



A review of the evidence on the impact of inclusion on pupils with SEND¹ and their mainstream peers

Peter Gray, Brahm Norwich and Rob Webster

Introduction:

Discussions of the impact of inclusion on pupils with SEND and their mainstream peers tend to be characterised by absolute positions. On the one hand, there are those that argue that being educated alongside non-disabled peers is a human right: that placement in special schools denies that entitlement. They also tend to emphasise the importance of normal language and behaviour models, with special school grouping providing more limited opportunities for social learning. In addition, they point to the positive impact that the presence of a disabled child can have on mainstream peers, in terms of empathy and valuing individual diversity and difference, and the influence this can have on longer-term social attitudes.

On the other hand, critics of mainstream inclusion tend to point to the lack of specialist skills, training and experience in the mainstream workforce, the impact of a less appropriate/flexible curriculum and the possibility of social rejection. Special schools are seen as offering a more tailored teaching and learning experience, delivered by properly skilled professionals, and a social haven where children can feel they belong.

Critics of mainstream inclusion also raise concerns about the negative impact that some pupils with SEND can have on the learning of others, particularly in terms of difficult behaviour or diversion of staff time from their broader responsibilities to the wider school community. At the same time, there tends to be limited reference to the potential impact of pupils with social/behavioural difficulties on peer learning in special school settings.

With such strongly held (and often emotive) opinions, it is important to have a well-developed and coherent evidence base, against which such assertions can be evaluated. However, while national and international studies on these issues continue to be undertaken and reviewed, the area is beset by a number of methodological issues, particularly:

¹ There are significant differences between countries in the terminology used to describe children who experience difficulties in education or who are regarded as learning disabled. In England, there has been a historical distinction (dating back to the Warnock Report in 1978 and accompanying legislation) between the '18%' (whose needs are more moderate and may be more transitory), and the '2%' who are seen to have more significant, complex and long term difficulties. The evidence reported in this review largely relates to the population in each country who might be placed in specialist provision, with the Netherlands one of the highest in Europe at around 5%. The population in the US is more difficult to determine because of state to state variation.

- 1) the difficulty of identifying matched groups of pupils for proper comparisons to be made: although it is possible to look at relative mainstream/special school outcomes for specific groups (eg those with Down's syndrome), it may be that some of those placed in special schools have more complex needs to start with; learning and social outcomes may be less positive for that reason.
- 2) the tendency to generalise beyond samples to broader populations of pupils with SEND: do positive mainstream outcomes for pupils with physical or learning disabilities apply equally to all groups (eg ASD/behaviour)? Is there a different pattern of outcomes for those with more complex/significant needs?
- 3) the tendency for research to focus on a limited set of outcomes (eg learning and social development of pupils with SEND and their peers), with less attention paid to other areas such as longer-term economic/social independence or provision costs.

The following summary of evidence is organised around some key policy questions. It aims to present a balanced picture of the best available research and what it can tell us about these issues.

Costs: is it more or less expensive to teach children with SEND in mainstream or specialist provision?

Given current financial pressures and an increased emphasis on impact and value for money, it is surprising that this area has received so little research attention. We have identified two key studies: one by Audit Scotland (2003) which sought to anticipate and evaluate the cost implications of that country's emerging policy of 'presumption of mainstream'; and the recent SENPRF research on factors linked to higher/lower levels of High Needs Block funding, which we reported to you at our last meeting.

The Scottish study concluded that significant financial investment would be needed to implement national policy on the basis of:

- (i) capital costs arising from the need to adapt mainstream buildings so they were fit for purpose
- (ii) revenue costs, arising from the need to fund additional staff to support pupils in mainstream settings
- (iii) transition costs, arising from a need for duplication of provision while some special schools were closing
- (iv) loss of economies of scale in terms of the deployment of specialist services such as therapy

However, the study did not directly compare expenditure in Authorities that had fewer special schools/pupils in specialist settings against higher provision users. Even in 2003, there were already a reasonable number of Scottish Authorities with low levels of specialist provision, due to rurality and/or local policy.

