonics (phonics group on carpet). He seems unsure but finds it. Teacher says "ah, you have just moved up to this phonics group haven't you".
- Tells teacher that he has the phoneme in his name and she praises (on carpet in phonics group)



In Harry's classroom representation he made four distinct areas and appears to have been representing more of a school than a single classroom. He has the Headteacher sat at a computer in one space, an area where children are washing their hands at sinks in another space [for sinks he used a cupboard on its side], a teacher with a class sitting on chairs in another space and a teacher with another class of children in the other space. The adults are all represented by larger figures and children by smaller figures. There are four children in each class sat on chairs in a row and then two further children at the sinks washing their hands.

He names the Headteacher and says she sits there at her computer getting everything ready for assembly.

He says that one class is learning about where they live and different parts of where they live [named place]. The other In Harry's video tour of his classroom, he picked out the following key features:

Displays (2), pencils and pens, maths arrow cards and class computers.

About a topic display, "These are very important because we are learning about the Great Fire of London and we needed to make some houses on fire and some pictures of the River Thames."

"These pencils and scissors and felt tips are really important because they are for drawing and spot the differences and stuff".

Showing magnetic arrow cards, he said "These are really important because we use them for phonics and maths and stuff" [perhaps referring to all the resources in this area rather than just the arrow cards which are commonly used in maths teaching].

He showed the computers and said that they name them "DC" [PC?]. "We have to play games on them every day" [emphasis on 'every day']. The second display had photographs of all the children and he pointed out his and other people's photographs.

"You learn really nice stuff". He gave an example as the current class topic and said he liked making things (box modelling) for this topic. He explained the steps for making these. He said there are "only some" things he doesn't like doing.

class is a guitar class [although there are no guitars, none were provided].	He says he doesn't like sitting down whilst the other children are drinking milk as you have to sit down even if you don't drink milk although you do "get a story" which is good. "I normally spend most of my time on the table". He named the group that he sits with and that the children in this group are all year 1s. He says it is a "massive" table as it is the biggest table. He explained that sometimes he sits on other tables if you "have to get a partner and sit on their table" but he would rather sit on his table with the year 1s. After being asked about specific tables by the researcher, Harry explained that the one of the year 2 groups (lower attaining) can't sit with the others as they are the "new year 2s" who were not in the class as year 1s. He went onto explain that the "little bit older year 2s" sit on the next table [middle attaining year 2s] and the oldest year 2s sit on the next table. Talking about individual children in the class he says that he is the fastest runner and the cleverest person. He gave an example of data handling in maths for how he knows that he is the cleverest, "I was the first one that done all of it". He said that the oldest year 2s get the hardest work as they have to do counting in 2s and he has to do counting in 1s and 2s.

Joseph (deemed highest attaining)

- Asked to come to the carpet by the teacher with four other ht/a children which they do (maths lesson). Have feedback on yesterday's work and introduced to today's work which is different for this group.
- In paired work, Joseph's partner is out of classroom reading so the teacher is his partner for the task.



All figures in Joseph's class were sat at tables. He included a male teacher and 5

In Joseph's video tour, he picked one important feature as being the set of scissors (in a wooden holder). He said, "These are the scissors for people to get when they need to cut things".

Joseph reports that being in his class "is a bit fun like doing stuff on the computers" and gave doing pictograms as an example of the type of things you would do on the computer. In a normal day he says that they do ICT, literacy and numeracy. He spends most of his time in class "at my desk". He gave his group name and listed the children who sit at the same table as him. He is clear that he doesn't choose where he sits and that the teacher [named] does and laughs when he says

	he deservit brown here sheepers
children (different sized figures) who he referred to as "kids". Each child is sat with their own desk facing the teacher except for two children who are sat side by side sharing one table. He used upside down crates for two of the tables. "They're learning to do some topic about the harvest festival". He explained that they are sitting at tables "because they're doingum, umthere's meant to be a piece of paper there [points to child's table top]". When asked what would be on the teacher desk he says "some demonstration work".	he doesn't know how she chooses. He explained that he would prefer to sit with two children [named, from the higher attaining table] "cos I've been to both of their houses and we go to the same club". He explained by using his fingers on the desk top that these two children sit together and he and another boy sit on the next table but apart. He said that the children in his class sometimes do the same work and sometimes to different work. He explained that the year 2s do harder work so it is the same work but harder. When year 2 work is easier and harder, he gets the harder work but he said he doesn't know why. He says that the fastest runners in the class are him and another boy [higher attaining]. He mentioned the other child that he would like to sit with as the best reader [middle attaining] and a girl from his group as good at drawing [highest attaining]. He said that another girl from his table is the best at writing in his class as sometimes the teacher [named] looks at the work and says it is really good. Joseph says that the teacher [named] chooses where everything goes in his classroom but he doesn't know how she chooses. He says that the thing that best helps him learn in his class are the teacher "demonstrations".

Megan (deemed middle/higher attaining y1)

- TA praises her and another m-h/a child for their maths work (at table)
- Goes out of the classroom to read with TA for 10 minutes

Megan chose to represent the playground and dinner hall before the classroom in her representation. She put a teacher "inside doing some work" at a table. As she took out the table she said "this can

In her video tour, Megan showed the camera the role-play area and several items within it, a display, pencil pots on tables (with pencils, glue, rulers and rubbers inside) and the water bottles. Megan talked very quickly and moved the camera around the room at speed. She also checked where the researcher would be (outside the room) before she began.

On the topic display, she focussed upon the box models saying "We made these with cardboard boxes and tissue paper".

Megan showed the camera the play money, and inside the oven with the play food when visiting the role-play area.

be a teacher table". She changed the figure representing the teacher (although neither looked like her actual teacher and she did not name them) and then added four children sat at two tables in front of the teacher. The ten children in the dinner hall were at two tables and one was on a skateboard. The children were all different sized figures. She put two lunch boxes on one of the tables. When finalising her classroom representation, she put a computer on the teacher's desk and made sure there were two boys and two girls in the class.	In Megan's class she says "I like playing with my friends and I like getting helped. Mostly I like helping the teachers and doing stuff for them". On a normal day, she immediately said, "we work". "In the mornings we do stuff like write letters do numbers with whiteboards and we um write in our skills book". She says that she spends most of her time in the classroom in the role-play area but clarified this when asked if she goes in there every day and she explained, "no, we take turns." She also said, "mostly I spend time at the computer" and smiled when the researcher asked her if she liked going on the computer. She named all the children on her table and explained that they all sit together because they are all year 1s so are new to the class. She seemed clear that the year 2s have harder work, "hard ones" and the year 1s "easy ones". She explained that one year 2 group do the same work as the year ones [lower attaining], "any tables that are on that side [sweeps right hand forwards], they do easy work". She said she doesn't know why these year 2s do easy work. She said a girl from the table next to her [lower attaining year 2] is really good at running and a year 1 from her table is really good at drawing. A year 2 girl from the highest attaining year 2 group is good on computers and a year 1 boy from her group is good at writing. She explained that "all of us" are good at maths work. She said she doesn't know who is the cleverest in her class. Megan named the teacher as the person choosing where everything goes in the
	really good at running and a year 1 from her table is really good at drawing. A year 2 girl from the highest attaining year 2 group is good on computers and a year 1 boy from her group is good at writing. She explained that "all of us" are good at maths work. She said she doesn't know who is the cleverest in her class. Megan named the teacher as the person choosing where everything goes in the classroom, "she likes everything to be tidy and neat". She said that she would sometimes like to go on a different table, perhaps the next table [lower attaining year 2s] as "it is tidier and nice, kind". She wouldn't like to go on the table on the other side [highest attaining table] as it is a messy table. Megan said that the computers and the whiteboard help her learn. She explained that the interactive
	computers and the whiteboard help her

Olivia (deemed highest attaining)

• Asked to come to the carpet by the teacher with four other ht/a children which they do (maths lesson). Have feedback on yesterday's work and introduced to today's work which is different for this group.



Olivia's classroom included the lunchboxes, scissor tray, whiteboard and the computer. She put the teacher (larger figure) seated at the front near the computer and three tables with 16 children seated around them on chairs (all sides of the tables had children and chairs). There are also two children sitting on the floor in front of the teacher because they have been naughty. When asked what they had done, Olivia replied "they been talking when they were supposed to be working in silence". All of the children are represented by smaller figures. She related it to her own class saying the year 2s get harder work and the year 1s get easier work but sometimes they all do the same. She explained that the children at the yellow table are the year 1s.

On her seven-minute video tour of her classroom Olivia, pointed out these key features:

Desks, reading chart, whiteboard (not interactive), screen (interactive whiteboard), ... displays (x4), reading books, children's trays, homework box, number chart, individual whiteboards and pens, lunchboxes, teacher's books (song and planning folders), birthdays chart (x2), seasons wall frieze, visual timetable, whole class reward tokens, maths folders and England folders [English folders].

At the beginning of her tour she immediately said that, "the desks are important as that's where all the children do their work". When showing the whiteboard she said, "this is where [teacher's name] shows us what we have to do". She showed quite a number of charts and symbols (resources) that could be used or copied to help with tasks. She talked about the coloured stages (levels) of the reading books. When showing the camera the children's trays she said that these are important "because that is where the children put their stuff if they haven't finished". Olivia seemed to have a clear sense of audience when talking on her video tour, "this box is very important, I know you will think it's a normal box but that is where we put our homework cos where else would we put it? Cos when we do homework it helps us do maths and numbers and all sorts of different things". She explained that the individual whiteboards are important as they are for writing and numbers. She explained that the lunchboxes are important as otherwise the children having sandwiches wouldn't have anything to eat. Olivia gave lots of details in her talk (e.g. noticing the date was wrong on the visual timetable) and expressed some opinions (e.g. liking the display and gaining rewards), she explained who each item is important to and how it is used.

