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## Improving the process of inclusive education in children with ASD in mainstream schools

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### Abstract

This article is part of a competitive research project that examines factors promoting the inclusion of students with Autism Spectrum Disorders (ASD) in mainstream schools. We review a number of publications that make reference to strategies which facilitate the inclusive education of children with ASD in mainstream schools. These publications outline several factors that appear to help the inclusion process for children with ASD in mainstream schools. Several of these factors can be described as being associated with preparing the child with ASD in a pedagogical sense while another set of factors of potential importance is concerned with aspects of individual schools themselves.

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**Keywords:** autism, inclusive education, mainstream

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### 1. Introduction

This article originates as the first approach to outlining those factors that hinder or enhance the process of inclusion of students with ASD (Autism Spectrum Disorders) in a research project (Competitive Project EDU2010-19478: Improving the educative response in mainstream schools through good inclusive practices. MICINN) which was carried out in five schools: three preschool/primary schools and two secondary schools in Catalonia (Spain). These centres have 29 boys and girls enrolled who have been diagnosed with ASD or PDD (Pervasive Developmental Disorder). In our study, we found that all schools have a support service to special education (USEE) although their services and facilities vary from school to school. On the one hand, students with ASD spend most of their time in the regular classroom (which is desired) with the support service while, on the other hand, the support service is only provided in specific classrooms separate from the other children (not desired). As Jennet, Harris and Mesibov (2003) consider, it is likely that, given their difficulties, these students will be spending most of their time outside inclusive settings, so they have specific educational needs that require a high degree of specialization on the part of their teachers.

It is a given that children with ASD are characterized by impairments/differences in their communicative and cognitive development in social terms from early childhood and throughout their lives (Frith, 2004). These three dimensions are the so-called basic triad of impairments of autism, although the extent and manner of involvement can vary greatly from one subject to another depending on differences in intellectual ability and/or age.

In this article we are not going to discuss the two approaches mentioned in the literature about inclusion (namely, rights-based versus needs-based perspectives). From one position, labeling is exclusionary because it emphasizes the

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differences which can lead to marginalization while, from the other, it is inclusionary as it makes it possible to identify and meet individual needs (Ravet, 2011). The existence of the debate is highly significant and might be considered representative of the emerging ‘autism as neurodiversity’ metaphor that has gathered support over recent years as an alternative to the ‘autism as disease’ metaphor (Broderick & Ne’eman, 2008). For Ravet (2011), if we re-categorize autism as a ‘difference’ rather than a disability, it might be taken less seriously. As Jordan (2005), we think that students with ASD not only have similar, if not the same, individual needs as other students, they, indeed, also have other needs that are unique and specific to their group of learners within the autism spectrum. It is evident that knowledge of the educational needs of students with ASD can help shape an effective educational plan, although the peculiar nature of the problem is not initially visible and the causes of their difficulties are not so obvious (Hernández, Martín and Ruiz, 2007).

When we attempt to understand the factors involved in the education of students with ASD in mainstream schools through our review of the literature, we find that there are four major factors which are: the individual characteristics/needs of students with ASD, schools, teachers and support services together with family collaboration.

## 2. Characteristics of students with ASD

One of the issues in the inclusion process of students with ASD is the severity of the disability from student to student. For Eldar, Talmor & Wolf-Zukerman (2010), the factors that can make or break the inclusion process are related to the student’s functioning in terms of his/her personal/internal factors such as: social skills, communication and language skills, stereotypical behaviour and other individual abilities.

When we ask teachers about these factors their responses are related.

- Intellectual capacities: in general, children with IQ above 70 could be integrated in mainstream schools (without necessarily excluding the possible integration of students in the range of IQ 55 to 70).
- Communication and linguistic level: declarative and expressive language skills are regarded as important criteria for successful inclusion.
- Behavioural problems: the presence of serious self-harm, aggression, uncontrollable tantrums. These can put into question the possible inclusion of the student if there is no previous solution.
- Inflexibility in cognitive behaviour may require adjustments and therapeutic aids in the integrated cases.
- Level of social development (a crucial criterion): children whose age, in terms of social development, is essentially that of a toddler or younger, generally only have real learning opportunities in a one to one scenario with adult experts.

In fact, consideration of the above characteristics often affects the placement of students with ASD. In a study conducted in Seville (Spain), Rodriguez, Moreno and Aguilera (2007) found that 52% of the 165 students with ASD detected in the overall sample went to special schools, while the remaining 48% was enrolled in mainstream schools. However, the age distribution by type of school offered a significant difference and when students with ASD grow up, their education is often away from more inclusive settings.

Although the education of students with ASD in secondary schools is increasing, many of these students are already segregated in special schools. Thus, it is clear that further specialized training is required for teachers in receiving and integrating these pupils in mainstream schools.

## 3. Teacher

As the numbers of students with ASD rise continually, the need for teachers who understand the unique characteristics associated with autism is at an all-time high. There are three important factors for improving the teaching process of children with ASD, all of which can be related to the teachers themselves, namely: attitudes, training and support.

Nowadays, teacher training and attitudes are very important in inclusive education. An analysis of the current research literature reveals that there are outcome studies on the subject which show the effects of self-rated teacher-training on the pupils’ change in behavior and their sense of school belonging across the school year. Inspection of

these data reveals that the two areas in which teacher-training appeared to impact most on the pupils were in reducing social problems (Osborne & Reed, 2011). And a program for students with autism cannot be successful without continuous professional learning. All staff members (i.e. special education teachers, regular education teachers, paraprofessionals, administrators, receptionists, custodians, and food service workers) must all be trained. If everyone in your building understands the needs of your students with autism, things will go much smoother (Crisman, 2008). Furthermore, good staff training promoted the pupils' social behaviors and their sense of school belonging (Osborne & Reed, 2011).

