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Learner agency in urban primary schools in disadvantaged contexts

Report to Society for Educational Studies

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The Open University
July 2015

Acknowledgements

This project was funded by a Small Grant from the Society for Educational Studies (£5,851) and The Open University.

The author would like to thank the advisory board, consisting of Professor Teresa Cremin, Professor Jonathan Rix and Professor Karen Littleton, for advice and guidance during the course of the project.

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Executive Summary

This project aimed to develop new theoretical understanding of the nature and extent of children's learner agency in primary education. From a sociocultural perspective, having the capacity to exercise learner agency is essential for meaning-making and therefore deep and effective learning (Bruner 1996). Existing international research suggests that children attending schools with significant intakes of children from 'disadvantaged' backgrounds may develop 'passive' and disengaged orientations to learning in response to the strong pressure on many of these schools to raise attainment (Lupton & Hempel-Jorgensen 2012; Mills & Gale 2009; Johnston & Hayes 2007; Thrupp 1999; Haberman 1991).

The research objective was:

• To develop theoretical understanding of the nature of children's learner agency in 'disadvantaged' urban primary schools

Learner agency can be defined as volitional activity which has an effect on learners' peers and teachers, for example in terms of their understanding of a concept or phenomena (Blair 2009). Meaning-making can be defined as a process where learners reconstruct new knowledge by integrating it into their understanding of the world, using their existing experience, knowledge and concepts (Bruner 1990). In a classroom this occurs through talk and activity with peers, including those who are more experienced, and teachers who act as expert guides. Learner agency is both constrained and enabled by sociocultural practices, including, as in this research, the modes of pedagogy used by teachers (Bernstein 2000):

- *The performative mode* is characterised by a strong focus on assessment through tests, time-keeping and discipline. Children's perceived success in learning is measured through their outputs which are judged against standardised external criteria.
- The competence mode (also known as child-centred pedagogy) is defined by a focus on children's perceived 'innate' characteristics related to their ethnicity, gender or social class (Ivinson & Duveen 2006; Hempel-Jorgensen, 2015) and the presence of an 'invisible' pedagogy (low focus on discipline, assessment through tests and time-keeping) which relies on children's self-regulation.

The study

A multiple case study design (Yin 2009) was selected to enable collection of rich data using multiple methods within and compare across different schools. Four case study schools with above national average (26.7% in 2013) proportion of pupils eligible for Free School Meals (as a proxy for 'disadvantage') and located in urban settings in Greater London. The schools were located in three different local authorities although one of the two in the same LA had academy status.

Table 1: Proportion of children eligible for Free School Meals (FSM) in case study primary schools¹

	School 1	School 2	School 3	School 4
Children eligible for	68%*	46%*	29%*	45%*
FSM				
Main mode of	Performative	Performative	Competence	Competence/
pedagogy				performative

^{*}Numbers rounded to nearest decimal point

Data was collected in the four schools through semi-structured interviews with Year Five teachers and children and Year Five lessons were observed by the researcher as a non-participant observer, across the curriculum. Three focus children were identified in each school to provide a focus for data collection. These children were considered low, average and high attainers by their teachers and were selected as their experiences were likely to differ. In each school three numeracy, literacy and non-core lessons were observed resulting in 36 lesson observations across the four schools. The data collection instruments were based on key concepts from Bernstein's theory of pedagogy and sociocultural theory of learner agency.

All interview data was transcribed from audio-recordings. Transcripts and observation notes were initially coded using open and closed codes, based on key theoretical concepts from the literature identified above, from which themes were generated. The data was initially analysed separately for each school which included a comparison of children according to their attainment ranking and within respectively numeracy, literacy and non-core lessons. The data was then compared between schools to generate overall findings and to answer the research question.

Findings

All four classrooms were characterised by a mixture of competence-based and performative pedagogy, although the dominant mode varied across schools. The higher the proportion of disadvantaged children at the school, the more performative the pedagogy was.

The pedagogy in Schools 1 and 2 was predominantly performative, which meant that:

- Children's behaviour was regulated by a visible discipline system (Bernstein 2000);
- Children were very regularly tested in numeracy and literacy lessons which informed children's 'ability' labelling and teachers' pedagogical practices;
- Learning activities were tightly sequenced and paced (Bernstein 2000);

¹ Free school meals data from Ofsted School Data Dashboard 2013: http://dashboard.ofsted.gov.uk/

- Children's talk was highly regulated and constrained, particularly in core lessons, resulting in less opportunities for meaning-making; they had less if any choice of seatmates which also constrained talk;
- More time was spent on whole class teaching, which was highly teacher-led, in core subject lessons;
- Children's access to digital technology was limited to occasional use of the electronic whiteboard and otherwise mini whiteboards, worksheets and writing books;
- Teacher-led sessions typically consisted of teachers giving instructions and asking closed questions which required pre-defined brief answers from children, testing their knowledge;
- Opportunities for learner agency were found in the 'gaps and cracks' of teacher control by children taking initiative to use their extensive understanding of language to compose creative jokes or other humorous contributions to learning activities which were subversive in nature;
- There were few opportunities for choice or taking legitimate initiatives in lessons and when they were offered, usually in non-core lessons, these not necessarily valued by children as the options were seen as teacher defined.

In School 1, there were also elements of competence pedagogy in which children were judged in terms of perceived deficient, innate characteristics related to their ethnicity and social class. The teacher positioned children, who were largely from British Minority Ethnic groups, as lacking White British linguistic and cultural competence. This was expressed in the teacher preventing children from developing activities or topics for discussion, which she perceived as requiring such competence. This was despite the fact that children had initiated these activities and topics, which they clearly had a strong interest in. The teacher effectively shut down potentially powerful opportunities for children to exercise LA.

In Schools 3 and 4, pedagogy was either mainly competence based (School 3) or mixed with more equally with performative pedagogy (School 4), which meant that:

• There was a relative lack of focus on discipline in that children's behaviour was regulated by an invisible pedagogy based on self-regulation;

- Children were allowed to choose seatmates for many activities and peer relations were mainly positive with a strong sense of solidarity;
- Children had greater access to information technology including IPads which were used to make films and conduct research on topics chosen by children;
- Teachers consciously strove to teach children skills for meta-learning strategies or self-determination:
- In School 4, where the influence of performative pedagogy was stronger than at School 3, more lesson time was teacher-led than at School 3 where children were expected to work autonomously, usually in groups, for a significant proportion of lessons;
- Teachers used more open questions, encouraging longer and original responses from children with a focus on understanding rather than testing knowledge;
- Children felt trusted by the teacher to be autonomous as learners, to make 'sensible' choices
- Peer talk was less regulated by the teacher providing more extended opportunities for meaning-making;
- Children's initiative-taking was encouraged and validated by the teacher. This took
 the form of children asking questions inspired by their own interests and making
 suggestions for lesson content or structure.

In School 3 where competence pedagogy was strongest, children were allowed higher degrees of autonomy in managing their own learning. However, their LA was constrained by teachers' judgements of children's gender in relation to learning. A particular masculinity was associated with the 'ideal learner' which meant that girls' and some boys' learner agency was constrained in subjects such as numeracy and physical education. This also applied to children with lower attainment in most subjects, who struggled to participate in group work without expert teacher or peer guidance.

Conclusions

• The project provides new empirical evidence about the nature and extent of children's learner agency in disadvantaged urban primary schools; it has led to the development

of theoretical understandings of learner agency in such contexts. The data suggests that learner agency is constrained and enabled in complex ways, which depend on teachers' pedagogical practices. This extends existing research in such contexts, which has mainly focussed on children's agency in constructing their social and learner identities and positioning as learners (e.g. Youdell 2006; Reay 2006). The study took a new theoretical approach to researching agency in disadvantaged schools, drawing on sociocultural theory to develop understandings of *learner* agency. The project also contributes significantly to developing sociocultural understandings of learner agency by identifying how it is constrained and enabled in relation to Bernstein's (2000) modes of pedagogy.

- Talk amongst children and with teachers is a key way in which learner agency and meaning-making is enabled and constrained. In Schools 3 and 4, where pedagogy was more competence-based children, were expected to be self-regulating learners. An important pedagogical feature was that teachers allowed children greater opportunities for unregulated talk and whole class discussions where children's extended contributions were valued and built upon. This is in contrast to performative pedagogical practices where talk was highly teacher-led and where teachers sought short, 'correct' answers to their questions. In these classrooms, children's capacity to exercise learner agency was also constrained through stronger regulation of children's peer talk. This resulted in significantly reduced opportunities for children to talk freely with peers and teachers and minimised opportunities for meaning-making and shared knowledge construction.
- Yet some competence-based pedagogical practices can also significantly constrain children's capacity to exercise learner agency. This is because teachers judge children according to perceived innate characteristics related to their gender, social class and ethnicity as illustrated in Schools 1 and 3 in the text boxes above.
- Children's choice-making does not seem to be closely related to learner agency, as
 hypothesised by sociocultural theorist van Lier (2008). Almost all children
 interviewed across the four schools felt that opportunities for genuine choice were
 scarce and confined to the margins of the school day. When they were given choice
 by teachers they perceived the options were too teacher-defined and did not align with
 children's interests, experiences or concerns.
- Children taking initiatives may be far more integral to learner agency. However, in
 the highly performative classrooms where performative pedagogy dominated,
 children were discouraged and even prevented from taking initiatives. Yet children
 did take initiatives of a subversive nature, taking the form of jokes or humorous and
 creative contributions to learning activities. In taking these initiatives, children used

their sophisticated knowledge of language – ostensibly gained from literacy lessons focussed on the 'technical' aspects of literacy – in creative ways. In School 1 these episodes were particularly subversive of the teacher's authority, her claim of superior knowledge and her somewhat deficit perceptions of children's social class and ethnic backgrounds. Yet these initiatives were closed down by the teacher who took a highly defensive position against her behaviour being seen as racist. This meant that potentially powerful opportunities for debate and discussion about the nature of racism – which was clearly a topic of interest and pertinence to children - were shut down. These can therefore be termed 'illegitimate' forms of learner agency and while the children had created opportunities to exercise learner agency, these were arguably limited and marginalised by the teacher.

- Self-regulation, as a key feature of competence-based pedagogy, enables children's autonomy which in turn affords opportunities for exercising learner agency. On the other hand, self-regulation is also an invisible form of control (Bernstein 2000), where children take on and internalise the values of the teacher (Vassallo 2011). They are required to do so, in order to be recognised as a good learner. This raises questions about the relationship between self-regulation and learner agency and where the former ends and the latter begins, especially if teachers' values are not aligned with children's.
- Trust between teachers and children is fundamental to enabling their capacity to exercise learner agency. When children felt trusted and valued by their teacher they became more engaged with learning on affective and intellectual levels and because of the autonomy they enjoyed they were able to practice self-regulated learning behaviours. The positive effect of trust was compounded by the teacher's validation of children's social class and ethnic identities as seen in School 4 through adopting their 'youngster' language and integrating it into learning activities.
- Friendship and positive peer and teacher-child relationships were vital to enabling learner agency. When children were allowed unregulated talk with peers they considered as friends, with whom they had positive relationships, the resulting quality of talk was more likely to engender meaning making. This contrasted with classrooms where children were seated next to peers of the opposite sex to encourage 'good' behaviour, where 'partner' talk designed to generate meaning-making was brief and perfunctory.
- Children's engagement with learning seems to be closely linked with children's
 capacity to exercise learner agency and engage with meaning-making and knowledge
 construction. Furthermore, certain cultural tools facilitate engagement and meaningmaking, and hence learner agency, to a greater extent than others. Most children
 across the four schools felt more engaged when involved in interactive activities using

natural and cultural artefacts and technology. This was in contrast to handwriting in books or on worksheets which children and teachers reported as being less engaging for children. This is arguably because the latter activity is usually connected with more tightly framed activities such as completing worksheet activities or heavily prescribed literacy or numeracy exercises. In contrast, activities such as using iPads for research or film-making, or engaging in a discussion comparing a film adaptation of a book with the book itself were less tightly framed and enabled children greater autonomy, meaning-making and initiative-taking.

- The findings from this project confirm and extend existing research which suggests that teachers in schools in socio-economically disadvantaged contexts are prone to adopt highly performative pedagogy. Moreover, the findings highlight the consequences of this performativity for children's capacity to exercise learner agency in order to engage in meaning-making and knowledge construction. In the schools characterised by the most performative pedagogies, opportunities for meaning-making were significantly reduced and children had to create such opportunities for themselves by resisting the teachers' strong regulation of classroom talk. While such resistance did enable some children to exercise learner agency, children's capacity to exercise learner agency was greatly reduced, for most children for the majority of lesson time. Yet in other schools, where pedagogical practices were more competence-based, children enjoyed greater autonomy and positive relationships with teachers, characterised by reciprocal trust and respect. This enabled them to exercise greater learner agency through heightened engagement with learning activities and topics and abundant opportunities to engage in talk with friends, which created opportunities for meaning-making. Significantly, children's talk and their original contributions to discussions were not only allowed by teachers but were also valued and built upon dialogically in the classroom learning community. Perhaps most importantly, children's learner agency in the school (School 1) where the teacher had deficit perceptions of children's ethnic, social class and gender identities was most highly constrained. Conversely, where children's identities were validated and accepted (School 4), children's learner agency was enabled to a significantly greater extent. This suggests that teachers are able to employ pedagogical practices to enable children's learner agency in contexts characterised by relatively high levels of socioeconomic disadvantage. The pressures caused by such disadvantage therefore do not necessarily lead to employing highly performative pedagogical practices. This arguably suggests that school leaders and teachers may have sufficient agency to make a significant difference to children's capacity to learn effectively through engaging in meaning-making and knowledge construction.
- The project findings also extend our understanding of Bernstein's theory of pedagogical modes and sociocultural theory of learner agency. They develop understanding of how and why teachers use and combine these two modes of pedagogy and how that contributes to constraining and enabling children's capacity to exercise learner agency. The data analysis also developed an understanding of the

range of factors which impinge on children's capacity to exercise learner agency. These include: opportunities for high quality talk with the teacher and peers where relationships are positive and which engender meaning-making; autonomy in managing and carrying out learning tasks; intellectual and emotional engagement with learning activities and topics; being allowed to take initiatives and make original contributions to learning activities which are valued; and the extent to which children's ethnic, social class and gender identities are validated and accepted. These findings make an important contribution to academic research and knowledge about learner agency and pedagogy in low socio-economic areas as well as pedagogical practice in such contexts.

Introduction

This project set out to develop new theoretical understandings of the nature and extent of children's learner agency in urban primary schools, located in 'disadvantaged'² urban contexts. From a sociocultural perspective, having the capacity to exercise learner agency is essential for meaning-making and therefore deep and effective learning (Bruner 1996). Existing international research suggests that children attending schools with significant intakes of children from socio-economically disadvantaged backgrounds may develop 'passive' and disengaged orientations to learning in response to the strong pressure on many of these schools to raise attainment (Lupton & Hempel-Jorgensen 2012, Mills & Gale 2009; Johnston & Hayes 2007; Thrupp 1999; Haberman 1991; Anyon 1980). This pressure may result in such schools adopting performative pedagogies (Bernstein 2000) which are characterised by teacher-led learning activities, a focus on discipline and pupils' performance in tests. Performativity may be heightened in these schools due to their greater proportions of children with low prior attainment, complex emotional and behavioural needs and material deprivation (Lupton, 2006). These factors may combine with teachers' deficit perceptions of these children and their home backgrounds, which can be viewed as anti-educational. While research indicates that children who go to schools in 'disadvantaged' areas can develop passive (Hempel-Jorgensen, 2009) and disengaged orientations to learning (Arnot & Reay, 2006) teachers may have more agency to determine their pedagogical style and more scope to increase children's capacity to exercise agency as learners (e.g. Craft et al., 2012).

The capacity of children and young people to exercise agency in producing social identities and subjectivities in schools has been researched extensively in the sociology of education (e.g. Youdell 2006; Reay 2006). The apparent tendency for children to take more 'passive' positions as learners in these contexts has until now not been fully explored and therefore remains under-theorised, especially in regard to children's meaning-making and knowledge construction. Furthermore, because children's agency in relation to learning has not been the focus of study, the impact of teachers' pedagogical practices is insufficiently understood. The key research objective of the present research project was therefore to understand how pedagogical practices and curriculum topics for learning contributed to enabling or constraining learner agency. The project originally intended to examine how the nature of learner agency might differ in local authority and academy schools as teachers in the latter may have had greater pedagogical freedom. However, as only one academy school was recruited, the project does not focus on this distinction although the data does provide some insight into potential differences.

Theoretical approaches to learner agency & pedagogical practices

Learner agency (LA) can be defined as volitional activity which has an effect on learners' peers and teachers, for example in terms of their understanding of a concept or phenomena (Blair 2009). Meaning-making can be defined as a process where learners reconstruct new knowledge by integrating it into their understanding of the world, using their existing

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² The term disadvantaged refers to how particular areas and individuals have been disadvantaged by sociohistorical government policies, labour market dynamics and dominant discourses about 'race' and social class. It does therefore not refer to any characteristics seen as inherent in individuals or groups of people.

experience, knowledge and concepts (Bruner 1990). In a classroom, this occurs through talk and activity with peers, including those who are more experienced and teachers who act as expert guides. Having an increased sense of agency (or 'internal locus of control') in learning at Key Stage 2 level has been positively linked to attainment and social mobility, mediated by educational qualifications (von Stumm et al, 2009). It is also connected with a stronger likelihood of engaging with lifelong learning and pupils' development as active citizens (Pollard, 2010).

Learner agency can be conceptualised as having two key dimensions: pupils' sense of agency and their actual agency. The former is conceived of as pupils having a sense of purpose in interactions and behaviours and a belief that their actions can have an effect on other people, e.g. in terms of their understandings of the world (van Lier, 2008). Pupils' actual agency is here understood as pupils making decisions and choices; taking initiatives; developing and using learning strategies independently (Blair, 2009); ascribing meaning and relevance; and co-constructing knowledge (Lave & Wenger, 1991). Research in disadvantaged schools in Australia (Munns et al, 2013) suggests both these aspects of learner agency are necessary for pupils to engage with high-level learning on a cognitive, affective and operative basis. This is in contrast to simply complying with teacher instructions.

