IRIS | Challenge

iris.peabody.vanderbilt.edu/module/asd1/challenge

Autism Spectrum Disorder (Part 1): An Overview for Educators

Challenge

View the movie below and then proceed to the Initial Thoughts section (time: 4:42).

Video Player

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- 🔘 None
- ⚪ English

[Use Up/Down Arrow keys to increase or decrease volume.](#)

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Transcript: Challenge

Every child or student with autism spectrum disorder—or ASD—has his or her own strengths, classroom needs, and challenges. Let's briefly meet four students with ASD.

This is Drew, an energetic four-year-old. Drew only communicates with others when he initiates the interaction, most often when someone has something that he wants. Drew spends his free time lining up toy cars in the classroom. The teacher has a hard time redirecting him to any other activity. He seems content to be by himself and often tantrums when asked to comply with teachers' instructions or to participate in non-preferred activities. As a result, he does not participate in most age-appropriate activities at his school, such as story time and dramatic play, and shows no interest in his peers. His parents are worried about what will happen when Drew enters kindergarten. They are not sure what his educational program should look like or where to turn for help.

This is Jaquese, a ten-year-old student in an inclusive fourth-grade classroom. Jaquese loves mathematics and science and is above grade level in both subjects. Because of this, his teachers have a hard time keeping him engaged during mathematics and science instruction. On the other hand, Jaquese has difficulty with reading comprehension, both when a story is read to him and when he reads it independently. He is obsessed with superheroes and will frequently act out scenes from their films and comic book adventures. This is often frustrating for the teacher, because no matter how she tries to distract him from his imaginary super-heroics, he always comes back to them. In fact, he often cannot begin his work until he has finished acting out an entire scene. Further, most students do not share his obsession, and they find Jaquese annoying and do their best to avoid him.

This is David, a 2½-year-old with autism spectrum disorder. He is not interested in other children, and he does not play with toys as they were designed to be played with. For example, instead of pushing toy cars around on the floor, he flips them over and spins their wheels. On the other hand, David loves to play in the water and listen to music. At night, he remains awake for extended periods, something that is exhausting for his parents. Mealtimes are a struggle as well. David eats only a few specific foods and avoids others with textures or consistencies he doesn't like. He is non-verbal and lacks a systematic way to let his teachers and parents know what he wants. Often, when he is not successful at communicating what he wants, David throws himself on the floor, hits his parents, and throws objects. He has recently been introduced to the Picture Exchange Communication System, often referred to as PECS, but has not yet learned enough to communicate his needs.

Finally, this is Michelle, a fifteen-year-old tenth grader diagnosed with high-functioning autism spectrum disorder. Michelle is bright and funny and often outspoken with adults and her peers. She has a good memory and the ability to recall details about all things related to outer space. Although this can lead to interesting conversation, Michelle has a hard time taking cues from her audience when they are tired of a particular subject. She perseverates when the other kids would prefer her to stop. Michelle also displays behaviors that the other students consider strange, such as rocking back and forth in her chair and violating others' personal space by standing too close when talking to them. All these behaviors present challenges when Michelle is trying to make friends at school. Even so, she loves to be around her peers and would like to participate in a school club or team. However, because she lacks organizational skills, she often misses the deadlines for signing up or trying out.

All of these children have been identified as having autism spectrum disorder. Although you might have noticed some similarities in their needs and their behaviors, you probably noticed a number of differences as well.

Here's your Challenge:

1. What is autism spectrum disorder and what are the characteristics associated with it?
2. What should teachers consider when working with students with autism spectrum disorder?

Credit

IRIS | Initial Thoughts

Autism Spectrum Disorder (Part 1): An Overview for Educators

Initial Thoughts

Jot down your Initial Thoughts about the Challenge:

What is autism spectrum disorder and what are the characteristics associated with it?

What should teachers consider when working with students with autism spectrum disorder?

When you are ready, proceed to the Perspectives & Resources section.

IRIS | Perspectives & Resources

Autism Spectrum Disorder (Part 1): An Overview for Educators

Perspectives & Resources

Objectives

By completing the entire Perspectives & Resources section and reviewing the accompanying activities, the learner will:

- Understand that the strengths and needs of students with ASD vary greatly
- Be aware of the early signs of ASD
- Know the difference between a medical diagnosis of ASD and an educational determination of autism
- Be able to identify key IEP and IFSP team members
- Understand various factors that might affect family members of students with ASD
- Be familiar with strategies that teachers can use when working with students with ASD

Standards

This IRIS Module aligns with the following licensure and program standards and topic areas. Click the arrows below to learn more.

Council for the Accreditation of Educator Preparation (CAEP)

CAEP standards for the accreditation of educators are designed to improve the quality and effectiveness not only of new instructional practitioners but also the evidence-base used to assess those qualities in the classroom.

- **Standard 1:** Content and Pedagogical Knowledge

Council for Exceptional Children (CEC)

CEC standards encompass a wide range of ethics, standards, and practices created to help guide those who have taken on the crucial role of educating students with disabilities.

- **Standard 1:** Learner Development and Individual Learning Differences
- **Standard 7:** Collaboration

Division for Early Childhood Recommended Practices (DEC)

The DEC Recommended Practices are designed to help improve the learning outcomes of young children (birth through age five) who have or who are at-risk for developmental delays or disabilities. Please note that, because the IRIS Center has not yet developed resources aligned with DEC Topic 8: Transition, that topic is not currently listed on this page.

Family

- **F1.** Practitioners build trusting and respectful partnerships with the family through interactions that are sensitive and responsive to cultural, linguistic, and socio-economic diversity.
- **F2.** Practitioners provide the family with up-to-date, comprehensive and unbiased information in a way that the family can understand and use to make informed choices and decisions.
- **F3.** Practitioners are responsive to the family's concerns, priorities, and changing life circumstances.
- **F4.** Practitioners and the family work together to create outcomes or goals, develop individualized plans, and implement practices that address the family's priorities and concerns and the child's strengths and needs.
- **F5.** Practitioners support family functioning, promote family confidence and competence, and strengthen family-child relationships by acting in ways that recognize and build on family strengths and capacities.
- **F6.** Practitioners engage the family in opportunities that support and strengthen pa renting knowledge and skills and parenting competence and confidence in ways that are flexible, individualized, and tailored to the family's preferences.
- **F7.** Practitioners work with the family to identify, access, and use formal and informal resources and supports to achieve family-identified outcomes or goals.
- **F8.** Practitioners provide the family of a young child who has or is at risk for developmental delay/disability, and who is a dual language learner, with information about the benefits of learning in multiple languages for the child's growth and development.
- **F9.** Practitioners help families know and understand their rights.
- **F10.** Practitioners inform families about leadership and advocacy skill-building opportunities and encourage those who are interested to participate.

Instruction

- **INS1.** Practitioners, with the family, identify each child's strengths, preferences, and interests to engage the child in active learning.
- **INS2.** Practitioners, with the family, identify skills to target for instruction that help a child become adaptive, competent, socially connected, and engaged and that promote learning in natural and inclusive environments.
- **INS3.** Practitioners gather and use data to inform decisions about individualized instruction.
- **INS4.** Practitioners plan for and provide the level of support, accommodations, and adaptations needed for the child to access, participate, and learn within and across activities and routines.
- **INS5.** Practitioners embed instruction within and across routines, activities, and environments to provide contextually relevant learning opportunities.

- **INS6.** Practitioners use systematic instructional strategies with fidelity to teach skills and to promote child engagement and learning.
- **INS7.** Practitioners use explicit feedback and consequences to increase child engagement, play, and skills.
- **INS8.** Practitioners use peer-mediated intervention to teach skills and to promote child engagement and learning.
- **INS9.** Practitioners use functional assessment and related prevention, promotion, and intervention strategies across environments to prevent and address challenging behavior.
- **INS10.** Practitioners implement the frequency, intensity, and duration of instruction needed to address the child's phase and pace of learning or the level of support needed by the family to achieve the child's outcomes or goals.
- **INS11.** Practitioners provide instructional support for young children with disabilities who are dual language learners to assist them in learning English and in continuing to develop skills through the use of their home language.
- **INS12.** Practitioners use and adapt specific instructional strategies that are effective for dual language learners when teaching English to children with disabilities.
- **INS13.** Practitioners use coaching or consultation strategies with primary caregivers or other adults to facilitate positive adult-child interactions and instruction intentionally designed to promote child learning and development.

Teaming and Collaboration

- **TC1.** Practitioners representing multiple disciplines and families work together as a team to plan and implement sup ports and services to meet the unique needs of each child and family.
- **TC2.** Practitioners and families work together as a team to systematically and regularly exchange expertise, knowledge, and information to build team capacity and jointly solve problems, plan, and implement interventions.
- **TC3.** Practitioners use communication and group facilitation strategies to enhance team functioning and interpersonal relationships with and among team members.
- **TC4.** Team members assist each other to discover and access community-based services and other informal and formal resources to meet family-identified child or family needs.
- **TC4.** Practitioners and families may collaborate with each other to identify one practitioner from the team who serves as the primary liaison between the family and other team members based on child and family priorities and needs.

Interstate Teacher Assessment and Support Consortium (InTASC)

[InTASC](#) Model Core Teaching Standards are designed to help teachers of all grade levels and content areas to prepare their students either for college or for employment following graduation.

- **Standard 2:** Learning Differences
- **Standard 10:** Leadership and Collaboration

When you are ready, proceed to Page 1.

IRIS | Page 1: What Is Autism Spectrum Disorder?

iris.peabody.vanderbilt.edu/module/asd1/cresource/q1/p01

What is autism spectrum disorder and what are the characteristics associated with it?

Page 1: What Is Autism Spectrum Disorder?

Autism spectrum disorder (ASD) is a developmental disability that can result in significant delays and developmental differences in a number of areas, including communication, social interaction, and behavior. The major characteristics of ASD are:

- Persistent deficits in an individual's social communication and social interaction across contexts (e.g., difficulty initiating or responding to social interactions, displaying or interpreting facial expressions, or showing interest in peers)
- Restricted, repetitive patterns of behavior, interests, or activities (e.g., flapping of hands, difficulty handling changes in routine, highly focused interest, atypical responses to sensory input)

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atypical responses to sensory input

Hyper- or hypo-sensitivity to sensory inputs common among individuals with autism; might lead to issues related to:

- Clothing (e.g., too scratchy, too tight, irritating seams)
- Food (e.g., texture, temperature, consistency)
- Noise (e.g., volume, pitch, unpredictable or inconsistent sounds)
- Light (e.g., brightness, flashing)
- Touch (e.g., hugs, walking barefoot on grass)
- Pain (e.g., high threshold or indifference to pain)

Research Shows

- The number of individuals identified as having ASD is increasing at a staggering pace. The current prevalence of ASD is 1 in 44, up from 1 in 68 in 2010, 1 in 150 in 2000, and 1 in 10,000 in 1989.
- ASD is approximately five times more likely in boys than in girls.
- ASD is reported to occur in all racial, ethnic, and socioeconomic groups.
- Only 38% of children identified with ASD also have an intellectual disability.
- Parents who have one child with ASD have a 20% higher likelihood of having another child with ASD.
- A number of studies have shown that there is no link between vaccines and the development of ASD.
  (Dawson & Bernier, 2013; U.S. Centers for Disease Control and Prevention [CDC])

Listen as Wendy Stone discusses some contributing factors for the increasing prevalence of autism.

Wendy Stone, PhD
Professor, Educational Psychology
Director of the Research in Early Autism Detection and Intervention Lab
University of Washington

(time: 1:33)

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[View Transcript](#)

Transcript: Wendy Stone, PhD

There has been a lot of press about the increasing prevalence of autism. For somebody who's been in the field as long as I have, it is striking and remarkable. The reasons are not entirely clear, but there are certainly some contributing factors that need to be considered. One is that diagnostic systems change, and so the criteria become more liberal. Then more children will be included within that diagnostic framework as having autism. We're also getting much better at identifying children with milder forms of autism, so that's going to increase the pool of children. Probably one of the biggest factors is greater awareness about autism now. When I started in the field thirty years ago, people just never heard of autism. I would explain to parents this is what their child had, and there would be a blank facial expression. In contrast now, when parents come in they're often asking about whether their child has autism. Autism is a household word; there are lots of organizations focused on it, there's lots of information about it in the news and elsewhere. Another factor is that children are being identified at younger ages now, so we're having two-year-olds included in the count when we look at prevalence of autism. One other thing is that the services tend to be improving, and so sometimes services for children with autism are desired, and families want to make sure that they get an accurate diagnosis so that they can receive the services.

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Diagnostic and Statistical Manual of Mental Disorders (DSM-5)

A guide developed by the American Psychiatric Association as a reference in the diagnosis of mental disorders, which includes a summary of symptoms and diagnostic criteria.

The most recent version of the [Diagnostic and Statistical Manual of Mental Disorders (DSM-5)](#) presents a major change in how ASD is described and diagnosed. Most notably, several categories of pervasive developmental disorders (i.e., autistic disorder, Asperger's disorder, and pervasive developmental disorder) are now classified under the umbrella diagnosis of ASD. This means that there is no longer a diagnosis of Asperger's disorder; children who would have fallen under this category in the past are now diagnosed as having autism spectrum disorder. Click the link below for a summary of these differences as well as a comparison across the last two editions of the DSM and IDEA '04.

[Comparison of the Diagnostic Criteria for Autism Spectrum Disorder Across DSM-5, DSM-IV-TR, and the Individuals with Disabilities Education Act (IDEA) Definition of Autism (PDF)](#)

Some of the terminology surrounding ASD can be confusing. For example, many people use the term "ASD," while others prefer "autism," and some use them interchangeably. Listen as Ilene Schwartz discusses why both of these terms are used.

Ilene Schwartz, PhD
Professor, Special Education
Director, Haring Center for Research and Training in Inclusive Education
University of Washington

(time: 0:44)

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[View Transcript](#)

Transcript: Ilene Schwartz, PhD

The confusion between the terms "autism spectrum disorders" and "autism" is that we have two different guides that we're using. IDEA, the Individuals with Disabilities Education Act, still uses the term "autism." The DSM-5, which is the manual that is used to diagnose children with autism, uses the term "autism spectrum disorders." So the more accurate term and the more encompassing term is "autism spectrum disorders," but I think in practice people use them interchangeably.

IRIS | Page 2: Autism Spectrum Disorder Characteristics

🦋 **iris.peabody.vanderbilt.edu/module/asd1/cresource/q1/p02**

What is autism spectrum disorder and what are the characteristics associated with it?

Page 2: Autism Spectrum Disorder Characteristics

ASD is referred to as a "spectrum disorder" because children with ASD demonstrate a great range of strengths, abilities, and areas of need. Although they all display the two major characteristics of ASD (i.e., differences in social communication/social interactions and behaviors), they differ in the severity of these symptoms. The table below highlights the differences in the symptoms displayed by the children highlighted in the *Challenge* video. These children represent the diversity of students a teacher might encounter in a general education classroom.

