



The Education of Children with autism in Saudi Arabia: A Teaching Guide



Hanan Almasoud

(2010)

Lecturer, Special Education Department, College of Education

King Saud University



Introduction

Students with autism have special challenges and unique abilities in different educational settings. They lack communication and social interaction skills and commonly have challenging behaviour that can be disruptive to the learning environment. However, with a deep understanding of their abilities, difficulties and unique characteristics, working with these students can be an enjoyable and unforgettable experience.

In Saudi Arabia, students with autism are still excluded from mainstream schools due to the lack of knowledge and understanding of autism as a condition and because teachers are unable to adjust classroom environments and their teaching styles to meet the special needs of these students. However, this segregation is no longer acceptable and some effort is being made to change policies, raising teachers' awareness and encouraging cooperation between the relevant authorities in order to enhance the quality of education for these students.

The primary aim of this paper is to add to the current trend towards including students with autism in mainstream schools in Saudi Arabia by providing a simple guide for teachers to help them to develop a better understanding of the autism spectrum. This understanding will allow teachers to support children with autism and help them achieve and reach their full potential in the least restrictive environment possible.

The structure of this paper will be as follows: Part one will briefly compare the educational placements that are available for students with autism and the level of support that they receive in Saudi Arabia and the United Kingdom. Part two will illustrate the characteristics of individual with



autisms in order to help teachers understand the strengths autistic students possess as well as the difficulties they may experience in the learning environment. Part three will discuss how classrooms should be reorganised and how teaching methods should be modified in order to meet the special needs of these students and to reduce any possible disruption to the learning process. Finally, some guidance and advice will be given in the fourth section of this paper to promote good teaching practices with autistic students.

Educating students with autism: A brief comparison of Saudi Arabia and the United Kingdom

Educational provisions in Saudi Arabia still have a long way to go. In terms of the educational placements that are available in public schools, schools still not able to include these students because of poor training and provisions from the responsible institutions. Therefore, autistic students are being referred to centres for those with severe learning difficulties, regardless of their intellectual ability or their different needs. In addition, students with high functioning autism or Asperger syndrome often remain undiagnosed because teachers are unable to recognise the symptoms of autism. In terms of the private sector, there are a few centres that specialise in autism in the major cities, and they seem capable of meeting the special needs of these students. They have specialists and experts in the field who are able to work effectively with children—and their parents—from an early age through adulthood. They adopt many approaches and interventions and mainly use the Treatment and Education of Autistic and related Communication handicapped Children (Division TEACCH) as the foundation for their educational programmes.

In the United Kingdom, the type of placement varies depending on the severity of the condition, the student's intellectual ability and the experience and expertise of the teachers (Jones, 2002; Jordan, 1998). The options for preschool or school age children are mainstream school, school for those with



severe learning difficulties, special schools or units for other types such as language units, specialist units for autism run by independent organisations or authorities, and home-based programs (Jordan, 1998). According to Jones (2002), an increasing number of schools are capable of meeting the special needs of autistic students and there are a number of government initiatives that enhance educational provisions for students with autism. There are 12 specialised schools for students with autism: 5 are run by the National Autistic Society (NAS) and 7 are run by local autistic societies in England. In addition, independent schools are increasingly offering placement for students with autism. On the other hand, some LEAs have specialist units attached to mainstream or specialised schools—usually a day unit—to support between 10 and 20 primary aged children.

With regard to the educational approaches used in schools and units, schools adopt a number of interventions and approaches (e.g. PECS, TEACCH, daily life therapy, music therapy and diet). These approaches are influenced by the experience and expertise of the staff in the school and the visits of professionals such as physiotherapists, occupational therapists and speech and language therapists. Finally, all schools—mainstream schools and special schools—follow the national curriculum (Jordan, 1998).

From the comparison given above, it is obvious that there is a significant need for increased training of teachers in Saudi Arabia, along with the need for increasing government initiatives. In addition, enhancing diagnosing services is strongly required, especially to identify students who have high functioning autism in order to provide them with the correct support. It is also necessary to provide appropriate educational placements depending on the severity of the condition and to adopt the best possible interventions and educational approaches in order to meet the special needs of these students and to provide an inclusive educational environment for them.



As mention previously, the focus of this paper is guiding teachers to learn more about autism in order to enhance their practice, which will hopefully be reflected in the quality of educating students with autism. Thus, the characteristics of individuals with autism will be discussed in detail in the next section.