This understanding of learner agency suggests it should also be understood in relation to curricula and how teachers enact them in classrooms as pedagogical practices (McCormick & Murphy, 2008). Research suggests that school curricula and their enactments can alienate and exclude disadvantaged pupils (e.g. Maguire, 2010). This may particularly apply in disadvantaged schools if teachers are constrained by having to closely follow the National Curriculum (NC),³ which arguably positions learners as passive recipients of externally prescribed, pre-conceived and de-contextualised knowledge (Thomson, 2010). Curriculum topics and what is considered 'school knowledge' are therefore important for children's agency because they influence whether they feel engaged or alienated, which in turn can enable or constrain their learner agency.

LA is both constrained and enabled by sociocultural practices, including pedagogical practices (Rogoff 2008). This research hypothesised that the nature of LA and the ways in which it might be constrained and enabled may be related to the mode of pedagogy prevalent in the classroom. Pedagogical practices are sociocultural in the sense that they are influenced by sociocultural discourses about education and social and learner identities and wider discourses around 'race', gender and social class. Bernstein (2000) understands pedagogy as being framed and influenced by education policy, which can be perceived as a powerful form of sociocultural discourse about education. In this project, sociocultural discourses around ethnicity, gender and social class and education policy are considered to be key potential influences on teachers' pedagogies. Bernstein's (2000) modes of pedagogy are used as a theoretical device to identify and theorise pedagogical practices in classrooms, which may

³ Note that this study took place in the Summer Term immediately before the introduction of the 2014 National Curriculum.

frame the nature of children's learner agency. The two modes of pedagogy – performative and competence – can be briefly characterised as follows:

- The performative mode is characterised by a strong focus on assessment through tests, time-keeping and discipline. Children's perceived success is measured through their outputs, which are judged against standardised external criteria (e.g. tests and 'ability' levels), as opposed to what might be seen as inherent characteristics of the child (e.g. perceived innate 'intelligence').
- The competence mode (of which child-centred pedagogy is one type) is defined by a focus on children's perceived 'innate' characteristics related to their ethnicity, gender or social class (Ivinson & Duveen 2006; Hempel-Jorgensen, 2015) and the presence of an 'invisible' pedagogy (low focus on discipline, assessment through tests and time-keeping) which relies on children's self-regulation (Bernstein 2000).

While these two modes are distinct from one another, most classrooms are likely to be characterised by elements of both, with one being the dominant mode. These pedagogical modes can potentially explain how both education policy and dominant discourses about ethnicity, gender and social class influence pedagogical practices and hence constrain or enable learner agency. Bernstein argued that in England, since the 1988 Education Reform Act, performative pedagogy has been the dominant mode of pedagogy. This is a result of the introduction of the National Curriculum and standardised high-stakes testing which engendered a highly prescriptive pedagogy. Prior to 1988, Bernstein (2000) argues that competence-based pedagogy dominated English primary education in the form of childcentred pedagogy, from the 1960s through to the 1980s. Walkerdine (1990) provides examples of how child-centred pedagogy (as a form of competence pedagogy) had historical roots in the European Enlightenment. She argues that it is therefore based on a historical discourse which favours what are seen as inherently male characteristics such as being rational, autonomous, individualistic and competitive and gently challenging the authority of the teacher. The promotion of these characteristics as inherently male can be seen in studies of child-centred pedagogy throughout the past forty years in English and North American schools (e.g. Hempel-Jorgensen 2015; Langford 2010; Brooks 2005; Walkerdine 1990; Willes 1984; Sussman 1977).

In addition to socio-historical discourses, LA is also mediated by cultural tools including talk and physical resources in the classroom. In sociocultural theory such tools help to shape cognitive development and are therefore a core facilitator for children's learning as meaning-making. Talk is considered key to enabling learner agency (Van Lier 2008). Deep learning is most likely to occur when children are engaged in particular kinds of talk, where children are 'required to explain, elaborate, or defend one's position to others, as well as to oneself; striving for an explanation often makes a learner integrate and elaborate knowledge in new ways' (Vygotsky 1978, p.158). Van Lier (2008) argues that a significant indicator of a high level of learner agency is when, for example, children engage spontaneously in spirited debate about a topic they have chosen and care deeply about. Talk is also essential for meaning-making in that it takes place in collaborative dialogue between peers and/or the

teacher. The quality of talk is important here in that specific types of talk are more conducive to meaning making. Littleton and Mercer (2013) argue that exploratory talk is one such type. Here, children working with peers are all able to put forward ideas, which are then collectively and constructively evaluated and the group then collaboratively make decisions based on this. Other research shows how a productive tension and conflict between different learner and teacher voices in the classroom is necessary for deep learning (see Nystrand 2006 for a review of this literature). This type of talk requires children to exercise learner agency because they need to be allowed to take initiatives, ask independent questions, think creatively and be affectively and intellectually engaged.

Research suggests that teachers can create a context conducive to such talk by loosely framing activities and allowing it to emerge spontaneously in children's talk, when it is less regulated by teachers (Twiner et al 2014). Yet as Alexander (2008) and Littleton and Mercer (2013) argue, high quality talk and dialogic teaching need skilful guidance from teachers (for example, through modelling) and is less likely to occur spontaneously. For children to exercise learner agency for meaning-making through talk, there needs to be a careful balance between teacher framing of activities and children's autonomy and agency for developing peer talk.

Cultural tools may vary in the affordances they engender in terms of enabling learner agency. For example, new research suggests that using mobile and other forms of digital technology engender opportunities for children to exercise greater learner agency. IPads have been found to allow children to collaborate in an enhanced capacity with peers face-to-face and remotely within and outside the school day, at any time (Faloon 2015). Both talk and digital technology, as sociocultural tools for mediating learner agency were therefore a focus in this study, alongside other aspects of pedagogical practice.

The study

The central research question was:

• What is the nature and extent of pupil learner agency in relation to teachers' enactments of school curricula in their pedagogical practices?

To answer this question, a multiple case study (Yin 2009) was designed to enable collection of rich data using multiple methods within, and compare across, different schools. Eligibility for Free School Meals (FSM) was used as an indicator for disadvantage in selecting schools. While FSM statistics are made freely available by Department for Education (DfE), it is known to be a crude proxy for poverty (Hobbs and Vignoles 2010) and is only an indicator of economic disadvantage. Social class and ethnicity/'race' are also known to be key dimensions of educational disadvantage (Francis et al 2013; Rollock et al 2015). Selected schools were therefore located in urban areas as these were more likely to contain diverse ethnic in-takes (ethnicity data is also made available by DfE). There are currently no readily available indicators of social class, such as parental occupation, at the school level. The

school selection criteria were therefore: location in Greater London and an above national average (26.7% in 2013) proportion of children eligible for FSM. A long-list of 15 schools, meeting the selection criteria and in which the researcher or colleagues at OU had personal contacts with, was compiled. Those with highest proportions of children eligible for FSM were prioritised. Four schools agreed to take part in the research. Their FSM rates ranged from 29% - 68% and they were located in three different local authorities, although one of the two in the same local authority had academy status (see Table 1).

Table 1: Key characteristics of case study primary schools⁴

	School 1	School 2	School 3	School 4
Children eligible for	68%*	46%*	29%*	45%*
FSM				
School type	Local	Local	Local	Academy
	Authority	Authority	Authority	

^{*}Numbers rounded to nearest decimal point

Consent to take part in the project was initially gained from head teachers. They were asked to select a Year Five teacher and class to take part in the project. The criteria for teachers were willingness to take part and availability during the Summer Term of 2014 with no unusual activities during lesson in the three-day observation period. Year Five was selected as a Key Stage 2 (KS2) year group as having a strong sense of agency in Key Stage 2 is linked with improved educational outcomes. Year Six was not selected as this year group would be undertaking KS2 Standard Assessment Tests (SATS) during the fieldwork period and schools were thought to be less likely to agree to participate.

Data was collected in the four schools through semi-structured interviews with the Year Five teachers and children and Year Five lessons were observed by the researcher as a non-participant observer, across the curriculum. Three focus children were identified in each school to provide a focus for data collection. These children were considered low, average and high attainers by their teachers and were selected as their experiences were likely to differ particular as many children are taught in sets in Key Stage 2. In each school it was intended that three numeracy, literacy and non-core lessons were observed, resulting in 36 lesson observations across the four schools. The data collection instruments were based on key concepts from the literature review as shown in Table 2 (see Appendix 1 for full data collection tools).

Table 2: Key themes informing data collection instruments by data collection type

Data themes	Data collection type
Children's sense of agency	Group interviews with
1. Belief that actions can have an effect on others	children
2. Sense of purpose/volition in actions	

⁴ Free school meals data from Ofsted School Data Dashboard 2013: http://dashboard.ofsted.gov.uk/

3.	Sense of commitment to learning activities/motivation	
Childr	en's actual agency	Lesson observations,
	Making choices and decisions (choosing between options	Individual interviews with
	and possibilities)	teachers and group
2.	Taking initiatives (e.g. asking independent questions)	interviews with children
3.	Developing and using learning strategies independently	
4.	Meaning-making	
Socio	cultural practices/discourses:	Lesson observations,
1.	Pedagogical mode	individual interviews with
2.	Teachers' pedagogical practices	teachers and group
3.	Discourses on gender, ethnicity, social class, 'ability'	interviews with children
	enacted in pedagogical relationships and practices	
4.	Discourses on discipline and knowledge in the classroom	
	(behaviour charts and policy, focus on discipline in	
	teacher talk and interactions with children)	

The following data were collected across the four schools. A small number of observations and interviews were not carried out due to unavailability of participants. A full set of interviews and observations were planned but these were often changed shortly before they were due to take place due to OFSTED inspections, teachers attending CPD sessions or other unscheduled events.

Table 3: Data collected through interviews and lesson observations

		FP	School 1	School 2	School 3	School 4
		attainment				
Pupil interviews (Focus		Low	✓	✓	✓	✓
child with 1-2 friends)		Mid	✓	✓	✓	✓
		High	✓		✓	✓
Lesson	Literacy	Low	✓	✓	✓	✓
observations		Mid	✓	✓	✓	✓
		High	✓		✓	✓
	Numeracy	Low	✓	✓	✓	✓
		Mid	✓		✓	✓
		High	✓	✓	✓	
	Numeracy	Low	✓	✓	✓	✓
		Mid		✓	✓	✓
		High	✓	✓	✓	✓
Year Five Teacher interviews		✓		✓	✓	

This resulted in the following number of interviews and lesson observations across the four schools:

- 11 child group interviews (32 children interviewed in total)
- 32 lesson observations in literacy, numeracy and non-core lessons (science, art, rehearsal for play or musical, 'topic', drama)
- 3 interviews with Year Five class teachers
- Unstructured observation also took place around the school, for example, noting the contents of wall displays
- Informal, spontaneous conversations with teachers outside lessons and children in the playground were also noted and analysed

The project was designed in accordance with the OU Ethics Principles for Research Involving Human Participants and BERA Revised Ethical Guidelines for Educational Research (BERA 2011). The project was approved by the OU Human Research Ethics Committee. Particular attention was focused on ensuring that children were able to provide informed assent to participate in the project. This entailed gaining consent from parents by sending a letter with full details of the project to parents via the class teacher. Parents were asked to opt in or out of the research. Prior to interviews, children were also given full details about the project, anonymity of data and research outputs and dissemination of results. The researcher was aware of the implications of power inequalities between the researcher and child participants within the school setting, which could result in children feeling coerced to take part in the study and to self-censor their contributions in particular ways. The researcher attempted to counter this effect by providing full information about the project, emphasising the anonymity of children's individual contributions and positioning herself as an 'outsider' in the school context and therefore as distinct from teachers. To achieve this, the researcher also avoided using authority over children such as giving directions or disciplining them during lessons or in the playground.

All interview data was transcribed from audio-recordings. This was with the exception of one teacher interview in School 3 and one child group interview in School 1, who wished not to be audio recorded. Transcripts and observation notes were initially coded using open and closed codes based on key concepts from Bernstein's (2000) theory of pedagogy and sociocultural theory of LA from which themes were generated (see Appendix 2 for further details of codes and themes). The data was initially analysed separately for each school which included a comparison of children according to their attainment ranking and within respectively numeracy, literacy and non-core lessons. This process further developed and refined existing themes and generated new ones. These were then connected through axial coding to develop theoretical explanations for the relationship between the mode of pedagogy, particular pedagogical practices and the different ways in which LA was constrained and enabled. The data was then compared between schools. This involved connecting the level of disadvantage (proportion of children eligible for FSM) in each school with the dominant pedagogical mode used in the Year Five classrooms and how children's learner agency was enabled or constrained in relation to teachers' pedagogical practices.

Table 3: Key characteristics of pedagogy and learner agency in schools

	School 1	School2	School 3	School 4
Children eligible	68%*	46%*	29%*	45%*
for FSM				
School type	Local	Local Authority	Local Authority	Academy
	Authority			
Main mode of	Performative	Performative	Competence	Competence/
pedagogy				performative

^{*}Percentages have been rounded up to nearest decimal point

Findings

All four classrooms were characterised by a mixture of competence-based and performative pedagogy, although the dominant mode varied across schools. The higher the proportion of disadvantaged children at the school, the more performative the pedagogy was. There was also variation within schools. In School 3, the participating Year Five teacher used a more competence-based pedagogy compared with the other two teachers in this year group. In School 4 the participating teacher only taught Year Five children for literacy and numeracy in sets, and had a far more positive relationship with children, infused pedagogy with emotion and trusted children to self-regulate as learners. One of the other Year Five teachers who was a class teacher focussed far more on discipline and had a more conflictual relationship with children, not trusting them to work autonomously.

Schools 1 and 2: Mostly performative pedagogies

The pedagogy in Schools 1 and 2 was predominantly performative, which meant that children's behaviour was regulated by a visible discipline system. The classroom behavioural rules were displayed on the walls along with a behaviour chart which was used regularly to monitor children's behaviour. Children were also expected to line up in a certain order and to be quiet when entering or exiting the classroom. Children were frequently disciplined by the teacher and teaching assistant for speaking when silence was expected or for speaking too loudly.

Children were regularly tested in numeracy and literacy lessons which informed children's 'ability' labelling and teachers' pedagogical practices. In School 1, children were observed being tested twice in literacy during the three-day lesson observation period. In both schools, children were nearly always taught and seated in 'ability' groups and/or sets for core subjects and work was clearly differentiated according to children's grouping.

The teacher explains that she uses assessment to identify children's 'weaknesses' to address in subsequent teaching and that there is an emphasis on periodic assessment to continually ascertain children's levels. Notes from interview with class teacher, School 1

Boy: [the teacher] puts different types of work on each table because there's different levels, so we're on the highest table... Pupil group interview, School 2

Learning activities were tightly timed and paced. In School 1, in particular, children were regularly reminded of needing to work at a faster pace and that time for a specific learning activity was running out. The pace of activities was generally high during core subject lessons. The following lesson observation extracts were typical of how lessons were paced.

The class is very fast-paced in that children are continuously told by the teacher to work faster and activities are talked through at a fast pace for the initial tasks. When children work independently they are given a set of 30 equations and there is constant talk about which number children are up to. There are 10 yellow (teacher describes as 'warm up'), 10 blue (main event) and 10 red ('challenge') equations. The boys at [middle attaining focus child]'s table speak about these as school 'years' – presumably in reference to a linear progression of competence. Observation, School 1, numeracy

Children are working independently on a worksheet to solve a set of sums. The teacher asks children, which number they are on and if they have finished yet. She says to a boy 'You've been given a set task and timeframe. If you can't do it, stay in at lunch time'. A brief exchange follows which ends with the teacher saying 'you're more than capable'. At the end of the lesson the teacher tells children to tidy up: 'I'm looking for the quickest and tidiest'. The high attaining focus pupil rushes her last bit of work. The teacher says to her: 'you owe me one minute. Well done, I'm very impressed. You've worked well and produced a sufficient amount of work'.

Observation, School 2, higher set numeracy

The following extract from a child group interview expresses children's perspectives on the effect of pacing on their opportunities to talk, even when talk was legitimate and 'on-task'.

Yeah the thing I don't like most about like the teachers is just that they don't like, at first they don't give us enough time to speak and things like that and then they basically they're like interrupting us just before we can finish our sentence and then they, and then they, also say er, er, like don't give us enough time, like I mentioned, and they just are too strict with it. Boy, Child group interview, School 1

More time was spent on whole class teaching, which was highly teacher-led, particularly in core subject lessons. When children were assigned individual or pair activities during these lessons they were highly structured and monitored by the teachers.

The teacher introduces the topic of square roots and demonstrates a 'number bug' method on the electronic white board to whole class. She does not encourage pupil questions. This is followed by children being asked to talk briefly to their partners and then a whole class question and answer session led by the teacher. Children are then asked to work with their mini whiteboards individually on a new task to solve a set of teacher set sums using a 'number bugs' approach. The teacher demonstrates a few examples and then tells children to solve the sums for themselves. Observation, School 1, numeracy

The lesson is structured around children completing three worksheets on technical aspects of English language and grammar. On the first sheet, children are required to fill in the correct homophone in four sentences, learn to spell 8 words with 'ai' in them and write one or two sentences using homophones. They are also required to write one or two sentences using as many of a given list of words as possible. A second and third sheet with similar exercises is handed out later to those who have finished the first. The third sheet is on interjections. Observation, School 2, literacy

The teacher starts the lesson by asking children what they know already about writing persuasive letters. She picks children with hands up to provide short answers to her questions. She is clearly looking for specific responses. She then works through an example first letter with the whole class, describing some of the features: rhetorical questions, facts vs. opinions, use of stereotypes. Children are then asked to work in pairs to perform a similar analysis of the second letter, which they do. Observation, School 1, literacy

Highly regulated peer talk and teacher-led question and answer sessions

Children's talk was highly regulated and constrained, particularly in core lessons, resulting in few opportunities for meaning-making. This was more pronounced in School 1 than School 2.