Of her class Olivia said, "it's nice because on a Friday in the afternoon we get choosing time and sometimes we do stuff on the computer and we get to write in our class and I like to write and maths and stuff". She also talked about morning tasks. She said that the year 1s do easier work and the year 2s do harder work although there is sometimes a difference in the work for different year 2 tables, "sometimes our table does harder work than any other table". She explained that one group [lowest attaining] do the same work as the year 1s because these children stayed in the class before as year 1s so went straight into class 2 as year 2s so they do the same work as the year 1s "so they can get the routine". She named three children as [highest and higher attaining] really fast runners and explained that a [highest attaining] child is the best reader as he is on the highest stage reading book. She explained that another girl and her [highest attainers] are really good at writing and that they normally do writing about their topic. She said that she doesn't often get help with her writing as "because whenever she [teacher] asks us to do something I do it, erm and I find it quite easy so I don't ask for help so I just think guite hard". She named one child [middle attaining] as someone who does get a lot of help because she asks for it but then still says she doesn't know what she's doing. She says that occasionally two children on her table get help [highest attaining] and that some of the year 1s get help. The places do not change except at the beginning of the school year. She explained that the teachers decide where everything goes in the classroom. She also told the researcher about a time when she and another girl [highest attaining] were computer partners and played a really easy game about money and they got onto really high numbers (in the hundreds).

Petey (deemed lower attaining)				
 and another I/a child's name. TA reminds him and four other I/a TA gives him an instruction (math TA supporting him and four others Enters classroom from phonics groteacher TA supports him and h/a child with 	s at table) s in I/a group (at table for maths work) oup in corridor and says "wet break" to the n paired discussion task compting, turn-taking and modelling n paired discussion task			
When creating his video tour, Petey initially had a little trouble working t video camera. He then took 6 short videos. He showed the camera the				



Petey had lots to say about his classroom representation and there were six videos of him talking about it. Petey included a teacher (male) and seven children (represented by different sized figures). He put himself in the classroom (class 2) first (far left sat down) as one of the four children sat on the floor in front of the teacher. They all have one arm in the air, "cos they gotta tell which reptile is powerful". He did make a class one in an enclosed area to the right but later moved this away. He also introduced another figure who was introducing a map and stood him on a table but later took him away also saying he "stealed the map". He named the different tables using group names from his class (including his group) and had one child sat on a chair at each table but they "all have to work on themselves". There are some disregarded items which he left in his classroom representation when he took his photograph of it.

role-play area, the place where the crayons and scissors are kept, the drinks bottles, the tables, display and model made out of cubes.

Of the role-play area he said, "this is important because its got a lot of bakery stuff". For most things he showcased in his videos he introduced the item like this: "here's all the crayons and the scissors".

When asked what it is like to be him in his class, Petey said "I never be bad. I pick my bogeys to show people and they say 'eww' and I chase them". He explained that he does different types of work, "computer work, paper work phonics, not fighting".

He said, "you got to copy yourself they do sentence". He explained that everyone does the same sentence as "you be in partners at the [named] table." He named the children on his table and explained that they are his friends and that also has a friend in a different class. In his class he sits at [name] table (to work) and stands up on the carpet if he has been bad like punching someone in the stomach. He says that his teacher [named] said he had to sit there as it is "his job". He said that he doesn't want to sit by himself. He named three people on the next table (year 1) because that is where they have to work. He said that the teacher helps him to do work.

Talking about the children in his class, Petey names a child that is faster than him at running but has now left the class. He says he is the cleverest in his class as he "I am clever cos I can do work all done and put my hand up and didn't shout". He names a child from his group as being good at reading and also names himself as good at writing. He likes playing with Lego and drawing best in his class as he draws dragons or builds dragons, dinosaurs, a Lego® man or an octopus.

Rachel (deemed highest attaining)

- Puts hand up and asks teacher if she can write a question as a sentence (whole class at tables)
- Tells the teacher what the maths task requires (whole class carpet session). Teacher praises but reminds her to put her hand up

- Asked to come to the carpet by the teacher with four other ht/a children which they do (maths lesson). Have feedback on yesterday's work and introduced to today's work which is different for this group.
- Behavioural reminder from teacher (phonics group on carpet)



In her classroom representation she includes quite a few adults. There are two distinct enclosed areas, one is the classroom and one is the playground. In the classroom there are three children sitting in a row on chairs facing the teacher and his wife. The Headteacher is collecting the children from the playground and stands at the narrow opening of the enclosure. There are four adults and six children in the playground. She includes chairs in the playground but no figures are sitting on them.

She also discuss the skin colour of the figures and says that one figure looks "Indian". She explains her choice to swap the headteacher from a white woman to a black woman as needing to find a white wife like him (male teacher). She deliberately chooses to have a class full of only girls and says she would like this.

In her very short video tour of her classroom (34 seconds), Rachel shows the role-play area but doesn't appear to move from her starting position in the room

"This is the role-play area where we play when we can".

In Rachel's class "its sometimes tricky cos I have to do a billion work and a trillion things like that but its fun but I don't like it when I get told off". She says she doesn't get told off very often but "usually it is when I am talking in class cos I like chatting". "We usually do literacy and phonics in fact on Friday we don't do phonics as it gives the teachers less work". There's two separate phonics groups and gives examples of the different activities they might do. She is clear that one of these groups (not hers) is easier. This easier group has "the year 1s and the people who've just moved to the class".

Rachel explains that it is "like a mix, sometimes we do the same work and sometimes we do different". She gives examples of different activities like guided reading and reading independently. She spends most of her time sitting at [name] table. She explains her group placement by saying "it's the table the teacher gives you". She says that, "I am at the stage that's harder than [name of higher attaining group] so [name of highest attaining group] the tricky table and this isn't that tricky [gesturing with hands to placement of groups on desk top, pointing to the higher attaining table when saying 'this table']. If I went on [name of higher attaining table] and I did twenty when I was meant to do a hundred work I would find it really really easy." She says that her table is the hardest and the year 1 table is the easiest. She names the children in her group.

When discussing the children in the class, Rachel picked out a boy and a girl [both highest attaining] as fast runners. When asked who is good at reading in the class she says "I don't really know cos you don't really get to listen to people read". She says she is probably the cleverest person in the class. "I am quite clever!

Appendix H. School 2 Teacher Interview Transcription Record

Teacher interview from video recording – School 2 94:14mins

Mins	Topic/ Question	Summary	Photographic evidence	First Coding	Second Coding
0.	What are the distinctive features of your current class?	Reassured that the interview will take more of a less- structured conversational approach: Mixed y1/2 class (holds both hands up cupped and indicates each when saying year 1 then year 2) – varied upon numbers. These year ones are more ready "for more formal learning now" and are less than a quarter of the class.	Right hand y1, left hand y2	Types of learning (formal/informal) Structure (school)	Curriculum (policy) Whole School
1.	How do you decide which year 1 children are in this class?	The years 2s: "they range fromI've got quite a errr low ability child in my class who is still 'working towards' in some areas" (rubs hands on top of each other when says "err" and lifts shoulders). "and then I've got a bunch of children that are 'age related' and then I've got a handful of children who are working beyond expectations". "We don't think about it as keeping children back in reception".	Rubs hands when explaining that there is one 'low ability' child in the class For the	Stages of 'ability'	'Ability' as a continuum (linear)

			Fans hands outwards in front to indicate 'bunch' working at age related expectations. Hands open and slightly front left, tapping right hand in air twice to indicate 'handful' working above age related expectations.		
2.	Planning	Discussion about partner class. Two yearly curriculum cycle so all year 1 and 2 children get both years of the cycle. Some children "only get one year in my class" (makes rectangular shape in air with both hands for 'in my class'). "Last year the children in that class were very similar in ability to the children in this class so we had (emphasised) to definitely do the same curriculum then". There is some discussion of the school expanding and changing to a three year curriculum.	Two hands making thin rectangle in air [other hand out of picture].	Curriculum (school) Fixed 'ability'	Whole school Fixed 'ability'
3.	Returns to original question about how y1 children are selected	It's not done on birthday (swipes R hand to the left with closed fingers) as quite often we have children who are Summer birthdays who are quite (points and flicks wrist with right hand) it is mainly done on ability but also on maturity, on how well they can access, because in here I can't really		Stages of development Class 'readiness'	Child development Whole school

4.		have, there isn't room for a water trough or a sand tray (open hands, talks from side of mouth)". "I try and have some role play over there (points to corner) and we do have construction still its just they can't have it all the time". "It is me teaching (points behind with both hands at front of classroom) then they go to their desks and do their work (turns and spreads hands and points at tables). Explains that Reception class is different as it is teacher input then children play and teacher works with one group at a time – year 1s who no longer need that are in this class. Discussion about new houses being built in the area and the	Open hands gesture when discussing why curriculum in the classroom cannot be play-based	Class routines Physical classroom	Structure and organisation Physical learning environment
5.	Teaching choices for observed sessions	 potential impact upon the school. 'Normal morning' "I suppose I have learnt that actually you need to keep them moving and changing and doing different things (cupped hands down on desk and crossing arms back and forth) so actually when they come, they sit at their desks (pulls right hand towards and then points down for 'desks') and I used to have them sit on the carpet but then register would take 15/20 mins and they'd have things to tell you (puts right hand in air) which is great but I have tried to find separate times for them to share their news (open hands)". 	Open hands	Class routines	Structure and organisation
7.		Typical routines. "On a Wednesday, I always do write two sentences about and then I think of a theme, on Monday we do whiteboards and writing numbers and its always the same" "I have a little screen up as well (turns with flat hands towards interactive whiteboard) showing them that information (voice goes up at end)". "It just means that when I take the register they are quite and clam and it just sets the tone for the day really". Children come to carpet and "usually do a literacy lesson" first but it varies. I do a 15 to 20 minutes spiel on the carpet (hands to right and pushed palms down, corners of mouth turned down), it might be that we are doing drama so it's not always sit down and be quiet and listen and they go off to their work (hands together curled inwards and then both sweep outwards) which is differentiated so I usually differentiate	Both hands together folder inwards, both sweep outwards and away, "they go off and do their work"	Class routines Lesson structures Differentiated tasks	Structure and organisation Differentiation in tasks

	about three ways (turns head to the right and raises eyebrows together, twists hand around three fingers) because I see them as a class".	"differentiated" right hand moving across towards left hand		
8.	"Some of my year 1s are actually as capable as some of my year 2s so its lower, middle, above (right hand flat and vertical, right to left, three chopping motions) so then we have a literacy lesson, normal type of thing (half smile and eye contact), where we do their work and then a plenary type of thing at the end." Explains morning timetable as literacy, phonics (two groups plus children can go to Reception class if they need to) and maths. "Sometimes because I have a mixed group, and maths particularly we need to do this, I" Explains that higher and highest attainers are set a task to consolidate from previous day whilst introducing new learning to the middle and lower attaining groups (on the carpet) then "I send them off and do an introduction for the others". Not every day, depends upon what the lesson focus is.	Right to left, three chopping actions for "lower, middle and above" differentiation three ways.	Differentiated tasks Teaching norm Differentiated objectives Separate teaching ('ability') 'Ability' as a continuum (linear)	Differentiation in tasks Teacher (role) Differentiated expectations 'Ability' differentiated seating/groups 'Ability' as a continuum (linear)
9.	Discusses maths lesson observed today. Explained that she did not want the lower and middle attainers "sitting around listening to all that" (to input about pictograms where each picture represents two when they were doing pictograms where each represented one). Crinkled nose and smiled. Scratches face. "I tend to have the upper group" (those that have passed their phonics test) and TA has the other group. Discusses need to consolidate (rotates hands) previous phases	"right back" left to right hand sweep	Separate teaching ('ability') National Testing Curriculum	'Ability' differentiated seating/groups Assessment (policy)

