

**The Social Impacts of Inclusion on Pupils with SEN and their Mainstream Peers**  
**Research Report (RES-061-23-0069-A)**  
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**Background**

Inclusive education is believed to be an effective form of education (UNESCO, 1994) for pupils with SEN, with positive effects on their social development due to increased opportunities for contact with typically achieving children. However, most research efforts to date have been rooted within a school improvement tradition seeking to identify organisational structures and practices which may be associated with facilitating or impeding the development of inclusion. This work, however illuminating, has not evaluated systematically the social and affective outcomes of inclusive developments (Frederickson et al, 2007). It is this gap in the literature that the project reported here sought to fill.

*A brief review of the existing relevant research*

The self-concept of pupils with SEN is generally assumed to be more negative than their typically achieving peers (Bear et al, 1993; Stanovich et al, 1998; Harter et al, 1998; Stone & May, 2002; Bear et al, 2002; Zeleke, 2004). Chapman (1988), in his meta-analysis, attributed this trend to the well-documented academic underachievement of pupils accredited with SEN in school settings. By contrast, the evidence regarding the social self-concept of pupils with SEN is less clear cut. While some studies found children with SEN to have a more negative social self-concept than their peers (Harter et al, 1998; Crabtree & Rutland, 2001), other studies did not report such a difference (Juvonen & Bear, 1992; Tabassam & Grainger, 2002; Gans et al, 2003) or even observed that an appreciable proportion of pupils with SEN often do not have accurate self-perceptions of social acceptance Nowicki (2003)

With regard to social outcomes, it is consistently reported that integrated children with SEN have lower status compared to their classmates (Larrivee and Horne, 1991; Vaughn et al, 1996; Pavri and Luftig, 2000; Ochoa and Alvarez, 1995; Ruijs & Peetsma, 2009). What is striking is that similar findings have been reported across different national school systems including the UK (Frederickson and Furnham, 1998), Holland (Scheepstra et al, 1999), Norway (Frostad and Pijl, 2007), Spain (Cambra and Silvestre, 2003) and Israel (Tur-Kaspa et al, 1999). Furthermore, it is consistently reported that pupils with motor impairments and pupils with intellectual impairments have fewer problems in their contact with peers than pupils with behaviour problems or pupils with autism (De Monchy et al., 2004; Mand, 2007; Champerlain et al, 2007).

The literature reviewed above suggests that children with SEN often lack the necessary social skills to successfully interact with their peers thus becoming socially isolated. Other studies, however, showed that, despite their generally low social status, children accredited with learning difficulties managed to form and maintain some positive social relationships in inclusive settings and felt part of a social network (Pavri and Monda-Amaya, 2001; Meyer, 2001; Estell et al, 2008).

*Theoretical influences*

The two main theoretical understandings that informed the design of the study were the “*homophily*” and “*contact*” hypotheses. The *homophily* hypothesis (McPherson, et al., 2001) concerns the commonly reported tendency in research on students’ social relations, for students to prefer to associate with ‘similar’ peers. The

'homophily' hypothesis is also referred to in the literature as the '*similarity hypothesis*' (Male, 2007) and largely explains why even in inclusive settings children with SEN form friendships amongst themselves on the basis of their shared experiences of disabling barriers (Guralnick et al, 1995). This is particularly true in situations where children with SEN spend considerable time in withdrawal settings such as units embedded in mainstream schools ('resource rooms' in US terminology).

By contrast, the *contact* hypothesis refers to the positive effect of increased interaction on the attitudes mainstream pupils hold towards pupils with SEN (Allport, 1954; Yucker, 1988; Maras & Brown, 2000). Indeed, empirical research has lent support to this hypothesis (Capper and Pickett, 1994; Scheepstra et al, 1999). Moreover, research has also shown that co-operative learning arrangements foster co-operation between children with and without SEN and have considerable strength in promoting attitudinal changes in both groups (Gartin et al, 1992).

