**Setting and within-class ability grouping: a survey of practices in physical education**

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Within the United Kingdom (UK) and internationally, the practice of separating pupils by ability endures as a characteristic feature of mathematics and science classrooms. Though there is an extensive international research literature on ability grouping within classroom-based subjects, limited research exists in the context of physical education (PE). The purpose of this paper was to explore ability grouping in PE in North East of England schools. Specifically, the paper examined the prevalence of setting and within-class ability grouping in PE, the contexts of its use, how sets and within-class ability grouping were established, and the rationales used to justify decisions about setting and within-class ability grouping in the subject. Data were collected via a web-based survey site. The electronic survey was sent to 194 PE Heads of Department (PE HoDs) from North East of England schools catering for pupils in Key Stage 3 (ages 11 to 14) and/or Key Stage 4 (ages 14 to 16). The results indicated that setting is embedded in the organisational and pedagogical practices of PE in many secondary schools. Ability also served as a basis upon which to organise pupils *within* mixed-ability and setted PE lessons. A variety of other factors including friendship and behaviour, were also reported as factors influencing grouping of pupils in PE lessons.Our discussion directs attention to issues arising for policy and practice in PE and points to the merits of further exploration and analysis of between-class and within-class grouping practices in the subject.

**Key Words:** Ability grouping; Setting; Between-class ability grouping; Within-class ability grouping

**Introduction: the policy context of ability grouping in schools in England and Wales**

In England and Wales, as in many other educational systems throughout the world, educational policy is dominated by the rhetoric of raising ‘standards’ of achievement, particularly in terms of attainment in national tests and examinations (Benjamin, 2003; Stobart, 2008). Fuelled partly by ubiquitous achievement-based priorities and enduring concerns about underachievement, a prominent and sustained feature of UK government’s policy on education in recent years (Conservative Party, 2010) has been an expectation that primary (ages 4 to 11) and secondary (ages 11 to 18) schools1 make greater use of structured ability grouping in the form of setting. Indeed, since 1997, when New Labour was elected into office, a raft of policy documents and pronouncements have provided clear and unequivocal support for the proliferation of setting in schools in England and Wales. In 1997, the Labour Party outlined their commitment to ability grouping in their election manifesto. The Labour Party argued emphatically that ‘children are not of the same ability, nor do they learn at the same speed. That means setting children in classes to maximise progress, for the benefit of high fliers and slower learners alike' (Labour Party, 1997: 7). This commitment was endorsed and reaffirmed in the Labour Party’s first White Paper, Excellence in Schools (Department for Education and Employment [DfEE], 1997). In the British political system, a White Paper is an authoritative government report that declares new and intended policy direction. The DfEE argued vociferously for the use of setting, particularly for science, mathematics and languages, declaring that ‘we do not believe that any single model of grouping pupils should be imposed on schools, but unless a school can demonstrate that it is getting better than expected results through a different approach, we do make the presumption that setting should be the norm in schools’ (DfEE, 1997: 38). This trend continued in the White Paper, Higher Standards, Better Schools for All (Department for Education and Skills [DfES], 2005) which propounded the view that the differentiation of pupils by ability or attainment can help build motivation, social skills and independence, and ‘most importantly can raise academic standards because pupils are better engaged in their own learning’ (DfES, 2005: 58). The current Conservative Government appears to espouse similar views. In his Keynote Speech to party members in 2007, and more recently, in his Party's 2010 election manifesto, Conservative leader David Cameron explicitly advocated for more setting and streaming, with a ‘grammar stream’ in every subject in every school, so that the most able pupils continue to be stretched and that all pupils are taught at the right level (Conservative Party, 2007, 2010). In early September 2014, several newspaper reports (Wintour, 2014; Press Association, 2014) surfaced and claimed that secondary schools would be forced to set pupils by ability. It was reported that the plan would be considered as part of the Conservatives’ 2015 general election manifesto. For the moment, at least, it appears that the Conservative Government will not enforce a policy of setting on secondary schools. Indeed, there was no reference to setting in the Conservative manifesto 2015 (Conservative Party, 2015), perhaps reflecting ongoing controversy surrounding the effectiveness of setting and its impact on pupils.

**Ability grouping: perceptions and understandings**

Although successive UK governments have offered clear support for setting as a purported means of driving up standards of attainment and enhancing pupils’ motivation and learning (DfES, 2005; Conservative Party, 2007, 2010), an extensive academic discourse (Slavin, 1987, 1990; Ireson and Hallam, 1999; Wiliam and Bartholomew, 2004) has disputed the relative educational merits of ability grouping in schools. Though not unequivocal, research examining between-class ability grouping in mathematics, English and science classrooms has robustly indicated that the placement of pupils in ability groups, of itself, does not deliver a net positive effect on pupils’ scholastic achievement (Slavin, 1987, 1990; Wiliam and Bartholomew, 2004; Ireson et al., 2005), and in some cases tends to depress achievement slightly (Wiliam and Bartholemew, 2004). Ability grouping has also been identified as contributing to different teacher expectations (Hallam and Ireson, 2005; Dunne and Gazeley, 2008), and has impacted negatively on both high ability and low ability pupils’ sense of self, adequacy and their willingness to access and pursue learning opportunities (Boaler, 1997a, 1997b; Boaler et al., 2000; Hallam and Deathe, 2002). Although the contextual nature of mathematics, English and science environments make it problematic to generalise about the value of ability grouping, the questionable efficacy of the practice in these subjects should prompt stakeholders to reflect critically on the use of setting in other subject contexts, including PE.

