Teaching Students with Special Needs in Inclusive Settings: Exceptional Learners Chapter 9: Autism Spectrum Disorders

Background

- “Autistic” is a “broad term coined in the twentieth century by Bleuler that meant individuals with an extremely narrow range of personal relationships and restricted interactions with their environments.”
- The APA (American Psychological association is still working on a better definition, but recommends that a proper diagnosis of a spectrum disorder must meet three criteria: “significant, persistant deficits in social communication and interactions,” “Restricted, repetitive patterns of behavior, interests and activities” (like rituals or routines and verbal or motor patterns), and these symptoms must have been present since childhood, but not necessarily fully developed.
- Most Scientists have only proved that the disorders are neurological, not interpersonal, and that there is a strong linkage in genetic. Psychiatrists can diagnose autism spectrum disorders using criteria from the APA. The child is observed in an examination room and examined by the ADOS (Autism diagnostic Observation Schedule) and the ADI-R (Autism Diagnostic Interview-Revised).
- Children can be diagnosed by the age of 3.

Psychological and Behavioral Characteristics of Autism

- Impaired Social Interaction- babies or toddlers with autism don’t respond normally to being picked up or cuddled and do not show a differential response to different people.
- Impaired Communication- most children with autism lack communicative intent, or the desire to communicate for social purposes.
- Repetitive and Stereotyped Patterns of Behavior- repetitive, ritualistic motor behaviors, such as twirling, spinning objects, flapping the hands, and rocking, similar to those that are evident in some people who are blind.
- Impaired Cognition- most individuals with autism display cognitive deficits similar to those of people with intellectual disabilities. However, some cognitive processing problems seem to be peculiar to autism, such as thinking in pictures.
- Abnormal Sensory Perceptions- Some people with autism can be either hyperresponsive or hyporesponsive to particular stimuli in their environment (sight, touch, sound, etc.) Can often experience synesthesia, which occurs when the stimulation of one sensory or cognitive system results in the stimulation of another sensory or cognitive system.

Psychological and Behavioral Characteristics of Asperger Syndrome

- Impaired Social Interaction- people with Asperger syndrome have a lot of difficulty in social interactions because they aren’t adept at reading social cues. They are often overly literal in how they “read” the behavior and language of others. Unaware of the ‘hidden curriculum’ (p. 247)
- Impaired Communication Skills- People with Asperger syndrome can often express themselves with age appropriate vocabulary, but they have problems with pragmatics and may often speak with an abnormal voice inflection, such as monotone, too loudly or slowly, or may repeat the same thing over and over again. They also have trouble taking turns talking in a conversation.

Teaching ASD Students Tips from Specialed.us

- Role play/model situations (so students can see instead of just being told)
- Make sure to keep expectations the same, every time someone is inconsistent it takes 8 times of being consistent to “undo” the inconsistency
- Foreshadow changes in schedules
- Teach Social Skills as part of curriculum
- Remember there is no such thing as “common sense”
- Start a new skill in an area of success first
• Teach student how to handle situation before putting them in it

Strategies from autism-world.com

1. Environmental Considerations

Visual and auditory stimulation in the classroom must be taken into consideration.

Many students with autism are sensitive to auditory input and have a more difficult time processing auditory stimulation. Their work stations should be placed away from excessive auditory stimulation and away from unnecessary movement.

2. Visual Schedules

Students with autism perform best when their daily routine is predictable, with clear expectations. Establishing and following a visual schedule eliminates the unexpected and assists students in anticipating and preparing for transitions. Schedules must be visual and kept in the same location at all times. For pre-readers, an object schedule can be used. A tangible object that is related to the class or activity it represents is attached to an icon and the printed word. Other students are able to follow an icon schedule and strong readers can use a printed schedule.

A “check schedule” transition cue is then given to the student each time he is to transition to a new activity or class.

3. Visual Structure

The environment needs to be structured visually to help the student clearly see and understand what is expected of him. Work stations must be clearly defined. Some students will need three-sided work stations, while others will be able to work in more open areas. Taped outlines on the floor, chairs labeled with the student’s name or using furniture to reduce visual and auditory stimulation are examples of environmental considerations. Work stations also need to be structured. Activities should be designed with strong visual cues so less auditory directions are needed. Each station also needs to clearly show what needs to be done, how much needs to be done, when the student will be finished, and what’s next.

4. Alternatives to Verbal Communication

Many students with autism have impairments in communication, particularly expressive communication. For those who are non-verbal, an augmentative communication system must be in place. The Picture Exchange Communication System (PECS has been very effective. Voice output communication devices may be very appropriate. For those students who do have verbal communication skills, many benefit from having some form of augmentative communication available as a back-up system for times when expressive communication may fail them. It is very common for students to be unable to access verbal communication when in a stressful emotional state. Having a back-up visual form of communication can assist with expression and reduce aggressive behaviors.

5. Direct Instruction of Social Skills

The majority of students with autism need direct instruction in social skills. Most do not learn interaction skills by simply being placed in social environments. They need to learn social interaction skills in the same way they learn other academic skills. Using strong visual structure, activities can be designed to teach about identifying emotions in self and others, situations that can cause certain emotions, and how to respond in certain social situations. Social stories have been found to be very useful. They are short stories written about specific social situations that briefly describe a social situation, how others may respond in this situation, and how the student should respond.
6. Literacy Instruction

Because many students with autism rely on some form of augmentative communication, even if it is only a backup, literacy instruction is very important. If a student is literate, s/he will be able to communicate at a much higher level than if the child is forced to depend on communications devices that are programmed with limited vocabulary. Literacy instruction should begin at a very early age and continue throughout all school years.

