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**Mixed-ability grouping in physical education: Investigating ability and inclusivity in
pedagogic practice**

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Abstract

In the United Kingdom [UK] particularly, grouping strategies in secondary education have attracted considerable political attention. While setting students by ability is frequently adopted in mathematics, English and science, mixed-ability grouping is common in other subjects, including physical education [PE]. Educational research exploring grouping has highlighted the need for research to extend understanding of the pedagogical assumptions, challenges and/or opportunities associated with the use of mixed-ability grouping in various subject and school settings. This case study research sought to examine mixed-ability grouping with a particular focus on how this grouping strategy was enacted in Key Stage 3 (Years 7, 8 and 9) and Key Stage 4 (Years 10 and 11) PE lessons in a secondary school in England, and how issues of ability and inclusion are expressed in the enactment of this grouping strategy. Data from in-depth, semi-structured interviews with seven PE teachers is reported. The findings illustrate the various ways in which teachers' enactment of mixed-ability grouping is framed by discourses of sport performance and gendered discourses, and highlight in particular the impact that 'grouping within groups' has for the learning opportunities that different students are able to access in PE. The analysis and discussion critically examine the conceptualisations of ability and inclusion inherent in the mixed-ability grouping practices at the case study school. The conclusion identifies a need for further research involving a larger sample of schools and teachers to extend the insights about mixed-ability grouping practices in PE generated by this study.

Key words: Mixed-ability grouping, Ability, Inclusion, Physical education and sport pedagogy, Equity

Introduction

Mixed-ability grouping is widely used in many subject areas in primary (ages 4-11) and secondary schools (ages 11-18) in England, including art, music, drama, humanities and PE (Hallam, Rogers, & Ireson, 2008; Ireson, Hallam, Hack, Clark, & Plewis, 2002; Kutnick et al., 2005). This grouping arrangement contrasts to ability-based groupings, including *setting* (referring to the practice of assigning students to classes based on their ability and/or attainment in a particular subject), which is frequently employed in other subject areas, most notably mathematics, English and science, in secondary schools in England (Francis, Taylor, & Tereshchenko, 2020; Office for Standards in Education [Ofsted], 2011, 2013; Taylor et al., 2017; Taylor, Hodgen, Tereshchenko, & Gutiérrez, 2020). It also reflects that political pressures to adopt setting have been felt most strongly in mathematics, English and science in England, with these subjects positioned as key markers of performance for schools and the education system as a whole (Conservative Party, 2010; Department for Education and Skills [DfES], 2005; Ofsted, 2013). Research investigating the impact of particular grouping practices, including mixed-ability grouping, on teachers' pedagogy and student outcomes has also invariably focused on these subjects (see, e.g., Hallam & Ireson, 2005; Venkatakrisnan & Wiliam, 2003). Comparatively, the enactment of mixed-ability grouping in other subject areas, including PE, has received far less focused research attention. Indeed, as Taylor et al. (2020, p. 4) point out, "little is known about the grouping of students across secondary school (in Years 7-10) or, indeed, about the specific types of grouping employed by schools". In summarising the current grouping literature, Francis et al. (2020) further noted an absence of research that has "closely focused on pedagogic practice in mixed-attainment grouping" (p. 144), with consequently limited understanding of "what constitutes mixed-attainment grouping and teaching" (p. 143) in different subject and school settings.

This study was designed to extend current educational grouping research and literature by examining the enactment of mixed-ability grouping in secondary PE, encompassing Key Stage 3 and Key Stage 4. In doing so, it also built on previous research in PE that has highlighted that how ability is conceptualised and enacted in PE is fundamentally important in relation to issues of equity and inclusion, and gender in particular (Evans 2004; Hay & Macdonald, 2010a, 2010b; Hunter, 2004; Penney, Jeanes, O'Connor, & Alfrey, 2018; Wilkinson & Penney, 2021; Wilkinson, Penney, Allin, & Potrac, 2020). Hence, the inquiry recognised a need for mixed-ability grouping research in PE to particularly examine the notions of ability and inclusion inherent in the pedagogic practices used by teachers within a mixed-ability PE setting; consequently, how learning opportunities are differentiated with reference to particular skills, knowledge and/or understandings; and the ways in which gender discourses intersect with ability discourses in a mixed-ability PE setting. In the sections that follow, we expand upon the literature and conceptualisations underpinning our research, relating to grouping, ability in PE, and inclusion in PE. First, however, we necessarily address terminology that is central to the paper.

