

GENERAL EDUCATION AND SPECIAL AREA TEACHERS



Autism Basics

What does autism look like?

Autism is a term commonly used for a group of neuro-developmental disorders also known as Pervasive Developmental Disorders (PDD) or Autism Spectrum Disorders (ASD). The core symptoms of autism are challenges related to:

- **communication**
- **social interaction**
- **restrictive or repetitive behaviors and interests**

Individuals with autism can also experience other difficulties, including medical issues, differences in coordination and muscle tone, sleep disturbances, altered eating habits, anxiety or disordered sensory perceptions. The features, abilities and severity of symptoms vary considerably among individuals with autism.

These differences may also present as exceptional abilities, and autism can occur with or without other learning challenges. It is important to think of each individual with autism as intelligent, even if language or behavioral difficulties might not reveal abilities in the way one might expect. A student with autism may display some or all of the following characteristics, which may represent challenges from a certain perspective, or strengths from another (e.g. a student who appears inflexible or rigid may also be the most compliant with the rules of a classroom):

- Difficulty understanding language, gestures and/or social cues
- Limited or no speech, or verbalizations that repeat or maintain a particular topic
- Limited or no eye contact
- Difficulty relating or participating in a back-and-forth conversation or interaction
- Social awkwardness
- Intense or odd interests in unusual topics or objects, unusual play
- Repetitive behaviors, such as pacing or lining things up, spinning, hand flapping, or rocking
- More or less sensitivity to light, sound, smell, taste or touch than usual
- Abnormal fears and/or lack of appropriate fear of real dangers
- Difficulty managing transitions, changes in routine, stress, frustration
- Strong visual skills
- Good rote and long term memory (math facts, sports statistics, etc.)
- Adherence to rules, Honesty
- Intense concentration or focus, especially on a preferred activity
- Understanding and retention of concrete concepts, patterns, rules
- Musical, mathematical, technological or artistic ability or interest



Where does it come from?

There is no known cause of most cases of autism, though the best scientific evidence points toward a combination of genetic and environmental influences. Autism is a neurological/biological disorder, not a psychological/emotional condition.

Autism is found in all social, racial and ethnic groups, and is 3-4 times more prevalent in boys than in girls. Autism occurs in 1 out of 150 children, up from 1 in 10,000 in 1980.

What do I need to keep in mind?

- Individuals with autism can learn and many make dramatic improvements, especially with early and intensive intervention
- Communication challenges can encompass a broad range, both in terms of understanding and speaking (understanding gestures or spoken language, delays in processing, inability to form sounds or full sentences, word retrieval difficulties, misunderstanding idioms or sarcasm, timing of body movements or conversational exchanges, remaining on topic, etc.)
- Many people with autism are visual learners, or have attention difficulties that make visual supports essential
- Most are concrete thinkers and literally interpret jokes, idioms or sarcasm
- Social skills are underdeveloped, but interest in friendships and social interaction is often present
- Anxiety and frustration are common
- *Each student* is an individual - with a distinct set of likes and dislikes, strengths and challenges, and a unique personality

How can I make a difference?

- Be welcoming and supportive. Meet the student where he is and learn from him. Respect the individual. *Please* do not talk about him in his presence.
- Set clear expectations and boundaries. Be consistent. Develop structure. Practice and provide repetition to build understanding and skills.
- Recognize that behavior IS communication.
- Develop strategies to compensate for or overcome challenges—offer preferred seating, additional response time, organizational supports (written schedules, lists, labels, etc.), visual information paired with verbal directions, etc.
- Be aware of the student's sensory needs, and adjust supports and expectations as appropriate. Avoid or prepare for known triggers, such as fire alarms. Give breaks for self-regulation.
- Expect growth and keep standards high, with small steps and supports to allow the student to exhibit success. Promote age appropriate interests, behavior, independence and life skills.
- Reward what you want to see utilizing positive reinforcement strategies. Use the student's interests to engage and motivate him.



- Educate peers and promote acceptance and understanding. Support social development with role playing, modeling, rewards. Include with typical peers.
- Communicate among team members, including parents. Ask questions, share what works and problem-solve what does not. Keep learning. Be creative.
- Assume intelligence, teach competence, promote independence and be respectful.
- Relax, have fun, celebrate successes and treasure the individual!



Asperger's Syndrome Basics

What does Asperger's Syndrome look like?

