Learners' attitudes to mixed-attainment grouping: examining the views of students of high, middle and low attainment

Antonina Tereshchenko, Becky Francis, Louise Archer, Jeremy Hodgen, Anna Mazenod, Becky Taylor, David Pepper & Mary-Claire Travers

Routledge
Taylor & Francis Group

Learners' attitudes to mixed-attainment grouping: examining the views of students of high, middle and low attainment

Antonina Tereshchenko[a], Becky Francis[a], Louise Archer[a], Jeremy Hodgen[a], Anna Mazenod[a] , Becky Taylor[a] , David Pepper[b] and Mary-Claire Travers[a]

[a]Department of Education, Practice and Society, UCL Institute of Education, London, UK; [b]School of Education, Communication and Society, King's College London, London, UK

ABSTRACT

There is a substantial international literature around the impact of different types of grouping by attainment on the academic and personal outcomes of students. This literature, however, is sparse in student voices, especially in relation to mixed-attainment practices. Research has indicated that students of different attainment levels might have different experiences and views of grouping structures. This paper represents a significant contribution to this literature. Drawing on the data collected as part of a large study on student grouping and teaching in England, we analyse the attitudes of students of different attainment levels to mixed-attainment practice, focusing on their explanations for their preferences or aversion to mixed-attainment classes. The data-set is drawn from group discussions and individual interviews with 89 students age 11/12 (Year 7) from eight secondary schools practicing mixed-attainment grouping in mathematics and English. Our analysis identifies some broad patterns in student attitudes, including a strong preference for mixed attainment among those at lower prior attainment. The analysis of the explanations students give for their opinions on mixed-attainment practice demonstrates how the learner identities of different groups of students are constituted in various ways by the discourses around 'ability', and constrained by the dominant ideology of 'ability' hierarchy.

Background

The practice of grouping students by 'ability' is commonplace in school systems around the world and takes various forms (Chmielewski 2014). The practice of subject-by-subject grouping, known as 'setting' in the UK, is theoretically a more flexible form of grouping than 'streaming' or 'tracking' systems that involve assigning students to fixed classes based on their presumed ability, achievement level, or career aspirations. Mixed attainment or heterogeneous grouping (also known as 'detracking' in the US and other international

CONTACT Antonina Tereshchenko ✉ a.tereshchenko@ucl.ac.uk

contexts) refers either to random allocation of students or a conscious effort to achieve a balance of students of different prior attainment in the class.

Mixed-attainment practice is not unknown in English secondary schools and is, in fact, the prevalent mode of grouping students in art, music and humanities (Kutnick et al. 2005). However, it is rare to find mixed attainment extended to core subjects, especially mathematics – in the Programme for International Student Assessment (PISA) 2012 less than 5 percent of UK students were in maths classes with 'no ability grouping' (OECD 2013, 79). Additionally, Ofsted[1]'s figures show that, on average, 62 percent of secondary science and 58 percent of English classes were 'setted, streamed or banded by ability' in the 2009/2010 academic year (cited in Dracup 2014).

The findings of the research on the effects of grouping by attainment on the academic and personal outcomes of students have suggested positive benefits for students assigned to high groups (Kulik and Kulik 1982; Kerckhoff 1986; Ireson and Hallam 2001). The progress of students in lower groups, however, was found to be delayed by one or two months each year, and their confidence and engagement were undermined (Higgins et al. 2015). Questioning the practice of separation by attainment further, a recent second-order meta-analysis synthesising research in the USA on the effects of ability grouping on secondary students' attainment identified no significant benefits from between-class grouping (i.e. 'setting') for either high, middle or low attainers (Steenbergen-Hu, Makel, and Olszewski-Kubilius 2016). By contrast, a number of studies (Slavin 1990; Venkatakrishnan and Wiliam 2003; Burris et al. 2008) revealed positive effects of mixed-attainment grouping on the achievement of the lower attaining subgroups. Furthermore, mixed attainment was found to foster greater self-esteem and positive attitudes to school (Ireson and Hallam 2001).

Though the research on student grouping by attainment is abundant with quantitative analyses of the outcomes, it is sparse in student voices (for exceptions see Boaler, Wiliam, and Brown 2000; Gillborn and Youdell 2000; Ireson and Hallam 2001). The literature on what constitutes good mixed-attainment practice is limited in any case (Francis et al. 2017), but even more so in relation to secondary students' experiences. This paper addresses the gap in research on how different learners perceive mixed-attainment grouping. Drawing on the qualitative aspects of the ongoing study, involving Year 7 students in schools with mixed-attainment practice at Key Stage 3 (KS3),[2] we provide a nuanced analysis of students' responses to mixed attainment by their level of prior attainment.

What do we know about students' perceptions of mixed-attainment grouping?

A large-scale survey conducted by Hallam and Ireson (2006) suggests that students' preferences for mixed or 'setted' classes differ according to a range of factors. The extent of attainment grouping adopted at school and students' current and previous experience of setting were identified among predictors of preferences for mixed-attainment grouping or setting. Notably, a higher percentage of students from schools practicing near complete mixed attainment expressed a preference for mixed-attainment classes compared to respondents within the settled and partially settled schools. There were also higher levels of satisfaction with their class placement among students taught in mixed-attainment groups (Hallam and Ireson 2007).

The survey findings also suggest that lower attainers and disadvantaged students are most likely to favour mixed-attainment classes (Hallam and Ireson 2006). Indeed, a greater

proportion of students in bottom sets for all curriculum subjects expressed preference for mixed classes compared to those in middle and top sets. There was also a greater preference for mixed-attainment classes amongst students taking free school meals. The most commonly named advantages of mixed-attainment classes related to cooperation, friendships, social mixing, and equality of learning opportunities. A smaller number of students gave reasons for disliking mixed attainment due to behavioural problems in class, and feeling left out or behind (Hallam and Ireson 2006). However, these comments were not systematically examined by students' level of attainment, set or other social characteristics.

The few studies that have attempted to disaggregate and compare the views of different groups of students within mixed-attainment classes indicate that students of different attainment levels, as well as of different racial and socio-economic backgrounds, could have different experiences. For example, some insights into learners' prior attainment and their attitudes to mixed attainment are offered by Kutscher and Linchevski (2000), who found that low and middle attainers consistently preferred learning mathematics in mixed-attainment groups, while results were more mixed for higher attainers. There is further evidence that less confident learners dislike the competitive and stressful environment of top sets (Boaler 1997), while studies with 'gifted and talented' students have found a stronger preference for homogeneously grouped classes (Shields 2002; Adams-Byers, Whitsell, and Moon 2004).

Boaler's (2006, 2008) research in a diverse American high school found that learning mathematics in mixed-attainment groups promoted relational equity among students, responsibility towards lower attaining peers, and improved achievement. The success of detracking in this case was underpinned by the effective classroom implementation of this reform by the teachers. Other research on students' perspectives on detracking revealed doubts about educators' ability to teach challenging material in a mixed-attainment classroom, to have equally high expectations of all students, and to abandon favouritism on the basis of 'ability', as well as class-related and racial stereotypes [Yonezawa and Jones 2006; see Corbishley et al. (1981), Gillborn and Youdell (2000) for UK context]. Even teachers devoted to the detracking reform could face difficulties in raising the achievement of low attainers in the academically competitive classroom, dominated by the values of credentialing, with limited time for academic scaffolding of struggling learners (Bixby 2006; Rubin 2003).