Clearly, friendships cannot be engineered but helping children find creative ways to form them should be at the top of every school's agenda. Consequently, in testing the *homophily* and *contact* hypotheses in mainstream primary settings, the emphasis was placed on how disabling environments contribute to the social marginalisation and isolation of children with SEN; and, crucially, on identifying the institutional practices that facilitate the formation of positive social relationships.

## Objectives

There were no changes to the objectives outlined in the initial contract with the ESRC but only minor adaptations in the research focus and design. Specifically, the original research proposal aimed to examine the social impacts of inclusion on statemented pupils with (SEN) and their mainstream peers. However, the small number of pupils with Statements found in the participating schools necessitated a broadening of this research focus to the full range of pupils with SEN. Nevertheless, differences determined by severity of SEN were also examined in the analyses conducted. In accordance with the original proposal the study pursued the following three objectives:

- To examine the self-concept of pupils with SEN in inclusive provision.  
This was addressed through administering the Self-Perception Profile for Children (SPPC), a psychometric instrument assessing different facets of children's self-concept.
- To determine the sociometric status of pupils with SEN within the social network of their class and to explore their participation in peer groups.  
This was addressed through the application of the classic peer-nomination and the Social Cognitive Mapping sociometric techniques.
- To identify teaching strategies and wider school practices conducive to the promotion of social interaction between pupils with SEN and their mainstream peers and the development of friendships.  
This was addressed through interviewing professionals in the participating schools as well as relevant evidence gathered from the sociometric part of the study.

Fieldwork was conducted successfully, resulting in the collection of data from 566 pupils, a number which is significantly larger than the estimated 300 in the initial

bid. In addition to the original objectives, the research also addressed questions emerging during the course of study through the application of an additional innovative technique (Social Cognitive Mapping) and the exploration of the pupils' behavioural characteristics.

## **Methodology**

The study adopted a multi-method research design. Sampling procedures and the methods utilised are described below.

## **Participants**

Fieldwork was conducted in one LEA in the North of England. In choosing seven schools, we took care to include two schools (Elm and Willow schools) with resource units of different types, and one school which took an active part in supporting dual placements (Berry). Two (Roselands and Hook schools) of the remaining four schools were chosen following an examination of their OfSTED reports, evaluated with indicators taken from the Index for Inclusion (Booth and Ainscow, 2002). These schools were drawn from a long list determined by the numbers of children with Statements of SEN, on School Action, and on School Action Plus. As there was a bias in this larger sample towards schools in suburban areas, a further school was chosen from a less economically advantaged area (Fairlight). Finally, a seventh school (Healing) was chosen (also drawn from the long list) because they had expressed a strong desire to be included.

Participants were 566 pupils representing the whole population of the Year 5 and 6 cohorts. Approximately one in five children were on the SEN register, a ratio which reflected the LEA's figure. The SEN sample consisted of 56 pupils at the School Action stage, 28 at the School Action Plus stage, and 7 with Statements. The last two categories were combined to form a new category resulting in two groups, those with moderate and those with severe learning difficulties (see Table 1 in the Annex for a detailed breakdown of the samples' demographic characteristics).

In addition, interviews were conducted with 27 professionals including teachers and SENCOs. The interviews were guided by a semi-structured schedule (see Annex D).

## **Instruments**

### *Psychometric Assessment*

The Self-Perception Profile for Children (SPPC) (Harter, 1985) is a psychometric instrument assessing different facets of children's self-concept. The SPPC contains six separate subscales tapping into five specific domains as well as global self-worth subscale. Specifically, the SPPC consists of 36 items that can be allocated to five 6-item domain specific subscales (scholastic competence, social acceptance, athletic competence, physical appearance, and behavioural conduct) and one 6-item global self-worth subscale (see Annex A).

Each SPPC item consists of two opposite descriptions, e.g. "*Some children often forget what they have learned*" but "*Other children are able to remember all things easily*". Children have to choose the description that best fits and then indicate whether the description is somewhat true or very true for them. Accordingly, each item is scored on a four-point scale with a higher score reflecting a more positive view of oneself. For each of the self-esteem domains and for the global self-worth scale, a total score is computed by summing relevant items.