Asperger's Syndrome, sometimes viewed as a high functioning form of autism, is a neuro-developmental condition that is one of the Pervasive Developmental Disorders (PDD) or Autism Spectrum Disorders (ASD). The core symptoms of Asperger's Syndrome are challenges related to:

- **social interaction**
- **restrictive or repetitive behaviors and interests**
- **but not delays in language development or intellectual ability**

Individuals with Asperger's have average or higher intelligence, with many exhibiting exceptional skills, knowledge or abilities. Individuals with Asperger's Syndrome can experience other difficulties, including medical issues, differences in coordination and muscle tone, sleep disturbances, altered eating habits, anxiety or disordered sensory perceptions.

These differences may also present as gifts. A student with Asperger's may display some or all of the following characteristics, which may represent challenges from a certain perspective, or strengths from another (e.g. a student who appears inflexible or rigid may also be the most compliant with the rules of a classroom):

- Difficulty understanding figurative language, idioms, gestures and/or social cues
- Literal or excessive speech, often with concentration on a particular topic
- Limited or no eye contact
- Difficulty relating or participating in a back-and-forth conversation or interaction, such as a game
- Inflexibility, Social awkwardness
- Intense or odd interests in unusual topics or objects, unusual play
- Repetitive behaviors, such as pacing or lining things up, or self-stimulatory actions like spinning, hand flapping, or rocking
- More or less sensitivity to light, sound, smell, taste or touch than usual
- Anxiety, Abnormal fears and/or lack of appropriate fear of real dangers
- Difficulty managing transitions, changes in routine, stress, frustration
- Ability to decode written language (read) at an early age (but not necessarily comprehend)
- Strong visual skills
- Good rote and long term memory (math facts, sports statistics, etc.)
- Adherence to rules, Honesty
- Intense concentration or focus, especially on a preferred activity
- Understanding and retention of concrete concepts, patterns, rules
- Musical, mathematical, technological or artistic ability or interest



Where does it come from?

There is no known cause of most cases of Asperger's Syndrome, though the best scientific evidence points toward a combination of genetic and environmental influences. Asperger's Syndrome is a neurological/biological disorder, not a psychological/emotional condition.

Asperger's is found in all social, racial and ethnic groups and is diagnosed up to ten times more frequently in boys than in girls. The autism spectrum disorders, including Asperger's Syndrome, occur in 1 out of 150 children, up from 1 in 10,000 in 1980.

What do I need to keep in mind?

- Individuals with Asperger's can learn and many make dramatic improvements. Academics are often an area of strength.
- Communication challenges can encompass a broad range of subtle differences, both in terms of understanding (gestures, others' perspectives, idioms or sarcasm,) and speaking (word retrieval, timing conversational exchanges, remaining on topic, inappropriate comments, etc.)
- Many people with Asperger's benefit from visual supports and other accommodations helpful to visual learners and those with auditory processing challenges or difficulty focusing attention. Most are concrete thinkers and make literal (and often incorrect) interpretations of jokes, idioms or sarcasm.
- Social skills are underdeveloped, but interest in friendships and social interaction is often present—and students are often painfully aware of social status.
- Individuals with Asperger's are often the victims of bullying behavior.
- Anxiety, depression and frustration are common.
- *Each student* is an individual - with a distinct set of likes and dislikes, strengths and challenges, and a unique personality.

How can I make a difference?

- Be welcoming and supportive. Meet the student where he is and learn from him. Respect the individual. *Please* do not talk about him in his presence.
- Set clear expectations and boundaries. Be consistent. Develop structure. Practice and provide repetition to build understanding and skills.
- Recognize that behavior IS communication.
- Develop strategies to compensate for or overcome challenges—offer preferred seating, additional response time, organizational supports (written schedules, lists, labels, etc.), visual information paired with verbal directions, social curriculum, etc.
- Be aware of the student's sensory needs, and adjust supports and expectations as appropriate. Avoid or prepare for known triggers. Give breaks for self-regulation.
- Expect growth and keep standards high, with small steps and supports to allow the student to exhibit success. Promote age appropriate interests,



behavior, independence and life skills. Specifically teach social skills and understanding.

- Reward what you want to see utilizing positive reinforcement strategies. Use the student's interests to engage and motivate him.
- Educate peers and promote acceptance and understanding. Support social development with role playing, modeling, rewards. Teach self reliance. Include.
- Communicate among team members, including parents. Ask questions, share what works and problem-solve what does not. Keep learning. Be creative.
- Assume intelligence, teach competence, promote independence, be respectful.
- Relax, have fun, celebrate successes and treasure the individual!



