Sheila Norris and Paulo Aleixo: Ability Grouping in Schools: Attainment and self-esteem

A review of the research reveals evidence to support ability grouping, which appears to have detrimental effects on some pupils, and possibly disadvantage students in lower ranked in primary school.

In schools today it is likely that children are taught in groups differentiated by ability. In secondary schools this is most likely to take the form of dividing the children up on the basis of ability and teaching them separately for subjects such as maths, English and science (those are known as sets). In primary schools this is likely to take the form of within-class sets whereby children are divided into small groups within the class. In infant schools this tends to be on the basis of ability in maths and English and junior schools on the basis of maths, English and science.

The practice of grouping was criticised by the Plowden Report (1967) because studies had shown that pupils in the lower streams exhibited low self-esteem, while levels of attainment were not greatly improved.

The trip then has a return to ability groupings occurred? Is the use of sets and within-class sets more beneficial for attainment and self-esteem in comparison to streaming? Who is in favour of such a return to ability grouping?
Reay and Tull, 1997). Hannan (1997) writing in the TES comments:

* Let us be honest with ourselves. We are not taking education here, we are taking politics. After all, 80% of parents are in favour of setting because they believe they will have the 20% of children who will be in set 1 (p. 47)

Concerns over attainment and raising standards appears to have superseded concerns over effects of dividing pupils in terms of ability on self-esteem.

Hannan and Toutouni (1996) state that kith and kin debate has been between those who believe that dividing pupils on the basis of ability leads to improved academic attainment and those who think that the lower attainment pupils will suffer in terms of self-esteem.

Attainment

In a comprehensive review of the literature, Ireson and Hallam (2001) argue that while there are conflicting research results, on the whole, much research demonstrates that ability grouping does not raise levels of attainment for the majority of pupils. Slavin (1987), for example, in a meta-analysis of international studies focusing on streaming and sets in primary schools concluded that the effect of ability grouping was essentially zero although he noted that ability grouping was more effective in mathematics attainment. Similar findings were observed for secondary schools in several meta-analyses of the literature (Kulik and Kulik, 1985; Slavin, 1990; Veerman, 1995).

Other studies have shown different effects for different subjects. For example, Harlen and Malcolm (1997) and Ireson and Hallam (1999) observed no real effect of ability grouping on attainment, especially in English and science.

Still other studies have observed difference effects of ability grouping on low and high attaining pupils. Ireson, Mortimore and Hallam (1999) found that in maths, high attaining pupils showed greater gains in attainment in schools that set while lower attaining pupils did better in mixed ability schools.

Within class sets

There is much less published research on within-class sets (see Ireson and Hallam, 2001 for a review) but several studies have shown that when implemented properly this method of ability grouping can have beneficial effects on attainment (Bossert, 1988; Lou et al, 1996; Johnson and Johnson, 1995; Slavin, 1990; Topping, 1992). However within class sets have divided opinion, with some groups of mixed abilities - most and least able working together (Bennett and Cass, 1989; Swing and Peterson, 1982; Webb, 1991) and Slavin (1990) notes that groups should be representative in terms of ethnicity and gender. Bennett et al (1994) suggests that primary teachers using within class ability groupings tend to underestimate the capabilities of the higher attaining pupils but overestimate the capabilities of the lower attaining pupils.

Self-esteem

In terms of self-esteem the situation is less straightforward. It is difficult to come to an overall conclusion because different studies use different types of self-esteem measures, different pupil age (either primary or secondary), and investigate different types of ability grouping (setting, streaming, within-class grouping and so on). Despite these problems there are some studies worth noting.

In a meta-analysis of studies on elementary schools (primary) and junior high schools (middle and lower secondary) Kulik and Kulik (1992) concluded that the ability grouping raised the self-esteem of the lower attaining pupils while lowering the self-esteem of the higher attaining pupils. When looking at academic self-concepts (esteem related specifically to academics rather than general self-concepts) Byrne (1988) found that the low attaining pupils had lower English and maths self-concepts. Ireson, Hallam and Flew (2001) observed that for maths but not English and science self-esteem was lower in high streaming and higher in low streaming pupils. Overall they observed self-esteem was best at moderate levels of setting rather than in schools where there was mixed ability teaching or high levels of setting.

Because of the problem of setting pupils looking at general self-esteem while others look at academic self-concepts it may be helpful to highlight studies that investigated pupil attitudes to ability grouping. In addition, there is some evidence that teachers tend to treat everyone in a group homogenously (Ollerton, 2001; Bowler, 1997). Hannan and Brown, 2000).

Social issues

Beyond the usual concerns about attainment and self-esteem some research suggests that there may be concerns about social issues. Benn and Chitty (1996) observed that in comprehensive education attainment was not better whether pupils had learned within mixed ability or set ability groups. However, in mixed ability settings they found that pupils had a more favourable general ethos. This in turn may result in improved pupil attitudes towards school (Do not suggest not reflected by Bowler, 2000).

