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Pupil or tutor? Greater depth pupils' perspectives on mixed attainment grouping

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Abstract

Collaborative learning strategies, such as talk partners and small groups, are routinely used in the primary classroom with a view to enhance learning for all. Ample quantitative research backs this up as an effective approach, but qualitative accounts of pupils' experiences are rare. Are pupils working at greater depth helped or hindered by mandated collaboration with peers? This research proposal asks whether collaborative learning is a fair approach for pupils working at greater depth, and suggests a mixed-method study aimed at gauging these pupils' perspectives on working in constellations of mixed prior attainment. A study into greater depth pupils' perspectives, paired with a philosophical consideration of fairness, could add valuable insights to the discussion of what works, and for whom, in the classroom.

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Introduction

Collaborative learning is common within the primary classroom. Teachers have long been encouraged to plan for paired and group work (Education Endowment Foundation/EEF, 2021a; Johnson et al., 1984), with reference to learning benefits for pupils. A recurring feature of collaborative learning activities is "mixed ability" grouping, wherein children of varying levels of attainment work together towards a shared goal. The purpose of such grouping can be emotional regulation (Järvenoja & Järvela, 2009), social cohesion (Tolmie et al., 2010), or benefits for learning for all or most pupils (Baines et al., 2007). The benefits of collaborative learning have been highlighted particularly in relation to pupils currently working at or below age related expectations (ARE) (EEF, 2021a). However, some research has emerged which questions the benefits of paired and group work for children working at greater depth. Webb and colleagues (1997) and King (1993) have shown that while the attainment levels of children working at or below ARE can be raised through collaborative learning, they tend to remain static for children working at greater depth. Robinson (1990) goes so far as proposing that paired and grouped classroom activities constitute "exploitation" (p.9), of pupils working at greater depth, as they are asked to instruct their peers at the detriment of their own progress. Whilst such arguments can be critiqued for their utilitarian and individualistic assumptions (why does individual progress take precedence over social interaction and helping others?), Robinson's charge is interesting. Do collaborative learning strategies impact pupils differently, or even unfairly? This project aims to explore the perspectives of pupils working at greater depth on collaborative learning activities in the primary classroom. The two Research Questions (RQs) at the centre of this work are:

RQ1. How do Year 6 pupils working at greater depth perceive collaborative learning?

RQ2. How do children working at greater depth conceptualise the relationship, if any, between collaborative classroom activities and their own learning?

Language and definitions

Research related to pupils' attainment is fraught with issues of terminology. Historically, terms such as "gifted and talented" (Koshy et al., 2012, p.167), "academically talented" (Robinson, 1990, p.9) and "more able" (Hallam & Parsons, 2013, p.395) have been used to describe pupils who achieve high scores in assessments and who participate at a high level in classroom work and discussions. In contrast, children working below or towards age related expectations have been described as "less intelligent" (Topping & Trickey, 2007, p.273), "lower ability" (Neber et al., 2001, p.207), or, in short, "lows" (King, 1993, p.400). In recent years, the trend has shifted. Ofsted (2022) now recommends language focusing on attainment rather than ability, as this is more reflective of pupils' and teachers' opportunities to raise achievement levels through effort. In addition, the inspection body instructs inspectors to refer to "prior attainment" (Carr, 2022, para.1) as this avoids suggesting fixed ability. This new approach to terminology around attainment appears to me to be influenced by ideas of growth mindset, first introduced by Dweck (2006). The idea that children's (and adults') achievement and intelligence are not fixed but rather can be influenced by effort and a belief in progress inspires terminology which emphasises the temporariness of achievement. In this project, I will refer to "greater depth pupils" or "GD pupils", to indicate that these participants have been assessed by their teacher as working at greater depth in at least one subject. This is the current terminology used in schools, and highlights work output rather than innate ability. Whilst labelling a child "greater depth" might still be seen as suggesting a fixed state, it constitutes an improvement from past terminologies.

Literature review

Collaborative learning for greater depth pupils

Collaborative learning here refers to a wide range of classroom activities which involve cooperation between at least two pupils in pursuit of a shared goal. Some examples include elbow partner talk, think-pair-share strategies, paired maths tasks, whole-table discussions, and group projects. Tasks requiring cooperation can last for a few minutes, or span several lessons. The ambiguity is intentional, as this research project will depend on which types of collaborative learning take place in my allocated classroom. The following sections will outline past and current literature on paired and group work in the primary classroom.

