Research paper

Teaching using ability groups in English primary schools: The perspectives of university-based student teachers

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ABSTRACT

This paper focuses on the impact felt by primary school Student Teachers (STs) engaging with research at university that highlights concerns associated with ability grouping, while simultaneously working within classrooms that use ability groups while on school placement. Drawing upon interview data from eight STs - part of a larger study exploring the experiences of final year STs in England - findings illustrate a theory-practice divide, revealing significant tensions that lead to mistrust of university guidance. The research highlights a need for universities to work with schools to provide STs with clearer models of varied, realistic and effective grouping practices.

1. Introduction

The purpose of this research is to explore the under-reported perspectives of Student Teachers (STs) about how children are grouped in English primary school classrooms (children aged 5–11). The research uses data from semi-structured interviews with eight STs - part of a larger study exploring the experiences of final year STs in England on the topic of how children are grouped in primary school classrooms - to analyse their experiences of engaging with the topic of ability grouping at their university provider, while simultaneously working within classrooms that use ability groups while they are on placement. The research considers these experiences as specific to STs, working as 'guests' within placement schools and thus working within the established systems and routines of more experienced teachers in schools, and the implications for the work that universities and schools can undertake in partnership to support STs. One research question guided the study:

How do university-based Student Teachers experience and navigate the contrast between university presented research evidence on ability grouping and the realised practice in schools?

1.1. The context of ITE in England

In England, Initial Teacher Education (ITE) is carried out by a range of providers, offering differing routes, all accredited by the Department for Education (DfE). Aspiring teachers must select one of these routes to pursue their ITE and obtain Qualified Teacher Status (QTS). For all routes, the evidence required for a ST to be awarded QTS in England predominantly comes from formal and informal observations during their teaching practice.

In 2023/24, 44 % of new entrants for ITE trained in England via a Higher Education Institution (HEI) on what are described as university-based courses. The remaining 56 % of entrants were enrolled on school-led routes (Gov.uk, 2023a). The terms 'school-led' or 'university-based' are something of a misnomer, given that STs will spend most of their time in school, whatever route they elect to take. The minimum time STs in England must spend in school is currently 120 days. However, academic engagement with an HEI varies greatly depending on route, ranging from none, in the case of School Centred Initial Teacher Training (SCITT) providers with accreditation to training programmes independent of universities, through to more than 250 days, as is the case for a three-year undergraduate degree in Primary Education with QTS (Gov.uk, 2023b). All university-based routes (and selected school-based routes) will lead to an academic qualification in addition to QTS.

The present study focuses on STs sampled from those 44 % enrolled on university-based courses.

Most students enrolled on university-based routes into primary teaching in England are post-graduate students (87 % in 2023), with degrees from a range of fields, who complete a one-year Post Graduate Certificate of Education (PGCE) with QTS (sometimes including modules at master's level). These students will spend approximately 60 days on campus, engaging with sessions that focus on subject knowledge,

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curriculum, pedagogy and assessment. The remaining 13 % are undergraduate students. These students will complete a three-year university Bachelor of Arts degree with QTS (Gov.uk, 2023a).

The qualifications that accompany QTS in England mean that university-providers demand assessed academic work from STs, in addition to classroom observations. What this looks like will vary between universities and may also differ from one year to the next. However, STs will typically complete regular subject-knowledge audits, write essays that synthesise theory and practice, give presentations and keep reflective diaries. The requirement of the DfE in England is that all providers have a curriculum that adheres to the Core Content Framework (DfE, 2019). The framework consists of eight teaching 'standards', containing a combined total of 64 statements specifying 'what' STs must learn and corresponding suggestions for 'how' these aspects might be learned. Within the framework, there is no mention of ability grouping or mixed attainment grouping. This does risk the topic being marginalised by providers of ITE and indeed, the framework has been criticised for encouraging a reductive curriculum, based on a narrow and positioned view of teaching (Hordern & Brooks, 2023). However, how providers interpret and supplement the framework is not prescribed and this means that the academic elements of a university-based ITE course present an opportunity for variation and that students enrolled will likely still experience an emphasis on a range of theory and research in their curriculum.

The following literature review will discuss the ways in which interpretation of the term 'ability' is problematic, the contentious ways that the notion of ability is used to organise the learning of children in English schools and the prevalence of ability grouping. The literature review will conclude by conceptualising the position of STs, with a foot each in school and university, caught in the middle of a 'theory-practice divide' (Merchant & Bubb, 2023).

1.2. What does ability grouping mean in English primary schools?

The English education system has long reflected a perception that children should be separated according to ability. This separation consistently correlates with socio-economic status (Connolly et al., 2019; Francis et al., 2017; Tomáschová & Bahna, 2024). While policy makers, parents and other stakeholders continue to advocate for separation based on perceived ability, stratification based on perceived ability is likely to continue to mirror stratification based on socio-economic status and thus, the maintenance of educational hegemony (Francis et al., 2017). Separation may occur between schools (e.g. grammar schools requiring entrance exams or comprehensive schools without the requirement) or within schools (the allocation of children to 'higher or lower' ability groups, as is the focus of this paper). In this long-established educational environment, it is perhaps unsurprising that ability continues to be a core concept that influences how teachers think about children in English schools (Stables et al., 2018). The term is often used synonymously with attainment; however, the concept of ability specifically refers to the notion of inherent and fixed intelligence, and is a trait attributed to the child. Contrastingly, attainment refers to a point-in-time assessment of the work produced by the child (Towers et al., 2019). The dominance of ability over attainment in school discourse in England emphasises a fixed judgement about the child, rather than a fluid assessment of their learning.

