

This is the authors' version of a paper later published as:

le Roux, Johann and Graham, Lorraine and Carrington, Suzanne (1998) Effective Teaching for Students with Asperger's Syndrome in the Regular Classroom. *Australasian Journal of Special Education* 22(2):122-128.

Effective Teaching for Students with Asperger's Syndrome in the Regular Classroom

Johann le Roux and Lorraine Graham
University of New England

Suzanne Carrington
Queensland University of Technology

This paper investigates issues surrounding the inclusion of students with Asperger's Syndrome in primary school classrooms by first identifying the unique needs of these students, and secondly, by examining some strategies which can facilitate the inclusion of these students into inclusive school settings. These effective methods take into account physical factors within the classroom, the predictability of instructional routines, and building on students' pre-existing knowledge in order to enhance their productivity. The approaches to instruction discussed in this paper are particularly valuable because they are appropriate to the needs of many students in the regular classroom.

Schools need to reflect and represent the kind of society in which children will take their place (Sapon-Shevin, 1995). Inclusion is, therefore, of vital importance to children's development because it provides a realistic experience of the larger community during the years of formal schooling. Providing educational services in segregated settings remains one way of dealing with individual differences, while inclusion as a curriculum concept and a practice seeks to minimise these differences and at the same time challenge the *status quo* (Slee, 1996).

Essentially, inclusion has been the result of a call to change our formal educational systems by merging special and general education into a single system that can support all students in general school settings. Critics of the inclusive schools movement doubt that effective support can be provided in the same setting for all students (e.g., Kauffman & Hallahan, 1995) and remind us that including all children with disabilities, regardless of the severity and nature of their difficulties may be merely replacing one injustice with another (Shanker, 1995). In its purest form, however, inclusion connotes a philosophical and accommodative ethos and approach, rather than a particular prescriptive placement system utilized by schools and regulated by legislation.

The concept of inclusion is based on the notion that schools should, without exception, provide for the needs of all the children in their communities, whatever their level of ability or disability. It represents a warm and embracing attitude that unconditionally accepts and accommodates learners with special educational needs. Truly inclusive schools celebrate diversity in ability, as well as in cultural, racial, ethnic and social background (Brown, 1995; Burden, 1995). When considering the integration of students with special needs, teachers and administrators may ask: Can we provide for the unique needs of this student within this school? From the viewpoint of inclusion this question becomes: How will we best provide for the needs of this student in our school? (Giorcelli, 1995). Inclusion usually means placement in the regular class, regardless of the child's type or level of disability (Foreman, 1996).

Australian educational systems have acknowledged that inclusion in regular classrooms is an appropriate placement for children with special educational needs to varying degrees (Slee, 1996). However, it is of vital importance that teachers in inclusive settings are professionally prepared and equipped to provide for the diverse needs of all students with special educational needs. It is important to emphasise that inclusion does not happen without planning, vision, resources, creative initiatives, constant energetic management and widespread goodwill from parents, teaching staff, educational authorities and the community at large. Answering the vital question of "How will we best

provide for the needs of this student in our school?" is not easily done. According to Muir (1995, p.15-16) the following three factors are most prominent in deciding the success or failure of inclusive school placements:

1. *School ethos*: Is the school positive and enthusiastic in working to overcome the challenge?
2. *Quality of teaching*: Is the curriculum appropriate and are the unique needs of students with special educational needs successfully incorporated into the teaching program?
3. *Adequate resources*: Are resources such as physical modifications, special equipment and flexible staffing for specialist aides and teachers adequately supplied?

Ideally, inclusion may be focused on the diverse and dynamic nature of individuals within educational systems and is fully supported by financial and professional resources. However, as support for inclusive practices is not always forthcoming, some attempts at inclusion have been extremely stressful for teachers whose self esteem has been undermined by their inability to cope with a situation for which they are largely unprepared and unassisted (Forlin, Hattie, & Douglas, 1996; Whiting & Young, 1996). This paper specifically investigates the challenges faced by teachers of students with Asperger's Syndrome, by first identifying some of the salient educational needs of these students, and secondly, by examining some strategies which can facilitate the inclusion of these students into regular school settings.

Asperger's Syndrome: Eccentricity in the Classroom

The types of behaviours that have become known as Asperger's Syndrome were first described by the Austrian physician, Hans Asperger, in 1944. This syndrome shares features with the severe communication disorder of autism, however, differs from autism in that affected children generally have better verbal skills than individuals with autism, but poorer motor co-ordination, and at least normal, though sometimes superior, intelligence (Goble, 1995; Happe, 1995). Asperger's Syndrome most commonly affects males, with up to 20 boys diagnosed for every girl (Frith, 1991).