### *Classic Sociometric Assessment*

In this study, the social position of pupils with SEN in mainstream classes was determined through a classic peer-nomination technique, that is, by asking pupils to nominate which classmates they considered as friends. Negative nominations were not sought from pupils as these would give rise to ethical complications. As a result, certain negative status classifications encountered in other sociometric studies such as ‘controversial’ and ‘rejected’ could not be established. The nominations were limited to a semi-fixed choice (a maximum of five nominations). As Frostad and Pijl (2007) point out, it is usual in peer research to work with a fixed number of nominations (such as three choices) though this could introduce error through excessively restricting the freedom of choice for the respondents. By contrast, allowing pupils up to five nominations has been suggested as the least limiting alternative (Wasserman & Faust, 1994).

### *Social Cognitive Mapping and Peer-Assessed Behavioural Characteristics*

To demonstrate the bases for affiliation, a social network question (*Are there some children here in your classroom who hang around together a lot?*) was combined with Farmer and Farmer’s (1996) approach, which involves peer nomination on the basis of eight behavioural descriptors. Participants were instructed to list all the groups that they could think of, including their own. Students’ responses to the social network question were analysed according to Social Cognitive Mapping (SCM) procedures developed by Cairns et al (1997) to identify peer clusters and pupils’ centrality within their classroom’s social network.

Peer assessments were used to determine classmates’ perceptions of peers’ behavioural characteristics. Pupils were asked to nominate three peers who best fit eight descriptors that were adopted from Farmer & Farmer’s (1996) peer assessment study. Specifically, these researchers used the following eight descriptors: ‘co-operative’, ‘starts fights’, ‘popular’, ‘athletic’, ‘disruptive’, ‘leaders’, ‘good at schoolwork’ and ‘shy/withdrawn’. In this study, the two descriptors with negatively biased connotations (‘starting fights’ and ‘disruptive’) were replaced with ‘argues a lot’ and ‘breaks the rules’ to minimise negative conceptions of classmates. Full definitions of these descriptors were included in the interview schedule and, when necessary, were provided to the pupils for further explanation (see Appendix C).

### **Procedures**

Children completed the SPPC in their classrooms during structured lessons. The teacher and a research assistant were always present to ensure independent and confidential responding and to answer possible questions of the children. Particular adaptations were made to accommodate pupils with severe SEN. To avoid potential ethical problems inherent in sociometric research, the process of ‘nomination’ formed a small part of a much broader interview addressing a wide range of issues, thus minimising the chance of pupils sharing their nominations (see Annex B). Interviews lasted approximately twenty minutes. Finally, all teacher interviews were carried out individually and lasted around forty minutes.

### **Ethics**

The research complied with the ethical guidelines set by the British Educational Research Association (BERA). No ethical complications emerged in the course of the project. The anonymity of schools and participants was preserved throughout all datasets and research outputs.

## Data analysis

The psychometric data were analysed using the SPSS software (version 15.0, SPSS Inc. Chicago, IL). First, exploratory factor analysis was performed to confirm the psychometric properties of the SPPC (see Annex E, Table 2). Following this, descriptive statistics were calculated to obtain the mean scores of the participants in the various scales. Independent samples t-tests were then conducted to examine potential differences between groups of students determined by educational classification (SEN vs. non-SEN pupils) and by SEN classification ('moderate' vs. 'severe'). Differences between groups of pupils with SEN determined by type of need experienced were also examined through one-way Analysis of Variance (ANOVA).

The sociometric data were analysed using the UCINET software (Borgatti et al, 1999). First, the number of nominations received and the number of friendships (reciprocal ties) established for each pupil were calculated, while sociograms depicting relationships between pupils were constructed for every class. Next, the number of nominations received by each pupil was converted into a z score (i.e. standardised) resulting in the pupils' classification into popular, average, and low social status groups. Comparisons were performed between groups of pupils with different types of SEN. Finally, three indexes of social inclusion (being accepted by peers, having a friendship, and belonging to a cohesive subgroup) were used to compare pupils with SEN to those without. The first index uses the number of nominations received as a criterion for social inclusion; accordingly, pupils who have received no nominations at all and those who have only one nomination as classified as socially excluded. The second index takes the number of friendships held as a criterion for social inclusion; accordingly, pupils with no friends and those with only one friendship are also classified as socially excluded. The third criterion uses membership in a cohesive subgroup (defined as a set of at least three pupils who have more links with themselves than with non-members) as a criterion for social inclusion.