Sociological research has demonstrated that students' learner identities are also interconnected with raced, classed and gendered identity practices and institutional discourses (Francis 2000; Archer 2003; Youdell 2006). Furthermore, particular 'constellations' of identities could 'suffer' in the context of mixed attainment. For example, Rubin (2003) describes how the context of small group work in an American detracked classroom brought to the fore the already pervasive racial and socioeconomic tensions and reinforced minority students' prior understandings about their social and academic possibilities [see also Modica (2015)]. In Yonezawa, Wells, and Serna's (2002) study on detracking, the school effort to create heterogeneous classes through the mechanism of student 'choice' failed due to even higher attaining Black and Latino students choosing 'respect' over high-track courses where they felt unwelcomed. Hence, despite teachers' best intentions to ensure diversity, it is possible that students might themselves prefer 'a compatibility rooted in sameness' (Rubin 2003, 558).

The association between learner identities and constructions of 'ability' were particularly salient within our study, and most commonly evoked and problematised by students when

asked about mixed-attainment practice. This prominence reflects the very nature of the differentiation and categorisation practices inside schools,

> … underpinned by the notions, for instance but not exclusively, of ability (intelligence); rationality and self-reflection; good conduct; hard work and commitment; and childhood and adolescent development. (Youdell 2006, 179)

Scherer's (2016) analysis shows that some children are keen to 'challenge' judgemental institutional labels. Other literature has suggested that such opportunities are constrained by the naturalisation of hierarchies of 'ability' within and beyond schools, with working-class students being most affected by school messages about their 'ability' identity (Abraham 1995; Hamilton 2002). Even in the mixed-attainment context disadvantaged students were found to rationalise unequal treatment by differences in 'ability' and 'behaviour' among students (Gillborn and Youdell 2000, 209). And, despite liking mixed attainment mathematics, 'average' students were found to implicitly prioritise the potential needs of the high attainers, expressing concerns about whether 'excellence' [*sic*] students were stretched enough in mixed-attainment classes (Walls 2009, 192). Hence, we suggest that the assemblage of measurement, categorisation and differentiation practices in school, and associated discourses around 'ability' that shape learner identities, provide a useful framework for examining students' attitudes to mixed-attainment grouping.

Methodology

The 'Best Practice in Grouping Students' is an ongoing large-scale project. It adopts a randomised control trial (RCT) design to investigate which approach to grouping students in English secondary schools – setting or mixed attainment – is most effective in improving the educational outcomes of students, especially those in low sets and from lower socio-economic backgrounds (Francis et al. 2017). The trial 'Best Practice in Setting' investigates setting in English and/or mathematics across 126 secondary schools located in England. A feasibility study 'Best Practice in Mixed Attainment' investigates mixed-attainment grouping and teaching practices across 13 schools.[3] The project also undertakes mixed-method research to explore young people's experiences of different student grouping practices in English and mathematics.

This paper is based on analysis of the qualitative data from the pilot[4] and main phases of 'Best Practice in Mixed Attainment'. The data-set comprises data from 20 group discussions and nine individual interviews with a total of 89 students aged 11/12 (Year 7) drawn from eight state-funded schools practicing mixed-attainment grouping in core subjects. Three of these schools were part of the pilot phase of the study. The remaining five schools were purposefully sampled from the 13 schools participating in the ongoing trial with the view to representing a variety of pupil demographics (e.g. rural, suburban, and urban; multi-ethnic and predominantly white, deprived and affluent areas, etc.). We also sought to sample schools from both the intervention and control groups[5] of the trial, as well as some new to mixed-attainment teaching and others with an established practice. Of the schools selected, two were located in the South East, one in the Eastern region, one in Yorkshire, two in the Midlands, two in London (Table 1).

In the pilot phase of the study, students were interviewed individually and in focus groups. However, we found, in line with the common observation of child and youth researchers (Punch 2002), that group environments provided security, reduced power imbalance and

Table 1. Description of schools in the sample.

	Project stage	Condition in feasibility trial	Ofsted category	% FSM	% EAL	School type	Location
School A	Pilot	n/a	Good	29.8	11.9	Academy – converter	Suburban
School E	Pilot	n/a	Outstanding	9.8	3.1	Academy – converter	Suburban
School F	Pilot	n/a	Outstanding	58.5	91.6	Local Authority school	Inner city
School K	Main	Control	Outstanding	9.4	4.3	Free school	Suburban
School L	Main	Control	Outstanding	59.6	70.6	Academy sponsor led	Inner city
School M	Main	Intervention	Good	18.3	4.2	Academy – converter	Semi-rural
School N	Main	Intervention	Good	19.2	3.8	Local Authority school	Suburban
School O	Main	Intervention	Good	43.5	3.7	Academy sponsor led	Urban

offered a more relaxed atmosphere where Year 7 students did not have to supply lengthy verbal accounts but, reacting to each other's perspectives, could more fully articulate their own implicit views. Therefore, the decision was made to interview students in groups in the main phase of the study. This format also suited a social constructionist study framework in that participants were explicitly encouraged to interact and talk, thereby constructing a collective meaning (Wilkinson 1999).

Already during the preliminary analysis of the pilot data, it transpired that students of higher and lower attainment levels held divergent views of mixed-attainment grouping. Thus, in the main phase of the project we asked teachers to put together group discussions of students with similar prior attainment. We expected that the interaction among students with comparable experiences would exemplify the views and beliefs representative of certain groups of students in mixed-attainment settings. We also hoped that interviewing students with peers at similar attainment levels would create a 'safe' space for pupils to articulate their feelings about their experience of mixed-attainment classes, which could potentially be at odds with experiences of those at other attainment levels (Boaler, Wiliam, and Brown 2000).

Our definitions of students' attainment levels (see Table 2) were based on their Key Stage 2 (KS2) test results attained on completion of primary school: low attaining – below level 4 in the KS2 tests; middle attaining – at level 4 in the KS2 tests; high attaining – at level 5 or above in the KS2 tests. Including the pilot phase, a total of 89 students (31 boys and 49 girls) took part in 20 group discussions and nine individual interviews (1 boy and 8 girls).

Table 2. Overview of the student sample by school and level of attainment.

	High	Middle	Low	Unassigned*
School A	6	4	–	1
School E	4	3	–	
School F	8	4	1	
School K	4	4	4	
School L	4	4	4	
School M	4	4	4	
School N	2	4	4	
School O	4	4	4	
Total	36	31	21	1

*No Key Stage 2 data available.

The gender imbalance in the sample for this qualitative work is because two of the pilot schools were single-sex all-girl schools.

Students came from a range of socioeconomic and ethnic backgrounds. Social class categorisations were assigned by the authors on the basis of parental occupations. The higher status occupation between two parents was used to classify students into the following broad categories: higher SES (36%, $n = 32$), middle SES (38%, $n = 34$), low SES (20%, $n = 18$) and unknown (6%, $n = 5$). Students self-categorised their ethnicity in the following way: White British – English, Scottish, Welsh and Northern Irish (57%, $n = 51$), South Asian – Bangladeshi, Indian, Pakistani (18%, $n = 16$), White Other (7%, $n = 6$), Arab (7%, $n = 6$), Black (3%, $n = 3$) and any other mixed backgrounds (8%, $n = 7$).