Whilst I take a broad approach to the term collaborative learning, there is a homonymous teaching strategy (here referred to as CL), first introduced by Johnson and colleagues (1984). In this method, "[c]lass members are split into small groups after receiving instruction from the teacher. They then work through the assignment until all group members have successfully understood and completed it" (Johnson et al., 1994, p.3). The first part of this description is uncontested and common – teachers often give whole-class instruction and then expect pairs or groups to complete a task. It is the second part of the definition, the one about all group members understanding and completing the assignment, that requires precise instruction. Five key enabling elements are suggested for enabling CL success: positive interdependence, face-to-face promotive interaction, individual accountability, interpersonal skills, and group processing. These need to be explicitly taught and planned, in order for the definition to be fulfilled. Whilst the Johnsons' (1994) book on CL is detailed and could be used as an implementation handbook, it lacks consideration of the variability of impact depending on pupils' prior attainment. This perspective will be explored further down.

Neber and colleagues (2001) conducted a meta-analysis of twelve studies into the effects of collaborative learning on "gifted and high-achieving students" (p.199). Following many caveats regarding the varying quality of reviewed papers, the authors state that collaborative learning appears to benefit pupils with higher attainment levels. Interestingly, one of Neber and colleagues' greatest criticisms of other studies is that they conflate "gifted" and "high achieving" pupils. If we allow for a while the use of gifted as a descriptor, consider whether some pupils are gifted but not high achieving, or high achieving but not gifted. Does this have implications for how one should read older studies on this subject? Certainly, as most studies on collaborative learning and higher achieving pupils are from the 1990's, this type of language is commonplace in papers and should be scrutinised. "For instance," the authors write, "studies with gifted students point to advantages for cooperative learning in heterogeneous… groups, whereas studies with high achievers found clear advantages for cooperative learning in homogenous groups" (Neber et al., 2001, p.210). One might find here a suggestion that "truly" gifted pupils work better in heterogeneous groups, whereas "nongifted" pupils who are simply high achieving benefit from working with similarly highly achieving peers. However, due to the dated nature of these terms, and the lack of definitions provided around them, these suggestions become nearly inapplicable to the experiences of pupils assessed as working at greater depth today.

In slight contrast to Neber and colleagues, Patrick's team of researchers (2005) suggest that higher achieving pupils' progress in collaborative learning is impacted not only by the type of grouping in place, but also by the type of task given to groups. If mixed-attainment groupings are used, they write, it is important that the task is focused on exploration rather than on right/wrong answer queries, a point which has also been made by Matthews (1992). The authors adopt a balanced stance by saying that whilst higher attaining pupils' academic needs can be met in mixed-attainment groups, this is not a matter of certainty, and there may be better types of groupings for such pupils. Patrick et al.'s (2005) paper suffers from the lack of clarity pointed out by Neber and colleagues (2001) – a definition for gifted pupils is not given, and no distinction is made between gifted and high achieving pupils. Furthermore, the study concerns older students in the United States, which raises several barriers to generalisations to the UK context. However, the nuanced argument is useful in a research and policy climate which might demand clear steers despite the complexity of the issue.

One study into discussion-based learning groups found that high attaining students performed equally well in homogenous groups, heterogeneous groups, and when working alone (Webb et al., 1997). However, the quality of discussion appeared to be higher in mixed groups. The authors frame this in a positive way, saying that "[w]orking with less-able students did not pose a disadvantage for high-ability students" (Webb et al., 1997, p.45), and therefore recommend that all groups be mixed in the interest of fairness. This idea of fairness will be addressed further in the section on theoretical perspectives.

More recently, the Education Endowment Foundation has released guidance stating that collaborative learning approaches provide "high impact for very low cost" (EEF, 2021a, subheading). The Foundation favours mixed-attainment groups, as homogenous groups might risk widening the attainment gap. Evidence, however, is generally limited, and the report acknowledges that a majority of the 211 studies reviewed are likely to have become outdated. This meta-review includes only quantitative studies, which inevitably limits the conclusions that can be drawn from the data. Outcomes more difficult to quantify, such as enjoyment of learning, and outcomes unrelated to academic progress have thus been left out of this guidance, leaving schools and teachers to decide on best approaches.