	Social Communication/Social Interaction	Restricted, Repetitive Patterns of Behavior/ Interests/Activities
Drew (4 yrs old)	• Communicates only when he initiates the interaction • Interacts with others only to get items that he wants • Does not participate in most age-appropriate activities • Shows no interest in peers • Content to be by himself	• Lines up toy cars • Tantrums when given instructions or asked to participate in non-preferred activities
Jaquese (10 yrs old)	• Makes unsuccessful attempts to interact with peers • Has difficulty with language	• Obsessed with comic book superheroes—excessively quotes and acts out scenes from their stories
David (2 1/2 yrs old)	• Does not have [functional play skills](#) • Is not interested in peers • Is non-verbal • Cannot communicate wants and needs effectively x *functional play skills*	• Eats a limited number of foods • Throws self on floor, hits parents, and throws objects when unable to communicate wants and needs

|		
	Skills associated with using toys and materials in the manner in which they are intended to be used (e.g., rolling a toy car instead of just spinning its wheels).	
Michelle (15 yrs old)	• Is outspoken with adults and peers • Has difficulty taking cues from her social partners • Violates others' personal space • Has difficulty making friends at school	• Obsessed with outer space • Rocks back and forth in her chair

For a child or student to be diagnosed with ASD, he or she must present behavioral differences in early childhood. The American Academy of Pediatrics, among others, identifies a number signs of ASD in the first two years of life.

child and student

We distinguish between the terms "child/children" and "student(s)." "Child/children" refers to infants, toddlers, and young children. "Student(s)" encompasses individuals from preschool through transition/vocational programs.

Early Signs of ASD in the First Two Years of Life
• Lack of appropriate gaze • Lack of warm, joyful expressions with gaze • Lack of sharing enjoyment or interests • Lack of alternating to-and-fro vocalizations with parents • Lack of response to name • Delayed onset of babbling past nine months of age • Decreased or absent use of pre-speech gestures (waving, pointing, showing) • Not speaking single words by sixteen months • No two-word utterances by twenty-four months • Repetitive movements or posturing of body, arms, hands, or fingers • Loss of language or social skills at any age

To better understand some of these signs, view the video below (time: 9:02). It features three children who display many of the characteristics listed above and compares their behavior to three children without ASD.
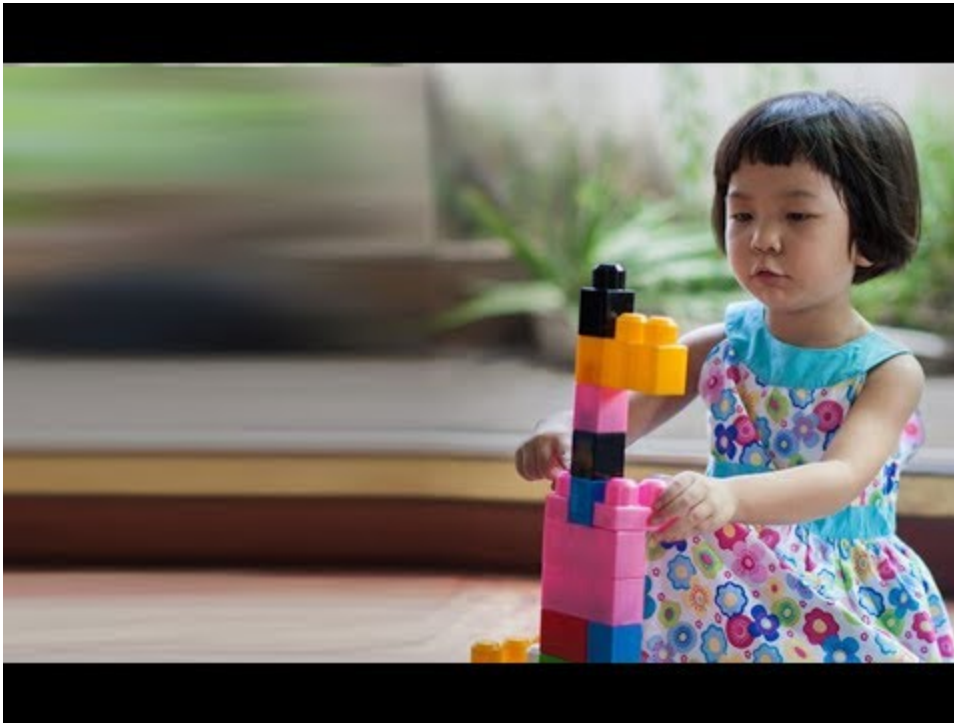
Source: Kennedy Krieger Institute; used with permission

[View Transcript](#)

Transcript: Early Signs of Autism

I'm Rebecca Landa, Director of the Center for Autism and Related Disorders at Kennedy Krieger Institute. You're about to watch a brief tutorial illustrating the early signs of autism spectrum disorders, or ASD. You will see three pairs of videos of one-year-olds. Within each pair, you will first see a child with neuro-typical development, followed by a child who shows early signs of ASD. The developmental features indicative of ASD shown within these videos fall into three main categories. These include effective communication and sharing enjoyment, making social connections, and the one with which we will begin: seeing social opportunity through play.

This nineteen-month-old child does not show signs of ASD. He has chosen to play with the balls. He quickly integrates the lady into his play. He pretends that the balls are food and offers a bite to the lady.

Mother: He pretends a lot of stuff is food, and he always wants you to offer it to him.

Observer: Yeah, okay. Um mmmm. You're making some yummy food.

He understands that food, spoons, plates, and eating go together. As he creates a pretend play activity, he remains aware of the people nearby. He enjoys incorporating social interaction into his play and offers the lady a bite.

Observer: Thank you. That sure is tasty.

He's able to pay attention to the lady, the doll, and the pretend food all at once. He shares his excitement about the toys with the lady, looking at her and smiling.

Observer: Hot.

After the lady comments that the food is hot, he links his play and language to her idea.

Observer: It's okay now. It's cool. It's nice and cool now. Yeah.

Here he imitates the lady's actions with the pretend lipstick.

Observer: I'm going to look so pretty now with my lipstick on. Oh, it's doesn't come off.

This helps him to learn new play skills and at the same time synchronizes his actions with the actions of others.

Observer: Yeah, she has lipstick on. Oh, just like mommy wears. She looks so pretty. Thank you.

This nineteen-month-old child show signs of ASD. He has an intense interest in the toy phone. He does not share his enjoyment of the phone with others. He does not look towards others and smile.

Mother: Shows, you know, sensory [inaudible]. He really has an addiction to telephones lately. It's okay, because it's helping him to sound. It's probably, like, ten telephones laying around my house, because he walks around carrying them then sits them down and then he goes on to the next one.

Although he puts the phone to his ear, he does not show creative play with the phone. When his name is called, he does not respond.

Mother: Elliott. Ellie. Ellie. Elliott.

He does not offer the phone to others so that they can have a turn.

Observer: He returns to his hands, and progressively he's not.

His mother tries to distract his attention away from the phone.

Mother: No, no, let mom see it. Let mommy see the phone.

She begins to tickle him. Although he seems to enjoy the tickling, he does not look at his mother or make a social connection with her. He does not try to communicate with his mom to keep the social game going.

This fourteen-month-old child has a mild motor delay but does not show signs of ASD. As he explores a new toy, he remains aware of the people nearby. He checks in with his mother behind him to ensure that she also see the toy. Next, he shows that he understands the social communicative meaning of the woman's pointing gesture by immediately looking at the sticker then he looks over at another sticker she had pointed out before.

Observer: Let me get you another one.

He continues the woman's topic of communication as he points to the ticker sticker. He shows the motivation to maintain social engagement with others and the ability to communicate using coordinated gaze, vocalization, and gesture.

This fourteen-month-old show signs of ASD. First, he flaps his hands while enjoying the bubbles. He does not share his enjoyment by looking at the man. He does not respond to his name.

Observer: Ben. Ben. Ben.

Although he looks at the man's pointed finger, he does not follow the direction of the man's gesture to locate the object of the man's attention.

This fourteen-month-old does not show signs of ASD. While she enjoys looking at and exploring the toy, she stays engaged with the people nearby. She tries to share her enjoyment with her mother as she turns to show the toy to her then she shares her enjoyment with the lady across from her by directing her gaze and smile toward the lady. Also, she recognizes that the lady is a source of help. Her request for help is clear and effective. Coordinating eye contact, gesture, and vocalization for purposeful communication is a sign of healthy social and communication development.

This fourteen month-old child shows signs of ASD. Notice how his attention is so focused on the toy that he does not interact with the people nearby. He does not share his attention with others. His exploration of the toy is also unusual. He drops the toy onto the table and watches it move. When the toy stops moving, he does not use eye contact, vocalization, or gesture to ask for help. He also tenses his body and mouth in an unusual way. Even though the lady is talking to him, he shows no interest in her. He does not seem to understand that her gesture is an offer to help him. He does not check in with the lady or his mother to see whether they are paying attention to the toy that he is enjoying.

ASD is a neuro-developmental disorder affecting multiple aspects of development, especially social and communication skills. Children with ASD often show unusually intense interest in certain objects or sensory experiences. They may repeat certain behaviors over and over again. The signs of ASD are not transient but rather persist over time. The earliest signs of ASD are often subtle and become clearer in the second and third year of life. A diagnosis of ASD should be made by one or more experts who gather a thorough developmental history, directly assess the child's developmental abilities, and conduct a medical exam.

For more information about ASD early detection and intervention or to sign up to receive our newsletter, please visit autism.kennedykrieger.org/card.

(Close this panel)

Listen as Nancy Rosenberg, a parent of a young adult who has ASD, reflects on the early signs that her son exhibited. Next, listen as Adrienne Golden discusses the characteristics of the children with autism that she works with and some of the early signs she looks for in the classroom.

Nancy Rosenberg, PhD
Parent of a young adult with ASD
Director of Distance Learning ABA Program
University of Washington

(time: 3:48)

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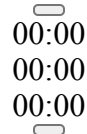[Use Up/Down Arrow keys to increase or decrease volume.](#)

[View Transcript](#)

Adrienne Golden

Susan Gray School
Early Childhood Lead Teacher
Vanderbilt University

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Transcript: Nancy Rosenberg, PhD

Brian was diagnosed when he was two and three months, which 20 years ago was pretty good. I think part of that was because he was pretty significantly impacted. Up until 18 months, we didn't have a worry in the world. I don't think that means there weren't early warning signs. I think it was that we just didn't know what to look for. In retrospect, I remember a friend who had a child Brian's age right around 12 months saying, "Oh, she is just pointing at everything. She's driving me crazy because she's pointing and wanting me to acknowledge everything," which of course Brian wasn't. And I remember thinking at the time, "Oh, I wonder when Brian's going to start doing that?" And, of course, we know now that that's a big early warning sign, a child's not starting to point.

He wasn't particularly social. He was hard to engage, especially between a year and 18 months, and again I remember thinking, "Oh, he's just not going to be the life-of-the-party kind of kid. He's just more reserved." But there really wasn't anything that we thought was wrong at that point. At 18 months, we were starting to get worried but only because he wasn't really talking much. He could label all of the letters. So you'd hold up a letter, and he could say them, but those were his only words at that point. Up until 18 months, we thought he was really smart. His receptive vocabulary was tremendous. He loved looking at books, and we'd just get him to label all these different things. I remember a fish book that he had. He knew all these different kinds of fish.

Between 18 months and two years, things got really rapidly out of whack. It was clear that something was wrong. His self-stimulatory behaviors really started to emerge. I've had an expert tell me that Brian's the highest self-stim kid she's ever seen, especially in his childhood, and it's been one of our biggest challenges trying to break through that. And that really started to emerge around that time. He started running back and forth flapping his hands. Flapping his hands was a big thing, and at first we'd just come up with all of these explanations for it. I remember he'd stand in front of his reflection in the oven and flap his hands, or his reflection in the sliding glass door. "Oh, he's pretending to be a conductor." And I remember him running back and forth, back and forth, and different people, like, "Oh, he's chasing his shadow. Oh, he's pretending to be Batman." But what he was doing was stimming.

So at around 20 months, I took him to the pediatrician because I was again mostly concerned about his not talking. I talked to my pediatrician about my concern. She got me in a place for an evaluation, and literally within a couple weeks of that evaluation we had a speech therapist and a special educator coming to our house to work with Brian. It was with his work with the speech therapist that I really started to realize how wrong things were, because she was using a typical speech therapy approach, embedding it all in very naturalistic play, trying to work on his speech, and she couldn't get him engaged with anything. She was pulling out all of her toys that I'd seen other kids in the neighborhood just love—a doctor's kit and a

pretend playground—and she just couldn't get him engaged at all, and I could really see how unusual that was. And so then she and the special educator were the first people to mention anything about autism.

Transcript: Adrienne Golden

We've had a wide range of kids with autism. For the most part, they have some social communication deficits. They tend to be very solitary in their play, a little more interested in adults than kids, but generally not interested in others. We try to bring that out in them. A lot of repetitive behaviors, so we'll see them lining up cars or materials. They have a very rigid sense of their play. They have in their head what they think they want their play to be and aren't very receptive to other people getting in the way of it, and you can see that's it's really rigid and routine, and they like to do the same thing over and over. The kids I've had really enjoy a routine. When they come in, in the morning, they want to wash their hands, sit down for snack, then play, and if snack's not there, kind of throws them off, and so you see them trying to work through that. Also repetitive behaviors, flapping or toe walking or just any sort of behaviors that are just very repetitive.

They all have their own little quirk or thing that they like to do. You can see a lot of similarities in them, but they're unique in what they display. But I think the social deficits are usually the biggest and most obvious. And then, when you really observe them, you can see the behavior piece of it. I generally watch their social behavior. I think language is hard because kids develop language at such different rates, although it is something to watch out for. I usually watch more for their social. If they're very isolated and they prefer to be in a completely different part of the classroom than the other kids, or if a teacher goes over to sit with them and engage with them and they just give up and walk away, that is a red flag for me. Or if I see them flapping their hands or walking on their toes, those repetitive stimming behaviors sets off a red flag in my head. I think it's important to note those and watch over, not too long necessarily because you want to get them diagnosed if it's there, but to make sure that it's something that's consistent and persistent and it's not just, oh, one day they were really excited and flapped their hands or they might prefer to walk on their toes or today they were not feeling well, and so they were playing by themselves, make sure that's it's something that's more common than not for that child. Maybe this is autism then kind of go from there.

Ask other professionals that you know, occupational therapists or a speech therapist, "Hey, have you noticed these things? What do you think? It might be autism. I don't know." And then if other people have a consensus as well about that, they may be bringing it to the parents and say, "When we do this, we notice that your child does this." So they can actually know it's not just me saying, "Oh, I think we've seen this exact behavior, and it's a concern because these are some things we usually see with autism," and then going from there and have them look into getting a diagnosis. It's definitely making sure it's something more persistent and not just a once-in-awhile kind of thing.

Activity

View the videos below. Each pair contains one example of a child engaged in typical age-appropriate behavior and one of a child exhibiting characteristics of ASD. For each pair of videos, compare and contrast the behavior of each child. Be sure to list the characteristics associated with ASD that the child with this disorder is displaying.