7. Consistency

All students do best when the daily program remains consistent with clear expectations. All staff working with students with autism need to be well-trained and must implement the daily program as consistently as possible.

8. Sensory Opportunities

Most students with autism have some sensory needs. Many find deep pressure very relaxing. Others need frequent opportunities for movement. All students should have a sensory profile completed by an occupational therapist or other professional trained in sensory integration. Based on the profile, a sensory “diet” can be created and implemented throughout the day.

9. Functional Curriculum

Children with autism have a great deal of potential to live and work independently as adults. The curriculum should place a strong emphasis on following a functional curriculum. Skills that emphasize daily living skills, community skills, recreation and leisure and employment need to be incorporated into the curriculum. Students in inclusive settings can follow the regular curriculum, but emphasis should be placed on those skills that are the most functional. Functional academics should always include literacy (reading and writing, basic math, time and money skills. Self-care skills, domestics, recreation and community experiences should also be emphasized. Older students should have formal employment opportunities beginning in middle school.

10. Take advantage of student strengths and interests

Many students with autism have particular strengths and interests and these should be taken advantage of in the classroom. For example, if a student demonstrates an interest in trains, the student should have opportunities to read about trains, write about trains, do math problems about trains, etc.


**Definition of Autism Spectrum Disorder**

The APA recommends that in order to be diagnosed with autism spectrum disorder, the individual must meet the following three criteria:

1. Clinically significant, persistent deficits in social communication and interactions, as manifest by all of the following:
   - A. Marked deficits in nonverbal and verbal communication used for social interaction;
   - B. Lack of social reciprocity [give-and-take];
   - C. Failure to develop and maintain peer relationships appropriate to developmental level

2. Restricted, repetitive patterns of behavior, interests, and activities, as manifested by at least TWO of the following:
   - A. Stereotyped motor verbal behaviors, or unusual sensory behaviors
   - B. Excessive adherence to routines and ritualized patterns of behaviors
   - C. Restricted, fixated interests

3. Symptoms must be present in early childhood (but may not become fully manifest until social demands exceed limited capacities) (American Psychiatric Association: DSM-V Development, 2010)

   - Autism: extreme social withdrawal and impairment in communication; often includes stereotyped movements, resistance to change, and unusual responses to sensory experiences; usually manifests before 3 years of age.
   - Asperger syndrome (or Asperger disorder): much like mild autism, but without significant impairments in cognition and language
   - Childhood disintegrative disorder: normal development for at least 2 and up to 10 years, followed by significant loss of skills; much more prevalent in males
   - Pervasive developmental disorder not otherwise specified (PDD-NOS): persons who display behaviors typical of autism but to a lesser degree and/or with an onset later than 3 years of age

**The reported increase in Autism Spectrum Disorder diagnoses:**

1. A widening criteria used to diagnose autism, including the recognition of milder forms such as Asperger syndrome
2. A greater awareness of autism in the general public as well as the medical, psychological, and educational professions
   3. “Diagnostic Substitution,” the phenomenon of persons now being identified as having an autism spectrum disorder who previously would have been diagnosed as mentally retarded (intellectually disabled) or as having developmental language disorders

**Facts about Autism**
• Prevalence rate for Autism Spectrum Disorders: 1 in 110 (Centers for Disease Control and Prevention, 2009) (p.237)
• Prevalence is 4 times higher for boys than girls and higher for the European American population than it is for Latinos or African Americans (p.237)
• The MMR (mumps, measles, rubella) vaccine has been linked with the onset of autism, but “the evidence favors rejection of a causal relationship between MMR vaccine and autism” (p.239) Most likely explanation is that children receive the MMR vaccine at around the age of 2 which is when the earliest signs of autism are usually noticed.
• Many authorities now think that autism is better conceived as a disorder of neural networks rather than as being due to an abnormality in one specific part of the brain. In addition, research suggests that the brain cells of individuals with autism exhibit deficient connectivity that disrupts the cells’ ability to communicate with each other (p.240).
• Even if they aren’t diagnosed as autistic, family members of those with autism are more likely to exhibit autistic-like characteristics at a sub clinical level, such as a lack of close friends, a preoccupation with narrow interests, and a preference for routines (p. 241).

**Early Signs of Autism (p. 242)**

• 6 Months
  o No big smiles or other warm, joyful expressions
• 9 Months
  o No back-and-forth sharing of sounds, smiles, or other facial expressions
• 12 Months
  o No consistent response to own name
  o No babbling
  o No back-and-forth gestures, such as pointing, showing, reaching, waving, or three pronged gaze (e.g. child looks at adult, looks at toy to indicate interest in it, looks back at adult to communicate something about the toy)
• 16 Months
  o No words
• 24 Months
  o No two-word meaningful phrases (without imitating or repeating)
  o Any loss of speech or babbling or social skills at any age

**Psychological and Behavioral Characteristics (p. 243)**

• Impaired Social Interaction- babies or toddlers with autism don’t respond normally to being picked up or cuddled and do not show a differential response to different people.
• Impaired Communication- most children with autism lack communicative intent, or the desire to communicate for social purposes.
• Repetetive and Stereotyped Patterns of Behavior-