Greater depth pupils' perspectives on collaborative learning

Having explored research into different types of collaborative learning, I will now query the literature on how pupils of diverse levels of achievement might perceive such learning approaches. In particular, I am interested in how students working at greater depth perceive paired and group work. The early 1990's saw a wealth of research on this topic, and many studies use the Johnsons (1984; 1994) work on collaborative learning as a launch pad for further inquiry.

A tonally significant paper was published by Robinson in 1990. In "Cooperation or Exploitation? The Argument against Cooperative Learning for Talented Students", Robinson argues that paired and group learning in heterogeneous constellations exploits pupils working at greater depth. The essence of her argument is that it is not the job of greater depth pupils to explain content to their peers. As time is a limited resource in the classroom, and as all pupils should be allowed equal opportunities to deepen their own learning, collaborative learning hinders pupils working at greater depth from mastering the learning content, in favour of tutoring and motivating classmates. Robinson (1990) questions the argument that paired and group learning for all pupils is desirable as it raises attainment for lower achieving students and does "no discernible damage to [the] high achiever" (p.19). This, she argues, is not a sufficient justification for the practice, and constitutes an overgeneralisation of the benefits of paired and group learning.

Robinson (1990) provides useful glasses for researchers who wish to draw out assumptions about greater depth pupils from research papers about collaborative learning. The author warns about the risks of overgeneralisation, points out that greater depth pupils are rarely the focus of research studies, and cautions that talented pupils who underachieve may be concealed in the middle and lower attainment groups. However, whilst these points are worth making, the relevance of Robinson's paper for the present study can be questioned. Firstly, she writes from an American context, primarily citing works from that education system, making comparisons with the UK more difficult. Secondly, as her paper is a theoretical argument rather than a summary of a study, the age range in question is unstated. This could pose problems in the application to a primary school context. Finally, at the time of my writing this, the paper was published 33 years ago. Whilst the theoretical argument is not necessarily impacted by age, the practices on which Robinson bases her paper are likely to have changed significantly since this seminal piece was produced.

A few small studies followed, some experimental and some interview-based. Matthews (1992) interviewed 15 "gifted" students aged 11-14 in a wealthy suburban area in the United States about their perspectives on cooperative learning. Frustration and boredom were two emotions commonly associated with group learning, especially when groups were arranged to achieve a mix of low, middle and high achieving students. Participants reported preferring homogenous groups, and Matthews appears to agree that this might be a good idea for higher achieving children, at least some of the time. Contrasting with the view of the Johnsons (1984), who hold that all children benefit from mixed group learning, Matthews (1992) suggests that those benefits only become reality for gifted children when they are allowed to work in homogenous groups with other gifted pupils. While streaming or setting, i.e. organising pupils based on attainment, receives a low score from the Education Endowment Foundation regarding its potential to raise achievement (EEF, 2021b), Matthews' point still stands: higher attaining pupils prefer working alongside pupils with similar achievement levels. Since the aim of the present project is to gauge pupils' perspectives, and not to judge the effectiveness of certain modes of teaching, Matthews' (1992) findings can be used as inspiration in the production of an interview schedule.

Both Mulryan (1992) and King (1993) instructed teachers to follow a new (for the class) type of small group learning in mathematics lessons, and then evaluated the outcome of this new approach in their studies. This method places the researchers in a more experimental category than Matthews (1992), as they introduced a new element into the classroom and observed the effect of this new stimulus. Both researchers found that high achieving pupils tended to be active during group work, and that lower achieving pupils were more passive. King (1993) reported, on top of this, that the "small-group model did not greatly reduce the differential status effects between high and low achievers" (p.399). In the interviews, pupils reported frustration, and feeling like they were not learning anything new. Child S said:

> "I could do it [word problems]. It was easy for me… not too hard for the ones in advanced math. The others though, it was hard for them. I hate things like that in groups. You have to explain… it slows you down"
>
> (Mulryan, 1992, p.268)

This quote shows the importance of interviews following observations. Without this and similar conversations, the researcher would have been forced to guess from observation only the child's perspective on the learning activity. Whilst both studies just now presented suffer from age and geographical distance, their findings are highly relevant for the present project. The pupils were aged

8-9 and 11-14 respectively, which roughly matches UK Year 6, and the focus on pupils' perspectives is rare – especially when a focus on higher achieving pupils is added.