Play

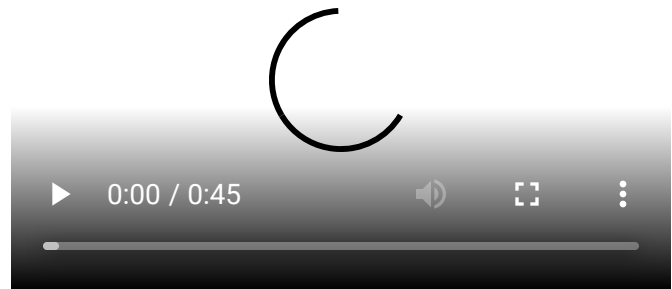Video Player   Video Player
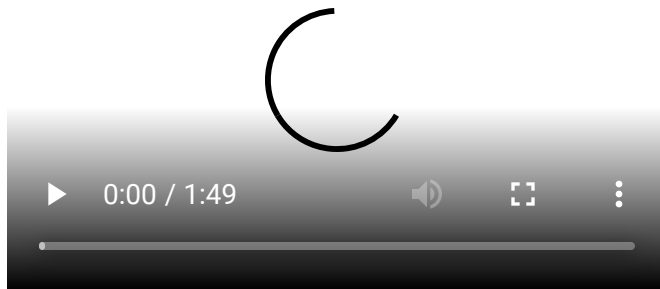
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Typical Play (View Description)

Thirteen-month-old Kyle plays with a collection of colorful nesting cups. He plays with them as they were designed to be played with, stacking the smaller cups inside the larger ones. He hands cups back and forth with an observing adult, who prompts him to continue his play.
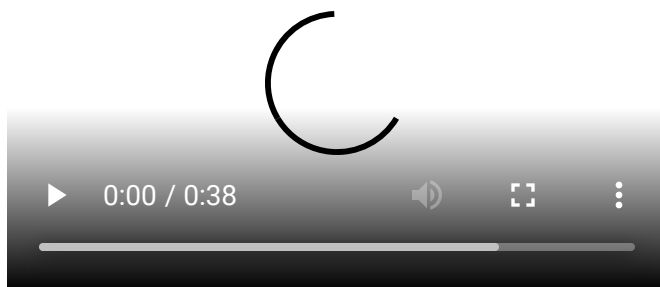

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Atypical Play (View Description)

In this video, seventeen-month-old Evan plays with a toy phone by tipping it over and throwing it. Even after an observing adult demonstrates how to use the toy as intended—pretending to answer a call for Evan and passing him the handset—he persists in his own style of play.

Speech

Video Player

Video Player

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Typical Speech at Two Years (View Description)

Two-year-old Alex is sitting in a highchair with food on a tray in front of him. An adult in the room chats with him about his breakfast, and Alex responds in kind. The adult tells him that they will wait until his food "gets nice and warm. It's a little bit hot, sweetie." Alex replies, "It's a little bit hot?" The conversation goes back and forth, with Alex
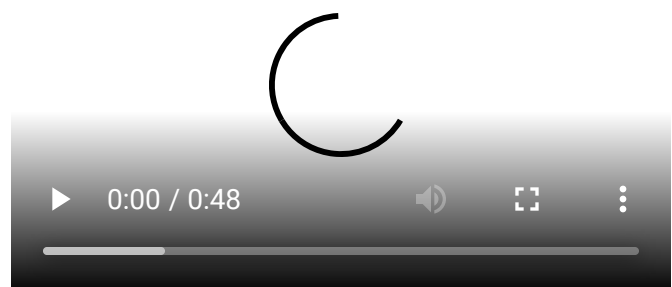
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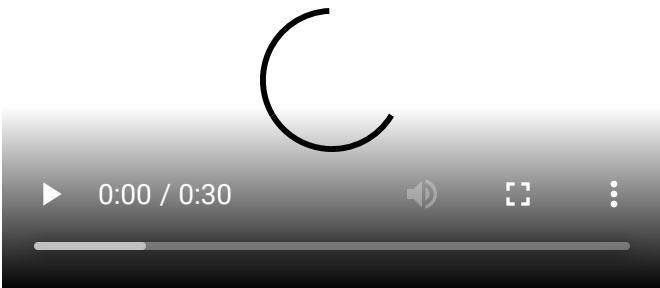Repetition of Spoken Words (View Description)

An adult enters the room where thirty-month-old Lucas is playing. She greets him: "Hi, Lucas!" To which he replies, "Hi, Lucas." The adult says, "No. Say, 'Hi, Georgia!'" and Lucas again repeats her. "Hi, Georgia." When the adult asks, "How are you?" Lucas replies, "How are you?" Once more, she

following the adult's train of thought each time and responding appropriately.

prompts him: "Say, 'I'm fine,'" and Lucas again complies. "I'm fine," he says.

Response to Name

Video Player

Video Player

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Use Up/Down Arrow keys to increase or decrease volume.

Use Up/Down Arrow keys to increase or decrease volume.

Response to Name (View Description)

Lack of Response to Name (View Description)

Twelve-month-old Kyle is playing with toys on the floor. When an adult speaks his name, Kyle immediately turns toward her in recognition. He smiles and points before beginning to crawl toward the adult and the sound of her voice.

Two adults try to get nineteen-month-old Evan to respond to the sound of his own name. Even after adding physical touches and tickling to their attempts, however, Evan continues to avoid eye contact with either of the adults and shows no sign of recognizing his name.

Source: Centers for Disease Control and Prevention

IRIS | Page 3: Diagnosis

What is autism spectrum disorder and what are the characteristics associated with it?

Page 3: Diagnosis

Because the medical system relies on the DSM-5 for diagnosis, it generally uses the term "ASD." On the other hand, the education system, which uses IDEA '04 for identification purposes, prefers the term "autism." Regardless of what specialists call the disorder, it's the child's unique needs that are important.

Medical Diagnosis	Educational Determination
- Made by a licensed physician or psychologist - Usually based on the criteria listed in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) - Diagnosis: autism spectrum disorder	- Made by a multidisciplinary school team - Based on the regulations governing Individuals with Disabilities Education Act of 2004 (IDEA '04) - Required to access educational services - Eligibility determination: autism x *Individuals with Disabilities Education Act of 2004 (IDEA '04)* Name given in 1990 to the Education for All Handicapped Children Act (EHA) and used for all reauthorizations of the law that guarantees students with disabilities the right to a free appropriate education in the least-restrictive environment.

Medical Diagnosis

The process of obtaining a medical diagnosis often consists of two stages: screening and diagnostic evaluation.

Screening: The American Academy of Pediatrics recommends that all children be screened for ASD at 18 and 24 months during their well-child visit, using the Modified Checklist for Autism in Toddlers, Revised with Follow-Up (M-CHAT-R/F).

Diagnostic Evaluation: If a screening indicates that a child might have ASD, the pediatrician or psychologist needs to conduct a more thorough evaluation of the child and his or her level of functioning. Because there is no medical test for ASD, identification is based on information gathered from:

- Family members or other caregivers (e.g., childcare providers, teachers)
- Behavior observations across environments

- Systematic testing
    - Overall development
    - Adaptive behavior (e.g., dressing, grooming, feeding)
    - Fine motor (e.g., holding pencil, buttoning buttons, using scissors)
    - Gross motor (e.g., walking, jumping)
    - Communication (e.g., understanding directions, expressing wants and needs)
    - Social interaction (e.g., ability to interact with others)
    - The presence of autism-related symptoms (e.g., repetitive behaviors, sensory issues, lack of eye contact)

Once this information has been gathered, the doctor can determine whether a child meets the DSM-5 criteria for a medical diagnosis of ASD. This medical diagnosis opens the doors to disability-related services such as:

- State-funded programs (e.g., respite care, supplemental security income)
- Health insurance benefits (e.g., to cover clinic services, applied behavioral therapy)

Research Shows

A child can be reliably identified as having ASD by 24 months of age; however, the average age of diagnosis of ASD in the United States is approximately 4½ years old.
(CDC, 2021)

Educational Determination

A child or student over three years of age who receives a medical diagnosis of ASD should be referred to the appropriate state agency (e.g., local education agency or LEA) for an educational evaluation. On the other hand, a child who does not have a medical diagnosis, but is suspected of having autism, should also be referred to the public school system for an evaluation. In either case, this evaluation is conducted by a [multidisciplinary team](#) and should involve:

x

multidisciplinary team

A team of teachers, educational professionals (e.g., related services personnel, school psychologist), administrators, specialists, and parents or guardians who assess the individual needs of students to determine eligibility for special education and develop individualized education programs (IEPs); often called IEP teams.

- Interviews with family members or other caregivers (e.g., childcare providers, teachers)
- Review of relevant medical records (e.g., vision or hearing screenings, documentation of ASD diagnosis)*
- Behavior observations across environments
- Systematic assessment of:
    - Intellectual ability
    - Academic achievement
    - Adaptive behavior (including motor skills)
    - Communication skills
    - Social interaction skills

* *Note:* Remember that an educational determination and a medical diagnosis of ASD result in different services. Therefore, if a child does not already have a medical diagnosis of ASD, the family may also want to consult with a physician or psychologist during this process.

Once this information has been gathered, the team can determine whether a child meets the IDEA criteria for autism, which requires that a child's or student's educational performance be adversely affected. If so, the child is eligible for special education services. It is possible for a child to have a medical diagnosis of ASD but not qualify for special education services under IDEA.

Listen as Ilene Schwartz discusses why it is important to look beyond academic needs when determining whether a student with ASD qualifies for special education services.

Ilene Schwartz, PhD
Professor, Special Education
Director, Haring Center for Research and Training in Inclusive Education
University of Washington

(time: 1:43)

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[View Transcript](#)

Transcript: Ilene Schwartz, PhD

One of the things about children with autism who do not present with cognitive impairments, and in fact who may present as being gifted academically, is that they're very challenging for many public school systems. That is because, as special educators, we are prepared to and we expect to provide help to children to catch up academically. These children may be advanced academically but in fact are behind socially, and some of these children may not qualify for special education because they're able to access general education. One of the things we often encourage school districts to do is to consider if the behaviors the children are presenting have a negative impact on those children's ability to participate in general education activities, working in groups, working together in teams. Some of the social impairments that children bring to the table actually do have a negative educational impact because it makes it difficult for the children with autism to participate in these groups in a meaningful way. So one of the things we always want to do when we look at children with autism is not just look at their academic functioning and determine their need for special education services based on that, but to look at the whole child and consider how they do socially, how they do behaviorally, and how they're doing academically.

Eligibility for Early Intervention Services

Similar to the educational determination for children three and older, children under three who have, or are suspected to have, ASD can receive assistance under IDEA, Part C. Children who meet their state's definition of developmental delay or disability are eligible for early intervention services. Such services are designed to meet the developmental needs of the child and the needs of the family to assist appropriately in the child's development. These services should occur in the natural environment as much as possible,

including the home and community settings in which children without disabilities participate. For more in-depth information about eligibility and early intervention services for infants and toddlers, view the module *Early Identification of Autism Spectrum Disorder*, hosted by the ASD Toddler Initiative Project at the Frank Porter Graham Child Development Institute, University of North Carolina at Chapel Hill.
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early intervention services

Specialized services provided to very young children at risk for or showing signs of developmental delay.

Now listen as Nancy Rosenberg discusses the early medical diagnosis of her son and the educational services that he received.

Nancy Rosenberg, PhD
Parent of a young adult with ASD
Director of Distance Learning ABA Program
University of Washington

(time: 4:30)

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View Transcript

Transcript: Nancy Rosenberg, PhD

By two, we were really concerned and took him to get evaluated. He was two and three months at that point. They diagnosed him medically right away with autism. His intervention at that point was we had these two people coming to the house, his speech therapist and a special educator. The special educator was coming once a week for an hour, maybe an hour and a half, and the speech therapist was coming twice a week for thirty minutes or forty-five minutes. We were just thinking he was getting these boosters until he could go to preschool. I had him signed up for when he was going to turn three for our local preschool, and it had not yet entered our mind that he might not be able to go to normal preschool.

We moved to Seattle when Brian was about two and a half years old. John, my husband, came two weeks ahead of time, and his job was to get us signed up so we could start having these people come to our house like in New York. We got a very rude awakening that that was just not going to be available to us in Seattle, and in fact John spent a great deal of time on the phone trying to figure out how to get services. He felt like after a day of phoning people that he was giving people in the community more information about services than they were giving him because there was just so little out there. But the one fortunate call that he made was to the Experimental Education Unit at the University of Washington. They had an infant-toddler program. He talked to the person who ran it. She was delighted to have Brian come, which was not an answer that we were hearing from anybody. And, again, this wasn't what we wanted. What we wanted was somebody to come to our house like in New York.

That was our first introduction into the school system. He got into the infant-toddler program at the EEU and then stayed through preschool. The EEU is in the Seattle school district. We were still just trying to grapple with what does this diagnosis means and what help we need for Brian. When he turned

kindergarten age, we picked a school doing full inclusion. Brian had very severe autism, and he needed a one-on-one aid with him the whole time if he was going to be fully included. Even with the one-on-one aid, what I saw over the course of the six years was that it was just getting harder and harder as the gap between him and the other kids got larger and larger to figure out ways to include him in the classroom. There wasn't a special ed classroom because it was full inclusion, and he couldn't be in the gen ed classroom, so he and his aid were spending more and more time by themselves. And they had a portable where she could go and work with him one-on-one, and again more and more of their time was spent there and less and less of their time with other people. And I just started wondering whether it would have been better to be in a self-contained classroom where he would have least been around other kids and other adults.

The difference between medical and educational services is that in education they're required to individualize for different student's needs, and the schools, because of the law, have had to figure out what to do, or at least attempt to figure out what you need to do to meet the needs of all different kinds of kids. What I found in the medical field is that they don't have that same requirement, and I find it very hard to find medical professionals that can really do anything significant as far as evaluating Brian's medical needs. I've had a real hard time finding people who can use the strategies that they need to use to evaluate somebody like Brian. And especially to take the time, because it just takes a lot of time. With Brian, you have to be really patient and never make him feel threatened, never make him feel that he's being asked to do something against his will. And that takes way more time than your typical medical professional has.

Later Identification

Although a growing number of children are identified in the early developmental period, many are not identified until they are older and not meeting expected age-appropriate social demands. For example, it was not until Jaquese, one of the children you met in the Challenge, started kindergarten that it became evident that his obsession with comic book superheroes and his communication difficulties were not developmentally appropriate. Because Jaquese was an only child, his parents did not recognize the extent to which he was displaying atypical behaviors.

As soon as a parent or a professional (e.g., childcare provider, teacher, pediatrician) believes that a child is demonstrating the early signs of ASD, he or she can refer the child to their state's child find system, which is responsible for identifying, locating, and evaluating children in need of special education services.

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child find

Mandated by the Individuals with Disabilities Education Improvement Act of 2004, this law requires all school districts to identify and evaluate all children ages birth through 21 who have or are suspected of having a disability, regardless of severity, to determine if they need special education services.

Listen as Ilene Schwartz discusses multiple factors that lead to the later identification of children with ASD.