Defining and distinguishing ability grouping practices

As reflected in the introduction, various grouping practices are discussed in this paper. To clarify terminology, we distinguish and define specific practices. *Streaming* refers to the practice of separating students to classes based on their levels of ability and/or attainment across subjects, with students therefore remaining in these classes for most lessons in school (Ireson et al., 2002; William & Bartholomew, 2004). In contrast, the reference point in *setting* is students' ability and/or attainment in individual subjects, meaning that students can be allocated to different classes in different subjects in school (Hallam et al., 2008; Sukhnandan & Lee, 1998; Wilkinson & Penney, 2014). Streaming and setting are both grounded in the

belief that students have different levels of ability that can be measured with the use of standardised tests (Sukhnandan & Lee, 1998). The main purpose of streaming and setting is to reduce the heterogeneity of the class and thus purportedly enable teachers to better match their level of instruction to the learning needs and ability levels of students (Francis et al., 2020; Sukhnandan & Lee, 1998). As explained below, educational research has presented strong and sustained counter-arguments to the claimed merits of these practices.

Mixed-ability grouping differs from streaming and setting in that students of different levels of ability and/or attainment are placed together in classes (Francis et al., 2020; Taylor et al., 2017). Mixed-ability grouping is based on the notion that students have different learning needs and abilities that change over time and that can only be effectively addressed on an individual basis (Ireson et al., 2002; Sukhnandan & Lee, 1998). Sukhnandan and Lee (1998) explain, therefore, that “the main aim of mixed-ability teaching is to provide individual students with individualised teaching that is specifically tailored to their needs” (p. 4). This grouping practice is referred to as detracking or heterogeneous grouping in the United States of America [USA] and other international contexts (Tereshchenko, Francis, Archer, Hodgen, & Mazonod, 2019).

As indicated above, this research foregrounded the concept of ability as a key point of reference in mixed-ability grouping in PE, particularly from a pedagogical perspective and in anticipation of *within-class* grouping occurring. *Within-class grouping* is the practice of organising students into smaller groups within the same class (Hallam et al., 2008; Sukhnandan & Lee, 1998; Wilkinson, Penney, & Allin, 2016). This study explored the different approaches taken in within-class grouping in the context of mixed-ability class groups for PE. As indicated above, this reflected a recognised absence of research examining the complexities of mixed-ability grouping practices in secondary education.

Finally, it is important to note that multiple studies spanning the contexts of mathematics, English and science, have generated evidence to indicate that the effects of ability and mixed-ability grouping are mediated by the pedagogical practices adopted by teachers (Boaler 1997a, 1997b; Francis et al., 2020; Ofsted, 2013; Slavin, 1987, 1990; Wiliam & Bartholomew, 2004). The research reported in this paper is part of a broader program of research that has sought to explore such mediation in the context of PE, and that has therefore encompassed investigation of ability grouping as well as mixed-ability grouping (Wilkinson & Penney, 2021; Wilkinson et al., 2020). The commentary that follows outlines the strong political mediation of grouping in the UK. Approaches to grouping in secondary PE and the widespread use of mixed-ability grouping, need to be understood against this backdrop.

Policy agendas for grouping practices in secondary education in the UK

As indicated above, grouping practices have a contentious history in educational policy, research and practice in England that spans several decades and major educational reforms. Going back to the 1950s, the practice of streaming was common in primary and secondary schools (Ireson et al., 2002; Wiliam & Bartholomew, 2004). The Hadow Report (1930) and the Butler Education Act (1944) recommended that, where numbers allowed, primary schools should group students in classes by ability to enable more effective selection for different types of secondary schools, including grammar or secondary modern schools (Great Britain, Statutes, 1944; Hadow, 1930). Primary schools were also encouraged to use intelligence tests as a basis for allocating students to classes (Great Britain, Statutes, 1944; Hadow, 1930). In the 1960s and early 1970s, however, the prevalence of streaming declined amidst an increasing emphasis on the provision of equal opportunities for all students in education in England. A range of studies and reports also demonstrated that streaming had no significant positive effect on

students' attainment and had negative social and emotional consequences for students in lower streams (Barker Lunn, 1970; Department of Education and Science [DES], 1967; Hargreaves, 1967; Jackson, 1964; Lacey, 1970; Willig, 1963). Streaming was also linked to working-class underachievement as these students were disproportionately represented in lower streams and taught by less experienced teachers (DES, 1967; Hargreaves, 1967; Jackson, 1964; Lacey, 1970).

Mixed-ability grouping was proposed as a means to mitigate the negative effects of streaming in primary and secondary schools in England (DES, 1967; Jackson, 1964). The Plowden Report (DES, 1967) was particularly influential in encouraging schools to move from streaming to mixed-ability grouping. The Plowden Report suggested that mixed-ability grouping would provide all students with equal access to a common curriculum and encourage more cooperative learning experiences between students (DES, 1967). In the light of the evidence on streaming and mixed-ability grouping and an increasing emphasis on equality of opportunity in educational policy in England, many primary and secondary schools adopted mixed-ability grouping, to the point that by the mid-1990s, mixed-ability grouping was widespread in primary schools and in the first two years (Years 7 and 8) of secondary schools (Benn & Chitty, 1996; Lee & Croll, 1995; Sukhnandan & Lee, 1998).

