

## **Teaching & Assessment Strategies for Students with Autism Spectrum Disorder**

Autism Spectrum Disorder is a life-long, developmental disorder caused by a neurological dysfunction. It is generally accepted that autism is an organic brain disorder. The cause or causes of autism are, as yet, unknown. No factors in the child's psychological or family environment cause autism. People with the syndrome are likely to have the same range of intellectual skills as the general population, though they may have a number of other characteristics that make education less accessible to them

As social interaction is so intrinsic to the way that most teaching and learning takes place, students with Autism Spectrum Disorder may find the experience of higher education daunting. However, in recent years several students have had successful experiences in a range of subjects including, most commonly, mathematics and computing.

Students with Autism Spectrum Disorder may have above-average intelligence, extensive factual information, advanced vocabulary in a particular topic, exceptional memories for detail and/or a natural affinity with computers, be original and creative in their thought patterns, have good attention to detail and precision and can be very independent in their studying. However, they may also exhibit the following characteristics in the learning environment:

- weakness in comprehension and abstract thought, problem solving, organizational skills, concept development, and making inferences and judgments;
- difficulty with cognitive flexibility, tending to think in a more linear way – thinking tends to be rigid, students with this disorder have difficulty adapting to change or failure and do not readily learn from their mistakes;
- tendency to take language literally and demonstrate confusion by non-literal sayings, e.g., 'pull your weight') and respond in a way that seems rude;
- difficulty coping with change and obsessive routines - preoccupation with a particular subject of interest which may have been learned by rote, obsessions or routines which interfere with learning;
- experience anxiety - even minor stress may cause increase in coping mechanisms such as repetitive movement or muttering, panic, or incessant questioning;
- problems with social relationships - difficulty making and keeping friends;
- in group situations may behave in ways that seem "odd" to others and may come across as arrogant, rude or withdrawn;
- inability to pick up on non-verbal cues and have poor eye contact - lack of understanding of sarcasm or irony, people's moods and feelings;
- difficulty in understanding or communicating feelings - may be unable to empathize with others and predict or understand their behavior (in group work may not naturally consider other people's wishes or needs);
- poor organizational skills, poor co-ordination, clumsiness, odd postures and poor gross motor skills;
- speech which is pedantic and monotonic;
- may be overly sensitive to sounds, tastes, smells and sights, even sensory stimuli that others may not perceive.

## Teaching Strategies

Despite being very intellectually able, students with Autism Spectrum Disorder often show characteristic behaviors that can disrupt their learning. However, students with this condition can excel academically if appropriate support and awareness is in place. There are several strategies that can assist these students to learn effectively:

- Get to know the student's particular needs in advance - meet her/him before the course starts to discuss needs.
- Provide clear, detailed information (oral and written) about structure of course, practical arrangements, assessment requirements and deadlines.
- Be consistent in approach and keep variations to a minimum - if a change (e.g., in timetable, room, lecturer) is inevitable, give clear, specific information as far ahead as possible.
- Use clear, unambiguous language (spoken and written) and avoid or explain metaphors, irony, etc., and interpret abstract comments of others. Give explicit instructions and check that the student is clear about what he/she has to do. If providing feedback, be very clear about what is inappropriate or appreciated.
- Be patient, encouraging and supportive but guide the student back on task if necessary. Present course materials and instructions in a structured way using literal language. Show how components fit together as a whole. Provide subject word lists, glossaries of terms and acronyms.
- In group work make clear exactly what is required of students with Autism Spectrum Disorder and mediate to resolve disputes in a calm, logical way providing an opportunity immediately after group sessions to check that they have understood. If group-work proves too stressful provide alternative ways of completing team work.
- Students may have difficulties in motivation for certain parts of their course due to a particular interest in one aspect of it. Set concrete, realistic goals to assist motivation, e.g., 'If you want to become an engineer, you must complete all parts of the course, even the essays'.
- Provide access to personal support or a particular staff member who can provide support if the student becomes distressed.

## Assessment Strategies

- Assessment - Students may benefit from the opportunity to look at a model of the exam format (instructions and structure of examination) before the exam so that any confusion can be dealt with and anxiety minimized.
- The language used on exams should to be both explicit and literal. For some students, multiple choice papers can be particularly confusing and alternative testing modes may be appropriate.

Adapted from information from the UK [National Autistic Society](#)