

The Autistic Spe

Wendy Fidler explains how a prepared Montessori learning environment can help children with disorders on the autistic spectrum, including Autism, Asperger Syndrome and Semantic Pragmatic Disorder.

All children with autistic spectrum disorders experience, to a greater or lesser degree, restrictions in normal functioning in communication, socialisation and imagination. Communication restriction includes impairment across all modes of communication – speech, intonation, gesture, facial expression and other body language. Socialisation includes difficulties with social relationships, poor social timing, lack of social empathy, rejection of normal body contact, inappropriate eye contact. Finally, imagination restriction can be described as rigidity and inflexibility of thought processes, resistance to change, obsessional and ritualistic behaviour, lack of creative, imaginative play. These three areas of common difficulty, known as the ‘triad of impairment’, are sometimes accompanied by poor physical and visual-motor skills and clumsiness and challenging, unpredictable and disruptive behaviours.

Autism

Autism is a lifelong developmental disability that affects the way a person communicates and relates to people around them. Children with autism have difficulty relating to others in a meaningful way. Their ability to develop friendships is generally limited, as is their capacity to understand other people’s emotional expression.

Autistic children are special, unique and very different to children with other learning difficulties; everything parents and teachers may know and understand about special needs children may be challenged by the behaviours presented by children who are autistic.

Autism affects children’s everyday living and learning in many ways:

Language and communication: Children with autism have difficulty understanding the meaning of words and the intention of the speaker; they are not able to interpret gestures, intonation, facial expressions or body language.

Echolalia: Children with autism sometimes echo or repeat the words spoken to them; they may talk incessantly about one topic, or laugh and giggle inappropriately.

Inflexibility of thought and imagination: Children with autism have difficulty manipulating thoughts in an imaginative way. They often become unduly upset by changes in their pattern of life and routines. Sometimes, autistic children make repetitive actions within a restrictive range, such as body rocking and hand or armflapping.

Lack of social skills: Autistic girls and boys have little or no understanding of normal social interaction; they do not easily make relationships and they have difficulty understanding that other people have feelings, thoughts and intentions.

Different perceptions: Children with autism have a different view of what is important; their perceptions are different; some people describe autism as a different culture because the world in general does not share autistic people’s view of life.

Listening and attention: Autistic children find it very difficult to attend to activities in which they are not practically involved.

Hyper-sensitivity to sensory stimuli: Bright lights, loud sounds, unexpected touch, tastes and smells can be very upsetting to some autistic children.

Behaviour: Difficulties with



communication often trigger behavioural problems in autistic children.

Special abilities: Autistic children often learn to do complex things very well and very quickly, such as playing a musical instrument, assembling detailed constructions or riding a horse – these are not tasks which require social understanding.

What causes Autism?

The exact cause or causes of autism is/are still not known, but research shows that genetic factors are important, and that autism may be associated with a variety of conditions affecting brain development that occur before, during or very shortly after birth – though there is debate about whether it can develop later. Current research is also looking into whether allergies and dietary intolerances may play a part.

It is likely that a number of factors together give rise to the condition; as yet there is no proven cure and there is no universally accepted ‘protocol’ for the treatment and management of autism. There is certainly scope within the current breadth of research for inclusion of observations and assessments of children with autistic difficulties who learn in prepared Montessori learning environments.

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Above: Autistic children do not like change; they are likely to be disorientated, distracted or wander off during school trips.

Far left: Children with autistic spectrum disorders have a different view of what is important.

Left: Autistic children need plenty of time and space to develop understanding, trust and meaningful relationships.

Below: Special needs children respond very well to the multi-sensory Montessori approach; they see, say, feel numbers and letters as they recognise, recall and consolidate learning concepts.



Working with Autistic children in prepared Montessori learning environments

Autism is a very individual disorder; in addition to the common features of the 'triad of impairments' described above, autism may co-exist with other disorders such as Attention Deficit Hyperactivity Disorder (ADHD) and Dyspraxia which impact further on children's self-esteem, safety, behaviour and gross and/or fine motor skills development.

The traditional teaching and learning methods and the predictable daily routines employed in prepared Montessori learning environments provide stability for children with special educational needs (SEN), including disorders on the autistic spectrum.

Montessori boys and girls at all stages of learning (the Foundation Stage, Key Stage 1 and Key Stage 2) are involved in hands-on activities with which they become fully engaged.

In general, special needs children respond very well to the multi-sensory, interactive Montessori teaching/learning approach; it is very difficult for a child with, say, dyspraxia or attention deficit



hyperactivity disorder to maintain concentration on any activity without being continuously stimulated and practically involved with the learning process. The Montessori approach provides this continuous stimulation.

However, Montessori teachers should be aware that children with autism might be extra sensitive to sounds, light, touch, tastes and smells. They may dislike 'scratchy' materials (for example wool) next to their skin, and may find sudden loud noises or bright lights frightening or upsetting.