Ilene Schwartz, PhD
Professor, Special Education
Director, Haring Center for Research and Training in Inclusive Education
University of Washington

(time: 1:55)

Audio Player

View Transcript

Transcript: Ilene Schwartz, PhD

The goal for identification is *early*, and we know that we can accurately identify children by their second birthday and sometimes even before that. The average age of identification is about four years old. There are some children who may not be identified until later for a number of reasons. One is that they may be misidentified, so for example a child may be identified as having ADHD and a reading disorder, not taking into account some of the social deficits that are impacting their ability to learn and participate in school activities. One is that children of families of color tend to be identified later. They also require more doctor's visits to get identified. And that's also true for families who are economically disadvantaged. But some children—and they tend to be children—who we refer to as having higher functioning autism tend to be identified later because their skills don't present in the way that we often think about children with autism. They may develop language on time. They may have pretty good social skills in prescribed ways. So if we look at children who develop language, start talking at the right time, have a pretty good vocabulary, but their social skills don't develop, if a child isn't in a group social situation early on those deficits may not show up. So there are many children with autism who are extremely bright and advanced academically. The fact that they're advanced academically seems a protective factor, so the fact that they're delayed socially doesn't really show up.

IRIS | Page 4: The Multidisciplinary Team

What should teachers consider when working with students with autism spectrum disorder?

Page 4: The Multidisciplinary Team

Once it has been determined that a child has ASD and is eligible for individualized early intervention or special education services, the multidisciplinary team needs to write a plan outlining these services. The plan outlines individualized goals (which should be tied to the assessment results and parent concerns), the amount of time the child or student is to be educated with typically developing peers, and more. For children from birth to three years of age, these plans are called Individualized Family Service Plans (IFSPs). Children and youth ages 3–21 have individualized education programs (IEPs).

Individualized Family Service Plans (IFSPs)
Written documents used to record and guide the early intervention process for young children with disabilities and their families; designed to reflect individual concerns, priorities, and resources.

individualized education programs (IEPs)
Written plans used to delineate an individual student's current level of development and his or her learning goals, as well as to specify any accommodations, modifications, and related services that a student might need to attend school and maximize his or her learning.

Required Multidisciplinary Team Members

Children and students with disabilities have a variety of needs, which require the expertise of a number of individuals. Although many individuals might be involved, IDEA '04 requires the participation of key team members in the development and implementation of IFSPs and IEPs. These team members are described in the boxes below.

IFSP Team Members: Children ages birth to three years
IDEA '04 requires that, at a minimum, multidisciplinary IFSP teams include a parent and at least two professionals from different disciplines, one of whom must be the service coordinator. • **Parent**. The term *parent* refers to a biological parent, foster parent, legal guardian, or an individual who acts in place of the parent (e.g., grandparent, stepparent, other relative). This person can provide important information about the child's history, strengths, and needs as well as the family's priorities for the child and information about the cultural and developmental appropriateness of goals and intervention strategies. • **Service coordinator**. This person assists the child and his or her family in accessing the appropriate services. This can include tasks such as making referrals to providers, scheduling appointments, as well as coordinating services, assessments, and IFSP meetings. • **Second professional**. This position can be filled by any number of professionals—for example, an early intervention service provider, related service provider, or evaluator—as long as he or she is

from a different discipline than that of the service coordinator. This allows the inclusion of multiple professional perspectives during the decision-making process.

Additional team members are determined based on the individual needs of the infant or toddler or are requested by the parent (see "Additional Team Members" below).

IEP Team Members: Students age 3–21

IDEA '04 requires that, at a minimum, multidisciplinary IEP teams include a parent, general education teacher, special education provider, a representative of the school district, and an educational professional who can interpret assessment results.

- **Parents**. The term *parent* refers to a biological parent, foster parent, legal guardian, or an individual who acts in place of the parent (e.g., grandparent, stepparent, other relative). Parents can provide important information about priorities, strengths, and child needs as well as information about the cultural and developmental appropriateness of goals and intervention strategies.
- **General education teacher**. At least one general educator should be present if the student is participating in general education. As the general education curriculum specialist, this person is responsible for providing the core academic instruction.
- **Special education teacher or special education provider**. At least one special education teacher or provider should be present. An expert in specially designed instruction, accommodations, and curricular modifications, the special education teacher ensures that student performance data are collected and analyzed, and then instruction and intervention are modified accordingly. A special education provider is responsible for implementing the IEP. In addition to the special education teacher, this can include related service personnel, who also provide services outlined in the IEP (see below).
- **A representative of the school district**. This person must be a) qualified to provide or supervise the uniquely designed instruction that will meet the student's needs, b) knowledgeable about the general education curriculum, and c) knowledgeable about available school resources.
- **Other professional (e.g., school psychologist)**. This person's role is to interpret the assessment results and explain the instructional implications of those results to the team. This role may be filled by any of the school personnel listed above, as appropriate.
- **Other relevant individuals**. At the parent or school district's discretion, other people who have relevant knowledge or expertise regarding the student can be included, when appropriate.
- **Student with a disability**. Depending on a child's age, maturity, interest in, and willingness to participate, the student should be included in IEP meetings when appropriate.

Additional team members are determined based on the individual needs of the student (see "Additional Team Members" below).

Andy
Parent of a child with ASD

Ideally, the multidisciplinary team members (including the family) work together to develop a plan that addresses the child's individual needs. As with any type of team, it can be challenging at times for the members to come to consensus. There are times when professionals and family members disagree about supports and services that the child will receive. Listen as Andy and Becky, the parents of a child with ASD, describe their experiences as members of their son's IEP team (time: 2:54).

Audio Player

Becky
Parent of a child with ASD

Transcript: Andy and Becky, Parents

Andy: Being part of the IEP team was a new adventure certainly and not one that I think any parent in our situation ever plans for. And, like all these things, you figure it out as you go. It's a challenge of the public education system, trying to figure out what to do with kids like ours who need special attention and deserve special attention. I understand that it's difficult for everybody. The approach is like a team, but sometimes there are little mini battles within the team, it feels like. And that doesn't mean there aren't some wonderful people that are part of the process; it's just the needs of all the parties are different, and as parents of the child our needs are simply to advocate for him and to make sure he's getting the best possible education that he can and that we are accessing every part of the system that's available to us. But it's extremely challenging, produces a tremendous amount of anxiety. Parents, us included who are very well educated, still feel underequipped, which is why many people do bring attorneys to these meetings, and we have done that as well from time to time. But it's a balance always, because you don't want to show up with guns blazing, ready for a fight because that immediately puts people into defensive posture on the other side, and then you are in a fight all the way through. And so our approach has always been to try to maintain a real civil exchange and friendly exchange and positive exchange. We've been pretty successful at that throughout, and we have not really had any significant challenges that we haven't been able to overcome. Very early, we had a little bit of a challenge in how to describe his disability.

Becky: The school psychologist wanted to label him as mentally retarded, and we knew that (a) that wasn't an appropriate label and (b) he was too young to make that assessment. We did have to push very hard on that, and as new parents with a three-year-old that was our first foray into the world of IEPs. That was scary and challenging for sure.

Andy: Fortunately, we were successful in getting a more appropriate label, language. That's very important. Where you start is going to affect the trajectory of your whole experience as a student in a school system. So pushing very hard against that, I think, allowed for us to be on a path for Finn to be and stay in a general education environment, and he's had an aide throughout, which has been a very good experience as well.

Additional Team Members

In addition to the required multidisciplinary team members listed above, other personnel are often needed to address the individualized needs of the child or student. Related services personnel—each with discipline-specific expertise beyond that of the classroom or special education teachers—are frequently part of the multidisciplinary team and provide these supports. Depending on the intensity of the needed services, related services personnel might work directly with family members or caregivers of infants or toddlers, work directly with an individual child or student, or consult with team members who then provide the supports during naturally occurring activities. Some of the more common related services personnel—many of whom are on the IFSP and IEP teams for students with ASD—are listed below.

Related Service Providers

Board Certified Behavior Analyst

Applied behavior analysis (ABA) has long been recognized as the most effective overall strategy for educating students with ASD. Board Certified Behavior Analysts (BCBAs) or other well-trained behavioral specialists can assist school teams with assessment, training, and direct intervention at school, in community settings, and at home.

applied behavior analysis
Process of systematically applying interventions to modify an individual's behavior and at the same time collecting data to evaluate the effect of each intervention on the individual's behavior.

Paraprofessional

Paraprofessionals can work with young children and students with ASD on a variety of activities (e.g., implement behavioral plans, facilitate peer interactions). Often the paraprofessional spends more time with the student than either the special education or general education teacher and can provide valuable insight into the student's strengths, areas of needs, interests, and other issues that can help build a strong educational program.

Occupational Therapist (OT)

OTs support a student's participation in school-related routines and activities. For a student with ASD, that can include activities such as dressing independently, coping with tactile or sensory issues, participating in social activities, or managing transitions across school and community settings.

Physical Therapist (PT)

PTs can assess and provide intervention for issues of strength and stamina, postural control, functional mobility, coordination, and general motor behavior. They can help young children learn how to use playground equipment or negotiate steps and stairways in the school. PTs might help arrange the classroom and home environments to make sure that the work spaces (e.g., desks, computer stations) are arranged to facilitate independence and success.

Speech Language Pathologist (SLP)

SLPs help students who have trouble with communication skills perform important learning and school-related activities. For many students with ASD, this includes work on social communication, which is one of the core deficits of ASD.

School Psychologist

In addition to their role in the assessment and evaluation of students with ASD, school psychologists develop behavior plans, conduct social groups, and provide or recommend other specialized interventions for students with ASD.

Nutritionist

A nutritionist develops and monitors appropriate feeding plans to address the nutritional needs of the child, as well as other feeding issues such as food preferences, food habits, and sensory issues, among others.

Social Worker

School social workers support students with disabilities whose academic, behavioral, or social-emotional issues interfere with their education. Depending on their age, children and youth with disabilities might receive services such as social skills training, transition planning, conflict-resolution training, individual counseling, family counseling, or job-placement training.

Vocational Specialist

Vocational specialists have expertise in post-secondary education and employment options and focus on career development and preparing students for independence and for integration into a post-secondary school, work, or community environment.

School personnel can also request others to participate as members of the multidisciplinary team. These additional team members can include a range of individuals, such as child/family advocates, community members (e.g., clergy, tribal elder), and language interpreters.

Listen as Nancy Rosenberg discusses her son Brian's IEP team and highlights non-required professionals that she invited.

Nancy Rosenberg, PhD
Parent of a young adult with ASD
Director of Distance Learning ABA Program
University of Washington

(time: 1:15)

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[View Transcript](#)

Transcript: Nancy Rosenberg, PhD

I think my general comment on his school was that it was an ongoing struggle. We tended to have the most behaviors in school. It was an ongoing struggle in the early years to figure out how to include him and to make sure people knew how to work with him. He's definitely teachable, but you need to know what you're doing to teach him. And so you really needed the people working with him to be highly trained. The IEP team was, of course, his special ed teacher, the OT, and the SLP. I always insisted that his one-on-one paraeducator was at any of the meetings. They are the person—or if there's multiples of them, and there were years that we had several people working with Brian—they're the ones that probably know him better than anybody at the school. And then all through his junior high and high school, we also had an education consultant involved in his programs. This was somebody that was hired from outside the school district who specialized in autism to control some of his program. And that was something we asked for and got in his IEP.

Activity

Review Michelle's vignette from the Challenge movie and answer the questions below.

Michelle is a fifteen-year-old tenth grader diagnosed with high-functioning ASD. Michelle is bright and funny and often outspoken with adults and her peers. She has a good memory and the ability to recall details about all things related to outer space. Although this can lead to interesting conversation, Michelle has a hard time taking cues from her audience when they are tired of a particular subject. She perseverates when the other kids would prefer her to stop. Michelle also displays behaviors that the other students consider strange, such as rocking back and forth in her chair and violating others' personal space by standing too close when talking to them. All these behaviors present challenges when Michelle is trying to make friends at school. Even so, she loves to be around her peers and would like to participate in a school club or team. However, because she lacks organizational skills, she often misses the deadlines for signing up or trying out.

    a. Would this child or student have an IFSP team or an IEP team? Explain.
    b. Who are the required members for this team?
    c. Identify at least two additional members that might be on this team and explain why you would include them.

Click here for feedback.

    a. Michelle would have an IEP team because she is in high school.
    b. The required members of the IEP team are the general education teacher, special education teacher, parent(s), representative of the school district, and a school psychologist or other assessment professional.
    c. Any of the following can be members of Michelle's IEP team:
        1. Vocational specialist to help Michelle identify strengths and explore post-secondary options
        2. Social worker/school psychologist /occupational therapist to help Michelle understand personal space and boundaries during social interactions
        3. Speech/language pathologist to work on social communication skills

IRIS | Page 5: Working with Families of Children with Autism Spectrum Disorder

iris.peabody.vanderbilt.edu/module/asd1/cresource/q2/p05

What should teachers consider when working with students with autism spectrum disorder?

Page 5: Working with Families of Children with Autism Spectrum Disorder

Family involvement is one of the most important—if not *the* most important—factors in ensuring a child's success at home and in school. Keeping the child and family at the center of the process will help IFSP or IEP teams create service plans that are guided by the child's needs and that can be supported by their families. Family members—parents, caregivers, siblings—can provide information such as:

- The child's strengths and needs
- The cultural and developmental appropriateness of goals and intervention strategies
- Supports that are feasible for the child's family based on their unique circumstances (Keep in mind that families of young children often implement interventions in the home environment.)

Return to the Challenge: Feasible Family Supports

Recall that David, the child we met in the *Challenge* video, is non-verbal. During the IFSP meeting, the multidisciplinary team suggested that David's family work on his communication skills for fifteen minutes each night at dinnertime, a naturally occurring routine. However, David's mom indicated that she is alone at dinnertime because her husband is at work at that time. In addition, she is busy at dinner feeding David's six-month-old sister, who is just beginning to eat solid foods. After hearing from David's mom and discussing this further, the team decides that its original goal is simply not realistic. They determine, with the mom's input, that bath time is an enjoyable time for David and a much better time to work on his communication skills.

Listen as Wendy Stone discusses the importance of involving families when working with children with ASD.

Wendy Stone, PhD
Professor, Educational Psychology
Director of the Research in Early Autism Detection and Intervention Lab
University of Washington

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Transcript: Wendy Stone, PhD

There are so many reasons why families have got to be involved in any intervention or teaching that involves a child with autism. First of all, they know their child the best. They can tell you what's typical, what the child's behavior is in situations that the teacher will never be able to see. Parents may have figured out how to deal with certain behaviors, or how to manage or prevent certain behaviors, and those tips can be really important for teachers. Second, you really want parents to be able to use similar strategies at home that are used in the school or preschool setting. So if you want to generalize skills across settings, which is important for any child but sometimes more challenging for children with autism, it's important to have some carryover. For example, if a teacher's working on playing appropriately with a train set by rolling a train on the tracks then a parent may want to also do something like that at home with a similar material. Another reason is that parents are more likely to work on behaviors that are of importance to them and to their home functioning. Parents see their children during everyday routines, which can be very challenging. We want parents to be able to use these strategies at home in meaningful situations, not just within the school setting. So it's important that the skills that are learned at school also translate to home. We can increase the efficiency of learning if we can work together with families.