A number of studies have also shown that pupils select friendship groupings from those who are similar in terms of class, ability and ethnic grouping (Barker Lunn, 1970; Gannon and Berenda, 1987; Newbold, 1997) but this is less marked in mixed ability settings (Newbold, 1977; see Ireson and Hallam, 2001 for a review).

Furthermore, it is still established that social settings are important in the development of intellectual ability (Bruner, 1983; 1985; Vygotsky, 1962), especially through the input of more knowledgeable others, in the form of teachers or peers. Setting may limit the capacity for this to occur since ability grouping limits the academic level of those peers children will interact with mostly and hence those who can ‘pass’ on their greater ‘knowledge’.

Academic Self-Knowledge

One of the implications of these findings is arguably the most worrying concerns the development of children’s self-perception in academic and intellectual terms. There is a general belief that setting or within-class groupings are better than streaming. However, these run the risk of having pupils create an idea about their level of academic and intellectual ability from one or two subjects (usually maths and English) from the age of about 5 (Year 1). Children who excel in one subject may never find themselves in a high and thus a affirming for art. A child’s whole view of who they are academically may be affected by placement in ability groups.

Conclusions and Implications

Clearly, research evidence is mixed on the impact of ability grouping, being this setting, streaming and mixed groups. However, research not seem to justify the current Government emphasis upon it. In fact, several researchers have concluded that there is no evidence for...
ability grouping resulting in higher pupil attainment (e.g. Ayiett, 2000; Harlen & Malcolm, 1997; Lyle, 1999).

Perhaps more importantly, given certain research findings, there are clearly implications regarding the use of ability grouping in primary schools. There is the real possibility that pupils in lower ability groups at key stage 1 will remain in lower ability groups throughout their school careers. As a result of lower ability children at the age of 5 may be selected for a lower set within a class that utilises within class ability grouping. When they enter the next year, they will only be able to demonstrate the knowledge and understanding from the curriculum that they have been offered and therefore be allocated to a similar ability group. If that carries on the child will then achieve the Key stage 1 and 2 resultscommensurate with the group they have been placed in. It is also therefore likely that this trend will be continued in secondary schools. This result will back up Dixon's (1999) claim that

- a child’s chance of remaining in the initial grouping for the rest of their school career are 89%.

In effect, the argument is that KS1 results will in turn affect children’s placement in secondary school and therefore potentially affect the quality of teaching and resources they receive. The obvious conclusion is that these pupils will only be offered the lower track GCSE in maths and further preventing their attainment and future preventing their attainment and future progression (for example, not being offered ‘A’ levels). The system is, in essence, not allowing for individual differences in children’s development of mathematical and English abilities since it assumes that the general level of these abilities develops at the same rate for all pupils.

This situation is further complicated by the evidence that suggests that summer born children, ethnic minorities and boys are over-represented in the lower ability groups. This suggests that these children may be receiving a substantially different type of education than their higher attaining peers. Sharp and Hutschey (1997) referring to summer born children, clearly agree:

"...Children who are younger in the year group are likely to do less well than their older classmates...if decisions are made on the basis of KS1 data, (e.g. the allocation to sets and streams) these age related differences could have longer lasting negative repercussions for the children concerned." (p.5)

This could equally be applied to minority groups and boys and therefore (columns 2001) states, becomes an issue of equal opportunities.

Clearly, more research into the possible long-lasting effects of within class ability grouping is needed. A whole generation of boys, ethnic minorities and summer born children could be failed at the age of 5 by an education system that encourages ability grouping.

While there is a general belief that ability grouping may benefit the more able students (although this remains unsubstantiated), the question remains as to whether the less able should be

Given that the more able students may suffer more self-esteem issues this hardly seems a good argument to teach pupils in ability groupings.

While academics, the government and teaching practitioners argue over the relative validity of academic research, pupil attitudes to testing appear to be clear and should be listened to. Lyle (1999) cites the 1989 UN Convention on the rights of the child that was ratified by the UK government in 1991. Article 12 states that every child should have the right (if capable) to express their views and that such views should be given weight in accordance to the age and maturity of the child. This alone suggests that while this debate has raged on for most of this century, every child has a human right to be consulted.

Perhaps the only solution to this problem is to return to the recommendations of the Plowden report (1967) to use mixed ability teaching (see also a review of alternative methods in column 2001).

As Cillerton (2001) states;

"At the centre of learning processes are children who have entitlements, rights, hopes and aspirations. As such education must be inclusive, explicitly and intrinsically free from centralised Government intentions to categorise and divide children in ways which, if applied to race or gender would be immoral, and if applied to our own children, totally unacceptable.

Inclusion is an equality of opportunity issue. It is, in turn, related to quality of access for all children to the statutory curriculum. Teaching children who have wide range of conceptual understandings, work-rates, motivations, potentials, behaviours and aspirations, in inclusive, mixed ability classrooms is not just feasible, it is ethically desirable." (p.40)


References