Individual interviews lasted between 20 and 30 min, and group discussions lasted between 40 and 60 min. All interviews were audio-recorded, transcribed and then anonymised prior to analysis. The semi-structured schedules covered experiences of school and English and mathematics, perceptions of reasons for mixed-attainment grouping and impact on students, feeling about being/learning in mixed classes, perceptions of mixed-attainment teaching, experiences in primary school, as well as views on setting. Data were organised and thematically coded in NVivo to facilitate analysis. This paper draws on the analysis of students' responses to the key interview questions about their experiences and views of mixed-attainment classes. First, where respondents expressed their sentiments, the lead author classified each student's contribution as 'positive', 'negative' or 'mixed' and mapped it against his/her prior attainment level to identify broad patterns. The coding of several debatable cases was checked by two other authors. The subsets of data were then further examined to explore main reasons for young people's preferences for or dissatisfaction with mixed-attainment grouping, and analysed in light of the literature cited earlier.

Overview of students' attitudes to mixed attainment

The content analysis of contributions by 85 students suggests that more students were consistently 'positive' than 'negative' about mixed-attainment grouping, but there was also a substantial minority of those who highlighted both 'positive' and 'negative' aspects of being in mixed-attainment classes (see Table 3).

Table 4 breaks down responses by student attainment. It demonstrates that learners of lower prior attainment are proportionately more likely than other students in our sample to express positive views about mixed-attainment grouping, with three-quarters (16 out of 21) speaking favourably about mixed classes. Half of higher attainers (18 out of 35), spoke positively about their experiences of mixed-attainment classes, and further nine students in this group discussed both positive and negative sides of mixed attainment. Middle attainers appear to be more divided than the other two groups in their responses to mixed attainment.

Table 3. Overview of students' views on mixed attainment.

	N (%)
Positive views	46 (54)
Negative views	24 (28)
Mixed views	15 (18)
Total*	85(100)

*No clear views were expressed by four students who are excluded from the count.

Table 4. Students' views on mixed attainment by their attainment level.

	Positive views	Negative views	Mixed views	Total
Higher attainers	18 (51%)	8 (23%)	9 (26%)	35 (100%)
Middle attainers	12 (41%)	13 (45%)	4 (14%)	29 (100%)
Lower attainers	16 (76%)	3 (14%)	2 (10%)	21 (100%)

Although the respondent sub-group numbers are small, rendering this identified trend impressionistic, elements of these findings echo those in previous research on grouping preferences among students. Hallam and Ireson's (2006) survey found that students in bottom sets, and those who did not achieve high scores at Key Stage 3 tests, were likely to prefer mixed attainment to setting. Our own analyses of the present project's baseline questionnaire[6] data demonstrate that Year 7 students with lower KS2 test results for reading and maths expressed the most negative views towards setting, as did students in bottom sets (Archer et al. 2018).

The figures displayed in Table 4 do not entirely support a previously reported strong opposition to heterogeneous grouping among higher attainers (Adams-Byers, Whitsell, and Moon 2004; Hallam and Ireson 2006). And our findings suggesting that less than half of middle attainers favoured mixed-attainment grouping also challenge Kutscher and Linchevski's (2000) finding that middle attainers in their classroom research preferred to learn mathematics in mixed groups with stronger students who supported their progress – albeit here our findings are in keeping with Hallam and Ireson's (2006) survey results, which found that middle set students' views of mixed attainment grouping are significantly less positive than those of students in bottom sets.

To unpack these findings, we turn to consider the reasons that each group of students offered for preferring or disliking mixed-attainment classes. Importantly, we examine not only differences between groups but also variations within the attainment groups, and how these are infused by classroom practices and wider discourses.

High-attaining students – between equity and individualism

'You don't feel like you're isolated': mixed attainment as a fair system

A significant proportion of the higher attainers who expressed positive views about mixed-attainment grouping were found to draw on equity discourses that emphasised the ability of this grouping system to support fairness and equality of opportunity. In keeping with earlier research (Ireson and Hallam 2001), the majority of the students who expressed support for mixed attainment believed that it promoted the attainment and inclusion of lower attainers through access to the curriculum content, and perhaps to the pedagogy, that in the setting system would be 'deemed beyond the 'bottom' stream' (Abraham 1995, 15).

> [L]ess able at maths, they get taught the same thing as people who are more able and so they're not like left behind. (Lara, School K, White British, higher SES)

> [I]f there's like a class of lower achieving students […] they wouldn't have that much like ability to share with the other students, whereas if you're a higher student, you can easily share ideas with them. (Gary, School M, White British, higher SES)

Many respondents expressly valued the social inclusivity of heterogeneous grouping. The girls we interviewed at School F were effusive about the emotional advantages (i.e.

confidence due to established bonds of friendship) of learning in their form. At another school, Chris found the diversity of mixed classes interesting: 'I do quite like the mixed groups because you get to see what other people are thinking' (School E, White British, higher SES). In relation to reasons behind mixed-attainment grouping Jeremy believed that 'we're humans, we're not brilliant at everything', and in 'the real world, there are going to be people who don't like you and people who are different to you, so you've got to get used to that' (School K, White British, higher SES). Hayat, who seemed uncomfortable with the idea of hierarchies and did not want to be regarded as 'the girl who does all this', said that mixed attainment allowed her to feel included:

> I think it makes it better because you don't feel like you're isolated and you're away from other people. (School L, mixed ethnic background, higher SES)

In some ways, being in mixed-attainment classes shaped these students' support of the education system where, to quote Abraham (2008), the 'needs' of at least some higher attainers are related to 'helping others' as opposed to just 'striving ahead' (861). Offering help to others was also framed as a benefit to their own learning, not just to the learning of low attainers – the view that coheres with research on the positive effects of cooperative learning on highest attainers and those offering explanations (Slavin 1996). For example, Muna thought that 'if you're helping another person maybe you learn something new' (School F, South Asian, higher SES). Likewise, Evelyn argued, 'if the higher level students are helping the lower level, they might learn some more by helping them as well' (School N, White British, higher SES).

Perhaps echoing Boaler's (1997) finding that some higher attainers dislike the 'fast and furious paradigm' of the top sets, Susan welcomed extra practice and revision in mixed-attainment lessons: 'I think it's nice because you can always start off with an easier bit of work and then build up' (School A, White British, middle SES). Higher attainers from other schools also described how the inclusive mixed-attainment pedagogy could fill potential gaps in their knowledge and deepen their understanding:

> [T]hen while they're teaching sort of the lower level, the higher levels can maybe listen to things that they've missed out on when they've been away or something. (Evelyn, School N, White British, higher SES)

> [S]ay you're quite good and you forget about the easy stuff, you learn from the ones that aren't as good because they just keep going through the easy stuff. (Simon, School K, White British, low SES)

The perceptions by students presented in this section touch upon wider social issues behind the egalitarian principles of mixed attainment. Yet, despite recognising that mixed attainment supported equity, many high-attaining students, as discussed below, were also academically competitive and adopted a meritocratic view of education – that equality of opportunity implies maximising the potential of individual students in accordance with their merit (i.e. 'abilities').