In general, children diagnosed with Asperger's syndrome appear to present a special challenge in the formal educational situation. These children lack an understanding of human relationships and the rules of social convention. They are unusually naive and conspicuously lacking in common sense. Their inability to cope with or adjust to social convention, often causes them to be easily stressed and emotionally vulnerable. Common characteristics of students with Asperger's Syndrome can be ordered in such a way that the keyword ASPERGER can be used as a acrostic device: Academic difficulties, a need for Sameness and routine, Poor concentration, Emotional vulnerability, a Restricted range of interests, a Gait that is unusual because of poor coordination, Egocentricity, and difficulties with Reciprocal interaction. These characteristics are described in more detail in the following section.

Characteristics of Student's with Asperger's Syndrome

Academic Difficulties. These children lack many higher level thinking and problem solving skills. Despite an often impressive vocabulary and amazing rote memory, children with Asperger's Syndrome often show little understanding of abstract concepts or ideas (Bauer, 1997; Delong & Dwyer, 1988).

Sameness and Routine. They may worry obsessively and find coping with everyday life a bewildering task without sameness and routine to help them control and understand their environment (Williams, 1995).

Poor Concentration. These students are often easily distracted. Although they can sustain their attention, their focus is often somewhat "odd", because they have great difficulty deciding what information is really relevant. Many children with Asperger's Syndrome have difficulty working in groups because of their difficulties with attention (Gillberg, 1985).

Emotional Vulnerability. Students with Asperger's Syndrome need help to cope with the demands of the regular classroom. They can be easily stressed because of their inflexibility and are particularly prone to depression during adolescence (Eaves, Ho & Eaves, 1994).

Restricted Range of Interests. These students have a tendency to focus on one particular interest to the exclusion of all else. They may become obsessive collectors of information and can lecture on the topic of their specific interest at any available opportunity. A specific interest in transport of one form or another is quite common. The documented special interests of children with Asperger's Syndrome include railway stations, buses, trains, computers, postcodes, weather reports, fans, and fountains (Saliba & Griffiths, 1990; Williams, 1995).

Gait is unusual / Poor Motor Coordination. Children with Asperger's Syndrome are often clumsy and walk with a stiff and awkward gait. In school, their poor motor co-ordination affects handwriting skills and their willingness to participate in games during physical education sessions or in their free time (Bauer, 1997).

Egocentric. These children may be described as both egocentric and eccentric. They have great difficulty taking another's point of view and find it very hard to understand the subtleties of social interaction (Williams, 1995).

Reciprocal interaction is difficult. Because children with Asperger's Syndrome tend to be egocentric they have great difficulty initiating and sustaining conversations. They often use inappropriate body language and do not appear to listen to others. Interacting with people and coping with many of the ordinary social demands of life can be enormously difficult for children with Asperger's Syndrome (DeLong & Dwyer, 1988; Williams, 1995).

Implications for the Inclusive Classroom. Teachers can organise their classrooms so that students with Asperger's Syndrome are fully included. For example, in their case studies of twelve boys with Asperger's Syndrome, Rickarby, Carruthers & Mitchell (1991) found that students' success with coping in regular classrooms was directly related to the accurate and detailed assessment of their specific difficulties and the associated modifications or allowances that were made by the classroom teacher. Because each child has an individual personality, symptoms of exceptionality like Asperger's Syndrome manifest in ways specific to each individual. Therefore, while no particular classroom approaches or educational methods for teachers of Asperger's Syndrome students can be readily provided (Williams, 1995), these students are most likely to learn in classrooms where aspects of classroom instruction and curriculum are modified to meet their needs. As Grebenstein (1995, p. 87) states, students with special needs "may need more time to complete assignments. They may need intensive help in specific subjects. But they rarely need special or exotic teaching methods or technologies".

In inclusive education practice, teachers take responsibility for the learning of all their students and demonstrate sensitivity to individual characteristics by using a wide variety of teaching techniques. These effective methods take into account physical factors within the classroom, the predictability of instructional routines, and build on students' pre-existing knowledge in order to enhance productivity. Some practices appropriate for students with Asperger's Syndrome are suggested below. These approaches to instruction are particularly valuable because they are also appropriate for many other students who learn in the regular classroom.

Physical Factors. Is the child seated so that distractions are minimised? Sometimes children with Asperger's Syndrome require more personal space around them than other children (Bauer, 1996). Because of their poor co-ordination and difficulties in playing team games, they may need a modified program within the health, and physical education curriculum. This differentiation of instruction is a very powerful inclusive practice which encourages teachers to cover the same curriculum content with all students through tailoring teaching approaches and classroom processes to individual needs (Stradling, Saunders, & Weston, 1991; Westwood, 1996).