Towers et al. (2019, p. 24) explain that "despite the evidence that grouping by attainment is on the increase in primary schools, it is difficult to gain a comprehensive picture of primary school practices of grouping." The work of Hallam and Parsons (2013) gathered substantial data in relation to ability grouping and the implications for those involved in primary education. Their results highlight a prevalence of *streaming* and *setting*. Both these forms of grouping split children from peers of the same age, based on perceived ability. *Setting* is when a child will find themselves ranked from 'low-ability' to 'high-ability' for individual subjects, while *streaming* is when a pupil is labelled with a general

ability that dictates the level of the work in their classes for all 'streamed' subjects (Bradbury, 2019).

Data from the last decade in England suggests that teachers favour ability grouping due to the pressure of external assessment (e.g. Bibby et al., 2017; Bradbury, 2018) and that this pressure is impacting the teachers of increasingly young children (Bradbury & Roberts-Holmes, 2017). Nevertheless, an audit of current practices for primary schools, to mirror that of Taylor et al. (2020) for English secondary schools, is still lacking. However, it is widely understood that most pupils aged 3–11 will experience this separation by ability through the practice of *within-class ability grouping*, rather than by *setting* or *streaming* (e.g. Bradbury, 2019; Marks, 2016). *Within-class ability grouping* describes the allocation of children to groups based on ability - often demarcated by placement at specific tables – but within the same classroom. Typically, one teacher will be responsible for teaching the children in all ability groups during the lesson. Lessons will tend to follow the same core objective; support and challenge being adapted in various ways to try and meet the needs of all children (Webb-Williams, 2021). As this paper focuses on STs perspectives about the way in which children are organised into groups for learning in their primary school classroom, the focus falls upon perceived contrasts between *within-class ability grouping* and what is referred to as *mixed attainment grouping*. *Mixed attainment grouping* describes the allocation of children to groups within the same classroom either randomly or based on factors that do not include homogenous attainment. These factors may include group dynamics and/or the intentional mix of children with a spread of attainment levels.

It must be noted that the simple labels given to these forms of grouping betrays the variation of the experiences for children in English primary schools. As highlighted by Domina et al. (2019), in their work with 20,000 children from California middle schools, there is significant variation in the implementation of ability grouping. This starts with the very reason that a child is allocated to a given group. It could be the most recent test, the availability of resources, or even child preference. The degree of collaboration with other children, the proportion of a given lesson time spent in the allocated group and the degree to which the set learning tasks vary from one group to another are just three further variables that make categorising how children are grouped more complex than these terms suggest. Further, the practice of organising children using ability groups is not consistent across all schools, all year groups and all subjects. There are schools and teachers that will not use any form of ability grouping and, while many (but not all) pupils aged 5–11 will experience this type of grouping for English (including phonics and reading) and Mathematics, lessons in the remaining subjects of the curriculum are less likely to be organised this way - a pattern that reflects the dominance of English and Mathematics in both curriculum time and in the focus of high-stakes assessment during the primary years in England (Bradbury et al., 2021).

This variation renders it impossible to make inferences about any links between ability grouping and specific teaching approaches. In their analysis of 125 Year 5 classes (9 and 10-year-olds) in England, Siraj and Taggart (2014) did identify 11 characteristics of effective primary pedagogy. However, none of these either specify or are indicative of how children should be grouped. You could make the argument that dialogic teaching and collaborative learning (two of the 11 characteristics) are more synonymous with mixed attainment groups, but there is no current evidence that these characteristics, or any of the others, are more or less prevalent in lessons where children are organised into ability groups, compared with mixed attainment groups.

1.3. Why is ability grouping a source of contention?

The practice of ability grouping continues in England's primary schools, despite the lack of clear empirical consensus about the relationship between this form of grouping and academic outcomes (Francis et al., 2017; Hogden et al., 2023). Using secondary data analysis, Jerrim

(2021) performed a regression analysis of the available data for 10,755 primary age pupils in England and found no evidence of a benefit in academic outcomes of ability grouping. These findings align with other evidence from England in the last decade that indicate that the practice offers little to no benefit for academic attainment at secondary age (Francis et al., 2019) or for pupils aged 3–11 (Bradbury, 2018). A closer look supports the notion that for pupils in the lowest attaining groups, the impact may even be negative in terms of academic progress, compared with their peers (e.g. Jerrim, 2021; Taylor et al., 2016). Beyond England, but also with secondary age children, Terrin and Triventi (2023) conducted a meta-analysis of 53 studies, from across the globe published in English between 2000 and 2021, focused on the impact of ability grouping on attainment and inequality. They found that the mean effect size of ability grouping on attainment was null but that the impact on inequality was significant. Notably, they recommend that removing ability groups has the potential to reduce inequality without impacting attainment.

The practice of ability grouping has also been widely reported as having a detrimental effect on self-efficacy and aspirations (Archer et al., 2018; Buchanan et al., 2021; Hargreaves et al., 2022) and a negative influence on social mobility (Francis et al., 2019). Despite this, many teachers believe that organising children in this way allows them to challenge and support children more effectively. Teachers and school leaders in England cite the 'more targeted' allocation of staff time and resources as justification, even claiming that such pedagogy helps to raise standards for 'disadvantaged' pupils (e.g. Hodgen et al., 2023; Taylor et al., 2020).