In the late 1990s and beyond, developments in education policy in England reflect that concerns about standards of attainment in education brought a renewed and sustained interest in ability grouping, and specifically setting. Successive governments challenged mixed-ability grouping, identifying it as failing to meet the needs of students who had fallen behind and failing to challenge and extend higher attaining students (Conservative Party, 2007, 2010; Labour Party, 1997). Setting was claimed to be a more effective and efficient method of grouping than mixed-

ability grouping because it enabled teachers to target curriculum and pedagogy more closely to the learning needs of students (Conservative Party, 2007, 2010; DfES, 2005; Labour Party, 1997; Ofsted, 2013). Setting was therefore perceived as a means to improve students' attainment, motivation and social skills because they would be "better engaged in their own learning" (DfES, 2005, p. 58). Notably, a large body of research has countered these claims by showing that setting has little overall impact on students' attainment levels and often impacts negatively on students' self-esteem and attitudes towards learning (Boaler, 1997a, 1997b; Boaler, Wiliam, & Brown, 2000; Francis et al., 2017, Francis et al., 2020; Higgins et al., 2015; Wiliam & Bartholomew, 2004). Recent government policy has not directly advocated the use of setting (see, e.g., Conservative Party, 2015, 2019). However, as noted in the introduction, the practice remains widespread in secondary schools in England, particularly in mathematics, English and science (Francis et al., 2020; Ofsted, 2011, 2013; Taylor et al., 2017, 2020).

Mixed-ability grouping has repeatedly been reported as the most common grouping practice in all subjects other than mathematics, English and science in secondary schools in England (Hallam et al. 2008; Ireson et al., 2002; Kutnick et al., 2005; Ofsted, 2001, 2011, 2013). As indicated above, mathematics, English and science settings have, however, been a focus of much research examining pedagogical practices arising in mixed-ability grouping contexts. Research has shown, for example, that in mixed-ability groups, there is often little or no differentiation of instruction, with teachers frequently pitching their lessons at mid-attaining students (Ball, 1981; Evans, 1985; Francis et al., 2017; Gillborn & Youdell, 2000; Hallam & Ireson, 2005; Ofsted, 2013; Sukhnandan & Lee, 1998; Wiliam & Bartholomew, 2004). This tendency has further been associated with behavioural problems arising in mixed-ability classes, because some students find the pace and level of work anxiety-provoking and others find it insufficiently challenging (Gillborn & Youdell, 2000; Hallam & Ireson, 2005;

Sukhnandan & Lee, 1998; Tereshchenko et al., 2019). Other studies have identified that in mixed ability classes, teachers frequently group higher attaining students with lower attaining students, with the intention that the higher attaining students provide peer support for the lower attaining students' learning (Francis et al., 2020; Sukhnandan & Lee, 1998; Taylor et al., 2017; Venkatakrishnan & Wiliam, 2003). Use of flexible, balanced and carefully structured within-class groups based on specific learning objectives is a further strategy identified in research and associated with success in raising attainment (Francis et al., 2020; Ireson & Hallam, 1999; Towers, Taylor, Tereshchenko, & Mazonod, 2020; Venkatakrishnan & Wiliam, 2003).

In PE, Hallam et al.'s (2008) survey of 97 PE teachers from 45 secondary schools in England reported that 58% of lessons which PE teachers taught were designated as mixed-ability. More recently, Wilkinson et al. (2016) conducted a survey of the grouping practices of 155 PE departments in the North-East of England. The survey was originally undertaken to inform in-depth qualitative investigation of setting practices in PE (Wilkinson & Penney, 2021; Wilkinson et al., 2020), but also provides a number of findings that are pertinent to this study. For example, the survey revealed that a significant proportion of PE departments were fully or partially adopting mixed-ability grouping in PE (Wilkinson, 2019; Wilkinson et al., 2016). Specifically, 38% of PE departments were solely using mixed-ability grouping between Years 7 and 11 (ages 11-16) and a further 32% were using a combination of mixed-ability grouping and setting (Wilkinson, 2019; Wilkinson et al., 2016). Of those PE departments solely using mixed-ability grouping in PE, 85% were also using within-class grouping practices. These practices were diverse, ranging from within-class grouping based solely on ability and/or attainment to within-class grouping based on ability and/or attainment and a combination of either choice, interest, behaviour or friendships (Wilkinson, 2019; Wilkinson et al., 2016). The survey also revealed a gendered dimension to mixed-ability grouping in PE that has not

previously been reported in the literature, with ten schools using mixed-ability grouping in girls' PE only (with setting in boys' PE) and one school using mixed-ability grouping in boys' PE only (with setting in girls' PE) (Wilkinson, 2019; Wilkinson et al., 2016). Wilkinson et al.'s (2016) research thus pointed to varied and gender-differentiated grouping practices within mixed-ability grouping.