Predictability. Because they require sameness in order to cope with their environment, students with Asperger's Syndrome need a predictable routine in the classroom. Providing a class timetable which sets out the days activities very precisely, can help these children and others in the classroom as well. If possible, any changes to an established routine should be explained in advance. These students also learn best when given precise instructions and concrete procedures to follow. They may need longer than usual to process and understand what is expected of them. In short, these students need very clear explanations (Westwood, 1996) and appropriate wait time (Rowe, 1986).

Preparation. Because students with Asperger's Syndrome usually have a very literal understanding of speech and text, they often miss or misinterpret wordplay and subtle messages. They need explicit instruction (Rickaby, Carruthers & Mitchell, 1991). For example, these students need to be taught comprehension strategies to help them find the main idea of a passage. They also need to learn social skills that others usually take for granted, for example, communication strategies such as looking -at the person who is speaking to them and asking questions to sustain a conversation may have to be explicitly taught. It is also important for students with Asperger's Syndrome to learn personal coping strategies. For example, one coping strategy that can help these students when they begin to feel overwhelmed is to (1) breathe deeply three times, then (2) count their fingers slowly three times, before (3) asking to talk to the teacher or leaving the room.

Pre-existing Knowledge. Students with Asperger's Syndrome typically have very strong interests in particular areas. These interests can be used to link to content that is central to the curriculum in order to broaden the skills and knowledge of all students in the class. Allocating time for students with Asperger's Syndrome to pursue their special interests can also be a very powerful way of rewarding them for the completion of other classroom activities. Indeed, most students find time to spend on their own interests rewarding and learn more easily when links are made to their current interests and preexisting knowledge (Lewis, 1992).

Productivity. To succeed in the regular classroom, children with Asperger's Syndrome need firm, clear expectations, sufficient time to process task requirements, and strategies that help them cope socially and academically. They need to be given tasks which have been broken into manageable segments, and should be expected to complete fewer activities than most of their peers because of the attentional and handwriting difficulties they experience. Some group work activities could be organised which allow the memory skills and special interests of students with Asperger's Syndrome to shine. Such experiences can highlight the value of these students within the class and encourage positive interactions with peers. In fact, a teacher who makes use of curriculum differentiation, uses clear explanations, allows appropriate wait time, successfully uses explicit instruction, models academic and social strategies, and links curriculum content to students' current interests and pre-existing knowledge enhances the learning of all students in the regular classroom.

Conclusion

In June 1994 *The Salamanca Statement on Principles, Policy and Practice in Special Needs Education* (UNESCO, 1994) emphasised the importance of inclusive schools as:

...the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all; moreover they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system. (p.ix)

The success of inclusive education for children with special needs, however, relies heavily on the right mixture of prior planning, resources, good communication, creativity, and benevolent attitudes (Carrington & Graham, 1996; Muir, 1995). Sebba & Ainscow (1996) claimed, that if inclusion works from the principle that all students in the community should learn together, then inclusive schooling is an ongoing process that has no limits. This implies that teachers need to continually develop appropriate inclusive practices. It may well be that inclusive practices are largely subsumed under the umbrella of effective teaching and that ineffective teaching is in fact a form of exclusion for many students.

Whatever the case, a vital ingredient to successful inclusion is good teaching. Batten, Marland & Khamis (1993) asked students in Australian schools to describe 'good' teachers.

Their respondents emphasised qualities and skills such as being friendly, straightforward, knowledgeable, caring, and helpful, having a sense of humour and being able to explain so that everyone understands. Similarly, Hans Asperger (1944) also made some observations about the personal characteristics of successful teachers of the boys he studied. He observed that:

The teacher who does not understand that it is necessary to teach these children seemingly obvious things will feel impatient and irritated.... These children often show a surprising sensitivity to the

personality of the teacher.... They can be taught, but only by those who give them true understanding and affection, people who show kindness towards them and, yes, good humour. (p.103).

It is clear that effective teachers value all children whether they are average achievers, gifted, or those with special needs like the students with Asperger's Syndrome discussed in this paper. Inclusion, therefore, represents a particular teaching quality and attitude towards students, rather than a form of stereotyped practice.

