

Setting or mixed ability? Teachers' views of the organisation of pupils for learning

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This paper examines how staff in schools formulate decisions about pupil organisation. A small sample of primary and secondary schools from across Scotland was involved in the study.

In 1996 Her Majesty's Inspectors published a report entitled *Achievement for All* (SOEID, 1996) which, it was envisaged, would form the basis of school evaluations into the effectiveness of classroom organisation. This report, and in particular the six principles on which it suggested effective organisational arrangements should rest, formed the organising framework for the study.

The study had three main aims:

- 1. to ascertain the extent to which the principles outlined in the HMI report had been used by school staff when making decisions about which form of organisation to use**
- 2. to comment on the perceptions of teaching staff of how well the arrangements in place were working**
- 3. to ascertain how the impact on teaching and learning was being evaluated.**

Introduction

Achievement for All (SOEID, 1996) identified a number of key principles governing the organisation of pupils by class, or within class, in Scottish schools and concluded that:

The application of these principles does not give rise to one, universally best method of organising pupils into classes. If used effectively, both mixed ability and setting may be appropriate forms of organisation ... It is important that the forms of organisation employed in schools are subject to rigorous analysis and evaluation to ensure that they meet the key principles ... Decisions about class organisation must be based on an objective appraisal of what is likely to be the effect for pupils and upon realistic expectations of teachers.

(para. 5.4)

This conclusion is in keeping with available reviews of research on the topic. In the year following the publication of *Achievement for All*, The Scottish Council for Research in Education (SCRE) published a review of research related to setting and streaming in schools (Harlen & Malcolm, 1997). This review concluded that there is: 'no consistent and reliable evidence of positive effects of setting and streaming in any subjects or for students of particular ability levels' (p. 40). This confirmed the conclusions of an earlier review by Slavin (1990) that found no effects of ability grouping on pupils' achievements for any level of ability. More recently, research by Ireson, Hallam and Hurley (2002) confirmed that 'neither setting nor mixed ability provide significant advantages in terms of raising achievement' (p. 1).

However, tensions in *Achievement for All* are evident, in particular between the advice being offered, that is, 'The main consideration in organising pupils into classes should be to create the best conditions for effective learning and teaching ...' (SOEID, 1996, para. 2.1) and the main recommendations:

In primary schools attainment groups should be the principal means of organising pupils in English language and mathematics.

(SOEID, 1996, para. 5.12)

In secondary schools, much greater use should be made of attainment groups in all subjects. Broadband setting should be introduced in English and mathematics from S1 [age 11–12] and, where feasible, in a number of other subjects by S2 [age 12–13], particularly in science and modern languages.

(SOEID, 1996, para. 5.13)

Despite an absence of research evidence to favour setting as the most effective organisational arrangements many schools have changed their organisational procedures in line with the recommendations outlined in the HMI document (TESS, 22.11.02) and as advocated by The Right Honorable Jack McConnell MSP, First Minister of the Scottish Parliament (McConnell, 2002) in a speech to Scottish head teachers.

There is, therefore, a contradiction evident with policy makers in that setting continues to be advocated, although it is also recognised that there is no significant research evidence to favour this form of organisation. Schools are caught between these two conflicting messages.

As neither setting nor mixed ability organisation appears to offer great advantages in terms of raising standards, decisions about the best way to group pupils should be based on other considerations. It is time for a reassessment of the organisation of pupils to achieve a better alignment between grouping, pedagogy and learning outcomes. Social outcomes should also be considered. (Ireson et al., 2002, p. 12)

Methodology

A total of 11 schools were included in the investigation (four primary and seven secondary). All schools had been identified by HMI as exemplifying good practice in recent inspections.

One department in each of the secondary schools was included in the research. This involved four subject areas: English, mathematics, science and modern languages. Four secondary schools organised pupils by broad-band setting, two used mixed ability teaching and one used within-class setting. Thus five departments organised pupils' by setting (either within class or across classes). In each secondary school one member of the management structure (with responsibility for pupil organisation), the principal teacher of the subject and two classroom teachers from within the same department were interviewed.

All four primary schools in the research used broad-band setting in mathematics and English language. These primary schools also organised the pupils by mixed ability for class work in the other curricular areas. Thus all the teachers interviewed in the primary schools had current experience of both methods of organisation. In each primary school one member of the senior management team and two teachers involved in the set arrangements were interviewed.