In both schools, children were told to 'talk to their partner' about a method (e.g. 'number bugs' to work with square root numbers) or a concept (e.g. 'persuasive writing') to consolidate what they knew prior to starting a new learning activity. Such talk was usually limited to a short time period and confined to partners. Partner talk was affected by peer relationships, which in turn had an effect on the quality of talk children experienced during lessons. Yet this varied significantly in Schools 1 and 2.

In School 1 children felt they had no choice of who they sat and worked with in most lessons and were in some cases seated next to other children who they did not like. This was closely related to children being seated next to a child of the opposite sex for discipline-related reasons, when they actually preferred to work with children of the same gender as themselves. This had a negative effect on the quality of talk they experienced during 'partner

talk' session because and therefore minimised opportunities for meaning-making to occur through peer talk. The following interview excerpts, which were typical of children's perspectives in School 1, suggest that partner and/or group talk was not of an exploratory type (Littleton & Mercer, 2013), which is conducive to meaning-making:

I feel like it's not teamwork. One person like w[ill], will, will, asks one thing and then the next er the other person asks like another thing, and then it's just like they er don't exactly work properly with each other. Child group interview, School 1

In School 2, peer relations were more positive and the interviewed children had more opportunity to sit next to children they liked and had a friendly relationship with. The following excerpts, suggest that this translated into richer opportunities for meaning-making:

Child 1: And what makes maths exciting is that other people, like it's not, maths is not about having laughs and chatting it's mostly about. . . It's about doing your work.

Child 2: Being with your friends.

Child 1: Yeah it's about doing work but it's nice to have that company because when. . . I don't know something miss says 'ask the person next you and maybe they'll help you' and [another child] helps me sometimes and I help [Child 2] sometimes.

Child 2: Yeah because like me and [Child 1] are really attached to each other and so what we, I mean like not sisters but like friends so we have a whiteboard me and [other interviewee], and I'm like well you don't get yours I'll share with you, so we do our work on it.

Child 1: Yeah we do, she does her bit and I do my bit then we combine Child group interview, School 2

This difference in peer relations may reflect in part the different quality of teacher-child relations in the two schools. In School 1 the teacher-child relationships were affected by the focus on discipline and therefore was often more conflictual. In School 2, on the other hand, children had a more positive relationship with the class teacher and they were, in general, keen to please her and to produce 'good work' and correct answers to her questions. There were also less behavioural disruptions, and therefore a lower focus on discipline, when children were taught by the class teacher. This also suggests that children's relationships with teachers can be positive in a largely performative pedagogy and the focus on discipline can be less dominating when the teacher forges positive relationships with children.

In both Schools 1 and 2, teacher led sessions typically consisted of teachers giving instructions and asking more closed questions which required pre-defined brief answers from children testing their knowledge. The example from the School 1 numeracy lesson below illustrates a typical format for whole class sessions across the curriculum. At School 2, this type of approach was supplemented with some scaffolding and children were often asked to demonstrate their work on the interactive whiteboard so their peers could learn from them and were given opportunities to 'argue their case', to a limited extent, with the teacher, to

explore meanings. This contrasted with School 1, where the teacher rarely allowed children to challenge her authority of knowledge and where only the 'correct' answer to the teacher's question was seen as legitimate. Nevertheless, this was not a general characteristic of most lessons observed in either school.

Children put their hands up to answer the teacher's questions. The teacher picks a child and if the answer is correct, no other children are given the opportunity to respond. When children work individually on their worksheets, they very occasionally ask questions of the teacher but they are specifically about how the teacher expects them to present work in their books (e.g. 'do I include working out [of the sum]?'). The Focus Child (middle attaining) sometimes strikes up conversation with his partner about their work but the exchanges are short and instrumental, for example, 'what do you do here?' Observation, School 1, numeracy

The teacher asks children to give examples of homophones. A girl says 'hare and hair'. The teacher explains that 'the phonetics sound the same but they have different meanings and spellings'. Another child is selected to give an example 'night and knight'. A boy says 'but and butt'. The class laugh loudly and some make other jokes. The teacher says: I'm waiting for you to explain that'. The boy points to his bum. The teacher says she accepts it but 'it's a bit inappropriate'. Another boy is selected to provide an example of a homophone: '"ludicrous!" It's both a rapper and the other is a crazy person!' The teacher responds: 'But that's a name so that doesn't really count'. The boy argues his case but the teacher is not convinced and eventually dismisses the example. Later on the teacher and a child start a discussion about another suggested homophone 'wear and ware' which the teacher initially dismissed as it was already on the board. Yet the boy argued that he had a different way of explaining it as a homophone which the teacher acknowledged. Observation, School 2, literacy

In this latter excerpt the teacher allowed children to explore their own meaning-making processes by entering into conversations about their homophone examples. She thereby validated children's individual initiatives to engage in meaning making, albeit to a limited extent.

Use of cultural tools: worksheets and the Interactive Whiteboard

The lesson observations in both Schools 1 and 2 suggest that children's access to digital technology was limited to occasional use of the Interactive whiteboard (IWB) and otherwise (non-electronic) individual mini whiteboards, worksheets and writing books. Children were only given access to the IWB during whole class sessions to demonstrate, for example, a method for working out a sum in numeracy. This was used more extensively in School 2, compared with School 1. Mobile and other digital devices were not observed in use by children during any lessons.

Some, particularly lower attaining children, reported that the 'clever children' had more opportunities for using the IWB to demonstrate to the rest of the class or write up the correct answer to an activity.

Erm well when we are like doing games and one person has to go up to the whiteboard and they have to write something down, like one of the clever, like one of the more er cleverer people [will do it]. Child group interview. School 1, mid attaining focus child

Highly limited decision and choice-making; illegitimate initiative-taking

In the lessons observed in Schools 1 and 2, there were few opportunities for children to make choices or decisions. In School 1, where the teacher was interviewed, she explained that children's choice-making was very constrained due to curriculum pressures.

All interviewed children across Schools 1 and 2 felt that genuine choice was a rare occurrence and when 'choice' was offered it was usually a case of choosing between predefined options presented by the teacher. In School 2, children reported slightly more opportunities for choice-making, although this was confined to the margins of the school day, during break times and in 'free choice time' when there was a few minutes of spare time at the end of a lesson or the school day.

Examples of choice made during core lessons include choosing whether to finish work in the next lesson or during lunch time and which of two letters provided by the teacher was 'most persuasive' when learning about 'persuasive language'. Some children felt this was because the teacher did not trust them to make choices due to discipline concerns. The lower attaining girls in School 1 felt that they were not given more opportunities to make genuine choices because the teacher did not trust them to make the 'right' choices.

While the School 1 teacher acknowledged that she was unable to give children much choice in terms of topics for learning, she did attempt to allow choice in non-core lessons. However, what she understood as choice was not necessarily recognised by children. In the following School 1 art lesson, the teacher presented the activity as entailing choice-making and some autonomy for children in being able to choose their source material, drawing equipment and to manage a larger (20 minute) time period. From the teachers' perspective, this lesson contrasted significantly from others I had observed because it was based on her visit to a Matisse exhibition at a London art museum which had greatly inspired her and which she thought would also interest the children. However, due to the highly prescriptive nature of the teacher's instructions and her continual policing of children's activities, their autonomy was in effect curtailed. Two children remarked that they would have preferred to do cut-out art rather than the following activity as they saw this as more directly related to Matisse's art. Many of the children expressed interest in Matisse's art during the introduction session where the teacher showed pictures of his art and children had the opportunity to ask questions.

During the teacher's introduction to Matisse's work a girl asks whether he 'did abstract work?' The teacher answers 'wouldn't say so. Abstract art is more about a mood.' The teacher moves on to talk about impressionism and the use of colour in different art movements. She also talks about Van Gough's mental illness which the children are very keen to hear more about asking why he was ill and cut off his ear. The teacher explains that it was due to lots of different reasons- he may have had an argument with someone. The teacher then instructs children to find their own source

material in the form of a plant in the school gardens and to carry out 'research using drawing'. She tells them to carefully observe the source material focusing on tone, shade and outline but not colour. Children are told to concentrate on 'really looking at it closely from different angles' and to reflect this in their drawings. She explains 'This is not to be a finished drawing of an object but an exploration into how tone and shape can be drawn'. While children are preparing to go into the garden to start drawing they converse excitedly about which pencils they will use e.g. a 6 or 7b. Children are then invited to choose where in the gardens they find their source material although the teacher makes it clear throughout the lesson that they are to choose one place and stick with it. This also means that children can choose who they sit near. It seems that [the mid attaining focus child] and his friends may have made their choice of source material on this basis. However, the boys are admonished for moving from their original spots and the choices they have made are negated, to an extent, by the tight framing of the activity meaning that the boys cannot work together as they might choose to (the activity is independent rather than collective). The boys clearly wanted this to be a more social activity where they could talk freely. When the teacher is not in earshot they talk loudly and excitedly about insects they encounter and complain about the heat of the sun. Despite this, the Focus Child focuses on his drawing task but the others do not for any significant amount of time. The teacher regularly comes to their section of the garden to admonish the boys for moving away from their original plant, talking loudly and being off task. She also criticises their drawings in that the children do not seem to understand her instructions for the task having drawn them in the 'wrong' way and she expresses her disappointment. Observation, School 1, art lesson

In the following non-core lesson children were also seemingly given a high degree of autonomy and rich opportunities for genuine choice-making in designing their own class assembly to be performed to the rest of the school. However, the teacher effectively eradicated choices and shut down children's initiatives during the course of the lesson. Children were asked to choose a topic for their class assembly with the theme of 'the news' and to write a script and decide how they were going to perform it. However, many of the children's suggestions were criticised and rejected by the teacher for not meeting her initially unstated criteria.

Many pupils come up with a range of original ideas including 'new planet discovered called Malteezers...' This seems to be inspired by their learning about planets in science. Many further ideas are put forward, most of which are rejected or dismissed by the teacher. She is critical of many of the boys' ideas in particular. At one table a boy suggests something based on a fictional book character. The teacher says she would prefer them to make something up. At the middle attaining focus child's table, someone suggests 'girls being forced to marry too young'. The boys laugh at this but the teacher admonishes them saying 'it's not funny, it's real!' [This was a high profile topic in national media at the time of this lesson]. Suggestions are made including 'footballer is injured and dies'. The teacher responds 'nothing too negative', again

dismissing children's ideas. She later elaborates saying 'I don't want to say 'no' to ideas but parents and siblings will be there and won't want to hear about violence and you shouldn't be joking about it'. She adds 'I know the news is negative'. A small number of pupil-initiated ideas are approved by the teacher including: 'girls being forced to marry young' and 'Beyonce's neighbours complain that she has been singing too much'. The teacher says the latter is a 'fun' idea and elaborates what the news story could be. The teacher picks up on an idea the lower attaining Focus Child has written on her mini white board, which reads along the lines of 'Britain's got talent'. The teacher teases out how the topic could be developed but eventually rejects the idea.

These non-core School 1 lessons contrasted to art lessons in School 2, where some children felt art lessons did entail real choice:

[art's] so fun being in my class because first of all my teacher is really fun, she makes like every subject really fun and she, when she does art with us like it's not, it doesn't feel like we're doing . . . it's like we're at home drawing whatever we feel like and we can use our own creations but we have like these like with pictures which show us we can help. Child interview (low attaining), School 2

In School 2, there were also occasional opportunities for choice in reading when the class visited the local library, although this was a rare occurrence. In the following interview extract, the children contrast their usual lack of choice in reading materials with the effects on engagement with reading when they are enabled to choose at the local library.

Child 1: And when we come back we, you can't even hear pin drop, it's, it's so, so quiet 'cause we've got our own choice of books.

Child 2: 'Cause in there [pointing to the classroom] if you look it's really, really not our choice, 'cause when we get the book, pretend this is the book I'm reading, I'm I would be chatting to [child 1] because me and [child 1]s thinking I don't like this book this is boring, things like that.

Child 1: And it'll make us . . . and then we chat, chat and the teacher won't be able to concentrate, so she would take us to the library and she would . . . but that's only some days when

Child 2: But I think [Class Teacher] understands why, why we're getting bored because we've had them like since year five we haven't even been to the library. Child group interview, School 2

Despite the lack of opportunities for choice and decision-making during most lessons, children recognised the value of choice in fostering engagement with learning and being creative.

Girl [in response to question 'if you could design a lesson, what would you do?']: I would do, write your own . . . like express your feelings lesson like erm write what,

like I would say to the kids, because I don't want them to be bored, I'd say like do what you want to, write a story, write a poem but you should not include bad words and bad characters. I wouldn't have writ that I would know these people like do this so one day I would do a poem lesson where most of the people writ poems and a story lesson and er drawing and writing for them guys 'cause I would not like them to be like haaa, falling asleep and getting bored and like . .. Child group interview, School 2

Opportunities for children to take initiatives in learning were also constrained in both Schools 1 and 2. This was the case in terms of, for example, children asking questions of the teacher.

Child: You can ask at playtime because [class teacher] er duty's at playtime and you can be like 'I thought this question, when are we going to the library because we have still not gone?' and I'll be like 'Miss when are we going to the library, we haven't gone yet?' And she'll be, 'cause you can't say in a literacy lesson 'miss when are we going to the library?' she'll be like how can I tell you because. . . .

Child group interview, School 1

Similarly, in School 1 children rarely observed asking questions other than about what the teacher expected them to do in a teacher-defined task. This included questions such as how to complete a worksheet or how to present work in their writing or work books. In general, when children did make more original contributions to lessons such as asking more independent questions or making original contributions this was disapproved of by the teacher or teaching assistant. The overall lack of such questions and contributions further suggests that they were not valued in this classroom. This was with some exceptions in non-core lessons – the examples are discussed further below.

In both schools, opportunities for taking initiatives were found in the 'gaps and cracks' of teacher control by children taking initiative to use their understanding of the 'technical' aspects of language (e.g. syntax and grammar) to compose creative jokes or other humorous contributions to learning activities which were subversive in nature. This is arguably a reflection of the strong focus in literacy lessons on these aspects of language as well as children's intrinsic desire to be agentic (Bruner 1996) and creative with their knowledge. The examples observed nearly always only involved boys. In this first example, the children had been learning Spanish as a second language at school, so that the children evidently had proficiency in the language, although the class teacher did not speak it.

One boy tells a joke which is overheard by other children at neighbouring tables who are distracted—they all laugh. The joke is about another boy at the joke-author's table and is told in Spanish. It sounds as if the child has made up the joke. The teacher is elsewhere in the classroom and doesn't hear [I tell her about it afterwards—she seems slightly embarrassed—not pleased]. Observation, School 1 numeracy lesson.

During the observation period, children in both schools focussed on the topic of homophones in literacy lessons. Boys in both schools made humorous contributions arguably inspired by

their new knowledge. In School 2, as seen above, these contributions were made directly to the teacher as part of whole class activities, whereas in in School 1 they occurred out of the teachers' earshot or outside of learning activities. Yet, rather than passively responding to a teacher question as was the general lesson format in this classroom, a boy had taken the initiative to creatively apply their knowledge in a new social situation and produce a joke for others' amusement and potentially learning.

The boys at a table are having an extended off-task conversation and when they reach the topic of family a boy says 'my cousin is called donut!' The other boys laugh and one says 'what if he goes into a bakery and someone asks for donuts?' The boys laugh again and the boy says 'his real name is Nathan'. School 1, Science lesson

When the teacher and TA talk animatedly about the children's World Cup sweepstakes, discussing the country Chile, a boy constructs a joke from the situation: 'If you draw a [map of] Chile you can chill for a while!' Observation, School 1, Science lesson

Children also took initiative to directly challenge the teacher in both her knowledge and authority. In the following examples, boys use their knowledge and understanding of, respectively, the sun and racism. Both examples could open interesting and fruitful discussion for meaning-making. These opportunities were likely to be rich because they were self-initiated by children and they were evidently topics of interest to them. However, the teacher and teaching assistant responded negatively and effectively closed down these opportunities.

A boy who is often reprimanded for disruptive behaviour during most observed lessons says loudly whilst children are working on their planet charts 'why do you say that the sun is yellow when it's really orangey? It just looks yellow from a distance, but up close it is orange.' The TA says sternly to the boy 'I don't want to hear your voice right now!' Observation, School 1, Science

In a numeracy lesson the teacher attempts to illustrate that a boy is being hypocritical about something. She says 'that's like the pot calling the kettle black.' Another boy exclaims 'that's racist!' which is echoed by a small number of other boys. Other boys look at each other seeming highly interested in this exchange. The teacher immediately launches into a monologue. She explains in a defensive tone that 'it is not racist' and that 'it is ok to use the word 'black' because in this context it is not racist'. She says to the boys' section of the class in general that they 'need to learn and understand the nuances of the English language' and that she 'would expect this type of comment from KS1 children, not KS2' and 'they should know better'.

In the second episode the children were making a comment about the teachers' use of language, which they interpreted as racist, and potentially linked this statement with other aspects of her lesson where they might have felt she was racist towards children. The teacher was White whereas nearly all children were British Bangladeshi or Somali. This could have led to a discussion about, for example, how children felt the

teachers' language was racist, the relationship between language and racism and the nature of racism (e.g. it's subjective definition arising from the MacPherson Report).

Limited opportunities for meaning-making

There were less examples of meaning-making in School 1 compared with School 2. In the latter school, where talk was less regulated and peer relations were better and children had the opportunity to work with friends, children valued and gave examples of times when they had engaged with meaning-making through group work.

Boy 1: I'd say learning's like working with other groups like learning together, like you're with your group and you get to do stuff like maths and literacy but while you're doing that you have some fun.

Boy 2: I think learning is improving your skills, so when you're doing your work you get to interact with other people and you er get ideas [cross talk].

AHJ: Okay, yeah. So when you're working together in groups erm with other children erm can you tell me about what, why is that good? Or is it, is that good? Boy 1: Yeah because it can erm, it split up, because we also get em like we, it's, it's friendship, friendship and it's all about the teamwork that we do. Like say if we have to make, 'cause when we're in groups we have to do something hard and when it was me, Harvey, Daniel, . . . we were sitting at this table.