Parent Challenges

Another way the team can keep families in the center of the IFSP/IEP process is to understand the potential struggles and challenges that families of children with ASD might encounter. Additionally, keep in mind that families can be defined in a number of ways (e.g., single parent household, extended family living together, foster family) and therefore might require different kinds of supports. Below are some challenges often experienced by the families of children with ASD.

For Your Information

ASD is often referred to as an *invisible disability*. That is, there are no physical characteristics that readily identify a child with ASD as having a disability. Because these children look like typically developing children, others often view their behavior as inappropriate and associate it with bad parenting skills. Parents report that this causes stress and feelings of guilt.

- High divorce rates – Almost twice as high as in families of typically developing children
- High stress levels – Due to factors such as the child's:
    - Cognitive impairment
    - Challenging behavior
    - Language delays
    - Unpredictable behavior
    - Hyperactivity
    - Inability to self-regulate
    - Lack of self-care abilities
- Lack of time – Lack of caregivers with knowledge of ASD reduces the amount of time a parent has available for work and leisure activities.

- High levels of fatigue – Children with ASD can require a lot of care and supervision. In addition, some have sleep issues that interrupt their caregivers' sleep.
- Financial burdens – Costs for services and supports (e.g., medical services, therapy) are high and not covered in full by insurance or other programs.
- New roles – Parents assume roles such as child advocate, case manager, inclusion specialist, transition specialist, or medical expert.

To learn more about the challenges of raising a child with a disability, visit the IRIS Module:

- [Family Engagement: Collaborating with Families of Students with Disabilities](#)

First, listen as Nancy Rosenberg, a parent of a young adult with ASD, describes some of the stressors her family experienced. Next, Andy and Becky talk about the challenges of parenting their child with ASD.

Nancy Rosenberg, PhD
Parent of a young adult with ASD
Director of Distance Learning ABA Program
University of Washington

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Becky and Andy
Parents of a child with ASD

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Transcript: Nancy Rosenberg, PhD

I think Brian's childhood was unbelievably stressful for everybody involved. There were just so many stressors. There was the financial stress. I learned about ABA pretty early on, and as quickly as possible got an ABA program going for him, but that was before insurance was paying for it, so that was incredibly expensive. You couldn't use typical babysitters, because they couldn't handle Brian, so babysitting cost

$20 an hour instead of $6 an hour like other parents were paying. So all of the financial stuff was very stressful.

Brian's behaviors were incredibly stressful. He needed watching all of the time. We used to joke that you think that just by chance he might start doing something appropriate but it never seemed to be true. He would climb on anything and was just obsessed with climbing on things. All of our bookshelves were eventually bolted to the walls after they had come tumbling down. We had bars put on all of our upstairs windows. He would get on top of anything. He would jump anything or smear anything he could find, any shampoo bottles, dish soap, a milk jug, a cup of coffee, or a diet coke left out. He was very attracted by water of any kind. We have many stories of when we'd be out with him, and he would somehow see water somewhere and just make a beeline for it and go right in.

He'd have huge tantrums; you know, pee and poop everywhere. It took years to get him potty trained. And of course poop was something that was so fun to smear. Many, many, many nights spent cleaning up poop that had been smeared all over the place. And his stim was very stressful also. He had very high rates of self-stimulatory behavior. I was reading everything I could at the time, but back then the going line was don't let them stim. Every minute stimming is a learning moment lost, and so you should try to keep them from stimming. And what that meant was somebody behind him every second of the day trying to prompt him to do something appropriate. So it was either us or one of his ABA tutors. They were here for three hours a day but the rest was me, and it was incredibly stressful because, first of all, he didn't want to be doing anything but stimming, so they weren't pleasurable interactions. It was very hard to get him interested in doing anything else, and he would resist it. It was work. There was no fun involved in it. It meant, because I had read how important this was, that any moment that he was left to his own devices to stim I had to feel guilty about it.

We were seeing very little of friends or relatives at that point, because it was virtually impossible to take Brian anywhere so people had to come to us, and our house was kind of like a war zone. And I just remember the times when we were with other people, like at holidays, it was just constant stress. I either had to give up any hope of interacting with other people and just be on Brian doing what I'm supposed to be doing, which is stopping him from stimming, or I'm going to interact with other people and feel guilty that Brian's over there stimming. And so that was very, very stressful.

Then we were very worried about the impact of this on our other son. That was very stressful as well. By two years, it was completely clear that there was no danger of autism in him or really anything else, so we shifted from worrying about whether he was going to develop autism to worrying about the impact of all of this on him. Our house was a war zone. It was very difficult to take the two kids anywhere together, because it was hard to find a place that Brian could be safely that David might also enjoy. And that became progressively harder as the kids got older, because even though David was two years younger the gap between him and Brian pretty rapidly increased, and so when they were really young the sensory things that we could take Brian to the jumping pit or the climbing apparatus at McDonalds David liked, too, but David out grew that stuff and Brian didn't. So, yeah, it was stressful. Things have happily gotten better.

Transcript: Becky and Andy, Parents

Andy: One of the challenges of being the parent of a child with special needs, it's just communication. You spend so much of your time and energy preparing for IEP meetings, advocating for your child in various situations, communicating with your teacher probably more than other parents are, trying to integrate them into other extracurricular activities wherever that may be, managing medical appointments and therapy appointments and pharmaceutical stuff. It takes up a lot of time and energy, and so for us just not spending all of our evenings and all of our free time on that and trying to maintain a healthy communication in our marriage, and some play time for us, and times to just go out and just be a couple, and that's certainly a challenge. And then, as we've had other children, now it's the challenge for us to maintain some balance between our children and not just focusing all of our attention on Finn but also parenting our baby and

giving him the time and energy that he needs too. Those things in particular, I think, have been really difficult. Fortunately for us, we're pretty aware of that and try to be pretty diligent about not letting that overwhelm us and getting away and trying to find some time where we can just be us, too.

Becky: I think another challenge for parents of kids with special needs is that it can tend to be somewhat isolating. I don't know if anybody completely understands the full picture of what we deal with on a daily basis. And so for a parent being transparent enough with your family and with friends to let them in and let them carry the load a little bit is a huge challenge because you want to look like you have it all together. You're doing the IEP meetings and doing the communication and still making time for your friends and for your spouse and for your other children, so just being transparent enough to ask for help when you need it

Andy*:* It's really hard because I think most of our natural tendencies is to just get it done. Some of us are raised with this attitude of, you know, buck up and make it work and don't complain and push through, which is not healthy at all. We kind of live in a world like that to where the idea is just to not bother anybody else, not trouble anybody else. That is very isolating, and many of us have struggled with that in our lives and in our situations with our children, and many of the people listening to this probably do, too. So it's a great temptation to isolate, but it's a great blessing if you can find a way past that, to find some people in life that you can just tell the truth. It's embarrassing sometimes; I have a ten-year-old who still has pottying issues. Fortunately, he can accommodate most of his needs, but even still there are challenges in that, and it's just embarrassing sometimes. It's really not something you want to chat with your friends about, especially your friends who have normal, beautiful children who are soccer stars and straight A students. That gets difficult sometimes, but if you can find a couple of people that you're okay to just say, "Hey, my kid made a mess in the bathtub tonight, and that was really difficult." It's really awesome to have somebody to be able to really talk about that kind of stuff with.

Research Shows

Families are connected and interdependent; what happens to one member of the family can affect the dynamics of the whole. The earlier a child is identified as having ASD, the earlier the child and family (including the siblings) can get appropriate supports and services.

- Parents who are unaware that they have a child with ASD might use ineffective parenting strategies, which can make them feel frustrated and doubtful of their own parenting abilities.
  (Sofronoff & Farbotko, 2002; Karst & Van Hecke, 2012)
- The parents of children with ASD frequently use maladaptive coping strategies, particularly self-blame.
  (Rodrigue, Morgan, & Geffken, 1990; Karst & Van Hecke, 2012)
- Because siblings will usually be involved in one another's lives longer than the parents, they also require training and supports.
  (Conway & Meyer, 2008)
- Siblings often share the same feelings about their siblings with ASD as their parents may, including isolation, guilt, concerns about the future, and desire for more information.
  (Conway & Meyer, 2008)

Supporting Families

Once educational professionals become familiar with the potential struggles and difficulties that families of children with ASD might encounter, they can lessen parent stress and help their children make meaningful progress through the interventions that they provide. Because interactions with school staff can be an additional source of stress for some families, professionals should listen to them, communicate frequently,

and be responsive to their concerns and input. Keep in mind that teachers should communicate about the child's positive behaviors and not just about his or her challenging behaviors.

Teachers can further support families by helping them find an appropriate support network. There are a number of groups or networks that offer supports and services to families of children with ASD (e.g., Autism Support Network). Many parents express great satisfaction when they are able to create networks with other parents with children of similar ages and abilities, and these associations often lead to lifelong friendships.

Listen as Adrienne Golden discusses the importance of caregivers and educators communicating with and providing support for families. Next, listen as Nancy Rosenberg describes some of the supports that helped her cope with stressors she experienced.

Adrienne Golden
Susan Gray School
Early Childhood Lead Teacher
Vanderbilt University

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Nancy Rosenberg, PhD
Parent of a young adult with ASD
Director of Distance Learning ABA Program
University of Washington

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Transcript: Adrienne Golden, Early Childhood Teacher

I think families are a huge part of the classroom for all kids. They know their kids the best. They've spent the most time with them. They've known them from day one, and they can provide us a lot of insight about the child, what they like, what they don't like, how they respond to different situations, strategies that have worked in the past, or just haven't worked in the past. Often, kids are different at home and at school, so they can really provide us a lot of insight into what the child is doing at home or out in the community, and what's important to them, because each family has something different that's important for them and for their child to be working on.

It's important to be consistent across different settings, so if they're doing something at home that seems to really work, how can we make that work in our classroom or vice versa? If we're seeing something that's really working and maybe the family is struggling with that, how can we help them use the same strategies at home so the child's receiving the same support everywhere? So they're getting used to, this is how I behave in all situations, or this is how I work through these situations at home and at school. I try to keep an open line of communication and gather information from them and then talk to them a lot about how well their child is doing in the classroom. They know that their child is going to struggle with a lot of things. That's a given, so we touch on that some, but I always like to focus on the positive. And, you know, "Oh, today, he said this word that he's never said before. We made eye contact at circle time," and those kinds of things to really help them see that their child is being successful. And then really talking to the families about what's a struggle at home and how can we help with that? And then saying, "You know, we were really struggling with how are we going to get your child to stay seated at lunchtime. And that was a struggle for us, and these are some things we've tried and it's really working, so if you're having that struggle at home, maybe you can use some of the same strategies." And some families have offered to make visuals for them and those kinds of things. Just anything that we're doing at school that could help them at home.

Transcript: Nancy Rosenberg, PhD

I just wanted to make it clear that we've had so much help and support throughout the years, both at school and in the home and community environment. For one thing, my husband works at Microsoft, and we were part of a group that advocated early on when Brian was, like, six and seven, we were pushing to get Microsoft to cover ABA therapy for kids on the autism spectrum. When my son turned eight, they started covering it. That made such a difference because we were providing a lot of ABA therapy. We were getting respite in family support from the Department of Developmental Disabilities, and I can't say how much that helped ease the stress.

And then another thing that I always had that made such a difference, an expert friend to call who could give me advice or assistance. I wasn't much of a support-group person. I wanted to talk to an expert, and probably because we went to the experimental education unit when my son was young, I was hooked up with people that really knew what they were doing. I think of so many times over Brian's childhood that I just felt completely helpless and uncertain what to do, and I had these people I could call that could help.

Then the final thing was getting knowledge, going back and getting my PhD. And I'm not necessarily recommending that to everybody, but that knowledge on how to teach and help my child myself was the best support I could have had. I remember when I was doing ABA with my child, people would say things, like, "Oh, I don't want to be my child's therapist. I just want to be his mother." Part of me understood that, but part of me was, like, "Yeah, but a mother needs to be able to teach their child things, and I am learning how to teach my child." I'm just so thankful for that education, because now when a problem comes up, and they always do, I have the knowledge and the strategies to deal with it, and that's the biggest support I could have had. I'm not dependent on trying to find somebody else who knows how to do it. I know how to do it myself.

IRIS | Page 6: Instructional Considerations

What should teachers consider when working with students with autism spectrum disorder?

Page 6: Instructional Considerations

Just as the development of the IEP or IFSP is a group effort involving several multidisciplinary team members, so too is the instruction of children and students with ASD a shared responsibility, much of which occurs in inclusive settings. A large number of children and students with ASD receive at least some instruction in typical early childhood settings or in general education classrooms. More specifically:

- Although not all young children participate in early childhood programs (e.g., preschool, childcare), about half of all children ages three to five with ASD participate in a regular early childhood program.
- Approximately 91% of students with ASD ages 6–21 receive all or some portion of their instruction in a general education classroom. The remaining 9%, many of whom have severe symptoms, receive services in separate schools, residential facilities, homebound/hospitals, correctional facilities, and private schools.

For these reasons, it is important for personnel in early childhood settings and general education classrooms to be aware of strategies to increase the likelihood of the child or student's success. As such, it might be beneficial for them to seek out the expertise of the multidisciplinary team members to help implement these strategies, such as those briefly described below.

Get To Know the Student

When they understand a young child or student's interests, teachers increase their chances of making meaningful progress with that child or student. Teachers can use this information to teach concepts, as well as to motivate, reinforce, and build rapport with a student. For example, if a teacher knows that a child is especially interested in certain cartoon characters, she can use a picture of those characters to motivate the child to identify colors. Likewise, a teacher can incorporate a teenager's interest in the solar system to teach concepts related to speed, distance, or trajectory. Additionally, when a teacher takes time to build rapport with a child or student (e.g., enjoying time together in a playful or fun activity), the child or student is then more interested in working with that teacher and more likely to behave appropriately.

Provide Instruction in ASD-Specific Skills or Areas

In addition to instruction in traditional areas such as literacy and mathematics, most students with ASD benefit from instruction in ASD-specific skills or areas, such as those listed below. It is important to begin this type of instruction at a young age.

- Communication
- Social interaction
- Executive functions
- Emotional regulation

- Play and leisure skills

- Self-care skills
- [Flexibility](#)
- Observational learning skills (e.g., imitation)
- [Independence and self-advocacy](#)

executive functions
The mental processes that control and coordinate activities related to learning, including processing information, retaining and recalling information, organizing materials and time, and using effective learning and study strategies.

emotional regulation
The ability to control one's state or behavior in order to achieve individual goals, handle everyday stress, and deal with various social situations appropriately.

flexibility
The ability to adapt to routine changes and adjust to the unexpected. Students who have ASD often are viewed as rigid and inflexible. These students might struggle with:

- Transitions during the day
- Changes in schedules or routines
- Changes in staff
- Generating new ways to approach a problem
- Multiple interpretations of rules
- Managing emotions
- Responding to unfamiliar peers or adults
- Differing opinions

Independence and Self-Advocacy

A child or student with ASD needs to learn how to make decisions, take care of himself and his possessions, and tell others what supports he requires. It is important for these skills to be embedded in the curriculum as early as possible. For example, a preschool student can be taught to make decisions about which activities he wants to complete and in what order he wants to complete them. As students get older, self-advocacy may include telling teachers or employers what types of supports (e.g., written schedules) they need to be successful.