All staff were interviewed using a semi-structured interview schedule. In total 33 members of staff were interviewed.

The interview schedule included four key sections pertinent to this paper:

1. knowledge and use of Scottish Office Education and Industry Department (SOEID) principles
2. rationale for the organisational procedures currently in place
3. perspectives on how well the current arrangements were meeting the six principles outlined in the SOEID report, *Achievement for All*
4. evaluation of the current arrangements.

The interview schedules – detailing the areas and topics to be covered – were issued to schools in advance of the visit in order to give individuals time to consider their responses. Prior to each visit researchers obtained relevant policies and

documentation from each school to provide background information.

Knowledge and use of the SOEID principles

Achievement for All (SOEID, 1996) provided key principles around which schools might reflect and base decisions. In order to ensure effective learning and teaching it suggested the organisation of pupils by class or within class should:

- create conditions which motivate all pupils to make sustained progress in learning within a common curriculum framework;
- be flexible in responding to pupils' academic, personal and social development;
- make it clear that the achievements and progress of each pupil are valued;
- promote teaching which builds on the prior learning and attainments of pupils;
- free teachers to spend most of their time on direct teaching and enable pupils to work effectively on challenging tasks; and
- be feasible and appropriate in terms of expectations of teachers and pupils.

(SOEID, 1996, para. 2.2)

It became clear, however, that the schools in this study were not utilising the advice contained in the *Achievement for All* document when deciding on the organisational arrangements that would be adopted. While the staff of three schools were familiar with the existence of the document, only two of the school personnel interviewed had actually read it. No school used it or any other framework to evaluate the effectiveness of the organisational arrangements in place or to help in the decision-making process when a change in organisational procedures was being contemplated.

Rationale for the organisational procedures currently in place

All schools believed firmly in their choice and could offer a rationale for the organisational arrangements adopted. For those schools using set arrangements their reasons included the following:

- it is easier for teachers to deal with a smaller range of ability
- it was a way of separating out pupils with behaviour problems so that at least some could have a chance to learn
- it would improve results
- more able pupils could be challenged more easily
- mixed ability encourages teaching to the middle and therefore is inappropriate for a good number of pupils in the class.

For those schools using mixed ability arrangements their reasons included the following:

- it did not stigmatise pupils
- it reduced the possibilities of bullying
- pupils helped one another and contributed to a more positive class ethos
- setting was a divisive and elitist approach.

Staff perspectives of the impact on teaching and learning of the arrangements related to the six principles in *Achievement for All*

1. Create conditions which motivate all pupils to make sustained progress in learning within a common curriculum framework

The class ethos was acknowledged to be of vital importance to learning. In this respect schools reported that when the pupils were placed in sets the work was *more purposeful* and *focused*.

Staff in primary schools felt they worked more collaboratively when pupils were set. This was viewed as a positive development and motivating for the staff involved: 'I'm much more involved with my colleagues than I was in my last school; you can't work this system unless you do work as a team.'

Motivating particular groups of pupils was acknowledged to be difficult in both mixed ability and set arrangements. It was perceived that it was easier to motivate pupils who work more slowly than others through mixed ability arrangements; however, the motivation of 'more able pupils' was more difficult within mixed ability classes. A particular problem of motivation was identified with set arrangements at the S2 stage: 'in S2 the motivation aspect is more difficult to maintain.'

2. Be flexible in responding to pupils' academic, personal and social development

Flexibility was perceived to be harder to achieve in set arrangements. There was a tendency to keep top sets full and lower sets deliberately small. However, this led to problems if a pupil did well enough to be 'moved up' and there was no room in the higher set. There could be an awkward transition period when a pupil moved from one set to another, but the difficulty seemed to be exacerbated if a pupil moved 'up' a set: 'if a pupil moves up a set there can be a problem of matching the work during the transition period.' The reality in schools utilising set arrangements was that there was very little movement between sets once they had been established.

In contrast, the range of ability within mixed ability classes was seen to allow pupils to work at their own pace and progress without such organisational barriers.

3. Make it clear that the achievements and progress of each pupil are valued

All schools mentioned record keeping as the main way of tracking progress:

- profiling is done through work on the curriculum
- a checklist is provided for the purpose of checking that essential elements have been covered
- staff keep and maintain records which include all assessments which are made.

