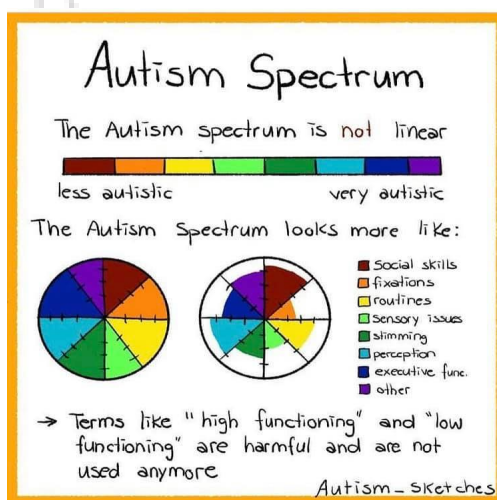**Informative Module Series**

Edition 3: Understanding Autism Spectrum Disorder; Making classrooms more ASD friendly

Introduction:

Autism Spectrum Disorder (ASD) is a developmental disability caused by differences in the brain. It affects how individuals behave, communicate, interact, and learn. The abilities of people with ASD can vary significantly, with some individuals having advanced conversation skills and others being nonverbal. Some people with ASD need a lot of help in their daily lives; others can work and live with little to no support.

Understanding the autism spectrum and making classrooms more ASD-friendly is crucial for creating an inclusive and supportive learning environment.

Understanding the Autism Spectrum:

ASD is a complex disorder, and the autism spectrum is not linear. People with autism can exhibit a range of symptoms at varying intensity levels. Scientists believe that ASD has multiple causes, including genetic factors, that interact with and influence the developmental differences observed in individuals with ASD.

Autism Spectrum

The Autism spectrum is not linear

less autistic   very autistic

The Autism Spectrum looks more like:

- Social skills
- fixations
- routines
- Sensory issues
- stimming
- perception
- executive func.
- other

→ Terms like "high functioning" and "low functioning" are harmful and are not used anymore

Autism_sketches

ASD in School-Age Children:

ASD typically manifests before the age of 3 and may persist throughout a person's life. However, symptoms can improve over time. Some children show signs of ASD within the first year, while in others, symptoms may not become apparent until the age of 2 or later.

Children with ASD may face difficulties in social interactions, communication, and understanding expected behaviours in school.

Signs and Symptoms of ASD in Secondary School:

Recognizing the signs and symptoms of ASD is crucial for educators. While individuals with ASD can exhibit various behaviours, the following are some common examples:

- Restrictive/repetitive behaviours:
- Repetition of words or phrases (echolalia).
- Intense interest in specific topics or details.
- Overly focused interest in objects or parts of objects.
- Discomfort with changes in routine or transitions.
- Sensitivity or lack of sensitivity to sensory input.
- Sleep problems and irritability.

Teaching Strategies for ASD-Friendly Classrooms:

Creating an ASD-friendly classroom environment is crucial for supporting the learning and development of students with ASD. Here are some effective teaching strategies:

1. Establish a structured environment:

Implement predictable routines and visual schedules to provide stability: According to the Autism Society, visual schedules can reduce anxiety and increase predictability, helping students with ASD navigate their day more effectively and independently[1]. Visual supports, such as visual timers or countdowns, can also aid in transitions between activities [2].

Use charts and diagrams: Visual aids provide concrete representations of information and support comprehension for students with ASD. Incorporating visual supports,

such as <u>graphic organizers or visual schedules</u>, can enhance understanding and organization [3].

Make visual supports portable, durable, easy to find, personalised and consistent.

1. Portable:
   a. using a visual supports app on the person's tablet
   b. storing photos and pictures on the person's smartphone
   c. putting symbols, pictures and schedules in a folder for the person to carry with them.
2. Durable:
   a. Laminate all printed visual supports
   b. Back up any app, photos and pictures you use on a smartphone, tablet or computer.
3. Easy to find:
   a. Placing them in prominent places at eye level
   b. Distributing them throughout particular environments, eg objects and areas in the classroom and at home could be labelled
   c. Putting a shortcut to them from a tablet home screen
   d. Attaching symbols to boards so that people know where to go to look at them.
   e. Using Velcro strips to attach symbols to a board, meaning schedules can be easily altered, eg activities removed once completed.

4. Personalised:
   a. Visual supports are very personal and what works for one person may not work for another. Use the person's special interest, eg make a visual timetable in the shape of a rocket.
   b. It can sometimes be helpful to use more than one type of visual support, but always introduce visual supports gradually. Start with one symbol and then build up a collection.

5. Consistent:
   a. If using pictures, once you choose a type or style (for example, line drawings), use it consistently. Ask family members, friends, teachers or support workers to use the same visual supports consistently.