[one of the boys describes how the children worked together to solve a problem set by the teacher]

Boy 2: And cooperation helps us because it's part of our Five C's. Child group interview (mid attaining), School 2

Children in both schools also valued interactive activities where they manipulated artefacts and physical cultural tools. In some instances this enabled their participation in meaning-making. For example, in a group activity involving children dissecting a flower helped them to develop knowledge and understanding of key biological concepts.

In a School 2 child group interview, the boys describe how they dissected a plant and learnt all the names of the parts and were able to remember them afterwards. After dissecting the plant and identifying different parts of it, they left it for a period of time and then went back to look at the style to see if it had changed. The fact that it had turned brown had clearly made an impression on the boys.

...what made it [understanding the parts of flowers] easier for us 'cause we took out the er parts of, that's right, and we got to understand it easier. Child interview, School 2

(Dis)engagement and alienation

Children's level of engagement with learning during lessons varied according to their attainment level, whether it was a core or non-core lesson and the quality of their relationship

with the teacher. The lower attaining children in particular felt alienated from curriculum topics covered in lessons, partially due to the teacher's pedagogical style based on face-paced question and answer sessions where the aim was to get the 'right' answer.

The girls seem to find literacy particularly problematic, all three respond 'I hate it!' to my question 'can you tell me about your literacy lessons?' They say: 'it's boring!', 'takes forever' and 'we keeping doing tests' and 'it would be great if we could skip classes like in American high schools'. Child group interview, lower attaining, School 1

Some children's engagement increased markedly in non-core subjects and many expressed a preference for art as their favourite subject. The following paragraph compiled as a 'miniportrait' of the middle attaining focus child. His disengagement was expressed bodily during many literacy and numeracy lessons. Yet this changed significantly during a science lesson where children drew their own planet chart.

[Focus child] is quiet much of the time, seems mostly on-task although there is a clear difference in his body language depending on the subject and topic he is working on. In numeracy and literacy he seems on-task most of the time, writing and briefly chatting with partner during 'partner work', but he also seems bored at times and rests his head on his arm close to the table. He is not reprimanded once by the teacher. At times during these two lessons he is gazing into the middle distance with a neutral expression on his face. In contrast, during science when he is drawing pictures of planets his body language indicates engagement in that while he draws and colours he sometimes leans back and looks evaluatively at his drawings, in an appreciative way and he thoughtfully selects coloured pencils and uses shading techniques with his fingers. There are few pauses in his work during this activity and there is no gazing into the distance as observed in other lessons. He does engage with his table mates (only the boys) in chat about planets and which order they go in, although they also engage in extended talk about where they would like to go on holiday and which activities they would like to do, including fishing. Notes from various lessons about mid-attaining focus child, School 1

Boy: I love art, that's the only thing I do at home. Child group interview, School 1

In School 2 children expressed a greater degree of engagement with learning topics and activities and higher levels of motivation. This appeared to be linked with their positive relationships with the class teacher and children's appreciation of her wanting them to be 'good' learners. The children seem to share the teacher's belief in her pedagogical methods, which may be a result of their largely positive relationship with them.

... even though sometimes [the class teacher] shouts at me she, she definitely means it for good because like erm what I've learnt from miss right now is helping me a lot with things I do at home.

Boy 3: Yeah because I always like . . . before this I was like quite chatty and naughty and then she believed in me and then let me come here and get interviewed and she said erm, she said erm, if . . . show me my decision was right for this.

Child group interview (mid attaining), School 2

Children's positioning in relation to social class and ethnicity: constraints resulting from racism and teacher's deficit view

In School 1, there were also elements of competence pedagogy in which children were judged in terms of perceived deficient, innate characteristics related to their ethnicity and social class. This was possibly related to the teacher attempting to teach children self-regulation, in which she felt she had been unsuccessful. She explained in the teacher interview that she resorted to using performative pedagogy because the children were unable to make decisions and choices and use self-control. As will be seen below, this was related to her deficit perception of children in terms of their social class background.

'Ability' and attainment

In School 1, children felt their agency in lessons was constrained by their perceived low 'ability'. This was likely to have been influenced by the strong focus on structuring learning through setting and 'ability' grouping and assessment. Yet the group of low attaining girls interviewed did not rule out agency in the potential of improving their 'ability' and therefore did not seem to see 'ability' as fixed. This is commensurate with performative pedagogy. The group of mid attaining boys also commented on feeling constrained in some respects due to their low attainment. They felt frustrated by other, more high attaining children calling out the 'right' answers during whole class question and answer sessions. This made them feel unable to answer teacher questions, doubt their responses and feel confused when several different answers were called out.

The [group of interviewed] girls see themselves as struggling with work but note that they put effort in and 'try'. They say that others in class 'show off'. They rate their own 'ability' as low but fell that the teacher pushes them to 'get better' yet the girls frequently mention difficulties with school work in the 'low ability' sets. Notes from child group interview (not audio-recorded), School 1

In School 2 some children who felt negatively labelled as 'not clever' resisted this labelling and insisted that setting and attainment-based grouping referred to the work they were set by the teacher as opposed an inherent characteristic of children.

C: We . . . we work together on different tables, we're not all on the same table and 'cause erm, why do we have sets?

C: We have sets 'cause of the low, medium and hard.

C: But it's not . . . people put it out there like we're not clever, we are clever it's just that we, we, do some easier work then some other people do some hard work.

Child group interview, mid-attaining focus child, School 2

In School 2, children felt positive about how learning was structured by the teacher in that they felt a sense of achievement and progress when they were able to go up a level or complete the next worksheet. These children therefore seemed to found a sense of agency and satisfaction in a performative pedagogy. This was likely to be linked with their positive relationship with the teacher and because they thought she 'believes in me' (Child group interview, School 2, mid-attaining boy).

Social class

In School 1, the teacher described children as 'lively' and 'bubbly' and remarked that 'you get a lot out of them'. Yet, she also perceived them as lacking self-control and being overenthusiastic in talking when they were not allowed to. During informal chats with the teacher she further revealed a perception that children 'watch a lot of American TV at home', which she thought contributed to what she saw as their insufficient understanding of the (UK) 'English language'. She also alluded to parental deficiencies in English language and cultural terms. While this has a racist dimension it is arguably also a classed account, positioning children as deficient, working class children who lack self-control and an inherently ability to self-regulate.

[the low attaining focus child] isn't the lowest attaining in the class she is a low attainer she doesn't em motivate . . . she doesn't take responsibility for her learning a lot of the time so she is very kind of like a lack of motivation. Teacher interview, School 1

There was less evidence of social class positioning at School 2. However, this could be because the class teacher was not interviewed in this school, although she did not position the children in terms of social class during informal conversations.

Ethnicity

In School 1, the teacher positioned children, who were largely from British Minority Ethnic groups, as lacking White British linguistic and cultural competence. This was expressed in the teacher preventing children from initiating and developing activities which she perceived as requiring such competence. This was despite the fact that children had creatively identified and developed these activities and topics, which they clearly had an interest in. The teacher effectively shut down potentially powerful opportunities for children to exercise LA. The observation extract below is a continuation of a lesson where children are identifying a topic and plan for their class assembly. At this point children had already suggested many topics, many of which the teacher had dismissed.

A boy suggests 'Mr Bean wants to be a footballer' to which another boy replies 'No, Mr Bean becomes a footballer'. The whole class becomes very excited and make lots of suggestions how the idea could be developed. The teacher calls out 'hands ups' to stop children from calling out. A child suggests acting out a Mr Bean Sketch and children respond 'I want to be Mr Bean!' The teacher questions the children whether they really know what Mr Bean is about explaining that he is a 'very specific form of physical comedy'. She asserts that she doesn't think the children understand it and

could imitate it. A boy takes initiative to regain some agency by making a suggestion which can be interpreted as subversive of the teacher: It is 'a dance-off between Ronald McDonald and the teacher'. The teacher responds with a brief, reluctant laugh. Observation, School 1, Class Assembly rehearsal

The defence of her use of racist language denies any recognition that the boys may have a legitimate claim and positions them as lesser learners by labelling them as 'immature'. Use of the word 'black' to refer to something negative has been argued to be racist (Hill 2008; Moore 1976). What was brought up as a comment on discrimination in the classroom by children was redefined by the teacher as a learning issue in which the children are positioned as deficit 'other' is the cause of the problem rather than the teachers' racist language. Their critique is silenced and an opportunity is missed for the teacher to engage with the children in a conversation about how language use can be racist and indeed how other behaviour in the class can be perceived as racist in general. This is especially important as there other racist incidents were observed during lessons with this.

In School 2, there was little evidence of how children were positioned by the teacher in terms of ethnicity. This could be related to the positive relationship the teacher had to children and her high expectations of them. There was also an indication of her respect for children's ethnic background in one of the wall displays in the classrooms which took up considerable space on the back wall.

The display is entitled 'Cool Planet' and comprises a world map with photos of children in the class and arrows to countries they have affiliation with. There is a personal blurb from each child about their relationship with these places. Each of the three focus children have written blurbs about their chosen countries from which one of the parents came from. The countries include Pakistan, Kosovo and Scotland. Observation notes, School 2

Schools 3 and 4: More competence-based pedagogies

In schools 3 and 4, pedagogy was either mainly competence-based (School 3) or more mixed pedagogy (School 4). There was a relative lack of focus on discipline and a focus on children's self-regulation. Children's behaviour was mainly regulated by an invisible pedagogy (Bernstein 2000) – although with some exceptions in School 4. In both schools there was some form of visible behaviour management but this was used very infrequently during the period of observation. In School 3, there was a behaviour chart at the front of the classroom although this was not observed in use. The following episodes exemplifies the invisible pedagogy at work in this classroom where children needed little prompting in carrying out their agreed tasks.

Children enter the class on their own, one by one, and either sit down or walk over to peers at other tables and talk – the teacher says 'what are you meant to be doing?' Shortly after children are all sitting down quietly working, most seem on task. One

child does the register without having to be asked. The teacher says 'choose someone to help you check lunches', which the child also does and then goes about collecting lunch choices and going to the kitchen to report these. The noise level is generally very low, some children whisper but there are no teacher reprimands. Lesson observation, School 3, reading

The teacher works quietly at his computer at the front of the classroom with his back to most of the children who are working at their tables. He occasionally turns around to ask them questions to prompt them taking responsibility for ensuring they are doing the required activities.... Children are given responsibility for structuring their own group work with minimal guidance of the teacher – they are given a 20 minute slot to write a play script and are expected to have one finished at the end. The teacher calls out when they have 8 minutes left. Children realise they need to speed up and move on accordingly with getting scripts finished. Observation, School 3, literacy

The following observation extract illustrates how the teacher more explicitly taught children to 'read a situation and to self-regulate their behaviour accordingly:

During the lesson a Year Four teacher enters the room to speak with the class teacher about discipline problems with in his class. After the teacher leaves, the teacher says to class: 'what could "read the situation" mean? Discuss with your partner'. After two minutes of discussion the teacher selects children to present their ideas. One child says 'to see what is going on around you'. Another says 'needing to be quiet when teachers are having problems with Y4'. The teacher responds 'yes, you read the situation'. He then asks children if they agree or disagree by responding 'yes' or 'no' — most seem to agree.

Observation, School 3, numeracy

In School 4, children were almost never observed being reprimanded or subject to discipline from the teacher in the literacy and numeracy sets taught by the main teacher participating in the study. Children entered and exited lessons on their own and without guidance from the teacher and were almost continuously engaged with learning activities. They were also not asked to lower the noise level even when they spoke fairly loudly during activities, although noise levels were never very high.

In School 4, this contrasted significantly with the focus children's registration class and the lower numeracy set, which were observed once each. These lessons were both taught by the registration class teacher who also took the lower numeracy set. In both lessons class, discipline-related episodes continually disrupted lessons and the teacher had a fraught relationship with children. The same children's behaviour and engagement with learning activities contrasted significantly with when they were in their literacy and numeracy sets with the other teacher.

The first 10 minutes of the lesson are taken up by the teacher reprimanding disruptive children and the teacher attempting to get children's attention to introduce the lesson.

Finally he asks them to get their reading books one table at a time and line up by the door to go outside. When I return to the class at 13.45 they are sitting outside, most of the girls are on a large climbing frame chatting rather than reading. A few girls are seated elsewhere on their own reading. Soon the girls on the climbing frame break into a loud argument. One girl is apparently upset about what one of the other girls wrote in her book [not sure what]. The accused girl is FPH in literacy and has already been reprimanded a few times in this lesson – a strong contrast to how she behaves in literacy and numeracy when she is taught in the smaller sets with a different teacher. The girl complaining of FPH writing in her book is FPM – again a stark contrast to how this girl is when she is in her lit and numeracy sets. There is much angry talking among the girls and the teacher spends around 15 minutes trying to calm the arguing and reprimand the girls. Towards the end of the lesson most children are now reading but arguments still erupt among the girls and some boys continue to chat intermittently. The T regularly reprimands children. At 2pm children are told to go back to the classroom. The children talk loudly as they walk back and a boy is reprimanded for trying to open a window on returning to the classroom (it is a hot day). Observation, School 4, reading

Children were given a significant degree of autonomy to manage their own learning time and to use space in a more flexible way, being able to move around on their own in the classroom and sometimes within the school. In School 4 children were often given most of the lesson, to carry out group activities which managed without teacher monitoring or support. This happened in core and non-core lessons.

Child 1: she trusts us like we had to do these a few weeks ago and she like trusted us to move around and even some of the other kids who can't really work with people like she let them sit there and that, she trusts us basically, like she trusts us and. . . .

AHJ: Okay and what do you think of that?

Child 2: It's really fun.

Child 1: I think it's fun because like she trust us not to like mess up.

AHJ: Okay, okay, so is it more about the trust or is it more about you can go and work with someone who you want to work with?

Child 1: Both.

Child 2: I think it's a bit of both but it's more trust.

Child group interview, mid-attaining, School 4

The children explained the significant value of trust, which made them feel confident and 'grown-up', as opposed 'babies' who required monitoring. Monitoring was associated with being a 'bad' learner. This lack of monitoring is suggestive of self-regulation where children's behaviour is regulated by their knowledge of teacher of teacher expectations. It also helped position children as 'good' learner.

AHJ: Okay, so when you were saying before that it's really that she trusts you em what does that... why is that important?

C2: I think it's good that, that teachers trust you.

AHJ: Hmm hmm.

C2: Because em

C3: If you didn't have the trust you would just feel like she doesn't trust you because you've done something bad.

C2: Yeah you won't feel grown up enough, like now we're growing up we're in year five, then we'll be in year six and then we're going to leave.

C3: And you won't feel like confident.

C2: Yeah we feel a bit more, we feel confident with ourselves that [the teacher] gives us a bit space like she isn't like always like looking, looking after us like babies, she treats us like we're young adults.

Group interview, mid-attaining, School 4

In School 3 children were allowed to leave the classroom during group work to choose a space in the corridor or the playground, completely out of eyesight of the teacher. They were not checked-up on during this work and were apparently trusted to complete the set task by the teacher. During the observation period, children were observed doing this in a numeracy lesson when they were planning the making of short films about methods for working out sums.

Teachers focussed on teaching children skills for meta-learning or self-determination. In both schools they did this by using peer partner talk, designed specifically to enable children to identify which skills, methods and knowledge they had learnt. The aim of such talk was to support children in uncovering the learning goals underpinning learning activities. Both class teachers emphasised they did not want children to rehash what they did or what the activities were but to analyse them to uncover the skills and knowledge they were intended to teach children.

In School 3, the teacher also used brief question and answer sessions between himself and children to enable them to identify the underlying skills and knowledge they were in the process of learning.

T asks children to share their ideas about what they did last time with the whole class. One child says 'it was to test to see if we could write a script for another group'. Tasks 'what did you learn?' a child answers 'what people expect us to act out in the play.' Children are asked to chat again for 30 secs about what they learnt. When asked to report to the whole class a child says 'I learnt that how I write the script doesn't mean that someone else will think the same.' Another child says in response to the same question 'write how you say something'. T responds 'what is that called?' Child answers 'instructions'. T responds 'excellent'

Lesson observation, literacy, School 3

In School 4, children used learning logs to facilitate self-regulated learning. The literacy/numeracy set teacher explained how the used learning logs were used:

The school has recently introduced an assessment for learning policy and as a result children have learning logs. They act as a record of past experiences so that children will learn to adapt a previously used method to a new experience or problem. Children have group and individual logs. The group books are intended to act as a set of reference material for future use. The aim of individual learning logs is to keep a record of learning as it happens and for children to have a 'Eureka moment', which they then write about in the learning log. This is in contrast to children just writing in the learning log mechanistically last minute, at the end of lessons only.

The following extracts from a literacy lesson illustrates how learning logs were used in practice:

During the lesson when children start working on activities in pairs the teacher moves around the room and reminds them to look at their learning logs because they need to check what they need to be working on. For example one girl needs to use connectives and the beginning of sentences. Another girl needs to identify clauses and the teacher scaffolds her to do this. Towards the end of the lesson T asks all children to find their Learning Log. She explains children need to write what skills they have learnt this lesson and how they can be used in the future. She emphasises that it is about analysing the nature of skills learned rather than 'what you did'. Observation, School 4, Literacy

Children in both Schools 3 and 4 were generally successful in internalising and displaying self-regulated behaviour and learning. The following example from School 4 illustrates children's understanding of self-regulation and how using tools such as a learning log helped them to learn. In the second half of the interview extract children refer to a device they use in their learning logs to encourage them to reflect on why they had undertaken particular learning activities.

AHJ: But does the log book help with your learning?

C1: Yeah, I got it, if you can't explain it simply you don't understand it well enough. AHJ: Okay, so do you think, what. . . what do you get from that? What do you think it means?

C1: Just like, it helps you as well because then if you can't write it down, what you've learnt then, then you might go to Miss and say Miss can we do this again because I haven't understood it?

C2: And these few days we've been doing this thing, it's called 'this is because' and you can see on the board it says it right at the top; 'this is because. . .' we call it TIB, it's a little . . ., this is to help me identify similarities and differences between a book/film version of a story, like and then we know why we're doing it. AHJ: Yeah.

C2: So then we don't have to think why are we doing this it's a bit random?

AHJ: Yeah.

C2: But now we know why we're doing it.

AHJ: Okay.