Only one school interpreted this point in terms of the messages that pupils receive about their achievement and progress, although one school did mention that 'the ethos

is one of cooperation amongst pupils and support for one another rather than competition between them.' There are implications for how pupils perceive that their progress and achievements are valued if the focus for staff is on the more formal procedures of recording and monitoring progress.

It was interesting to note that staff did not refer directly to tests as a means of letting pupils know about their achievement and progress. This was in contrast to the findings in a survey of pupils where testing was identified as a key way in which they received feedback about their achievement and progress (Smith & Sutherland, 2002).

4. Promote teaching which builds on the prior learning and attainments of pupils

Staff spoke in depth about the information transfer arrangements in place within their school and across sectors. The notion of building on prior learning was generally acknowledged to be an essential feature of effective learning and teaching. However, it became apparent that some issues exist in relation to this principle. Several comments indicated that some teachers equate building on prior learning with pupils having the same teacher over an elongated period of time.

If you know the children well it can have positive and negative effects. Knowledge of a child is certainly very important, but it may be that they and you need a change.

When you have the same class in S1 and S2 you really know the pupils and so you can work the class to suit their needs.

Some reservations were expressed by primary teachers who felt that the information collected and transferred to the local secondary schools was not being used.

Secondary schools must acknowledge the learning that has taken place in primary schools.

In one secondary school it was stated that the pupils were retested on entry to the secondary schools as the results from the associated primary schools were inconsistent and unreliable.

5. Free teachers to spend most of their time on direct teaching and enable pupils to work effectively on challenging tasks

While direct teaching, as defined by *Achievement for All*, includes one to one tuition, small group lessons and whole class teaching, schools had interpreted this as equating almost exclusively to whole class teaching. In set arrangements it was perceived that more direct teaching (in the form of whole class teaching) could and would occur. Thus in those schools that used set arrangements the dominant pedagogy was whole class teaching for all levels of sets.

In contrast, in those schools operating mixed ability arrangements, direct teaching was less dependent on

whole class sessions. The term had been interpreted to encompass small group teaching and individual tuition as well as the possibility of whole class sessions. Two ways of maximising direct teaching opportunities were mentioned: the encouragement and facilitation of independent learning by pupils, and the use of other adults in the room (for example learning support staff). Teachers operating with mixed ability classes were acutely aware of the range of abilities within their classes and identified the use of all forms of direct teaching as a means of catering for this diversity.

6. Be feasible and appropriate in terms of expectations of teachers and pupils

Setting was perceived to reduce pressure on a teacher in terms of preparation and class management: 'Setting is easier to plan and prepare for.' On the other hand, with mixed ability arrangements, it was felt that 'a lot more is expected of teachers and it takes a great deal more effort than other methods of organisation.' This perception was borne out in the findings from the survey of pupils (Smith & Sutherland, 2002), where pupils overwhelmingly perceived setting as being easier to manage for the teacher.

Staff evaluation of the current arrangements

No formal evaluation procedures (that focused on the organisational arrangements for pupils) were carried out in any school. However, given that reasons could be offered for the adoption of particular organisational arrangements (see above), and that both advantages and disadvantages of adopting set arrangements could be identified (see below), there was evidence that teachers had been involved in a good deal of reflection on the issues.

In total six schools had experience of mixed ability from which to draw. For the two secondary departments using mixed ability arrangements, the decision to continue with organising pupils on a mixed ability basis involved a conviction that the arrangements in place were working well and that there would be no advantage in changing them. Both departments referred to favourable HMI reports and good exam results as evidence that the arrangements were working. The four primary schools involved in the study also had experience of mixed ability organisation for general class work, and their perceptions of this work are included here. Staff interviewed from the six schools operating mixed ability organisation perceived the advantages of mixed ability to be that:

- there was less likelihood of pupil stigmatisation
- it was easier to maintain the motivation of those pupils working at a slower rate
- there was greater flexibility for pupils to progress at their own rates
- pupils benefited from peer support.

Disadvantages were also identified:

- it required a good deal – sometimes inordinate amounts – of organisation and preparation for staff

- it could be difficult to provide appropriate challenges for the most able pupils
- it meant that whole class lessons were difficult to undertake because of the range of abilities in the class.