*Distinguishing ability grouping and defining setting*

‘Ability grouping’ explicitly features in political, policy, professional and research arenas internationally. It remains, however, characterised by the use of a variety of terms across different policy and education contexts. In England and Wales, setting is grouping pupils from different classes by ability or achievement in certain subjects only. This grouping arrangement is referred to as streaming in New Zealand and in European and Asian school systems. It is termed regrouping in parts of Australia, and is covered by the terms tracking and ability grouping in the United States. All are versions of between-class ability grouping, which differs from within-class ability grouping, where teachers divide pupils into smaller groups reflecting different levels of ability within the same class. Given the different systems and variation in terminology, in this paper *setting* is used in referring to *between-class* ability grouping. The position reflects that the context in which this research was conducted was schools in England where between-class ability grouping is recognised as setting, and where intra-class ability grouping and/or in-class ability grouping is referred to as *within-class* ability grouping.

**The practice of ability grouping in schools**

To date, where data on the prevalence of ability grouping arrangements have been collected, the limited extant research has, with few exceptions (e.g. Penney and Houlihan, 2003; Hallam et al., 2008), been restricted to the academic subject areas of mathematics, English and science in the primary and secondary school context (The Office for Standards in Education [Ofsted, 1998]; Hallam et al., 2003; Hallam and Parsons, 2013a, 2013b; Loveless, 2013). The research has revealed that the practice of separating pupils by ability (e.g. tracking, streaming, banding or setting) is a common feature of schools internationally, is most prevalent in high/secondary school mathematics classrooms, and is conventional practice in most high/secondary school science lessons. Fitz et al. (2006), for example, suggest that it might well be that the practice of setting aligns more with subjects or classrooms where learning is conceptualised as linear, and where mastery of one stage is thought to be necessary before proceeding to the next, than with contexts where pedagogy is not constructed in this way. While Fitz et al. did not identify specific contexts as linear or nonlinear, other research (Ball, 1981; Hallam and Ireson, 2003) points to mathematics and science being particularly associated with linear conceptualisations of learning. We also acknowledge that linear conceptualisations of learning may feature in PE. Little empirical research has, however, explored the extent of ability grouping in other curriculum subjects. In other research, art, music, drama, and PE have tended to be grouped together as ‘practically-based subjects’ (e.g. Ofsted, 1998; Hallam et al., 2008). With this conflation of various subjects, where PE has been included in ability grouping research, data presented has been limited in both quantity and scope.

As indicated above, while ability-based practices are at times overtly used to establish setted class groups, they may also be enacted in a less structured way, such that although pupils may not be arranged formally in sets, they may still experience grouping based on ability within lessons. Yet, in the absence of systematic and specific analysis of these practices in PE, little is known about either structured grouping in PE, or the basis upon which and ways in which teachers select and position pupils for teaching and learning purposes within classes. A small body of empirical work (e.g. Penney and Houlihan, 2003) in the PE literature has revealed increasing orientations of PE departments in specialist secondary schools in England to structured ability grouping. In the UK, specialist schools are state schools, which aim to be local centres of excellence in their particular subject specialism(s)2 (DfEE, 2000). Penney and Houlihan’s (2001) national survey of 101 Specialist Sports Colleges3 in England found that setting was a common arrangement in PE at Key Stage 3 and Key Stage 4, and particularly Key Stage 44. However, evidence arising from surveys of secondary schools more broadly provides some contrasts to Penney and Houlihan’s findings. In Ofsted’s (2001) Annual Report of 698 secondary schools in England, only 11% of the PE lessons observed by inspectors were set by PE ability. Similarly, Hallam and colleagues’ (2008) survey of 97 PE teachers from 45 mixed-gender secondary comprehensive schools in England reported that very few schools were adopting setting as a pedagogical and organisational strategy for teaching PE. Hallam and colleagues’ (2008) survey findings indicated that in 14% of cases, mixed-ability grouping in year 7 was followed by some kind of setting in years 8 and 9. In the same study, the majority (83%) of PE teachers thought that the subject was suitable for mixed-ability teaching. Yet, approximately one third (31%) of those PE teachers surveyed indicated a preference for some form of ability grouping after year 7 – 22% in years 8 and 9 and 9% in years 7-9 (Hallam et al., 2008). Although the PE teachers stated that they wanted setting to be undertaken in relation to their subject, where setting was implemented in PE it was often determined by whole-school grouping policies, based on performance in academic subjects (mathematics, English and science) with the result that pupils within any given set in PE were often at very different levels of ability (Hallam et al., 2008). Hence pupils were not specifically set by ‘PE ability’ and a major source of frustration for PE teachers was that setting procedures based only on the perceived needs of academic subjects were being imposed.