Characteristics of individuals with autism

What is autism?

Autism is a developmental disorder that affects males more than females. It is a lifelong disability causes difficulties in communication and social interaction (Frith, 2008). Recently, the number of individuals diagnosed with this condition has increased dramatically. According to a survey conducted in 2007 in the USA, 66 in 10,000 individuals are diagnosed with autism. A similar prevalence rate exists in Canada: 60 per 10,000 individuals (Leblance et al., 2009). The cause is still unknown but many studies have emphasised that the early intervention services can make a difference (Frith, 2008). No two individuals with autism are alike, and everyone has different abilities and difficulties. Therefore, the level of support that they need will vary depending on their student profile (Autism education trust, n.d.). Generally, individuals with autism have difficulties in three areas, which are known as the triad of impairment. They experience problems in social interaction and communication and have repetitive behaviour or limited interests (Frith, 2008).

Intellectual and cognitive ability

Around 20% of individuals with autism show normal to above average intelligence, whereas 80% score in the range of mental retardation on IQ tests when the test is administered in a traditional way. However, intellectual ability does not reflect the severity of the condition. For example, one student may have severe autism but a normal IQ, while another has mild autism yet has



severe a cognitive defect. In addition, a small percentage of individuals with autism (about 10%) have savant characteristics such as mathematical computing, map recall and calendar calculation. In terms of their cognitive ability, individuals with autism are able to process information visually easier than other forms of presentation, which can be considered a strength and a preferred learning style for them (Scott et al., 2000).

Communication ability

Autism can affect any components of communication. In terms of verbal communication, many individuals with autism do not develop language and for those who do develop it may experience difficulties in expression and receptive language. For example, they may have problems in starting or ending a conversation, or they might have echolalia (repeating words, phrases or dialogs that they have heard) or they may interpreting language literally (Seach, 2002; Scott et al., 2000 and Lord and McGee, 2001). In terms of non-verbal communication, individuals with autism misunderstand non-verbal communication or interpreting it incorrectly (e.g. facial expression, eye contact, body language and gestures). In addition, they generally have limited use of non-verbal communication (Scott et al., 2000; Larkey, 2005). Many individuals with autism experience difficulties in maintaining eye-contact (Scott et al., 2000).

Social interaction and relationships

Social relationships are one of the major problems that individuals with autism face. Individuals with autism lack social awareness and have problems in following social roles (Humphrey, 2008); even verbal students have problems with social interaction because the majority of it is non-verbal. For example, they may talk *at* people rather than *with* people. In addition, they lack social conversation skills such as participating in the many turn-taking demands that conversations entail (Lord and McGee, 2001; Scott et al.,



2000). Another issue raises is in making and maintaining relationships. However, some of them prefer to be left alone. In terms of joint attention, individuals with autism find it difficult to invite others to look at an object through eye gaze.

They also have problems in sharing objects or activities with other people around them—even if the object is in another person hand, they may focus their attention on the hand and try to grasp the object, ignoring the person holding it (Scott et al., 2000). With respect to social and emotional understanding, they have problems in understanding or predicting other people's behaviours and in imagining situations outside their perspective or routine, which leads to difficulties in planning, organising and coping in unfamiliar environments. This can lead to repetitive behaviours and activities (Autism education trust, n.d.). With regard to the emotional understanding, individuals with autism have difficulties in defining different emotions, which results in difficulties in interpreting others' feelings or their own feelings, which consequently prevents them from expressing themselves appropriately (Seach, 2002).

Sensory sensitivities

Some individuals with autism have sensory sensitivity to some stimulation such as touch, sound, smell, lights and noises, which may make school a painful or frightening place for them (Autism education trust, n.d.; Department of education and science, 2006). Some students are hypersensitive to stimulation and some are hyposensitive. Hyposensitivity refers to a lessened response to stimulation, whereas hypersensitivity refers to more than normal response to stimulation. Some signs of hyper or hyposensitivity are covering ears, screaming from certain noises, such as the vacuum cleaner, or not crying when hurt or not showing distress (Scott et al., 2000).