A more recent study, undertaken by O'Hara (2019) in Canada, showed some enjoyment among high achieving pupils in relation to collaborative learning. Fifty-four children aged 6-12 completed a simply worded questionnaire about attitudes toward small group learning, and these responses were compared with pupils' final grades to correlate attitudes with achievement levels. Statistical analysis failed to show any significant link between higher achievement and a preference for individual work. However, pupils working at greater depth were more likely to say that they learned better on their own compared to in small groups. This shows an interesting distinction between *preference* and *beliefs* about one's own learning. As O'Hara concludes, "high-achievers may in fact enjoy working in groups, but nonetheless feel they are better able to demonstrate their abilities individually" (O'Hara 2019, p.6). My second research question, about how pupils conceptualise the relationship between collaborative activities and learning, is addressed by this finding. As a result of O'Hara's finding, I will ensure that my interview schedule distinguishes enjoyment from learning, as these two may otherwise conflate pupils' answers about preferences.

Theoretical perspectives on collaborative learning

Questions of grouping are in part questions of priority. Who benefits from collaborative learning in mixed groups, and is this justified? Whilst philosophical queries are not the focus of this project, a slight theoretical framework will provide depth to the discussion of findings. In this section, I will outline two different approaches to priority in education, and link these to the issue of collaborative learning.

First, we need to establish that the notion of collaborative learning as beneficial for all pupils, as suggested by Johnson et al. (1984), has been questioned by researchers. This was explored in the previous section. On this basis, I will assume that while collaborative learning has the potential to raise attainment for all types of pupils, paired and group learning in heterogeneous constellations is generally less valuable for pupils working at greater depth than for pupils with lower and middle attainment levels. In short, the lower a pupil's attainment, the greater the impact of collaborative learning for that pupil. This suggests an inverse reality, that the higher a pupil's attainment, the smaller the impact of collaborative learning for that pupil (suggested also by Webb et al., 1997). Should, then, pupils working at greater depth be utilised in collaborative learning to help raise the

attainment of their peers? Or, conversely, are lower attaining pupils entitled to mixed group work, on the basis of having low current attainment? Parfit (1997) and Crisp (2003) provide slightly different perspectives on this issue.

Writing about distribution of resources, Parfit (1997) suggests that "benefiting people matters more the worse off these people are" (p.213). In the context of this study, this *priority view* would suggest that lower attaining pupils should be benefited more than others, because they could be seen as "worse off". The implication is that lower attaining pupils have a moral right to be prioritised in education, and since collaborative learning has proven useful for raising attainment, pupils with low and middle prior attainment should be provided with opportunities for paired and group work.

Crisp (2003) extends this view and adds compassion as a consideration to take when faced with questions of distribution. On this view, compassion and not comparison should inform decisions on resource distribution. In Crisp's world, a person does not have to be badly off to be considered as needing resources. Rather, a compassionate observer might choose to distribute good things to people who are above a certain wellbeing threshold, but who might need support for other reasons. In relation to classroom learning, where time and attention are limited resources, Crisp's *compassion view* might thus suggest that greater depth pupils are morally entitled to support to a similar extent as lower attaining pupils, on compassionate grounds.

However, compassion implies that the receiving person is suffering: how can I feel compassion toward someone who is satisfied in every morally relevant aspect of life? Here, the current study becomes relevant. If greater depth pupils' perspectives on collaborative learning are generally positive, then Crisp's (2003) compassionate view provides no grounds for relieving them of participation in paired and group work. Only someone who suffers can be on the receiving end of compassion.

If Parfit (1997) provides little support for homogenously grouping greater depth pupils, and if Crisp's (2003) compassionate view only comes into effect if greater depth pupils themselves suffer from mixed attainment grouping, utilitarianism could offer some other perspectives on collaborative learning. This school of thought measures the total welfare outcome of a scenario, regardless of the implications for individuals within that scenario (Foot, 1985). When comparing two outcomes where one is larger than the other, the utilitarian will favour the greater outcome, even if distribution within that scenario is unfair. Taken strictly, utilitarianism would favour the maximisation of each pupil's

potential, and would allow some children getting left behind if the total welfare in the class was not harmed by it. Foot (1985) describes eloquently how people can be attracted to the simplicity of utilitarianism, and still be appalled by its implications. Whilst I will not consider utilitarian approaches to collaborative learning to any great extent in this project, its cold weighing of total benefits marks an extreme stance in the collaborative learning debate.

