

# Young Children with Autism Spectrum Disorder

## Strategies That Work

Clarissa Willis

Alexis is new to Ms. Roxanne's preschool classroom and spends a lot of time wringing her hands and staring out the window. She has been diagnosed with Asperger's syndrome, one of five conditions classified as an autism spectrum disorder. Roxanne wonders about Asperger's and what she can do to help Alexis adjust to being in the classroom.



**A**utism spectrum disorder (ASD) affects about one and a half million people in the United States. One in every 150 babies is diagnosed with autism spectrum disorder, and boys are four times more likely than girls to have a form of the neurological disorder

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Photos courtesy of the author.

This article is available online in **Beyond the Journal**, January 2009, at [www.journal.naeyc.org/btj/200901](http://www.journal.naeyc.org/btj/200901).

**naeyc**® 1, 3, 7

(Autism Society of America 2006). Many children with ASD, especially those with Asperger's syndrome, are fully included in regular early childhood classrooms with their typically developing peers (Willis 2009).

ASD is a broad-based term under which there are five recognized types of autism. The term *spectrum* is used because the characteristics of the disorder occur along a continuum, with severe symptoms at one end and very mild behaviors at the other. Where a child falls on the continuum helps determine how to plan for his education. For example, a child may be at the mild end in his ability to communicate with others, but at the severe end regarding his behavior around others.

ASD is a medical condition usually diagnosed by a developmental pediatrician and/or a team of specialists

that may include a speech-language pathologist, occupational therapist, or child psychologist. Early intervention offering behavioral, social, and skill-building training is vital. Most children with ASD have an Individual Family Service Plan (IFSP) or an Individual Education Program (IEP) in place by the time they enter the classroom. These plans are designed with input from the child's family and can serve as a guide for planning activities and making modifications to the curriculum. They outline the

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broad goals and objectives written with a child's individual strengths and weaknesses in mind.

This article discusses the major characteristics associated with autism and offers some simple strategies for helping children with autism function in preschool settings (see "Characteristics of Autism Spectrum Disorder"). While each child with autism is unique and exhibits characteristic/symptomatic behaviors in varying degrees, most children diagnosed with an autism spectrum disorder have difficulty with communication and social relationships, including interactive play; display behaviors not typical of their peers; and respond to sensory stimuli by screaming or reacting strongly to light, sound, or motion (Sicile-Kira 2004).

It is important to view a child with autism as a person with talents, strengths, and potential. In other words, families and educators should focus on what the child can learn, rather than what cannot be learned. Remember,

- Always put the child first. He is a "child with autism" not an "autistic child." Use the child's name as often as possible.



## Characteristics of Autism Spectrum Disorder

<b>Autism</b>	To be diagnosed with autism, a child must exhibit a significant number of the following characteristics: a significant delay in social interaction, such as eye contact or expression; a communication delay; behaviors including stereotypical behavior, such as intense, almost obsessive, preoccupation with objects; the need for nonfunctional and ritualistic routines, such as lining up books or food in a certain manner; and repeated movements, such as finger popping or hand flapping.
<b>Pervasive development disorder not otherwise specified (PDD-NOS)</b>	This classification is used when it is determined that a child has autism, but the characteristics displayed by the child are not like the characteristics of other children with autism. This diagnosis is also used when the onset of the disorder happens after age 3. Of all the autism classifications, this is the most vague and confusing for both families and teachers. However, this classification allows a child with a few, but not all, of the characteristics of autism to be classified as having autism, so that he can receive needed services.
<b>Asperger's syndrome</b>	Children with Asperger's typically behave much like children with other types of autism when they are young. However, as they grow into middle school age or in adolescence, they often learn how to socialize, communicate, and behave in a more socially acceptable manner. Most children with Asperger's have normal or above normal intelligence, so they learn new skills as quickly or in many cases more quickly than their typical peers.
<b>Rett's syndrome</b>	This is a degenerative disorder, meaning it gets worse with time. It begins in the first two years of life and is found almost exclusively in girls. Unlike other types of autism, children with Rett's develop normally prior to the onset of the disorder. Characteristics include loss of motor skills, hand-wringing or repetitive hand washing, and a decrease in head growth. Seizures and sleeping disorders may also develop.
<b>Childhood disintegrative disorder</b>	Sometimes called Heller's syndrome, this is a degenerative condition in which a child may begin to develop normally but start to lose skills or seem to forget how to do things over a few months. Loss of skills usually happens in the area of toilet training, play, language, or problem solving, typically between ages 3 and 4.