In general education settings, focusing on the attitudes of teachers towards children with autism is important because it may provide an invaluable source of data used in the development of teacher training and professional development programmes (Park & Chitiyo, 2011). More precisely, teachers' attitudes can influence the expectations of their students that will affect the students' 'self-image and academic performance. Also, there is a general belief that students perform better in an environment in which teachers exude enthusiasm (Natof & Romanczyk, 2009).

There are some recommendations for regular teachers in an inclusive setting and one of them is related to making sure that support services will be helpful. Instructional models are also important for support which should stress collaborative planning and problem solving as a means to serve the diverse student population. Working together in inclusive support teams, classroom teachers and support specialists can use their complimentary skills and knowledge to plan, implement and evaluate the benefits of instructional practices for all students in their classes.

In our research, when we asked teachers what they needed in order to provide better support to pupils with ASD, the responses given were as follows: special classrooms, speech and psychomotor-therapists, monitors or educators, psychologists.

In addition, supporting teachers and assistants can help reduce emotional and behavioral difficulties but, it must be noted, may also reduce improvements in pro-social behavior (Osborne & Reed, 2011).

#### 4. School management

Apart from teacher factors, existing studies devote some attention to other aspects relating to schools such as the general environment of special educational needs and school management. It is reported that little evaluative information exists on school factors such as school or class size (Osborne and Reed, 2011).

As schools become more inclusive there is a strong need for principals who are able to clearly define and articulate a mission which incorporates the values of acceptance. In order to make inclusion successful, the principal needs to foster a climate in which the school embraces the success and achievement of all students (Horicks, White & Roberts, 2008).

In order to develop the Individualized Program Plans for students with ASD, school principals should perform duties which may include implementing education programs for all students in the school, assigning staff, allocating resources and ensuring that teachers have the information and resources they need to work with students. Principals can facilitate the collaboration of school-based working groups in supporting students with special needs and establish procedures for involving parents in the Individualized Program Plans process.

In general, we have found these characteristics which may help children with ASD:

- Small schools with a low number of students resulting in not too excessive social interaction on the part of students with ASD.
- Schools whose management and organizational styles are highly structured allowing students with ASD to know and anticipate in advance what their school day will bring.
- Real commitment from all teachers.
- Existence of regular, complementary breaks during mainstream class-time to enable students with ASD to receive special functions training such as psycho-educational counselling and speech therapy.
- Providing classmates of children with ASD strategies to understand and support their learning and relationships.

There are four educational factors affecting students with ASD that are related to class size: a. the use of a student/teacher ratio as the measure of class size resulting in measurement error b. the estimation of a mis-specified model resulting from the failure to control for family effects (i.e., student innate ability); c. the general failure to take into account the endogeneity of class size with respect to student achievement; d. the employment of an

incorrect functional form when specified the relationship between class size and student achievement (Borland, Howsen & Trawick, 2005).

Ancess (2008) states that in small schools relationships between adults and students are close. In this condition, teachers can communicate with students with ASD more closely. There was a contradiction regarding the perception of loose boxes, the population size of the school, and the number of floor levels. This can be explained by the fact that there were some children who could handle these environmental factors while a group of children who could not handle them, possibly due to the wide spectrum of concentration difficulties within the disability (Tufvesson & Tufvesson, 2008).

## **5. Support services and family collaboration**

Close collaboration between families and schools is an effective way to create a successful home-school partnership. Family involvement and communication between the home and school are vital in special education. Using a communication log or notebook that the inclusion teacher, the special education teacher and parents can send back and forth daily or weekly to help maintain communication is indeed crucial. The student will feel more a part of the mainstream education classroom if his or her teacher and parents are on the same page and in regular communication (Boutot, 2007). Also, it is recognized that parents play a key role for the ASD treatment (Lord & McGee, 2001). More specifically, physicians and other healthcare professionals can provide support to parents by educating them about ASD; providing anticipatory guidance; training and involving them as co-therapists; assisting them in obtaining access to resources; providing emotional support through traditional strategies such as empathetic listening and talking through problems (Marcus, Kuncie & Schopler, 2005).

Parental involvement not only benefits students and creates active participation by the parents in the school community, but also increases parental satisfaction in the processes related to inclusive education (Timmons and Breitenbach, 2004).

It is essential for educators to develop and maintain an ongoing dialogue with all stakeholders (e.g. children, families, teachers) to ensure that the current and future needs are being met (Lynch & Irvine, 2009). Also, some believe that parents are regarded as the ultimate experts on their children's needs and that effective intervention is dependent upon their support and their participation in parent training workshops, supporting parents in their interactions with children after intervention hours as well as the provision of parent groups for emotional support.

The collaborative work between health professionals and the educational context is essential in the case of autism. Since the diagnostic categories alone do not explain what happens to a student in school, it is necessary to review and adapt the knowledge we have about students with ASD taking into account how they adapt and learn in an educational setting (Hortal, 2011). It is a specific, necessary network of support for teachers who are directly involved with students who have ASD.

## **6. Conclusion**

Most educational intervention programs on students with ASD have a lot in common. There is a series of characteristics which unite these programs: intervention must be early and intensive, high family involvement, specialized professional training, continuous assessment of student progress and consistent application of the curriculum through planned teaching. But the placement of a child with ASD in a specific school cannot mean a permanent solution. The fulfilment of academic goals is important for children with high intellectual levels with ASD in the inclusion program. We also believe that teachers are a very important factor with preschool children with ASD and that their role can even be a more determining factor than a school's characteristics.

With these studies our research is only beginning and our desire is to explore these factors more effectively through the index for inclusion (Booth & Ainscow, 2005) and to involve all educative agents in the process of inclusion of students with ASD such as family, support services, teachers and students in general.

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