A final and an important point is that individuals with autism may have challenging behaviours that appear in different settings. For example, some



challenging behaviours may appear in social situations as a result of a lack of social skills or a way of avoiding unpleasant situations. Challenging behaviours such as self-injury behaviours or aggression may be an attempt to receive attention, to avoid a task or situation or to protest against changes in routine. However, teachers and staff in schools must pay careful attention to the possible causes of a student's behaviour and to understand that dealing with these challenging behaviours requires a skilled response from all involved in the educational process (Scott et al., 2000; Lord and McGee, 2001; Seach, 2002).

From the discussion above about the core characteristics of individuals with autism, it is important to consider that these characteristics are differences rather than a disability. It is also essential to change the school environment to be autism friendly rather than concentrating on a student's difficulties (Jones, 2002). Therefore, the next section will discuss how classrooms should be organised in order to be to autism friendly.

The classroom environment

In order to create a supportive climate for autistic students, it is very important to differentiate the environment and the curriculum for them (Jones, 2002). The widely used program for this purpose is Division TEACCH. Division TEACCH was established in the mid-1960s to serve people with ASD of all ages and abilities and it has been used in UK schools since around 1990; since then, the National Autistic Society has collaborated with Division TEACCH to provide regular training programmes cross the UK to help teachers use structured teaching for their students with ASD. The purpose of structured teaching is to make the teaching methods and environment autism friendly by considering a student's cognitive ability, needs and interests, modifying the environment accordingly. There are four components of structured teaching: physical structure, daily schedules, work system and visual cues and instruction (Mesibov and Howley 2003).



Physical structure

Physical structure refers to "the way of arranging furniture, materials and general surrounding to add meaning and context to the environment" (Mesibov and Howley, 2003, p26). The physical structure and organisation of the classroom should provide an interesting, clear and manageable environment for students with autism. This helps in reducing anxiety and assists the student to function independently. It is a fundamental variable in the learning process of students with autism (Fukunaga, n.d.) and can play a vital role in the success or failure of the student (Mesibov and Howley, 2003; Magnusen, 2005). An effectively organised classroom environment decreases distraction and helps students understand where they are expected to work by establishing boundaries for learning areas such as group work, one on one work, whole class learning and independent learning (Kabot et al., 2010; Mesibov and Howley, 2003) (Figure 1). The number of areas will vary depending on student needs and classroom space. Each area should have the appropriate size for the activities that are used to limit distractions, increase engagement, reduce the possibility of challenging behaviours and encourage independence (Kabot et al., 2010). After creating the physical structure, teachers can begin establishing basic routines to help students link specific activities with specific areas in the classroom (Mesibov and Howley 2003)

It is always important for students with autism to be in environment that has physical boundaries, regardless of whether they are in special or mainstream class. While in mainstream schools, the classroom environment cannot be organised to the same extent for students with autism, physical structure is still important. The major problem that autistic students in mainstream schools often face is working independently. Therefore, it is



crucial to create an area for independent work (Mesibov and Howley 2003). The statutory guidelines of the Department for Education and Skills (DfES) suggest that some students might benefit from a work station inside or outside the classroom (DfES, 2001).