Ability, inclusion and grouping practices in PE

Reference to mixed-ability grouping necessarily prompts consideration of how ability is conceptualised and enacted in PE. Previous research has illustrated that the notion of ability is often uncritically accepted as a fixed, measurable capacity that can be used to explain students' progress and attainment in PE (Hay & Macdonald, 2010a, 2010b; Wilkinson et al., 2020). Evans (2004) pointed to the need for a more nuanced conceptualisation of ability that acknowledges the influence of social and contextual factors, such as the nature of the curriculum and teachers' values, beliefs and assessment practices, on how ability is recognised and valued in PE. The relatively small body of research taking up this challenge suggests that PE teachers frequently make sense of ability in relation to performance discourses privileged in competitive sport setting and therefore predominantly perceive students' abilities in PE in relation to their performance of physical skills, levels of competitiveness and fitness (Hay & Macdonald, 2010a, 2010b; Hay & Penney, 2013; Hunter, 2004; Wilkinson et al., 2020). Studies specifically exploring ability grouping in PE, and setting in particular, have echoed these findings and pointed to grouping practices as consequently privileging the learning needs, potential and interests of some students while marginalising those of other students (Croston, 2014; Wilkinson & Penney, 2021; Wilkinson et al., 2020). In Croston's (2014) study of ability-based practices in a secondary school in England, PE teachers allocated students to different groups (sets as they are called in the UK) based on judgements of their agility, balance,

coordination, speed and strength in team-based sports. There is also evidence that setting decisions may be influenced by factors other than ability and/or attainment in PE, including behaviour, attitudes and friendships, and that set allocation impacts students' immediate and longer-term learning opportunities in PE, including access to particular pathway courses in senior secondary years (Wilkinson & Penney, 2021; Wilkinson et al., 2020).

In further exploring mixed-ability grouping practices in PE, this research sought to interrogate the particular ability discourses (including gender, performative and sport discourses) variously being drawn upon and employed by teachers, and investigate the pedagogic consequences arising for different students in mixed-ability PE classes. Following Evans (2004) and Penney et al. (2018), our study was concerned to examine mixed-ability PE in relation to issues of equity and inclusion. This reflected the socio-critical orientation of our research and acknowledged both mainstream grouping literature and previous research on ability in PE pointing to the importance of this line of inquiry (see e.g., Francis et al., 2020; Hay & Macdonald, 2010a, 2010b; Taylor et al., 2017; Wilkinson & Penney, 2021; Wilkinson et al., 2020). DeLuca's (2013) framework of inclusion, as applied to PE by Penney et al. (2018), was employed to particularly explore the conceptualisation of inclusion inherent (explicit and implicit) in the enactment of mixed-ability grouping. The framework, as detailed by Penney et al. (2018), was chosen to enable this research to connect very clearly with contemporary studies in both PE and education more broadly that are seeking to extend understandings of and visions for inclusive educational practices. Within the limitations of space, we explain key tenants of the framework pertinent to this study:

- With what is termed a *normative* approach to inclusion, established dominant discourses relating to ability particularly, are privileged in and through curriculum, pedagogy and assessment in PE, and are reflected in “deficit approaches that focus on what students are

lacking (e.g., fitness, resilience, skill) in relation to specified standards and norms” (Penney et al., 2018, p. 1067).

- Both gender-differentiated provision and differentiation of learning and/or assessment activities on the basis of ability, align with what DeLuca termed *integrative* conceptions of inclusion, whereby teachers “may use pedagogies that acknowledge a need for differentiation, but are seeking to achieve this by adapting activities that, in and of themselves, continue to reinforce stereotypical thinking” (Penney et al., 2018, p. 1068).
- Alternative conceptualisations of inclusion, termed *dialogical* and *transgressive*, represent a contrasting perspective in that:

“... what counts as legitimate and valued knowledge does not come exclusively from a historically reproduced set of games, activities, dances or movement forms ... there is an appreciation that there are many different ways of moving, being healthy and physically active and a commitment to this diversity being reflected in curriculum” (p. 1069, our emphasis).

In turn, pedagogical approaches and assessment encourage and legitimate exploration of meaningful movement from the perspective of individual students (Penney et al., 2018).

In this research, we utilised these conceptual insights to examine the approaches to inclusion that were expressed in curriculum, pedagogy and assessment practices in mixed-ability PE, and particularly in the within-grouping practices arising in mixed-ability PE classes.

As indicated in our introduction, the study addressed three inter-related questions:

- What notions of ability and inclusivity are inherent in the pedagogic practices used by teachers within a mixed-ability PE setting?

- Consequently, how are learning opportunities differentiated with reference to particular skills, knowledge and/or understandings? and
- How do gender discourses intersect with ability discourses in a mixed-ability PE setting?