Methodology

Research design and data collection

This research project takes a mixed method, qualitative approach to understanding how Year 6 pupils working at greater depth perceive paired and group learning. Many previous studies have employed quantitative methods to analyse the educational outcomes of collaborative learning (Acar & Tarhan, 2008; Durukan, 2011; Law, 2008), and while such approaches are useful for informing policy and recommendations, they lack the qualitative depth needed to describe pupils' lived perspectives. Bhattacharya (2017) explains that where quantitative research is concerned with prediction, generalisation and replicability, qualitative research is inquiry with an aim of specificity, description and exploration – going deep, rather than broad. Additionally, where quantitative methods aim at describing and predicting trends on a group level, qualitative methods can be understood as focusing on the individual (Check & Schutt, 2012). Seeing as my research questions are concerned with perception and conceptualisation, qualitative methods are most suited to this project.

Figure 1 (next page) visually represents the structure of this study, which is aimed at drawing out rich content on which to base the interview schedule. In short, I wish to gauge perspectives on collaborative learning from the whole class before focussing in on the greater depth group, in order to facilitate more detailed interviews. The observation stage will involve me taking field notes on the nature and frequency of paired and group work normally occurring in the classroom. Researching Pupil Perspectives is aimed at exploring elements of schooling that children face regularly – hence, I will not stage collaborative learning activities but rather use those which the teacher normally initiates. During these activities, I will take pictures of the classroom, and these will be used as interview artefacts. I address the ethical considerations around the use of pictures further down.

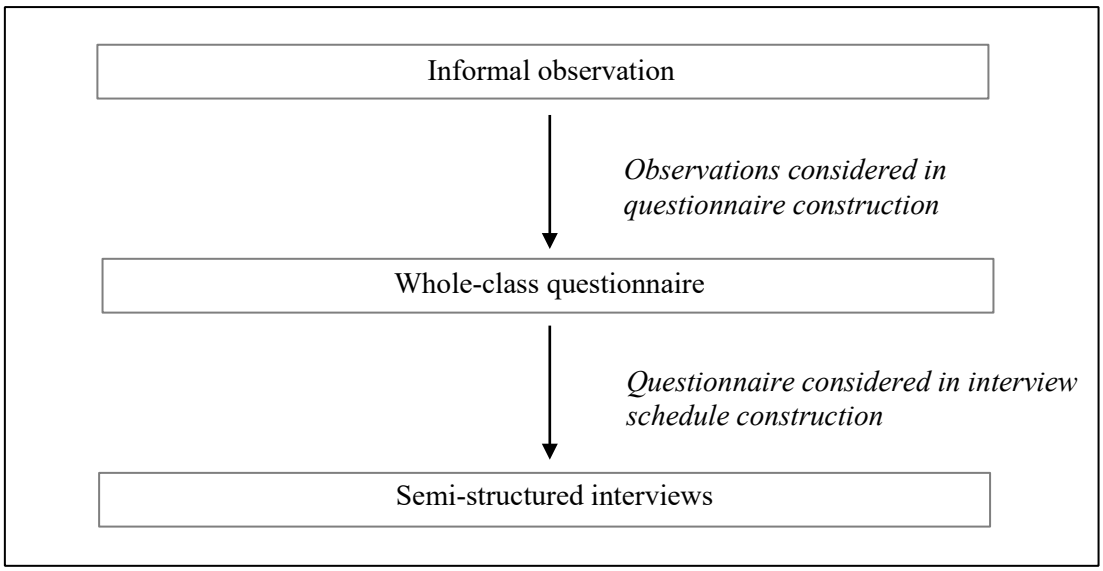

Figure 1: Research design

This research structure, with several steps leading up to the data collection, is a way of piloting (Flutter & Ruddock, 2004) methods and questions. If a certain question yields little or unclear answers in the questionnaire, for example, this can be removed or modified ahead of the interviews. I will now detail the steps of the study, starting from the more informal initial stage and moving down towards the main data collection stage.