The social network data were analysed using SCM software (Leung, 1994). SCM procedures (Cairns et al, 1997) involve aggregating the nominations that all class respondents have received and generating a composite social map of the class' social structure which describes the positions of individual pupils within their peer clusters and the position of the identified clusters within the entire class network. These measures of centrality (i.e. person relative to group and group relative to network) are, in turn, used to classify pupils in four types of 'network status' or 'network centrality': nuclear, secondary, peripheral, and isolated. In sum, 'nuclear centrality' is used to describe pupils who were high centrality members (i.e. were nominated at a high frequency within their peer cluster) of a high centrality group (i.e. their peer cluster was also nominated at a high frequency relative to other clusters in the class). 'Peripheral centrality' is used to describe pupils with a low centrality who were members of any group or belonged to a low centrality group. 'Isolated centrality' is used to describe pupils who were not nominated as being members of a peer cluster. 'Secondary centrality' consists of those pupils with intermediate centrality (i.e. the remaining members of the network).

The interview data were imported into Atlas/ti5, a text-sorting program designed to assist in qualitative data analysis (Muhr, 2004). The data on each school were first processed via a 'within-site' and then a 'cross-site' analysis to find similarities and differences between the different cases.

## **Results**

It is clearly not possible to discuss in detail the analyses conducted; however, the succeeding section presents the research questions addressed and the main findings reported in each investigation. The reader should refer to the respective statistical Tables in the Annex.

### **The psychometric survey provided answers to the following research questions:**

#### 1) What is the self-concept of pupils with SEN in mainstream primary classes?

(Annex E, Table 3)

- Pupils with SEN were found to have positive but, at the same time, lower perceptions of self-concept than their non-SEN peers on all assessed domains.
- However, statistically significant differences between the two groups were only detected in two out of five dimensions of self-concept measured (Athletic competence and Physical Appearance).
- Pupils with SEN held a positive social self-concept, i.e. they feel equally accepted in their schools as their non-SEN peers.
- Surprisingly, pupils with SEN held similar perceptions of scholastic competence to their non-SEN peers.
- Nevertheless, pupils with SEN held lower perceptions of global self-worth compared to their non-SEN peers.

#### 2) Does the severity of SEN experienced have an impact on the pupils' self-concept?

(Annex E, Table 4)

- No differences were observed between groups determined by severity of need
- Interestingly, 'social acceptance' was the only domain presenting a slight, but not statistically significant, difference between the two severity groups (with those with severe needs reporting lower perceptions).

#### 3) Does the type of SEN experienced have an impact on pupils' self-concept?

(Annex E, Table 5)

- The comparisons by SEN classification (Cognition and Learning, Behaviour, Emotional and Social, and Sensory and Physical) did not yield any statistically significant results.
- Remarkably similar mean scores were reported by the three groups on the social acceptance domain

### **The sociometric study provided answers to the following research questions:**

#### 1) What is the social position of pupils with SEN within the social network of their class?

(Annex E, Table 6)

- Pupils with SEN received on average significantly fewer nominations than their typically achieving peers.
- Calculation of each pupil's sociometric status indicated that pupils with SEN were more likely to hold 'low' and less likely to hold 'popular' sociometric status than their non-SEN peers.

2) Do pupils with SEN have similar number of friendships as their typically achieving peers?

(Annex E, Table 6)

- Pupils with SEN had fewer friends (defined as ‘reciprocal ties’ between pupils) than their non-SEN peers.

3) Does the severity of SEN experienced have an impact on the number of nominations received and the number of friendships held/achieved?