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## Families and educators should focus on what the child can learn, rather than what cannot be learned.

- Each child is unique, and no two children with autism have the same strengths and weaknesses.
- Not all information about autism (including what is shown on television and found on the Internet) is accurate.
- While there are several approaches to teaching a child with autism, there is no single method, specific program, or magic cure that can *fix* autism. Many programs and methods are successful with some children, yet may not be successful with others (Willis 2006).

### How might a child with autism behave in my classroom?

Children with an autism spectrum disorder may display in varying degrees some or all of the following behaviors: obsession with specific objects, such as collecting forks or having an attachment to a piece of cloth; prolonged interest in common occurrences like watching water as it swirls down the drain; adherence to rituals, such as arranging food in a certain order; and repetitive (stereotypic) behaviors like hand flapping or repeating the same phrase over and over.

### What is stereotypic behavior?

Stereotypic behavior is usually defined as a behavior carried out repeatedly and involving either move-

ment of the child's body or movement of an object (Edelson 1995). Some of the most common stereotypic behaviors seen in young children with autism include flapping one or both hands, pulling or tapping the ears, rocking back and forth or from side to side, sniffing the air, or sucking on the upper lip.

Stereotypic actions allow the children to move further into their own world and away from reality. While stereotypic behavior is not usually physically harmful, it often interferes with a child's ability to focus on what is going on around her (Lee, Odom, & Loftin 2007). Of course, all children, from time to time, tune out activities they want to avoid. Unlike typically developing children, however, many children with autism learn that by doing a specific thing, such as rocking, they can consistently tune out everything around them.

Attempting to understand the function behind the behavior is important. Knowing the reason for a behavior

can often help teachers determine what a child is trying to communicate through his or her actions. Behavior specialists and teachers can work together to conduct a functional behavior assessment, which involves observing the child's particular behavior across time to help determine its function.

### How do we know what a child with autism is trying to communicate with a behavior?

It is very difficult for a teacher to be responsive when she does not know what a child is trying to say. To try to understand the child's communication, ask yourself the following questions:

**1. What was the child doing immediately before the behavior started?** For example, if Aaron is sitting down for small group time and suddenly stands up and screams, his teacher can try to recall what occurred just before his outburst. Perhaps she had stopped interacting with him and is now talking to the group. If Aaron typically has a tantrum during group activities, it may indicate that he is using the tantrum to regain the teacher's attention.

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**2. What in the environment might have triggered the behavior, outburst, or tantrum?** Did something make a loud noise? Did the classroom suddenly get brighter? Is there a smell unfamiliar to the child?

**3. What is the child trying to say by his behavior?** Sometimes a child will act a certain way as a protest, while other times she may cry out to express “There’s too much going on here; I can’t think!” One key to identifying the function of a child’s behavior is to look at what happens after the behavior. If the child’s tantrums are often followed by some kind of interaction with an adult (even if the interaction seems negative), the child may be communicating (in a maladaptive way) that he wants attention.

**4. Can I predict when the child will behave in a certain way?** The behaviors of children with autism are not always predictable. However, sometimes knowing what will happen next can allow a teacher to step in to prevent an outburst. If Candice starts biting herself every day after coming in from the playground, it is probably safe to assume that she enjoys being outside and does not want to come indoors. In this case, the teacher can try cuing Candice with a special signal right before it is time to come inside. This gives the child time to end the activity she is enjoying and transition to the next one.

## Other ways a child with autism might communicate

Approximately 40 percent of all children with ASD are nonverbal (Charlop & Haymes 1994). However, just because a child is nonverbal, it does not mean she cannot learn to communicate. Several alternative or augmentative forms of communication are used with children with autism. These include

**Sign language.** Some children with autism can use the same signs used by people who are deaf.

## Strategy 1: Making New Friends

**Objective:** To help develop social interaction by showing the child how to introduce himself.

1. Make an introduction cue card with two cues, one for the child’s name and one to remind him to wait for the other person to respond (see photos). If possible, laminate the card.