References

- Asperger, H. (1944). Die "autistischen psychopathen" im kindesalter. *Archiv fur Psychiatrie und Nervenkrankheiten*, 177, 76-137.
- Ballard, K. (1995). *Inclusion in practice: A case study of metatheory and action*. Paper presented at the symposium Inclusion and Exclusion, University of Cambridge, July.
- Batten, M., Marland, P., & Khamis, M. (1993). *Knowing how to teach well*. Hawthorn Victoria: Australian Council for Educational Research.
- Bauer, S. (1996). *Asperger Syndrome*. New York: Developmental Unit of Genesee Hospital.
- Brown, R. (1995). *Dynamics of inclusion: Emotions and practices*. Paper presented at the 19th Annual Conference, Australian Association of Special Education, Darwin.
- Burden, A. (1995). Inclusion as an educational approach in assisting people with disabilities. *Educare*, 24 (2), 44-56.
- Carrington, S.B., & Graham, L. (1997). Let's work together! Educating students with special needs in the regular classroom. *Special Education Perspectives*, 6 (1), 5-9.
- Delong, G., & Dwyer, J. (1988). Correlation of family history with specific autistic subgroups: Asperger's Syndrome and Bipolar Affective Disease. *Journal of Autism and Developmental Disorders*, 18, 593-601.
- Eaves, L., Ho, H., & Eaves, D. (1994). Subtypes of Autism by cluster analysis. *Journal of Autism and Developmental Disorders*, 24, 3-22.
- Foreman, P. (Ed.). (1996). *Integration and inclusion in action*. Sydney: Harcourt Brace.
- Forlin, C., Hattie, J., & Douglas, G. (1996). Inclusion: Is it stressful for teachers? *Journal of Intellectual and Developmental Disability*, 21, 199-217.
- Frith, U. (1991). *Autism and Asperger's Syndrome*. Cambridge: University Press.
- Gillberg, C. (1985). Asperger's syndrome and recurrent psychosis -A case study. *Journal of Autism and Developmental Disorders*, 15, 389-395.
- Giorcelli, L. (1995). *An impulse to soar: Sanitisation, silencing and Special Education*. Keynote presentation at the 19th Annual Conference, Australian Association of Special Education, Darwin.
- Goble, D. (1995). Asperger's syndrome and autistic spectrum disorders: Diagnosis, aetiology and intervention strategies. *Australasian Journal of Special Education*, 19(1), 17-28.
- Grebenstein, E. (1995). Once the shouting dies down. *Educational Leadership*, 52 (4), 87.
- Happe, F. (1995). *Autism*. London: UCL Press.
- Kauffman, J., & Hallahan, D. (Eds.). (1995). *The illusion of full inclusion. A comprehensive critique of a current special education bandwagon*. Austin, Texas: Pro-Ed.
- Lewis, A. (1992). From planning to practice. *British Journal of Special Education*, 19 (1), 24-27.
- Muir, G. (1995). Equality, vitality, diversity. An integrated education system. *Education Australia*, 29, 15-18.
- Rickarby, G., Carruthers, A., & Mitchell, M. (1991). Biological factors associated with Asperger Syndrome. *Journal of Autism and Developmental Disorders*, 21, 341-354.
- Rowe, M. (1986). Wait time: Slowing down may be a way of speeding up. *Journal of Teacher Education*, 37(1), 43-50.
- Saliba, J., & Griffiths, M. (1990). Autism of the Asperger type associated with autosomal fragile site. *Journal of Autism and Developmental Disorders*, 20, 569-576.
- Sapon-Shevin, M. (1995). Can inclusion work? A conversation with Jim Kauffman and Maria Sapon-Shervin. *Educational Leadership*, 52(4), 7-11.
- Sebba, J., & Ainscow, M. (1996). International developments in inclusive schooling: Mapping the issues. *Cambridge Journal of Education*, 26(1), 5-18.
- Shanker, A. (1995). Full inclusion is neither free nor appropriate. *Educational Leadership*, 52(4), 18-21.
- Slee, R. (1996). Inclusive schooling in Australia? Not yet! *Cambridge Journal of Education*, 26(1), 19-32.
- Stradling, R., Saunders, L., & Weston, P. (1991). *Differentiation in action*. London: HMSO.
- UNESCO (1994). *The Salamanca Statement and Framework on Special Needs Education*. Paris: UNESCO.
- Westwood, P. (1996). Effective teaching. *Australian Journal of Teacher Education*, 21(1), 34-44.
- Williams, K. (1995). Understanding the student with Asperger syndrome: Guidelines for teachers. *Focus on Autistic Behavior*, 10(2), 1-7.
- Whiting, M., & Young, J. (1996). Inclusive education: A question of justice. *Australasian Journal of Special Education*, 20(2), 29-39.
- Wong, B. (1996). *The ABCs of learning disabilities*. San Diego: Academic Press.

*Address for: Dr Lorraine Graham, University of New England, School of Education Studies,
University of New England, Armidale NSW 2351. [Email: lgraham@metz.une.edu.au](mailto:lgraham@metz.une.edu.au)*