Use Evidence-Based Practices and Data-Based Decision Making

Teachers should use *evidenced-based practices*—strategies that have been proven to work through research. Additionally, they should collect data to track the child or student's performance across time. The multidisciplinary team needs to analyze these data to determine whether the child or student is making adequate progress. If not, the members of the team should determine the types of instructional changes that should be implemented to improve the child or student's performance.

Provide Individualized Supports and Services

Although children or students with ASD will not require individualized supports and services for every curricular area, those they need should be listed on the student's IFSP or IEP along with the name of the person responsible for implementing or providing them. These supports and services can range from simple to intensive. Increased staffing in a classroom (e.g., adding a paraprofessional) might be an example of an intensive service. On the other hand, a modified schedule that allows a student with sensory issues to

change classes before the bell rings to avoid crowded and noisy hallways is an example of a simple support.

Create Structured Environments

Typically, children and students with ASD like predictability. Maintaining a structured environment can help them feel less anxious, increase their availability for learning, and improve their cooperation throughout the school day. A structured environment can include:

- A predictable schedule – Activities occur at the same time across days or weeks.
- Predictable routines – Activities follow a consistent pattern.
- Predictable locations – Classroom objects are kept in consistent places.
- Minimal distractions – Environmental stimuli to which a child or student might adversely react are reduced or removed (e.g., clutter, noise level).
- A consistent physical environment – Minimal changes are made to the room arrangement.

first-then picture board

Teachers can use strategies and supports to help students understand the environment. For example, teachers can use visual cues first-then picture board; visual schedules using objects, pictures, or words) to help students predict what activity will come next. These strategies and supports need to be age- and developmentally appropriate, explicitly taught, and, to the greatest extent possible, support the student's independent functioning.

first-then picture board

A type of simple schedule that visually presents what the child or student needs to do now (first) and what he or she will do next (then). First-then boards can be created using pictures, objects, or text. Digital first-then picture board apps are also available.

Source: The Picture Communication Symbols © 1981-2015 by Mayer-Johnson LLC. All Rights Reserved Worldwide. Used with permission.

Use a Functional Approach for Challenging Behaviors

Some behaviors that children and students with ASD display are challenging for teachers. Research has shown that a functional approach is most effective in addressing these behaviors. A functional approach is one in which the function of the behavior (e.g., to get attention, avoidance) is determined through observations and analysis. Once the function of the behavior is determined, personnel can teach the child or student appropriate alternative behaviors that serve the same function. For example, if a child typically has a tantrum to avoid difficult or non-preferred activities, he can learn to hand the teacher a picture to request a break from the activity. This offers him a more appropriate way to communicate his need.

To learn more about functional behavioral assessments, view the following IRIS Module:

- Functional Behavioral Assessment: Identifying the Reasons for Problem Behavior and Developing a Behavior Plan

Create Social Opportunities

Because challenges with social communication and social interaction are major characteristics of ASD, providing opportunities for children and students to interact with their peers is key in developing relationships. Teachers can create opportunities for children or students with ASD to socialize with typically developing peers in a number of ways, such as:

- Creating group activities (and making sure each member, including the child or student with ASD, has a role)
- Assigning a peer buddy or partner
- Creating social opportunities that relate to the child or student's interest

To learn more about each of the strategies listed above, listen to the following IRIS Interview:

- [Strategies for Working with Students with Autism Spectrum Disorder](#)

Listen as Wendy Stone discusses a few other tips for teachers working with students with ASD. Next, listen as Adrienne Golden talks about how to engage children with ASD in the classroom. Finally, listen as Ilene Schwartz highlights the importance of teachers using data-based decision making when working with students with ASD.

Wendy Stone, PhD
Professor, Educational Psychology
Director of the Research in Early Autism
Detection and Intervention Lab
University of Washington

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Adrienne Golden
Susan Gray School
Early Childhood Lead Teacher
Vanderbilt University

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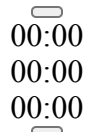[Use Up/Down Arrow keys to increase or decrease volume.](#)

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Ilene Schwartz, PhD
Professor, Special Education

Director, Haring Center for Research
and Training in Inclusive Education
University of Washington

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Transcript: Wendy Stone, PhD

Teachers who are unfamiliar with autism or maybe know just one child with autism or maybe have learned about autism from news shows or TV might be a bit wary or even frightened at the thought of the unknown. I think that's not uncommon, and it's not unexpected, but I do think it's so important for teachers to realize a couple of things. One is that there are a lot of stereotypes about autism that don't apply to the whole range of children, and there are still many misconceptions that abound about what autism is and what it isn't. I think the most important thing probably is understanding that each child is so very different from every other child, and that once you understand the characteristics of autism that underlie some of the behaviors that you see it's it's easier to figure out what to do about that and how to work with children when you understand what is causing the behaviors. I would encourage teachers to find out as much as they can about the child including their strengths, not just the things that they have trouble doing, but the strengths that they might have that can be used productively to help them learn and possibly to help other children learn in the classroom, as well. For example, they may have very good attention to detail. They may have specific areas of knowledge that are boundless. It's really important to build upon those strengths.

Talk to the parents about what approaches they've found. What the child likes to do. What might be a good reward. What the child's language level is. How the child communicates. Do they use a picture system? Do they use nonverbal? Do they use words? Find out what other people who've worked with the child have done, and what's been successful and learn about autism. Learn about how the core areas of impairment affect the child's behavior so that you know how to just step right in, and when you see a behavior it won't be a mystery to you. It will be, oh, that might be because it's too loud in here. Or the child might be acting this way because he just doesn't understand that it hurts other people when they're pinched. Or he may not have understood those directions because they were kind of long and wordy. Just to be able to think about the underlying characteristics of autism that may contribute to behaviors that may be challenging.

It's so important for teachers to understand the unique characteristics of autism and how they affect learning. Children with autism may not be as interested in social reinforcement or praise or doing what's expected of them or completing course work or staying on task. However, there are many other types of rewards that these children might enjoy. At the same time, children may not respond or seem to be complying, and it would be a mistake to attribute this to willfully being disobedient, as opposed to really maybe not understanding what the expectations are, having difficulty understanding language and also having difficulty expressing their needs in a productive, communicative way.

Transcript: Adrienne Golden, Early Childhood Teacher

I think when you first think of autism, and you think of a child coming in your classroom, you might be concerned about high levels of challenging behavior. One of the biggest things I think about is how am I going to engage that child in the classroom, because we know that they're not typically very engaged with other peers, and early childhood kids learn a lot from playing with their peers. We know that kids with autism usually have lower play skills. So you are, what are we going to do if they're not engaging with other kids and they're not communicating with other kids in the way that typical kids are? That's a big concern, with how am I going to set up the classroom and the activities in a way that will get them engaged, interacting, interested so that then we can teach through play, and how am I going to have to set up my classroom for them to be successful and provide that routine in structure that they enjoy, while also allowing them to engage with the toys and the other kids, like all the other kids are doing? I think my biggest concern is when I figure this kid out, how am I going to get them to engage, how am I kind of crack their little nut and get into their little world and engage with them. I think all kids with autism are so different. And I think that's what I enjoy the most about working with kids with autism. They are so different. It is like a puzzle. And I just love figuring out what's going to work for you today, what's going to work with you tomorrow?

Transcript: Ilene Schwartz, PhD

So the process of data-based decision making is to collect information about children's performance. We often now call that progress monitoring. What we're looking at is to say, "Is the child learning what I'm trying to teach them?" If not, the information from the data you have collected tell you that you need to make a change in your teaching plan. So what we encourage teachers to do is to look at the data on a weekly basis and determine is the child making progress? If so, continue as is. Is the child not making progress at the speed that you want to see them make progress? And if they're not then you need to make a change to the instructional program, and that may mean changing how you're providing instruction. It may mean that you need to provide more instruction. You may need to make the task easier. You may need to find a better reinforcer. The child may not be motivated to participate in the instructional activity. One of the tips we always give teachers, if the data are not showing the child's making progress, is to make sure that the instructional program is being delivered as written. We want to make sure that the instruction is being provided with fidelity, that we're providing the instruction correctly, and that we're providing the instruction with enough intensity to make sure that the child is learning.

For Your Information

Children and students with ASD often have difficulty generalizing skills across environments and people. Once a child or student begins learning new skills at school, it is a great idea to try to generalize these skills to the home. For example, if a pre-school child is learning colors and shapes, the teacher can ask his or her parent to incorporate these concepts in the home environment. Research has shown that for children with special needs, parent participation leads to greater generalization and maintenance of skills.

Listen as parents Nancy Rosenberg, Becky, and Andy describe some of the things they would like teachers to know about children with ASD.

Nancy Rosenberg, PhD
Parent of a young adult with ASD
Director of Distance Learning
ABA Program
University of Washington

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Becky
Parent of a child with ASD

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Andy
Parent of a child with ASD

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Transcript: Nancy Rosenberg, PhD

The first tip I would give teachers is forget about the other kids with autism that you had in your class, because there's a good chance that this child is going to be nothing like them. That adage that if you've seen one child with autism, you've seen one child with autism. I think that makes it really hard for teachers and our educational system, and especially now that they've gotten rid of terms like Asperger's, and it's just all autism spectrum disorder. It's just such a diverse group that it's hard to come up with strategies that are going to work with all of the different kids, whether they're an IQ of 120 and just have social deficit versus somebody who has language impairment, who has cognitive impairment and has the autistic traits. What teachers often struggle with more than anything is oral language, talking to the child, won't be your primary tool for communicating with the child with autism. With typically developing kids, oral language often is our medium for trying to get them to understand things, and often kids with autism it's not. When the child with autism clearly isn't understanding—whether it's an academic task, or a behavioral

expectation, or a schedule change—resist the impulse to use more language when you're not getting through to the child. Have a sense of humor. If we can laugh at the crazy and often undesirable things that a child with autism does, we're going to enjoy things and be much more effective than if we can't laugh at them. And to try, try, try not to take this child's behavior personally, not to feel that it's directed at you if they're having undesirable behaviors, and also to try not to attribute it personally to them. Keep reminding yourself that their behaviors aren't them, that their behaviors are their autism. That doesn't mean this is a bad person or a bad child. It's the autistic traits or characteristics that are causing the behavior, not them personally.

Transcript: Becky, Parent

The first thing that comes to my mind is that I would want them to be curious about Finn. He doesn't always present like a typical child with autism, and I think part of the challenge is there's not a particular child with autism. There's a spectrum, and Finn is on the spectrum, and from one day to the next it might look a little bit different. I would hope that the teacher would look for ways to authentically include Finn in the classroom, that it's not just him doing extra worksheets or sitting in the corner doing something else, but there are ways to really integrate him in a meaningful capacity with typically developing peers.

I think having an aide has worked well for him through elementary school. Up until this year, in terms of social interaction, Finn has a desire to be social but doesn't always know how to make that happen. And so an aide has helped facilitate some of that social interaction, so I think that's been good. He also has had some pull-out resource time to help with his reading and math skills where you do see that big lag. As parents, we've been very supportive of that because he still is in the classroom for some of that delivery of services, and that's been helpful. And then as technology has developed over the past five years, he has started using an iPad for PEC symbols and for his daily schedule and for doing social stories. So after the weekend he would come in, in theory with a social story of what we have done, so he could share that in circle time with his friends. And it has a prerecorded voice on it, but he's still selecting the pictures, and that was a great way for him to feel a part of the classroom. I would also add for the new teacher or the new special ed person, for the new assistant, that if they have questions that it's okay to ask. Because this has been a learning process for all of us, and as the parents we may not have the answers, but we will certainly do all of the research to get an answer or to get the resources that he or she may need to be successful in their job.

Transcript: Andy, Parent

We all like to put people in categories and buckets so that we can understand the world around us, but autistic children are very unique. Very few of them are alike in all of their behaviors. And so every child really does need a very specialized approach, and every child has unique gifts and strengths that can be exploited and unique challenges that need to be negotiated. It would be a temptation, I think, of somebody who might say, "Oh, well, I've had an autistic child before in class, so I know what that's like. I know how to handle that." And they're probably right to about fifty percent. But half of that is right, but the other half is probably going to be way different. One tip that I would have for a teacher with Finn would be for them to have an attitude and an approach of curiosity as it relates to trying to unlock what's inside of Finn. He is a gifted human being. He has skills and abilities that are in there. But a great teacher would be somebody that would really pursue diligently a way to get that out of him. And it takes extra work, and it takes extra time, and it's probably not the easiest thing for a teacher that's got eighteen other kids in the class. I appreciate that that's difficult. But the great teachers that we have had and the great experiences that we have had have been with teachers who have been very curious about him and have wanted to find solutions to get those things out of him.

For Your Information

The [National Professional Development Center on Autism Spectrum Disorder (NPDC)](#) has a wealth of materials about working with children and students with ASD. Many of their resources cover the topics above in greater depth. An extension of NPDC, the [Autism Focused Intervention Resources and Modules (AFIRM)](#) website offers modules about planning for, using, and monitoring evidence-based practices with learners with ASD from birth to twenty-two years of age.

IRIS | Page 7: Faces of Autism Spectrum Disorder

What should teachers consider when working with students with autism spectrum disorder?

Page 7: Faces of Autism Spectrum Disorder

Children and students with ASD vary greatly in their strengths and needs. However, despite the challenges that these individuals and their families face, all of the parents appreciate their child's individual personality traits, take pleasure in watching them progress, and enjoy celebrating their accomplishments. Watch the videos and listen to the audios below to learn more about three individuals with ASD.

Benjamin

Benjamin, who is almost three years old, attends pre-school. He is a happy and social child and enjoys playing with his older brother, as long as they play something that he likes to play. Benjamin has a language delay and has sensory issues, mostly related to food textures. Early signs of ASD included difficulty with transitions, repetitive play behaviors, and overreaction to minor occurrences (e.g., something falling on the floor). After receiving early intervention services, Benjamin has made great progress in a short amount of time in his communication skills and behavior. Listen as Lindsey and Ryan, Benjamin's parents, describe their child (time: 4:00).

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View Transcript

Transcript: Lindsey and Ryan, Parents

Ryan: We think Benjamin is a highly functioning child who is diagnosed with autism. He likes to play. He loves to go to the pool and swim. He loves to go to the park and just run around and get on the swing. He loves to just interact with people and other kids. Everything about that is just normal childhood, and we always say to each other, "You know, ninety percent of the time, he's just normal."

Lindsey: I agree with him. He is the happiest child. He is giggly and sweet and cuddly, and everybody is his friend. He will run up and hug and cuddle with just about anybody. That is one of my favorite things, just hearing his teachers and other people talk about, "We just love Benjamin." And I can see why, because he's just pretty much happy most of the time. You know, he's just a fun-loving little two-, almost three-year-old boy.

One thing that has always stood out to me when he was diagnosed was that the doctor that diagnosed him said, "Benjamin is not the kid that we would have diagnosed in the waiting room. He's not the kid when he walked in, you'd say, 'Yeah, that kid is on the spectrum.' " Just keeping an open mind about the fact that it is a spectrum, and just because a child has an autism diagnosis does not mean x, y, and z.