Additionally, high stakes testing, and accountability has led to an increased use of ability grouping. Where the spotlight is most focused on pupil outcomes, teachers and school leaders are significantly more likely to use within-class ability groups (e.g. Bradbury, 2019; Towers et al., 2019). For readers less familiar with primary education in England, it is useful to know that ever since the introduction of Standard Assessment Tests (SATs) in England's primary schools three decades ago, and the related publication of league tables that rank the performance of schools on test outcomes in Mathematics and English, concerns that high-stakes assessment dictates teaching, rather than measuring learning, has continued to increase (e.g. Barrs, 2019; Wyse et al., 2016). The breadth, relevance and creativity of the curriculum at primary school has continued to be squeezed by the "backwash of assessment" (Grainger & Barnes, 2006, p. 209), resulting in narrow skills-based targets and the demand for measurable and rapid progress towards these targets. Especially in mathematics and English, the curriculum has become reductive and focused on more-measurable outcomes (e.g. Barrs, 2019; Bradbury et al., 2021). Teachers are expected to regularly track the 'level' of each child and this both exceeds and undermines the ongoing formative assessment necessary for effective teaching (Pollard et al., 2023). Children's current attainment is categorised into one of three levels, arranged according to what are claimed to be age-related expectations. STs in English primary schools will become familiar with the language used in these categories as children are described as either, 'working *towards'* the expected standard, 'working *at'* the expected standard, or working at '*greater depth'* (STA, 2024). It should be highlighted though, that the decision to organise children in ability groups is not inevitable as the pressure of assessments increases. Eriksen et al. (2024) report that despite increasing pressures from high-stakes assessment, mathematics teachers in Norway are inclined to reject ability grouping. They attribute this to high levels of teacher autonomy and political and cultural history of eliminating inequality. They specifically cite England as a contrast in stating that, "the default practice for teachers in England is some version of grouping by attainment" (p.394).

In conclusion, STs entering the profession in English primary schools quickly witness that the concept of ability remains a stubborn one at the centre of how policy makers and teachers in England think about children in schools (Stables et al., 2018). This leads to assumptions, biases and judgements that are congruent with organising children into ability groups. These assumptions, biases and judgements can have a significant negative impact in terms of social justice. The misallocation of children to 'lower ability' groups, correlated with socio-economic background, special educational needs and race provides strong evidence of the need for all teachers to reject the notion of ability and, instead, base any separation into groups, on current attainment instead (Connolly et al., 2019; Tomáschová & Bahna, 2024). This is highlighted further by evidence that children rarely move between ability groups despite obvious changes to attainment levels during their school lives (Towers et al., 2019).

1.4. Ability grouping and the 'theory-practice divide'

With the evidence from literature and research being largely indicative of the negative consequences of ability grouping, a clear question arises: If STs are presented with research at university that is critical of practices in schools, how will this translate into practice when they are in their own class *[on placement or once employed]* with some degree of pedagogical autonomy? This paper is underpinned by the argument that supporting STs to reconcile the messages from school and university -about how children should be grouped - and putting this into practice, is paramount. This is because of the potential fallout of what Merchant and Bubb (2023) refer to as the 'theory-practice divide.'

The theory-practice divide describes the dichotomy often experienced by STs, between the discourse of university and practices in schools. This divide is not unique to ITE in England and has been reported in educational research from various countries over the last 15 years (e.g. Falkenberg, 2010; Flores, 2016; Van Nuland, 2011). Previous research tells us that STs are at risk of experiencing a significant negative impact to their confidence and emotional wellbeing if the theory-practice divide is unreconcilable (Veenman, 1984; Voss & Kunter, 2020). For universities, the associated risk of failing to close the divide is significant. Where the gap is unreconcilable, there is a strong potential that the messages from university will be marginalised or disregarded. As Zeichner and Tabachnick (1981) highlight, in these contexts, no matter what ITE has affected in changing or introducing new ideas about teaching and learning, STs are likely to revert to mirroring the established practices of others in their school. This means that those in universities that present STs with research about ability grouping, without making efforts to align this with the practices experienced by STs in schools, will likely struggle to make an impact on the pedagogical practices of new teachers.

Our position is that successful ITE must support STs to navigate the theory-practice divide. Only in this context will STs be able to make decisions about teaching and learning that are responsive to their own classrooms, informed by a knowledge of a range of possibilities for teaching effectively.

One research question guided the study:

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2. Materials and methods

2.1. Participants and recruitment

The interview data upon which this article is based, came from a larger study that included surveys of 176 STs following university-based ITE courses and interviews with teachers in five schools that host STs. Eight STs from three different universities volunteered to participate in online interviews during the academic year 2021/22, and the current article draws on these eight interviews.

We know that all participants engaged in academic discussions about ability grouping. However, we do not know how much time was dedicated to these discussions, the context of the discussions or whether any

assessed work included a focus on ability groups. Our understanding is limited to the responses given during the interviews.

Participants in the study were enrolled on either a 3-year undergraduate degree, leading to QTS and a Bachelor of Arts degree, or a 1-year Post Graduate Certificate of Education (PGCE) with QTS. The difference between ITE courses in England is outlined earlier in the paper and further details of the courses and the experience of the participants at the time of interview are shown in Table 1. The table shows differences in the level of the university course, with two participants studying up to Level 6 (equivalent of the final year of an undergraduate degree in England) and six participants studying up to Level 7 (equivalent of a master's degree in England). There were also differences in the number of placements completed and the experience of whole class teaching that had been undertaken by participants by the time of the interviews.

University A is a medium sized university of 18000 students in the south of England that consistently sees approximately 100 students qualify after the third year of their undergraduate degree with QTS in Primary Education. University B is a multi-faculty university of 50000 students in the south-east of England that trains approximately 250 primary school STs each year on its PGCE courses. University C is a medium sized university of 15000 students in the north-west of England that trains approximately 150 primary school STs each year on its PGCE courses.