Located in the UK, this research reflects the continued prominence of setting in government discourse (Conservative Party, 2007, 2010) and that setting is an embedded feature of many pupils’ educational lives. At the same time, this research sought to extend a line of critical policy scholarship in PE that has drawn on work in education policy sociology and in so doing, highlighted an ongoing need to pursue how particular understandings, that play a central role in framing (and limiting) teaching and learning in PE, continue to be legitimated in political, policy and professional settings (e.g. Evans and Davies, 1986; Penney and Evans, 1997; Swabey and Penney, 2011). This research acknowledged that the ways in which notions of ‘ability in PE’ are represented in and legitimated by policy texts, but also understood and enacted in schools, continue to have a profound influence on pedagogical practices, experiences and identities in PE (Evans, 2004; Hay and Macdonald, 2010; Penney and lisahunter, 2006). In our view, this calls for research that continues to probe how ‘ability’ is discursively constructed ‘within and by’ PE policy, with the recognition that policy texts feature and promote particular understandings of ability. Similarly, we see a need for research that further explores how ability is constructed within and by pedagogical practice in PE. Our interests centre on the effect that particular discursive and pedagogic constructions of ability have on learning and learners in PE. More specifically, this project reflected that relatively little contemporary research in PE has sought to critically examine grouping practices and the discourses of ability that are expressed and legitimated by them. The research presented in this paper therefore aimed to extend empirical insights into ability-based grouping practices in PE, and specifically investigate:

1. The incidence of setting and within-class ability grouping in Key Stage 3 and Key Stage 4 PE in schools in the North East of England;
2. The justifications underlying decisions about the use of setting and about within-class ability grouping in Key Stage 3 and Key Stage 4 PE in schools in the North East of England; and
3. The criteria associated with assignment of pupils to sets and with the application of within-class grouping in Key Stage 3 and Key Stage 4 PE in schools in the North East of England.

**Method**

In order to obtain an indication of the extent of ability grouping practices in PE, empirical data were gathered via an Internet-based survey instrument, administered using Survey Monkey ([www.surveymonkey.com/](http://www.surveymonkey.com/)). There is growing support for the use of emergent electronic tools, specifically online survey methods, in educational research (Dix and Anderson, 2000; Carbonaro et al., 2002; Check and Schutt, 2012). As with any method of research, however, there are advantages and disadvantages of using the Internet for data collection. The former include a decrease in time losses incurred from survey distribution by hand or mail, and that non-delivered email notifications provide immediate information on the portion of the sample that did not receive the survey (Dix and Anderson, 2000). Disadvantages of online survey methods include uncertainty over who is responding to the survey, and limitations on the depth of responses that may be provided to open-ended survey questions (Dix and Anderson, 2000; Carbonaro et al., 2002). Accordingly, these limitations should to be considered when interpreting the results of this study. In the context of this research, reasons for using a web-based survey were that it permitted data collection from schools spread over a broad geographical area, provided expeditious access to a large number of PE HoDs, and research suggests that it may facilitate a higher response rate than a mail-survey due to the convenience and immediacy of response format (Dix and Anderson, 2000; Greenlaw and Brown-Welty, 2009). Further details of the survey instrument are provided below.

*The survey*

The electronic survey was developed in two ways. Initially, questions, phrasing and terminology were adapted from previous surveys of ability grouping (Hallam et al., 2003, 2008; Hallam and Parsons, 2013a, 2013b) and from reflections on themes from related research (Marks, 2012, 2013; Macqueen, 2013). The survey was then piloted with 10 PE HoDs from schools not involved in the study, for comment on usability, clarity and appropriateness of the questions. PE HoDs highlighted questions which required further explanation. To address this issue, modifications were made to the wording and ordering of particular items, and a revised final survey was developed. The final survey consisted of 35 items addressing ability grouping both at a class level and within PE classes. PE HoDs were provided with a definition of setting as ‘when pupils arrive to PE they are assigned to classes with others of similar PE ability’. Within-class ability grouping was defined as ‘dividing pupils into smaller groups based on PE ability within PE lessons’. ‘PE ability’ was deliberately included in the description for two reasons. First to differentiate between setting based on pupils’ ability and/or attainment in academic subjects and in PE, and second, to encourage PE HoDs to report setting based only on pupils’ PE abilities. Though numerous perspectives on ability exist, and its precise meaning is contested and recognised as socially constructed (Evans, 2004; Penney and lisahunter, 2006), we decided to use the term ‘ability’ as it is used by PE HoDs on a day-to-day basis. The survey acknowledged the contested nature of the term ‘ability’ and therefore, its varied application in relation to setting and grouping. The survey deliberately did not attempt to impose a single definition of ability as the intention was to reveal the varied practices falling under the ‘umbrella’ of ‘ability’ as a construct being applied by teachers. Presenting a ‘fixed’ definition would have resulted potentially in quite different responses. Closed-response questions requested information about the nature of the school, its age range, size and organisation, the extent of grouping within and between classes, and how ability was operationalised through setting and within-class grouping in PE. Open-ended questions were used to ascertain PE HoDs’ reasons and justifications for their use of setting, or not, and for within-class ability grouping in PE in their schools.

