

EDUCATING THE STUDENT WITH ASPERGER SYNDROME

Persons with Asperger syndrome (AS) share some of the same characteristics as individuals with autism, and there is debate on whether AS is an independent diagnostic category or another dimension at the higher end of the autistic continuum (Szatmari, 1995). Although Asperger syndrome shares some characteristics with higher-functioning autism, there are some unique features, and a different developmental progression and prognosis (Myles & Simpson, 1998) for individuals with AS.

According to DSM-IV (1994) criteria, the child must meet the criteria for social impairment, repetitive activities and age of onset, but have normal cognitive and language development. AS involves fewer symptoms than autism.

Learning and Behavioural Characteristics of Students with Asperger Syndrome

1.

Asperger syndrome is characterized by a qualitative impairment in social interaction. Individuals with AS may be keen to relate to others, but do not have the skills, and may approach others in peculiar ways (Klin & Volkmar, 1997). They frequently lack understanding of social customs and may appear socially awkward, have difficulty with empathy, and misinterpret social cues. Individuals with AS are poor incidental social learners and need explicit instruction in social skills.

2.

Although children with AS usually speak fluently by five years of age, they often have problems with pragmatics (the use of language in social contexts), semantics (not being able to recognize multiple meanings) and prosody (the pitch, stress, and rhythm of speech) (Attwood, 1998).

- Students with AS may have an advanced vocabulary and frequently talk incessantly about a favourite subject. The topic may be somewhat narrowly defined and the individual may have difficulty switching to another topic.
- They may have difficulties with the rules of conversation. Students with AS may interrupt or talk over the speech of others, may make irrelevant comments and have difficulty initiating and terminating conversations.
- Speech may be characterized by a lack of variation in pitch, stress and rhythm and, as the student reaches adolescence, speech may become pedantic (overly formal).
- Social communication problems can include standing too close, staring, abnormal body posture and failure to understand gestures and facial expressions.

3.

The student with AS is of average to above average intelligence and may appear quite capable. Many are relatively proficient in knowledge of facts, and may have extensive factual information about a subject that they are absorbed with. However, they demonstrate relative weaknesses in comprehension and abstract thought, as well as in social cognition. Consequently, they do experience some academic problems, particularly with reading comprehension, problem solving, organizational skills, concept development, and making inferences and judgements. In addition, they often have difficulty with cognitive flexibility. That is their thinking tends to be rigid. They often have difficulty adapting to change or failure and do not readily learn from their mistakes (Attwood, 1998).

4.

It is estimated that 50%-90% of people with AS have problems with motor coordination (Attwood, 1998). The affected areas may include locomotion, ball skills, balance, manual dexterity, handwriting, rapid movements, lax joints, rhythm and imitation of movements.

5.

Individuals with AS share common characteristics with autism in terms of responses to sensory stimuli. They may be hypersensitive to some stimuli and may engage in unusual behaviours to obtain a specific sensory stimulation.

6.

Individuals with AS may also be inattentive and easily distracted and many receive a diagnosis of ADHD at one point in their lives (Myles & Simpson, 1998).

7.

Anxiety is also a characteristic associated with AS. It may be difficult for the student to understand and adapt to the social demands of school. Appropriate instruction and support can help to alleviate some of the stress.

Strategies for Teachers

Many of the strategies for teaching students with autism are applicable for students with AS. The professional literature often does not differentiate between high-functioning autism and Asperger syndrome when outlining recommended practices. However, it is important to give consideration to the unique learning characteristics, to provide support when needed, and to build on the student's many strengths.

The following identifies the specific learning difficulty and suggests a number of possible classroom strategies:

Learning Difficulty Classroom Strategies

Difficulties with language

- tendency to make irrelevant comments
- tendency to interrupt
- tendency to talk on one topic and to talk over the speech of others
- difficulty understanding complex language, following directions, and understanding intent of words with multiple meanings
- Comic Strip Conversations (Gray, 1994) can be applied to a range of problems with conversation skills
- teach appropriate opening comments
- teach student to seek assistance when confused
- small group instruction for conversational skills
- teach rules and cues regarding turn-taking in conversation and when to reply, interrupt or change the topic
- use audio taped and videotaped conversations
- explain metaphors and words with double meanings
- encourage the student to ask for an instruction to be repeated, simplified or written down if he does not understand
- pause between instructions and check for understanding
- limit oral questions to a number the student can manage
- watch videos to identify nonverbal expressions and their meanings