The researchers approached Course Leads of primary university-based courses in England via email. From those that responded, three agreed to us contacting their STs. STs were then invited to participate via their respective Course Leads using Virtual Learning Environment (VLE) messages that contained the email addresses of the researchers. Once potential participants responded to the invitation to take part in the study by emailing the researchers, they were not selected nor deselected for any reason other than their status as a primary school Student Teacher on a University-Based route to QTS and where consent had been granted by the provider and by the participant. Although not a prerequisite of participation, the topic of ability grouping was familiar to all participants from the curriculum of their respective universities.

2.2. Data collection

Interviews were conducted online via Microsoft Teams and the participants provided both prior written consent and verbal consent for the interviews to be recorded for transcription purposes. Participants were given the option of in-person or online interviews. All interviews took place online, as participants were on placement at the time of the interviews. The semi-structured interviews all began with the same prompt question:

Can you tell us about your experiences of how children are grouped in schools?

As Denscombe (2021) advises, effective semi-structured interviews require the interviewers to be clear about the issues and topics that need to be addressed. Although we had just one set question, we had a list of prompt questions related to ability grouping and the theory-practice divide that we planned to use, if necessary. However, in line with

Grainger et al. (2003), we made a decision not to raise the topic of the theory-practice divide straight away as we felt that the validity of subsequent interviewee responses in relation to this core theme would have been greater if the responses were generated from the participant spontaneously, rather than as a result of being prompted by the interviewer. So that the reader can see what participants were asked more transparently, within the Results section, all participant quotes are preceded by the prompt given by the interviewer.

2.3. Data analysis and positionality

Upon completion of the interviews, recordings were transcribed, then analysed using reflexive thematic analysis (Clarke & Braun, 2018). Reflexive thematic analysis requires a recognition and iterative reflection of the subjective position of the researcher (Braun & Clarke, 2019). We write this article as former primary school teachers and current university lecturers working in ITE with STs like those whose voices are represented in the sections that follow. We position ourselves with academic colleagues we have cited in this article who reject the concept of fixed ability and view this aspect of teaching and learning as an ongoing matter of social justice for children in schools. Indeed, the research was motivated by efforts to make the subject of ability grouping more prominent on the taught curriculum at our university. As we read then coded the transcripts, before generating initial themes, we were therefore mindful that references to any themes related to discomfort with the notion of ability grouping may have been influenced by our positionality. Two of the researchers independently read, made notes about and coded two interview transcripts each. Codes were then shared, and the initial four transcripts were added to with the codes of the second viewer. The remaining four interview transcripts were then coded using the combined list and additions were shared and reviewed by both viewers. Once all transcripts had been coded, there was a two-stage process of clustering codes into themes. The first stage was to cluster codes according to deductive themes that were chosen from existing literature in this field. This resulted in three codes (shown below in Table 2). Codes were then re-clustered into inductive themes (also shown below in Table 2). The clustering of codes into themes was shared and conducted in person by the same two researchers.

For transparency, we have reported all themes in Table 2. While Theme 4 is the most directly related to the research question in the present study, all the themes are reflected by the quotes cited in the findings to follow. This is because the research question guides the presentation of the findings, not the theme most closely aligned with it. We do recognise that there is much data that we do not share, more relevant to other concepts, due to our decision to focus the lens of the present study on the research question alone.

2.4. Ethical considerations and limitations

The ethics application was completed and approved according to the BERA guidelines for ethical approval (BERA, 2024). Participants were made aware that both interviewers were tutors on an ITE Primary course and that both were lecturers with an interest in how children are

Table 1

Details of the university-based Initial Teacher Education (ITE) course and the experience of the participants at the time of interview.

Participant	University	ITE course, duration, and level of study	Total days spent at university on ITE course	Number of completed school placements at time of interview	Percentage of whole class responsibility in most recent placement
ST1	A	BA 3-Years Level 4-6	265	2	70 %–80 %
ST2	A	BA 3-Years Level 4-6	265	2	70 %–80 %
ST3	B	PGCE 1-Year Level 6-7	60	1	50 %–70 %
ST4	B	PGCE 1-Year Level 6-7	60	1	50 %–70 %
ST5	B	PGCE 1-Year Level 6-7	60	1	50 %–70 %
ST6	C	PGCE 1-Year Level 6-7	60	2	70 %–80 %
ST7	C	PGCE 1-Year Level 6-7	60	2	70 %–80 %
ST8	C	PGCE 1-Year Level 6-7	60	2	70 %–80 %

Table 2
Initial themes generated from reflexive thematic analysis of the interview transcripts. (Deductive themes have a letter code while inductive themes have a number code).

A. Tensions felt by teachers	C. Pressure of high-stakes assessment, school policy and entrenched practices
B. Lack of credible alternatives	
1. First-hand experience of impact on children	2. Cited barriers to alternatives
3. Entrenched practices and language	4. University as catalyst for cognitive dissonance / frustration
5. Desire for alternative	6. Mixed conceptualisation of inclusion and differentiation

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grouped in primary classrooms. The interviewers had no direct contact or responsibility for the participants during their studies. Measures were taken to ensure that participants understood that participation was voluntary, and that involvement would have no impact on achievement on their programme or any other outcomes. However, the researchers recognise the power imbalance and the resulting potential for participants to provide perceived 'desirable' responses. Caution was required in making inferences and recommendations regarding the support provided by universities and placement schools. Thus, the focus of the research question is on the experiences of STs, with a wider lens on the nature of gaps between the messages of the university and the practices of placement schools.

3. Results

During semi-structured interviews, participants were asked about their experiences of how children were grouped during their most recent

school placement.

3.1. Setting the scene

The purpose of this opening section is to set the scene for the findings to follow, using the voices of the participants, so the reader has a clearer picture of what the STs in the study experienced in their schools.