C3: So em TIB, let's say that we learnt it because Miss taught us we'd write it in our learning log that's what we've learnt and if we don't get something about it we'd write underneath.

AHJ: And do you find that helpful?

C3: Yeah because then the next day you can tell miss if you wanted to, or the next week she would just do it herself by looking at your learning log compared to others. Child group interview, School 4

Lower attaining children seemed to struggle more than the mid and higher attaining children in regard to self-regulated learning. This was most evidence in School 3, where lower attaining children were observed more frequently than in School 4. The low attaining focus child and others at her lower attaining table were observed to have difficulties in completing individual and group tasks.

A pair of lower-attaining girls have chosen to work on methods for addition. One girl writes up a sum and solves it quickly using the column method. The other girl writes up a sum but struggles to solve it. The first girl gets distracted and starts chatting offtask with a table mate. The girl who was struggling has chosen to use a number line to complete an addition sum. She has in fact worked out the correct answer but struggles to explain how she has done it using the number line. I ask her how she would explain it to me and she takes me through it but is unable to show each step. She thinks for a long time and I ask her to explain again which she attempts to but gets stuck again. I ask her if she knows another way. She says she knows the column way and asks me 'should I do that?' I say 'it's up to you'. She still seemed unsure and I say 'you could try it?' She does and copies her partner's sum and works it out, getting the right answer. Meanwhile the other pairs at the table are either working on their own sums or chatting. Later when children are asked to show their working out on the electronic whiteboard at the front of the classroom the same girl does the column sum which she had copied from the other girl. While she does it correctly she seems unsure and it seems that she doesn't quite understand what she has done. Lesson observation, School 3, numeracy

Another low-attaining child takes a very passive role in a pair activity where she is paired with a boy.

Children have been asked to order bits of a play script which the teacher has cut up and then act it out to the rest of the class. When [the low-attaining focus child] works with a boy during the Jack and Gill activity there is little conversation in contrast to other pairs. The boy starts to order the snippets of paper with bits of script while FPL

watches silently. He eventually puts the papers in the right order and announces that he will be Jack and she will be Gill because 'he's a boy and she's a girl'. She mainly watches as the boy works and generally acquiesces with his decisions. She makes very occasional suggestions but the boy dismisses most of them. The bit of conversation they have is disjointed. Most of the talking between this pair happens when they read out their respective parts.

Lesson observation, Literacy, School 3

While children were taught in 'ability' sets in numeracy and literacy in both schools, their seating within these sets was less defined by 'ability' or attainment. This kind of grouping was treated as far more fluid and children were often given a choice of who to work with for individual lessons. In School 4, children were not assigned to 'ability' groups at all for literacy and numeracy but were assigned to work with other children who the teacher perceived had the same needs at a particular time. This changed from lesson to lesson, meaning that children worked with a wide variety of children within their set. At other times, children were given free choice of who to work with or sit next to. In School 4, children were given control over seating arrangements throughout the classroom and were allowed to try out different arrangements of desks and deciding how children would be seated for which 'ability' or attainment was not a criteria.

Extended use of teacher-child and peer talk

The teachers in Schools 3 and 4 used talk frequently and for particular aims. This was closely linked to self-regulated learning where children are seen to develop understanding through talk with peers and the teacher. Asking questions and engaging in reciprocal conversations was seen as an important aspect of classroom interaction. In School 4, where pedagogy was more performative than at School 3, the teacher also used talk, between both peers and herself and children to continually identify children's needs and to adapt activities and seating to meet these needs.

Talk was far less directly regulated by teachers in Schools 3 and 4. There were many more opportunities for children to engage in discussions with the teacher and peers and therefore more legitimate opportunities for meaning-making which was approved of, valued and built upon by the teacher and peers.

In School 4, the teacher used whole class teaching more than at School 3. Yet in contrast to School 2, and especially, School 1, the teacher used open questions and was clearly expecting more elaborate and original responses for children. She also valued and encouraged an emotional dimension

The teacher explains that the Iron Man (IM) was written to help children understand his mother's death. She asks 'how do you think that works?' and asks children to discuss in pairs. She then asks individual children to feed back their thoughts to the whole class. At least half of the class have their hands up. The first one says 'I think he

[the main character?] is saying to the child that your mother has a soul so she will live on'. The teacher pauses briefly and then says 'I could cry now'. Another child responds with something along the lines of: 'He is saying that your mother did everything she could when she was here and it's important to remember.' The teacher paraphrases the child's response and says 'fantastic. I hadn't thought of that'. Another child says 'She still lives on in your memory'. The teacher again paraphrases the child's response and says 'this is a lot deeper that I was planning at this point in the lesson.' ... This is followed by another Q and A session. Again, many children have their hands up to respond to the teacher. Her first question is: 'what is the purpose of music in the film?' A child responds 'the music gets the speech out' and another answers 'it builds the atmosphere'. The teacher goes on to explain how the camera sweeps up and down the IM in the film to show how big he is. A child adds: 'it shows how he is bigger and taller than a tree'. Another child says 'they are showing IM through Hogarth's eyes.' The teacher responds responds 'yes! They're filming up so you feel what it would be like for Hogarth....' The teacher asks children to discuss with their neighbour how the film shows time passing or how the film shows how they feel. After this the teacher asks children to share their discussions with the rest of class. Some examples of children's responses include:

'In some films they show the seasons change or a clock going fast to show time'. 'through songs – if it goes de-de-de you know what they feel – happy notes or sad notes'.

'when they're shouting you can see they are angry'

The teacher responds: 'yes, you can see these things. But when Ted Hughes wrote he had to use language to describe. He doesn't say 'he was sad' – he shows in writing rather than says it. He never actually tells us'.

Lesson observation, literacy, School 4

Teachers in Schools 3 and 4 used more open questions in whole-class teaching and when scaffolding children who were seen to need help or who had asked for assistance in completing a task. When scaffolding individual children, other children nearby listen and contribute to the conversation, thereby developing a meaning-making session involving several peers. The following observation extract was typical of how the teacher scaffolded children during individual activities.

T scaffolds [mid-attaining focus child] in working out a sum. She asks the child 'what's your problem?' to which the child replies 'I know how to work it out'. She explains to the teacher that 'to simplify the fraction 4/22 it needs to be halves and that the answer is then 2/11'. However, children have been asked to show entire working out and explain why the answer is right. The teacher then asks the children why that is the answer. The child attempts to explain. The teacher says 'I want you to use the word 'because''. The child attempts again but gets it wrong. Other nearby children, who have been listening to the conversation, call out other wrong answers. Finally the

teacher explains 'it's a prime number'. She then asks children to explain what a prime number is. Most call out and get the answer right.

Lesson observation, numeracy, School 4

Teachers used children's talk extensively to facilitate their meaning-making. In the following example, the activity promoted children's peer critique to develop their understanding of how to write play scripts for film making.

Children are asked to act out play scripts written by another group of children in the class. The point of the exercise is to judge how well the script is written, including instructions, so that another group can act it out as the authors intended. When asking children to provide feedback on the acting out of scripts he asks children 'what would you do differently if you were to do this again tomorrow?' and 'any feedback?' Using open questions and doesn't seem to be looking for specific answers. Children volunteer a range of criticisms such as 'extend sentences' and 'fill in storyline gaps- show how the character travelled from A to B'. The script authors seem to accept these criticisms when they respond to the teacher's questions about how they would change aspects of the scripts. Children's criticisms also include 'you need to act out and not just say the words' and 'it needs more expression'... One group of boys have embroidered their script and have made it more humorous. The children laugh as it is acted out as does the teacher and the feedback is appreciative. However other children offer some critique 'you're confusing stage directions with being narrator' as one of the boys read out directions instead of narration. At the end of the lesson the teacher says 'you were set up to fail with this activity because you didn't have enough time to write the perfect script but I wanted you to think about what you need to think about when you write scripts for others to use. We have two weeks from tomorrow to make a movie good enough for TV!'

Observation, literacy, School 3

In School 4, children were able to use talk extensively in group activities without teacher regulation. Because they had longer periods of time for conversations to unfold and were not required to be quiet, spirited debates and discussions were able to develop.

Children seem very engaged when writing their scenes and argue and negotiate enthusiastically. They engage in spirited conversation about each scene after it is acted out and the groups who authored the scripts seem excited while they are being acted out.

Lesson observation, literacy School 3

Children in School 4 also used talk to negotiate and evaluate each other's ideas and contributions to activities.

Children are planning the making of their films in pairs about how to use a method of their choice to solve a sum. Children are asked to talk in pairs to decide which method they will use and how they will explain it in their film. FPL and partner (also a girl) chat on-task. Children working in pairs negotiate what they are going to say and how will say what. They seem to largely accept and positively evaluate what each other say but there is also some disagreement. Yet disagreement is resolved positively so that the pairs can move on productively with the activity.

Lesson observation, numeracy, School 3

Children used talk on their own initiative to check their understanding with the teacher. For example, in School 4, they were able to take the initiative to do this by calling the teacher over during individual and group tasks.

A boy asks the teacher for help. He says 'I think I understand it' and talks through what he has done – the teacher confirms that it is right... [later in the same lesson] A girl working with the plastic blocks [to understand proportions] calls the teacher over so she can explain what she has done with the colours mixed. She seems unsure if she has done it right. The teacher takes the cubes and divides into them into two colours to represent what the girl has done but more clearly. The girl seems to understand that what she had done was right.

Lesson observation, numeracy, School 4

Children commented on how the teachers' use of open questions and scaffolding helped them to engage in meaning-making, which was contrasted with teachers providing answers. They appreciated that this positioned them in an active role as learners. The following excerpt also illustrates that this child understands self-regulation and is potentially able to use self-talk to work out a problem instead of asking the teacher for help.

AHJ: Okay and what does the teacher do when, when you ask her?

C2: She tries to explain what it is but she, she asks us questions. . . what she, what she thinks it means so she doesn't just say, let's say if she says what em what's straight, she doesn't say straight like straight but like she says like. . . .

AHJ: Yeah.

C2: She asks us questions, what do you think it is. . . like use different things to describe it and everything.

AHJ: Okay so she doesn't give you the answer she kind of. . . .

C2: Explains it.

AHJ: Helps you to. . . .

C2: Think by yourself, so when if she's doing something else with someone else you don't have to disturb her and not waste her time. You kind of think of the questions she asks of like if you didn't know the . . . you think of say . . . think of the same questions and try and answer them. Child group interview, School 4

Use of cultural tools: technology and autonomy

In School 4, children did use worksheets yet in some lessons these were developed specifically for the lesson by the teacher. In the following example, the teacher used children's previous work to create a resource sheet to use as part of an activity.

The teacher has developed a worksheet specifically for the lesson based on the sheets of sentences children composed during the last lessons. She has taken the 'best' bits from across children's sheets to create a bank of sentences for children to work from today. The intention is for children to use this bank as a scaffold, according to the teacher.

Observation, literacy, School 4

In both schools, children had greater access to information technology including IPads which were used to make films and conduct research on topics chosen by children. Children explained how using iPads enabled them to research information more easily than by using books:

C2: And I like using the iPads to research as well.

AHJ: Okay and what do you like about that?

C2: It's much more easier to research than books because . . . em every half-term when we change our topic [the teacher] gets another piece, piece a load of books about that topic.

AHJ: Okay.

C2: So we've got loads of books about the Tudors but I just find it difficult to find things, let's say if we were doing about clothes like it's hard to find books about clothing when we're doing about one subject loads of people get that book. Child group interview, school 4

Children also reported that using iPads for research, in this case to write biographies of writers, motivated them to take the initiative to broaden their reading by their chosen author.

C2: And then literacy sometimes. . . like once if you look on the wall we did biographies.

AHJ: Oh yeah.

C2: And it was really fun, 'cause we got to do biographies on people who wrote books.

AHJ: Okay, so what did you enjoy about it?

C2: Because we, we got to learn more about people like book writers and, and when you learn more about them you can read the. . . you can read their books.

AHJ: Ah okay so did you do that?

C2: Yeah, it was fun and we went on the iPads to research about them and we did a plan and then we wrote it we did em, we wrote em like the real version.

AHJ: Okay and what then.

C2: And and yeah [the teacher] said that we did it because. . . so it's em . . .more, more people in other year groups who don't know about writers, they'll be able to read them so then they learn more about the writers.

AHJ: Hmm, oh okay, so what do you think of that?

C2: Yeah it's good because it helps people read more and learn more.

AHJ: Hmm, and what did you. . . did you feel that you got something out of it?

C2: Yeah, I think I lear[nt]. . . I read. . . I think like I read more different books and I didn't just stick to like one subject.

Child group interview, School 4

Teacher-child relationships: trust, respect and autonomy

Most of the children interviewed in both Schools 3 and 4 had positive relationships with their teachers. This was with the exception of some of the children in School 4 in relation to their registration class teacher (it was the numeracy and literacy set teacher who took part in this study – referred to as the 'the teacher' in School 4 unless otherwise stated).

In School 4, the positive teacher-child relationships were in part related to the teacher's pedagogical approach in developing a 'partnership' with children and giving them a 'fresh start' to children when they were in their literacy or numeracy sets which she taught.

The teacher says setting has enabled negative behaviour patterns to be broken. One reason is that children with these patterns can develop a positive relationship with a new teacher. Also, she feels she has developed a partnership with children. She gives an example of a boy who arrived in her set tearful and upset due to conflict with peers and the in his registration class teacher. The (numeracy/literacy set) teacher said to him 'you're in literacy now so you can start afresh'. The boy's attitude changed and he is almost never involved in any discipline problems in literacy (he is not in the numeracy/literacy teacher's numeracy set) and has developed very positive relationships with the teacher and peers in his set class.

Interview, literacy/numeracy set teacher, School 4

Some children likened their relationship with the teacher to a friendship, which was based on a strong sense of mutual trust.

C2: And we always know that we can always speak to her like, like. . . .

C2: Like even if we've got any problems or anything, even at home or our maths or something we always know that we can speak to [the teacher]

C2: [the teacher], she makes us feel excited, she makes us feel like we're safe that we can always speak to her, like she's our friend.

Child group interview, mid-attaining, School 4

Children's relationship with the teacher in School 4 was arguably also characterised by the teacher trusting children. This meant that children were very autonomous in their learning in that the teacher allowed them to work in groups without supervision for long periods of time.

Children's relationships with teachers in schools 3 and 4 helped to facilitate self-regulation in that children felt it was desirable for them to behave, and become more like, the teacher. The following interview extract illustrates self-regulation where children have taken on board, to an extent, the teacher's values in what constitutes a 'good' learner. The competence-based aspects of pedagogy in this classroom are also reflected in the children's statement that being a unique, yet responsible, individual constitutes a successful learner.

C2: Like [the teacher] makes us be ourselves and not try to be somebody else. AHJ: Okay.

C2: And she makes us feel like we're proud of ourselves, don't try and copy anybody, like you're born an original don't like

C3: She tries to make us a bit like her because she normally chooses the right choices when she's near us.

AHJ: Can you say that again?

C3: She chooses the right choices and like she's. . . the things that she does, she tells us then she inspires us to do it too.

Child group interview, mid-attaining, School 4

In both Schools 3 and 4, setting in literacy and numeracy helped some children to transform their relationships with teachers and peers. Being taught by a different teacher provided opportunities for a fresh start as illustrated in the following summary from a child group interview:

A boy spoke about how his relationship with his class teacher had improved considerably because of his positive relationship with another teacher who teaches him in one of his sets. Being in this set enabled him to 'turn a new leaf' and develop a more positive relationship with a teacher.

Constraints on choice and decision-making and enabling of initiative-taking

Teachers consciously aimed to create many opportunities for children to make choices and decisions and to take initiatives during lessons in School 3 and 4. This was central to their pedagogical approaches.

I'm the lazy teacher who tries to get the kids to do all the work. So that's my way of thinking of how to come up with more of their learning objectives, of how they can adapt and change it to them....so when I'm thinking of my planning it's sort of a lot of discussion work, a lot of . . hopefully a lot of peer assessment, peer observation, peers. . . working together, discussion work, em and that isn't teacher led I shouldn't be doing all the talking I want to get the kids up the front... If I'm doing a lot of talking I'm doing something wrong. Teacher interview, School 3

T explains that she aims to equip children with various methods to solve problems so that they have a toolkit from which they can choose a strategy. This might be based on methods children like best or feel most confident with. However, she also encourages children to select a method which is the best fit for the problem rather than a strategy a child feels most secure with. She notes that children will often choose a method they feel secure with even if they get the wrong answer. She reflects that children tend to struggle with applying strategies across different contexts. Literacy/numeracy teacher, School 4

However, as in Schools 1 and 2, choice in Schools 4 was seen by as occurring mainly in more marginal learning activities and did not extend to developing learning objectives, which structured learning in all three schools.

C2: Er we... in the Christmas play we chose like which subject we wanted innit, em like we chose the three kings or something like that but we don't really choose our learning objectives because we might... because obviously kids will probably choose something that's easy for them.

AHJ: Okay.

C2: And [the teacher] wants to push us to the limits.

AHJ: Okay.

C2: In a good way though.

Child group interview, mid-attaining, School 4

Yet in lesson observations, children's initiative-taking was encouraged and validated by the teacher. This took the form of children asking questions inspired by their own interests and making suggestions for lesson content or structure. In School 3, children took initiatives during group work to manage and evaluate their group work. For example in the following observation, children were writing play scripts and were clearly intent on completing their task with minimal supervision from the teacher.

The high-attaining focus child's group become very focused and evaluative of their script in the last 10 minutes. One child says to others 'Is this a good title: 'Abandoned House of Horror'?

Observation, School 3, Literacy

Group work in both schools 3 and 4 provided affordances for children to exercise collective learner agency. In School 4, children gave an example of how a class play, written by all children in the class, was inclusive of every child's contribution. This was seen to engender a sense of agency among children in that their creative work was valued. This is also suggestive of the class being constituted as a learner community, from children's perspectives, which is also a pre-requisite for children to exercise learner agency.

C3: And also the play that we did, we did the script ourselves.

AHJ: Okay

C2: Yeah we all writ it like, not everybody was in it, but all of our work was in it. AHJ: Oh really okay.