About Me:

Personal Information Form

It also helps to send along photos of family or favorite activities or people!

Student's Name:

Person completing this form:

Phone:

Email:

What are some of the things that you are most interested in?

What upsets you?

What are you afraid of?

What makes you laugh?

What is ONE thing you would like to improve upon this year?

What calms you down when you are overwhelmed or upset?

What rewards work well for you?

What do you do after school or on weekends?

What days or times are convenient for Parent Meetings (during the school day)?

What is the best way to contact your family?

What issues would your family like to discuss or hear more information about?

Adapted from the Welcome Survey



General Education and Special Area Teachers (including Physical Education, Music, Art, Library)

Teachers of students with autism in the general education setting should be supported by the school team in understanding and providing effective supports and interventions for these students. Communication among IEP team members, including the parents, is critical to recognizing areas of strength and need and being prepared to support a student with autism in a way that is beneficial to the student, as well as the remainder of the class. Inclusion and mainstreaming are not the same as dropping a child into a classroom—and significant planning, coordination, collaboration and supports are essential to building a positive experience for all involved. In addition, it may be necessary to start with small but successful periods of inclusion, building these opportunities as the student gains competence and confidence in varying settings.

Critical to appropriate support is a positive mindset that you can be successful, with the caveat that your definition of success might adjust along the way. Celebrate small victories.

Knowing the characteristics of autism and the particular qualities of a student will allow for appropriate planning on his behalf. Be prepared to adjust expectations—for example, in an art class, it might be appropriate to provide pre-cut samples for a project to a student with fine motor challenges, while also expecting that student (with his great memory and love of color) to be the class advisor on color combinations.

Activities that are often challenging for students with autism include:

- multi step directions and activities
- following verbal directions
- organization and following the schedule
- circle time, since it generally means sitting, listening to auditory information and verbal output
- centers time, since this involves academic tasks, sometimes unclear expectations, following directions
- free play, because it involves social skills, co-operative play and verbal skills with very little structure
- group instruction
- assemblies, music and PE classes for students with sensory issues



Strategies

- Be calm, positive and an appropriate behavior model for the student with autism as well as other students—greetings, etc.
- Be aware of the characteristics of autism and general strategies—for quick reference reminders use [Autism Basics](#) or [Asperger's Syndrome Basics](#).
- Use [About Me](#) to get to know relevant facts about each particular student's likes, fears, needs, etc. Ask specific questions regarding safety and impulsivity.
- Promote a welcoming environment, and provide opportunities for your student (and others!) to develop social interaction skills and extended learning
 - Teach understanding and acceptance—see [Resources](#) for suggested reading, including books and programs to use with the students
 - Pair the student with positive role models
 - Allow times for students to work in pairs, small groups
 - Be aware that students with autism can become isolated within the classroom (interaction only occurring between an aide and student) and be on the lookout for isolation and preventing its occurrence by working with the students and the paraprofessional to support social exchange among peers
- Ensure that organization, communication and sensory issues are addressed (see [General Strategies](#) and [Classroom Checklist](#))
 - Establish clear routines and habits which support regular activities and transitions. Alert student to changes in routine, staffing, etc.
 - Consider seating--situate the student for optimal attention to instruction or sensory needs
 - Pay particular attention to the general strategies outlined for supporting communication and organization (simple directions, wait-time for processing verbal requests or directions, visual schedules, prompts and cues, etc.)
 - Be tuned into sensory issues particular to your class (e.g. echoing locker rooms and loud, fast activity can make P.E. over-stimulating and overwhelming)
- Provide written rules of the classroom, including 'unwritten' conventions if necessary. Use social narratives to help a student understand a rule or expectation, as learners with autism often increase compliance if they understand why a rule exists. (e.g. It is important to remain quiet (no noise or talking) while the teacher is speaking. If it is noisy, the students will not be able to hear her.)
- Use descriptive praise to build desired behaviors (e.g. 'I like the way you put your trash in the trash can!')
- Consider needs/supports for class presentations (i.e. cue cards, visual supports or a power point presentation for a child with impaired expressive language skills), field trips, etc.
- Utilize teacher training on multi-modal instruction! Find ways to teach and reinforce by expecting your student to learn not only by hearing, but also seeing (pictures, maps, diagrams, patterns), doing (movement and hands on activities), saying (repeat after me...) and even singing.