This super-sensory-sensitivity will impact on creating a prepared learning

environment that is autism-friendly; fluorescent light bulbs flash many times per second – this is great trial to many autistic children. Sudden movements and noises, especially from behind the child are also likely to trigger distressed responses. Even the rattles of the sound boxes and tones of the Montessori bells can be upsetting to some autistic children; teachers should be sensitive to this possibility and arrange to use such equipment away from the ears of an autistic child if appropriate.

Care must be taken when selecting and presenting fabrics, metals and woods for matching activities. Silk scarves or airline eye masks are more autistic-

friendly than traditional thick black cotton Montessori blindfolds.

The Montessori language and grammar materials are heaven-sent for teachers of autistic children. The reading and writing of 'command cards', for example, gives children opportunities to watch others speaking and acting out, using appropriate actions, intonations and behaviours to express what they understand from the words on the cards (*The Montessori Elementary Material*, Maria Montessori, 1917). Over time, autistic children can learn to mimic and mirror these socially appropriate behaviours, facial expressions, body languages and perceptions and adopt them as their own.



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Similarly, the Montessori daily routines and social graces activities give all children endless opportunities to practice polite social interactions, the art of turn-taking in conversations and sensitivities such as how near to stand to others and how to maintain appropriate eye contact. All these skills are much more easily learned at a very early stage in children's education, before unhelpful habits are formed.

The practical life activities help all boys and girls to fine-hone the visual-motor skills necessary for carrying, lifting, folding and rolling. This also has the great advantage of developing children's early awareness of their body parts in space; a very necessary aid to preventing unhelpful rocking and flapping movements.

Montessori education is first and foremost an 'education through movement'; children employ all their senses and use their hands during

practical activities, which demonstrate the concepts to be learned before they move onto more abstract activities once the concept has been fully understood. Montessori teachers sometimes worry about the children in their classes who do not choose to use some pieces of apparatus. However, autistic children always benefit from watching others participate, perhaps many times, before getting involved themselves. It is perfectly possible for them to acquire and consolidate learning concepts through 'third party participation' in this way.

The open shelves and clearly visible learning resources in a prepared Montessori learning environment are a boon for children with thought processing and imagination difficulties.

The classroom should be secure so that children cannot wander into unsafe areas, and visually helpful to promote choice-making and independence. In addition to being extra sensitive to some stimuli, children with autism may have high pain thresholds, so any playtime or classroom accident should be carefully checked.

Various teaching suggestions and strategies can be put in place to help prevent the triggers of inappropriate behaviour. Preventative measures should take into consideration the reasons for such behaviour. These measures are called 'antecedent strategies'; prompts and tools are provided for the child to help him or her to avoid using inappropriate behaviours as a form of communication (Moyes, 2002).

Autistic children do not like change; very special considerations and safety precautions should be taken when organising, for example, school trips when children are likely to be disorientated, distracted and might wander off, or events which require impromptu responses from children. For example, a party game involving a series of seemingly unconnected expected actions such as donning a hat and scarf and cutting and eating a cube of chocolate with a knife and fork would be totally outside the scope of understanding for an autistic child, who would most likely be distressed at the unexplained rush of activity.

Asperger Syndrome

There is also a condition called Asperger Syndrome (AS), which is a form of autism at the higher functioning end of

the autistic spectrum. It affects boys and girls, but affects boys in significantly higher numbers.

Children with AS also exhibit, to a greater or lesser degree the 'triad of impairment', which is the defining character of autism – difficulties with communication, imagination and socialisation. In common with other autistic spectrum disorders, there are wide variations in the physical and mental symptoms, in the degree of difficulties they present and in any early signs noted by parents. Boys and girls with AS are sometimes described as having 'mild autism' but this is misleading and can undervalue the significance of the diagnosis. There is nothing mild about the impact of AS; the effects are considerable and permeate all aspects of everyday living and learning.

What are the similarities and differences between AS and autism?

Behavioural difficulties: Behavioural difficulties are an important part of the diagnosis of AS, as with autism.

Language: Children with AS usually have fewer problems with language than those with autism, often speaking fluently, though their words can sometimes sound formal or stilted.

Co-existing learning difficulties: Boys and girls with AS do not usually have the accompanying learning disabilities associated with autism; in fact they are often of average or above-average intelligence.

Verbal skills: Children's good verbal skills mask a tendency to rely on literal meaning and an inability to read body language and facial expressions.

Social skills: Children with AS make better efforts to adapt socially – they have a genuine desire to make social contact.

Anxiety: This features significantly in the lives of those affected. Anxiety is often related to low self-esteem, fear of failure, fear of being misunderstood and of not understanding others. Additionally, girls and boys with AS fear being different and not 'fitting in'.

What extra problems does the AS child face at school?

By the time children with AS reach Key Stage 1 they are generally aware of their own difficulties, both in everyday living

and at school, and often exhibit high levels of anxiety. Often, there are also disruptive behaviours at home, at school or both.

