

ADHD and ASD in the Classroom

University of Mary

Morgan Pandolfo

Attention Deficit Hyperactivity Disorder and Autism Spectrum Disorder are common occurrences in today's special education classroom. In order to best help teach students with these disabilities, special educators should take it upon themselves to learn what these disabilities are, what each one looks like, and how to best help students succeed, despite their disability in and outside the classroom.

According to Daley and Birchwood (2009), ADHD is a “developmental, neurobiological condition defined by the presence of sever and pervasive symptoms of inattention, hyperactivity and impulsivity. (p.455)” In order to be diagnosed, a child must show these symptoms for at least 6 months and before the age of seven. ADHD is mostly recognized at the elementary grade level, but has begun to present itself before kindergarten. The comorbidity of ADHD and other behavioral and emotional conditions is quite apparent. 30-50% of students with ADHD show symptoms of oppositional defiant disorder (ODD) and conduct disorder (OD). 20-30% show signs of anxiety, and 11-22% present symptoms of bipolar disorder. Students with ADHD have also shown comorbidity with learning disabilities especially in language arts and mathematics. Biologically, an MRI of a student's brain with ADHD may show a smaller prefrontal cortex and because the prefrontal cortex is responsible for executive functions such as memory and response inhibition, it is logical that a student with ADHD experiences deficits in these areas (2009). In total, ADHD affects about 5% of children (Sayal, Mills, White, Merrel, Tymms, 2014).

Autism Spectrum Disorder, formerly known as Autism, is collective term for high and low functioning autism, Asperger's syndrome, and pervasive developmental disorder not otherwise specified. According to Sansosti and Sansosti (2012), individuals with ASD have “significant difficulties in social interactions and unusual patterns of interests or behaviors.” These students, especially high functioning, are more than capable of general academic tasks but

often struggle because of social behavior issues. Often times, students become emotionally uncontrollable when experiencing change or stressors that lead to tantrums and aggressive behavior. Because of unstable emotions, students with ASD have a great chance of becoming secluded by classmates. Around one in 88 children are diagnosed with ASD and the number of special education services needed is on the rise (2012).

ADHD greatly affects a student's productivity in the classroom setting. Everyday examples of the behavior resulting from these deficits include poor listening skills, excessive talking, inability to take turns, and interruptive in social situations (Daley and Birchwood, 2009). A student with ADHD often shows hyperactive, impulsive behaviors such as fidgeting with pencils, clothing, or his or her neighbor. Other common behaviors include inattention, aggression towards peers, disruptive behaviors such as talking out of turn, not listening to the teacher, not looking at the teacher when he or she is speaking, and poor memory, organization, and planning skills. Early intervention is crucial for students who may develop ADHD because at the preschool level, important social skills are emphasized which are important for success in grade school. A child with ADHD is unable to properly learn these skills when he or she is inattentive, hyperactive, and disruptive. Not only are social skills introduced at the preschool level, but emergent academic skills such as literacy and basic math computations as well. A Child with ADHD in preschool basically "misses out" on core skills because of the inability to focus and organize thought processes. This is why special education is so important; students with ADHD often receive "remedial services" and special education because of the lack of base skills taught at the preschool and kindergarten levels (2009).

ASD, unlike ADHD, deals more with emotional management and coping with change. Students with Autism may only need special education services for emotional management

instead of academic help. It is when emotions prohibit learning that a child with ASD will need special education within academia. Autism Spectrum Disorder presents itself in young children through poor social skills, lack of smooth transitioning from one activity to another, difficulty coping with change and processing information about their environment. Students will also display repetitive behaviors, activities, and interests (Deris and Di Carlo, 2013).

Daley and Birchwood (2009) state that academic interventions are the most successful when helping students with ADHD in the classroom. These interventions must be based on discrepancies in executive functioning, which are skills such as planning and response inhibition as well as working memory, and inattention. Unfortunately, medication is often the most used method of treating ADHD symptoms. Statistically, 36% of children with ADHD are prescribed medication (Sayal et al. 2014). Medication does alleviate disruptive behaviors, but at the same time, it can over stimulate a student's brain giving off a negative effect that presents itself as sleepiness and disinterest. Besides medication, peer tutoring has been effective when students with ADHD are placed in a large classroom and have difficulty paying attention (Daley and Birchwood, 2009). The peer tutor offers one-on-one instruction at the pace of the student with ADHD. Also, parent tutoring has shown success in strengthening reading. Just like many other learning disabilities, students with ADHD can benefit from modifications. Simple adjustments include shortening the length of assignments, dividing tasks into units, giving direct instruction, and changing the delivery of instruction to however that student learns best. Another useful method is self-monitoring. The student sets his or her own goals on homework or in-class work and rewards him or herself based on the completion of that task. A very simple but effective method to help students with ADHD stay focused is to have a stretchy band attached to underneath their desk for a quick way to release extra energy. From the teacher perspective,

educators must have a positive attitude towards individuals with ADHD in order to best help them. Patience, skilled intervention techniques, willingness to collaborate, and using hand gestures to communicate are crucial to successful teaching students with ADHD (2009).

Deris and Di Carlo (2013) offer many recommendations for assisting students with ASD. The authors discussed two basic categories: classroom modifications and teaching tips. Because students with ASD often get distracted and miss important information such as classroom procedures and rules, teacher should post rules and procedures around the classroom and by using pictures instead of words to exemplify the procedure or rule works better for students with ASD because often times they are lacking verbal skills. Students with ASD often become easily agitated or overwhelmed with their environment so establishing a “quiet area” for students to calm down and escape a stressful situation is crucial. Another aspect of ASD that can set off a trigger for a child is sensory experiences. An example of this would be noise level and one way to combat the negative experience would be to learn about a child’s triggers prior to school and observe the child’s behavior within the first few days of class. As mentioned before, transitioning between classroom and school activities can be a stressful time for students with ASD. Using physical markings such as colored tape on the carpet where students should line up, for example, can ease the transition to outside the classroom activities. Another method of easing transitions is having predictable schedules and routines and warning students about upcoming changes in schedules. Many teachers also integrate sensory walls that include the sensory systems, auditory, touch, movement, visual, and proprioceptive, or “information from muscles and joints (2013).”

When teaching a child with ASD a few considerations a teacher should make when adjusting his or her instruction is to keep all worksheets and handout work in either a top-to-bottom or left-to-right format to make material more clearly able to follow (Deris and Di Carlo,

2013). Teachers should also engage as many sensory systems as possible by verbally giving instructions and using pictures to give instructions. Using specific books, toys, or videos that students find enjoyable also helps students stay focused. Deris and Di Carlo (2013) stated in their article that the Premack Principle is an extremely effective teaching technique for students with ASD. The Premack Principle is based on the “if this then that” method. For example, the teacher may say, “If you finish your reading assignment, you may play with Legos.”

Assessment is an integral part of education today. Progress can be determined through assessing a student’s academic ability, but it can also come from observation. For students with Autism, observing social interaction both within and outside the classroom is a good method of determining the success of interventions. For ADHD, academic assessments will show the progress of a student’s intervention for academia, but not the behavioral aspect that observation will show.

As a special education teacher, I know I will see both of these conditions within my classroom. Applying what I have learned through researching these disabilities will benefit my future as a special educator greatly. I owe it to my students to be well educated and trained in whatever disability that could possibly hinder their learning and work from strengths-based perspective to help my students reach their full potential.

References

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