Firstly, and importantly, I will spend some time with the class in question before the onset of the study. A social rapport between the researcher and the child(ren) is key to ensuring a relaxed and safe interview environment (Danby et al., 2011). This stage will also be an opportunity for me as a researcher to get familiar with the types of collaborative learning that usually take place in the classroom, and the language used around these activities. Once I have learned the names of all pupils, I will start taking field notes. This follows Eder and Fingerson (2001), who hold that "it is essential to begin an interview study with at least some type of field observation" (p.191). The notes are not to be considered data, but will rather be tools for me to keep track of which learning events have taken place on which days, the duration and nature of these events, and some observations of pupils' displayed attitudes to the learning. I will also use this information to construct the whole-class questionnaire in a way relevant to the setting.

When the questionnaire has been adapted to the classroom in question, it will be administered to the whole class. Parents and carers will have completed a consent form prior to this part of the study, and in cases of non-consent, a suitable alternative activity will be provided for relevant children. The

purpose of the questionnaire is to gauge perspectives on collaborative learning from the whole class, which will inform the probe questions in the interview schedule. Coupling questionnaires with in-depth interviews, a method coined as "questerviewing" by Adamson and colleagues (2004), aims to draw out trends which can then be discussed in structured conversation. The questionnaires provide a starting point for interviews, and have been found to act as "useful triggers as respondents discussed their understanding and definitions of terms, often explaining their responses with stories from their own experiences" (Adamson et al., 2004, p.139). Despite its benefits, however, using questionnaires with young participants is associated with some potential pitfalls. Due to difficult language or unclear purpose, children may find surveys inaccessible, irrelevant, or simply boring (Barker & Weller, 2003). There is also a risk of narrow responses, as answers are steered by the questions put forward by the researcher. To address these concerns, I will ensure that the questionnaire is visually simple yet engaging, and that it leaves space for the child's own comments. This will be done through visual scales (rather than number-based ones) and some open-ended questions (Dockrell et al., 1999). Questions will be written with simple syntax, and using few words (Bell, 2007). Scales will be completely labelled so that children can easily identify the meaning of each step on the scale, and "don't know" options will be omitted, as suggested by Bell (2007). This is intended to avoid routine ticking. In collaboration with the class teacher, I will identify a suitable time for the survey to be completed. I anticipate that this will be during one of the morning lessons, as children and adults alike are generally more focused at this time of day. The questionnaires will be collected by me and used to inform the interview schedule. Data collected here will not be presented in findings, as it is only intended to be used formatively (or as a pilot step) in the research process.

The main method of data collection in this study is semi-structured interviews. Using this method, the researcher can stay on track and ensure all important issues are discussed, while having the freedom to probe and ask follow-up questions when comments of interest are made (Opdenakker, 2006; Seidman, 2019). The following approach to semi-structured interviews has been devised to address concerns associated with young participants.

The first consideration to take relates to memory. I will be asking participants about events which occur routinely in their school lives, and this risks triggering scripts rather than memories. A script is a standardised memory formed through repeated similar experiences (Docherty & Sandelowski, 1999), and I wish to discuss the specific learning events which I have observed as part of the study. Therefore, I will incorporate elements of stimulated recall interview methodology (De Witt, 2008),

which uses artefacts to cue memories in participants. Specifically, artefacts should depict children's own experiences, which justifies the use of images from observed lessons. I will select a small number of relevant images and show participants printed versions of these to frame our conversation.

Pitching the interview as a conversation is another important consideration when young participants are involved (Danby et al., 2011). Initiating the exchange with a small informal chat is thought to put the child at ease, and will situate the interview within the positive rapport which I will have worked to build with the participants. However, Danby and colleagues (2011) highlight the importance of preparing well for interviews – the informal appearance of the interview should be coupled with careful preparation and a diligent set of probe questions. Because of this, my interview schedule will be structured around my two research questions: what are participants' experiences of collaborative learning, and how do they link paired or group activities to learning, if at all? The themes will be illustrated by images from observations, and each theme will include a large set of optional probe questions.