*Data collection*

A link to the electronic survey was circulated via email to all 194 PE HoDs in single-sex (n=9) and co-educational (n=185) schools with Key Stage 3 and Key Stage 4 pupils in the North East of England5. The North East of England contains 35 middle schools (ages 9 to 13 or 11 to 14), 14 high schools (ages 13/14 to 18), and 145 secondary schools (ages 11-18). Although not all local education authorities (LEAs) in England have middle schools, middle schools were included in the sample group as they provide for Key Stage 3 pupils (years 7 and 8) and the three-tier model of primary, middle and high is a relatively common pattern of provision in the North East of England. As we discuss below, the inclusion of single-sex and co-educational schools also provided valuable insight into gendered dimensions of setting in PE. Contact details for the PE HoDs were sourced via school websites. Ethical clearance for the study was obtained from the University Research Ethics committee in February 2014. To increase response rates, two reminder emails containing the URL to the survey were sent one week apart to nonrespondents following survey implementation. Data were collected over a one month period during the summer term, 2014. A total of 155 electronically administered surveys were completed and returned, representing 79.9% of the sample.

*Data analysis*

Following data collection, all numerical and categorical survey data were analysed descriptively to calculate frequencies and percentages of responses. All closed and pre-coded items were imported into an Excel spreadsheet, and mean scores for each item calculated. Qualitative data generated by the open-ended questions were collated and an inductive content analysis undertaken. This approach involves the researcher(s) reviewing the data and allowing themes or patterns to emerge (Patton, 2002). The procedure first entailed the reading and rereading of the data to detect initial patterns, relationships and inconsistencies. Data considered to represent similar meanings were clustered into thematic categories, and then compared and contrasted with other categories. Where data appeared incompatible with identified themes, additional themes were generated. Frequency counts of the number of PE HoDs who discussed each theme, for example, ability, behaviour and effort, were then calculated. Where data were missing, percentages for each item were based on the proportion of given responses. Findings from analysis of survey responses are presented in the following section.

*Characteristics of responding schools*

Characteristics of participating schools are provided in Table 1. The sample included a wide range of responses in relation to school size, but consisted mainly of 11-16 or 11-18 co-education community or academy6 schools.

*Table 1 here*

**Results**

*Setting in PE*

The number of PE departments in the sample utilising setting for lessons was 96, 61.9% of the total. 72.2% of PE HoDs indicated that they were understanding ‘ability’ in terms of attainment in PE specific motor skill and physical fitness tests. A number of HoDs also mentioned other factors including behaviour (26.7%), friendship (15.6%), attitude (8.9%), motivation (8.9%), potential (8.9%), effort (4.4%), special educational needs information (2.2%), and confidence (2.2%) as influencing their setting decisions. Survey data revealed that while setting in PE was relatively extensive in secondary and high schools providing data, the practice was much less likely to occur in middle schools. 70.3% of all responding secondary schools and 58.3% of all responding high schools reported use of some form of setting in PE in their school. In contrast, only 22.2% of middle schools indicated that they were using setting in PE.

*Setting in Key Stage 3 and Key Stage 4 PE*

*Figure 1 here*

Of the 83 secondary schools using setting to form classes in PE, 77.1% were doing so in year 7 with the greatest proportion (94%) occurring in year 8. 87.8% of secondary and high school PE HoDs using setting indicated that they were doing so for year 9 PE, falling to 51.1% and 36.7% for year 10 and 11 PE. All six middle schools using setting procedures in PE stated that they were doing so for both year 7 and year 8. Middle school data are included in Figure 1 and are represented by year 7 and year 8.

In England, Wales and Northern Ireland, pupils in Key Stage 4 have the opportunity to study General Certificate of Secondary Education (GCSE) or Business and Technology Education Council (BTEC) PE courses. GCSEs are academic qualifications assessed mainly on written examinations, although in PE there are also elements of coursework and practical activities. BTECs are vocational, work-related qualifications. Unlike GCSE PE, BTEC PE is, at this time, assessed via coursework rather than examination. The survey therefore explored whether setting was being used in the context of practical and/or theory classes associated with vocational (BTEC) and examinable (GCSE) PE. This reflected an acknowledgement that it is common practice for schools in England to distinguish ‘practical’ and ‘theory’ lessons in their delivery of these courses. Among those secondary and high schools employing setting practices, 41.8% were placing pupils into set teaching groups for GCSE practical PE and 54.4% were using the practice for GCSE theory PE lessons. There were fewer instances of setting in Key Stage 4 vocational PE. In those secondary and high schools implementing setting in PE, less than one in three (30%) were doing so for BTEC practical PE lessons, and just over a third (36.7%) for BTEC theory PE lessons. Figure 1 outlines the percentages of setting by year groups within PE departments employing the practice.

It was notable that all schools using setting in PE were intending to continue with this form of organisation in the future and extension of the use of setting to other year groups and/or into BTEC and GCSE lessons was planned by 29.2% secondary schools. 16.9% of secondary schools that were not currently using setting were planning to initiate the practice in PE for the academic year 2014/2015.