Nine schools in total were involved in organising their pupils by setting: five secondary departments and all four primary schools. Staff perceived the advantages of setting to be that:

- it encouraged teamwork and collaboration with colleagues in primary schools
- it permitted a different ethos to be created. In particular it focused attention and work became more purposeful
- the preparation and 'set management' was easier for the teacher
- more whole class teaching could take place.

Disadvantages were also identified:

- motivating pupils in the slower sets was difficult
- the sets were often fairly rigid and inflexible
- moving pupils from one set to another, particularly those moving 'up a set', was problematic in two ways. First, if the top set was full then there was no space for a pupil who may be better placed in that top set. Second, the curriculum was perceived to be so different between sets that a smooth transition between one set and another was difficult to achieve
- staffing issues arose. In set arrangements three, and in some cases four, members of staff were required to cover two classes. If, as in the case of primary schools, this involved senior management team members, then the impact of other duties could mean set arrangements being abandoned.

Of concern to the researchers, was the fact that pupils' perceptions had not influenced these reflections by staff. In fact, pupil perceptions had not formally been sought by any of the schools involved. There was evidence in two schools that pupils had been invited informally to offer their opinions on the organisational arrangement in place. When pupils were interviewed as part of a larger study into perceptions of organisational arrangements in schools (Smith & Sutherland, 2002) it was found that in some schools pupils held opposing views to teachers as to the effectiveness of the pupil organisation in place. In one school, for example, the staff were clear that no stigmatisation occurred as a result of set arrangements, while the pupils interviewed reported several instances of verbal bullying taking place.

Discussion

The mixed messages from policy, inspections and research put schools in a difficult position. It was clear, from the rationale that could be offered and the identification of advantages and disadvantages of each organisational arrangement in place, that staff had formed opinions about the effectiveness of the arrangements. Some of the same

principles as were outlined in *Achievement for All* (SOEID, 1996), in particular motivation, flexibility, and feasibility for staff, were considered to be indicators of the effectiveness of the arrangements. However, other principles in *Achievement for All*, in particular valuing progress and achievement, building on prior learning and the appropriateness of the arrangements for the pupils, had not been considered by staff as being particularly related to the organisational arrangements in place.

The staff in the study reported that it was harder to motivate pupils in the lower sets; however there was no recognition of the dangers for other groups in set arrangements. It has been established, for example, that girls can be demotivated by fast pace and pressure to succeed (Boaler, 1997a; b; c). There was some evidence that a similar ethos was being cultivated in top sets in this study. The schools involved had reported that the ethos had become more purposeful and focused, and this was viewed as a positive outcome of the set arrangements. However, Ireson et al. (2002) found that pupils in top sets suffer because the fast pace and heightened focus on coverage of the curriculum means that they cannot do things in depth. A recent response to the national debate on education by the Scottish Executive Education Department (SEED, 2003) acknowledged that an overcrowded curriculum dominated by a testing and exam culture had been to the detriment of creativity and a narrow focus on key academic areas.

The findings of the research raise the question of why set classes appear more purposeful and focused than mixed ability classes. The introduction of setting would appear to coincide with increased pressure and pace – at least for the top sets. It may relate partly to the fact that primary schools reported greater involvement in teamwork with colleagues when setting was in place. This involvement may mean that staff themselves are more focused and purposeful, and that this is carried over into the ethos of the set classes. Further investigation as to why this might be the case and why focus and purpose is less likely to be associated with mixed ability classes is required.

It was generally recognised by schools in the study that a lack of flexibility posed some problems within set arrangements. There were particular problems acknowledged in set arrangements in respect of pupils moving from one set to another due to the differing pace at which the sets worked. This was compounded by the tendency to keep numbers in the top sets high, thus limiting the possibilities for movement. As with the current study, Ireson et al. (2002) found that, 'there is limited movement between groups, so that even if pupils improve they may not be allowed to be moved to higher sets' (p. 11). An assumption that a set comprised a much more homogenous group of learners led to the increased use of certain pedagogical methods such as whole class teaching. However, this has been found to be flawed thinking, as Ireson et al. (2002, p. 11) suggest: 'even when fine setting is used set sizes of 25–30 inevitably contain pupils with a range of attainments.' Further, Hallam et al. (cited by Ireson et al., 2002) suggest that teachers working with set

arrangements use a limited pedagogy even though they may be capable of and had previously utilised a wider range.