He's got some sensory things with food texture, like wet fruits, if that makes any sense. Like, he won't eat watermelon or grapes or apples or that kind of thing. He likes crunchy things. We also cut the tags out of his shirts. I think some of the sensory stuff was also head banging and biting and sometimes even biting himself. I think that was a soothing thing for him. He loves swinging and twirling, but I think those are some of the things he needs, kind of a reaction. We've noticed the sensory stuff mainly in his food and eating. He has come such a long way. The words that he was saying went from, like, a nine-month-old, and now he's like at a sixteen-month-old. That was a four-month period. We're seeing a lot of improvement with his spoken language, but where we are seeing the biggest improvement is in his receptive language. Whereas before I feel like when he was first diagnosed, I would say, "Benjamin, go pick up your toy," and he would look at me with this blank stare like he knew I was talking to him, but he didn't know what that was all about. And now I can give him two-step directions. "Go pick up your book and put it on the table," and he toddles over there and picks it up and puts it on the table.

We've been working with him with speech therapy and trying to insert ourselves into his kind of play world, and I feel like that has really enabled him to understand the benefit of verbal communication and understand how to use it. I think also what really started the step towards understanding communication and why it's important was learning sign language. When we first started therapy, we taught him just a few signs like "help," "more," "eat," "drink," and that was, like, the first time I think that it clicked with him that "Oh, my goodness, if I show mom the sign for drink she's going to go get me some milk. Or if I drop something on the floor and I can't pick it up and I give the sign for help, they're going to go pick that up for me," and I think something clicked in him then.

Ryan: Immediately we saw his banging of his head go away once he communicated in that fashion and tell us I want something to drink or I want some milk or I want some tea. He would go over to the fridge and give us a hand signal. I think a lot of it early on was just the frustration he was feeling for not being able to either verbally communicate with us or understand what we were saying.

Lindsey: My stress level has definitely gone down a lot since the communication has improved, because I feel like before I was living like on the edge at all times. I was walking on eggshells around him because I didn't want to upset him and I didn't want him to melt down.

Watch Benjamin as he engages in his favorite activity, playing with a bucket of beans. As he does so, his parents describe his strengths, the progress he has made, and the challenges he still faces (time: 5:42).

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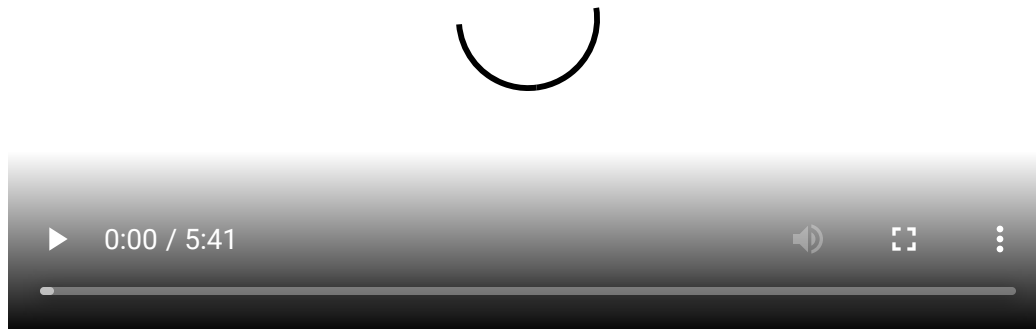
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Transcript: Lindsey and Ryan, Parents

Section 1: Repetitive Play

Lindsey: This is one of Benjamin's favorite activities. He likes to play with the beans. Sometimes he'll let us play with him, sometimes he won't. But we try to insert ourselves whenever we can. This is also one of the activities where he gets kind of in his own world. He's very social typically, and this is also typical.

Benjamin: No.

Lindsey: He doesn't like it when they fall on the floor, and sometimes he kind of overreacts to that, which was one of kind of the signs, red flags that kind of came out when we thought about getting him, getting him tested, was that his reactions to things seemed kind of over the top. So as you'll see, if it happens, if any of them fall, it's kind of a big deal, but as I say he gets kind of in his own world with this. He doesn't like it when anyone tries to kind of insert themselves, unless he brings us in like I think he is trying to do. So we kind of watch what he does a little bit and then we can try to insert ourselves a little bit.

[Ryan drops some of the beans.]

Lindsey: Uh oh, well, now he made a liar out of me because he didn't freak out. Can you pick those up? Can you pick them up? Pick them up and put them in. Put them in. Good. In. Put it in. There you go. I'll put one in, too. Here's your cup. Can I hold the cup?

Benjamin: No.

Mrs. Jacob: No? Okay. Pour it in. Good job. All right. Slow pour. Good job. Can I put some in?

Benjamin: No.

Lindsey: Benjamin, look. In. Now you pour them in. Good job. As you can see, it's pretty repetitive. It's pretty much the same thing: pour back and forth. But one of the improvements that we see with him was about six months ago I couldn't even put my hand in the beans without a little meltdown from him. So now I can at least kind of get in there a little. Now, handing me a cup, that might be pushing it.

Benjamin: See, see, see!

Lindsey: I do see. Can you show me again? Pour it in. Uh oh. Good job.

Section 2: Transition

Lindsey: He could literally do this for an hour, kind of without stopping unless someone kind of inserts themselves and moving him away from this, which we can try to do. Maybe I'll bring out another activity, and we can see kind of what a transition might look like. I'll go grab his blocks and see if we can transition him into another activity.

Ryan: What do you think? Should we try the blocks?

Lindsey: Benjamin, how about we try the blocks now?

Benjamin: No!

Lindsey: Can we put these away?

Benjamin: No!

Lindsey: Should we try?

Benjamin: No!

Lindsey: How about one more time and then we'll play with the blocks.

Benjamin: No!

Lindsey: All right put these away. Pour it in. All right put the cups in. All done. All right. Let's try the blocks.

[Benjamin runs crying away from the table.]

Lindsey: And that's the typical transition that we get. We'll bring the beans back, but that's pretty typical. Transitions are very, very hard for him. Especially when it's from one kind of desired activity to maybe one that he's not as into. So that's kind of something that we're working on, that they're working on with him at his school because that's going to be something that's he's going to have to do in school. So…do you want the beans again?

Another thing that was kind of a red flag for us before he was diagnosed was his receptive language was not…we weren't noticing that he was kind of understanding what we were telling him to do. Where his older brother, if we said—his older brother is only thirteen months older—and so if we said, "Go pick up the book," he'd toddle over and pick up the book and hand it to us. And Benjamin wouldn't do any of that, and so as you just saw Ryan say, "Give your mom a kiss and then you can play again," and you saw him do

that, that is, like, a huge step for us that he actually could follow that direction and follow through with it, which we're happy to see because that's definitely a step in the right direction for us. But, again, he could do this all day long.

Section 3: Strengths

Lindsey: And I think what you can also see is when you think of a child with autism a lot of times…

Benjamin [interrupting]: See?

Lindsey: I see him. You think of a child who's not making any eye contact, who's kind of sitting alone in the corner doing his own thing. And, while he does have these moments, the majority of the time, and what I consider as one of his strengths, is that he is very social. And he does point and notice things and hug you, and he looks you in the eyes. So, again, when they talk about the spectrum, this is what they mean. Like, he is a very social kid, but he just has these other little things, like this focused attention, and the language delay is also huge.
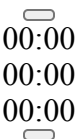
[Benjamin high-fives his dad.]

Lindsey: Good job.

Finn

Finn is a very social and happy ten-year-old who just began middle school. He has a language impairment and is academically behind his peers. Finn displays repetitive behaviors (e.g., plays with his hair, tugs at his shirt), constantly fidgets, and engages in self-stimulatory behaviors. Finn also has difficulty transitioning, especially when changing from a preferred activity (e.g., playing with his iPad) to a less-preferred activity. Despite these challenges, Finn is well liked by all of his peers. Listen as Andy and Becky, Finn's parents, talk about how their son's ASD impacts his life at home and at school (time: 2:12).

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Transcript: Andy and Becky, Parents

Andy: Finn is like every other student in many ways, and sometimes we're reminded when we're around some of our peers and our friends and other parents, and we might be making a comment about something that we think, because of our experience, is an autistic experience, and really it's a normal ten-year-old experience. It's a great reminder for us sometimes when we realize those things and we go, "Okay, this is just having a normal ten-year-old boy. This isn't having an autistic boy." He can behave very much like his peers. He's well loved and appreciated by his peers. The girls, in particular, are very sensitive to his needs, and perhaps that's obvious to others, but it's been very sweet to see that. Finn can run. He can play. He can participate in physical activities. He loves physical education. PE is by far his favorite subject. Some of that is just part of his sensory stuff and wanting to stimulate his body, but he's really normal in those types of settings. He's very musical. He likes to sing and participate if there's an instrument or something of that

nature involved. I'm not sure that he's a great recorder player, but he can participate and be just like his other peers and friends in those scenarios. That's very encouraging to us, that in some of those special types of educational experience he's like his little buddies.

Becky: I'll also add in that the boys treat him like a boy. Like, if Finn is messing around, they'll say, "Finn, come on, knock it off," which they would say to their peers as well. So we have girls that are very caring and nurturing, and we have boys being boys, and Finn just fits in to all of that.

Andy: We're very fortunate that Finn is mobile and can move his body from the lunchroom to the music room and such without needing lots of aid in that area. That has been both a blessing and a curse sometimes in that Finn can appear to be very normal to people. So, just at face value, he's a very beautiful child.

Watch Finn and his mom interact while they read several stories. Pay attention as Finn's mom points out some of his behaviors that are reflective of ASD (time: 5:46).

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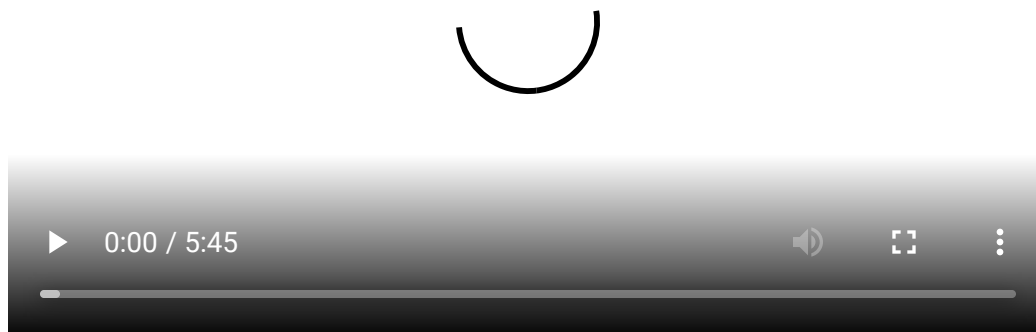
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[View Transcript](#)

Transcript: Becky, Mother

Becky: Okay. Oh, thank you for sharing. Can you show me what to do? Move it back? Then do I go like this?

Finn: Yes.

Becky: Yup. Do I get some points? Huh? Go back? Whoops. That wasn't very good, was it?

Finn: Over.

Becky: Should I start over?

Finn: Let me try.

Becky: Okay, you show me then we're going to do a little reading. Okay? So this is one of his preferred activities, certainly, on the iPad. And as we transition here it could potentially be a challenging transition, and you'll notice, too, just some of this extra behavior: shirt, hair, fidgeting. That's all pretty normal activity for him whether he is doing this or something else, as well. And that can be a challenge, certainly in the classroom where we're expected to sit in our seats and be still and pay attention. Okay, one more and then we'll do a little reading, okay? All right. Are we all done?

Finn: No.

Becky: Yes. Are we all done? Last one. Okay. Last one. Okay, button off. Can you turn the button off?

Finn: Yeah.

Becky: Okay, button off. Thank you, Finn. Do you want to choose a book? Do you want to do Pete the Cat or Adventures of Frog and Toad?

Section 2: Social Communication

Becky: Do you like to help others?

Finn: Yes.

Becky: Yeah. Who do you help?

Finn: Me.

Becky: You help yourself?

Finn: Self.

Becky: Who else do you help sometimes?

Finn: The bunnies.

Becky: The bunnies, yeah. Do you help mommy?

Finn: Hey, mommy?

Becky: Uh huh?

Finn: Where's Nanny?

Becky: Nanny's taking a nap. And so that's something, too, is he's constantly aware of where people are and asking where people are. And that does come out at school, too, doesn't it? You wonder where your teachers are, right? [reading] " 'Great job, Pete. You were a big help.' said the Easter Bunny. He got an award for a job well done."

Finn: Well done.

Becky: "He was the number one helper."

Finn: One helper.

Becky [reading]: "Happy Easter everybody." Do you like this book? That was a good choice. Would you like to read or do you want to play Beyblades?

Finn: This one.

Becky: You want to read Frog and Toad?

Finn: Yes.

Becky: Okay. Choose your story.

Finn: Si.

Becky: Si. Finn also went to Spanish immersion school, and so we also get Spanish in every once in awhile. Which one are you going to choose? Do you know? Oh, that's a good one. Do you remember what this one is called?

Finn: "Spring."

Becky: "Spring." That's right. And this is a book that Finn has had for probably four years. Right?

Finn: Four years.

Becky: Four years. And you love these stories. We usually come back to the same stories.

Section 3: Wait Time

Finn: The story.

Becky: The story. That's right. And that's something, too, that I think is helpful for educators to know, is just he has the words. It just sometimes takes him a little while to get out, or has the thoughts, and so just being patient…And you are really comfortable on the sofa right now, aren't you? And you can see all the fidgeting pretty clearly, can't you?

Finn: Can we read some more?

Becky: You want to read some more?

Finn: Yes.

Becky: Okay, you read for a minute.

Finn [reading]: "One day in summer, Frog was not feeling very well. Toad said, 'Frog…'"

Becky: " 'You are looking quite…?' "

Finn: " '…green.' "

Becky: That's kind of funny, isn't it? Because frogs are green.

Brian

Brian, twenty-two years old, recently completed high school. Brian is considered to be on the low-functioning end of the spectrum. He has a significant intellectual disability as well as expressive and receptive language impairments. One of his most-noted early signs was excessive self-stimulatory behaviors (e.g., hand flapping, back-and-forth pacing). He lives at home with his family, who provides a lot of supports to meet his needs. Brian recently began a twenty-hour-per-week part-time job that he loves and that suits his interests—especially being outdoors. Brian's infectious smile makes others smile when they see him. Listen as Nancy, Brian's mother, discusses her son's strengths and needs (time: 5:17).

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View Transcript

Transcript: Nancy, Parent

Brian's greatest strength is his infectious happiness. He hasn't always been this way, but especially now he is extremely happy most of the time, and he has what somebody once called unedited joy. There is no inhibition about any of his emotions and that includes happiness. He just walks around with a big smile on his face, and he's out in the community almost all of the time now. People see that, and they smile even if they have no idea why Brian is smiling. The other really big strength that I think Brian has is his patience. I think Brian really lives in a world that he doesn't understand. Despite our attempts to make everything functional for him, I think a lot of it he just doesn't understand. Just a couple of examples of that. He follows a dressing schedule. I put up a picture schedule for him every morning that shows the sequence of what he needs to put on. And he points to a picture of his underwear. He'll go get his underwear. The drawers all have pictures on them. He'll put his underwear on. He'll go back and take that picture down, and he'll point to the next picture, which is his jeans, and he'll get those out of the drawer marked "jeans." If he gets out of synch at any point—like, after jeans is his belt—so he'll put on his belt, but if he gets distracted and he goes back to the schedule and the belt picture is still on there and he doesn't realize he's already done it, he'll just get another belt out of the drawer and I'll discover later in the day that he has two belts on. He just doing the things that he doesn't understand because we taught him to do it.