	<i>Asks about how the phonics groups are constructed</i>	in phonics even when children are deemed to be working within a particular phase, going "right back" to earlier phases (open right hand sweeps from left to right).	Consolidate (rotating gesture)	Spiral curriculum/ repetition	Spiral curriculum/ repetition
10.		Discussion about revisiting prior phonics learning. "In lesson plans that you can find on the internet or whatever, the general advice is to do" sounds in order quite quickly but sounds like 'aw' "my lot never remember" so need revisiting regularly.		Curriculum Planning (external to school)	Curriculum (policy) Planning
11.		Discussion of year 1 phonics test. "All my year 1s last year passed but I have some reading level 2A/3C books whereas I've got some who are still reading level 1A books and they are stillreadingandsounding out" (holds hands palms up to mimic a book). Explains that the children's phonic knowledge doesn't always match their reading ability. Discussion of reading words out of context. "It got to a point where, with the phonics, where I had a display up over there actually (points to display board next to interactive whiteboard) where I had alien words and I had, I had cut out the aliens (scissor motion with fingers) from the phonics test so that it was all (opens both hands cupped) relevant because to them just to read out forty words."		Testing Curriculum Physical learning environment	Assessment (policy) Curriculum (policy) Physical learning environment
12.		Gives an example of a child who read twenty correctly and then twenty wrong because he got bored. Discussion about whether you should be allowed to do the test in two parts. Says that test is "boring" (smiles). Discussion of effort.		Testing Individual needs/access Effort/motivation	Assessment (policy) Personalised provision Effort/motivatio n

13.	In terms of the teaching choices you make, do they vary much from day to day or week to week or do you try and do things in a similar way?	"I probably stick to what I know to a degree (looks to right and cups face with right hand) erm, so I would say the format, particularly for my literacy, would be the same". "Starting with a text (fingers on desk), then "drama around that text" moves one hand around on desk, "to word level work" to "creating a piece of writing at the end" (cups both hands facing each other on knee). "I think that I stick to it (scratches face with one finger), particularly with this age group (points finger downwards) routine is quite important to them and they respond better when it is an activity that they have done before and they know." Gives example of "paired writing" (two symmetrical closed hands pushed slightly forwards) where it can "initially be quite a hectic activity to do and you have to get over the squabbling" (hands closed, crossing back and forth).	"this age group" emphasis "paired writing", two symmetrical closed hands	Structure/routine Matching teaching choices to age range Teaching choices (comfortable range)	Structure and organisation Child development Teacher (qualities)
14.		"I suppose I do try new stuff and then I try to repeat that". "I think it depends on what area I am teaching, it depends how dry it is (right hand, opens fingers away from body, smiles) you know (eye contact). Pauses. "Some stuff, you can really get equipment (pulls cupped hands inwards in front of face) and hands on and I perhaps do a whole class thing (rubs eye)erm particularly where we're having to investigate things (rotates cupped hands and talks more quickly) and work as a team (lips turned down) and that will just be a whole class session. It won't perhaps look like a normal session where I have them all on the carpet initially (points with both hands to floor behind) but then (leans forwards) in literacy as well if there is quite a lot of reading, I would perhaps put them in a group of three where at least one person is an able reader (points to little finger on left hand and grabs it) so that they can bring in the other children as well (right hand scooping motion twice towards left hand). Relates this to mixed age class in terms of reading fluency.	pushed slightly forwards "dry" "get equipment and hands on" moves cupped hands back and forth	Collaborative learning Structure/routine Practical activity Mixed 'ability' grouping to support access Differentiation by task	Peer support (across 'ability range) Structure and organisation First-hand experience Personalised provision Differentiation in tasks

		"at least one person is an able reader" "wo sweeps of right hand towards left for two children to be "brought in" to a reading task by a "more able reader"		
15.	Explained teaching choice from literacy lesson where fluency of reading determined which groups had pictures and text to sequence and which had just text. "If I had just had one resource which I couldn't change then I would have mixed them up (closed hands cross over and back). "I think I normally stick to what I know" (hands pulled in to body, right holding left arm). "If someone has a good idea around the school then I'll perhaps try it (gestures towards classroom door) but I think it is just a matter of organisation, so for example (leans forwards and smiles, eyes widen) I was talking to the Head last year (indicates behind) about how there were some groups last year, some children who just don't get going, don't know what to do, but because your routines are so tight (draw fingers in on both hands and pulls to chest), it is right off you go, I am working with this group".	"mixed them up" closed hands cross over and back "stick to what I know" "stick to what I know"	Sharing practice within school Differentiation by task Differentiation by objective Teaching choices (familiar) Learning from other teachers	Whole school Differentiation in tasks Differentiated expectations Teacher (qualities) Own experiences (teacher)

		"because your routines are so tight"		
16.	Explained discussion with Head Teacher about what to do and she suggested getting one child (on rotation) to take responsibility for explaining task to the rest of the group. Has not tried it yet as concerned about how to indicate who is in the peer mentor role. Also concerned about "will that stop people from getting on if they do know what to do and it is was just certain children who constantly sort of sit there and they don't, it appears that they don't bother to listen down here (points with both hands and open fingers to floor behind) or they do but they need that one to one" (hand moving forwards with fingers splayed from down to up, away from body).	"down here"	Peer support (task) Access Teaching choices to support independence	Peer support (within 'ability' range) Personalised provision Independence
17.	Discussion of pros and cons of that strategy and need to match it to the task. "Is it worth it or shall I just tell them to listen next time" (smiles). I still think that some of them don't understand that when you come to the carpet, this bit here (points behind to floor) is going to relate to what you do there (arms and hand come right over head and point to desks, smiling). Gives example from observed maths session, modelled creation of graph, wrote up the data on two boards and some children didn't use this data.		Reflection Lesson structure Access	Teacher (qualities) Structure and organisation Personalised provision
18.	"where did I do wrong there? What didn't I do (smiling, leaning forwards) to make them not click?" (clicks fingers). Discussion of research focus in terms of what children pay attention to most in their classroom experiences.		Teacher guilt	Teacher (self- belief)

19. 20. 21.		"I know personally, I wouldn't as a kid want to ask questions within the session (points to floor behind) but then when I was sat next to my mate. I would then want to know, is it this? (quiet voice, mouth almost closed) because it's just thatyou sort of forget about how embarrassing some children might find it putting their hand up" and some put their hands up lots of times and "don't care, I know" (laughs and holds hands wide with palms out). "I don't think there is a right or wrong answer because you can't sort of hit everybody and get everything right with everyone" (hands flat, palm down edging forwards). "Makes me wonder about (left hand cupping cheek) how can I help them in the classroom the most without cluttering up the classroom with stuff" (fingers bent under chin). Discussion about children's enjoyment of school and what children think about resources and classrooms, including who pays for schools. Some children take care with school	Hands edging forwards in this position "hit everybody"	Own experience as a child Meeting individual needs Teacher role	Own experience (child) Personalised provision Teacher (role)
22.	Where do you think your teaching choices come from, within you?	resources such as glue sticks and others think they can just get another one. "I don't think a lot is from training to be fair". "Maybe if I had been older. I was 18, well 19, when I started my teacher training and they talked a lot about Piaget and different, you know and actually I was quite an immature eighteen year old (raises shoulders and smirks) and I don't think I was all that interested in all (laughs). Now, I am perhaps more interested in understanding children and how people learn so perhaps maybe if I went back my training would be more useful because perhaps I would take that all on board a bit more but it terms of actually teaching class (hands palms up making a V shape), no probably not too much from my teacher training." "The teaching practice (hands together) that I did certainly did (hands rub together, lips turned down). I met lots of different types of teaching styles" (right and left hands open, forwards and back). "My first teaching practice job (hands together) was at [name of school] juniors and I think I learned quite a lot there (emphasis upon 'quite', eyebrows together)	Hands palms up making a V shape, moving forwards "actually teaching a class"	Curriculum pressures Child development Learning from other teachers	Curriculum (policy) Child development Own experiences (teacher)

	just in terms of, umph, it was different back then (emphasis on 'different', arms folded), it wasn't that long ago, our afternoons were kind of told to just have fun (arms open, fingers splayed). To have a nice time is what I think we said".	hands rub		
23.	"We still had to teach them science and all that type of stuff but erm it wasn't quite so 'we need to have the learning objective over here' (points to interactive whiteboard behind), lots of drama, maybe we missedthere were probably areas where we didn't do so well because it wasn't quite so tight (both hands clasped together, fingers inside). "Maybe we didn't differentiate quite as well as we could've done but I know it is important, I loved primary school" (right hand moves to chest to point to self). My primary school experience, if I remember rightly was quite woolly really (smiles) in that in year 6, I remember our teacher saying, 'choose the topic you want to do' and my friend and I did our cover page (mimics drawing on the desk) and then we decided we wanted to change so then we did another cover page (smiling, mimics drawing on the desk) and we didn't really get a lot of work done but I liked school (smiling with raised eyebrows, points three times with index finger of right hand). I really liked it (emphasis upon 'really') like I didn't want to miss a day really, I liked coming and I knew that learning was important even perhaps, even though I wasn't doing learning all the time, I was really enjoying taking care of that front cover even though it was only pictorial, you know".	"tight" "pointing on each word, "I liked school"	Curriculum pressures Own experience of school Enjoyment of school Broad/flexible curriculum	Curriculum (policy) Own experiences (child) Child interests/ choices Curriculum (wider)
24.	"I liked the school plays that we did (opening up hands from being together) and my school was very creative and (rotating open hands in air) and we did lots of singing (open right hand rotates in air). So my experience I think I really want the children to have my experience of school (two hands pointing to own chest) but I am finding that I am battling against the new curriculum that we have to do at the moment (interlaced fingers) not to do with not having fun but the freedom (right	hands rotating, "creative "	Creativity Curriculum pressures and restrictions Enjoyment	Curriculum (wider) Curriculum (policy)