(Annex E, Table 7)

- No differences were observed in the number of nominations received and the number of friendships held between groups determined by severity of need.

4) Does the type of SEN experienced have an impact on the social position held and the number of friendships achieved?

(Annex E, Table 7)

- There was a statistically significant difference in the number of nominations received amongst pupils with SEN
- Pupils with Cognition and Learning (C&L) needs had received significantly more nominations than their peers with Behaviour, Emotional and Social (BE&S) needs.
- Most of the pupils with BE&S were classified as having ‘low’ sociometric status; none of them held ‘popular’ status.

5) Are pupils with SEN included in their classroom network as determined by three different indexes of social inclusion?

(Annex E, Table 8)

- The indexes of social inclusion indicated that pupils with SEN were equally likely to be socially included in their classes as their non-SEN peers.
- This suggests that despite their low social status pupils with SEN had managed to become part of social clusters.

**The Social Cognitive Mapping and the peer-assessed behaviour study provided answers to the following research questions:**

1) Do classmates in mainstream classrooms perceive pupils with SEN as being members of peer groups?

(Annex E, Table 9)

- There were no differences in the likelihood of peer-group membership across gender and, more importantly, across educational classification
- This suggests that being accredited with SEN cannot be taken as a predictor of social isolation.

2) Are the remaining three levels of social network centrality (nuclear, secondary, and peripheral) associated with the educational classification of pupils?

(Annex E, Table 10)

- Boys with SEN were equally likely to be represented in the four centrality groups (nuclear, secondary, peripheral, and isolate) as their non-SEN peers
- Non-SEN girls were more likely to occupy nuclear positions than their SEN peers; the opposite was true for the ‘Isolate’ category.

3) Are the four levels of social network centrality (nuclear, secondary, peripheral, and isolated) associated with the type of need experienced by the participating pupils with SEN?

(Annex E, Table 11)

- The type of need experienced by pupils with SEN was linked to their social position in their peer groups.
- All isolates fell into the Cognition and Learning needs (C&L) category.
- There were no isolated pupils with Behaviour, Emotional and Social needs (BE&S). The vast majority of them occupied nuclear and secondary statuses, suggesting that pupils with BE&S were well-integrated into their clusters, possibly because of other attributes of their personality.
- There were no isolated pupils with Sensory and Physical (S&P) needs. One girl occupied nuclear status and three girls occupied secondary status; one boy and one girl held peripheral status.
- The two pupils with S&P with peripheral status were a boy and a girl with hearing impairment, suggesting that children with hearing impairments are integrated in mainstream schools.

4) How do peers perceive the behaviour of pupils with SEN?

(Annex E, Tables 12,13,14)

- Significant associations were identified between pro-social characteristics (e.g. 'leader', 'popular' and 'athletic') in both the SEN and the non-SEN groups.
- The two 'antisocial' characteristics of 'Argumentative' and 'Breaks rules' were positively correlated with each other and were negatively correlated with pro-social characteristics.
- In the SEN group, significant positive correlations were noted between 'argumentative' and 'leader'; and between 'breaks the rules' and 'leader'. This suggests that pupils with BE&S, had managed to assume leadership positions in sports, games and other group activities, which may have helped them interact with peers despite their negative behaviour.

(Annex E, Table 15)

- Non-SEN pupils were nominated by a larger percentage of classmates than SEN pupils on the 'Cooperative', 'Leader', 'Popular', 'Studious', and 'Athletic' descriptors.
- SEN pupils were nominated by a larger percentage of classmates than non-SEN pupils on the 'Breaks the rules' and 'Shy/Withdrawn' –the two anti-social descriptors.
- Boys with SEN were equally likely to be nominated for being 'Leaders' and 'Athletic' as their non-SEN counterparts.
- Girls with SEN were more likely to be nominated on the 'Shy/withdrawn' characteristic than Non-SEN girls, which was not the case in the boys' comparison.
- Boys with SEN were more likely to be nominated on the 'Break the rules' characteristic, which was not the case in the girls' comparison.