C2: You could literally . . . whenever someone's work came up they were like yeah that's my work.

AHJ: Okay and what do you think of that?

C2: I think that's quite good 'cause [the teacher] could've just put the people's things that are in the play or not in the play, but she put everybody's in [cross talk] Child group interview, mid-attaining, School 4

Creativity was also valued by children in School 3, when they had the opportunity to express their own ideas through their work.

C1: Miss, I like art because even though I'm not good at it I'm trying to use all my ideas from my head to put it on the page as a drawing so say I'm drawing a Tudor girl and a Tudor boy with the massive dresses and clothes, I just imagine what it would look like, obviously it wouldn't be bright pink but it could be black or purple because they had the . . . the rich people they could afford it.

AHJ: Oh okay.

C3: And also that art expresses how you feel so if. . . if your teacher told you to draw something that he wanted to draw, like if he said draw something of your own, it's, it's just expressing what you're thinking about and yeah.

Child group interview, School 4

Two of the strongest examples across of children taking initiative as learners, across Schools 3 and 4, took place outside of formal lessons. While these examples are not part of teachers' formal lesson pedagogies, they were framed by teachers being supportive and encouraging and providing the material resources children needed to complete their self-initiated projects.

I meet two girls at lunchtime in the playground who offer to sing me a song they wrote for the girls kidnapped in Nigeria [fieldwork took place in 2014, shortly after a high profile kidnaping of over 200 school girls in Nigeria]. They tell me they wrote the song themselves including the melody. I am impressed by how good the song is. One of the girls explains she has a piano at home and that they wrote the lyrics and composed the music on their own initiative. They performed the song for their music teacher at school, who said it was good, and they are now going to perform it with a larger group of children at the Summer Fair.

Notes from informal conversation, playground, School 4

A group five children decided to make a card for their classmate who was in hospital. This had been unprompted by the teacher and was not supervised by him at any time. Most of the activity in making the card took place during break times and children stayed in voluntarily to take part. Each of the five children took on a role: one

leader/co-ordinator and a boy, who was normally marginalised socially in class but who was a strong artist. He was in charge of visual design of the card. It was clear he was a fully accepted member of the group formed specifically for this task. While I watched three of the group working together with coloured cardboard, a variety of coloured pencils and felt tip pens and decorative items, the other two admired his drawings and bubble writing on the card. He also takes his work to the teacher asking him 'is this good?' to which the teacher responds 'yeah' and nods. This boy's body language is significantly different in this role compared with how he usually is in class being far more talkative and animated. The girl in the organiser/coordinator role also clearly enjoyed her role and obviously had keen organisational skills, assigning tasks and resources to other group members.

The activity illuminates the extent of self-regulation in the classroom in that the option of taking part in this highly self-directed activity was open to children and that the teacher trusted them to carry it out in a responsible and appropriate way. Yet the children were also aware that the card would have value outside the immediate group in that the rest of the class and the teacher would appreciate their efforts and the resulting product.

Notes from lunch-time observation in classroom, School 3

This episode also illustrates the formation of a small learner community in which children were accepted and valued by other group members for the skill set they brought to the activity. The (ostensibly temporary) community was generated by the children themselves which clearly involved a degree of individual volition as well as acceptance of each other. This provides empirical support to van Lier's (2008) point that learner's need to be an accepted and valued member of a learning community to be enabled to exercise learner agency.

Frequent opportunities for meaning-making

There were more opportunities for meaning making in Schools 3 and 4, in comparison with 1 and 2, because children had far more opportunities for engaging in discussions with peers and the teacher. The quality of the talk was also more mutual in that children could make lengthier and more original contributions to discussions, which were valued and built upon by teachers and peers.

The following except from a literacy lesson in School 4 provides a powerful example of how whole class discussion engendered meaning-making. The children's responses to the teachers' questions were built upon by other children and the teacher to develop new shared meanings.

The teacher explains that Ted Hughes wrote the Iron Man to help him understand his mother's death. She asks 'how do you think that works?' and asks children to discuss in pairs. She then asks individual children to feed back their thoughts to the whole class. At least half of the class have their hands up. The first one says 'I think he [the main character?] is saying to the child that your mother has a soul so she will live on'. The teacher pauses briefly and then says 'I

could cry now'. Another child responds with something along the lines of: 'He is saying that your mother did everything she could when she was here and it's important to remember.' The teacher paraphrases the child's response and says 'fantastic. I hadn't thought of that'. Another child says 'She still lives on in your memory'. The teacher again paraphrases the child's response and says 'this is a lot deeper that I was planning at this point in the lesson.'

The teacher goes on to explain that the film shows rather than describes how people feel and their characteristics. She adds that the film loses the richness of language that is in the book. She asks children to discuss this in pairs. This is followed by another Q and A session. Again, many children have their hands up to respond to the teacher. The teacher's first question is: 'what the purpose of music in the film?' A child responds 'the music gets the speech out' and another answers 'it builds the atmosphere'. The teacher goes on to explain how the camera sweeps up and down the Iron Man in the film to show how big he is. A child adds: 'it shows how he is bigger and taller than a tree'. Another child says 'they are showing the Iron Man through Hogarth's eyes.' The teacher responds 'yes! They're filming up so you feel what it would be like for Hogarth.

The teacher asks children to discuss with their neighbour how the film shows time passing or how the film shows how they feel. After discussion the teacher asks children to share with the rest of the class. A child says 'In some films they show the seasons change or a clock going fast to show time'. Other children suggest:

'Through songs – if it goes de-de-de you know what they feel – happy notes or sad notes. 'When they're shouting you can see they are angry'

The teacher says: 'yes, you can see these things. But when Ted Hughes wrote he has to use language to describe. He doesn't say 'he was sad' – he shows in writing rather than says it. He never actually tells us.'

A child says: 'I agree with [the name of another child in class] that in the book he needs to persuade harder because the film just has to show'. Other children give further examples of how the film shows things. At one point the teacher says 'yes, the film showed the robot looking kind, if that's possible. They showed it in an appealing light.'

The teacher asks the class: 'how does the film and book use humour? I laughed several times in the film but I didn't in the book'.

Child: 'The film doesn't want us to be too sad'

Teacher: 'Yes, it's to lift the atmosphere. It's also to manipulate you in to getting involved'. Child: 'it would get boring if it was all sad'

Teacher: 'Yes! If we were sad all the way through you would stop feeling sad but if we laugh, we feel more sad when the sad bits happen.'

The teacher goes on to explain how the book also manipulates the reader to change their experience. She describes this as an 'emotional roller coaster'.

The teacher says to the class after the discussion: 'I thought I'd be telling you a lot of this but you have told me! You watch a lot of TV and have analysed it, so you have a lot of experience in this'

Literacy lesson, higher set, School 4

Meaning-making was also facilitated by the teacher validating and encouraging children's 'youngster language' when in literacy lessons. In the following example, children used their

'youngster language' (as they described it) to write poems, which helped them to understand the language features of poetry:

C2: I know, we speak like youngster language like we don't speak like all posh like adults do, we speak like innit and like all of that, like basically slang. . . .

C3: I do, and we made up our poems a bit like this

AHJ: So did it help you to understand the poems?

C3: Yeah we understanded the way . . . the structure [cross talk], yeah we understood the structures of it 'cause there's like four different poems.

Group interview, mid-attaining, School 4

Opportunities for meaning-making were also enhanced in School 4 through the teachers' use of life experiences in lessons to illustrate a concept. In the following extract, the class were discussing the idea that 'things are not always what they seem' in relation to the Iron Man novel and film. Here, the teacher used examples from her own life about how experiences as part of adulthood can change people, in this case, through experiences of fear and other emotions. This provides an opportunity for children's meaning-making to be enhanced through the teacher modelling how her existing experience can be used to understand literature.

A girl has her hand up and when selected days 'Hogarth is good because he didn't know if Iron Man was good or not but he still made a sacrifice'. The teacher responds 'Yes, Hogarth doesn't have fear like adults have'. She goes on to give an example from her own life in that she developed fear of flying after she had children. She goes on to talk about how she changed after having children and she recently cried at her son's guitar concert at school. The children laugh a bit and she says 'you will too [when you have kids'. She makes several other humorous comments. Lesson observation, literacy, School 4

In School 4, children described how 'acting out' playscripts and stories helped them to develop 'insider' understandings of, for example, how life might have been in an historical period by using imagination.

C2: And we had to like act out how it would be in that time, like we had. . . like a king, there was a king, then there was the maid, then there was the queen, all of that. AHJ: Okay.

C3: And when we. . . .

C2: We had to imagine how it was though.

AHJ: Okay, so can you tell me a bit more about that, what did you do?

C2: Like when we were the queens all the girls had to curtsey.

C2: And the, and the er king stood. . . stand up tall.

C2: And he was like, like looking at all of us.

C2: And we had to curtsey to him, it was really fun.

C1: And er when you read the book sometimes you're not actually inside the book, because you've got to imagine you're inside the book but like during the play you're actually inside the book, like you're actually a character.

Group interview, mid-attaining, School 4

Children's positive relationship with the teacher in School 4 and the teachers' pedagogical practices of not reprimanding children when they were struggling or had not completed a task, enabled children to engage in meaning-making sessions with the teacher. In the following example the teacher used a combination of scaffolding and alternative cultural tools (plastic blocks rather than words) to enable the child's meaning-making.

At the end of the lesson the teacher stays behind with one of the boys who is struggling. She demonstrates how ratios can be scaled up and down using plastic blocks. She ays to the boy 'you know this — we need to use the information we already have to judge whether it is right or not'. The boy seems upset and edges away from the teacher. The teacher says 'sit down' in a friendly tone and says 'it's sometimes difficult to understand maths with words and that's why we use blocks.' The boy eventually understands and writes in his learning log. T says 'that's clear now, it's worth doing.' T spends about 10 minutes with the boy on writing in his learning log. Lesson observation, numeracy, School 4

In School 3, children described how the teacher's pedagogical practices, where he modelled ways of learning and approaching tasks, helped them to build on their existing understanding in order to tackle more difficult tasks. This was also helped by the learning topics being of interest to children, which enabled to them to continue to engage and develop their knowledge and skills. The following quote is typical of children's attitudes to learning in School 3.

C1: ... I think [the teacher's] really fun because, because em, because sometimes he lets, he lets us go out for break early and em he always chooses the funnest topics for us to do like em some of my favourite topics that we done in history was em the World War One, not World... World War Two em and we em also done something about water, we done facts about water and I think it was in year four and three that we done the ancient Egyptians and the Romans which was really fun and we're still learning about them now because I really like, and I, and I really like the like the history of like in the years of BC and BCA and stuff like that and it's really fun to learn about all that stuff with [the teacher] because he makes it all easy and then, and then we go onto like harder stuff. And it makes us, it makes it easier for us because we've done easy tasks and then we know what to do and perfectly to do for the hard stuff.

AHJ: Okay, so what helps you? What is it that you do em that helps you to understand?

C1: Well sir normally shows us a video or goes on Wikipedia or em shows us pictures of what we don't understand and then he tells us the words that we don't understand because em sometimes he would read a book or something and I wouldn't understand a word and he would tell me what it meant and how to say it properly and em he writes it on the board like when I

was in digital leaders today he was telling me how to upload my videos to YouTube to put it onto the QR code and em it makes it a whole lot easier for someone to show you how to do it and then you could get onto . . . and then you could do it as well and show other people how to do it.

Child group interview, School 3

Engagement with learning

In Schools 3 and 4, children generally had positive attitudes towards most subjects, although most had a preference for 'topic' (e.g. history, science) or art. This was due to the nature of activities which involved drawing, site visits and handling, interacting with or viewing cultural artefacts or natural objects.

Er we're studying the Tudors and we've been on quite a few trips to learn about the stuff like artefacts, we've been to Queen Elizabeth's hunting lodge which I enjoyed and we got to see how the houses were made, we got to em see reindeers and all that type and the, about the horns Child group interview, School 4

Similarly to Schools 1 and 2, lower attaining children found core subjects, literacy and numeracy more difficult and therefore less engaging.

C1: Sometimes I don't like the times tables because I don't know them well at all, it's like divisions, I don't like divisions.

AHJ: Okay, er why not?

C1: Because I don't really know how to do divisions and it's really boring.

AHJ: Okay, so what, what do you do when you have to do that, when you have to do divisions?

C1: I just em, em ask the, ask the teacher to help me with it.

AHJ: Okay and what does he do to help you?

C1: Like he just tells me how to work the answer out.

AHJ: Okay.

C1: But I don't really get divisions.

AHJ: Okay, so when he tells you how to get the answer, how to work out the answer does that help at all?

C1: No, 'cause I don't really know.

Child group interview, mid and low attaining (C1), School 4

In School 4, the teacher's pedagogical practices of 'acting out' and using props motivated children to be engaged in learning on emotional and intellectual levels:

C2: It's so fun, [the teacher] makes it like. . . really fun.

C1: And funny. . . . [cross talk]

AHJ: So she acts it out?

C2: She makes maths fun, she makes all the lessons fun. Like em sometimes in literacy we write about fun things like the Gruffalo and cartoons and we watch movies or something.

AHJ: Yeah.

C1: And in maths she bought these capes so then if we forgot to estimate she put these capes on us and we'd pretend to be... the estimate.

AHJ: Oh I see, so those superhero characters on the wall.

C2: Yeah use the power of estimation.

AHJ: Okay, so what's. . . tell me about. . . so you're saying that that's fun.

C2: But we're learning at the same time too.

C1: Yeah we learn and we're having fun at the same time so we don't leave the classroom thinking ah I don't want to come here again this is just boring we can't wait for the next day to come and do maths.

C2: And in maths she, she. . . we had to do this dance we were learning about angles and she was like parallel. . . and we all had to dance to it.

C1: In my old school I used to think our text book work is rubbish, it's boring but when you're here, I don't know it's like magic she makes it fun.

Group interview, mid-attaining, School 4

The teacher in School 4 noted that children were more engaged with learning during classroom discussions but she felt that this did not necessarily translate into written work. She argued that this was problematic because written work was the main focus of summative assessment.

The teacher comments to me after the lesson that the children's engagement and the level of discussions were very impressive. However, she says 'we need to see how this translates into written work which doesn't always happen'. She explains children prefer talking over writing. She explains 'They think that they know it and they know that I know it but they need to realise that their written work will be read by someone who doesn't know that they know it'.

Teacher interview, School 4

Across both schools, engagement through activities using iPads or cultural or natural artefacts, and class discussions, frequently occurred. However, engaging children in writing remained a challenge, perhaps because this was associated with summative assessment and a more performative teaching and learning agenda.

Children's positioning in relation to gender and social class: enabling, constraining and deficit discourses

In School 3, children were at times positioned as learners in terms of their gender. While all children were apparently given equal amounts of autonomy when carrying out pair and group tasks which they managed themselves, girls were sometimes constrained more than boys. During the activity where children made films about how to use a method for solving sums of their own choice, girls' capacity for exercising agency was constrained whereas for boys' agency was enabled. The girls attempted to gender their film by making a statement that

maths can be feminine and 'fun', yet they were discouraged from this feminisation. This arguably also detracted from their sense of ownership of the film and producing positively gendered learner identities in relation to numeracy.

A pair of girls have written their names in attractive writing on their mini WB for filming and one of them and has drawn lots of small hearts around them. The girls plan to film this as the opening scene of the film. However, the other girl looks on, annoyed, saying 'you always have to make something out of it!' but she accepts the drawing. The Teaching Assistant tells the girls to draw maths symbols rather than hearts as that would be 'more appropriate'. The girls wipe out the hearts and draw multiplication, subtraction and addition symbols instead. They carry on with filming and in the last part of the film they exclaim in unison 'maths is fun!'

Boys on the other hand, were encouraged to gender their film by including funny banter whilst explaining and demonstrating their chose method. As previous research in schools shows, such humour is positively valued as masculine (e.g. Hempel-Jorgensen 2015, Pollard & Filer 2007, Walkerdine 1990).

A pair of boys is selected by their teacher to show their film to 'see if it is good enough for YouTube'. The film has a music soundtrack but it is too loud, drowning out some of the boys' talking. On the film the boys banter as they explain their chosen method for solving their sum. The teacher says 'love the banter' but advises the boys to use a Q & A format to make the explanation clearer and to reduce the volume of the music.

Observation, numeracy, School 3

The boys in the class sat together in most lessons in two or three small groups and played football at lunch time, with the exception of one boy who seemed ostracised from the others. His masculinity seemed different to those of the other boys and the teacher in that he did not strive to be a 'joker' (Pollard and Filer 1996) but instead was quiet, often worked with the girls and chose to stay in the classroom during break-times to draw and practice other artistic activities. The teacher allowed this but it was clear that he did not consider this behaviour 'normal' and described him as a 'lonely soul'. The boy sometimes elected to work with boys but in these situations he remained on the edge of the group. His ostracisation was most apparent in a Physical Education lesson where children played a ball game where children had to choose teams. The boys all formed a team with the exception of this boy and he ended up in a group of girls but, again, remained on the periphery of the game. His marginalisation was potentially linked with his masculinity not conforming to an implicit ideal in the class which the (male) teacher and other boys strove to conform to. His artistic sensibility, for example, and his apparent inability to perform masculine behaviours (such as expressing enthusiasm for football) may have positioned him as a less accepted member of the class learner community. This marginalisation potentially contributed to constraining his learner agency as he was often placed as a peripheral participant, on the edge of conversations and team decision-making processes. There was one activity where he seemed to be a fully accepted team member, which was the child-initiated get well card-making for their peer who was in hospital. The boy was responsible for the art work on the card, which in this context

was highly valued by the other team-members and the teacher when he was shown the finished card.

In School 4, where children had a particularly positive relationship with the teacher, this was related to children's perception that the teacher respected and valued their 'youngster' language, which can also be understood as a classed. However, as the following interview except illustrates, while children felt respected by the teacher, the social class difference between themselves, as expressed in their language, and the teacher was highlighted. Children felt that the contrast illustrated that their language was inferior to the teacher's way of speaking.

AHJ: Can you tell me more about. . . can you give me an example of what makes you feel like she's your friend?

C1: The way she talks.