Data collection during interviews will be done through audio recordings using a portable device, such as a tablet. Recordings will be stored securely and deleted after the conclusion of the research project. Since interviews with children benefit from a conversational climate (Danby et al., 2011), I have opted for a type of data collection that is less invasive than other options, such as note taking by hand or video recording. The loss of data such as facial expressions or body language (Tessier, 2012) can be mitigated by researcher notes immediately following the interviews. These notes can complement the transcripts based on recordings, and will be treated as the researcher's interpretations rather than as raw data.

Participants

This study is limited by some specific parameters. I will have access to one primary school in England, and within that school, one class will be my main point of contact. For that reason, and because small sample sizes are typically justified within qualitative research (Boddy, 2016), I will limit my project to one Year 6 class. This means that my participants will most likely be 10 – 11 years old, and be able to communicate in English (or have arrangements in place, e.g. with a teaching assistant, to understand and respond to instructions in English). I assume in this research proposal that the participants will be used to some form of collaborative learning. Whilst assumptions should be avoided when planning a research project, I maintain that it is associated with quite little risk to

expect UK primary school pupils to be familiar with paired and group work. This is partly because institutions such as the Education Endowment Foundation recommend collaborative learning, describing it as "[h]igh impact for very low cost" (EEF, 2021a), and partly because concepts such as "elbow partner" (Crawford, 2005) and "think – pair – share" are very common in the primary classroom.

Two types of sampling are present in this research project. The use of one class in completing the questionnaire could be described as convenience sampling. However, focussing on pupils currently working at greater depth and inviting these children to partake in interviews is an example of purposive, critical case sampling (Johnson et al., 2020). Only this group of pupils fulfil my criteria, and so they are critical to the completion of this study. It is possible that the class teacher has not recently assessed any pupils as working at greater depth in at least one subject. This would require me to explore opportunities for researching other Year 6 classes, or even other Key Stage 2 classes. If, conversely, a large number of pupils in the relevant class are working at greater depth, I will limit my study to the five pupils who have been assessed as working at greater depth in the largest number of subjects.

I recognise that "greater depth" is an imprecise measurement. Whilst all pupil assessments are backed up by evidence on the class teacher's part, it is possible that pupils who could attain at a higher level but who are currently underperforming will be concealed within the lower attainment sets, as pointed out by Robinson (1990). The implications of this will be taken into account in the discussion of findings in the final version of this project.

Data analysis

Interview transcripts will be analysed using thematic analysis (Blaxter et al., 2010). This method has been chosen as it allows participants' main points to carry through to the findings, without becoming an alienated data point far removed from its originator. For a project such as Researching Pupil Perspectives, choosing careful methods of analysis which respect pupils' voices is central. Braun and Clarke (2006) outline the steps for thematic analysis: getting familiarised with the data, grouping quotes into codes, searching for themes among the codes, naming the themes, and writing up findings. In short, the researcher distils the interview transcripts through a repeated process until themes emerge. It is possible that themes will contradict each other if different participants hold different views, and this can then be addressed in the discussion.

It must be pointed out that this is a highly qualitative approach to data analysis, and demands for impartiality cannot be met to the same extent as might be possible in quantitative research (Takahashi & Kobayashi, 2021). In the process of coding quotes and grouping quotes into themes, the researcher's subjective views of the transcripts will shine through. In the interest of transparency, however, a data depository can be created where interview transcripts are published in fully anonymised form. This mirrors common practice in quantitative research where raw data is published, and addresses calls for more transparency in qualitative research (Mozersky et al., 2020).

Ethical considerations

Ethical rigour in research is especially paramount when participants are aged under 18. The National Society for the Prevention of Cruelty to Children (NSPCC) highlights the obligation of researchers to carefully weigh the benefits of research projects against the risk of harm for young participants (NSPCC, 2023). The present project has received initial approval from a staff member at the Faculty of Education through a process of research proposal scrutiny, and so the benefits of the research have been recognised. Regarding exposure to harm, as it requires little interference in children's day to day school experience, the project should entail little risks. However, some elements must be scrutinised, in line with ethical guidelines stated by the British Educational Research Association (BERA, 2018).

