



COMPLEX LEARNING DIFFICULTIES AND DISABILITIES RESEARCH PROJECT (CLDD)

AUTISM

What is autism?

Autism is a neurodevelopmental disorder, which means that it stems in part from an irregularity in the development of the brain. Autism is also referred to as the autistic spectrum or autistic spectrum disorder (ASD) to indicate that it covers a range of conditions including Asperger’s syndrome.

Classic or Kanner’s autism	High functioning autism	Asperger’s syndrome
Moderate or severe learning difficulties	Average or above average intelligence	
The hardest to reach and teach	Able intellectually, but ability held back by degree of autism	Displays triad of impairments in subtler ways

Possible indicators of autism

Autism is generally described in terms of a ‘triad of impairments’, which must be present in order to receive a diagnosis. These are:

- 1. Impairments of social interaction**

Students with autism may try to avoid the types of situations in which typically developing students gain social skills. Some use contact with others as a means to an end (eg an opportunity to monologue on their subject of special interest); others appear to avoid or not to seek contact with other people. Students with Asperger’s syndrome may want to interact, but lack the empathy and understanding of the give and take of friendship to make friends easily.
- 2. Impairments of social language and communication**

Students with autism frequently struggle with communication, including understanding spoken language, gesture, facial expression and other social nuances. As many as 50% of students with ASD have no verbal language. Their difficulties with expressing themselves or getting their needs met can lead to frustration and challenging behaviour. Those with more advanced language skills may enjoy talking, but will not be so good at the turn taking involved in conversation.
- 3. Impairments of flexibility of thought and imagination**

Students with ASD may have an impaired ability to use imagination to problem solve and predict outcomes on a day-to-day basis, which impacts upon their ability to engage in pretend play, role play and take part in curriculum activities that involve abstract thinking and the use of personal imagination. They are likely to want to stick to rigid routines and to be resistant to change.

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Fundamentally, these social impairments affect the way in which students with autism understand and react to the world around them.

In addition, they are likely to exhibit sensory dysfunction. The two most common categories of sensory dysfunction are hypersensitivity and hyposensitivity. Hypersensitivity is indicated by extreme negative responses to sensory stimuli. The person will be sensation-avoiding; for example, they may avert their eyes from lights or cover their ears in noisy situations. Hyposensitivity is a reduced perception of sensory stimuli. This can result in the person seeking heightened sensory experiences; for example, mouthing things or self-harming. Hyper- and hyposensitivity can occur in the same individual, and even differently on different occasions.

Implications for teaching and learning

Difficulties for students with autism may present as follows:

- existence of learning difficulties (mild, moderate, severe or profound), in addition to those caused by being on the autism spectrum
- speech and language difficulties and a lack of desire to communicate
- over- or under-stimulation in the classroom due to hypo- or hypersensitivity (or both), as well as an inability to integrate sensory information from different sources
- inability to read social cues, feel empathy or develop social skills resulting in difficulty making friends, or to engage with others in learning tasks
- lack of flexibility of thought and imagination leading to problems understanding and interpreting the behaviour of others and the world around them
- preference for highly structured environments and routines, combined with a resistance to change
- challenging behaviours and frequent 'meltdowns'.

Supporting students with autism

There are some established approaches for teaching students with autism. Some teachers prefer to concentrate on one method, while others will use ideas taken from several approaches.

1. General approaches

- **Daily life therapy (Higashi)** – this approach emphasises group learning in the context of a programme which includes vigorous physical activity to develop both strength and concentration
- **Applied behavioural analysis (Lovaas)** – this approach focuses on two main areas of development – teaching specified skills and managing behaviours
- **Intensive Interaction** – this is an approach in which the learner leads and directs interactions and the teacher responds to and joins in with the learner.
- **SPELL (Structure, Positive, Empathy, Low arousal, Links)** – an eclectic approach developed by the National Autistic Society (NAS) which combines elements from a variety of programs.



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- **TEACCH structured teaching approach** – in this approach, visual and physical structured environments are used to support students' focus and learning underpinned by a distinctive ethos.
- **Social Stories** – this is an approach that helps to develop social skills through the use of stories, which show (either in words or pictures) how to behave in various situations.

2. Strategies

- i) Helping students with autism to build up relationships and develop their communication skills is as important as their academic progress, so make sure these aspects of their development are given priority.
- ii) If students are non-verbal or have extremely limited language skills, use an alternative communication method such as the Picture Exchange Communication System (PECS).
- iii) As students with autism have been described as being 90% visual learners and 10% auditory learners, it is important to present information visually, rather than relying on talk. Use visual schedules, objects, pictures, symbols, words, etc, depending on the needs of the individual student.
- iv) Break down tasks into small steps, so that students can be as independent as possible. Structure the tasks in a similar way, so that they are familiar with what to do; for instance, having one tray containing the activities to be done and another for finished work. Have designated spaces in the classroom for different activities.
- v) As these students are easily distracted by extraneous noises and sights, they may benefit from having their own workstations screened off from other students. Large amounts of sensory stimulation such as bright visual displays and background noise will quickly overload their dysfunctional sensory systems.
- vi) An autism-friendly environment can be created by taking care over lighting and cutting down on glare, keeping to pale colours with matt finishes and adding soft furnishings, such as cushions and carpeting, to dampen noise.
- vii) Some students with ASD struggle to imitate or learn through observation, which means that they benefit from opportunities for kinaesthetic learning. Provide opportunities for 'learning through doing', which can either be physical or virtual (eg through the use of interactive whiteboards).
- viii) Allow opportunities for physical activities at frequent intervals, including ones that stimulate the vestibular system such as rocking, jumping and swinging. These can be extremely beneficial and can also help to reduce outbursts.
- ix) Motivate students to want to engage with others and with learning by following their lead and responding quickly and positively to any attempts they make to communicate. Use their individual interests as a basis for teaching.
- x) Use social stories, which show in words or pictures, how they need to behave in different social situations. These can be created as the need arises and shared with the student on many occasions, in order to drive the message home.



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Finally, remember that strategies will be most effective when there is consistency between all the settings and individuals supporting the child, particularly if they are understood, shared and implemented by and with families at home.

Key references

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