	hand makes a circular sweeping motion) of, for example, I remember (hand on top of head) at primary school we did a topic on waves which went from learning about radios (sweeps left hand outwards) to going to Cleethorpes to go in the swimming baths (sweeps right hand outwards and then makes wave motion with right hand, smiles) and I 'm sure my teacher probably just thought, 'how can we get to that wave machine (points to side of head with right index finger) in Cleethorpes' (laughs) but I remember that experience (eyebrows up, both hands point to own chest, pauses, eyes with still expression). "When I went to secondary school, I didn't like it as much because it was more (hands vertical and parallel, eyebrows furrowed).	interlaced fingers interlaced fingers hands vertical and parallel, gesture used instead of words	Cross- curricular/holistic	Children's interests / choices Whole child
25.	Finger on lips, pause. "I suppose my own primary school experience helped me sort of have the fun side, the singing and that type of thing, I had a very musical teacher at school which I enjoyed having and then I would say certain teachers I've met over the years (opens fingers on hands in random places in front of her eight times) have made me teach in a certain way (moves both hands to left of body) and change it back again (smiles and moves both hands back to right of body). Gives example of a teacher who had each child's name on (only one pencil until Christmas) which she tried but "of course, didn't work with little ones". "So I think I was quite controlling for a while but then you need to be in some areas but then actually you need to let it go a bit and let them sort of have a say (right hand palm upwards) and have ownership (laughs)." "And then also I would say having children has changed how I teach as well so I think before that with this age group I probably did still treat them like juniors (hands open) and expected more of them in terms of behaviour and now I do have children I am like, of course they are not going to remember, yeah (smiling, one hand across body).	<pre>"having children" pointing finger hands open, "I probably did"</pre>	Own experiences of school Child ownership Structure/ routines Teacher control	Own experiences (child) Independence Structure and organisation Teacher (role)

26.	Having children does change you.	"So I think having children has helped shape how I teach." "I always have this theory now that, and you have probably heard me in the times that you have visited (runs hand over the back of hair), just getting quite cross with a child (draws hands together with fingers splayed outwards) for one reason or another and I sort of (clicks fingers and laughs) and I just try and (draws hand over eye) picture them in their pyjamas". This reminds her that they are not an older child who "knows what they are doing". Gives the example of a child who had knocked over something in the classroom. Explains how she reminded herself that child is only seven years old and has other things going on personally.	with a child"	Own experiences as a parent Controlling teacher emotion Age appropriate expectations Valuing individual	Own experiences (family) Teacher (qualities) Child development Value and belonging
27.		Remember that they are "just a kid that at the end of the night is going to go with a teddy to bed" (right hand thumb moving up on 'go' and left hand across body). "They are still very young". "Although they give it some (moving mouth shape made with right hand), they are still only little". Discussed how year 6 children are still quite immature in many ways. Discussed how she sometimes has high expectations of help from her eldest child.	moving mouth shape with right hand	Age appropriate expectations	Child development
28.		Discussion in difference in the amount of continued training from when she started teaching to now. "We have a new teacher in (points to classroom door) its quite nice actually seeing, 'oh you do it that way do you', I don't necessarily like going on courses (palms in a V shape) but when you get to chat to people on your table that's quite handy 'I do it like this', 'of course you do, that's how you do it' (spoken with closed mouth looking sideways then moves in seat and laughs), why didn't I think of that". Discussion about new and forgotten ideas arising from discussion on courses.	with palms	Informal learning from colleagues	Own experiences (teacher)
29.	Working in a small school, obviously there are not as many members of	Arms folded. "No. Erm, I am quite a solitary worker to be fair. I do a lot of, you know, I'm (moves arms up and opens out cupped hands, frowns), I find it quite hard to make decisions (open hands towards chest) so when I work with another person (interlocked fingers) I know I'm quite difficult to work with". Explains that	arms folded then moving up and opening to	Teacher autonomy Individual teacher planning	Teacher (role) Planning

	staff to work with.	she is not always supportive of colleagues' ideas as she is taking time "actually processing it" (laughs circular gesture with right hand next to head). "But yes I suppose because we are all different year group (points finger and moves it in a large circle towards door) we do share but it's not easy as often it's not relevant, erm (index finger on chin)". Discussion of team planning in parallel classes, from discussion with teachers at other schools and taking turns to do planning. "I hate anyone looking at my planning anyway and having to interpret other people's planning (scrunches nose, points right index finger across left open palm)".	Cupped hands with fingers spread, facing down Cupped hands with fingers spread, facing down Hands on chest then fingers interlocked Composition Hands on chest then fingers interlocked Composition Compos	Individual teaching choices	Teacher (qualities)
30.	You talked earlier about the tightness of the curriculum, where do you think this is coming from?	Discussion of advantages but overall disadvantages of shared planning. Rubs eye. "I think, I feel Ofsted, she says with a curt tone (smiles and moves in seat) I don't know it's just things like only in the last three of four years has someone actually come into the class and spoken with a child and said 'and what are you learning' and getting them to articulate, particularly in this class (points with all fingers of right hand onto the desk)." Explains that this might be more suitable for older children.		External pressures (policy and QA) Own experience of teaching (QA/policy)	Curriculum (policy) QA (policy)

31.	"Sometimes you just learn through getting involved and doing it and finding out" so children won't always know their learning objective. Gives example of internal observation, "I have to do that as I have to tick the box for when Ofsted ask", where a group of children were asked what they were learning and they said, 'vegetables' (crinkled nose, leans forwards, teeth on bottom lip, shakes head, makes sound). Explained that they had not been given, "an objective, I didn't say this is your learning outcome, I didn't tell them what I'm looking for, didn't give them a WILF, (hand closed and turned upwards moving outwards for each) I just wanted them to experience (hand closed turned downwards, pointing with index finger) this is what a red cabbage looks like cut in half, I didn't tell them that, erm and I wanted them to experience using pastels because as far as I know they haven't used them yet. It wasn't a biggie, it was just I want you to have a nice time erm, I want you to see what vegetables look like and I want you to experience pastels and drawing with them and maybe create a nice picture at the end of it" (hands open on lap, palms up).	"I didn't" "I just wanted"	Experiential learning School QA/policy	First hand experience QA (policy)
32.	Explained how the children hadn't been given a model or asked to demonstrate a specific skill. Discussion about how modelling can lead to a lack of creativity. "Actually that's more me (closed hand with finger pointing downwards). I am more, I am going to draw a red cabbage (left hand vertical held up and right hand closed and moving around left palm) now can you go away and (sweeps hands to other side of body, fingers splayed outwards) that is what I used to be very much like erm but, you know, I have probably since learned that actually it's okay if they go off and do it slightly differently, unless there is a technique that you are doing".	"That's more me" Modelling drawing	Teacher direction/input/ control Child autonomy/ freedom	Teacher directed activity Children's interests/ choices

		"now can you go away and"		
33.	Gives an example of a child drawing a face on a pumpkin which led to a discussion about what the pumpkin actually looks like. Explains that activity was alongside a computing activity where she only wanted half of the class computing and half not. "I just had an activity for them to do" (draws shoulders up and down and moves open hands to the right). "I find Ofsted always need a reason or some sort of outcome (finger and thumb touching and little finger outstretched) for them to articulate their learning, yeah, and that whole thing about making progress in a lesson (clenched fist turned up), well I wouldn't show that to an Ofsted inspector (holds back of neck) because one, they wouldn't have any other drawings to compare to (hands open, palms outwards, nose crinkled frowning), two you won't be able to see it so therefore would that be a cross?" (draws cross in air).	"I just had an activity for them to do"	External QA/policy Outcomes/ evidence Experience	QA (policy) Curriculum (policy) First-hand experience
34.	"And also I think sometimes (higher voice), for example, you just find a nice worksheet that you want to give everybody because it's nice and it isn't differentiated but it's a bit fun and it'll probably hit most kids but you know I probably wouldn't dare to put (hands wide apart) the same worksheet in every child's folder anymore because when Ofsted come look at your folders, they'll say well why have they got the same? This person's a 1C and this person's 3 so why aren't they different? It's like well, (raises and lowers shoulders) I just wanted them (raises shoulders, smiles and holds hands out)it (shakes head) that is what I feel, that sometimes I just feel (shoulders raised, hands together to body) there are lots of things you don't do because there is this fear that someone will	Hands wide apart "I probably wouldn't dare to" holds hands out, "I just wanted them "	Accountability External QA/policy Differentiation by task Teaching choices limited by policy	Curriculum (policy) QA (policy) Differentiation in tasks Own experience (teacher)

	look and say (hands to chest). I feel exposed quite a lot (scratches hand) or worried that I am going to be exposed, it's tiring".	hands together, drawn to body "I just feel "		
35.	"Only two or three years into teaching, Ofsted came and they came for the week and alright we knew what we were teaching well before that, it was different then, I remember I think out of seven, I got five very goods (so five number twos) and two grade threes and this was (arms wide apart, nose crinkled) me as kind of an NQT and, you know, a couple of years ago our SIP, our School Improvement Partner, and I came out with a satisfactory lesson as I think they had asked someone what they were doing and they couldn't articulate that they were creating a pattern of alternate beads (laughs). Do you know what, how could I have been very good then and ten years later (sweeps left hand left to right on desk), I'm mediocre and I had tried though. The thing I was most upset about was that I had been in on the Sunday (leans forwards, points on desk and smiles) and I had really worked hard (leans back and laughs) to make sure that that lesson was going to be good and it wasn't, it was just satisfactory (curls lip). I had just had my kids at the time and I couldn't have worked any harder." I thought I had, I had differentiated it so everybody was doing stuff that met their needs but because they couldn't articulate what they were doing (sighs).		Grading teaching External policy/QA Differentiation by task	QA (policy) Own experiences (teacher) Differentiation in tasks
<u>36.</u> 37.	Discussion about a lesson observation for the researcher. "I just find sometimes I don't know if I am doing the right thing all the time (right hand across body and left hand rubbing shoulder). Pause. I remember my primary school experience being fun (rocking forwards and backwards) and I know I went to		Teacher confidence/self- belief	Teacher (self- belief)