A recent evaluation of factors affecting levels of HN funding in English LAs undertaken by Alan Marsh, Peter Gray and Brahm Norwich identified history as the continuing major determinant, with a significant correlation ($r=0.6$) between spend and use of specialist provision. Lower spending areas were typically more inclusive; higher spenders tended to

have a greater percentage of pupils in specialist settings. Interestingly, there was no correlation between use of specialist provision and demographic need (as measured by the DFE's national funding formula indicators). The study also indicated that a significant reason behind the exponential increases in HN spend over recent years had been the increase in numbers of special school placements (DFE 2020; CSIE 2019). While some of this increase may reflect growth in numbers and levels of HN, the rate of change implies other contributing factors².

Two other factors need to be considered when making cost comparisons:

- 1) the significant increase in special school staffing/funding levels since DFE staffing circulars 11/90 and 7/93 were issued. These reflect increased expectations and safeguarding concerns as well as levels of need, along with rising staff costs associated with national pay settlements.
- 2) Changes to the national HN funding system, which requires the first £10k of support for pupils with EHCPs in mainstream to be found from delegated budgets while special schools are funded in full. This means that placements in special schools draw significantly more from local area High Needs Budgets than pupils remaining in mainstream.

Do children with SEND do better or worse if they are included in mainstream?

There have been a wide range of studies and international research reviews looking at this question (eg Ruijs & Peetsma 2009; Dessemontet et al (2012); Dyssegaard & Larsen (2013); Oh-Young & Filler (2015); Hehir et al (2016); Szumski et al (2017); Cole et al (2019); Kefallinou et al (2020). Typically, both learning and personal/social outcomes are considered:

Academic progress

The balance of findings across the 5 sources listed above indicates more academic gains for pupils with a range of SEND (typically characterised as mild to moderate) who are in mainstream settings rather than separate ones. There are reported gains in both literacy and maths, but more so with literacy. Positive effects are more pronounced in primary vs secondary settings.

Personal-social outcomes

The large-scale Hehir et al review found more positive outcomes for pupils with SEND in mainstream, in terms of social engagement, greater peer acceptance and fewer behaviour issues, more participation in school and community groups and greater independence/social skills. The other two reviews covering this area found a more mixed picture.

² Research by Anne Pinney (2017) for the CDC/True Colours Trust reported a 'real increase' in England in the numbers of disabled children with complex needs. The most significant element of this increase was for pupils identified as having ASD (which are now the majority category of pupils with EHCPs: 29% compared to only 6.2% of pupils receiving SEN support: DFE statistics January 2019). She saw ASD as 'by definition' a complex need – which is contestable given the broad range and levels of difficulties now covered by this description. There is substantial anecdotal evidence from SENPRF policy seminars of other contributing factors to the rise in specialist placements in recent years, including budget and narrower accountability pressures on mainstream schools, reduced capacity at LA level to provide challenge and support, and less flexibility in the mainstream curriculum offer.

Do children in mainstream classes where pupils with SEND are included do better or worse as a result?

Effects on non-disabled peers (academic)

On balance, most studies show neutral or positive effects. Generally, effects are stronger where there are positive teacher attitudes, training or use of strategies geared to diverse needs, along with collaborative problem-solving staff cultures. There was some evidence (though not in all studies) of more negative effects when included students had emotional/behavioural difficulties or more severe/complex SEND. Of 26 studies conducted across 4 different countries, 23% showed positive gains and 58% no impact; in only 19% of studies were negative effects reported (Kalambouka et al 2007).

Effects on non-disabled peers (personal-social)

There has been little research on this aspect. However, key reviews such as Hehir et al provide strong evidence of positive impact on the social and emotional development of non-disabled peers (reduction in discriminating attitudes and higher responsiveness to the needs of other), particularly in relation to pupils with Down's syndrome and those in primary schools with broader intellectual disabilities. Ruijs and Peetsma identified similar effects where pupils with more significant SEND were included. Evidence indicates that some level of social intervention may be necessary for positive outcomes to occur. This will depend to some extent on teacher attitudes and training.

Impact: Research overview and limitations

There is little attempt to differentiate outcomes for different disability groups. For example, there is little explicit mention of effects related to pupils with ASD (autistic spectrum disorders) who currently form a significant but diverse proportion of those identified with SEND in the UK. Some work done by Glenys Jones and colleagues (2008) at Birmingham University, however, suggests positive and negative outcomes for pupils with ASD across all types of provision (mainstream schools, mainstream resource bases and special). Key factors were quality of teaching and the effectiveness of strategies to promote social participation.