Firstly, being asked to leave the classroom for approximately 15-20 minutes to take part in an interview might leave pupils feeling singled out and thus cause mental discomfort. To address this risk, I will ensure along with the class teacher that no participants are chosen who might be expected to suffer from such individual attention. However, from my personal experience, pupils are often willing to participate in activities involving one-to-one interaction with an adult outside of the classroom, as this provides a break from routine. The participant profile could also be seen as mitigating the risk of unwanted attention: seeing as the study focuses on children working at greater depth, it should not add extra burden to pupils who are routinely the focus of interventions outside the classroom. Secondly, the wording of the interview questions is important, so as to avoid stigmatising any group of students. Since the questions will, to some extent, ask children to make value judgements about their peers (with the aim of understanding participants' perspectives of working together with classmates), the responses of the researcher must be neutral, and not uphold negative views of any children.

There are some formal requirements which will be observed in the project. All relevant parents or carers will receive information sheets about the structure and aim of the research, and be invited to sign a voluntary informed consent form to allow the child in their care to participate in the project. Information provided about the study will be written in clear and simple language, stating the aim of the research to fulfil BERA's (2018) requirement of transparency. Adults who, for reasons such as language barriers, would benefit from a verbal explanation of the research will be offered this. The information sheet and consent form will state clearly the right of withdrawing at any point one's participation or data from the study. This will also be made clear to the children participating, both in the whole-class questionnaire and in the semi-structured interviews. Any child who does not personally consent to participating, or whose parents or carers oppose the study, will be provided with appropriate alternative activities when the rest of the class complete the study-related tasks.

Participants' data will be treated securely, in line with the recommendations of BERA (2018). Questionnaires will be completed anonymously, and kept in secure storage. Images of lessons, interview recordings, and interview transcripts will be stored on a device to which only the researcher has access, and be deleted promptly at the end of the project. In the final paper, the content of images used as interview stimuli will be described in words (e.g. "Image 1, child A and child B looking at mathematics task"), and visuals will not be included. Interview transcripts will be edited to remove any identifying characteristics of individuals or the school setting. In the interest of confidentiality, aliases will be assigned to each "named" participant, and the name of the school will be replaced with a generic alternative.

Implications for future practice

Reading about collaborative learning and pupils' experiences of paired and group work has left me with two opposing insights. On the one hand, collaborative learning offers great possibilities for social and academic development. The benefits of collaborative learning championed by Johnson et al. (1984; 1994) are wide-ranging, and inspire me to include some of this practice in my future classroom. Cautionary notes about the importance of purposeful collaboration rather than routine elbow partner talk have reminded me about explicitly teaching the skills related to group work, in order to reap the rewards of cooperative tasks. The nature of tasks – exploratory rather than ones that have a right or wrong answer – impacts greatly on the quality of collaborative learning. This is a motivation to always consider how tasks will "play out" in the classroom – who will engage with

them, and how? Overall, much empirical evidence supports the implementation of collaborative learning strategies.

On the other hand, higher attaining pupils report consistently that paired and group work do not benefit their learning, or their enjoyment of the process. Many express a preference for learning in homogenous groups, or for working alone, for reasons of frustration and boredom in mixed constellations. The perspectives of Parfit (1997) and Crisp (2003) weigh into this – who is entitled to priority in education, and who is obliged to fulfil this entitlement? It is clear to me that collaborative learning is beneficial for most, if not all, pupils, but that implementation often is so poor that higher attaining pupils lose motivation and would rather work on their own. This is a failure of teachers, but it is one that is difficult to mitigate – facilitating truly collaborative learning is, simply, hard. With this realistic outlook, I will consider alternating between homogenous and heterogeneous seating plans and group constellations. This will stretch pupils currently working at greater depth, give pupils with lower prior attainment the benefits of learning in heterogeneous groups, and recognise that no attainment level is fixed. Pupils who are working at age related expectations one term may be working at greater depth the next, and so collaborative groups should be under constant reconstruction.

I am also inspired, after preparing this research, to continue on an exploratory path in my future practice. Whilst I might not produce research papers, administering questionnaires to the class to gauge the children's perspectives on various aspects of their learning appears an excellent tool for co-authoring the learning environment. Interviews with either selected or random sets of pupils could continue to provide insights into pupils' perspectives on their learning and my teaching. I recognise that time will be a highly limited resource once in the profession, and that wishing to undertake further interviews whilst teaching might be utopian thinking. Nevertheless, preparing this research project has made me curious about my future class, and about my future pupils' perspectives.

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