Research context and methodology

The research involved a qualitative case study of mixed-ability PE within one mixed-gender secondary school in the North-East of England. This approach was taken because of the exploratory nature of the study and the accompanying desire to gain in-depth, context-defined understanding of mixed-ability grouping in PE. The school was selected for the study because it had a policy of using mixed-ability grouping in all PE lessons. The details of the case study school are provided in Table 1. Pseudonyms are used for the school and participants to preserve anonymity. The study was granted ethical approval by the Ethics Committee of Northumbria University.

Insert Table 1 here

Semi-structured individual interviews were conducted with all PE teachers (four male and three female) in the school. Semi-structured interviews were used as they allow specific areas of interest to be explored, while also providing freedom to explore emerging issues raised by participants (Bryman, 2015). Table 2 provides further background about the PE teachers involved in the study.

Insert Table 2 here

The semi-structured interviews covered four main topics: perceptions of mixed-ability grouping in PE; rationale for mixed-ability grouping in PE; teaching practices in mixed-ability groups in PE; and perceived impact of mixed-ability grouping in PE. The interview guide was informed by relevant literature, piloted with two PE teachers from schools not involved in the study, and refined during the research process to reflect a commitment to data collection being “guided by the simultaneous analysis of the data” (Robertson, 2005, p. 31). The interviews were audio-recorded and as soon as possible after each interview had taken place, were transcribed verbatim and iteratively analysed for major themes.

A systematic process of inductive and deductive thematic coding was used to examine patterns in the data (Braun & Clarke, 2013). Transcripts were initially grouped by gender of students for analysis. This reflected that girls and boys were taught in single-sex groups in PE, a common arrangement in schools in England, and that previous research has drawn attention to the need to interrogate understandings of ability and practices associated with ability grouping for the influence of gender discourses (Wilkinson & Penney, 2021; Wilkinson et al., 2016, 2020). The interview data were then read multiple times to detect initial patterns, relationships and inconsistencies. Text segments that appeared to carry similar meaning were assigned a provisional category label and data further assessed to determine their accuracy and comprehensiveness (Braun & Clarke, 2013). Further analysis subsequently explored the relationship of category labels and data extracts to DeLuca’s (2013) conceptualisation of inclusion as applied to PE by Penney et al. (2018) (see above). This step in analysis sought to particularly extend insights into the relationship between grouping practices, pedagogy and the understandings of inclusion being expressed and legitimated in mixed-ability PE lessons. For each stage in analysis, the process continued until the data were saturated.

Findings and discussion

At Westfield, it was school policy to use mixed-ability grouping in all subjects other than mathematics. PE teachers reported that this was because the school placed a strong emphasis on cooperation, respect for others and high achievement for all. The teachers thus associated these values with the principles of mixed-ability grouping:

I think it [mixed-ability grouping] reflects the ethos, values and culture of the school.

The school is all about inclusion and ensuring that all students make progress. I think you probably get that more with mixed-ability grouping than with setting. (Katie)

Data from the interviews also showed, however, that the organisation and practice of mixed-ability grouping in PE was complex and nuanced, with setting in another subject being the basis of mixed ability grouping in PE in Key Stage 3, and a system of pathways also established that differentiated the PE curriculum experienced by different students in Key Stage 4. In the sections that follow, we address each of these characteristics in turn, highlighting their influence on PE teachers' pedagogical practices and exploring the conceptions of ability and inclusivity being expressed.

Mixed-ability grouping in PE in Key Stage 3: Differentiation, ability and gender

As indicated above, for Key Stage 3 PE, mixed-ability class groups were based on students' set placements in mathematics. PE teachers explained that students attended PE lessons in their mathematics sets and remained grouped in this way in Years 7, 8 and 9. Class groups for PE were identified as consequently featuring a wide range of abilities. Here, PE teachers highlighted ability as contextually specific to PE and expanded upon the components they associated with ability in PE:

The ability range in the first three years is massive. They are in their maths sets in PE. So, groups are based on maths ability really. Maths is totally different to PE though. (James)

I mean the abilities you need in maths are different to PE, and vice versa. So, it automatically creates that mix. You need to physically perform in PE. So, you need to have good fundamental movement skills, tactical awareness, show effort, etc. (Laura)

As these teachers' comments also indicate, the 'mix' that they were faced with in PE classes presented clear pedagogical challenges. The PE teachers particularly stressed the importance of differentiating instruction to meet the learning needs of different students within mixed-ability groups and reported using a range of strategies, including flexible within-class grouping, and providing tasks with varied access points and levels of challenge:

Sometimes you're teaching one lesson, but you're teaching something six or seven times over in different ways. So, within a lesson they [students] might be working on different tasks or they might be working on the same task with different entry levels. (Andrew)

Differentiation is really important in mixed-ability lessons. I have an access and a stretch strategy. So, if we were doing cricket, the access strategy might be something like a lighter bat and a softer ball and the stretch strategy might be a heavier bat and ball. (Paul)

As Paul also explained, the specific focus of the lesson and considerations for safety informed further variations in approach to grouping of students within the mixed-ability setting:

We group students in lots of different ways in lessons and it varies depending on what we're doing. So, sometimes we narrow things a bit when we're doing more competitive activities. So, we put the more able in a small group. It's mostly for safety but it also

means they can push each other on. When we're doing more cooperative activities, we sometimes group the more able with the less able to enhance their learning. (Paul)

It is interesting to note that in this instance, a narrower range of ability was regarded as preferable in lessons with a performance focus and that students deemed more able could support other students' learning in cooperative settings. As we discuss below, in Key Stage 4 PE particularly, team games were clearly positioned as inherently competitive and were contrasted to individual activities that were positioned as participation focused.