The wide spread of attainment in sets would be less problematic if appropriate teaching methods were used, with a variety of activities and differentiated work within the classroom. Evidence suggests that this is unlikely, as even teachers who use these methods with mixed ability classes fail to employ them when teaching sets.

(Hallam et al., cited by Ireson et al., 2002, p. 11)

One of the principles of *Achievement for All* was that achievements and progress should be valued. However, the focus by those schools using set arrangements was on monitoring and recording progress rather than on valuing of achievement and progress. This was evident in the section of the study that looked at pupils' perceptions of the arrangements in place (Smith & Sutherland, 2002). In this concurrent study pupils reported dissatisfaction with the use of formal test results as a dominant factor in selection into sets. They particularly felt that this did not accurately reflect their achievements and progress.

Staff acknowledged that teaching should build on prior learning but equated the effectiveness of this with teaching the same classes from one year to another. This was specifically related to the secondary sector, where staff see pupils for only a limited number of periods per week. Pressure on teachers to cover the curriculum and to achieve targets may impact on their ability to forge meaningful relationships with pupils in their class. This may be especially difficult when class sizes are at their maximum (in Scotland that is 30 in primary classes P1–3 for 4–6 year-olds, 33 in primary classes P4–6 for 7–10 year-olds, and 30 in non-practical classes in secondary S1 and S2).

It would appear that an issue still exists with the transition period from primary to secondary education, with primary schools still reporting that information passed on is not being used. It would appear that there is a lack of confidence in the information being transferred from one sector to another. The recent response to the national debate by the Scottish Executive (SEED, 2003) has suggested that teachers should be able to teach in both sectors and that this may increase continuity at the transition phase.

The question of whether the adoption of particular organisational arrangements impacts on pedagogy remains to be addressed fully. As with Hallam et al. (cited by Ireson et al., 2002), this study found that teachers involved in set arrangements held a narrower definition of direct teaching than those involved in mixed ability arrangements. An assumption of homogeneity led to the belief that all pupils could work at the same pace and in the same way. This, once again, contradicted what more than one pupil reported in the concurrent study: 'although it's ability it's still mixed!' (Smith & Sutherland, 2002). There was a clear perception from staff interviewed for this study that setting was easier for the teacher to manage. Thus, while sets may be *feasible* (SOEID, 1996) in terms of teacher workload, it

would appear that they may not, necessarily, be more appropriate (SOEID, 1996) in terms of pupil learning.

Conclusions

Given that the document *Achievement for All* (SOEID, 1996) was not used by schools in this study it raises the question of the place and use of such reports in and by schools. In addition, all of these schools had received recent favourable reports from HMI who, presumably, did use the principles from the document in their evaluations. It may be that, from the teachers' point of view, some principles relate more closely to the organisational arrangements in place than others and that both forms of organisation can meet all six principles satisfactorily for the purposes of HMI inspections. Particular forms of organisation, however, would appear to be able to meet some of the six principles more easily than others.

In set arrangements it would appear that motivation might be an issue for some pupils, and there is a lack of flexibility in the allocation of pupils to sets and in movement between sets. Sets were, however, perceived to be easier for the teachers to organise and manage and, although research evidence may dispute the perception, more motivating for the more able pupils. In mixed ability arrangements the motivation of the most able pupils can prove difficult, and it is perceived as much harder for teachers to cater adequately for everyone in the class. However, mixed ability is perceived to offer greater flexibility.

Some of the perceptions of staff seem to be at odds with the research evidence currently available. It was felt by

schools which utilised setting arrangements that motivation of those in the top sets was easier to achieve. There is some research evidence to suggest that the fast pace and competition that emerges in these top sets can prove to be an issue for the motivation of girls in particular. It also emerged from the rationale of those schools adopting setting that there was a belief that this would improve results. The research available would suggest that this is not the case. The issue that emerges is not whether schools and staff are reflecting on the issues – they clearly are – it perhaps relates more to the utilisation of research findings in their decision making and their procedures for formal evaluation of the arrangements.

Finally, it would seem that inclusion of pupils' opinions and insights into the impact of organisational arrangements on their learning would be an invaluable source of information in any evaluation procedure. Indeed, recent legislation (The Standards in Scotland's Schools etc. 2000 Act) requires schools to involve pupils in the decision-making processes that affect their learning. The omission of this crucial group in the consideration of such important issues remains to be addressed.

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