*Setting in boys’ and girls’ PE*

In many co-education secondary and high schools in England (and especially in Key Stage 3), PE has traditionally taken the form of single-sex groups and different activities for boys and girls (Lines and Stidder, 2003). In the context of this research, 81.5% of schools using setting in PE delivered PE in single-sex classes in all Key Stage 3 lessons, and 16.3% used a combination of single-sex and mixed-sex classes. Only 2.3% of schools reporting setting delivered Key Stage 3 PE in mixed-sex classes for all PE lessons. Pupils were generally in mixed-sex groups in Key Stage 4 vocational and examinable PE classes. This study therefore sought to pursue the use of setting amidst single-sex grouping arrangements in Key Stage 3 PE. PE HoDs in co-education schools that taught PE in single-sex groups were asked to indicate if setting was used for boys’ PE only, girls’ PE only, or for both boys’ and girls’ PE in their school. One (1.2%) co-education school using setting reported the arrangement in girls’ PE only, 10 (11.6%) schools were using setting in boys’ PE only, and 79 (87.2%) schools were setting in both boys’ and girls’ PE in Key Stage 3. Though it was beyond the scope of this study to explore why boys were more likely to be setted in contexts using single-sex grouping for PE, the finding is clearly important in revealing a dimension of sex-differentiated pedagogical practice that has not previously been highlighted.

*Setting in different aspects of the PE curriculum*

*Figure 2 here*

In those schools adopting setting in PE, almost all were using setting in team games (98%), swimming (93.3%), athletics (92.7%), and individual games (90.6%). Of the remaining schools employing setting in PE, 88.5% were doing so for gymnastics, 88.4% for health related fitness (HRF), 85.7% for dance, and 84.3% for outdoor adventure activities (OAA). The variation in the extent to which setting occurs in particular activity contexts raises interesting issues in relation to the learning focus in these contexts (e.g. sport-specific movement skills or personal and social skills) and associated perceptions of setting as more or less desirable. Furthermore, these differences in setting practices particularly highlight the need for further exploration of what abilities specifically are being recognised and used as the basis of setting practices in PE. These are amongst the issues arising from this data set for future research to pursue. Figure 2 provides the frequencies of setting according to subject areas of the curriculum in PE departments using the practice.

*Reasons and justifications for setting, or not, in PE*

*Table 2 here*

Qualitative content analysis of PE HoDs’ reasons and justifications for using setting in PE generated 25 code items. The most frequently reported reason for using setting in PE was that the practice enabled all pupils to learn, make progress and achieve. Marginally fewer PE HoDs suggested that setting enabled them to optimally challenge pupils of all ability levels in PE. The 12 code items with the highest frequency counts are included in Table 2. Least frequently reported reasons for using setting were that pupils prefer it, for behaviour management, and to allocate teaching assistants.

*Table 3 here*

Qualitative content analysis of PE HoDs’ reasons and justifications for not using setting in PE yielded 16 code items. Code items with a minimum number of five responses are included in Table 3. The most frequently reported reason for not implementing ‘PE specific’ setting in schools was that pupils would arrive to PE in sets based on attainment in academic subjects, and stay in those sets for PE. Other frequently reported reasons for not using setting in PE were that there were not enough students or PE staff in the school to accommodate such arrangements. Least frequently reported reasons for avoiding the practice were to avoid labelling pupils, and that mixed-ability grouping provides equal opportunities for all pupils.

*Within-class ability grouping in PE*

Ability also served as a basis upon which to organise pupils within mixed-ability and setted PE lessons. Almost three quarters (74%) of the 96 departments adopting setting in PE reported using some form of within-class grouping. Of these schools, 28.2% organised within-class groups based solely on ability, 57.7% were making within-class grouping decisions on the basis of judgements of ability and a combination of either pupil friendship, behaviour, choice, interest and diversity, and 14.1% were using a combination of criteria other than ability – either pupil friendship, behaviour, interest, choice and diversity to determine the allocation of pupils to within-class groups. Schools not using setting in PE (n=59) were also specifically asked to indicate if they grouped pupils within PE lessons. Of these schools, 84.7% used grouping within PE lessons. Just under one-third (32%) were exclusively using differentiations of ability to arrange pupils into groups within PE lessons, 64% combined ability and either pupil friendship, behaviour, choice, interest and diversity, and only 4% were using a combination of criteria other than ability to determine pupil groups within PE. In total, 78.1% of all responding PE HoDs reported teaching PE lessons involving some form of within-class grouping.

*Reasons and justifications for using within-class ability grouping in PE*

*Table 4 here*

Qualitative content analysis of PE HoDs’ justifications for using within-class ability grouping in PE generated 14 code items. Code items with a minimum number of four responses are included in Table 4, and are presented separately to reflect within-class ability grouping in setted and non-setted PE contexts. Overwhelmingly, the most frequently reported reasons for adopting within-class ability grouping in setted PE and non-setted PE was to facilitate the differentiation of planning and tasks for individual classes, and to encourage cooperation and collaboration between pupils. Least frequently reported reasons for using within-class ability grouping in setted PE were to promote flexibility and movement between groups, and to increase contact time with all pupils. Least frequently reported reasons for using within-class ability grouping in non-setted PE were to assist with behaviour management strategies, and that pupils have a preference for ability grouping within mixed-ability PE lessons.