2. Explain to the child that the cue card will help him know what to do when he meets someone new.

3. Ask several children to help you and the child practice meeting people.

4. Sit in a circle and practice what to say and how to wait for the other person to respond.

5. Remind the children that when you are meeting someone for the first time, it is a good idea to look at him or her.

6. Look for opportunities for the child to practice using the cue card to introduce himself.

### Helpful Hints

- When the child becomes familiar with this routine, add additional cues, such as one showing something that he likes to do or asking a new friend to play a game.
- Make a set of cue cards for the child to take home.
- Alert the family that the child is working on introducing himself and other social skills, so they can help him practice.

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### Communication devices.

Computer-like tools can speak for the child when activated by the push of a button or selection of a picture.

**Communication pictures.** A child can point to specific pictures to tell what is happening, what he needs, or what he wants. Many children with autism respond better to real pictures than to line drawings (Willis 2009).

Among the many tools commercially developed for children with communication deficits is the Picture Exchange

Communication System (PECS) (Frost & Bondy 1994). PECS is simple to use, relatively inexpensive, and helps children with autism develop a way to communicate with others (Charlop-Christy et al. 2002). Because of communication and behavior issues, many children with ASD do not initiate interactions with others. What makes the PECS system unique is that, unlike other systems of communication, it requires that the child initiate interaction by using a representative picture

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(Bondy 2001). In general, when used consistently, the PECS helps children with autism have more meaningful communication interactions. Communication with others is an important social skill that helps any child make friends.

### **What do we do when a child won't interact with others?**

Because children with autism generally do not initiate interactions, social skills training, including how to respond in social situations, should begin as early as possible and continue throughout the child's education (Stichter & Conroy 2006). Some strategies can help a child learn how to greet people and introduce himself (for an example, see "Strategy 1: Making New Friends," p. 85).

It is important to work with the child's family and other teachers and specialists to prioritize which social skills should be taught. Learning too many new skills without enough time for practice can be overwhelming, and the child may react with maladaptive behavior. To encourage positive social interactions, it is vital to structure the environment to help the child succeed.

### **How do we arrange a preschool environment for success?**

Children with autism function best when they have

- structure and a predictable routine,
- environments that do not distract,
- verbal reminders of what will happen next, and
- picture schedules.

Teachers should define the environment as much as possible for a child

with autism. To reduce the child's anxiety, create and post in each center or learning area a picture schedule using photographs or other images to display the day's events. The child can look at the picture to get an idea of what is supposed to occur in that area. Children with autism like to know what they are supposed to do, so a picture schedule is reassuring.

In learning centers, teachers also can set up activities that encourage interaction, such as group art projects or activities that require two people to complete them. Remember, children with autism may not be particularly interested in an activity or specific center. Allowing use of a child's preferred object can greatly increase the probability that the child will take part in an activity (Schwartz, Billingsley, & McBride 1998).

Transitions are times when a child with autism is likely to have an outburst. Plan smooth transitions. Music makes an excellent transition tool. Use the same song for each transition so



the child learns that the song is a cue that something new is about to happen.

Here are some other ideas to facilitate smooth transitions:

- Go with the child to the picture schedule and point to the next activity.
- Set a timer to indicate that in a few minutes it will be time to change activities. Hourglass timers are less distracting than timers with loud continuous bells.
- Tap the child gently on the shoulder as a cue that it is almost time to stop.
- Ring a service bell (with one quick ring) or soft chime, such as wind chimes, as a reminder that it is time to change activities.

Note that making loud noises or flashing lights on and off are not good ways to signal transitions for a child with autism. The sensory stimulation can be overwhelming.

It is critical to remember that most children with autism will, in some fashion, have difficulty with sensory stimuli. They require an environment that is sensitive to their unique needs.



## Why do children with autism have difficulty with sensory stimuli?

Most children with autism have some form of sensory integration disorder whereby they cannot filter or screen out sensory-related input (Kranowitz 2005). The common “feely box” that many preschool teachers use to introduce new textures can be very distressing for many children with autism. For them, the information

they receive from their environment—such as through a feely box—becomes distorted and unreliable.

Children with autism need a special place in the classroom where they can go without distraction and without all the sensory input they receive elsewhere. Locate this place in the quietest part of the room and provide soft, indirect lighting, a comfortable chair or cushion, and some activities that the child likes. Teachers should always be able to observe the child in

the special place. This quiet center is also a space where a child can go to complete especially stressful activities, such as counting, working a puzzle, or writing her name (Willis 2006).

After the child spends time in the quiet center, allow her to return and finish any activity she started before visiting the quiet center. Quiet centers should be used routinely to allow the child to be in a place where she feels safe and secure. They should *never* be used as a form of punishment.