- Collaborate with the student's special education staff to provide strategies for modifying curriculum, supports such as visuals, communication access, organizational tools, and directly teach study skills (note taking, time management, etc.)
- Make sure that activities such as field trips, class presentations, assemblies, and plays are addressed ahead of time. Think about ways the student can be included and discuss and plan for them with the support team.
 - Field Trips: use a social narrative to describe to the student where the trip is, who he will be with, what will occur and the schedule for the day. When possible include pictures (websites and Google Images are great resources)
 - Assemblies/ Plays/Presentations: prepare the student ahead of time with materials and social narratives; be attuned to sensory issues; be creative such as offering the student an opportunity to be “producer” with a run down of the program and the ability to sit off to the side away from other students and out of the noise.

In addressing curricular issues and making **academic modifications or accommodations**, it is important to keep the following suggestions in mind. These might be adjustments made by the general education teacher or in collaboration with a student's special education teacher or paraprofessional. For a student participating in an inclusive setting, the more he is able to follow along and participate in the activities of the classroom *in real time*, the better he can access the curriculum as well as the social objectives being targeted by inclusion.

- Define core curriculum objectives and concentrate on those—for some students this may be as simple as one or two basic components within a unit
- Concentrate on teaching less content, but teach to mastery and where appropriate, fluency
- Make sure student/support staff have classroom materials ahead of time
- Pre-teach relevant new vocabulary and key concepts, concentrating on those that build and repeat throughout the curriculum
- Make the information presented by the teacher accessible to the student: know the amount of verbal information the student can process, consider ways to break the information into manageable parts, highlighting key points, providing outlines, study notes, etc
- Use visuals wherever possible—to organize, improve comprehension and assess
- Review information
- Recognize that functional academic skills—note taking, test taking, true/false, organizing information, etc. may need to be taught and reinforced directly, separately from subject area content
- Consider homework—establish a method for recording assignments, present defined expectations, consider if accommodations or more time is needed



- Consider long term projects—support managing a timeline for due dates, chunk the assignment into smaller parts with a completion schedule and checklists
- In assessing, reduce expectations of performance in areas of difficulty for the student—to test concept knowledge, replace essays with multiple choice or fill in the blank questions with word banks or replace paragraphs with webs that show relationships, etc,
- Teach and test regularly and in small chunks: check for comprehension
- Consider allowing more time or an alternate setting for testing
- Review, repeat and move on when the student demonstrates proficiency
- If the student has difficulty learning a concept or skill, re-think how material is being presented understanding is being assessed
- Supply study guides ahead of tests
- Pre warn the student and paraprofessional when you give a pop quiz

Reading

- Students are likely to have difficulty comprehending material, predicting events, and reading between the lines/infering from the text.
- Be aware of a high proportion of students with high functioning autism who are adept at encoding and word calling, but may have significant issues with comprehension. Some students may be diagnosed with hyperlexia.
- Provide summaries or pre-exposure to a new reading book prior to its initiation. Identify the story line, plot, main characters and setting—with visuals as possible—to situate the student to the book.
- Provide specific structure to questions when expecting an answer for comprehension. Use multiple choice, cloze sentences with a word bank, or starter responses. Whereas it might be very difficult to answer “John, how did the wolf find grandmother’s house”?, a student with autism might show comprehension when asked, “John, the wolf found grandmother’s house by crossing the river and _____”?
- When giving choices, know how many choices are appropriate. Some may be able to pick from four choices, some from only two. Reducing the number of choices is a simple way of making a task simpler for the student, while still expecting independence and indication of learning.



Writing

It is essential to recognize that writing involves expressive language skills, word retrieval, organization of thoughts and fine motor skills, all of which are often challenges for students with autism. Strategies to support each of these areas of need are often required.

- Use visuals to prompt language—pictures, word banks, etc.
- Begin with cloze sentences or sentence starters
- Actively teach brainstorming, developing descriptive vocabulary, etc.
- Use template organization tools for all writing assignments—webs, outlines, etc. How to use of these tools will need specific instruction, and consistent and repeated use of the same tools is likely to result in greater independence and success.
- Provide significant structure and direction for the assignment.
- Consider using keyboarding, dictation and computer graphic organizer programs to support your student. Consider an [AlphaSmart](#) or other traveling keyboard that can be used across settings.
- Look for content rather than length of a written piece, knowing that writing may need to be evaluated by alternate methods than those used for the class in general. For example, rather than expecting the three paragraphs assigned, consider whether the student responded to the questions and the content objectives of the assignment.