Other variants that have received limited consideration include numbers of pupils included in the same class at any one time; gender factors (both for disabled students and class composition); class size and school structure; and parental attitudes.

However, the evidence shows at least that mainstream inclusion has no overall negative effect: if anything, impact is neutral or moderately positive – and more so for particular groups eg those with Down syndrome or more moderate intellectual disabilities.

There is also evidence that the attitudes, training and skills of mainstream teachers moderate impact, i.e. promote more positive/negative outcomes, along with school culture (the presence/absence of a collaborative problem-solving approach). These factors, along with some other barriers identified in the research, are amenable to change, even though some may require shifts in organisational structure as well as practice in classrooms.

The research also suggests a need for a more nuanced position other than ‘mainstreaming is either good or bad’. For example, there tends to be limited consideration of the impact of different patterns of inclusion in mainstream schools e.g. the extent of withdrawal and the extent to which this affects outcomes in either direction.

What about longer-term outcomes?

Generally, studies reporting positive impact of mainstreaming on peer attitudes tend to assume that these will be carried over to later life, and that this will help improve societal attitudes to disability. There is also a view that mainstream participation will lead to greater resilience and independence in adulthood. Currently, there is only limited evidence as to whether either of these expectations are valid. Research shows that disabled people (and those with learning difficulties in particular) have a significantly reduced chance of paid employment and there are clearly a range of institutional and attitudinal barriers that impact on this.

To differentiate outcomes between pupils with SEND in mainstream settings against those educated in special schools, longitudinal studies are needed. We only found one set of researchers who have examined the issue in this way. In Norway, Myklebust and Batevik (2005) found that over 60% of adolescents with SEND educated in inclusive settings attained economic independence. In contrast, only 35% succeeded among those who received their educational support in special classes³. However, they also noted that placement practices varied between schools, so this made it more difficult to make like for like comparisons.

We found no research evidence with regard to longer-term personal-social impact. It is rare for either mainstream or special schools to evaluate outcomes long-term in a systematic rather than anecdotal way. Proper longitudinal research would help track the variety of influences on children’s progress from the early years into adulthood, to help assess the impact of a range of factors/interventions (including types of setting and opportunities) on longer term outcomes⁴.

What do parents want?

When the Coalition Government decided in 2010 to address the ‘bias towards inclusion’ that they ascribed to the previous Labour administration, it had varied reactions to this proposal. The resolution was to strengthen parental choice, with parents being able to express a preference for types of school and specific institutions. However, while parents can have strong feelings in both directions (special school vs mainstream), there has been little research into factors underlying their choices.

A recent postgraduate study by Satherley (2020) found that parents’ choice of special school (vs mainstream) was typically based on their view that this would offer a more appropriate curriculum and a greater sense of belonging. This may relate to some of the key moderating influences identified in the larger scale research reviews summarised above: the degree to which mainstream schools are able to offer curriculum flexibility, the degree to which this is valued and the emphasis that mainstream schools place on social inclusion and having a

³ In mainstream schools: Norway makes greater use of this type of provision (vs special schools) than many other European countries.

⁴ We are aware that this is something the DFE are already considering

diverse community. Again, these factors are amenable to change, either through local practice or more inclusive national policy.

Conclusions:

Although research into the value and impact of mainstream schooling for pupils with SEND is beset by continuing methodological issues (definition of ‘mainstream’; validity of comparator groups; choice of disability; long-term vs short-term benefits etc), some broad conclusions can be drawn:

- 1) There is stronger evidence of positive impact for pupils with more moderate needs, both for disabled pupils themselves and for non-disabled peers. This includes a proportion of those in England which are described as having High Needs which are not routinely ‘severe and complex’ (as set out in Government guidance and legislation)
- 2) The picture is less clear for pupils with significant social, emotional and mental health issues and for some others with severe/profound/complex learning difficulties
- 3) The evidence on impact on other mainstream pupils does not support a negative view. The balance of research on this issue suggests effects are neutral or moderately positive
- 4) There is strong evidence that impact is moderated by mainstream staff attitudes, training and skills and by school culture. These factors are mostly amenable to change.
- 5) There is emerging evidence in England that increasing numbers of placements in special schools are associated with significant rises in costs, particularly given the way that funding is currently organised. There is some evidence to suggest that increases in numbers in specialist and alternative provision are not simply a product of increases in numbers/levels of High Needs, but are also linked to organisational and policy factors
- 6) Overall, the evidence currently available is consistent with maintaining a continuum of provision. However, when looking at the balance of provision across this continuum, a greater focus on a stronger and more consistent mainstream offer would help achieve more positive outcomes for both children with SEND themselves and their peers, as well as offering better value for money. We believe that some substantial changes in national policy and expectations will be needed for this to be achieved.

List of evidence sources:

Costs:

Audit Scotland (2003): Moving to mainstream: The inclusion of pupils with special educational needs in mainstream schools: report prepared in conjunction with HMIE

Marsh, Gray and Norwich (2019): Research into factors associated with differences in levels of HN funding across English LAs: for SEN Policy Research Forum

Impact and outcomes:

Cole , Murphy, Frisby, Grossi and Bolte (2019): A longitudinal study to determine the impact of inclusion on student academic outcomes: <https://iidc.indiana.edu/cell/what-we-do/pdf/inclusion-study-handout.pdf>

Dessemontet, Bless and Morin (2012): Effects of inclusion on the academic achievement and adaptive behaviour of children with intellectual disabilities. *Journal of Intellectual Disability Research*, 56, 6, 579-587

Fletcher, J. (2010): Spillover effects of inclusion of classmates with emotional problems on test scores in early elementary school; *Journal of Policy Analysis and Management* 29, 1, 69-83

Gottfried and Harven (2015): The effect of having classmates with emotional and behavioural disorders and the protective nature of peer gender: *Journal of Educational Research*: 108,1, 45-61

Hehir, Grindal, Freeman, Lamoreau, Borquaye and Burke (2016): A summary of the evidence on inclusive education: Instituto Alana, Harvard Graduate School of Education

Jones, Guldberg, Jordan, Waltz, English & Richardson (2008): Educational provision for children and young people on the Autistic Spectrum living in England: a review of current practice, issues and challenges: Autism Education Trust, 134

Kefallinou, Symeonidou and Meijer (2020): Understanding the value of inclusive education and its implementation: A review of the literature: Prospects: <https://doi.org/10.1007/s11125-020-09500-2>

Kristoffersen, Kraegpoth, Nielsen and Simonsen (2015): Disruptive school peers and student outcomes: *Economics of Education Review*, 45, 1-13

Oh-Young & Filler (2015): A meta-analysis of the effects of placement on academic and social skill outcomes measures of students with disabilities: *Research in Developmental Disabilities*, 47, 80-92

Rangvid (2019): Returning special education students to regular classrooms: externalities on peers' reading scores: *Economics of Education Review*, 68, 13-22

Ruijs and Peetsma (2009): Effects of inclusion on students with and without special educational needs reviewed: *Educational Research Review*, 4, 67-79

Schaerenberg, Rollett and Bos (2019): Do differences in classroom composition provide unequal opportunities for academic learning and social participation of SEN students in inclusive classes in primary school? <https://doi.org/10.1080/09243453.2019.1590423>

Szumski, Smogorzewska and Karowski (2017): Academic achievement of students without special educational needs in inclusive classrooms: a meta-analysis <http://dx.doi.org/10.1016/j.edurev.2017.02.004>

Longer-term outcomes:

Mykelbust & Batevik (2005); Batevik and Myklebust (2006): cited in European Agency for Special Needs and Inclusive Education (2018): Evidence of the link between inclusive education and social inclusion: a review of the literature

Parental views:

Satherley, D (2020); An exploration of parents' experiences of choosing special schools: DEdPsych thesis: University of Exeter

Incidence of disability:

Pinney, A (2017): Understanding the needs of children with complex needs or life-limiting conditions: Council for Disabled Children/True Colours Trust

Search strategy:

2 stage process:

- (i) identification of relevant papers already known to authors of this review
- (ii) search of ERIC and ERC databases for period 2010-2020
(details of search terms etc available on request)