'I feel a bit held back': competitive individualism in mixed-attainment classes

Those high attainers who expressed negative views of the mixed-attainment grouping tended to describe their lessons as being 'easy', 'boring', 'a bit dull', 'slow' and 'not challenging enough',

thus, as Lochan put it, 'bad for the top class students' (School O, British Asian, low SES). The quote below, by a high-attaining student, captures such sentiments:

> Then the bright kids, it's quite hard for them because when we have the easy stuff, it bores them quite easily because they can just do it and then they're sitting there because they've done it and there's not much for them to do because they find it so easy. (Camilla, School E, White British, higher SES)

On the one hand, these concerns relate to a recognised challenge of meeting the varied 'needs' of students within mixed-attainment classes (Hart 1992). Some previous work described a lack of appropriate change in the teaching approaches and content of the lessons in schools which adopted all attainment teaching (cf. Ball 1981), where, as Rubin (2008) found, higher attainers could be 'bored' with 'stuff that I kind of already knew' (687), and even lower attainers felt their 'classes were easy, so I didn't have a challenge' (665). However, given that we do not have evidence of such uninspiring pedagogy in our schools, the views and learner identities of the higher attainers may have been influenced earlier by attainment structures and cultures in primary schools. Yonezawa, Wells, and Serna (2002) maintain that 'students who are labelled gifted in elementary school develop a habitus of entitlement' (52). The setting structures in secondary schools, as Reay, Crozier, and James (2011) argue in their study of white middle-classes choosing urban comprehensives, 'simultaneously build upon and maintain' the sense of superiority and entitlement for middle-class high-attaining students and their parents:

> A key motivator for being in the top set was to ensure academic success, but this was also linked for both the parents and young people to the desire to be separated off by the putative 'disruptive elements in the school' – the undesirable Other. (Reay, Crozier, and James 2011, 133)

Several higher attainers in our study used the language of 'behaviour', rather than 'ability', to justify their desire to be kept apart from 'distracting students' who 'mess around' and, supposedly, 'just don't really enjoy the subject' (Felicity, School K, White British, higher SES). The majority of the students however described mixed-attainment grouping as limiting their individual academic progress, thus reproducing the 'common sense' view supported by most politicians, teachers and parents that students are best engaged in learning on their level of 'ability' (see Francis et al. 2017 for discussion). For example,

> It is quite annoying because we've already learnt that stuff and we're just going over it, which is good but like we want to learn more, we don't want to just carry on going over the same thing. (Brooke, School M, White British, higher SES)

> And then, like, the people, like, are trying to learn the stuff but then slowing down when we could be doing something else different. (Neil, School O, White British, middle SES)

High attainers have been previously described as operating according to the pragmatic code of 'making the grade' (Becker, Geer, and Hughes 1968, quoted in Bixby, 2006, 119). The following quotes exemplify their instrumental focus on certification, alongside the recognition that mixed attainment is good for low attainers:

> I think it benefits the lower-ish people because they feel encouraged to do better but the higher people, they might not feel pushed enough to get better grades. (Alice, School A, South Asian, higher SES)

> It means you can't cover the stuff you're supposed to cover in the lesson so it means you're less able when it comes to tests and stuff because there have been so many people messing around you haven't been able to cover the stuff you should be. (Camilla, School E, White British, higher SES)

These views expressed by the students highlight the need to recognise the challenge of implementing such a 'radical' change in a context infused by individualistic interests, investments and desires, and resistance from those who perceive benefit from the separation by 'ability' within the comprehensive system (see, e.g. Oakes et al. 1997). Indeed, Loveless (2009) found that suburban schools serving students from higher socioeconomic backgrounds were least likely to respond to the US policy recommendations on detracking. It is possible, however, that effectively differentiated teaching in heterogeneous classes (see e.g. Taylor et al. 2015) could contribute to resolving the tensions between the higher attainers' individualistic orientations and their support for the learning and social benefits, and egalitarian principles of mixed-attainment grouping related to reduction of inequality.

Low-attaining students – between 'empowered' and 'positioned' learner identities

Valuing inclusion and collaboration: 'you can help some people and some other people can help you in return'

As Table 4 above illustrated, the large majority of low prior attainers valued mixed-attainment practice. Many articulated a strong awareness of a range of opportunities available to them due to the conditions in mixed-attainment classrooms. For example, Mabel (School M, White British, middle SES) appreciated access to a less stratified curriculum – a chance she would not have had in the bottom set to learn about 'what the good people are doing' and thus being able to realise 'what you are good at'. Likewise, being exposed to 'what [others] are doing' helped Rania (School F, South Asian, middle SES) 'see things that I am able to do'. Debbie (School O, White British, low SES) noted that, where attainment grouping segregates students socially as well as by attainment, mixed-attainment grouping facilitated the ability to 'talk [things] through and make friends and then that could, like, help with your work'. Although Debbie's classmate Colm initially had doubts about whether he belonged in mixed classes, being 'really nervous' about sitting 'next to the smart people', he later changed his perception of his learning capacity and came to believe that being taught in a mixed-attainment class would open up his opportunities beyond the school:

Colm:	But now I know if you're sitting next to smart people, you can get a better job, then you can –
Debbie:	Get a better grade on your GCSEs.
Colm:	Yeah. Then you can get a lot of money to have a nice family and have a nice house.

(School O, White British, low SES)

By contrast, in Ireson and Hallam's (2001) study of setting practice, the better long-term prospects such as 'good jobs' and 'lots of money' were associated by most students with top sets, while students in lower sets were described as 'left for unemployment' (98).

Students' awareness of mixed-attainment practice's facilitation of opportunities to learn and get help from peers have been previously identified (Hallam and Ireson 2007). Teachers were also found to believe that 'mixed ability classes provide the less able students with positive models of achievement' (Ireson and Hallam 2001, 126). In the maths classroom where students worked in homogeneous groups, low attainers reportedly accomplished very little on their own without the input of more competent peers or teachers (Kutscher

and Linchevski 2000). Collaborative work in mixed-attainment maths classes, on the other hand, allowed students that were regarded as weaker 'to shine in some areas' (Boaler, Wiliam, and Brown 2000, 645). Most of our interviews reflected these issues:

> I think it's better because since there's different abilities, you can help some people and some other people can help you in return. So then you get extra help for like if you're in one of the lowers with loads of people who aren't very good at maths and there's only like one teacher then you can't get other students to help you. (Adele, School N, White British, middle SES)

It is notable, given that low attainers are often constructed as benefitting from *receiving help* in mixed-attainment classes, that Adele highlights *the ability to help others* as a mutual benefit for all students, including low prior attainers. We found that while many higher attainers in this study and in other research (Boaler 1997; Adams-Byers, Whitsell, and Moon 2004) expressed preferences for individual learning at faster pace, the learner identities of the lower prior attainers in mixed-attainment classes were constituted by their preference for collaboration and shared responsibility for the learning of others. Asked about why they preferred mixed-attainment classes, a number of students revealed the importance they attached to learning together as a community for mutual benefit:

> Because, like, as Furud said, it's 32 brains and from one brain everybody can learn and say if somebody got something wrong, other brains can help them and then they work on their own. (Hichem, School L, Arab, low SES)

> Because you have the people to help you around you, but then you also have the people you can help, so it's easier. (Joey, School M, White British, middle SES)

> The fact that everybody around me is helpful and they can give you advice on the things you don't understand, and I can help other people gain more knowledge. (Rania, School F, South Asian, middle SES)

The above comments speak to Hart et al.'s (2004) findings on the impact of teaching based on the principles of trust, co-agency and community on young people's learner identities within classrooms free from ability labelling. They argue that such classrooms produce 'empowered learners' who take active responsibility for supporting one another's progress. On a related note, less stratification in school improves the self-esteem and general self-concept of all students, and particularly those of low prior attainment (Ireson and Hallam 2001).