Social Studies

If a student with autism has an interest in this area, he might become the class's resident expert on a certain topic, such as Egypt or modes of transportation. This might be a chance to allow this student to shine, as well as provide a motivational opportunity by using his particular area of interest to motivate flexibility or availability to learning new subject matter. Additional suggested strategies for those who might need additional assistance to grasp subject matter:

- Employ timelines, maps and visuals to support concepts and ideas
- Use videos (check out [YouTube](#)) to bring to life past events
- Teach idioms and analogies
- Act or role play



Science

As in other subjects, if a student with autism has a particular interest he might become the class's expert on the solar system, dinosaurs or rocks. Build confidence and interest in learning by celebrating this strength, while stretching flexibility and interest in other areas. Strategies and considerations:

- Support hands on activities
- Be aware of impulsivity and safety concerns
- Define rules for lab work
- Whenever possible, point out relationships between science concepts and real life experiences

Math

Although some students with autism excel in mathematical ability, and others might have an affinity for the rote aspects of memorizing math facts and functions, the language of math and associated abstract concepts can be difficult for many students with autism. Recognizing that this area often represents great variability in skill levels means that instruction is likely to need great individualization—a student who can perform double digit multiplication in his head may have great difficulty conceptualizing negative numbers or measurement. Word problems in particular are a notable area of struggle. Use the student's areas of strength to build his self confidence and motivation to working on areas of challenge.

- Break math down into specific parts, using visuals and manipulatives
- Use strategies such as [TOUCHMATH](#) to support computation
- Students with autism often learn the patterns involved in a skill, rather than the concepts, so beware of over-learning—a child who spends months learning how to add and months learning how to subtract, may then take months *to learn to look for the sign* on a mixed addition/subtraction page
- For skills that require precise learning and execution, employ errorless teaching strategies that ensure correct development of a skill from the start, as corrective teaching is generally less effective and unlearning bad habits can be very difficult for students with autism



Physical Education

- Be aware of a student's particular motor, timing, language and attentional issues that might affect his performance and interest, and make appropriate accommodations
- Be attuned to the high sensory input inherent in echoing locker rooms, whistles, students running and shouting, and how this might affect your student
- Recognize that while a student may not be able to keep up with the pace of learning and activity of the whole class, he still might be able to learn components of a sport or activity that will offer a valuable social outlet or exercise opportunity
- Break tasks into small scaffolded components and celebrate successes—a student who learns how to shoot hoops has gained a valuable skill in turn-taking and an opportunity for social interaction with peers, even if he has not mastered the ability to participate in a 5 on 5 game
- Solicit the assistance of special education staff in providing training in appropriate locker room behavior, social conventions regarding privacy, etc. using social narratives, etc.

Music

Many individuals with autism have musical strengths, which can be celebrated, used to reinforce and motivate, and teach. A sense of rhythm and interest in music can be used to motivate a child to participate in an activity. Since music is processed in a different area of the brain than language, some individuals with limited language ability are able to sing, and song can be used to teach concepts or aid in memory development.

However, it is worth noting that the issues with timing, processing and motor planning often make choral responding—singing or reciting with a group—very difficult. It has been noted that if a student with autism *initiates* the choral (such as the Pledge of Allegiance) he can be successful, whereas the timing required for *joining in* can impede this ability.



Art

Strong visual skills, a heightened sense of visual perception or a unique perspective can often result in significant artistic ability in some individuals with autism. Others might take a special interest in color, and be the class expert on color combinations and the application of the principles of the color wheel.

Because of sensory/tactile issues, some students may have a difficult time with art class or certain art projects (e.g. clay on the hands, odors from materials, etc).

Computers and Technology

Even a very young child with autism can show great affinity for technology, being able to immediately find the 'on' button on any TV he encounters, or the rewind knob on any VCR. Visual acuity and varied ways of storing/accessing information and creating thought processes often make some individuals with autism adept at computer utilization and programming, stereo operation, film making, etc. A student with autism may be a great asset in developing technological resources, but his communication challenges may prevent him from being able to explain how something works. Use a student's problem-solving and technical expertise to make other tasks easier (replace handwriting with typing, produce a video instead of writing a paper) or to motivate attention to other areas being targeted.