(Annex E, Table 16)

- Pupils with BE&S received significantly more nominations than their peers in the other SEN categories (C&L and S&P) on the two antisocial behavioural characteristics.



- Pupils with C&L and pupils with BE&S received significantly more nominations than their peers with S&P on the 'leader' characteristic.

5) Is the peer-assessed social behaviour of pupils who are isolated different from the peer-assessed social behaviour of pupils who are in peer-groups?

(Annex E, Table 17)

- Thirty pupils without SEN (16 boys and 14 girls) and eight pupils with SEN (6 girls and 2 boys), were classified as isolates.
- All isolated pupils with SEN had been identified as experiencing Cognition and Learning needs. Six of these pupils were at the School Action stage, one was at the School Action Plus stage and one had a statement of SEN.
- Compared to their isolated peers, both non-SEN and SEN pupils who were members of a group were more likely to be perceived as leaders, popular and athletic, and less likely to be perceived as 'argumentative', 'breaks the rules' and 'shy/withdrawn'.
- Antisocial behaviour was not necessarily associated with the social isolation of pupils with or without SEN.

### **Interviews with Teachers and Pupils**

The qualitative evidence collected through interviewing provided rich insights of the participating schools' approaches to inclusion. A list of relevant observations is offered below:

- A continuum of approaches to inclusion was identified, which ranged from 'segregative' to 'fully inclusive' practices
- Many teachers' attitudes towards inclusion were dependent on the type and severity of need.
- Each school's implied culture or ethos on inclusion affected the approaches and practices employed. In schools committed to inclusive ideals, whole-school approaches were favoured over assimilationist ones.
- A predominance of 'deficit' and assimilationist rather than fully inclusive approaches was observed in schools that had a long tradition of maintaining separate specialist provision on site.
- Teachers enculturated into the integration rather than the inclusion model expressed a desire to address the assumed social difficulties of children with SEN through specialist care and focused attention [Annex F, Extract 1].
- Isolated children attributed with SEN do not seem to be aware of their status as isolates

Conclusion: Given that many social skills training programmes aimed at SEN pupils alone have been shown to be relatively ineffective (Nowicki's 2003), it could be argued here that any social interventions undertaken in classroom settings ought to address the entirety of the pupil population. Teachers' attention should be placed on facilitating the development of pro-social characteristics, such as leadership and sportsmanship, within cooperative and team-building activities. Far from asking teachers to identify and target those students with low sociometric status, they should be encouraged to construct activities that could draw those pupils described by their peers as 'shy' or 'withdrawn'. The reasons why some children become isolated within their class network is as yet an open question; however, it is clear from Table 17 that experiencing a special educational need alone is not a causal factor.

The qualitative evidence collected through interviewing also elicited a range of teaching strategies and wider practices conducive to the promotion of social interaction and friendships. A list of useful strategies and practices is offered below:

- Peer mentoring schemes encouraging pupils to help and socialise with children with SEN during lunchtime or playtime [Annex F, Extracts 2 and 3]
- Schemes encouraging pupils themselves to take responsibility for including those who feel left out (such as the ‘Buddy Bench’ scheme, where children take turns to look out for anyone sitting on their own on the Buddy Bench, and make sure they have someone to play with) [Annex F, Extract 4]
- Teacher-led mixed groups consisting of pupils from different years and abilities (e.g. the ‘Family Groupings’ tutoring scheme, where a teacher always gathers the same pupils from different classes into an assembly, for a chat; or e.g. for Circle Time) [Annex F, Extract 5]
- Demystifying SEN and reducing stigmatisation through discussing a child’s needs with the other pupils when that child and their parents agree to it [Annex F, Extract 6]
- Establishing all-inclusive teacher-led creative games such as collaborative story building, where each child in turn advances the story.
- Encouraging pupils to collaborate with a wide mix of children in group activities, both in the classroom and at playtime [Annex F, Extract 7]
- Encouraging academically weaker pupils to develop skills and aptitudes in other areas in order to promote their sense of global self worth [Annex F, Extract 8].