Wanting to be with peers of similar attainment: 'I think we should have all the same levels'

Nevertheless, a small number of low prior attainment respondents expressed dislike of mixed-attainment practice. The following reason given by one of our study participants could appear to confirm the existing belief among the proponents of setting that low attainers would be intimidated and disheartened by challenging work and the faster pace of the mixed-attainment lessons (for discussion see Mazenod et al. 2018; Hallam and Ireson 2005; Rosenbaum 1999).

> I'd prefer it if we were all the same level classes because then there's some people that have the same levels as me, not just all higher and it will be easier, I think. (Lauren, School K, White British, low SES)

Such views could also be read in light of the self-fulfilling prophecy literature which argue that young people's 'levelled' aspirations and expectations, and their learner identities are

affected by their inferior position in the 'ability' hierarchy of the school (Yonezawa, Wells, and Serna 2002; Hart et al. 2004; Boaler 2008). As the overwhelming majority of our participants had had some experience of 'ability' grouping in primary school, it could be that they adopted what the system had been communicating to them about their identities as learners (see Walls 2009; Marks 2016; Scherer 2016), resulting in some of the students doubting their capacity to succeed in a more demanding mixed-attainment environment. Moreover, as indicated by Serena, quoted in the title of this section, students strongly identify with 'levels' attained at standardised tests at the end of primary school, supporting prior research findings on the 'regulatory' function of such assessment on students, whereby they come to view themselves and their peers 'entirely in terms of the levels to which [their] performance in the SATs is ascribed' (Reay and Wiliam 1999, 346). Indeed, the negatively disposed lower attainers believed that the school had enough information about students to set them in Year 7 at the start of the secondary phase:

> Catriona: Well, you've done your SATs, so I think like they shouldn't really overly just put us in classes
>
> Kayla: And we've done our CATs
>
> Catriona: Yes
>
> Interviewer: So you mean you think that they should put you in sets already, they should be able to do that?
>
> Catriona: Yes.
>
> (School N, Other White, higher and middle SES)

Although there is evidence in these interviews of the internalised thinking that 'ability' is an innate and measurable quality, it is noteworthy that low-attaining students with ambivalent views of heterogeneous grouping centred their criticism on certain mixed-attainment teaching practices that impinged on their learning. Specifically, the following quotes suggest the lack of attention to differentiation for students' individual needs that is considered 'pivotal to a fair system where all children are able to succeed' (Hart 1992; cited in Taylor et al. 2015, 26).

> Sometimes it's really hard because the teachers think that we all understand it because there is higher people who do understand it and then they just move along. (Haley, School N, White British, middle SES)
>
> Because it's not really fair on the people who think like they can't do it, but then the teacher's like paying more attention to the people that have done it and just like, 'Oh yes, you've done really well.' When you like put your hand up and say, 'I don't really understand any of this,' and they're just like, 'You'll get the hang of it.' (Kayla, School N, Other White, higher SES)

These students seem to agree with some of the negative remarks by the higher attaining peers related to the practical implications of mixed-attainment teaching. Yet, they also highlight the need to ensure special provision for struggling learners in heterogeneous classes to maximise their chances for academic success (Burris et al. 2008).

Middle-attaining students – comparison, competition and status

'If I don't get something I will ask somebody who does'

In contrast with the high attainers, who saw the benefits of mixed attainment primarily for low-attaining students, those middle attainers who held positive views of mixed-attainment

grouping focused on benefits for their own learning. Asked about what she thought of mixed-attainment grouping at her school, Shazana reflected,

> I think it's a really good idea because we can teach each other, rather than being at the same level and knowing the same things and not knowing the same things, so if I don't get something I will ask somebody who does. (Shazana, School F, South Asian, higher SES)

Like most students at low prior attainment, the middle attainers thought that working with other students enabled their progress. It was good to learn in a mixed class because 'you need other's help', said Maryam (School L, Arab, low SES). Other students noted that getting help or hearing from other students made them 'learn more from their answers' (Claire, School A, White British, middle SES), 'see what they agree with' and 'always [learn] something new' (Mehdi, School L, White British, higher SES).

We also found that this group of middle-attaining students appreciated 'equal work' (Vanita, School F, South Asian, higher SES) in mixed-attainment classes. Their opposition to separation by attainment, described by one student as 'favouritism towards the intelligent' (Josh, School O, White British, middle SES), might be explained by the worries middle attainers previously revealed in relation to their 'precarious' position in the 'ability' hierarchy of the schools – that 'they might indeed be assigned to the lower tracks in the following year' and, as a result, 'feel inferior' (Kutscher and Linchevski 2000, 7). Furthermore, several students made critical allusion to the limits imposed by attainment grouping on young people's learning and future opportunities:

> I just think that it's better for the school to like put different people together because it's not just about intelligent and lower because the lower people might have high dreams. (Cara, School O, White British, middle SES)

> I don't think it's fair to like split people because of their ability because then some people won't learn the things that they need to learn to get to university and go pass their GCSEs and A Levels. (Kian, School K, Black, low SES)

The issue of 'status' (e.g. feeling clever and respected – Hallam and Ireson [2006]) is implicit in the concerns of the students cited above. Anxieties around (loosing) their 'status' within the 'ability' hierarchy shaped the negative views of mixed attainment among the other group of middle-attaining students.