As shown in Table 3, all participants cited that ability grouping was the norm during their most recent school placement, in one or more of English, mathematics and phonics lessons. Science lessons and the remaining curriculum subjects (often referred to as 'foundation subjects' in English schools) were typically taught in mixed attainment groups. At the start of the interview, all participants were simply asked *Can you tell us about your experiences of how children are grouped in schools?* Participant 3's initial response reflects the pattern indicated by Table 3.

In my first placement at school, I was in a Year 1 class, so the kids were only five or six years old. They were already being streamed in

Table 3
How children were grouped during the participants' most recent experience on school placement. (Shaded cells indicate where children were organised into ability groups).

Participant and (age of children in class)	Mathematics	English	Phonics	Remaining curriculum subjects
1 (5-6 years)	▓		▓	
2 (6-7 years)	▓		▓	
3 (5-6 years)	▓		▓	
4 (6-7 years)	▓		▓	
5 (5-6 years)	▓		▓	▓
6 (7-8 years)			Non applicable as phonics was not taught to this age group	
7 (10-11 years)			Non applicable as phonics was not taught to this age group	
8 (5-7 years)	▓		▓	

terms of phonics and English and maths where they were being grouped in terms of ability. But when it came to foundation subjects, they were grouped in mixed abilities so that they could all help each other out and bring in their own personal experiences, especially when it came to religious studies for example, where they were learning about mosques, there was a lot of Muslim kids in my class so they were able to split all of them up and then bring in their own experiences into the class discussion. But in terms of phonics, they were all set in sound groups. I think that's because the Read Write Inc programme [a widely used commercially published scheme] emphasises that they should be putting them into sound groups as they think that kids learn the particular sounds quicker. With that they were actually leaving the class and going to different classes and seeing different teachers but for English and maths it was within class ability grouping where they were put into sets and tables. Certain tables were only allowed to do certain work sheets and then the other kids had to do what they were just given.

(Participant 3)

The experiences of Participant 3 reflect the previous findings in relation to the prevalence of ability grouping in specific subjects (e.g. Hogden et al., 2023), in relation to the justification provided by schools that ability grouping accelerates learning (e.g. Bradbury, 2019) and in relation to discomfort felt by teachers about the emotional impact of ability grouping (e.g. Hargreaves et al., 2022). Participant 3's response also highlights the specific influence of schemes used for the teaching of phonics on ability grouping. This supports the findings of Bradbury (2018), specifically in relation to 5 and 6-year-old children, and the impact of the Phonics Screening (Gov.uk., 2023c) a national assessment used in England to benchmark children in relation to reading expectations.

While two of the participants had some prior experience in classes that had not used ability groups, the responses of the remaining six indicated that their most recent placements were in keeping with what they had experienced in previous placements during their teaching degree. The responses of participants also reflected the language often used in connection with ability grouping. Participant 5 had been describing how children were grouped and the interviewer then prompted by asking, *what were your feelings as a teacher going into the class about how children were grouped?*

On my very first week and when we were just observing, a boy came up to me and said, "Oh, blue table or green table" which is the lowest attaining tables "are for the bad children." He pointed to them and that's the first interaction I had. I said, "Oh no they're not." He said, "Yes, they are. They're for the bad children." That's a Year 1. So that was quite shocking that he recognised that, that's what he thought the tables were for. First of all, especially in the school, it just gave the teachers way more work. They were having to differentiate and also the lower tables, blue and green, were taught by the LSA [Learning Support Assistant] and taken away from the lesson and taught on a flipchart on the other side of the room. Also it seemed edging on discriminatory because the children on the blue table were all children with additional needs and also sometimes when the teacher said that a new child had come in with English as an additional language, that they were too low to be on the blue table which is the lowest table, that she should go with an LSA, just add them on to the LSA. Often they were just sitting there drawing pictures on their whiteboard, not being at all anything. So yes, it was definitely, I would say, no way positive.

(Participant 5)

Participant 5's reflections align with the experiences of teachers and children described by Marks (2013) and Buchanan et al. (2021). Children are aware of their position within the class and make judgments about themselves based on their group allocation. Even where teachers have taken steps to mask the ranking of ability groups in their class, children remain aware of the expectations of them, and this caused Participant 5 discomfort.

Similarly, Participant 1 was responding to the opening question, *can you tell us about your experiences of how children are grouped in schools?* when referencing how ability groups had been labelled by staff in her previous school placement.

In my first placement there was an SEN [special educational needs] table which also had just lower attaining students rather than just SEN, but it was called the SEN table. Then obviously there was 'expected table' and then 'achieving greater depth table' too [the terms 'expected' and 'greater depth' relate to the tracking of assessment levels outlined earlier in the article]. But then I feel like it could be just the schools, but I personally would now not group children based on attainment at all. I think it's good for them to have more knowledgeable peers around them to either help them but also the other way round, it's good for those more knowledgeable peers to help the less knowledgeable children. I think it supports both children in both ways.

(Participant 1)

Participant 1 is articulating a desire to do things differently. This response, like those of Participants 3 and 5 begin to **illustrate the impact of being positioned at the intersection of the theory-practice divide,** something that we argue is a key contribution of the present study. The remainder of this chapter illustrates this impact further and is separated into three related findings.

3.2. Finding 1: Tension caused by alignment with the perceived values of the university and the dissonance between this and practices in school

While on campus at university, all participants in the present study had engaged with academic discussions, informed by research, on the topic of how children are grouped in classrooms and the implications. When asked, *how do your experiences link to work at university about ability grouping?* Participant 7 articulated a value that she appeared to share with her university lecturers.