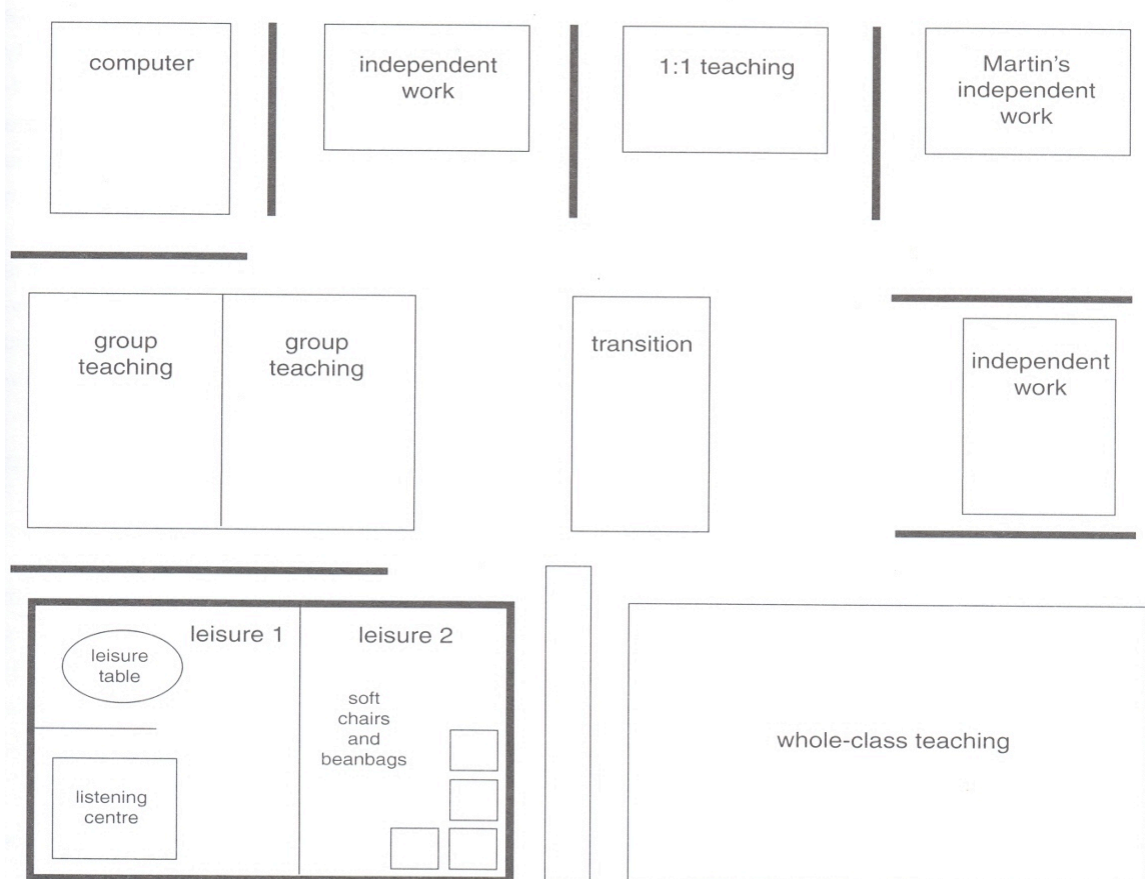


Figure 1: Example of classroom structure (Mesibov and Howley 2003).

Schedules

Daily schedules provide the order of activities and events that will take place during the day in order to help autistic students to clearly understand what they supposed to do and provide them with a predictable environment. They also establish a consistent routine, which encourages students to be organised and less dependent on adult prompting and direction. The schedules can be designed using objects, pictures and written words. The type of schedule will vary from student to student, depending on his or her



ability. In addition, the length of the schedule will also differ from a single item at a time to half or full day schedule. This depends on the student's ability to follow a sequence of activities using a visual cue and on the student understanding of the 'first....then....' concept (Mesibov and Howley, 2003) (Figure 2).

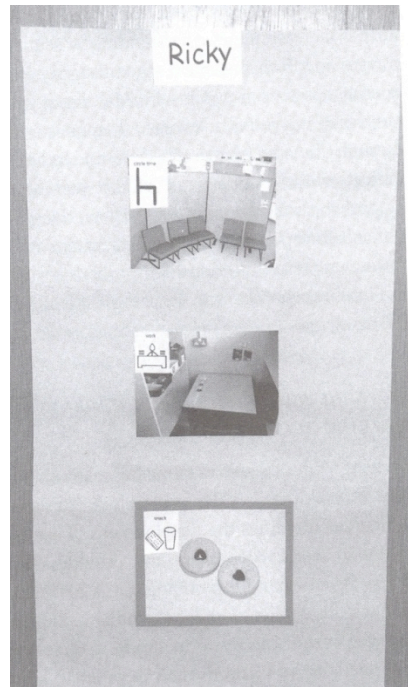


Figure 2: A part-day photo schedule with added symbols (Mesibov and Howley, 2003).

Wok system

A work system refers to organising a student's activities by indicating what work should the student work on, how much work is required, how his or her progress is evaluated, when the work is finished and, finally, what will happened after it is completed. As is with the daily schedule, there are different levels of work systems depending on the student's ability. A simple work system can be organised from left to right—if that is the reading direction the student most familiar with. The work that needs to be completed placed in



the left hand side and the finished work moved to the right. For students with good cognitive ability and conceptual skills, their work system can be embedded into a schedule (Mesibov and Howley, 2003) (Figure 3).