'I'm not the smartest person in the lesson': feeling threatened and exposed by high attainers

This section discusses the experiences of the substantial number of middle attainers, which broadly relate to the diminished academic and self-concept in mixed-attainment settings due to the high-attaining reference group effects (Marsh 1984). The following allusion to the quick work pace of 'clever people' is significant for understanding the concerns of this group of students about their position in the academic 'race':

> It's like some stuff I know pretty well. It's just the other kids that don't know it. But sometimes I don't know the stuff, and then there's tons of clever people like racing ahead of me. (Lee, School E, White and Asian, higher SES)

Engaging in comparison with higher attainers and assessing their 'ability' as inferior, the dissatisfied middle-attaining students felt 'frustrated', 'discouraged' and 'embarrassed' due

to 'struggling' with the work they perceived as being 'hard' and, therefore, above their 'ability' level:

> Because certain people could be struggling and sometimes in certain lessons, I'm not the smartest person in the lesson, so they are giving out hard work and I don't understand it and they can't expect you to do it if it's mixed. (Mary, School A, White British, middle SES)

> I feel like I am, kind of, struggling on the work and everyone else gets it and stuff like that so I, kind of, feel a bit more discouraged if everyone else gets it and I don't and I also feel quite frustrated if that happens. (Edie, School N, White British, higher SES)

One key factor that seemed to contribute to the distress of middle attainers was the use of peer tutoring where high attainers were placed in the role of the helper by teachers who are often pressured to provide challenge for 'the most able' (Ofsted 2015). This left some middle attainers feeling 'babied' and even 'humiliated':

> [P]eople that have finished, they go round helping everyone else. I kind of find it a bit humiliating because I'm just sitting there and everyone knows that I haven't finished and everyone else has. (Hilda, School E, White British, middle SES)

These experiences of the students suggest that the well-intentioned strategies adopted by teachers to cater for the needs of both high and lower attainers can lower self-confidence, highlight differences, and even promote labelling and antagonism towards higher attainers. For instance, higher attaining students were described as 'show-offs' by middle attainers at School K. As Roberts (2016) argues, a less problematic solution to utilising the strengths of students of different attainment is to find ways to place 'the more capable peer' in role as 'a co-collaborator in the learning process', rather than 'a teacher of those less capable' (44).

Distancing from low attainers: 'we're at different stages and it's a bit hard to cooperate'

Finally, a small number of middle attainers bemoaned the presence of low-attaining students in their mixed-attainment classes. These students openly distanced themselves from low-attaining peers whom they described as being 'at different stages', 'hard to cooperate' with, 'asking loads of questions', 'stopping the whole class from doing their work' and the like. Suzanna voiced a typical view:

> I don't like working with people who are mixed abilities because say people who aren't as high a level as us, they could be just asking loads of questions, 'I don't understand', and stopping the whole class from doing their work when you just want to get it done and go home. (Suzanna, School A, White and Black African, low SES)

These views are similar to the discourses of competitive individualism by higher attainers. However, a notably larger portion of higher attainers were more cooperative than these middle attainers and open to the idea of providing assistance to students of low prior attainment. This further highlights the point that the necessity of students to navigate and assert their place in the learnt 'ability' hierarchy of the school might take priority over values of fairness and social responsibility.

Conclusion

This research has made a significant contribution to the international literature on mixed attainment by seeking and analysing secondary students' views and experiences of mixed-attainment practice. Overall, the findings suggest that students' attitudes to mixed attainment are related to their prior attainment levels. As predicted by earlier literature, we found that mixed-attainment grouping was especially appreciated by students at low prior attainment level due to its inclusive and collaborative environment. However, our analysis somewhat challenges prior findings on the proportions of higher attainers that do not support mixed attainment, and suggests a more nuanced picture in which many high and middle attainers also appreciate aspects of mixed-attainment grouping. While in 'setted' schools top set students tend to prefer setting (Hallam and Ireson 2006), this research highlighted many high-attaining students' commitment to communitarianism and social justice that they felt underpinned mixed-attainment practice. The middle attainers who spoke positively about mixed attainment also felt the practice indicated that their school was committed to equity.

As noted in the introduction, schools practising mixed attainment in core subjects are unusual in England. As we have discussed elsewhere, there is a range of socio-political reasons (Francis et al. 2017), as well as practical and pedagogical explanations (Taylor et al. 2017), for why mixed-attainment grouping is rejected. American research has also found notable pressures towards tracking in schools that educate relatively advantaged and hetero-geneous student populations (Loveless 2009; Domina et al. 2016). Those schools who 'buck the trend' and provide mixed-attainment learning environments in England are able to do so because of a wider focus on improving learning and teaching or equity, with implications for young people's learner identities (Hodgen et al. forthcoming).

The sociological analysis of the explanations students provided for their disaffection with mixed attainment across our 8 schools suggests that the responses of different groups of learners are configured by the wider discourses around 'ability' and constrained by the dominant ideology of 'ability' hierarchy. Specifically, this relates to the reluctance of a small number of low-attaining students to endorse mixed attainment due, hypothetically, to their previous experiences with 'ability' grouping practices in primary school that shaped their learner identities. While these low prior attainers appear to doubt their ability to succeed in heterogeneous classes, some high attainers feel entitled to preferential treatment, and the middle attainers appear to be preoccupied with their own status and asserting their position in the academic hierarchies.

The negative views of students discussed in the paper also bring to the fore the importance of distinguishing between 'mixed-ability *classes* and mixed-ability *teaching*' (Abraham 2008, 856; emphasis in the original). By way of implications for mixed-attainment practice, the findings suggest that it is crucial for teachers to ensure differentiation by outcome with rich tasks and quality feedback – otherwise learners of all attainment levels will be left dissatisfied (see Taylor et al. 2015). Additionally, while paired learning and peer tutoring seem to be appreciated by many students, these strategies also present strong risks that teachers need to be attuned to, to avoid scenarios where same people always give or receive help. These concerns are consistent with the ideas from classroom research that it is vital to support structural detracking with pedagogy explicitly designed to enable all students to succeed in spite of social and educational inequalities (Rubin 2003). Indeed, the quality of teaching students encounter has been found to make the most difference to the success of

any grouping structure, including mixed attainment (Burris et al. 2008). This led Gamoran (2009) to call for combining research on 'ability' grouping with research on teaching to continue to examine the two evidently successful approaches to detracking: raising standards for low attainers and providing differentiated learning in mixed-attainment classrooms. Our forthcoming analysis will combine the present findings with the scrutiny of the teaching students encounter in English and mathematics in order to continue to shed light on the topic of mixed attainment in secondary schools.

Notes

1. The Office for Standards in Education, Children's Services and Skills (Ofsted) is the chief inspection and regulation department responsible for inspecting educational institutions in the UK.
2. This term refers to the first two years of secondary education (Years 7 and 8) in state schools in England, Wales and Northern Ireland.
3. Because few schools in England use mixed-attainment grouping in core subjects, the scale of the trial is necessarily small. Our separate publication reports on our struggle to recruit schools for the mixed-attainment study, and explains why mixed attainment is seen as problematic (Taylor et al. 2017). Additionally, our review of the literature found little evidence on what constitutes good mixed-attainment practice – thus the need to pilot the intervention on a small-scale basis (Francis et al. 2017).
4. With the view to develop the intervention, prior to commencement of the RCT study period, the project team worked during 2014–2015 academic year with three pilot secondary schools practicing mixed attainment (see Taylor et al. 2017 for full details).
5. Although both groups practiced mixed attainment in English and mathematics in KS3, the control group was doing 'business as usual', while the intervention group was receiving a pedagogic intervention designed by the research team that drew on existing research evidence around 'best practice in mixed-attainment grouping' (see Taylor et al. 2015 for details).
6. The baseline survey data comprises questionnaire responses from 12,997 Year 7 students in 96 secondary schools across England. The survey was offered to all schools in the study, and 96 out of 139 participated and provided data, a response rate of 69%.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Antonina Tereshchenko is a research associate on the 'Best Practice in Grouping Students' project at UCL Institute of Education.