Insistence on sameness

- wherever possible prepare the student for potential change
- use pictures, schedules and social stories to indicate impending changes

Impairment in social interaction

- difficulty understanding the rules of social interaction
- may be naïve
- interprets literally what is said
- difficulty reading the emotions of others
- lacks tact
- problems with social distance

- difficulty understanding "unwritten rules" and when they do learn them, may apply them rigidly
- provide clear expectations and rules for behaviour
- explicitly teach rules of social conduct
- teach the student how to interact through social stories, modeling and role-playing
- educate peers about how to respond to the student's disability in social interaction
- use other children as cues to indicate what to do
- encourage cooperative games
- may need to provide supervision and support for the student at breaks and recess
- use a buddy system to assist the student during non-structured times
- teach the student how to start, maintain and end play
- teach flexibility, cooperation and sharing
- teach the students how to monitor their own behaviour
- structured social skills groups can provide opportunity for direct instruction on specific skills and to practice actual events
- may need to develop relaxation techniques and have a quiet place to go to relax

Restricted range of interests

- limit perseverative discussions and questions
- set firm expectations for the classroom, but also provide opportunities for the student to pursue his own interests
- incorporate and expand on interest in activities and assignments

Poor concentration

- often off task
- distractible
- may be disorganized
- difficulty sustaining attention
- frequent teacher feedback and redirection
- break down assignments
- timed work sessions
- reduced homework assignments
- seating at the front
- use nonverbal cues to get attention

Poor organizational skills

- use schedules and calendars

- maintain lists of assignments
- help the student to use "to do" lists and checklists
- pictures on containers and locker
- picture cues in lockers

Poor motor coordination

- involve in fitness activities
- may prefer fitness activities to competitive sports
- take slower writing speed into account when giving assignments (length often needs to be reduced)
- provide extra time for tests
- consider the use of a computer for written assignments, as some students may be more skilled at using a keyboard than writing

Academic difficulties

- usually average to above average intelligence
- good recall of factual information
- areas of difficulty include poor problem solving, comprehension problems and difficulty with abstract concepts
- Often strong in word recognition and may learn to read very early, but difficulty with comprehension
- May do well at mathematical computations, but have difficulty with problem solving
- don't assume that the student has understood simply because he/she can re-state the information
- be as concrete as possible in presenting new concepts and abstract material
- use activity-based learning where possible
- use graphic organizers such as semantic maps
- break down tasks into smaller steps or present it another way
- provide direct instruction as well as modeling
- show examples of what is required
- use outlines to help student take notes and organize and categorize information
- avoid verbal overload
- capitalize on strengths, e.g., memory
- do not assume that they have understood what they have read – check for comprehension, supplement instruction and use visual supports

Emotional vulnerability

- may have difficulties coping with the social and emotional demands of school

- easily stressed due to inflexibility
- often have low self-esteem
- may have difficulty tolerating making mistakes
- may be prone to depression
- may have rage reactions and temper outbursts
- provide positive praise and tell the student what she/he does right or well
- teach the student to ask for help
- teach techniques for coping with difficult situations and for dealing with stress
- use rehearsal strategies
- provide experiences in which the person can make choices
- help the student to understand his/her behaviours and reactions of others
- educate other students
- use peer supports such as buddy systems and peer support network

Sensory Sensitivities

- most common sensitivities involve sound and touch, but may also include taste, light intensity, colours and aromas
- types of noises that may be perceived as extremely intense are:
 - sudden, unexpected noises such as a telephone ringing, fire alarm
 - high-pitched continuous noise
 - confusing, complex or multiple sounds such as in shopping centres
- be aware that normal levels of auditory and visual input can be perceived by the student as too much or too little
- keep the level of stimulation within the student's ability to cope
- it may be necessary to avoid some sounds
- having the student listen to music can camouflage certain sounds
- minimize background noise
- use of ear plugs if very extreme
- teach and model relaxation strategies and diversions to reduce anxiety

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