## Strategy 2: Classroom Hunt—I Spy!

**Objective:** To encourage the child with autism to explore areas of the classroom, interact with toys, or try new activities.

**Materials:** A basket with a handle and one item from each learning center.

1. Gather one representative item from each of the centers in the room—a block from the block area, a magnetic letter from the literacy center, a paintbrush from the art area, a book from the reading center, and so on.
2. Place the items in a basket or box. A basket works best because you can carry it on your arm. The child may even want to carry it for you.
3. Tell the child you need help putting the things in your basket back in the centers where they belong.
4. Start each hunt with the same phrase, “Here is a \_\_\_\_\_. I wonder where it goes.”
5. Refocus a child who looks away or appears disinterested by holding the item in front of her.
6. Hold up an object and ask, “\_\_\_\_\_ [the child’s name], where do you think this goes?”
7. Prompt a child who does not reply or does not take the object by walking to a center and asking, “Do you think it goes here?”
8. When the child figures out where the object belongs, ask her to place the item in/on the correct bin or shelf. Continue with the other objects in the basket.

### Helpful Hints

- Say the name of the object aloud.
- Vary the activity. For example, if you use picture cards, match the object to the correct picture card before returning it to its proper location.
- Put the object in the wrong location if the child appears uninterested or bored. Wait to see if she corrects you. Sometimes, even nonverbal children have an extraordinary sense of place and know in fine detail where items belong.

(Later, after the child has gotten used to being at school, it might be fun to do the activity with a second child so that the three of you look for the correct center.)

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## How can we prepare for a child with autism?

The best way teachers can prepare themselves and the other children in the class for a child with autism is to get to know as much as possible about the child before enrollment. Encourage the family to come with their child to visit your classroom before the first day of school. This initial visit is an opportunity to meet the family and the child and let him become familiar with the classroom. This introductory visit should happen when other children are not present, and more than one visit may be necessary. One way to help a child learn more about his new classroom is to take the child on a classroom hunt (see “Strategy 2: Classroom Hunt—I Spy!”).

Many preschools have a family information form, but you will need to find out much more about the child than is typically included on such forms. Here are some questions to ask the family before a child with ASD arrives at the program:

1. What does she like to eat? Are there foods that she will not eat or that cause her to react in a certain way?
2. What are her particular interests? Does she have an object that she is attached to?
3. Does she have a favorite activity or song?
4. How does she communicate with others?

5. What might cause her to become upset or frustrated?
6. What do you see as her strengths?
7. What do you consider her challenges?
8. What other services has she been receiving? Speech therapy? Occupational therapy? Who provides the services? How often and in what setting?
9. What do you do when/if she has an outburst at home?
10. How much experience has she had interacting with other children?
11. What is her daily routine?



### How do we set up the daily routine for a child with autism?

Children with autism are less frustrated when they can follow predictable and organized routines. When setting up a daily routine for a child with autism, it is important for the child to understand what you are asking him to do. How the day begins often determines how the child will behave during the rest of the day. If there is any variation in the schedule,

even a minor change, let the child know in advance.

When the child arrives, greet him and discuss the daily schedule. Use familiar picture cards to show each activity for the day. Make sure the schedule is on a level the child can understand. For some children, this may be an object schedule, and for

others, a simple first-then card. A first-then card is a series of picture pairs in which the first shows what happens first and the second shows what happens next (Small & Kontente 2003; Willis 2006). When possible, use the identical daily routines, such as saying the same morning greeting each day (see “Strategy 3: Morning Greeting”).

## Strategy 3: Morning Greeting

**Objective:** To establish a morning routine that starts the day on a positive note.

1. Use the same words and phrases each day, perhaps something as simple as “Good morning, [child’s name] .” Wait to see if the child responds, then say, “Let’s check and see what we do first.”
2. Bend down to eye level and use a picture schedule to show the child what you want him to do.
3. Try singing to a child who does not respond to a spoken welcome. You might sing the following to the tune of “Three Blind Mice” (first verse):
  - [Child’s name], welcome.
  - [Child’s name], welcome.
  - I’m glad you’re here.
  - I’m glad you’re here.
4. Direct the child to his cubby. If he hesitates, walk with him. A picture of the child above the cubby will help him identify it more easily. Show him the picture cards that relate to putting up his backpack, coat, and so on.
5. Tell him what to do next: “After you put up your backpack, go to the \_\_\_\_\_ center.” Even if you start the day with independent center time, direct the child to a specific place each morning.
6. Say or sign thank you.
7. Guide the child to the center if he does not go on his own; walk with him.
8. Vary the welcome only after he is accustomed to the morning routine. For example, suggest two or more center choices. Expect that when you first tell him to choose where he wants to go, he will likely stand still or hide in his cubby.