	secondary school, wanting to do well and knowing that education was important and yet I had this quite woolly experience of primary school so it couldn't have been that bad." Explains that this was similar for most children going from her primary school to secondary school. "I just feel sometimes that (cupped hands hooked together, looks to right), I know that I can teach what I want, there is generally quite a lot of freedom in that (arms out and hands open) and I like the fact that literacy hour has changed so that I don't have to do all that stuff, like we talked about last week, with a range in a certain term and I like all the cross-curricular stuff. Gives examples of cross-curricular work. "But then there is always are you doing this, do my books look like that, have the children responded to marking".	"I just feel sometimes that", cupped hands hooked together "freedom" to teach "what I want"	Own experiences of school Teacher autonomy over what to teach but not how Cross-curricular/ curriculum Internal/external QA/policy	Own experiences (child) Teacher (role) Curriculum (wider) QA (policy)
38.	"Yeah so I think I just feel quite stressed and quite um (palm down, fingers splayed, pushes downwards), being looked at constantly (finger and thumb together, fingers curled, moving forwards on each word). Even though we just had Ofsted this year, yeah I feel sometimes that my teaching choices are, I stop or I don't do them because I think oh actually (shakes head slightly). Discusses session today where a child pointed out how quiet the lesson had been and she realised (clicked fingers) she "hadn't got hot in the lesson (smiles), I was calm and I was thinking actually yes he is right and it is because actually, they were all on task." Explanation of what would have indicated that they were not on task.	palm down, fingers splayed, pushes downwards	Teaching choices determined by policy/QA Children's engagement Teacher stress	QA (policy) Behaviour Teacher stress
39.	"That's the other thing they picked up on in the last Ofsted inspection. They saw one child rocking on their chair (left hand palm up), so he was like 'well you need to sort that out' so children now lose five minutes of playtime for rocking on their chair whereas normally I'd have said 'don't do that it's dangerous' (pointing to back of classroom) but it's just this fear of what if they do that again when the next Ofsted inspector comes in (bounces in chair, knocks on desk, laughs) and then we'll be put in, you know" (sits back). Discussion of accountability.	palm up palm up "fear" curled to open hand	Teaching choices determined by external policy/QA External policy/QA	QA (policy) QA (policy)

40.	What factors do you think are the most important for you when you are planning?	"Erm, okay, I try and make it as varied as possible so it's not all carpet based, it's not all looking at the interactive and following this and doing it's not all me. I am quite conscious that I do go on a bit and I need to stop myself so I try quite a lot of paired work on the carpet, so when I look at my planning over five days (spreads out hands) or over, I try for literacy to do it over two weeks as we are building up to something, or even three so that I can see (looks up, right hand above head and left hand at chest height) when I look down the plan (right hand moves down), a bit of paired work here, a bit of individual writing here". Asks for repeat of question. "Making sure they're going to enjoy it (holds thumb), making sure that what they are doing is going to actually make them learn that particular objective (holds finger and thumb) if possible (looks up to left).	wbuilding up" holds finger and thumb	Variety in teaching strategies Peer support Enjoyment Curriculum planning	Teacher (qualities) Peer support (general) Children's interests/ choices Planning
41.		"It's not always easy with that one. Trying to make sure that I've got a lot of (twists hand around fingers) I've got a variety of kinaesthetic stuff (cupped hands together) going on cos I know that within this classroom (hands apart, fingers splayed), although we've got the maths equipment, there's not a lot of hands on unless I really think hard about it (cupped hands together on forehead)". "Erm, yeah and that it leads up to an outcome." Gives example of literacy leading up to writing speech bubbles. <i>Researcher suggests that the children will then know that they are working towards that outcome.</i> "And I'm still working on that, of making sure that they know that because we talked about how that's good practice, this is where we want to reach by the end of all this so are going to start here (left hand on table on left) about this is where we are going" (moves right hand to point on right of table drawing a partial line with finger then pointing finger to forehead).	around fingers of left hand around fingers of left hand Winaesthetic stuff "	Practical/hands on Objectives (known to children) Objective aligned planning Progression	First-hand experience Differentiated expectations Planning Curriculum (policy)
42.	<i>How do you find out about and then build</i>	We always, we have an assessments database which we all put data into so initially I look at the data". Has some children in class for two years so discusses looking at EYFS		School assessment system	Assessment (policy)

43.	upon children's prior attainment when they enter the class?	profile data and how that is "tricky" because it doesn't fit with National Curriculum levels so is "frustrating" (laughs and puts hands up and outwards). "I don't know a lot about the foundation stage to be fair" (sweeps both hands down and to right). "I do a lot of talking to teacher [previous class teacher] and, you know, over the year we will have talked about so I knew which girls were going to be quite bright coming into class anyway." Discusses three levels of EYFS profile, "it's just here, here or here" (puts right flat hand high in air then left hand below then right hand below that). "So I should generally do a baseline, when I say do a baseline assessment I don't mean give them a test necessarily but I am just (right hand flat, palm down, makes a sideways movement in air). "At the beginning of term, I like to hear them all read one to one rather than guided to get a feel for where they are all at". "I tend to do a piece of writing quite early on. And we have thinking skills books which I don't look in a lot (upside down fists on lap, turned upwards), they are really just for them to do jottings but where they just do, do write about this so I can see straight away where they are at (left hand vertical, fingers away from body, moves across desk right to left and then back and stops with a short chopping motion on 'at'), look at letter formation that type of thing and then I suppose the Autumn term is pretty much my learning (hands vertical and together on left of desk, fingers away from body, body turned to left) , its where I do my learning (moves right hand away from left, left to right across the desk) and my assessment (repeats action)".	"here, here and here", right hand flat in air then left hand moves below left "light hand flat, palm down, makes a sideways movement in air, initial assessment.	National assessment system National policy Assessment (teacher)	Assessment (policy) Curriculum (policy) Assessment and feedback
44.		Gives example of one child who seems "quite competent" but is actually less so due to immaturity. Gives an example of one child working below age-related expectations and therefore needs assessing against early years criteria. "Sometimes there are a lot of 'I'm not sure abouts', so for example in theory by now they should all be able to cut (makes scissor motion with fingers) but I know not all of them can (makes circular motion with two fingers)". Explains how she puts	moves both hands to right, "still needs to be looking at" Early Years curriculum	Assessment Holistic/cross- curricular Personalised provision	Assessment (policy) Curriculum (wider) Personalised provision

		cutting activities into literacy lessons so "you've still got that			
45	How did you	skill going on".			
45.	decide to organise and arrange your classroom space?	Discussion of preference for computers to have been put somewhere else and that they are at the wrong height for the children (laughs). "So I guess, I need some cupboards and stuff for storage (points to left with left hand open) but I put that there (indicates shelving unit) as I wanted some model space as well. Discusses use of a unit to display books or homework projects.			
46.		"Because I've got their tables and everybody's got their place (hand points to desks in classroom) erm, which is quite formal (emphasis upon 'formal' left hand moves forward and stops palm down with index finger raised), I try and still cos it is still a Key Stage One class (leans back, hands open and apart) I've got to try and find ways to make it Key Stage One so we've got places to put models and bringing in things (fists up), we've got construction they've always got to have trays so they just go against the wall". The tables I've organised, I used to try and have four tables (scratches back of head) but it depends on how many I've got in the classit varies". "I have them spaced out in terms of 'ability'" (scratches side of face).	"formal"	Seating ('ability') Structures/ routine Fixed 'ability' Physical classroom	'Ability' differentiated seating/groups Structure and organisation Fixed 'ability' Physical learning environment
47.		Discussion of inherited furniture and role-play area (only has if fits in with the topic but tries to have one in the first half of the Autumn term). "And this is the thing I've had to work on (rubs right shoulder with left hand), finding the opportunity. So, I set it up and it's like (smiles) three weeks in and they haven't actually played in there yet" (small mouth shape, talking quietly). Discussion of Fridays where job share partner teaches a session where they mix with another class and access indoor and outdoor play. "When I give them a test it doesn't always show what they can do".		Curriculum Holistic/cross- curricular	Curriculum (policy) Curriculum (wider)
48.		"I try every fourth Thursday, rather than do a formal literacy and maths lesson, I have, they like to call it 'busy jobs' but literally I say, you can make this out of construction, we can		Curriculum	Curriculum (wider)

		have this many in the role-play, we can have three at the computers whilst I have a table where I'm listening, I'm asking children to do stuff (left hand fist, right hand fist moving in circular motions) and I'm observing as well (points to eye and then make circular motion in air with finger pointed). So I have tried to build in a more of an observational assessment (pause), things like, you know how do they hold their pencil." Discussion of other opportunities to use role-play, for example "when we have computers" which is better not whole class (is a "nightmare", laughs).	left hand fist, right hand fist moving in circular motions	Assessment (teacher)	Assessment and feedback
49.	<i>How do you organise your tables?</i>	Discussion of teaching computing with older children or with an IT suite. "The children on that table (points to table) tend to be ones who have come straight into the class as year 2s. "They are not all the same 'ability'". "I've now learned that there is one girl on that table who is better than the others but in terms of space actually there is not enough room so then I tend to (gets up and walks over to table), sorry, so yes that's lower 'ability'".		Seating ('ability' and practicality) Fixed 'ability'	'Ability' differentiated seating/groups Fixed 'ability'
50.		"These children here are probably all similar but it is varies in maths and literacy (comes to sit down) so rather than swapping them round different tables, I just try and gauge where they're at (index fingers point to forehead alternately). Instead of moving children to different tables for maths and literacy, "I just try and number my worksheets or whatever I am doing". "This is the strongest table (points to table with both hands), we have some higher ability on that table too (points with both hands to next table) but not consistently or in every subject" (clenched hands move back and forth rapidly). "There are some children who are placed here for behaviour as well because they are maybe not quite as capable (hands with fingers pointed together on left, right moves away from left and opens fingers) but they could be and they need separating, yeah".	"I just try and gauge where they're at" "in every subject", move clenched hands back and forth rapidly "placed here for behaviour"	Differentiation by task Linear 'ability' Seating (behaviour)	Differentiation in tasks 'Ability' as a continuum (linear) Behaviour