Well, I mean our university course is very, very focused around being an inclusive practitioner, being a reflective practitioner. At no point really are we pushed to be a practitioner that makes children achieve really, really high results. It's more about being inclusive. Personally, I have such a passion for working in special needs, with my last placement being in special needs especially. I'd love to teach in a special school. So, one of my biggest focuses in my teaching is always different, catering to the child, to the individual child. That means I will tailor my teaching as such to meet their needs.

(Participant 7)

This article earlier highlighted that prospective STs in England have the option to follow a school-based or university-based route into teaching. That Participant 7, as with all participants in the present study, elected to enrol on university-based routes perhaps makes the alignment with the values that she shares unsurprising. The response of Participant 2 shows similar alignment between her ambition and the perceived values of the university.

Participant 2 had been discussing her recent placement, in which the teacher had ability grouped the children in the exact same way for both English and Mathematics. She finished her response by commenting that, "this isn't really a practice that I would want to do when I'm a teacher." The interviewer then prompted for further clarification by asking, *so you said that it's not something that you would do. Why is that?*

Well, we've been taught a lot at university about making sure that we're giving our time equally to the students and it's really not fair if we essentially leave the students who need us most to work with the

TA [teaching assistant] all the time. So, when I'm in a classroom, I want to make sure that I'm helping the students who need me the most and not necessarily just leaving them to work with the TA, making sure I'm supporting them, and I know exactly where they are in the lesson and what I can do to help them but, no, differentiation was never spoken about in terms of grouping by ability. I found at university they do try and push to having mixed ability groups in a lot of subjects. So, your EAL [English as an Additional Language] students, they're speaking to confident learners. Your SEN students can be supported by their peers. But I found, since going into schools, the practice tends to be more grouping the lower abilities so that they can all be supported at the same time, sometimes with a TA, which contradicts a little bit what the university is saying but because it's obviously the teacher's class, we haven't really got the scope to changes thing up like that just yet.

(Participant 2)

Use of the word 'push' is revealing in that it reinforces the notion that the university provider was communicating a clear and positioned value. Participant 2's response illustrates the theory-practice divide when she opts to use the word 'contradicts' to describe the messages of the university compared to the practices of school. There is little sense of potential for nuance or flexibility between these positions. In this context, Participant 2 feels unable to reflect the messages from the university, concerning ability groups, in her pedagogy. The participants demonstrated that this contradiction of messages was confounded by the lack of specific guidance from the university.

3.3. Finding 2: An absence of practical, pedagogical guidance from the university provider

Despite perceiving that their universities were positioned strongly in favour of mixed attainment teaching, all participants reflected an absence of practical support to implement mixed attainment teaching. STs expressed frustration that specific strategies for teaching without (or indeed with) ability groups were rarely, if ever, discussed or modelled while at the university.

Participant 8's answer below was in response to an interviewer prompt specifically about the theory-practice divide. Participant 8 had been reflecting on experiences where mixed attainment teaching didn't seem to work as well as the university had led him to believe it would. The interviewer asked, *how do you manage that dynamic when the messages from school and university are different?*

The thing is with mixed ability, I think you think about it as thought partners for example, like pairing a child who is working in a higher group with a lower group and you think, "They'll bounce ideas off of each other. The higher will support the lower and the lower may be able to come up with ideas that might challenge the higher." However, in practice it is always the higher that ends up not gaining as much from the conversation for example. That's how I see it. I think at university, we don't look enough at the different types of ability grouping. We cover it but we don't actually look at it in terms of how it works in the classroom and how effective it actually is and in what subjects it's effective in and how we could provide provision in ability grouping that is effective. So, I have completely mixed beliefs over it in terms of actually where it's effective and how it can be implemented in a way that is effective.

(Participant 8)

There is a complexity to Participant 8's response that goes beyond a frustration caused by a theory-practice divide. The response provides a concrete example of where a method presented by the university as beneficial – a pair of children with contrasting current attainment levels working together – is perceived as failing in practice. However, rather than reflecting a contradiction between the messages of the university

and the advice of the school, this appears to be more about the participant critiquing practice that is also part of the school's pedagogy, using the ideas developed at university. While the school appear to have been similarly unable to provide the desired nuance about when and how mixed-attainment approaches are effective, it is the university that is perceived as being 'out of touch'. In this context, both the university and the school would benefit from the development of work with primary schools that is similar to that of Francis et al. (2019), who have synthesised findings from work in secondary schools to highlight the effective elements of both ability groups and mixed attainment groups, rather than to declare one form as universally 'better' than the other.

3.4. Finding 3: When the theory-practice divide causes strong emotions, STs are more inclined to follow the approach of the school

When asked if she had anything else that she wanted to share at the end of the interview, Participant 6's response reflected a similar frustration from being placed at the intersection of a divide that she didn't see as being reconcilable and further demonstrates the risk that the messages from university may be abandoned in favour of the approaches taken in school.

Until today, I didn't actually really think about how much it was forced into our heads that ability grouping isn't good, there's a lot of negatives and so on but when you get to school almost virtually every class has ability grouping. It's just like we're told one thing but our experiences tell us a whole different story and it's like, "Okay, what do we go with? Do we go from what we've experienced at that school or do we go from what we've learned that's been researched and found in books? Which one do we lean more towards?"

(Participant 6)

Further, in a finding that aligns with the earlier cited work of Voss and Kunter (2020), it was striking that the participants' expressions of the 'reality gap' - between the messages from university and the practices of school - lead to the articulation of strong emotions. Participant 7 was also asked if she had anything else that she wanted to share at the end of the interview.