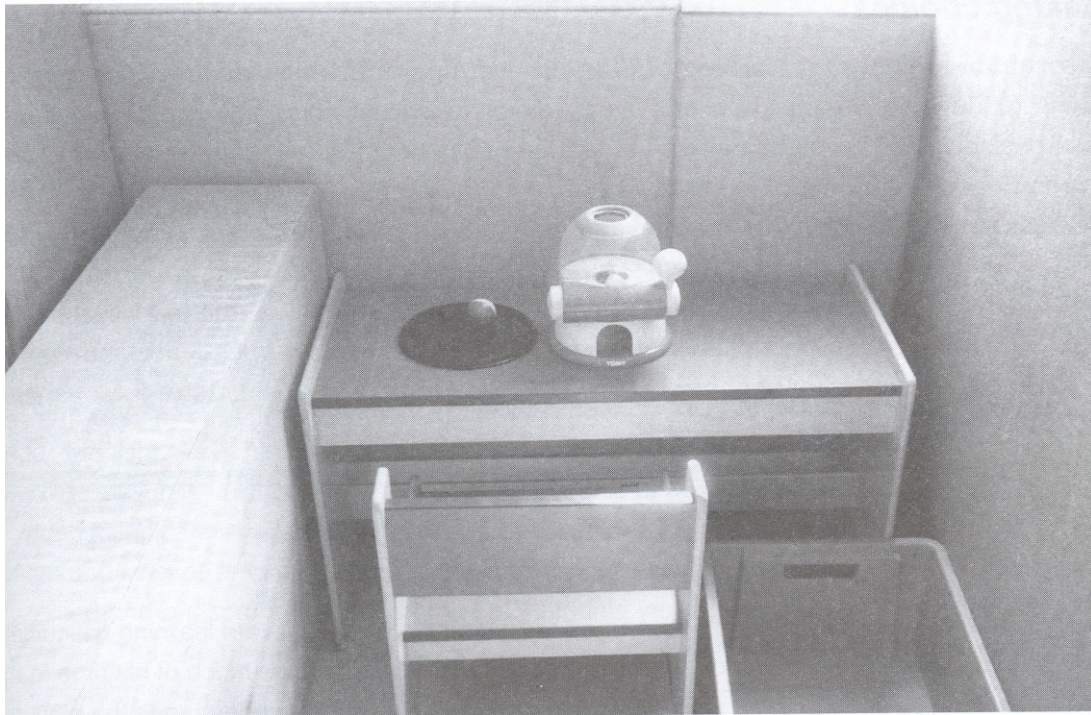


Figure 3: A basic left to right work system with a 'finished' box: one task (Mesibov and Howley, 2003).

Visual cues and instruction

In order to add meaning and increase student understanding and interest, teachers must organise and structure tasks visually. As mentioned previously, the visual skills of individuals with autism are usually stronger than their receptive language; therefore it is necessary to use visual instruction in structured times as well as in unstructured times such as lunch and break time. Visual cues help show the student the order of activities and increase his or her ability to focus on the relevant part of the task provided (Mesibov and Howley, 2003 and Kabot et al., 2010). Another use is in setting the classroom rules. They develop the student understanding of appropriate



behaviour, which consequently reduces the possibility of challenging behaviours (Clark and Smith, 1999) (Figure 4).

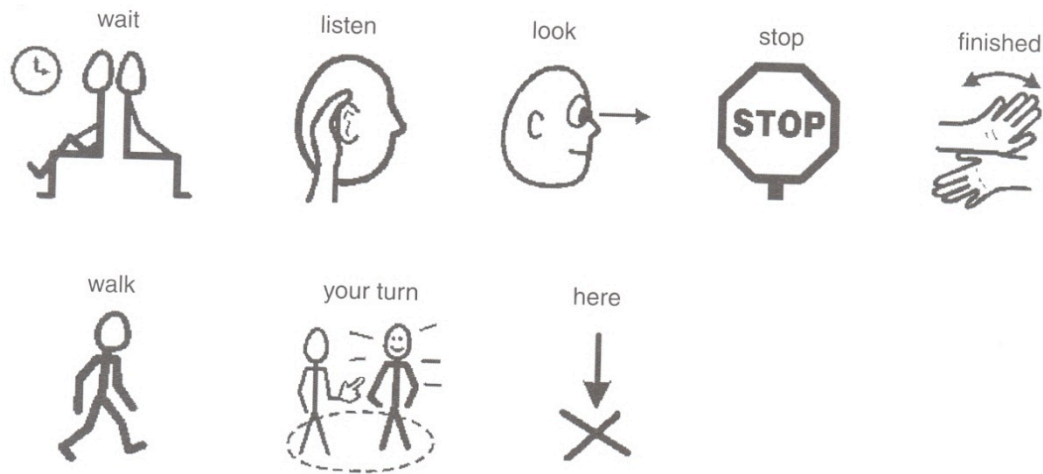


Figure 4: Examples of symbols used as visual reminders of appropriate behaviours (Mesibov and Howley, 2003).

