A Brief Guide on Autism for Educators: Information for Educators of School-Age Children



What is autism?

Autism is a developmental disability that impacts social-communication skills and involves the presence of repetitive movements, actions, or language patterns. Autism is a "spectrum disorder," meaning that there is a range of impact across a variety (i.e., spectrum) of characteristics. This also means there is a variety of how these characteristics are presented across individuals. An autistic student will have strengths in some areas but may need support in others. This is why we need to always presume competence in our learners, because they are all capable of learning and understanding regardless of their presentation. What these strengths and areas of support look like are unique to that individual, which is why you may have heard the adage "When you've met one person with autism, you have met *one* person with autism."

Although there is variety in how autism looks, all autistic people share the same two characteristics. According to the Diagnostic and Statistical Manual – 5th Edition (DSM-5), a person may receive an autism diagnosis when the following criteria are met:

- Persistent difficulties with social-emotional reciprocity, reading non-vocal cues, and maintaining relationships.
- Demonstrate repetitive movements, prefer reliability/routines, have highly focused interests, and/or have different reactions to sensory input.

Many different traits can manifest within each of these areas. Therefore, two children with the same diagnosis can have different abilities and behave in very different ways.



VANDERBILT KENNEDY CENTER

Treatment and Research Institute for Autism Spectrum Disorders The range of autistic characteristics is broad. Within the language and communication area, some children are non-vocal, some speak in single words or short phrases, while others are fluent in vocal communication. Children's socialization styles may differ as well. Some children have minimal social interest and prefer to spend much of their time alone, while others are interested in being social and prefer interacting with their peers but may have difficulty initiating and/or maintaining conversations.

Children can also have a wide range of interests and repetitive behaviors. Some children may demonstrate repetitive vocal sounds or body movements as a form of self-regulation. Children may also show a strong preference for certain routines; therefore, they need extra support for transitions or changes in their environment. Autistic people can also be passionate about a variety of interests, ranging from popular topics (e.g., television shows, superheroes, etc.) to more unique areas (e.g., logos, street signs, etc.).

Because autism can look different across individuals, it is important that the support we provide autistic students is tailored to their individualized needs. Using autistic students' strengths to help them grow in areas where they need help is a great way to empower autistic learners.

How common is autism?

1 in 31

8-year-old children identified with ASD in 2025

*Based on tracking within 11 communities in the United States

The Center for Disease Control and Prevention created the Autism and Developmental Disabilities Monitoring (ADDM) Network to "track the number and characteristics of children with autism spectrum disorder (ASD) and other developmental disabilities in diverse communities throughout the United States ("Community Report on Autism 2023," 2023)." In the most recent report published in 2020, the ADDM Network found that one in 36 eightyear-old children were identified with autism, or 2.8%. This number is the same as the percentage identified in the Tennessee-specific ADDM Network monitoring. Nationally, boys were nearly four times as likely to be identified as girls.

What strengths may autistic learners bring to the classroom?

It is important to appreciate that autistic students have a variety of skills. Like anyone, they possess many strengths and talents that vary by individual. Some learners may be precise and detail-oriented while others may have advanced vocabularies. Additionally, some students may have a high level of interest or skill in a specific area. Others may think and learn better in a visual way.

Common strengths autistic learners may bring to the classroom		
Strong visual learners	Often times autistic students respond better to visual input rather than hearing verbal instructions. This can include materials like written words, pictures, or photographs.	
High attention to detail	Autistic students do well with concrete literal information. Making abstract concepts more concrete by breaking them down into smaller steps or into black-and-white observable behavior will help students learn how to accomplish larger tasks.	
Motivated when topics and activities are of interest	Incorporating a student's interest into the activity or lesson is a great way to get them involved. This gives them an outlet to contribute their knowledge on the topic and and gives educators a framework on what is motivating to their students.	
Strength in repetition and consistency	and Making the expectations clear and allowing for repeated practice will help	
Offer new perspectives	All autistic learners bring unique and important perspectives to situations that should be valued within a community.	