Becky Francis is the director of the 'Best Practice in Grouping Students' project and the director of UCL Institute of Education.

Louise Archer is the Karl Mannheim Chair of Sociology of Education at UCL Institute of Education. She is a co-investigator on the 'Best Practice in Grouping Students' project and the director of the Aspires2 and Enterprising Science projects.

Jeremy Hodgen is the chair of Mathematics Education at UCL Institute of Education. He is a co-investigator on the 'Best Practice in Grouping Students' project.

Anna Mazenod is a research associate on the 'Best Practice in Grouping Students' project at UCL Institute of Education.

Becky Taylor is researcher practitioner and project manager of the 'Best Practice in Grouping Students' at UCL Institute of Education.

David Pepper was a research associate on the 'Best Practice in Grouping Students' project and is now a Lecturer in International Education in the School of Education, Communication and Society at King's College London.

Mary-Claire Travers is an associate team member of the 'Best Practice in Grouping Students' project who contributes to the research data collection.

ORCID

Anna Mazenod ⓘ http://orcid.org/0000-0003-0175-1634
Becky Taylor ⓘ http://orcid.org/0000-0002-7257-4463

References

Abraham, J. 1995. *Divide and School: Gender and Class Dynamics in Comprehensive Education*. London: The Falmer Press.

Abraham, John. 2008. "Pupils' Perceptions of Setting and Beyond – A Response to Hallam and Ireson." *British Educational Research Journal* 34 (6): 855–863. doi:10.1080/01411920802044511.

Adams-Byers, Jan, Sara Squiller Whitsell, and Sidney M. Moon. 2004. "Gifted Students' Perceptions of the Academic and Social/Emotional Effects of Homogeneous and Heterogeneous Grouping." *Gifted Child Quarterly* 48 (1): 7–20. doi:10.1177/001698620404800102.

Archer, L. 2003. *Race, Masculinity and Schooling: Muslim Boys and Education*. Buckingham: Open University Press.

Archer, L., B. Francis, S. Miller, B. Taylor, A. Tereshchenko, A. Mazenod, D. Pepper, and M.-C. Travers. 2018. "The Symbolic Violence of Setting: A Bourdieusian Analysis of Mixed Methods Data on Secondary Students' Views about Setting." *British Educational Research Journal* 44 (1): 119–140. doi:10.1002/berj.3321.

Ball, S. J. 1981. "The Teaching Nexus: A Case of Mixed Abilty." In *Schools, Teachers and Teaching*, edited by Len Barton and Stephen Walker, 159–175. Basingstoke: The Falmer Press.

Becker, Howard, Blanche Geer, and E. Hughes. 1968. *Making the Grade*. New York, NY: Wiley.

Bixby, Janet. 2006. "Authority in Detracked High School Classrooms: Tensions among Individualism, Equity, and Legitimacy." In *Classroom Authority: Theory, Research, and Practice*, edited by Judith L. Pace and Annette Hemmings, 113–134. Mahwah, NY: Lawrence Erlbaum Associates.

Boaler, Jo. 1997. "When Even the Winners Are Losers: Evaluating the Experiences of Top Set' Students." *Journal of Curriculum Studies* 29 (2): 165–182. doi:10.1080/002202797184116.

Boaler, Jo. 2006. "How a Detracked Mathematics Approach Promoted Respect, Responsibility, and High Achievement." *Theory into Practice* 45 (1): 40–46. doi:10.1207/s15430421tip4501_6.

Boaler, Jo. 2008. "Promoting 'Relational Equity' and High Mathematics Achievement through an Innovative Mixed-Ability Approach." *British Educational Research Journal* 34 (2): 167–194.

Boaler, Jo, Dylan Wiliam, and Margaret Brown. 2000. "Students' Experiences of Ability Grouping – Disaffection, Polarisation and the Construction of Failure." *British Educational Research Journal* 26 (5): 631–648.

Burris, Carol Corbett, Edd Willey, Kevin Welner, and John Murphy. 2008. "Accountability, Rigor, and Detracking: Achievement Effects of Embracing a Challenging Curriculum as a Universal Good for All Students." *Teachers College Record* 110 (3): 571–607.

Chmielewski, Anna K. 2014. "An International Comparison of Achievement Inequality in within- and between-School Tracking Systems." *American Journal of Education* 120 (3): 293–324. doi:10.1086/675529.

Corbishley, P., J. Evans, C. Kenrick, and B. Davies. 1981. "Teacher Strategies and Pupil Identities in Mixed Ability Curricula: A Note on Concepts and Some Examples from Maths." In *Schools, Teachers and Teaching*, edited by Len Barton and Stephen Walker, 177–195. Basingstoke: The Farmer Press.

Domina, T., P. Hanselman, N. Hwang, and A. McEachin. 2016. "Detracking and Tracking up." *American Educational Research Journal* 53 (4): 1229–1266.

Dracup, T. 2014. "The Politics of Setting." https://giftedphoenix.wordpress.com/2014/11/12/the-politics-of-setting/.

Francis, B. 2000. *Boys, Girls and Achievement: Addressing the Classroom Issues*. London: Routledge.

Francis, Becky, Louise Archer, Jeremy Hodgen, David Pepper, Becky Taylor, and Mary-Claire Travers. 2017. "Exploring the Relative Lack of Impact of Research on 'Ability Grouping' in England: A Discourse Analytic Account." *Cambridge Journal of Education* 47 (1): 1–17. doi:10.1080/030576 4X.2015.1093095.

Garmoran, Adam. 2009. "Tracking and Inequality: New Directions for Research and Practice." In *The Routledge International Handbook of the Sociology of Education,* edited by Michael W. Apple, Stephen J. Ball, and Luis Armando Gandin, 213-228 Abingdon: Routledge.

Gillborn, David, and Deborah Youdell. 2000. *Rationing Education: Policy, Practice, Reform, and Equity*. Buckingham: Open University Press.

Hallam, Susan, and Judith Ireson. 2005. "Secondary School Teachers' Pedagogic Practices When Teaching Mixed and Structured Ability Classes." *Research Papers in Education* 20 (1): 3–24.

Hallam, Susan, and Judith Ireson. 2006. "Secondary School Pupils' Preferences for Different Types of Structured Grouping Practices." *British Educational Research Journal* 32 (4): 583–599.

Hallam, Susan, and Judith Ireson. 2007. "Secondary School Pupils' Satisfaction with Their Ability Grouping Placements." *British Educational Research Journal* 33 (1): 27–45.

Hamilton, Lorna. 2002. "Constructing Pupil Identity: Personhood and Ability." *British Educational Research Journal* 28 (4): 591–602. doi:10.1080/0141192022000005841.

Hart, Susan. 1992. "Differentiation. Part of the Problem or Part of the Solution?" *The Curriculum Journal* 3 (2): 131–142. doi:10.1080/0958517920030203.

Hart, Susan, et al. 2004. *Learning without Limits*. Maidenhead: Open University Press.

Higgins, S., M. Katsipataki, R. Coleman, P. Henderson, L. Major, R. Coe, and D. Mason. 2015. *The Sutton Trust – Education Endowment Foundation Teaching and Learning Toolkit*. London: Education Endowment Foundation.