The national curriculum

Accessing the national curriculum can be challenging for students with autism. Thus, special modification is needed to overcome these barriers. First, in order to enable students with autism to access the curriculum, teachers must adjust the content and method of delivering the knowledge to fit individual intellectual ability and functioning level. In addition, breaking tasks into small components will increase students' motivation and increase learning opportunities. It is also important to take in to account a student's areas of strengths and interests along with his or her learning style when working on a task or activity. One of the major barriers that students with autism face in mainstream schools is in understanding the 'classroom culture' or, in other words, the social context of the classroom that can make them feel left behind. A student with Asperger syndrome recalls that her experience in school was as if 'everybody is playing some complicated game and I am the only one who has not been told the rules'. Therefore, the culture of the



classroom needs to reflect their different way of thinking and understanding (Mesibov and Howley 2003). Teachers and school staff need to remember that school can be a confusing, frightening and challenging environment for students with autism due to the potential of sensory overload and social demands (Humphrey, 2008). Therefore, special accommodations might be needed for some students who have sensory problems (Jones, 2002).

It can be concluded that including students with autism mainly relies on modifications and differentiation of the environment and teaching methods. From this concept, inclusion can be defined as:

the process of including and educating a pupil within a local mainstream school, where the school is able to recognize and assess the pupil's particular needs and is willing and able to be flexible in how the curriculum is delivered and to adapt the routines and physical environment the pupil is expected to operate within particular attention is given to the relationships the pupil is enabled to develop with other pupils, both within and outside the school, and the potential benefits to other pupils and staff (Jones, 2002).

Advice and strategies for teachers and staff in schools

Some advice and guidance adopted from different sources are provided in this section to inform teachers' practice and understanding of the special needs of students with autism and to help them differentiate the classroom environment and curriculum.

First, structure your communication and use simple and clear language when you communicate with a student and allow some time to help him or her to process the information given. Use the student's name to obtain his or her attention before given any instructions (Autism education trust, n.d.; Fukunaga, n.d.; Larkey, 2005). If you have a student has echolalia (the student repeats his or her own words or the words of others), remember that this form of speech has a social functioning and you should look for the



intended meaning of it —it could aimed at turn taking in a conversation or asking for something- (Scott, 2000; Larkey, 2005). Bear in mind that students with autism have limited communication abilities and therefore developing goals for peers interaction and play skills is necessary (Lord and McGee 2001).

Social interaction is an arduous task for students with autism and it is one of the major difficulties that they face in school, and social climate is an important component for successful inclusion. Thus, the student's peers should be informed about autism and encouraged to be supportive friends to him or her (Humphrey, 2008). Offering training for students with autism as well as their peers regarding social and communication skills has great value in creating a supportive social atmosphere (Fukunaga, n.d.).

This can be done through role playing of the targeted skills including turn taking, sharing and conversation skills. In addition, you must consider that your attitude towards the autistic student has a direct influence on the level of acceptance of the student's classmates, otherwise the student may only be physically integrated in the classroom (Clark and Smith1999; Betts et al., 2007; Magnusen 2005).

In addition, careful attention must be paid to planning activities for these students. Ensure that each task has clear start and end; a timer can be used for this purpose (Larkey, 2005; Autism education trust, n.d.). To maintain student motivation, break tasks into small, achievable steps, use students' special interests and have realistic expectations (Larkey, 2005). Use timetables to show the student the order of activities and to inform him or her about any possible changes in the classroom routine (Humphrey 2008). Remember, relying on verbal instruction with students with autism is not advisable and supporting your instruction with visual cues such as pictures and symbols will enhance the student's ability to understand what is required from him or her. In the learning environment, ensure that you reduce any potential distraction such as lights, noises or smells, especially if the student



has sensory sensitivity. Unstructured time such as break or playtime can be overwhelming and confusing to a student with autism. Therefore, try to provide structure in these times; for example, offer structured games and make choices clear and limited as much as possible (Autism education trust, n.d.). It is also advisable to use visual cues to reduce the student's anxiety when needed (Clark and Smith1999).