What are evidence-based practices for teaching autistic learners?

Interventions are considered evidence-based practices when there is scientific evidence to support their claims. Evidence-based practices must be selected for implementation based on sound professional judgment, coupled with careful review of available data, input from individuals and family members, and an honest evaluation of the educators' capacity to implement the interventions accurately. The National Clearinghouse on Autism Evidence and Practice Review Team identified and published a list of 28 evidence-based practices that have positive effects with autistic children and youth. Panels of experts reviewed 31,779 research abstracts and 972 research studies in which practices were tested with autistic individuals under 22 years of age. The panelists checked the quality of studies and evaluated the effects of the interventions (Steinbrenner et. al, 2020).

Interventions identified for autistic students:

Antecedent-based interventions	Naturalistic intervention
Ayres Sensory Integrationn	Parent-implemented intervention
Augmentative and alternative communication	Peer-based instruction and intervention
Behavioral momentum intervention	Prompting
Cognitive behavioral instructional strategies	Reinforcement
Differential reinforcement of alternative, incompatible, or other behavior	Response interruption and redirection
Direct instruction	Self-management
Discrete trial training	Social narratives
Exercise and movement	Social skills training
Extinction	Task analysis
Functional behavior assessment	Technology-aided instruction and intervention
Functional communication training	Time delay
Modeling	Video modeling
Music-mediated intervention	Visual supports

Educators or other service providers can use the evidence-based practices listed above when designing instructional programs or intervention programs to promote positive outcomes for autistic learners. To be most effective, interventions chosen for autistic learners should be strengths-based, naturalistic, and individualized to the learner (Schuck et al., 2021).

How can I promote engagement and inclusion of autistic learners in schools?

School staff can ensure that autistic learners are engaged, valued members of any learning environment with planful preparation. The following strategies lay groundwork that provides clear expectations and meaningful learning opportunities.

Strategies for clear expectations and meaningful learning		
Make abstract concepts concrete	Consider procedures, rules, routines, staff-student or student-student interactions, or activities or subject areas where expectations for student behavior may be abstract. Find ways to describe, model, or illustrate for all learners, including autistic learners, what success looks like, feels like, and sounds like. Autistic learners may struggle with abstract language or figurative language, so being descriptive while also being clear and concise is important. For example, rather than telling students that a behavior expectation is to be respectful, define what respectful behavior is. "Students, we show respect during work time by staying in our assigned area, completing our work quietly, and raising our hands and waiting for the teacher to help us if we get stuck."	
Make verbal cues visual	Think about instructions or reminders that you provide to students frequently (e.g., turn your work in here, voices off, keep your hands in your lap, line up quietly). Create visual supports to communicate that information with students in a way that they will understand (e.g., a photograph of students demonstrating the desired behavior, a drawing or sketch to remind them of the desired behavior, a written list describing the steps to show the desired behavior). Teach the students what the visual means and have it available in the place the students need to demonstrate the behavior so that students can reference it.	
Create a structured environment	Define boundaries between student spaces and teacher spaces. Have a clear structure around where and how materials are stored and accessed. Reduce visual clutter when possible, ensuring that posters and materials visible to students are referenced or used frequently.	
Find ways to increase predictability	Help students understand what to expect throughout the school day, class, or activity by providing them with schedules showing the classes, activities, or subjects that will occur throughout the day. When a special event is going to occur, such as a field trip, assembly, or guest speaker, prepare the students in advance and answer any questions they may have.	
Promote consistency	Having a consistent schedule, consistent routines for arrival, dismissal, lunch, and changing classes, and consistent behavioral expectations provides autistic learners with structure and reassurance about how to successfully participate throughout the school day. Increased consistency during most school days can help students better cope with unavoidable, unexpected events, like fire drills or substitute teachers.	
Collaborate with caregivers	Talk with caregivers before the school year begins to understand the student's strengths, interests, and areas of need. Create a plan to communicate with caregivers regularly about the student's progress, growth, and areas of need. Having open lines of communication allows educators and caregivers to collaborate to celebrate successes and solve problems.	