Hodgen, J., B. Taylor, B. Francis, L. Archer, A. Mazenod, A. Tereshchenko. forthcoming. "Resisting Homogeneous 'Ability' Grouping Practices: How Some Schools Buck the Trend and Implement Mixed Attainment Teaching".

Ireson, Judith, and Susan Hallam. 2001. *Ability Grouping in Education*. London: Paul Chapman Publishing.

Kerckhoff, Alan C. 1986. "Effects of Ability Grouping in British Secondary Schools." *American Sociological Review* 51 (6): 842–858. doi:10.2307/2095371.

Kulik, Chen-Lin C., and James A. Kulik. 1982. "Effects of Ability Grouping on Secondary School Students: A Meta-Analysis of Evaluation Findings." *American Educational Research Journal* 19 (3): 415–428.

Kutnick, P., J. Sebba, P. Blatchford, M. Galton, J. Thorp, H. MacIntyre, and L. Berdondini. 2005. *The Effects of Pupil Grouping: Literature Review*. London: DCSF.

Kutscher, Bilha, and Liora Linchevski. 2000. "Moving between Mixed-Ability and Same-Ability Settings: Impact on Learners." 24th Conference of the International. Group for the Psychology of Mathematics Education, Hiroshima, Japan, July 23–27.

Loveless, T. 2009. *Tracking and Detracking: High Achievers in Massachusetts Middle Schools*. Washington, DC: Thomas B. Fordham Institute.

Marks, Rachel. 2016. *Ability-Grouping in Primary Schools: Case Studies and Critical Debates*. Northwich: Critical Publishing.

Marsh, Herbert W. 1984. "Self-Concept, Social Comparison, and Ability Grouping: A Reply to Kulik and Kulik." *American Educational Research Journal* 21 (4): 799–806.

Mazenod, Anna, Becky Francis, Louise Archer, Jeremy Hodgen, Becky Taylor, Antonina Tereshchenko, and David Pepper. 2018. "Nurturing Learning or Curtailing Independence? Teacher Constructions of Students in Lower Attainment Groups in English Secondary Schools." *Cambridge Journal of Education*. doi:10.1080/0305764X.2018.1441372.

Modica, M. 2015. "'My Skin Color Stops Me from Leading': Tracking, Identity, and Student Dynamics in a Racially Mixed School." *International Journal of Multicultural Education* 17 (3): 76–90.

Oakes, Jenny, Amy Stuart Wells, Makeba Jones, and Amanda Datnow. 1997. "Detracking: The Social Construction of Ability, Cultural Politics, and Resistance to Reform." *Teachers College Record* 98 (3): 482–510.

OECD. 2013. *PISA 2012 Results: What Makes Schools Successful? Resources, Policies and Practices (Volume IV)*. PISA: OECD Publishing.

OFSTED. 2015. "The Most Able Students: An Update on Progress since June 2013." Manchester. www.gov.uk/government/organisations/ofsted.

Punch, Samantha. 2002. "Research with Children: The Same or Different from Research with Adults?" *Childhood* 9 (3): 321–341.

Reay, Diane, and Dylan Wiliam. 1999. "'I'll Be a Nothing': Structure, Agency and the Construction of Identity through Assessment." *British Educational Research Journal* 25 (3): 343–354. doi:10.1080/0141192990250305.

Reay, Diane, Gill Crozier, and David James. 2011. *White Middle-Class Identities and Urban Schooling*. Basingstoke: Palgrave Macmillan.

Roberts, Jenny. 2016. "The 'More Capable Peer': Approaches to Collaborative Learning in a Mixed-Ability Classroom." *Changing English* 23 (1): 42–51. doi:10.1080/1358684X.2015.1133765.

Rosenbaum, James E. 1999. "If Tracking is Bad, is Detracking Better?" *American Educator* 47 (4): 24–29.

Rubin, B. 2008. "Detracking in Context: How Local Constructions of Ability Complicate Equity-Geared Reform." *Teachers College Record* 110 (3): 647–700.

Rubin, Beth C. 2003. "Unpacking Detracking: When Progressive Pedagogy Meets Students' Social Worlds." *American Educational Research Journal* 40 (2): 539–573. doi:10.3102/00028312040002539.

Scherer, Lexie. 2016. "'I am Not Clever, They Are Cleverer than Us': Children Reading in the Primary School." *British Journal of Sociology of Education* 37 (3): 389–407. doi:10.1080/01425692.2014.948989.

Shields, Carolyn M. 2002. "A Comparison Study of Student Attitudes and Perceptions in Homogeneous and Heterogeneous Classrooms." *Roeper Review* 24 (3): 115–119. doi:10.1080/02783190209554146.

Slavin, Robert E. 1990. "Achievement Effects of Ability Grouping in Secondary Schools: A Best-Evidence Synthesis." *Review of Educational Research* 60: 471–499. doi:10.3102/00346543060003471.

Slavin, Robert E. 1996. "Research on Cooperative Learning and Achievement: What We Know, What We Need to Know." *Contemporary Educational Psychology* 21 (1): 43–69.

Steenbergen-Hu, S., M. Makel, P. Olszewski-Kubilius. 2016. "What One Hundred Years of Research Says About the Effects of Ability Grouping and Acceleration on K–12 Students' Academic Achievement." *Review of Educational Research* 86 (4): 849–899.

Taylor, Becky, Mary-Claire Travers, Becky Francis, Jeremy Hodgen, and Claudia Sumner. 2015. *Best Practice in Mixed-Attainment Grouping*. London: Education Endowment Foundation/King's College London.

Taylor, Becky, Becky Francis, Louise Archer, Jeremy Hodgen, David Pepper, Antonina Tereshchenko, and Mary-Claire Travers. 2017. "Factors Deterring Schools from Mixed Attainment Teaching Practice." *Pedagogy, Culture and Society* 25 (3): 327–345. doi:10.1080/14681366.2016.1256908.

Venkatakrishnan, Hamsa, and Dylan Wiliam. 2003. "Tracking and Mixed-Ability Grouping in Secondary School Mathematics Classrooms: A Case Study 1." *British Educational Research Journal* 29 (2): 189–204. doi:10.1080/0141192032000060939.

Walls, Fiona. 2009. *Mathematical Subjects: Children Talk about Their Mathematics Lives*. Dordrecht: Springer.

Wilkinson, S. 1999. "How Useful Are Focus Groups in Feminist Research?" In *Developing Focus Group Research: Politics, Theory and Practice*, edited by S. Barbour Rosaline and J. Kitzinger. London: Sage.

Yonezawa, Susan, and Makeba Jones. 2006. "Students Perspectives on Tracking and Detracking." *Theory into Practice* 45 (1): 15–23. doi:10.1207/s15430421tip4501_3.

Yonezawa, Susan, Amy Stuart Wells, and Irene Serna. 2002. "Choosing Tracks: 'Freedom of Choice' in Detracking Schools." *American Educational Research Journal* 39 (1): 37–67. doi:10.3102/00028312039001037.

Youdell, Deborah. 2006. *Impossible Bodies, Impossible Selves: Exclusion and Student Subjectivities*. Dordrecht: Springer.