Paul clarified that he was judging students' abilities in relation to their motor skills, including throwing, catching and jumping, as well as their effort, behaviour and attitude. Other PE teachers reiterated this focus, while also pointing to other information informing grouping decisions within lessons:

The more able are the ones who have good motor skills. They also put in more effort, have a good attitude and are well behaved in lessons. I suppose we consider all of these things when we are grouping within lessons. (James)

It's [ability] about their motor skills. So, their practical ability to perform skills. It's also very much about their effort, attitude and behavior. (Sally)

We do some [motor skill] tests with them at the start of the year to give us an idea. We're also making our own observations. So, we're looking at their skills, but also their behavior and effort as well. (Katie)

The data also revealed that PE teachers drew on discourses of gender and ability to argue for greater use of grouping based on ability within boys' PE lessons and grouping based on

friendships within girls' PE lessons. Sally and Paul explained the rationale for their approaches, saying:

I think the girls prefer working together as a group more than the lads. They like to help each other out and they are very social too. They probably feel a bit more comfortable when things are more cooperative than competitive. So, most of the time I group them with their friends in mixed-ability lessons. (Sally)

The lads are more competitive. They probably prefer working with others who are at a similar level. So, we mostly group them by ability [within mixed-ability lessons]. (Paul)

Once again, the dominant focus informing notions of ability was motor-skill performance.

Mixed-ability grouping in PE in Key Stage 4: Pathways, choice, ability and hierarchy

When students attended PE for the first time in Years 10 and 11 at Westfield, they selected between two pathways: the performance pathway and the participation pathway. As James indicated, these pathways were also occasionally referred to as the team and individual pathways and were also gender differentiated.

The performance pathway is more focused on team sports and the participation pathway on individual sports. So, we sometimes refer to them as the team and individual pathways. It's the same for boys and girls, but just with different sports. (James)

As shown in Table 3, these pathways included six different types of curriculum activities, each of which was associated with a six- or seven-week block consisting of two lessons per week¹.

Insert Table 3 here

¹ This approach was a school-based curriculum planning structure as the National Curriculum does not specify the length of blocks.

Contrary to the overarching discourse of mixed-ability grouping at Westfield, PE teachers explained that they used the pathway model as a strategy to reduce the ability range of students within mixed-ability groups, and thus make teaching easier and more manageable. PE teachers raised concerns about the difficulty of meeting the varied needs of students in mixed-ability PE lessons in Key Stage 3, and more particularly the needs of students identified as 'more able'.

Katie explained:

I think the pathways came about because of the difficulties of teaching mixed-ability groups. There are problems with behavior and a lack of progress for the more able in mixed-ability groups. So, it's a subtle way of putting them together and allowing them to push each other on without us coming out and saying we're setting them. (Katie)

PE teachers also noted that the pathway model was not possible in Key Stage 3 because of extraneous factors, including timetabling and staffing constraints. Students were therefore able to experience the full range of activities in the curriculum in Key Stage 3 before specialising in team or individual sports in Key Stage 4. Sally remarked:

We'd probably use the pathways from Year 7, but we can't because of the logistics of timetabling ... We've got a bit more flexibility from Year 10 ... I suppose it does give the students a chance to experience the different activities in the pathways before picking them though. (Sally)

The process by which students selected a pathway for Key Stage 4 PE was explained by James:

In their first lessons [of year 10] they choose between two pathways based on different sports on offer. We just display the pathways on a projector in the sports hall and they pick which pathway they think they will enjoy the most. (James)

Further probing revealed that PE teachers were also sometimes using ability as a point of reference to advise students about which pathway to select in PE, while also considering which pathway particular students would feel 'more comfortable'. This was explained by Sally and Andrew:

We're probably guilty of encouraging our top performers to select the performance group. It tends to happen that way anyway, even if we don't say anything. (Sally)

We don't do it often because we like the students to choose themselves, but sometimes we might have a quick word with them. So, for example, if we think they would be more comfortable doing individual activities, we might encourage them to select the participation pathway. (Andrew)

With PE teachers equating ability in PE with performance in games-based sports, the performance and participation pathways were viewed hierarchically. Paul explained:

I suppose it kind of organically leads to ability groups. So, we tend to find that the more able go in the performance pathway and the less able go in the participation pathway. It can almost end up like a top set and a bottom set. (Paul)

As the following comments highlight, an important aspect of context played a major part in this scenario - the status of school sport and the direct link made between the performance pathway in Key Stage 4, and opportunities for students to be involved in extra-curricular school teams. Paul and Owen explained these linkages, commenting that:

It's [the performance pathway] usually your school team players. Those who just want to perform sport and they know that's what they will do in the performance pathway ... You might have some very talented dancers or trampolinists in the participation pathway, but in a game situation they wouldn't excel. (Paul)

I think the performance group tends to be the more able because sport is valued so highly within the school. We probably offer more extra-curricular opportunities in team sports than we do in individual activities as well. (Owen)

Other PE teachers similarly demonstrated an understanding of status and hierarchy being implicit in the pathways. For example, Andrew reflected:

I think there's status and hierarchy associated with the mixed-ability groups to be honest. I mean simply in their names. To perform sport rather than just simply participate in sport. It implies that you have to be able to do sport to be in the performance group rather than just take part in sport to be in the participation group. I think the students see that and it is probably reflected in their decisions. (Andrew)

PE teachers at Westfield thus primarily framed ability in PE in Key Stage 4 in relation to discourses of sport performance. In doing so, they also privileged a narrow conceptualisation of ability that centred on movement skills and values associated with games-based sports, including competitiveness, speed and coordination. As the following comments illustrate, the use of motor skills and fitness tests in assessment reaffirmed this emphasis:

We do some baseline testing with them to get a rough idea of where they're at. So, we're looking at things like their fundamental movement skills, whether they can run, catch, if they have spatial awareness. (Owen)

The PE teachers were also, however, drawing on their ongoing observations of students to inform judgements about their abilities in PE, and it appeared that this mode of assessment supported somewhat broader notions of movement competency being recognised and valued:

You can also see things by observing them. You can tell who is confident, who performs things correctly, who moves well, who is in the right place at the right time. So, that's at the back of our mind too. (Laura)

At the same time, the underpinning largely normalised thinking about movement and ability in PE was clearly reflected in teachers' thinking and pedagogy. The adoption of the pathway model influenced PE teachers' expectations and assumptions about students' abilities in PE and, in turn, their pedagogical practices. PE teachers varied the pace and content of their teaching in the performance and participation pathways, with students in the performance pathway often experiencing fast-paced and challenging work, while those in the participation pathway experienced slow-paced work and a more restricted curriculum:

I think we're probably guilty of teaching them [students in the different pathways] differently. The performance group tends to be the more able, so you can kind of push them on a bit and really challenge them. The participation group need more time to grasp things and we probably don't cover the curriculum in as much depth either. (Laura)

PE teachers also viewed student attainment as more homogeneous in PE in Key Stage 4 than in Key Stage 3 classes and, as a consequence, tended to differentiate work less and make greater use of whole-class teaching methods. Andrew explained:

I probably don't differentiate things as much when I'm teaching Year 10 and 11. There definitely isn't that range, so you haven't got that level of differentiation in lessons. You can kind of target provision at the same level because they are all quite similar. (Andrew)

Similar comments were made by Laura:

I probably put much more time and energy into planning [for Key Stage 3]. The differences between them are huge. I'm not sure if I get a bit lazy when I'm teaching the

performance and the participation groups, but I probably change my practices. The range of ability isn't as broad, so I don't need to plan for the same level of differentiation. I can kind of pitch things to one or two levels rather than five or six. (Laura)

As indicated above, PE teachers' assumptions about ability also led to students in the performance pathway benefitting from increased access to extra-curricular activities and being more likely to be encouraged to select examination PE as an option choice in Year 10. James acknowledged that:

Most of our GCSE students are from the performance pathway and it probably means that we focus a bit more on them to be honest. Things like encouraging them to attend after school clubs. Pushing them to select GCSE PE in their option choices. Things like that. Most of the students in the performance pathway are on school teams too. (James)

Mixed-ability grouping, pedagogy and inclusion in PE at Westfield

In the mixed-ability PE setting for Key Stage 3 students at Westfield, within-class grouping strategies and teaching as a whole appeared clearly directed towards supporting students "to reach proficiency that aligns with a particular standard of motor skill, fitness or tactical competency" (Penney et al., p. 1068). The visions of ability inherent in grouping and teaching were further framed in relation to performance in established team games that were overtly privileged in the Key Stage 4 PE curriculum. The approach to differentiation in Key Stage 3 PE, the design of Key Stage 4 curriculum and assessment discourses and practices all reflected normative and integrative (DeLuca, 2013) conceptualisations of inclusion in PE. In our data, there was little evidence of "a willingness to question assumptions that underpin established curriculum, pedagogical and assessment practices and that simultaneously contribute to the reproduction of inequities in physical education" (Penney et al., p. 1069). Rather, the centrality

of established, traditional activities, forms of movement and performance discourses within the mixed-ability PE setting, all pointed towards ongoing reproduction and legitimation of inequities engrained in provision of curriculum and extra-curricular PE and in teachers' pedagogic practices. Narrowly conceived understandings of ability and assumptions grounded in gender discourses informed and continued to be legitimated by these practices.