When we're doing the university degree, I felt like ability grouping almost felt like an awful thing, really awful. I mean I actually didn't even use the word 'ability'. We used 'attainment grouping'. We couldn't even say ability because that implies a set, a fixed level of possibility whereas attainment is just the current level that the child is achieving at. We did so much research on that. Then we get into school, or I get into school, and I walk in and they're like, "This is the lowers," and I'm like, "Whoa." "This is the HA group, higher ability group, LA, lower ability," and I'm like, "Whoa, okay." That's just every school I've been to. It's just like, "These are my lowers, these are my lows," or, "These are the low ability," and you're like, "Oh my God. At uni I'm taught we can't say that. We can't even say the word ability." I think it's not realistic for the industry that we're in. We do differentiate between the children like that. I don't know. I just thought I'd make that point because it is just the uni do it slightly different. I did feel very ashamed when I started talking about ability. I was so nervous to say the word in placement.

(Participant 7)

This sentiment serves as a warning to university providers of ITE. This article has presented justifiable reasons to be critical of the way that ability grouping is implemented in schools and the impact on children. However, the response of Participant 7 is reflective of a ST who feels unequipped to find their own way to reconcile the language used in relation to ability groups at university and the language that is commonplace in schools. The sense of shock and the extent of the gap have left Participant 7 with enduring strong feelings and, ultimately, a cynicism for what the university advocate. This is illustrative of the

previous findings that indicate that when the theory-practice divide is too great, STs will more often favour school pedagogies over messages coming from universities (e.g. Hick et al., 2019). University providers of ITE risk alienating STs unless more care is taken to explore how STs can make realistic but meaningful adjustments within their school contexts.

Indeed, Participant 4 demonstrated this risk when asked, *what would you like to have done with your teaching within those classrooms?*

> I think as a start point, I would want to keep my base class together as a whole and build that relationship as a whole class. For me, they need that moral support from each other and the ability to co-work with all of the children in the class and not be constrained to groups because I think from what we're told when we're on a PGCE and in our learning, we're constantly told there is no evidence that grouping is beneficial for learning. But when I talk to other students and their experiences, actually in reality, ability grouping is done far too widely for there to be no evidence. It's baffling why.

(Participant 4)

This response is illustrative of the warning of Petty (2009, p. 5) that without university collaboration with schools and support in navigating the theory-practice divide, and STs are likely to feel that even when their values and aims align with teaching in mixed attainment groups, "the final court of judgement is not academic research but what works in your classroom".

4. Discussion

This article builds upon what is already known in England and internationally about both the challenges of the theory-practice divide for STs working between university and school placement and about the issues related to ability grouping. Specifically, it contributes by bringing these two topics together and highlighting the impact on STs when concerns about ability grouping from academic research juxtapose with contradictory, established ability grouping practices in schools. Our intended contribution is also to generate discussion about how universities might engage and collaborate with schools to provide STs with guidance and support that more accurately reflects the nuance of teaching and learning when it comes to how children are grouped in primary school classrooms.

Finding 1, *tension caused by alignment with the perceived values of the university and the dissonance between this and practices in school,* highlights the emotional impact on STs caused by the theory-practice divide. It is worth noting that this conflict for STs somewhat mirror those reported for experienced teachers too. As Bradbury et al. (2019, p.154) reported:

> Teachers did not blindly follow grouping practices without an understanding of the research and the negative effects. However, there were pressures on these teachers that lead to them using ability grouping despite their concerns.

However, we argue, as Veenman (1984) does, that the confidence of STs is uniquely fragile and thus, more vulnerable to the emotional impact of the theory-practice divide. This emotional impact is evident in our participants' responses. Further, as Voss and Kunter (2020) highlight, in the context of working between school and university, the beliefs of a ST can undergo significant changes during their training year. Again, this aligns with the responses shared in this paper. Failure to adequately support STs to navigate these changes can lead to exhaustion by the time they qualify and the increased risk of new teachers leaving the profession (Voss & Kunter, 2020).

So, this raises the question of how best to address these differences for teachers at the start of their careers and thus support them as they experience different contexts and pressures as they develop. Internationally there have been initiatives to respond to differences between university and school pedagogies for STs in ITE (Allen & Wright, 2014; Falkenberg, 2009). Many initiatives seek to minimise the differences

that STs encounter, in other words, to develop closer alignment between schools and universities. Advocating for closer alignment feels uncontroversial and indeed this strategy is promoted by the OECD (2019). It proposes that school placements should be 'sheltered environments' for STs to experience a strong culture of professional learning (p110). The logic of this seems straightforward. However, the capacity of schools to offer students places is, in our experience, already challenging and any idea of schools being asked to more closely mirror university principles does risk causing alienation and an even greater challenge in getting students a placement in school at all. Indeed, our experience - likely aligning with that of others working in universities to support STs - is that teachers and school leaders share many of the principles and concerns about ability grouping. However, the reality for these colleagues is that they are currently working under significant pressure due to the demands caused by high-stakes assessment and the policy environment favouring heavy accountability measures. As Bradbury (2018) highlights, schools often feel that they have little choice but to adopt ability grouping. In this context, university providers of ITE have a role in supporting schools to adhere to these demands while maintaining effective and inclusive approaches to grouping.