Sometimes the transfer to secondary schooling takes place before the real problems surface; these may not be academic (AS boys in particular are frequently top of the class). The difficulties are more likely to be because the child does not understand the behaviour and intentions of those around him, the meanings of instructions and lessons, or may not be able to interpret the wide variety of verbal and non-verbal language used by teachers and peers.

The implications of these difficulties are widespread in the diverse social settings of home, community and school.

There is an increasing professional acknowledgement of the relationship between the communication difficulties experienced by children with autism and AS, and the number of behavioural problems they may display. (Hodgdon, 1995) This is hardly surprising, considering the communication difficulties, which constitute one of the principal deficit areas in the autistic spectrum syndromes.

How can Montessori settings help the AS child?

As with autism, children with AS respond well to the predictable routines, social graces and manners of speech practised in a well-organised Montessori classroom. Montessori teachers model sensitive behaviours, value diversity and respect the right of all children, including those with AS to 'be themselves'. Montessori children are much less likely to suffer the loss of self-esteem and confidence which underpins anxiety and provokes inappropriate behaviour.

AS children often have great difficulty understanding idiom, similes and metaphors. Montessori command cards can be drawn up to describe and explain, for example, the meaning of feeling 'as fit as a fiddle' (which might otherwise conjure up images of a very active violin in the mind of the AS child).

Children with AS can be very egotistical and chauvinistic; they sometimes create impossibly high standards for themselves in all they do. The skilled Montessori teacher will work with the child to further his or her special interests where possible, to promote a tolerant and understanding ethos in the classroom and encourage the AS child to widen her or



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his range of chosen activities where possible. In this way the AS child learns that he or she may not always be chosen or win, and develops better skills for taking part in team activities which benefit the group, class or community. Furthermore, the child's self-esteem is preserved and actively promoted.

Semantic Pragmatic Disorder

Semantic Pragmatic Disorder (SPD) is a communication disorder:

semantic = the relationship between words or sentences and their meanings;

pragmatic = making language work in context.

SPD children are unable to process all the given information from certain circumstances. The disorder relates to autism because children have difficulties in the same 'triad of impairment'.

SPD is often described as the 'outer spectrum of autism', but all children with autism will have semantic pragmatic disorders with language. Children with SPD may behave very differently at home from school; parents' concerns should always be taken seriously.

A child with SPD may exhibit some (but not all) of the following features at an early age:

- A fluent speaker, but on the child's terms;
- Sounds very grown up in his or her speech;
- Doesn't exchange eye contact or facial gestures appropriately;
- Problems with abstract concepts (such as time, next week, guess);
- Doesn't ask teacher to help or children to play;

- Can appear rude, gauche, arrogant and embarrass others;
- Late or early reader, but little understanding;
- Bad at team events and games;
- Bad at social events (school breaks, parties);
- Motor skills problems (writing, drawing, bike riding, dressing, football).

Children with SPD thrive in prepared Montessori learning environments. They learn well from practical hands-on tasks and in the quiet, orderly working environment with plenty of visual clues. The predictability of the daily routines reduces their anxieties; turn taking and changes in routines are clearly signalled.

Especially helpful Montessori ideas include:

- Small work groups, good role models, special small communication group activities (command cards etc);
- Simple instructions spoken slowly: say, for example, 'please put the toys in the box' not 'please tidy up';
- Time to reply when asked a question; replying for an SPD child (modelling) can help understanding;
- Help with socialising – specific games;
- Clear and consistently applied rules on how to behave using concrete language the child can understand;
- Constant positive reminders supported by visual/written information;
- Everything written down: eg timetable, instructions, message for parents;
- Daily diary between home and school with regular information about topic ▶

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Semantic Pragmatic Disorder – a late or early reader, but little understanding.

work – this allows for shared information and pre-tutoring;

- Teach the meaning of playground language and common idiomatic expressions;
- Respond to the child's intentions and not to what is actually said (which may not make sense);
- Always allow the child to watch other children first;
- Double check that the child understands what is expected of him or her;
- Constant encouragement and praise.

Finally, girls and boys with autistic spectrum disorders are not physically disabled, for example, in the same way that children with cerebral palsy may be; they do not require wheelchairs and they 'look' just like anybody without a disability. As a result it can be more difficult to create awareness and understanding of the condition; onlookers can assume that children are 'naughty' or that parents are not controlling the child.

It is important to remember that children with autism, Asperger syndrome and semantic pragmatic disorder are not immune to other illnesses or handicaps. It is tempting to attribute every difficulty experienced to the autistic disorder, when in reality, it may be due to deafness, depression or even just the normal behaviour of a boisterous and mischievous child. ■

Wendy Fidler is a Special Educational Needs consultant.

Resources:

The National Autistic Society Helpline: tel. 0870 600 8585

There is useful information in the DfES booklet *Special Educational Needs: A Guide for Parents* - call 020 7925 5000 (UK) or 0131 222 2400 (Scotland) for a copy.

www.autismmedical.com is the website for Allergy Induced Autism

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