			I and three syllables in "capable"		
51.	We probably answered this	Discussion about a new child being placed on a table where she is most likely to make friends. Explanation of the challenges or adding in a new child mid-year, "messing up the system" (laughing). Rubs earring for entire answer. "Experience, definitely, I didn't know what on Earth I was doing when I was an NQT to be fair (laughs), like looking back (eyes wide), I was just seat of my pants, just like watching what other people did, copying (shakes head, eyebrows raised) what other people did".		Social Personalisation Colleagues	Social Personalised provision Own experiences (teacher)
52.	question earlier but I will ask it again in case there is anything you would like to add: What has shaped your teaching and made you the teacher that you are now?	"I think that is whythere was one woman who controlled her class really well (interlaces fingers) and it was almost like she didn't actually have a lot of freedom but she (pause) she seemed to get the class to where she wanted them to go to (points with whole right hand on desk) so I kind of modelled myself on her really, as best I could do (sweeps hand in circle on desk). I think I probably discovered that that's not naturally me (right hand open on 'me') and then I saw actually that's good to a degree but the children need to do this (hands open wide)." "I would say erm my own experiences of what I like to do cos I think that if they see you enjoying it, you know I quite like Art, I am not a fan of teaching it but I do quite like drawing." Gives an example of when she sat with a group and drew her own drawing and the children were enthused by this (laughing and moving in chair).	<pre>"controlled her class really well" """"""""""""""""""""""""""""""""""</pre>	Control (teacher) Colleagues Own experiences of school	Teacher (role) Own experiences (teacher) Own experiences (child)

53.	"It's showing them that you've got strengths in certain		Colleagues	Own
55.	areas" (holds hands up like holding a ball two handed). Repeats		j	experiences
	question to herself. "Yeah, again like I said probably just	"strengths in	Child voice	(teacher)
	talking to other members of staff (voice goes up, both hands on	certain areas"		(
	chin). I am still trying (emphasis) to listen to the children's		Reflective	Children's
	needs more (drops hands below chin). I am very old school in		practice	interests/
	terms of how I am with I'm the adult (two hands on chest)			choices
	you're the child (right hand moves down), I'm in charge you (right		National	
	hand to left) listen to what I say (right hand to right, smiles) and		policy/QA	QA (policy)
	that's necessary to a degree. Smiling. I am starting to			,,
	understand and take on board the fact that children need to			
	have a voice (two hands move downwards in air) and need to have			
	ownership but I think you need to do that very carefully. I			
	remember when schools started to go down that route a bit			
	more about children's voices and school councils but actually			
	it gets out of hand (frowns) and children aren't naturally good			
	at it".			
54.	They can say 'I like this' but they don't always make the		Teacher	Teacher (role)
	right choices (two hands with finger tips on desk) and it's got to be		responsibility/	
	a sensible choice and it's got to be a choice that ends up		control	Whole school
	with them learning erm or, like with things like school			
	councils, whoever became school council member often it		School policy	
	became kind of (sniff) it went to their head a bit". Discussion			
	about whether children can understand that they are			
	representing others and whether it is scary for a child to			
	have adult responsibilities.			
55.	Interruption. "I am all for, you've got this choice (one hand on		Teacher role	Teacher (role)
	desk) and this choice (other hand also on desk) which would you			
	like?" (eye brows up). "Essentially, I am the person teaching	10		
	the class (brings hands together and then opens wide, palms out). It	"I am		
	might be that this is what you would like but actually in	the person teaching the		
	reality we can't do it like that but at the same time I know	class"		
	that research shows (arms folded) that if they feel that they			
1	have ownership then they are likely to"			

		arms folded		
56.	Discussion about whether school councils can be tokenistic. "Well I think what happened was, 'you should have a school council, Ofsted are going to come in so get a school council together (lip curled upwards), right and then you did and actually in reality people didn't really think it through properly" (shuffling in chair). Discussion about which children will get chosen. "I can see a value in it".		External policy/QA	QA (policy)
57.	Gives example of looking around a school and the Head Teacher saying that registration was a time to find out about each child individually. "I was thinking, I can see what you are saying (hands together and finger interlocked) and when we were discussing it earlier with sharing news, I understand that they do need to get some stuff out (moves flat palm away from mouth) but actually in reality (points twice) what happens is everyone sees it as a free for all". Give examples of children hearing one child's statement and others then sharing similar or related statements (brings hands with fingers splayed up to forehead and then outwards quickly). "I value the fact that they need to share stuff with me (hands up and open) as long as it's not drivel (laughs and leans forwards)".	"I can see what you're saying" "They need to get some stuff out" points on "actually" and "reality"	Teacher control Structure/routine	Teacher (role) Structure and organisation

		with me"		
58.	"In a classroom setting, is that a worthwhile use of time?" Gives example of adult courses where it would seem strange to ask each person how they are or about their weekend. "It's still a tricky one that I'm trying to still work out" (left hand across body). "You know when your mind is set in a certain way (points to side of head), when you know it ought to be set in a different way (points forwards) but you can't get yourself to do it yet (turns hand so finger is pointed towards self)".		Reflective practice Teaching choices	Teacher (philosophy) Teacher (role)
59.	Discussion about teachers being reflective. Gives example of being asked her strengths and weaknesses at interview and not answering it well. "I know now that my weaknesses are that I do sometimes get things wrong". "I am proud to say now, I am always questioning what I do (left hand vertical and right hand moving in circles with closed fingers) and it probably takes me a long time to get things done or decide how I'm going to do it (both hands on desk)". Explains that teaching the same topics several times helps with knowing what was successful and how to improve. "I do feel I am constantly thinking, is this right, could it be better? (tap table with hand on 'right' and 'better')".	hand still and right hand moving in circles, "always questioning"	Reflective Practice Teaching choices	Teacher (philosophy) Teacher (self- belief)
60.	Discussion about how practice develops, through reflection, with experience. Points with left hand and leans forwards, "I said that my teacher training didn't really help me, I'd say actually one thing that it did teach me to do and it's a bad thing in some ways, I still plan in quite a lot of detail (fingers spread on desk) like I have to write it out (voice pitch rises, left hand vertical on desk with right hand pointed going back and forth from it) just so it goes it (circular motions with right hand next to head) because I don't look at it (both hands out, palms up). It takes quite a while (smiles) and sometimes you get to week six or seven and you only have a skeletal plan and that's cos	left hand pointing forwards hands out, palms up, "I don't look at it"	Own experience (teacher) Planning	Own experiences (teacher) Planning

61		experience has helped me and I know how I am going to do it (hands to right) but when I first started teaching I remember I wasn't even allowed into my school, and I'd done all the planning (hands cupped, fingers spread), my mentor had checked it and said 'it's not good enough or it needs to tell me how (emphasis) you're going to do this' (turns head to right)". "And it's true, I hadn't really shown my thought process, cos I'm stupid (quiet voice, smiles)". "It's just down to experience. Actually, it taught me to really think about how (emphasis, right hand on desk) I'm going to do it". "[In first teaching post] as well, planning was expected in quite a lot of detail (cupped right hand forward in air), not to be handed in but ask the questions of, 'what questions are you going to ask', 'what will the children be doing', 'what will you be doing', 'how are you going to teach this' (draws right hand across desk, left to right, for each question) rather than 'what are they doing'". Gives an example of a maths scheme book. Discussion about planning content.	"done all the planning" "quite a lot of detail", cupped right hand moves forward slightly several times	Own experience (teacher) Planning	Own experience (teacher) Planning
62	What is `ability'?	Repeats question. "It's lots of things (arms folded). One of the first things that comes into my head is that it is something to do with academic ability (nods head slightly three times, lips turned down). Pause. "And that's where your levels come in 3A, 2C and so on (arms folded, rocking side to side). And I think that's where I was at when I first started teaching, purely seeing each child through that (moves left hand forwards on desk) but then I really try and work hard and try and find out a bit more about each child. So, I've got a folder, a record book (clenched fists turned upwards) and it's got various things in it (hands in air waving in turn) but it's also got anecdotes (right hand thumb and index finger spaced apart, moving up and down in air) so if someone does somethingit's there to remind me just so that (pause, right hand turned to face her in air) I sort of pride myself on knowing the child, knowing their names quite quickly and spelling their name correctly and all that stuff".	"folder" Folder" right hand turned to face her in air	Academic 'ability' Own experience (teacher) Whole child Assessment (own)	'Ability' as academic Own experience (teacher) Whole child Assessment and feedback

63	Gives example of a child's name mispronounced. "So anyway, back to ability. I try to find out, if I can do, I try to find time and have little interviews with them (horizontal hands palms touching and moving away slightly)". Gives varied examples of the type of things that she knows about the children from this in terms of activities they do out of school. "I just find out what their strengths are in terms of, yeah, extra- curricular (hands wide)".	Horizontal hands palms touching and moving away slightly, "little interviews with them"	Teacher/child relationship Whole child	Teacher/child relationship Whole child
64	"I try to find out what they are like generally out of school. I think it's all to do with, and this is something that has evolved over the last sort of ten years (makes slow large circle in air with right hand twice), looking at them in terms of how confident they are." Gives example of a child (h/a) "she's a good reader, a good mathematician, she does as she is told but doesn't answer questions in class (higher pitch)". Discussion about not trying to stand out and how this translates to secondary school, "a bit like I was, not now (smiles)". "There is a danger of becoming one of those teenage girls that is lacking in confidence (palms together) and not sure of who she is (cups hands together with fingers spread and touching) and all that sort of stuff.	"lacking in confidence" "not sure of who she is"	Confidence (child) Confidence as 'ability' 'Ability' as lifelong	Aspirations/self -belief/ confidence 'Ability' as wider than academic Fixed 'ability'
65	Gives example of another child (ht/a) who is "so feisty and, you know how we talked about when you do one and they all do it exactly the same, she will never do it the same (laughs), 'my way' (laughs)". Explains how ten years ago she would have seen that as a negative but "actually it's good that she is like that" (points finger firmly)". Explains that she has spoken to her parents about it being a good thing. "When she gets older she will be a confident young woman who knows her own mind".	"it's good that she is like that"	Own experience (teacher) Lifelong `ability'	Own experience (teacher) Fixed `ability'
66	Other child "might not go for job or strive to be the best that she can be". Discussion about some teaching assistants lacking confidence.		Lifelong 'ability' Confidence	Fixed 'ability'