**Discussion**

The purpose of this research was to provide a snapshot of ability grouping practices in PE in North East of England schools catering for pupils in Key Stage 3 and/or Key Stage 4 of their schooling. More specifically, the study sought to investigate the extent to which ability-based setting was being used in schools, the use of ability as a basis for grouping pupils within PE classes, whether they were part of a setting structure or not, how sets and within-class ability grouping were established, and the underlying rationales for adopting such practices or not. In this section, the significance of these data in relation to previous research on ability grouping is discussed, together with the prospective implications of the findings for educational equity and practices of PE in schools. Finally, potential directions for future research are discussed.

*Setting*

The survey highlighted that the use of setting in PE in schools in the North East of England was well established. While it is difficult to draw comparisons with surveys conducted at different points in time, the findings suggest that setting in PE may be increasing given that previous research found that pupils were infrequently set for the subject (Ofsted, 2001; Hallam et al., 2008). Overall, approximately 62% of total respondents were currently teaching PE to setted groups, with this prominent in secondary schools and also many high schools. Setting particularly featured in the second (year 8) and third (year 9) years of Key Stage 3 PE. Data indicated that in some (five, 8.5%) schools setting is postponed in PE in year 7 to allow teachers to gather assessment data on pupils to inform setting in PE in year 8. Seven PE HoDs (7.3%) reported that setting in year 9 was used as a basis to identify pupils for, and to encourage more able pupils to, select PE examination courses in year 10. The lower incidence of setting in the first year of Key Stage 3 (year 7) and across Key Stage 4 can be linked to a number of factors. In secondary schools specifically, 10 (16.9%) PE HoDs revealed that a lack of transitional information from the feeder primary schools on new intake pupils precluded them from initiating setting in PE immediately on entry to the school. 10 (16.9%) PE HoDs reported that the reason for not using setting for years 10 and 11 PE was that pupil groups were determined by different optional curriculum paths - where pupils self-select a pathway of curriculum activities to follow, rather than setting. Seven (11.9%) secondary school PE HoDs also suggested that there were not enough pupils or classes to set for vocational courses and/or examination PE.

Although PE HoDs were asked to report setting based on PE ability, it was apparent that ability was not the only basis for setting in the subject. PE HoDs cited a variety of factors as influencing set placement including ability, attainment, behaviour, attitude, friendship, potential, motivation and effort. This is perhaps not altogether surprising. PE teachers in Hay and lisahunter (2006) and Hay and Macdonald’s (2010) analysis of the complexities of ability construction in and through pedagogical practices within senior secondary PE constructed ability to include notions of behaviour, effort, motivation and attitude. These studies explored the construction of ability rather than ‘ability grouping’, but findings arising in research conducted in primary and secondary school mathematics, English and science lessons have similarly revealed that set placement was contingent on a range of factors including ability, behaviour, attitude and motivation (Boaler, 1997a; Muijs and Dunne, 2010; Marks, 2012). As noted earlier, our data also revealed gender-differentiated application of setting practices in PE that call for further investigation.

Ensuring that pupils made suitable progress in PE was at the fore of PE HoDs justifications for implementing setting in PE. 39 (40.6%) respondents attested to the benefits of setting in terms of maximising all pupils’ learning, progress and achievement, while seven (7.3%) PE HoDs specifically referred to the progress of the more able pupils. A belief in the perceived utility of setting as a means of optimising learning and improving achievement has similarly been reported by mathematics, English and science teachers (Ball, 1981; Gillborn and Youdell, 2000; Araújo, 2007), and constitutes the main argument enshrined in UK education policy discourse (DfES, 2005; Conservative Party, 2007, 2010). PE HoDs also stated that less able pupils were more confident and were more likely to participate in setted PE. This is a notable point of contrast to findings arising from studies addressing mathematics, English and science teachers’ motives for setting, and a voluminous literature (e.g. Lacey, 1970; Boaler, 1997b; Hallam and Deathe, 2002) in academic subject areas that has demonstrated that setting can engender frustration and lead to lower confidence and motivation for less able pupils. Although the respondents did not clarify why less able pupils were perceived to be more likely to participate in setted lessons, others (e.g. Hay and lisahunter, 2006; Hay and Macdonald, 2010) have reported that in mixed-ability lessons, less able pupils express concerns about publicly displaying a perceived lack of competence to more able peers for fear of ridicule and censure. Thus, it may be that some teachers believe that where less able pupils are ostensibly amongst a class group of comparably able peers, and less open to observation, judgement and surveillance from more able peers, they are more confident in performing and demonstrating their abilities.