Example of a graphic organiser:

Example of a visual aid for a morning routine:

2. Utilize individualized teaching approaches:

Tailor instruction to meet the specific needs and strengths of each student: Individualized education plans (IEPs) play a crucial role in supporting students with ASD. Personalizing teaching methods and materials based on students' individual learning profiles and preferences can enhance engagement and learning outcomes [4].

Differentiated instruction allows for the inclusion of various learning modalities, such as visual, auditory, or hands-on approaches, to cater to diverse needs [5].

Some tools to create IEPs are linked here-
https://adayinourshoes.com/autism-iep/
https://juiceboxcreative-autismwa.s3.ap-southeast-2.amazonaws.com/wp-content/uploads/2016/11/22140049/Example-Individual-Education-Plan.pdf

3. Use clear and concise language:
Students with ASD often benefit from concise and explicit language. According to the National Autistic Society, clear and direct instructions, avoiding idioms or abstract language, can support comprehension and task completion [6]. Providing visual prompts or visual cues alongside verbal instructions can reinforce understanding [7].

Break down tasks into <u>smaller, manageable, and sequential steps</u>: Researchers recommend using task analysis, which involves breaking down tasks into specific steps and teaching each step sequentially [8].

Tips for communication:

1. Be specific and to-the-point.
   a. Just <u>use keyword</u>s to avoid an overload of information.
   b. Avoid using any unnecessary language that may get lost in the communication message such as "(name) can you please sit on your chair now". Instead, say "(name) sit".
2. Be literal and obvious in your choice of language.
   <u>Always say what you mean.</u>
   - For example: rather than "don't run" – say "walk".
     In this example, the child may just process the word "run" and the communication message becomes meaningless.

3. Be as concrete as possible in your use of language:

Ensure any abstract language and concepts are supported visually to help with understanding.

4. Emphasise keywords of your communication message with sign language and/or visual support:
   a. Especially for children with additional learning difficulties, this can give the child extra cues to what you mean.
   b. The region you live in will determine the common signs used in that area and a Speech and Language Therapist (SaLT/SLP) should be able to teach you or point you in the right direction of which signs are used in your location.
   c. If you do not have access to a SaLT/SLP, there is a lot of information online.

5. Avoid using any language that has a different meaning, such as sarcasm and idioms:
   a. This may be interpreted very literally or not understood at all.
   b. If you are teaching these concepts, ensure the meaning is fully explained in a way the child can understand.

4. Encourage peer interactions and cooperative learning activities:
Social interaction opportunities within the classroom can promote social skills development for students with ASD. Research suggests that structured peer interactions and cooperative learning activities can enhance social communication, joint attention, and collaboration skills [9].
Implementing group projects, peer tutoring, or structured play activities can facilitate social engagement and build relationships with peers [10].

Teach and model appropriate social skills, such as turn-taking and active listening:
1. Explicitly teaching social skills is crucial for students with ASD.
2. Researchers recommend using evidence-based social skills interventions, such as Social Stories or Social Thinking programs, to teach and reinforce social skills [11].

3. Modelling desired behaviours, providing real-life examples, and incorporating role-playing activities can support the generalization of social skills across contexts [12].
4. Implement visual supports, such as social stories or visual cues, to facilitate understanding: Social stories, visual schedules, and visual cues can assist students with ASD in understanding social expectations and navigating social situations [13].
5. Visual supports provide concrete and visual representations of social concepts, helping students interpret and respond appropriately to social cues [14].

5. Incorporate sensory considerations:

1. Create a sensory-friendly environment by minimizing distractions: Sensory sensitivities are common in individuals with ASD. Teachers can create a sensory-friendly classroom environment by minimizing visual and auditory distractions.
   For instance,
   a. organizing materials in labelled containers,
   b. reducing clutter,
   c. using soft lighting can help create a calm and focused learning environment [15].

2. Provide sensory breaks if needed: Some students with ASD may benefit from sensory breaks to regulate sensory input and maintain focus.
   Sensory breaks involve providing opportunities for students to engage in calming or sensory activities, such as
   a. stretching,
   b. deep breathing exercises,
   c. using sensory tools like stress balls or fidget toys [16].
   These breaks can help students self-regulate and manage sensory sensitivities, leading to improved attention and engagement in classroom activities [17].

E. Collaborate with support professionals:

Work closely with special education teachers, therapists, and other support staff: Collaboration with professionals who specialize in supporting students with ASD is crucial. Special education teachers, speech therapists, occupational therapists, and other support professionals can provide valuable insights, strategies, and interventions to support students with ASD. Regular communication, sharing of information, and collaboration in developing and implementing IEPs and behavior support plans help ensure consistent support across different settings.

For more information and specific teaching strategies, you can refer to the following resources:

- "Teaching Methods for Children with Autism" by Vikaspedia: https://vikaspedia.in/education/education-best-practices/teaching-methods-childrens-with-autism
- 6 Tips for Teaching Students with Autism" by Teach For America: https://www.teachforamerica.org/stories/6-tips-for-teaching-students-with-autism

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