				Aspirations/self -belief /confidence
67	"Ability is to do with, definitely academic (holds thumb of left hand with right hand) definitely, that's the main thing it is about (interlocks fingers) but it is also to do with how confident you are (holds thumb and index finger of left hand), how capable you are as a whole person (holds thumb and two fingers of left hand with right hand then draws a circle with both hands in the air)." "I think (rubs finger tips of left hand along insider of fingers on right hand) that's probably, you know, going back to what we said about shaping my teaching stuff, I definitely feel that I left my primary school as quite a whole, good at this good at that, rounded person (makes circle in air with hands) whereas because the emphasis is so much on the academic (clawed hands) we are struggling to fit in PE lessons and struggling to do just those nice art afternoons (arms wide out to sides of body). That person might be fantastic at art but we've only got (looks at watch) seven weeks in this year timetable for that"	"academic" "main thing" "main thing" "confidence" "iconfidence" "how capable you are as a whole person" "I think" "I think" "the emphasis is so much on the academic"	Own experience (child) 'Ability' as academic and confidence Whole child National policy (focus upon academic and not whole child)	/confidence Own experience (child) 'Ability' as wider than academic Whole child Curriculum (policy)

68	You talked about how you find out about their extra- curricular abilities and their levels of confidence. How do you find out about that academic	"With literacy I do a 'big write', all over the school we do a 'big write' and I have a folder (goes to get one) and again this is honed over time". Opens folder and shows it to researcher. It has a piece of writing done every two or three weeks. Shows an assessment criteria list on the inside of the folder. "Now I'm uncomfortable about writing 1A or 2C on children's work (points firmly with right hand). I don't think it helps children (frowns). I am unsure where I am with Ofsted and what they think about levelling.	"Now, I'm uncomfortable about"	Assessment policy (school) National policy (assessment)	Assessment (policy) Curriculum (policy)
69	'ability'?	Discussion about whether Ofsted would have a preference. "I have a little code where blue means, I can't remember what it means, I think it is 1A (closed lipped smile)." Shows marking (two stars and a wish) and ticking off of assessment criteria. Explains that all children with the same target will be drawn together as a group and will use pens to go through and correct writing in line with the target.		National policy Assessment School policy	Assessment and feedback Assessment (policy)
70		"Maths is trickier (draws eyebrows together) because there are lots of different areas but I focus more on number because I think that other areas, shape and what not, are all linked to (cups hands together) number skills". "That comes more over time as you can't tell from three weeks where they are at. I tend to do end of term assessments so I tend to give them a little quiz and, like I said, I do assessments every month, not everybody, but who I can do".	"all linked"	Assessment (own) Curriculum	Assessment and feedback Curriculum (policy)
71		Explains that she has assessment criteria lists for maths in the children's maths books (as for literacy). "This is something I need to get better at (holds back of head)". Explains how APP was too large to manage. "Six children and it must be the same for them, no!". "In my planning, if there is a specific thing which is 1B then I try and include that in my planning (thumb and index finger tips together on right hand draw a line in the air)". Explains how she records if children have achieved this independently.		Assessment National policy (assessment) Planning and assessment	Assessment and feedback Assessment (policy) Planning Assessment and feedback

72	For the children in your class, where do you think it is that their 'ability' comes from?	Fingers of left hand on lips then pulls lips to either side and frowns. "I suppose the answer is I don't really know but my thinking is, I think when they are reception class, I wish our class could be more like their class, I don't think we would get through the amount of stuff that we have to teach them, taught like that (eye brows drawn together)".		Curriculum Structure and organisation of class	Curriculum (policy) Structure and organisation
73		"I think they come up from foundation quite experimental and willing to have a go because there are quite a few of those type of activities going on and I think they get their confidence from that (pause) from finding out and being able to play and learning through play. I do feel when they come in this class there is that itchiness in them want to get up and move about." "I do find they constantly want to show me their work (holds up fists in parallel). Suggests that this is due to working in small groups in foundation.		Play Confidence (child)	Children's interests/ choices Aspirations/ self-belief/ confidence
74		Discusses how children are less ready to look at their own work. "So some of it is from their experience of working in that class, so it's mixed (clawed hands back and forth alternately in air), some of it is good, some of it doesn't always suit the style of learning in this class". "I think a lot of it is down to genes as in, if you've got two intelligent parents (smiles), I think you are naturally, yeah, I definitely believe this, that your well you'd be really very upset if your child wasn't intelligent (laughs)". Discusses example of own child who 'isn't looking the brightest spark" but then other child is "on it".		'Ability' as heritable Own experience (family)	Fixed 'ability' Own experience (family)
75		Explains how parents and partner's parents are all professionals (two are teachers). "It runs in our family (holds both hands out flat, palms down). So I definitely think that (interlaces fingers) it comes from your make up (right hand cupped with spread fingers towards self) but I also think it is to do with the influence you have when you are younger and seeing what your parents do (both hands with fingers downwards, facing away from body)". I can only base this on my own experience	our family" "it runs in our family" "definitely think"	Own experience (family) Family/parents Effort/motivation	Own experience (family) Family/home Effort/ motivation

	(both hands to chest), I knew that it was important to work or to have a decent job to earn money to get a house that you want. And so I am not saying that that affected my ability but it helped me work hard. I wouldn't say that I am naturally up there, I do have to work at getting things right. At school I had to work hard at passing my exams".	"your make up" "seeing what your parents do"	'Ability' as heritable	Fixed 'ability'
76	"I think seeing my parents work hard made me work hard at my ability, if you know what I mean". Fingers on chin. "I think in terms of who you are as a person, I think confidence wise has a lot to do with your family". Discusses the importance of experiences with parents, siblings and what you see of their experiences (arms folded, rocking slightly side to side).		Family/parents Own experience (child)	Family/home Own experience (child)
77	"I think your main ability is to do with nature, it's what you were born with and then it is the influences around you, the people you meet. I don't think there's a lot (finger on chin)I think people can work hard and they can do well for themselves if they try hard (right hand on table) but I don't think generally you can change your ability (sweeps right hand in front of body and back, smiles), I don't think". "If you are generally lower ability (right hand in fist) then you are generally going to be lower ability (right and left hands together on right, cupped facing away from body, moving left hand diagonally up to the left, frowning) academic wise later on." "Humph, I don't know, I've never really thought about it or voiced it to be honest but then again if you are given the confidence to have a go (palms together, vertical, pointing away from body) then you probably were always able and it's not that you were low ability".	"lower ability" "lower ability" Right and left hands together on right, cupped facing away from body, moving left hand diagonally up to the left, frowning, "later on". Image: State of the sta	'Ability' as innate Family/parents Effort Fixed 'ability' Confidence	Fixed 'ability' Family/home Effort/ motivation Fixed 'ability' Aspirations/ self-belief/ confidence

78	Discussion about setting and research on teacher			
	expectations.			
79	"When I was at my [first teaching post], we used to have three year 6 classes (hand cupped and swept right to left) and the classes were mixed (cupped hands close to each other) but then when we had literacy, maths and science (holds thumb and two fingers) we used to set them. Now for maths (holds middle finger), I think that was a good thing because (eye contact, pinching little finger of left hand with thumb and index finger of right hand, pause), and I know this from doing A level maths, I was in a mathematics class where I was in with physicians and A level maths is more physics based and I did really well at GCSE maths but when I went into this particular (hands palm down and away from body, fingers splayed) because the teacher was hitting them (right hand in air, left hand moving to it three times), I was like 'uphh' (shoulders down)". Discussion of	<pre>"classes were mixed" "a good thing" (setting for maths)</pre>	Own experience (teacher) Curriculum Own experience (child)	Own experience (teacher) Curriculum (policy) Own experience (child)
80	 content of A level maths (laughs). "There's no meaning to it is there, there's no context to it". Explains how timetabling limitations meant that she couldn't be in the other class which would have suited her better with "kids that were more my level" (left hand flat on chest) "then I might have done a little bit better because I would've felt more comfortable with it being taught, well, the teacher wouldn't have gone at the pace. The teacher taught at a pace that I just couldn't keep up with." "I certainly felt at the primary school I was at that, yeah, actually it worked". "We had quite a big difference (right hand high in air to right, left hand clawed low on the left). We had some children who were still working on (hands cupped together palms up, to right on lap), you know, tens and units." Discussion of the "gap" by year 6. "Whereas in literacy, and this is something that Ofsted picked up on, unless you do this whole cross over planning (crosses hands in air)". 	right hand high in air to right, left hand clawed low on the left, "we had quite a big difference "	Own experience (school) Differentiation (pace) Differentiation (objectives) Planning	Own experience (child) Differentiation in expectations Differentiation in expectations Planning