C2: The way she talks, like when we're trying to do something funny she's like 'yeah man go do this, go do that' like she speaks like youngsters basically.

. . .

C2: And miss like speaks like us, she's like 'I don't git it, I don't git it', she speaks like us.

AHJ: Okay.

C3: We don't laugh when we speak like that when she does it it's funny because adults don't usually talk like that because we are used to her talking normally and it just shows that you're not meant to speak like that.

C2: I know, we speak like youngster language like we don't speak like all posh like adults do, we speak like 'innit' and like all of that, like basically slang. . . . Group interview, mid-attaining, School 4

A deficit discourse about children did form a part of teachers' perceptions of children in both schools, despite the largely positive relationships both teachers and children experienced. In School 3, the teacher spoke of the class as being 'flat' and 'unexcitable' in that they lacked the enthusiasm he would expect in children's responses to his pedagogical practices. This was related to his judgements of children's 'ability' and personality or character. He described children in terms of their individuality, commenting upon whether they 'stood out', or were unremarkable. Existing research on competence-based pedagogies, the ideal learner is usually male and is an active learning who is funny, 'bright' and creative (Bernstein 2000, Walkerdine 1990, Hempel-Jorgensen 2015). Few of the children seemed to meet these criteria in this teacher's class and this was related to their personality characteristics. He did comment on the brightness of one child, which was framed in terms of an innate characteristic.

T: [Mid-attaining focus child] is a usual boy, his writing needs to be worked upon. But y'know again there's nothing, I'll be rude nothing special. . . . or outstanding about him. AHJ: So he's quite an average. . . .

T: Yeah he's one of the . . . that you don't really spot in the day, obviously your very lows, your very highs, your very naughties, or your very clever, talkatives Just one of the blend in ones that you have to keep an eye on ... Because he falls through the gaps. And the [high attaining focus child], she's naturally very bright.

Teacher interview, School 3

In School 4, where pedagogy was more performative than at School 3, children were also referred to in deficit terms at times. While children were in many ways successful in behaving like self-regulated learners, the teacher described the three focus children in terms of the ways in which they did not quite succeed in self-regulation.

The teacher describes the three focus children to me [no low-attaining focus child in this school]:

- High-attaining focus child: She is 'bright' but uses questions as delaying tactics and to gain attention. She is needy because [of her home background](details redacted to maintain confidentiality)
- Mid-attaining focus child: Asks lots of questions but they don't seem to move her forward in her understanding she tends to ask the same questions and to want the 'right' answers
- Mid-attaining focus child: He doesn't like asking questions, he waits for me to look at his work

Notes from informal conversation with teacher, School 4

All three children were seen to have not learnt aspects of self-regulating behaviour such as using questions judiciously and taking responsibility for seeking the teacher's support only where necessary. They were also seen to lack the self-control or understanding of how to use questions to further their learning most productively. In the case of the high-attaining child, this was directly linked to her home background and potentially her social class.

Discussion & conclusions

This project aimed to answer the research question: What is the nature and extent of children's capacity to exercise learner agency in urban primary schools located in disadvantaged contexts? The research set out to answer this question by collecting and analysing data from four Year Five classrooms in schools with varying levels of socioeconomic disadvantage in children's households (ranging from 27-65 percent of children eligible for Free School Meals).

The project provides new empirical evidence about the nature and extent of children's learner agency in disadvantaged urban primary schools which has led to the development of theoretical understandings of learner agency in such contexts. The data suggests that learner agency is constrained and enabled in complex ways, which depend on teachers' pedagogical practices. This extends existing contemporary research on children's agency in such contexts (e.g. Youdell 2006, Reay 2006, Arnot and Reay 2006), which has mainly focussed on

children's agency in relation to their social and learner identities (e.g. in relation to gender, ethnicity and social class) and the effects of this on their positioning as learners (e.g. whether seen as 'good' or 'unacceptable' learners). Other research suggests that learner agency in schools with disadvantaged intakes was likely to be more constrained due to teachers' and children's preoccupations with discipline and 'keeping your head down and do as you're told' to stay out of trouble (Hempel-Jorgensen 2009; Lupton & Hempel-Jorgensen 2012). This project has taken a new theoretical approach to researching agency in disadvantaged schools, drawing on sociocultural theory to develop understandings of *learner* agency in disadvantaged contexts. This is distinct from (though overlapping with) children's agency in relation to developing social and learner identities. The project also contributes significantly to developing sociocultural understandings of learner agency (van Lier 2008, Rogoff 2008, Bruner 1996, Blair 2009) by identifying how it is constrained and enabled in relation to Bernstein's (2000) modes of pedagogy.

The findings also enable new understanding of how teachers blend performative and competence pedagogy in practice in contemporary schools and what the consequences are for children's capacity to exercise learner agency. Bernstein's theory of pedagogical modes posits that performative and competence-based pedagogies sit at either ends of a continuum and that in practice they are likely to be combined. The analysis suggests that even in a highly performative pedagogy, children can also be judged in accordance with perceptions of innate characteristics associated with gender, social class and ethnicity, which is commensurate with competence-based pedagogy. This indicates that elements of competence-based pedagogy may have influence on teachers' perceptions of children, even when highly performative pedagogies are used. This corroborates Hartley's (2009) argument that child-centred education, as a form of competence-based pedagogy, is still considered an ideal and desirable form of pedagogy.

Pedagogical modes in 'disadvantaged' schools

The data from this project confirms and further contributes to existing research, which found that pedagogy in disadvantaged schools can be highly performative in response to pressures that are particularly acute in such schools. These include the pressure to raise attainment due to high-stakes testing at school level and many children's low prior attainment. It also includes the perceived need to focus on discipline due to higher rates of behaviour which are considered to be unacceptable (Luton and Hempel-Jorgensen 2012; Hempel-Jorgensen 2009; Lupton 2006). On the one hand the data suggests that in the school with the highest proportion of children from low socio-economic homes are likely to experience the most performative pedagogy. On the other, it is apparent that in slightly less disadvantaged schools, though still with well above average proportions of children eligible for Free School Meals, teachers use more competence-based pedagogy where there is greater opportunity for children to exercise learner agency. This is because competence-based pedagogy allows greater learner autonomy. Although as the analysis shows, this may apply to some learners to a greater extent. For example, in School 3, this applied to boys who conformed to a particular form of masculinity.

Despite the differences, pedagogy in all four schools was framed by targets and objectives in the English National Curriculum (pre-2014) and attainment benchmarks set by government and judged by OFSTED. All schools used setting in Year Five for numeracy and literature, where children were taught in lower, middle and higher sets according to attainment in tests. It is worth noting that while the school with academy status was exempt from following the National Curriculum, they still used the objectives alongside 'schemes of work'. This meant that the curriculum, which teachers mediated in the four schools, was similar, and that children were compelled to meet similar targets and objectives.

Pedagogical modes and learner agency

The findings suggest that elements of both performative and competence-based pedagogy can act to constrain children's capacity to exercise learner agency. While learner agency was generally more constrained in classrooms where performative pedagogy was dominant, elements of competence pedagogy were associated with significant constraint on children's learner agency - albeit in different ways.

Despite the common external requirements in terms of curriculum and 'standards', there were significant differences in how teachers mediated the National Curriculum. The most pronounced difference was between Schools 3 and 4 in comparison with Schools 1 and 2. In School 1, and to a slightly lesser extent in School 2, pedagogical practices could mainly be described as performative. However, there were elements of competence pedagogy in School 1, in particular. The teacher wanted to use competence-based pedagogy but felt unable to as she perceived the children as incapable of self-regulation, due to their social class and ethnic background. Her judgements about children in her class were based on what she saw as innate differences that characterised their competencies and potential to be self-regulating learners. Such a view is commensurate with Bernstein's (2000) competence pedagogy, where children are judged according to perceived innate characteristics. This suggests that while most of her pedagogical practice could be characterised as performative, her perception of children remained influenced by a competence-based model.

In School 3, and to a lesser extent, School 4, competence pedagogy was more dominant. In both these schools children were expected to be self-regulating learners and teachers' pedagogies were based on this principle. There were less explicit rules for children's conduct and they were offered far more active roles as learners. These pedagogical features were achieved by the teacher allowing children greater opportunities for unregulated talk (mainly in School 3) and whole class discussions (especially in School 4). Yet children in School 3 were affected by competence pedagogy in a similar way to School 1. Here, the active, self-regulating, intellectually 'able' and 'interesting' boy learner was implicitly privileged as an ideal learner type. The boys who most closely emulated this ideal learner were afforded greater opportunities for learner agency in contrast to girls and one particular boy. This was expressed most clearly in a numeracy lesson where children made films about using strategies for solving equations. While children were given significant autonomy in their film making, a pair of girls was observed being told by the Teaching Assistant to erase their feminising of the film (they had drawn hearts on the white board alongside the equation they were demonstrating).

With performative pedagogy, learner agency was constrained by stronger teacher regulation of children's talk resulting in significantly reduced opportunities for children to talk freely with peers and teachers. In School 1 in particular, this minimised opportunities for meaning-making and knowledge construction. In Schools 3 and 4 there were many more opportunities for children to engage in discussion with the teacher and peers, and therefore more legitimate opportunities for meaning-making, which were valued, and built upon by the teacher and peers. This was in part because of the lack of focus on discipline and the relatively successful display of self-regulated behaviour and learning among children. It could be argued that self-regulation, and the underlying compliance with teacher expectations, was due to the largely positive nature of the relationships in the classroom. The trust teachers invested in children, for them to exercise autonomy in a variety of ways, was fundamental to the positive nature of relationships. This was compounded by the value and respect teachers showed towards children's social class and ethnic identities, although this applied most strongly in School 4.

In some respects, affordances for children to exercise learner agency were more frequent in the competence-based classrooms where children had greater autonomy, were more engaged in learning activities and were able to take more initiatives. On the other hand, self-regulation is also an invisible form of control (Bernstein 2000), where children take on and internalise the values of the teacher (Vassallo 2011). They are required to do so, in order to be recognised as a good learner. This raises questions about the relationship between selfregulation and learner agency and where the former ends and the latter begins. Arguably, in Schools 3 and 4, while children often successfully displayed self-regulated behaviour, they were also afforded opportunities for exercising learner agency. This is because the trust and autonomy, which are integral to self-regulation, opens spaces for children to take initiatives and be creative. Nevertheless, self-regulation may have a constraining effect on these spaces as there may be certain ways in which children are legitimately allowed to be agentic. This is likely to be related to the effect of dominant discourses about gender, ethnic and social class and how these inform teachers' judgements about desirable behaviour in a classroom. Learning behaviours can therefore be seen as classed and gendered where being a sensible, active learner with a degree of self-control can be constructed as a middle class, male ideal (Vassallo 2013, Walkerdine 1990). In the case of School 4, children were consciously aware that they needed to behave like the teacher to be 'good' learners. They felt that this was possible, arguably because she validated their identities at the same time as promoting ideal, self-regulated learner. Some children in School 3 may have felt less successful in approximating a self-regulated learner as the teacher implicitly seemed to promote a masculine ideal learner. Because this ideal learner was seen as active and innately 'able', lower attaining girls, in particular, struggled to be seen as successfully self-regulating learners.

Engagement, alienation and learner agency

Existing research suggests that children in disadvantaged schools are more likely to be disengaged and alienated from learning at school because of the nature of the curriculum (Thomson 2010) and school knowledge (Apple 2013; Whitty 1985; Anyon 1981). Other research argues that for children to be engaged with deep learning, they need to be engaged

on affective, intellectual and operative levels (Munns et al 2013). At the outset of this project, it was hypothesised that disengagement and alienation are inextricably intertwined with learner agency. This is because engagement with learning is a pre-requisite for children to exercise learner agency (van Lier 2008). This project provides further insight into children's engagement because it suggests that it is indeed closely linked with children's capacity to exercise learner agency and engage with meaning-making and knowledge construction.

Most children across the four schools felt more engaged with learning when it involved interactive activities using natural and cultural artefacts, technology and talk with peers or teachers. This was in contrast to writing which children and teachers reported as being less engaging for children. For lower attaining children, it was highly disengaging. In sociocultural terms, this suggests that certain cultural tools facilitate engagement and meaning-making, and hence learner agency, to a greater extent than others. There was a significant contrast in children's sense of agency when, for example, using iPads, dissecting a flower or engaging in discussion with peers and the teacher in comparison with handwriting on a worksheet or in a book. This is arguably because the latter activity types are usually connected with more tightly framed activities such as completing worksheet activities or other heavily prescribed activities. In contrast, using iPads for research or film-making, or engaging in a discussion comparing a film adaptation of a book with the book itself were less tightly framed and enabled children greater autonomy, meaning-making and initiative-taking. This is supported by emerging findings from research into the effects of mobile technology use in schools. However, technology use in itself does not necessarily engender greater learner agency – it needs to be embedded in pedagogical practices in which children are afforded opportunities to be agentic (e.g. Falloon 2015) While many children saw handwriting as disengaging and limiting of their agency, other children expressed a desire to engage in creative writing activities where they had free choice of topic. Some children suggested they would choose topics which had emotional significance through which they could express their personal thoughts and feelings.

Pedagogical relationships and learner agency

The findings in this project suggest that friendship and positive peer and teacher-child relationships were vital to enabling children's capacity to exercise learner agency. When children were allowed unregulated talk with peers they considered to be friends - as opposed to a child selected by the teacher to encourage 'good' behaviour (as seen in School 1) – the resulting quality of talk was more likely to engender meaning-making. The same applied in relation to talk between children and teachers, with whom they had a positive relationship. This is because meaning-making requires talk between peers or an 'expert other' (Bruner 1990) and it seems that there needs to be a positive social connection for this to be effective. This extends existing literature on the role of talk in learning (eg. Littleton & Mercer 2013; Alexander 2008) by highlighting that the nature of the social relationships is fundamental for high quality talk to emerge. The nature of these relationships is closely tied to teachers' perceptions of children's ethnic, social class and gender identities and the extent to which they validate and accept them as integral to the learning community. For example, the teacher in School 4 achieved this by using 'youngster language' in her teaching and validating

children's use of this language in learning activities (for example, in supporting children in successfully understanding the structure of poems).

The finding that peer relationships are important for producing high quality talk has implications for how teachers manage perceived discipline problems. In School 1, boys were seated next to girls as the teacher believed this would minimise behaviour related disruptions in lessons. In this classroom, discipline was a key focus, as part of the overall performative pedagogy. Yet because there was social rift between boys and girls in this class, this seating arrangement had a significantly negative impact on the quality of talk between children. This was because children were most often only allowed to talk to their 'partner' who sat immediately beside them.

Choice, decisions, taking initiatives and learner agency

Van Lier (2008) and Blair (2009) hypothesised that choice and taking initiatives are central to learner agency. The teachers in Schools 1 and 2 felt unable to give children much choice in lessons due to the constraints of having to teach according to the National Curriculum. In Schools 3 and 4, choice was valued more highly by teachers although children in both schools did not feel they were able to make choices in most lessons. This was because children perceived any apparent choices offered by teachers to be 'non-choices' as the options did not represent their interests. From observations, it also seemed that choice and decision-making were confined to margins of the school day or during less 'important' lessons such as art – although even here, children's choice-making was often constrained. In Schools 1 and 2, where performative pedagogy dominated, children were also discouraged and even prevented from taking initiatives.

However, children did take initiatives of a subversive nature, taking the form of jokes or humorous and creative contributions to learning activities. In taking these initiatives, children used their sophisticated knowledge of language – ostensibly gained from literacy lessons focussed on the 'technical' aspects of literacy – in creative ways. While their efforts were not appreciated or condoned by teachers, their peers clearly valued them. In School 1, these linguistic initiatives were particularly subversive of the teacher's authority, her claim of superior knowledge and her deficit perceptions of children's social class and ethnic backgrounds. In two episodes during the period of observation in the school (3 days), children directly challenged the teacher's practices as racist. These initiatives were closed down by the teacher who took a highly defensive position against her behaviour being seen as racist. This meant that potentially powerful opportunities for debate and discussion about the nature racism – which was clearly a topic of interest and pertinence to children - were shut down.

Children in Schools 3 and 4 also did not feel that choices were available to them on a regular basis. In a similar way to children in Schools 1 and 2, children felt that options were too teacher-defined and that the choices that would really matter to them were not made available to them. These include choices about topics to learn about and how decisions were made in lessons. However, there were frequent opportunities for taking initiatives in both schools, through classroom discussions and autonomous group work, as discussed above. Children did

seem to value and capitalise upon these opportunities although the extent to which they translated into enabling their capacity to exercise learner agency is less certain.

Conclusion

The findings from this project confirm and extend existing research which suggests that teachers in schools in socio-economically disadvantaged contexts are prone to adopt highly performative pedagogy. Moreover, the findings highlight the consequences of this performativity for children's capacity to exercise learner agency in order to engage in meaning-making and knowledge construction. In the schools characterised by the most performative pedagogies, opportunities for meaning-making were significantly reduced and children had to create such opportunities for themselves by resisting the teachers' strong regulation of classroom talk. While such resistance did enable some children to exercise learner agency, children's capacity to exercise learner agency was greatly reduced, for most children for the majority of lesson time. Yet in other schools, where pedagogical practices were more competence-based, children enjoyed greater autonomy and positive relationships with teachers, characterised by reciprocal trust and respect. This enabled them to exercise greater learner agency through heightened engagement with learning activities and topics and abundant opportunities to engage in talk with friends, which created opportunities for meaning-making. Significantly, children's talk and their original contributions to discussions were not only allowed by teachers but were also valued and built upon dialogically in the classroom learning community. Perhaps most importantly, children's learner agency in the school (School 1) where the teacher had deficit perceptions of children's ethnic, social class and gender identities was most highly constrained. Conversely, where children's identities were validated and accepted (School 4), children's learner agency was enabled to a significantly greater extent. This suggests that teachers are able to employ pedagogical practices to enable children's learner agency in contexts characterised by relatively high levels of socio-economic disadvantage. The pressures caused by such disadvantage therefore do not necessarily lead to employing highly performative pedagogical practices. This arguably suggests that school leaders and teachers may have sufficient agency to make a significant difference to children's capacity to learn effectively through engaging in meaningmaking and knowledge construction.