For other PE HoDs, pragmatism in relation to matters of planning and/or delivery had prompted them to introduce setting in PE. A small number of PE HoDs (eight, 8.3%) echoed findings from previous research into mathematics, English and science teachers’ attitudes towards setting (Araújo, 2007; Hallam and Ireson, 2003; Hallam et al., 2004), in commenting that setted lessons were easier to plan and deliver. However, contrary to some of the schools and teachers in previous research (Boaler, 1997a; Boaler et al., 2000), the impetus for implementing setting in PE did not seem to be based on teaching the whole-class as a single homogeneous unit, but rather on a need to narrow the ability range within lessons to facilitate the implementation of differentiated planning and tasks. This view is exemplified in the comments of the following PE HoD: “Setting helps to narrow the range of abilities in a PE lesson. In this regard setting enables us to more effectively differentiate planning and tasks to ensure that pupils are challenged at their ability level”. PE HoDs perceptions of the practicability of setting in PE were particularly influenced by the size of their school and the exigencies of the timetable. Reflecting the findings of Hallam and colleagues (2008), 12 (20.3%) PE HoDs commented that there was very little or no scope for implementing setting in PE because the use of grouping was steered by pupils’ attainment in academic subjects in their school. A considerable amount of PE HoDs also indicated that the use of setting in PE was unworkable because of the small size of their school. In smaller schools with fewer PE staff or only one specialist PE teacher, 22 (37.3%) respondents stated that pupils would often arrive to PE in single-form classes, and, as such, there were not enough pupils or teaching groups to physically accommodate such arrangements. Ofsted (1998) and Hallam and colleagues (2003, 2004) similarly reported that it was unusual to find a school of one-form entry using setting, and that only in schools that were large enough to form two same-age classes was setting feasible. The nature and logic of particular activity areas of the PE curriculum was also acknowledged as an important determinant of setting. Seven (7.3%) PE HoDs suggested that the practice was the safest approach to teaching pupils with marked differences in physical strength and competence in team-based sports, particularly rugby and football. Only two (3.4%) PE HoDs who did not use setting in PE voiced concerns about the practice. Consonant with the anxieties of mathematics teachers in Venkatakrishnan and Wiliam (2003) study, one (1.7%) PE HoD expressed concern about stigmatisation attached to pupils in lower sets and the attendant negative labelling that could be prompted by hierarchical ability-based practices. The second PE HoD argued that equality of opportunity for all pupils in terms of access to learning and achievement would be compromised if setting was practised in PE. In this regard, an absence of setting in PE in schools appeared to principally reflect extraneous factors, for instance staffing, pupil numbers and timetabling constraints, rather than a general ambivalence or scepticism about the policy and practice itself. This finding supports previous research in England (Hallam and Ireson, 2003; Hallam et al., 2008) which has demonstrated that PE teachers tend to exhibit positive attitudes towards structured ability grouping, and reflects the earlier findings within classroom contexts (Reay, 1998; Hallam and Ireson, 2003) which reported that teachers generally believe in the positive impact of ability grouping as an educational process.

*Within-class ability grouping*

Ability-based within-class grouping was also commonly reported in this study. While this was a more prominent arrangement in PE lessons where setting was not used, it was also used in concurrence with setting, ‘effectively double-grouping pupils’ (Marks, 2012: 177). In this study both setted and mixed-ability classes were further split with reference to a variety of factors including ability, friendship, behaviour, interest, choice and diversity. In reviewing the ability grouping literature in England, Wilkinson and Penney (2014) indicated that relatively little is known about the learning dynamics and the often subtle and less formalised workings and effects of grouping amidst various types of PE classes (e.g. mixed-ability, setted, banded or streamed). This is arguably a particularly critical area for future study if we are to extend understanding of the overt and more subtle ways in which ability discourses are communicated and expressed in PE, and gain further insights into the particular abilities being privileged in and through grouping practices. Marks’ (2013) analysis of practices within primary school mathematics lessons has provided one of all too few vivid insights into the complex nature and impact of discourses of ability in aspects of teaching and learning in un-setted classroom situations. Even in situations where explicit ability grouping and labelling practices were not used, Marks (2013) reported that assumptions of individual difference, capacity and limits permeated teachers’ pedagogical actions and pupil-teacher interactions, which in turn impacted on pupils’ sense of competence, status and learning opportunities in mathematics. While the differential nature of particular subject cultures makes the extrapolation of research findings across mathematics and PE potentially problematic, further research is certainly warranted to explore the reasons for using various within-class groupings in PE, and the impact of dominant ideologies of ability amidst mixed-ability grouping in the subject.