81	"The teacher had just done this history lesson, I think I told you this last week, all about the Romans and had done some drama and they were dead excited and then, oh it's time for literacy so we all went off to our separate (hands vertical, moving in and out across each other in air) and we opened the big book, you know, literacy world book 4A (hands in fists, like holding a book up, smiles), let's read a chapter of a book, no more and the Ofsted inspector said, you know those children were itching to write about the Romans (two hands with fingers touching the desk). Also, I think with literacy, you need that creative thing that oftenthat everybody has actually that at least when you are trying to access texts that are a bit more complex then at least as a mixed group it means that that group over there (hand gestures to l/a table) can access this because they got somebody who can 'can someone give me an example of a sentence with a connective in it?', none over there (points with arm outstretched to l/a table with open right hand) no-one but (touches ht/a table) yes, so I think it depends what subject you teach (rubs palm of right hand over back of left hand on chest)".	rubs palm of right hand over back of left hand on chest	Curriculum Motivation Cross-curricular QA (policy) Access Differentiation (peer support)	Curriculum (policy) Effort/ motivation Curriculum (wider) QA (policy) Personalised provision Peer support (across `ability' range)
82	Discussion about how we know where and when setting should be used and that guidance is mixed.			
83	"The danger is sometimes then that also in the lower, if you have a top middle bottom set, especially as the children get older the bottom set have got to that point where they're probably disinterested in school some of them because they are finding it hard (higher pitch)". "It is then the behaviour, isn't it". Discussion about common profiles of bottom sets, "its boy heavy with the odd girl who is quite quiet". Right arm across body with hand in fist, left elbow resting on right hand with left thumb and index finger on chin in v shape.		Behaviour ('ability' grouping) Motivation	Behaviour Effort/ motivation

84	Discussion about "Let's take academic ability aside, erm I don't suppose I ever group them on confidence with the most confident ones over here (nods head to right, arms folded) and least confident ones over there (nods head to left, arms folded). Discussion about not being asked to level children on confidence, "it's not a priority". Discussion of national priority subjects. "I mean generally, I'm always taught to teach towards the middle to the top (right hand, flat with palm down, moves in air and then raised further in air) and then differentiate down".	the top"	Confidence (child) National policy Wider `ability' (than academic)	Aspirations/ self-belief/ confidence Curriculum (policy) 'Ability' as wider than academic
85	Researcher mentions grammar schools. Right arm across body, left arm vertical with index finger on chin. "I think the issue is if you've got an intelligent child and you just want them to get on andbecause this is how I used to think in my silly middle class way, 'I want my child to go to that school, I don't want them to go to that (emphasis) school cos, you know, they'll be distracted (folds arms and smiles) and that type of child will go there and also in terms of including different types of children (cupped hands comes together, fingers spread) and special needs although I have recognised that although (right hand cupped with fingers spread, facing towards body) having, and quite a few years ago an autistic, quite an autistic child in the class and she was a distraction to a degree but the learning was (hands cupped, fingers spread, facing each other) also about seeing different, it's not just about the academic, it is about seeing, it is about seeing and understanding."	"the learning was"	Parents Special educational needs Hidden curriculum/PSHE	Family/home Personalised provision Curriculum (wider)
86	"They were probably quite tolerant". Discussion about lack of integration in own school experiences. "I still think and I still sort of stand by this when the child was in my class, I suppose I got the support for them and I guess maybe I might not have had support if I had not had that child without having them in my class but it's just that then the children (hands out flat, palms down), sort of in the (right hand flat, palm down moves forwards and back and then moves down and moves forward and back next to left hand) at that point (shakes right hand)	flat, palms down hands out	Finances National policy Access Linear 'ability'	Whole school Curriculum (policy) Personalised provision

	so she's there (shakes left hand which is below right) and they're there (shakes right hand which is above left) don't get the extra support well (sigh),I don't know, then we do need to plough money into them getting support" (draws eyebrows together)".	moves forwards and back and then moves down and moves forward and back next to left hand "so she is there and they are there"	Adult (TA) support	'Ability' as a continuum (linear) Differentiation in support
87	"And also, sometimes it was difficult then because of dealing with, well first of all one, dealing with behaviour so I couldn't always give my attention to everybody as well as I'd like to so, you know, I'm thinking, 'are their parents annoyed that that child is in this class because it means that their child will get less attention?'." <i>Researcher suggests</i> <i>that we don't want children in competition with each other</i> <i>for support.</i> "It is money isn't it". "And also, in terms of my own (left hand on top of right hand on chest) ability to keep up (rocking forwards and back slightly) so, I don't know for example, another child required lots of resources making, you know, Makaton signs, symbols to show. A child, I've got in my class at the moment, I was talking to [a colleague] about it and for this activity, alright he might not be able to draw the pictures but could he perhaps have them to cut out (leans back slightly, lip curled) but then I've got to make them (higher pitch), it's just one more job so then it's like well if I do have a child who is like that in the class (hands to right cupped together, fingers splayed, body turned right)".	"attention to everybody" "it's money isn't it" left hand on top of right hand on chest "like that"	Behaviour Parents Teacher workload Special Educational Needs	Behaviour Family/home Teacher (role) Personalised provision
88	I could burn out, I'm struggling to meet (hands wide apart) everybody's needs and I know it's the not the right answer to say cos really I should be (hands closed together on chest) meeting everybody's needs all the time but in reality (turns head to right) it's hard to (hand palm down, flat in air, moving forwards). Discussion about challenges of physical needs	hands closed together on chest	Teacher workload Teaching choices (familiar)	Teacher (role) Teacher (qualities)

89		within the classroom. "It is about equal opportunities for everybody" (draws hands out sideways). "It's a minefield, if you think too much about it, you just don't sleep at night do you? (scratching forehead). Discussion about teacher's feeling stuck. "I'll just stick to what I know" (laughing). "In terms of ability, the girl that is on that table (gestures towards l/a table with right hand), although her writing isn't super (scratching side of head with right hand) I know she perhaps struggles to read a bit more than the others, she verbally she knows a lot and she can come out with some really interesting facts so she's bright so now already I have flagged her, so she won't necessarily get the same work as them and likewise on this table (points to m/a table) who likewise could be stretched, where possible I try and (left hand flat on face, right hand in fist moving up and down slightly) so where possible it's the logistics of giving stuff out (gives examples). Leans forwards. "There is a lad here, (points to l/a table) that is super with money and you'd think he was quite an intelligent lad, he is obviously in that area, but it is, you know, lots of areas where he is not so".	left hand flat on face, right hand in fist moving up and down slightly	Differentiation (tasks) Assessment (own)	Differentiation in tasks Assessment and feedback
90	What has shaped your understanding of 'ability'?	"Um, I think probably just experience really (left hand flat on side of face, rocking side to side) a long time ago I was very caught up in levels and whether they are 1A or 2B and moving them on in that way (eyebrows drawn together) and not seeing the whole child but I think each year I've got a different class and different dynamic so I suppose experience with the children I meet and learning how certain children work." Discusses how experience helps you with working with children who are in some ways similar to children you have taught before.		National policy (assessment) Own experience (teacher) Whole child	Assessment (policy) Own experience (teacher) Whole child
91		Discussion about how levels are no longer going to be used and what this might mean for schools. "I know a 2A (scoops hands together, fingers spread) don't take that away from me". "I remember we had a moderator come in to moderate all	"I know a 2A"	National policy (assessment)	Assessment (policy)

	subjects and there was one particular child where I'd given them (looks up) 2A and it was partly based on the fact that she had achieved 2A on the SATs".			
92	When I described her as a reader to her, the lady said 'she sounds more like a 2B' but like well, I can see what you're saying but her ability in the test says she is a 2A (laughs and		National policy (assessment)	Assessment (policy)
	twirls hair). I am so glad that they have brought in APS, I have finally got APS (thumb and finger tips together, either side of eyes, dances in seat), yeah 2B is 15 so I can work it out from there (leans forwards and laughs)". "So I do find those things useful and it helps me certainly do the next steps (fingers together on left hand point to two places on desk, raises eyebrows). I think that's the thing that I didn't have to hand".		Planning and assessment	Planning
93	"The ability thing is also to do with what type of learner you are. So someone can be quite an able person, you know, and you class them as a bright person but they are more kinaesthetic they are going to be a joiner or a plumber (closed hands together moving in opposite directions)." Discussion of people without academic qualifications but are very able and how pay doesn't match to academic qualifications.	"joiner or a	Learning styles Lifelong `ability' (employment)	Learning styles Fixed 'ability'

Key

Italics = researcher

"" = teacher speech

Change of font = Teacher non-verbal communication

Initial notes from transcription

Having interview in own classroom was very important as it acted as structural support within a semi-structured interview.

The drawback with this is that there are more environment indicators as to teacher and school identity within the environment when using video analysis as an approach so for ethical reasons so images are lower quality or cropped very closely to ensure ethical anonymity. This is similar for teachers where distinctive badges, clothing and jewellery are avoided as well as more obvious facial features to protect identity.

Hands and gestures sometimes seem to show discomfort or guilt (not with interview) with own practice or what she is saying. Avoids or hesitates over saying a child is 'low ability' or selected on the basis of 'ability'. Open hand gesture used when she says she can't use more play-based approaches and hasn't time for children to share their news.

Words which seem overly interpretive when describing body language or gesture raise questions as to how much interpretation is the correct amount. For example, 'thrusting' hand forwards and 'grasping' arm seemed to be guiding the reader to a particular interpretation of the action but 'splayed' fingers and 'sweeping' hand seems okay. Even the way that you record the nonverbal gesture in written form can suggest intention or a conscious or subconscious action, unless you take care with the wording. For example, 'rubs hands together' or 'hands rub together'.

Reflections upon own school and teaching experiences provide much insight. In the future, a study of teachers' individual life histories would be very interesting.

The data analysis needs to match the type of interview being done so transcription by a transcription service (a verbatim representation of words said) is most appropriate for structured interview. Semi or unstructured interviews need transcribing in a way that captures conversation (back and forth, finishing each other's sentences, use of action or gesture rather than a word, capturing and filtering asides, jokes and serious comments, etc).

Ethics around own identity. Careful to ensure teacher and school identity are not given away but anything that the researcher says in a semi or unstructured interview is clearly connected to the researcher – they are not anonymous. As a professional doctorate student, your professional identity and practice needs protecting ethically within the transcription and interpretation of data. What I say in the interview is therefore framed within discussion topics rather than verbatim transcription as this is ethically important (due to researcher not having anonymity) and also not necessary within the research process (unless the interviewee repeats or draws heavily upon what the researcher has said – if an influence is apparent then inclusion is necessary).

What is a frown and what is drawing eyebrows together. Decided to use 'frown' if mouth and eyebrows were involved and 'eyebrows drawn together' if just the eyebrows appear to be involved.

Stories and anecdotes seem to have been particularly fruitful (when coding) suggesting an ethnographic approach to investigating teacher perspectives is appropriate and that perhaps a more ethnographic approach to interviewing might have improved the quality of the data collected and therefore ultimately the research overall.