The project findings also extend our understanding of Bernstein's theory of pedagogical modes and sociocultural theory of learner agency. They develop understanding of how and why teachers use and combine these two modes of pedagogy and how that contributes to constraining and enabling children's capacity to exercise learner agency. The data analysis also developed an understanding of the range of factors which impinge on children's capacity to exercise learner agency. These include: opportunities for high quality talk with the teacher and peers where relationships are positive and which engender meaning-making; autonomy in managing and carrying out learning tasks; intellectual and emotional engagement with learning activities and topics; being allowed to take initiatives and make original contributions to learning activities which are valued; and the extent to which children's ethnic, social class and gender identities are validated and accepted. These findings make an

important contribution to academic research and knowledge about learner agency and pedagogy in low socio-economic areas as well as pedagogical practice in such contexts. The following section outlines an agenda for further research and pedagogical practice.

Recommendations for further research

The findings from this project lead to identifying three key areas of future research. These topics could be taken up in research by academics and other researchers as well as teachers in practitioner research projects.

- The nature of talk and its relationship with learner agency. Talk emerged as a powerful theme and enabler of learner agency in this project. However, to understand the relationship between modes of pedagogy, talk and learner agency a study focussed closely on these relationships and which captures a wider range of detailed conversations (perhaps using video or audio recording) would be highly beneficial. Such research could focus on the nature of talk arising in different pedagogical conditions and socio-economic contexts. It could also aim to understand deeper understanding of the relationship between the quality of talk, learner agency and meaning-making. This would contribute important understanding of potential inequalities in terms of deep learning, meaning-making and knowledge construction. This could potentially provide evidence to shift the focus on educational inequality away from attainment in tests.
- The relationship between autonomy, self-regulation and learner agency. In Schools 3 and 4, children had considerably more autonomy as learners and were able to take initiatives as learners and were presented with further opportunities for meaning-making. However, the extent to which this enabled their learner agency is less certain due to the nature of self-regulation, which dominated pedagogy in these classrooms. Future research could focus on developing understanding of the relationship between these three pedagogical features and shed further light on the implications for learner agency.
- Identity dimensions, inequalities and learner agency. The findings suggest that children's capacity to exercise learner agency is unequal not only between schools with contrasting socio-economic in-takes but also according to children's ethnicity and gender. Future research needs to investigate the impact of these identity dimensions, and teacher's understandings of them, on children's capacity to exercise learner agency. Such research could focus on how teachers' perceptions of children's gender, social class and ethnic identities and how these inform their pedagogical practices in relation to learner agency, to further develop theory in this respect.

Recommendations for practice

The research findings from this project suggest that for teachers to successfully enable children to exercise learner agency for meaning-making, they need to use a combination of pedagogical practices. Learner agency is complex and depends on a range of factors and it is therefore likely that a range of practices throughout the curriculum on a regular basis are more effective than standalone activities.

The following recommendations can be made on the basis of this research project:

- To effectively enable children to exercise learner agency, children need to feel they are accepted and valued as part of a learning community. Teachers and children's relationships with each other are central to forging such a community and the project findings suggest that mutual trust and respect are an important part of these relationships. Trust is a prerequisite to enabling children's autonomy as learners and respect is essential for their ethnic, gender and social class identities to be valued and accepted on an equal basis with others in the classroom and school.
- For choice to act as a genuine enabler of learner agency, children need to be able to choose from options which reflect their interests, experiences and concerns, as far as possible. This applies to topics which children learn about and the way in which these topics are taught. Children may be interested in a topic but may feel disengaged and demotivated by the way they are being taught (see example of art lesson in School 1). Teachers might also find new ways of valuing original contributions from children even when they are subversive of their authority.
- For children to exercise learner agency, teachers can allow children to engage in sustained discussions with peers about topics they feel emotionally and intellectually engaged with. Children are likely to need guidance and intervention from teachers on how to engage in exploratory and dialogic talk as it often does not emerge spontaneously. Research suggests that children and adults need to learn how to engage in high quality talk, which can enable collaborative meaning-making.
- Children can be allowed to have greater autonomy as learners and if so, may be in a
 better position to exercise learner agency. Autonomy can be conferred to children so
 that they can manage larger chunks of time and decide where and with whom they
 work.
- Children's learner agency can be enabled by making greater use of cultural tools.
 These include mobile technological devices such as tablets and group or class discussions between children and teachers. To effectively use cultural tools to increase learner agency, these need to be embedded in pedagogical practices which

allow children to make genuine choices and decisions, take initiatives and to be creative.

- Teachers need to develop ways of engaging children on affective and intellectual levels with handwriting. Some children, across the four schools, expressed a desire to write about topics which they had chosen and which had emotional resonance for them.
- With all of the above recommended strategies, it is essential that an inclusive approach is taken. This means valuing the initiatives and original contributions from all children. Teachers may need to critically examine their own stereotypes of children from minority ethnic groups and working class backgrounds to ensure their pedagogy is genuinely inclusive. Children from these groups have been found to be marginalised and discriminated against in a wide range of educational research.

References

- Ahearn, L.M. 2001. Language and agency. Annual Review of Anthropology. 30: 109-137.
- Arnot, M. and Reay, D. (2006) The framing of performance pedagogies: pupil perspectives on the control of school knowledge and its acquisition. In H. Lauder, P. Brown, J. Dillabough & A.H. Halsey, *Education, Globalisation and Social Change*. Oxford: OUP.
- Alexander, R. (2008) Essays on pedagogy. Abingdon: Routledge
- Anyon, J. (1980) Social class and the hidden curriculum of work. Journal of Education, 162, 1, pp 67-93.
- Apple, Michael. 2011. Education and power. Third edition. New York: Routledge.
- Bernstein, B. (2000) *Pedagogy, symbolic control and identity: theory, research and critique*. London: Rowman & Littleman.
- Blair, D. (2009). Learner agency: to understand & be understood. *British Journal of Music Education*, 26: 2, 173-187.
- Brooker, L. (2005). Getting it right: Supporting children's personal, social and emotional development in the primary years. In A. Burrell & J. Riley (Eds.), Promoting children's well-being in the primary years (pp. 34–43). Stafford: Network Educational Press.
- Bruner, J. (1996) The Culture of Education. Cambridge, MA: Harvard University Press.
- Bruner, J. (1990) *Acts of meaning. Four lectures on mind and culture.* Cambridge, MA: Harvard College.
- Craft, A., T. Cremin, P. Burnard, T. Dragovic and K. Chappell. 2012. Possibility thinking: culminative studies of an evidence-based concept driving creativity? *Education* 3-13, 41: 5, 538-556
- Feagin, JR, Vera H, and Batur P (2001) White racism: the basics. New York: Routledge.
- Faloon, G. (2015) What's the difference? Learning collaboratively using iPads in conventional classrooms. *Computers & Education*, 84, pp. 62-67
- Flick, U. (2009) An introduction to qualitative research. 4th ed. London: Sage.
- Francis, Becky, Christine Skelton and Barbara Read. 2013. *Identities and practices of high achieving pupils: negotiating achievement and peer cultures*. London: Continuum Books.

- Gillborn, David and Deborah Youdell. 2000. *Rationing education: policy, practice, reform and equity*. Buckingham: Open University Press.
- Haberman, M (1991) The pedagogy of poverty vs good teaching. *Phi Delta Kappan*. 73:4, 290-94.
- Hartley, D. (2009). Personalisation: The nostalgic revival of child-centred education? Journal of Education Policy, 24, 423–434.
- Hayes, D., K. Johnston and A. King. 2009. Creating enabling classroom practices in high poverty contexts: the disruptive possibilities of looking in classrooms. *Pedagogy*, *Culture and Society*, 17:3, 251-264.
- Hempel-Jorgensen, A (2015) Working class girls and children-centred pedagogy: what are the implications for social justice? *International Journal of Sociology of Education*.
- Hempel-Jorgensen, A. (2009) The construction of the 'ideal pupil' and pupils' perceptions of 'misbehaviour' and discipline: contrasting experiences from a low-socio-economic and a high-socio-economic primary school. *British Journal of Sociology of Education*. 30:4:438-448.
- Hobbs, G. and Vignoles, A. (2010) Is children's Free School Meal 'eligibility' a good proxy for family income? *British Educational Research Journal* 36, 4.
- Holland, D., W. Lachiotte, D. Skinner, C. Cain. 1998. *Identity and agency in cultural worlds*. Cambridge: Havard University Press.
- Ivinson, G. & Duveen, G. (2006) Children's recontextualisation of pedagogy. In R. Moore, M. Arnot, J. Beck & H. Daniels (Eds.) *Knowledge, power and educational reform:* applying the sociology of Basil Bernstein. Oxford: Routledge
- Johnston, K., and D. Hayes. (2007) Supporting student success at school through teacher professional learning: The pedagogy of disrupting the default modes of schooling. *International Journal of Inclusive Education* 11, no. 3: 371–81.
- Langford, R. (2010). Critiquing child-centred pedagogy to bring children and early childhood educators into the centre of a democratic pedagogy. Contemporary Issues in Early Childhood, 11, 113–127.
- Lave, J. & Wenger, E. (1991) *Situated learning: Legitimate peripheral participation*. Cambridge: CUP.
- Littleton, K. and Mercer, N (2013) Interthinking: putting talk to work. London: Routledge.

- Lupton, R. and Hempel-Jorgensen, A. (2012) The importance of teaching: pedagogical constraints and possibilities in working class schools. *Journal of Education Policy* 27:5: 601-620.
- Lupton, R. (2006) Schools in Disadvantaged Areas: Low Attainment and a Contextualised Policy Response. In H. Lauder, op. cit.
- Maguire, M. (2010) Leaving school and moving on: poverty, urban youth, and learning identities. In C. Raffo, A. Dyson, H. Gunter, D. Hall, L. Jones, A. Kalambouka, *Education and Poverty in Affluent Countries*. Routledge: London.
- McCormack, R and Murphy, P. (2008) Curriculum: the case for a focus on learning. In Murphy, P and Hall, K. *Learning and practice: Identity and agency*. London: Sage.
- Mills, C. and Gale, T. (2009). Schooling in disadvantaged communities: Playing the game from the back of the field. New York, NY: Springer.
- Munns, G., Sawyer, W., Cole, B. (2013) *Exemplary teachers of students in poverty*. Oxon: Routledge
- Pollard, A. (2010) *Professionalism and Pedagogy: A Commentary by TLRP and GTCE*. London: TLRP.
- Pollard, A. and Filer, A. (1996). *The social world of pupil learning: case studies of pupils from four to seven*. London: Cassell.
- Reay, D (2006) 'I'm not seen as one of the clever children': Consulting primary school pupils about the social conditions of learning *Education Review special issue on Pupil Consultation* vol 58 no 2, 171-181.
- Rogoff, B. (2003) *The cultural nature of human development*. Oxford: Oxford University Press.
- Rollock, N., Gillborn, D., Vincent, C. & Ball, S. (2015) The Colour of Class: the educational strategies of the Black middle classes. Abingdon & New York
- Thomson, P. (2010) A critical pedagogy of global place: regeneration in and as action. In C. Raffo, op. cit.
- Thomson, Pat. 2002. *Schooling the rust-belt kids: Making the difference in changing times.*Stoke-on-Trent: Trentham Books
- van Lier, L. (2008) Agency in the classroom. In J.P. Lantolf & M.E. Poehner, (Eds.) *Sociocultural theory and the teaching of second languages*, London: Equinox.
- Sussman, L. (1977). Tales out of school. Implementing organizational change in the elementary grades. Philadelphia, PA: Temple University Press.

- Thrupp, M (1999) *Schools making a difference: Let's be realistic!* Buckingham: Open University Press.
- van Lier, L (2008) Agency in the classroom. Ed. in J.P. Lantolf and M.E. Poehner *Sociocultural theory and the teaching of second languages*, London: Equinox.
- Vassallo, S (2013) Implications of institutionalizing self-regulated learning: An analysis from four sociological perspectives. *Educational Studies* 47 (1), 26-49
- Vassallo, S (2011) Critical pedagogy and neoliberalism: Concerns with teaching self-regulated learning. *Studies in Philosophy and Education* 32 (6), 563-580
- von Stumm, S., Gale, C.R., Batty, D. & Deary, I. (2009) Childhood intelligence, behaviour and locus of control as determinants of intergenerational social mobility: British Cohort Study 1970. *Intelligence*. 37:329-340.
- Vygotsky, LS (1978) Mind in society. Cambridge MA: Harvard University Press.
- Walkerdine, V. (1990). Schoolgirl fictions. London: Verso.
- Willes, M. (1983). Children into pupils. London: Routledge.
- Yin, R. (2008). Case study research: design and methods. Los Angeles: Sage.
- Youdell, Deborah. 2006. *Impossible bodies, impossible selves: exclusions and student subjectivities*. Dordrecht: Springer.

Appendix 1: data collection tools

Pupils' sense of agency

- 4. Belief that actions can have an effect on others
- 5. Sense of purpose/volition in actions
- 6. Sense of commitment to learning activities/motivation

Interviews with pupils:

- Which classes are you in together?
- Can you tell me about what it's like being a pupil in your set/class where all together? (probe perceptions of teacher, other pupils) Where FP is?
- What kinds of things do you learn about in Maths/English?
- How do you feel about what you learn in lessons?
 (probe maths, English, non-core lessons observed)
 probe why, level of interest, excitement
- Which lessons do you like best? Why? Probe relationship with teacher, level of motivation, interest, probe topics
- Can you tell me about your teacher? What is he/she like?
- Are you allowed to talk to other pupils during lessons? Probe when, what about
- Do you ask questions in class? Probe question type, examples
- Do you get to decide/choose what you learn about? How? Probe subjects reading
- Are there times when you would like to choose/ decide what you do in class but can't? What stops you?
- If you could decide what you learn about in class, what would it be? What would your teacher think?
- Can you think of a time when you came up with an idea in class? Probe examples, teacher direction/instructions? Teacher and other pupils' response
- If you have an idea or think about something you find interesting during lessons, what do you do? Probe options, can you tell others? Teacher? How do they respond? Develop idea with other pupils?
- In X lesson I noticed X happened, could you tell me about that? Probe intention, feelings, perception

Pupils' actual agency

- 5. Making choices and decisions
- 6. Taking initiatives
- 7. Developing and using learning strategies independently
- 8. Ascribing meaning and relevance
- 9. Co-constructing knowledge

Observation and interviews:

- Learner choice and decision-making in learning activities and resources (books for reading, differentiated tasks, topics)
- Learner initiatives taken questions asked, ideas put forward and teacher response, offering help/instructing others, doing or saying something original, setting off in unpredicted direction
- Learners using non-school knowledge
- Learners contextualising 'school knowledge' in relation to self and wider society
- $7\frac{1}{2}$ acher framing of learning activities and

- knowledge and positioning of pupils
- Learners developing/creating new knowledge in local context
- Positioning of pupils in learning activities in relation to gender, ethnicity, 'ability'
- Nature and extent of pupil-pupil talk
- Positioning of pupils in teacher-pupil talk

Sociocultural practices/discourses:

- 5. Pedagogical mode on competence-performative continuum (Bernstein 2000)
- 6. Teacher's enactment of curriculum in pedagogical practices
- Discourses on gender, ethnicity, social class, 'ability' acted out in pedagogical relationships and practices
- 8. Discourses on discipline and knowledge

Observation:

- Grouping and setting practices
- Seating arrangements
- Discipline practices/systems
- Nature of wall displays (learning objectives, targets,
- Types of knowledge included/excluded 'school'/
 'local' knowledge and pupils' positioning in relation
 to this

Teacher interviews:

- Can you tell me a bit about your class? Probe: perceptions of 'ability', discipline/behaviour; level of engagement
- Could you tell me about the three Focus Pupils? Probe perceptions of 'ability', behaviour
- Ask about lessons observed:
 - o How did you plan?
 - What were the objectives/purposes?
 - o Teaching style/strategies?
 - o How typical were they?
- Ask about specific interactions observed with focus pupils probe strategies, reasons

School documents (from school websites):

- Y5 maths, English and selected non-core subject curricula
- Y5 timetable
- Discipline and behaviour policy

Appendix 2 Coding template for interviews and lesson observations

Topics and tasks (curriculum – ref? Apple 1995, Thomson 2012)	Nature of activities, learning objectives and targets if any
Material resources (sociocultural – Vygotsky)	Including books, worksheets, paper, writing implements, technology
Seating arrangements (Bernstein 2000)	Formation of desks – pupil and teacher positioning in relation to each other. In relation to discourses about discipline and 'ability', gender (e.g. girls sat with boys to manage behaviour).
Sequencing and pacing (Bernstein 2000)	Timing of learning activities – how visible, strong is regulative discourse? – focus on time during lessons, perceived progress of pupils according to external benchmarks Differentiation of work, activities in terms of 'ability' or other pupil characteristics
Discipline (Bernstein 2000)	Including sanctions, rewards, behaviour management systems
Teacher-child talk (van	Amount and nature of talk between teachers and children including
Lier 2009)	questions, answers, positioning of pupils in T-P talk
Child-child talk (van Lier	Amount and nature of talk between children on and off-task including,
2009; Littleton & Mercer 2013)	teacher sanctioned and non-sanctioned opportunities for talk, how talk relates to curriculum and learning tasks, topics of talk
Pupil choice (van Lier 2009)	Opportunities for choice in learning activities or non-learning activities; how pupils respond to these
Pupil initiative (van Lier 2009)	Opportunities for initiative taking, pupils making opportunities for initiative taking, individual or collaborative initiatives questions asked, ideas put forward and teacher response, offering help/instructing others, doing or saying something original, setting off in unpredicted direction
Meaning-making	Relating knowledge to own situation and framing in terms of own interests and purposes; ascribing meaning and relevant to objects and activities (van Lier 2008)
Knowledge construction	Developing new knowledge original and valuable in local context; creativity
Pupil engagement (Munns et al 2013)/commitment (van Lier 2008)	Level of intellectual, affective and operational engagement Degree of passion, interest and spirited activity
Positioning of pupils in relation to gender, ethnicity, 'ability' (Holland et al)	