Finally, share information with all school staff that is likely to work with the student such as speech and language therapists, occupational therapists and educational psychologists. Inform them about the student motivators, sensory issues, phobias and behavioural triggers. Most importantly, involve parents in the educational process. Review targets with them, share information and monitor progress (Autism education trust, n.d.; Betts, 2007).

Conclusion

This paper has compared the United Kingdom and Saudi Arabia in terms of the educational placements that are available for students with autism and the level of support that is provided to them in both countries. The comparison shows that Saudi Arabia still has a long way to including autistic students in mainstream schools due to several issues, such as lack of government initiatives and, perhaps more importantly, teachers' training and understanding of autism. This paper discussed the core characteristics of individuals with autism (intellectual and cognitive ability, communication ability, social interaction and relationships and sensory sensitivities) and linked them to practice in the classroom by showing how the classroom, the curriculum and teaching methods should be modified to meet the special needs of these students using Division TEACCH. This paper also discussed the concept of structured teaching and its four components (physical structure, daily schedules, work system and visual cues and instruction) and how they are used differently depending on the student's abilities and functioning level. Finally, some strategies and advice for teachers and staff in



schools were provided in order to promote their practice and understanding of how the special needs of these students can be met.

Hopefully, this paper will play a role in the successful inclusion of autistic students in Saudi Arabia and will have an impact on teachers' practice and understanding, which will hopefully improve the quality of educating students with autism in a welcoming and supportive environment—one that respects their differences and appreciates their abilities.



References

Autism education trust. (n.d.). Do you have a child with autism in your class? A guide for teachers [online]. Available from <http://www.autismeducationtrust.org.uk>. [Accessed 19December 2010]

Betts, S et al. (2007). Asperger syndrome in the inclusive classroom: advice and strategies for teachers. London: Jessica Kingsley Publishers

Clark, D and Smith, S (1999). Facilitating Friendships: Including students with autism in the early elementary classroom. *Intervention in school and clinic*, 34, 248-250

Department for Education and skills (DfES). (2001). Inclusion schooling: children with special educational needs. London: DfES

Department of education and science (2006). An Evaluation of educational provision for children with autistic spectrum disorders. Dublin: The stationery office

Frith, U. (2008). Autism: A very short Introduction. New York: Oxford University press

Fukunaga, L et al. (n.d.). Effective practices brief: Individualized educational support strategies for student with autism in inclusive classroom settings. [online]. Manoa: The University of Hawaii form [http:// www. Sig.hawaii.edu/final_products](http://www.Sig.hawaii.edu/final_products)[Accessed] 20 December 2010

Humphrey, N (2008). Autistic spectrum and inclusion: Including pupils with autistic spectrum disorders in mainstream schools. NASEN. Oxford: Blackwell Publishing



Jones, G (2002) Educational provision for children with autism and Asperger syndrome, London: David Falton

Jordan, R et al. (1998). Educational intervention for children with autism: A literature review of recent and current research. Birmingham: Crown copyright unit

Kabot, S et al. (2010). Setting up classroom spaces that support students with autism spectrum disorders. USA: AAPC

Larkey, S, (2005). Making it a success: Practical strategies and worksheets for teaching students with autism spectrum disorder. London: Jessica Kingsley Publishers

Leblance, L et al., (2009). Autism spectrum disorder and the inclusive classroom: Effective training to enhance knowledge of ASD and evidence-based practices. Teacher education and special education: The journal of the teacher education division of the council for exceptional children. 32:166

Lord, C and McGee, J (Eds). (2001) Educating children with autism. Washington, DC: National Academy Press

Magnusen, C (2005). Teaching Children with autism and related spectrum disorders: an art and a science. London: Jessica Kingsley Publishers

Mesibov, G and Howley, M (2003). Accessing the curriculum for pupils with autistic spectrum disorders: Using the TEACCH Programme to help inclusion. London: David Fulton Publishers Ltd

Scott, J et al. (2000), Student with autism: characteristics and instruction programming. California: Singular Publishing Group, Inc



Seach, D et al. (2002). Supporting children with autism in mainstream schools. Birmingham: The questions publishing company Ltd