Conclusion: Many pupils themselves report that they made friends by joining in with games or sport, or through pursuing common interests outside school. Further, the quantitative analyses have revealed a link between participation in social groups or friendship clusters and the social characteristics of ‘leader’ and ‘athletic’. Therefore, teachers should be encouraged to create structured sport, game, or creative activities, offering all children the opportunity to assume the role of a leader or team player.

## Activities

Preliminary research findings were presented at the following three major international conferences:

Wilde, A. & Avramidis, E. (2007). Social interaction between pupils with special needs and their mainstream peers and the formation of group associations. European Association of Research on Learning and Instruction. Budapest, 28<sup>th</sup> Aug. - 1<sup>st</sup> Sept.

Avramidis, E. & Wilde, A. (2007). Promoting social interaction and friendship between pupils with and without SEN: Inclusive strategies in primary schools. British Educational Research Association, London, 6<sup>th</sup> Sept.– 8<sup>th</sup> Sept. 2007.

Wilde, A. & Avramidis, E. (2007). Social interaction between pupils with special needs and their mainstream peers and the formation of group associations. European Educational Research Association, Ghent, Belgium, 19<sup>th</sup> Sept. - 21<sup>st</sup> Sept. 2007.

The full project findings are scheduled to be presented in the following two major international conferences:

Avramidis, E. (2009). Self-concept and social position of pupils with special needs in mainstream primary schools. European Educational Research Association Conference, Vienna, Austria, 28<sup>th</sup> Sept. – 30<sup>th</sup> Sept. 2009.

Avramidis, E. (2010). A sociometric assessment of the social impacts of inclusion in British mainstream primary schools. International Special Education Congress, Belfast, 2<sup>nd</sup> – 5<sup>th</sup> Aug 2010.

## Outputs

The following two papers have been accepted for publication:

- Avramidis, E & Wilde (in press). "Evaluating the social impacts of inclusion through a multi-method research design. *Education 3-13*
- Wilde & Avramidis, E. (in press). Mixed feelings: Towards a continuum of inclusive pedagogies. *Education 3-13*

The following three papers are at the final stage of completion:

- Self-concept and social position of pupils with special educational needs in mainstream primary schools.
- Social relationships of pupils with special needs in mainstream primary classrooms: Peer group membership and peer-assessed behaviour.
- Using sociometric techniques to assess the social impacts of inclusion: some methodological considerations.

Other research outputs will emerge as a result of this work, including a book collating all research findings.

Following completion of the project, the research outcomes will be further disseminated to potential users. This will involve:

- Distribution of the full report to all fifty-four primary schools in the LEA.
- Presentation of the findings to SEN officers of the LEA.
- End-of-project day conference at the University of Exeter to introduce the findings to invited local teachers, policy makers and researchers in the field
- The *National Association of Special Educational Needs* (NASEN) will be approached to disseminate the project's findings in their next regional and/or national conferences.
- Publication of short 'summary' pieces in local and national newspapers as well as on the project's website (<http://education.exeter.ac.uk/projects.php?id=225>)

## **Impacts**

The LEA has expressed a strong interest in receiving the final report upon completion. The study has produced a number of findings which should lead to a re-examination (by authorities and policy makers) of social skills development interventions and the identification of barriers towards the full social inclusion of SEN pupils. The study's strong applied dimension will be of interest to schools and practitioners as it also offers specific strategies and wider practices conducive to the development of inclusive school cultures.

## **Future research priorities**

The research has already attracted international interest and the ground is set for the establishment of a comparative study examining the social impacts of inclusion in different countries. To this end, Dr Marloes Koster from the University of Groningen, Holland, has secured research funding in order to spend the Autumn semester at the University of Exeter as a visiting research fellow. Further European funding will be sought to establish a consortium of European partners to further broaden the scope of the comparison.

A further line of research concerns the long-term effects of inclusive arrangements on the social functioning of pupils with SEN. Although some work has been conducted over short-term longitudinal studies, none to date have examined them over extensive time periods.

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