Finding 2, *an absence of practical, pedagogical guidance from the university provider,* indicates that universities have significant work to do to explore and articulate what effective pedagogy in relation to how children are grouped looks like. STs in this study have been clear in their belief that universities are not currently doing enough to provide such examples and models. The work of Francis et al. (2019), in which they worked with schools to develop clear examples of the features of effective pedagogy for both ability groups and mixed attainment groups for secondary schools, offers a model of what may be required by those working with STs at primary level. This is something that the authors of this study would like to pursue. However, as outlined earlier in the paper, the Core Content Framework (DfE, 2019) places significant limitations on what ITE providers, both in school and at university, can focus on within their curriculum. In this area, the framework does no more than advise against fixed perceptions of children. Thus, it does not mandate specific engagement with debates about ability groups and the alternatives. As Mutton and Burn (2024) warn, universities are already at risk due to the reductive nature of the framework, so any engagement in this specific topic – engagement that we argue is necessary – may appear extraneous and even potentially risky to colleagues in schools and universities.

Finding 3, *when the theory-practice divide causes strong emotions, STs are more inclined to follow the approach of the school,* warns us that though such engagement may appear extraneous and potentially risky, the risk of failing to bridge the divide is greater. The responses of the STs in this study demonstrate that when the curriculum of the university is found to be disconnected with real contexts, STs may reject the messages of the university and assimilate solely into the practices of a school. Where STs have been supported in reconciling the curriculum of the university with the practices of school, there is evidence to indicate that the research and theory that they engaged with at the university continues to influence their teaching once qualified (Brooks et al., 2012; Knight, 2015; Kowalczuk-Walędziak et al., 2019). However crucially, where the divide is perceived to be irreconcilable by STs, it is reported that they will disproportionately valorise school pedagogies over messages coming from universities (e.g. Evelein et al., 2008; Falkenberg, 2010; Flores, 2016; Hick et al., 2019).

This highlights the need for those working with STs in university to work with those in schools and demonstrate clarity and nuance in discussions about how children are grouped in primary school classrooms. This must include avoiding false associations, such as that mixed attainment teaching is somehow a panacea for effective teaching and social justice. We must demonstrate that pedagogy is nuanced and thus the blunt labels of 'mixed attainment' and 'ability groups' are insufficient for supporting STs to navigate decisions about how to group children. Such labels ignore how children are specifically taught within

lessons, how flexible the approach to grouping is, the language used within a school and the aspirations of the teacher, as just a few of the many variables at play.

5. Conclusion

What we suggest is that ITE programmes must collaborate with schools to explicitly explore both terminology and practice that can support effective grouping pedagogies in primary schools. Both universities and schools need to support the effective synthesis of research and practice that allows STs to critically reflect on school experiences in light of research while equally using what they experience in their classrooms to critically reflect on the research. Our focus in this paper was specifically on STs experiences of ability grouping. However, as Table 3 illustrated, all participants experienced some mixed-attainment teaching, especially in subjects other than English and Mathematics. Effective models of pedagogy offering alternatives to ability groups doubtless exist and while the present study does not include an exploration of these models, we advocate for further research and collaboration with schools that offer STs viable alternatives to ability grouping. In doing so we must again caution against the presentation of a false dichotomy between ability grouping and mixed attainment teaching. As those that work with STs in universities, we need to continue to represent the 'messiness' of teaching and learning and engender self-belief in our STs to be potential agents for change as they assume roles in classrooms and become the next generation of advocates for children's education.

It is particularly important that those supporting STs also support and work closely with colleagues in partner schools. This is no easy task with the heavy accountability demands and resulting squeeze on time experienced both by those in schools and universities. However, there is an embedded and cyclical nature to teaching practices. STs become the teachers that then mentor future STs so we argue that there is an opportunity and need to shift and disrupt the continuing dominant discourse of ability grouping. With effective partnership between universities and schools, there is potential to establish and share examples of effective practice in schools that use a broad range of grouping strategies. The implication thus, is that to shift and disrupt the dominant discourse of ability grouping relies on a reflection of the principles and beliefs presented by university providers of ITE so that they better align with and support the work in schools. As we conclude, we also wonder about the extent to which school-based providers of ITE (those without a link with university) are able to offer the opportunity to use research be critical of practice while simultaneously using practice to be critical of research. Thus, what are the implications for STs in school-based ITE, which now trains over 50 % of new teachers in England?

CRediT authorship contribution statement

Josh Franks: Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Georgina Merchant:** Writing – review & editing, Writing – original draft. **Gideon Sappor:** Writing – original draft, Methodology, Formal analysis, Conceptualization.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The authors do not have permission to share data.

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Glossary

English primary school: Provides statutory education for all children aged 5-11

Grouping by ability: the practice of dividing children into groups based on their perceived academic ability

Mixed-attainment group: the allocation of children to groups within the same classroom either randomly or based on factors that don't include homogenous attainment. These factors may include group dynamics and/or the intentional mix of children with a spread of attainment levels

Initial Teacher Education (ITE) (also Initial Teacher Training): A programme of study that leads to QTS and prepares student teachers for their first teaching role. In England it is followed by continuing professional development in accordance with the Early Career Framework

Primary education: statutory education for all children aged 5–11 in England

Qualified Teacher Status (QTS): a professional qualification that allows you to teach in many schools in England and Wales. It's a legal requirement for teaching in maintained schools and non-maintained schools for children with Special Educational Needs and Disabilities. In schools where QTS is not legally necessary, most schools still require the qualification for their teachers

School-based Initial Teacher Education (also School led): An ITE route into teaching in which the student has applied directly with the school or collection of schools. The route may have a connection with a university, but this is not mandated

Student Teacher (also pre-service teacher or trainee teacher): A student undertaking a course in ITE, usually leading to QTS

University-based Initial Teacher Education: An ITE route into teaching in which the student has applied directly to a university provider. Students still spend the majority of the time in schools (minimum of 120 days) but school placements are arranged by the university and the remaining course time is spent on the university campus

Within-class ability group: the allocation of children to groups within the same classroom but based on their perceived academic ability