What is neurodiversity?

Neurodiversity is the idea that neurological differences are natural and should be celebrated as an accepted part of human variation, just like variations in size, shape, and personality. Every person is unique and valuable. It focuses on brain differences being recognized and embraced rather than focusing on treating and curing "deficits" or traits that differ from the neuromajority. The neurodiversity movement helps autistic and other neurodivergent individuals be seen in terms of their strengths as well as their needs. This concept helps reduce stigma around differences in learning and thinking and allows individuals to be active in their communities.

We must always continue learning from disabled and neurodivergent individuals and remember to listen to their perspectives when making decisions or policies intended to support and

From a neurodiversity perspective, interventions should be:

Provided in a respectful manner This includes meeting the child where they are developmentally, being patient with their rate of progression, and incorporating their preferences into intervention.

Gamma Focused on teaching useful skills

Instructors should identify skills and goals to help the individual function in environments that are important and meaningful in their day-to-day life.

□ Aimed to improve subjective quality of life

This is measured by using personal goal outcomes outlined by the autistic student and continuously amending these goals to match their wants and needs.

benefit them. As the common saying within the disability community goes, "nothing *about* us *without* us."

What resources are available for me to learn more about autism?

□ TRIAD Resources

TRIAD Is a proud member of the Tennessee Technical Assistance Network (TN-TAN) through the Tennessee Department of Education. Through this network, we provide interactive training and consultation for administrators, teachers, paraeducators, school psychologists, and other professionals serving Tennessee students, including autistic students, in K-12 school settings. Email triad.doe@vumc.org with any questions. triad.vumc.org/schools

TRIAD offers Brief Online Training Sessions (BOTS) and archived webinars to provide information about evidence-based practices for individuals with autism. Check our online learning portal to access these free trainings and resources. triad.vkclearning.org

TRIAD offers live webinars that engage participants in interactive learning opportunities through live video training. Our webinars include topics that enhance professional knowledge in serving autistic students in the K-12 setting.

triad.vumc.org/livewebinars

Vanderbilt Autism Resource Line

A single helpline to make it easier for families and professionals to find information about autism-related clinical, research, and outreach services at Vanderbilt University and Vanderbilt University Medical Center. The helpline serves families, caregivers, clinicians, educators, and others in need of autismrelated resources at Vanderbilt. Local: (615) 322-7565 or toll-free: (877) 273-8862 E-mail: autismresources@vumc.org

Other Resources

National Autism Center's 'An Educator's Manual to Evidence-based Practice and Autism,' 2nd Edition: <u>nationalautismcenter.</u> <u>org/resources/for-educators/</u>

2020 EBP Report from the National Clearinghouse on Autism Evidence and Practice <u>ncaep.fpg.unc.edu/research-</u> <u>resources</u>

References

Center for Disease Control and Prevention (2023). *Community Report on Autism 2023*. Autism and Developmental Disabilities Monitoring (ADDM) Network. Retrieved August 3, 2023, from www.cdc.gov/autism/media/pdfs/2025/04/ ADDM-Community-Report-SY2022.pdf

Schuck, R.K., Tagavi, D.M., Baiden, K.M.P. et al. Neurodiversity and Autism Intervention: Reconciling Perspectives Through a Naturalistic Developmental Behavioral Intervention Framework. *J Autism Dev Disord* (2021). doi.org/10.1007/s10803-021-05316-x

Steinbrenner, J. R., Hume, K., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., Szendrey, S., McIntyre, N. S., Yücesoy-Özkan, S., & Savage, M. N. (2020). *Evidence-based practices for children, youth, and young adults with autism*. The University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, National Clearinghouse on Autism Evidence and Practice Review Team.

This resource was developed by TRIAD consultants and was made available at no cost through the Tennessee Department of Education, Tennessee Technical Assistance Network. <u>Triad.vumc.</u> <u>org/schools</u>. Cover image by Freepik. 2023