### Helpful Hints

- Stay focused on your primary objective, which is to start each day with a calm and predictable sequence.
- Keep in mind, regardless of your morning routine, that consistency will make the child with autism feel more secure.
- Accept that some children, even children without autism, are just not morning people and need a little more time to wake up. If the child is prone to rugged mornings, begin each day by allowing him to go to the quiet center until he has adjusted to the routine.
- Make sure that when you are absent, the substitute or teacher’s assistant follows your morning welcome routine.

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## Concluding thoughts

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Jim Sinclair puts it best: “Autism isn’t something a person has, or a ‘shell’ that a person is trapped inside. There’s no normal child hidden behind the autism. Autism is a way of being. It is pervasive; it colors every experience, every sensation, perception, thought, emotion, and encounter, every aspect of existence. It is not possible to separate the autism from the person—and if it were possible, the person you’d have left would not be the same person you started with” (1993, n.p.).

All children can learn, and children with autism spectrum disorder are no exception. To help them be as successful as possible in your classroom, remember that they function best when they have the following:

- structure and a predictable routine,
- environments that do not distract,
- verbal reminders of what will happen next,
- picture schedules to give them clues about what to do,

- a quiet place to go where they can be alone for a few minutes, and
- nothing to overwhelm their senses with too much light or noise.

## References

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- Autism Society of America. 2006. *Autism facts*. [www.autism-society.org/site/PageServer?pagename=about\\_what\\_is\\_factsstats](http://www.autism-society.org/site/PageServer?pagename=about_what_is_factsstats)
- Bondy, A. 2001. PECS: Potential benefits and risks. *The Behavior Analyst Today* 2 (2): 127–32.
- Charlop, M.H., & L.K. Haymes. 1994. Speech and language acquisition and intervention: Behavioral approaches. In *Autism in children and adults: Etiology, assessment, and intervention*, ed. J.L. Matson. Pacific Grove, CA: Brooks/Cole.
- Charlop-Christy, M.H., M. Carpenter, L. Loc, L. LeBlanc, & K. Kellet. 2002. Using the Picture Exchange Communication System (PECS) with children with autism: Assessment of the PECS acquisition, speech, social-communicative behavior, and problem behavior. *Journal of Applied Behavior Analysis* 35 (3): 213–31.
- Edelson, S. 1995. Stereotypic (self-stimulatory) behavior. [www.autism.org/stim.html](http://www.autism.org/stim.html)
- Frost, L.A., & A.S Bondy. 1994. *The Picture Exchange Communication System training manual*. Cherry Hill, NJ: Pyramid Educational Consultants.
- Kranowitz, C. 2005. *The out-of-sync child: Recognizing and coping with sensory processing disorder*. New York: Perigee.
- Lee, S., S.L. Odom, & R. Loftin. 2007. Social engagement with peers and stereotypic behavior of children with autism. *Journal of Positive Behavior Interventions* 9 (2): 67–79.
- Schwartz, I.S., F. Billingsley, & B. McBride. 1998. Including children with autism in inclusive preschools: Strategies that work. *Young Exceptional Children* 2 (1): 19–26.
- Sicile-Kira, C. 2004. *Autism spectrum disorders*. New York: Penguin.
- Sinclair, J. 1993. Don’t mourn for us. *Our Voice: The Newsletter of the Autism Network International* 1 (3). [http://ani.autistics.org/dont\\_mourn.html](http://ani.autistics.org/dont_mourn.html).
- Small, M., & L. Kontente. 2003. *Everyday solutions: A practical guide for families of children with autism spectrum disorder*. Shawnee Mission, KS: Autism Asperger Publishing.
- Stichter, J.P., & M.A. Conroy. 2006. *How to teach social skills and plan for peer social interactions*. Series on autism spectrum disorders. Austin, TX: Pro-Ed.
- Willis, C. 2006. *Teaching young children with autism spectrum disorder*. Beltsville, MD: Gryphon House.
- Willis, C. 2009. *Creating inclusive learning environments for young children: What to do on Monday morning*. Thousand Oaks, CA: Corwin.