**Conclusion**

In closing, it is important to acknowledge that the research described here provides a regional picture of current setting and within-class grouping practices within middle, high, and secondary schools in the North East of England. We emphasise that when interpreting or considering the generality of the findings, it is important to take into consideration that specific and differing cultural, social and policy contexts are significant. Insights from this research cannot be taken as applying in any straight-forward sense to schools throughout the UK or to education systems or disciplines in other countries. While noting that survey research is useful in identifying the types of grouping arrangements that pupils are likely to experience during PE lessons, we correspondingly reassert that such studies are limited in that they cannot comprehensively capture the nuances and subtleties of interventions, such as setting, as they are enacted within practice. We suggest that the extent and nature of grouping practices in PE is likely to be transient and complex and furthermore, that individual experiences of it will vary. Indeed, Gillard (2009) explains that groups in any single class will usually be formed or reformed periodically for particular activities and purposes according to the needs of the moment and the changing needs of particular groups of pupils. At the same time, we are also aware of literature highlighting the persistence of ability ‘labels’ assigned to pupils such that their impact can certainly be sustained (Gillborn and Youdell, 2000; Marks, 2012). While we are conscious of the partiality of the data reported and accordingly point to limitations in the generality of findings, we simultaneously stress their prospective significance for educators concerned with pedagogy and equity in PE. We thus suggest what, in our view, are notable issues and directions emerging from our findings.

As with any pedagogical practice, an important consideration in relation to setting is the prospective benefits for pupil learning. PE HoDs perceived that setting was beneficial for the whole ability range, though several remarked that the prospective impacts of setting on more and less able pupils tended to differ. PE HoDs reported that setting particularly helped the more able pupils to make progress, and encouraged the lesser able pupils to participate more confidently in PE. Data such as this prompt further inquiry directed towards pursuing exactly what advances in pupil learning are being prioritised amidst setting arrangements – our proposition being that the prospective merits of mixed-ability groupings as contexts to support and advance learning focussing on, for example, cooperation, mentoring and leadership skills, may not be reflected. PE HoDs attested to the desirability of setting as a way of supporting and enhancing efforts to provide for large heterogeneous groups of pupils within PE, as a key strategy to facilitate the development of differentiation, challenge, and pupil confidence, and as a means to enhance pupil learning, progress and achievement in the subject. Again, however, there is a need to critically examine what skills, knowledge and understanding are being encompassed in discourses of learning, progress and achievement in PE. Further research is also needed to investigate empirically the impacts of various grouping practices on different learners in PE, particularly as an extensive international academic literature in mathematics, English and science classroom contexts has highlighted the inequitable and inegalitarian nature of formalised uses of ability grouping in schools (Araújo, 2007; Muijs and Dunne, 2010; Macqueen, 2013). Macqueen’s (2013) research, centring on the effects of separating classes according to achievement levels for literacy and mathematics lessons, has particularly drawn attention to teachers developing limited expectations for pupils in lower groups, which restricted curriculum access and limited pupil motivation, engagement, movement between sets, and opportunities to learn. Although there is a need to caution against making generalisations from research conducted in classroom-based subjects to the PE context, these are all important prospective consequences for pupils who currently experience PE in sets.

Thus, our emphasis is that the substantial uptake of setting and within-class ability grouping in PE in schools in the North East of England, brings to the fore a number of important pedagogical and equity questions which call for local, national and international engagement. Indeed, comparative research would be useful to ascertain whether the situation reported here is also the case in PE, health and physical education (HPE), physical activity and/or sport in schools in other countries. As indicated, further research is also necessary to enhance our comprehension of whose needs and interests are at the fore of ability-based pedagogical practices, and the efficacy of those contexts for supporting and meeting the needs of pupils of all levels of ability in PE. If scholars and practitioners are to work towards the creation of positive and inclusive PE experiences for all, and are to avoid dogmatism in responding to pupil heterogeneity, then there is a need for clarity about the implications of ability-based policies and practices in PE. Indeed, without critical engagement with ability grouping, prospectively exclusionary and inequitable practices will remain opaque and furthermore, normalised in PE.

**Notes**

1. In England, children begin their compulsory education in a primary school (ages 4 to 11). Children then transfer to a secondary school (ages 11 to 18) for the remainder of their compulsory education. Less commonly, in England, the education system in some LEAs is divided into three levels of schooling. In the three-tier model of provision, children move from a primary school (ages 4 to 9) to a middle school (ages 9 to 13/14) and then attend a high school (ages 13/14 to 18).
2. Schools can specialise in one or combine specialisms in two curriculum areas: arts, business and enterprise, engineering, humanities, languages, mathematics and computing, music, science, sport, and technology.
3. In the UK, Sports Colleges were introduced as part of the Specialist Schools Programme (SSP). The SSP encouraged secondary schools in England to specialise in certain fields of the curriculum to improve standards in education. They have an identified mission to raise standards (academic and sporting) of performance and achievement in PE and sport for all their pupils across the ability range, increase participation in PE and sport for pre and post 16 year olds, and develop the potential of talented performers (DfEE, 2000).
4. In England and Wales, Key Stage 3 is the first three years of secondary school education (year 7, year 8 and year 9), when pupils are aged between 11 and 14. Key Stage 4 consists of the two years of schooling (year 10 and year 11) which incorporate GCSEs, and other examinations, for pupils aged between 14 and 16.
5. The North East of England encompasses twelve LEAs: Darlington, Durham, Gateshead, Hartlepool, Middlesbrough, Newcastle upon Tyne, North Tyneside, Northumberland, Redcar and Cleveland, South Tyneside, Stockton-On-Tees, Sunderland.
6. In England, academy schools are state funded schools which are directly funded by, and accountable to, central government. Academy schools are independent of direct control by the local authority.

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