While PE teachers at Westfield were not formally grouping students by ability, they were clearly drawing on and applying particular conceptions of ability to group students within mixed-ability PE lessons in Key Stage 3 and to then frame pathway opportunities for different students in Key Stage 4. In both instances, practices expressed narrow and limited conceptualisations of ability and inclusivity and served to legitimate and reproduce the status of skills, knowledge and understandings that aligned with a traditional team sport and performance orientation. For those students accorded recognition as able in PE and sport, opportunities for extending learning and participation opened up, while deficit discourses seemingly dominated the positioning of other students and simultaneously limited their learning and participation opportunities. More broadly, we suggest that the discourses of performance and participation, dominant in Key Stage 4 particularly, stand in sharp contrast to trends in contemporary participation and also, therefore, "ways of moving and movement skills that are important to young people now and in the future" (Penney et al., 2018, p. 1071).

Conclusion

The findings from this case study demonstrate the complex and nuanced nature of mixed-ability grouping practices in PE. It has drawn particular attention to an important inter-relationship for PE teachers and teacher educators internationally to consider - between conceptualisations and enactments of ability, grouping practices and issues of equity and inclusion. In many instances,

teaching and learning in PE at Westfield was framed in very similar ways to that seen in settings with ability grouping (Croston, 2014; Wilkinson et al., 2020). Echoing previous research in classroom-based subjects (see, e.g., Francis et al., 2020; Marks, 2013; Sukhmandan & Lee, 1998), this study also provided examples of symbolic distinction in the naming of different mixed-ability groups. Teachers' assumptions about students' abilities and learning capabilities impacted learning opportunities both within and beyond the curriculum. Practices associated with curriculum design, pedagogy and assessment repeatedly indicated that inclusivity within mixed-ability teaching in PE was being framed in normative and integrative terms (DeLuca, 2013; Penney et al., 2018), and simultaneously signalled the continued legitimisation and institutionalisation of established gender-differentiated practices, experiences and opportunities in PE (Fletcher 1984; Flintoff & Scraton 2006; Kirk 2002; Penney 2002; Wilkinson & Penney, 2021; Wilkinson et al., 2020).

Over 30 years ago, Evans (1985) noted that the continuation of selective processes within contexts of mixed-ability grouping in England was unsurprising, given that the introduction of mixed ability grouping "as an organisational form" was driven by systemic concerns for improved management and efficiencies, with "little to do with provision of an appropriate pedagogy, curriculum or educational equality of opportunities" (p. 159). This study reaffirms that mixed-ability settings are a critical area for further research and professional learning in PE that is directed towards advancing understandings of the ways in which conceptualisations of both ability and inclusion shape teachers' thinking and practice in mixed-ability settings – and, in turn, impact the learning opportunities afforded to different students. Our data, in particular, calls for more studies that adopt an applied focus in research, engaging teachers in exploring ways in which understandings of ability can be extended to embrace the intent of dialogical and transgressive approaches to inclusion in mixed-ability teaching and learning in

PE (De Luca, 2013; Penney et al., 2018). Finally, it is important to acknowledge the absence of student voice in this paper and recognise a critical need for research that examines students' perceptions and experiences of mixed-ability and other grouping practices in PE.

Tables:

Table 1. Details of the case study school at the time of study

	Westfield
Type of school	Local authority maintained
Age range	11-18
Gender	Mixed
Students on roll	1600 (rounded to the nearest 100)
Students eligible for free school meals	9% (average for English secondary schools = 28%)
Students with Special Educational Needs Support	6% (average for English secondary schools = 11%)
Students achieving grade 5 or above in English & mathematics GCSEs	62% (average for English secondary schools = 43%)
Ofsted grade	Outstanding

Table 2. Details of the PE teachers who participated in this study

Teacher/ Role	Number of years teaching/ At the school
Paul (Head of Department)	10/ 10
Sally (Assistant Head of Department)	12/ 7
Katie	6/ 6
Andrew	7/ 5
Laura	3/ 3
James	2/ 2
Owen	2/ 2

Table 3. Details of the activities in the participation and performance pathways

Pathway	Activities
Girls' participation pathway	Athletics, dance, tennis, trampoline, badminton, gymnastics
Girls' performance pathway	Netball, rugby, football, hockey, rounders, handball
Boys' participation pathway	Table tennis, athletics, tennis, trampoline, badminton, gymnastics
Boys' performance pathway	Basketball, rugby, football, hockey, cricket, handball

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