Another example of that is we taught him to empty the dishwasher, and part of that is putting the silverware away in the silverware drawer, and we've also taught him to clear his place at the table. So he takes all of his stuff into the kitchen, but we keep finding his dirty silverware from clearing the table in the silverware drawer because he doesn't get the reasons why in one case you would put it in the silverware drawer and the other case you wouldn't. This whole idea of clean and dirty. He's willing to do all the stuff, but he really doesn't know why, and we don't really have a good method for telling him why because his language is so impaired. But, given that he doesn't understand, I just think he is incredibly patient.

So those are a couple of his biggest strengths. He has pretty significant autism. I would definitely put him on the severe end of the spectrum, both in his autism but even more in his intellectual disability and his language impairment. Because he has pretty significant intellectual disability,

his language is very impaired. I think that his receptive language is equally impacted with his expressive language, and you just can never use language to try to explain things. He will never be able to live on his

own. He needs a lot of supervision, again because he does not get the world. There's no concept of safety.

We've taught him to make purchases at the store using an ATM card, and he can do it. He can select something. He can go to the line. We have his ATM card in a little pouch with his iTouch, which he uses to help him communicate. He can stand there and do the transaction at the little ATM machine at the cash register, but he really has no concept of what's going on. He doesn't understand that he's paying for something. It's just, "Well, when I want these Cheetos, they want me to stand in this line, and run this card through this machine," and so with those kind of limitations to his understanding of how the world works I don't foresee him ever be able to live on his own.

He in general is very well-behaved these days, but we struggled for years with significant challenging behaviors, and I have been realizing just in the last six months that they're always there bubbling beneath the surface, because he's had a lot of changes in the last six months. We have had somebody working with him for the last five years who is just amazing, and she's pregnant so we've been transitioning him to two new people. He has a paying job now. We're very excited about it, but it was another big change. It's 20 hours a week, and we had to switch his schedule around in other ways. And we've definitely seen behaviors in all these different changes, and it makes me realize that, even though he's gotten things pretty stable, the behaviors are always there when things get a little bit different for him.

Watch Brian across the years (preschool, preteen, teen, young adult) as he uses various visual schedules to help structure the activity he is engaged in (time: 6:50). Notice that when Brian is younger he requires tangible reinforcers as well as verbal and physical prompts, but as a young adult he relies on the visual schedule without prompts or reinforcers. (Note: Though provided by Brian's mother Nancy, the description that accompanies the video is read by a narrator.)

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Transcript: Nancy, Parent

Section 1: Learning Activity Schedule
Brian is four in this video. As you can see, we had lots and lots of toys clearly displayed around the room, but Brian would never, ever just get a toy off the shelf and play with it. Instead, he would run back and forth flapping his hands or wander around on his tiptoes.

We had systematically taught him how to play with many of the toys, but he still wouldn't do it unless we specifically prompted him to do so. I was using graduated guidance to teach Brian. With graduated guidance, you prompt from behind and try to back off whenever you can, only stepping in when you are needed. I tried to use as little talking as possible, especially when prompting Brian, to avoid him becoming dependent on verbal prompts.

Brian was very hard to interest in anything and was motivated by very few things other than food. To try to motivate him to complete his activity schedule, we made every other page a "snack page" and taught him that on a "snack page" he could take a small edible (often a half jelly bean or a Skittle) off a plate. Later on, we were able to fade out these pages, first moving to a "snack" every two pages, then every three pages, until we got to the point where he only got a "snack" when he was finished with his schedule.

The notebook with one picture per page was critical for Brian. I had tried using strips of pictures, both horizontal and vertical, to teach him sequences, and it didn't work. He would lose track of where he was in the sequence of pictures. The one picture per page and the turning of pages between steps really worked for him. Later on, he was able to transition to strips of pictures.

Section 2: Completing Activities Independently with Reinforcers
This video is several years later. Brian has made a lot of progress in his ability to independently complete activities, but will still not initiate doing an activity on his own. He can now complete the activity schedule on his own while I make dinner, fold laundry, or otherwise get work done! He still needs the snacks every other page but is now independently able to take them himself.

Section 3: Choosing Activities Using Notebook
By the time Brian is seventeen, the activity schedule has evolved a lot. Brian no longer needs reinforcers built in; he just knows he will get to have a snack when the activity schedule is finished. His activity schedule notebook is now empty. As he opens to a page, he selects an activity off of a choice board and places it on the page. He does the activity and then turns the page to a new blank page and selects another activity. He knows he is done when there are no more blank pages in the book. Brian still seems to benefit from the structure of the notebook even though he is choosing the activities on his own.

Section 4: Using Checklist Independently
We started using this form of checklist with Brian when he was in his early teens. We found that, when we tried to teach him a sequence of steps for a task, he could master the individual steps but was very prompt-dependent in moving from step to step. Getting ready to go out was a good example of this: he could put on his shoes, he could put on his coat, he could put on his glasses, but he required our prompts to do each of these things. It made getting ready to go anywhere difficult as we had to both get ourselves ready and make sure we were constantly prompting Brian to move forward.

This checklist, once Brian had learned it, was hugely successful. All we have to do, as you can see in the video, is tell Brian to do his checklist and he can work his way through the steps without our prompts. We can then just worry about getting ourselves ready to go! Having a method for him to remove items as he completed them was very important because otherwise he would lose track of where he was in the sequence.

In the last month, Brian got a new job that requires him to wear a uniform (special coat, safety vest, special hat, etc.). This promised to make getting out of the house in the morning very complicated. But it was so easy to just make pictures of these items and add them to Brian's checklist. It was amazing how quickly, within this known structure, Brian was able to independently complete the additional steps. We have a similar checklist in Brian's bedroom so that he can independently get dressed in the morning.

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To cite this module, please use the following:

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Additional Resources

Articles

Childress, D. C., Conroy, M. A., & Hill, C. F. (2012, January). *Supporting young children with autism spectrum disorders and their families*. Infant & Toddler Connection of Virginia Guidance Document. Retrieved on August 18, 2015, from https://infantva.org/documents/pr-partc-asd-guidance.pdf

This document created specifically for early intervention specialists includes information on the signs and symptoms of ASD, as well as overviews of assessment and service planning, diagnostic tools, and evidence-based practices for young children with ASD.

Lord, C., Risi, L., Cook, E. H., Leventhal, B. L., DiLavore, P. C., Pickles, A., & Rutter, M. (2000). The autistic diagnostic observation schedule–generic: A standard measure of social and communication deficits associated with the spectrum of autism. *Journal of Autism and Developmental Disorders, 30*(3), 205–223.

In this article, the authors overview a "semistructured, standardized assessment of social interaction, communication, play, and imaginative use of materials for individuals suspected of having autism spectrum disorders." Information includes the history and development of the diagnostic tool, methods of diagnosis, and the results of numerous reliability studies, among much else.

Miranda, A., Tarraga, R., Fernandez, M. I., Colomer, C., & Pastor, G. (2015). Parenting stress in families of children with autism spectrum disorder and ADHD. *Exceptional Children, 82*(1), 81–95.

In this study, the authors find that the parents of children with autism spectrum disorder or ADHD tend to experience more stress than do other parents. Included here is an overview of the study and its methods, as well as a discussion and some notes on the practical implications of the research and its findings.

Shepley, S. B. (2017). Self-instructing with mobile technology: Considerations and applications to increase independence. *TEACHING Exceptional Children, 50*(2), 59–65.
https://journals.sagepub.com/doi/10.1177/0040059917704971

Here the author champions the use of mobile technology—phones and tablets in particular—as substitutes for more traditional forms of self-instruction tools. Covered here are the types of learners who might most benefit from the use of these devices, appropriate devices and device setup, specific iOS applications for video-based instruction, and more.

Online Resources

American Academy of Pediatrics: Autism
https://www.aap.org/en-us/about-the-aap/Committees-Councils-Sections/Council-on-Children-with-Disabilities/Pages/Autism.aspx

The website of the American Academy of Pediatrics houses a wealth of information about autism spectrum disorders. Visitors here will find links to information on the latest AAP policies regarding autism, resources for professionals and families, training Webinars, and much, much more.

ASD Toddler Initiative Project
http://asdtoddler.fpg.unc.edu

This project, housed at the Frank Porter Graham Child Development Institute of the University of North Carolina, Chapel Hill, promotes the use of evidence-based practices for infants and toddlers (ages 0 to 3) and their families. Their website hosts modules on EBPs and on the early identification of ASD.

Center for Parent Information and Resources (CPIR)
http://www.parentcenterhub.org

Part of the Parent Center network funded by the U.S. Department of Education's Office of Special Education Programs, CPIR serves as a central resource for parents, providing information and resources to improve the outcomes of children with disabilities. In addition to materials on a variety of topics, including ASD, parents can connect with their State Parent Training and Information Centers (PTIs) and Community Parent Resource Centers (CPRCs).

Centers for Disease Control and Prevention: Autism Spectrum Disorders
https://www.cdc.gov/ncbddd/autism/index.html

Visitors to this section of the CDC's website will find links to information and resources about treatments, research and tracking, data and statistics, a wide variety of articles, and more.

The National Professional Development Center of Autism Spectrum Disorder
https://autismpdc.fpg.unc.edu/

This project of the University of North Carolina, Chapel Hill, promotes the use of evidence-based practices for children and students with autism spectrum disorders. Those visiting the project's website will find an extensive section on EBPs, as well as an overview of the NDPC model and resources for further investigation and study.

Project SEARCH
https://www.projectsearch.us/

Originally created at the Cincinnati Children's Hospital Medical Center, Project SEARCH has grown into an international organization dedicated to helping people with autism spectrum disorders to secure employment. The center's website includes a detailed overview of the program, tales of past successes, and information for those who wish to get involved, among much more.

Sibling Support Project
http://www.siblingsupport.org

This project provides information and resources to the brothers and sisters of those with disabilities, including autism spectrum disorders. The project's new website includes information on upcoming workshops, tools and training, and ways to connect with other siblings taking part in the program.

TEACCH Autism Program
https://teacch.com/

Headquartered at the University of North Carolina, the TEACCH Autism Program "creates and cultivates the development of exemplary community-based services, training programs, and research to enhance the quality of life for individuals with Autism Spectrum Disorder and for their families across the lifespan." The program's website provides information on clinical services, training, and research, among more.

Wrong Planet
https://wrongplanet.net/

This "Web community designed for individuals (and parents/professionals of those) with Autism, Asperger's Syndrome, ADHD, PDDs, and other neurological differences" provides links to autism-related news and research, information about therapy and other services, and articles on a range of topics including tips on how to secure employment and what to do if your wallet is stolen or turns up missing.

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Resources

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IRIS | Wrap Up

Autism Spectrum Disorder (Part 1): An Overview for Educators

Wrap Up

Autism spectrum disorder (ASD) is a developmental disability that can result in significant delays and developmental differences in several areas: communication, social interaction, and behavior. The major characteristics of ASD include:

- Persistent deficits in social communication and social interaction across contexts
- Restricted, repetitive patterns of behavior, interests, or activities

ASD is referred to as a spectrum disorder because children and students with this disability—such as those highlighted in this module—display a range of strengths, abilities, and needs.

	Social Communication/Social Interaction	Restricted, Repetitive Patterns of Behavior/ Interests/Activities
Drew (4 yrs old)	- Communicates only when he initiates the interaction - Interacts with others only to get items that he wants - Does not participate in most age-appropriate activities - Shows no interest in peers - Content to be by himself	- Lines up toy cars - Tantrums when given instructions or asked to participate in non-preferred activities
Jaquese (10 yrs old)	- Makes unsuccessful attempts to interact with peers - Has difficulty with language	Obsessed with comic book superheroes—excessively quotes and acts out scenes from their stories
David (2 1/2 yrs old)	- Does not have functional play skills - Is not interested in peers - Is non-verbal - Cannot communicate wants and needs effectively	- Eats a limited number of foods - Throws self on floor, hits parents, and throws objects when unable to communicate wants and needs
Michelle (15 yrs old)	- Is outspoken with adults and peers - Has difficulty taking cues from her audience	- Obsessed with outer space - Rocks back and forth in her chair

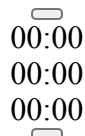|	- Violates others' personal space - Has difficulty making friends at school	

The prevalence of ASD is increasing, and most children and students with this disability receive instruction in the general education environment. Teachers should use strategies—like those described in this module—that improve outcomes for these children and students.

Listen as Ilene Schwartz provides a brief summary of ASD.

Ilene Schwartz, PhD
Professor, Special Education
Director, Haring Center for Research and Training in Inclusive Education
University of Washington

(time: 2:59)

Audio Player

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[Use Up/Down Arrow keys to increase or decrease volume.](#)

[View Transcript](#)

Transcript: Ilene Schwartz, PhD

Students with autism are students first. That's the key to this module. What we know about children with autism is that they have core deficits in the areas of social communication and in the areas of restrictive or repetitive range of behaviors. But what we also know about children with autism is that they may be academically on target, they may be academically advanced, and they may have cognitive deficits and be behind academically.

The number of children with autism is increasing dramatically. So every teacher during their career is going to teach a child with autism. But they're going to come with different behaviors, and those behaviors can be quirky, they can be annoying, they can be different, but children with autism can accomplish incredible things. So every teacher will have a child with autism in their classroom during their career. If you embrace the challenge of working with children with autism, it can be one of the most wonderful experiences in your career. But you have to meet children with autism, like all children, where they are. You have to embrace their strengths and help them through their areas of needs and their areas of deficits, but that can be done using evidence-based instructional practices and data-based decision making to guide the instruction to help children make as much progress as they can.

A child with autism takes a village. No one teacher can do it alone. It takes an educational team. And that team needs to include the general ed teacher, the special ed teacher, the parents, a speech-language pathologist, the school administrator or principal, and other members, other related service providers. It often is going to include a board-certified behavior analyst, because we know that implied behavior analysis is one of the most effective strategies to teach children with autism. But the great thing about working with children with autism is they are children first. And when you see them learn and accomplish

new skills, it's a wonderful accomplishment for them and a wonderful opportunity for the whole educational team to celebrate.

We know that children with autism go to college with regularity now. Children with autism grow up and are your neighbors. They work at Microsoft, and they work in the supermarket, and they work in every place in our community.

Revisiting Initial Thoughts

Think back to your initial responses to the following questions. After working through the resources in this module, do you still agree with your Initial Thoughts? If not, what aspects of your answers would you change?

What is autism spectrum disorder and what are the characteristics associated with it?

What should teachers consider when working with students with autism spectrum disorder?

When you are ready, proceed to the Assessment section.

IRIS | Assessment

Autism Spectrum Disorder (Part 1): An Overview for Educators

Assessment

Take some time now to answer the following questions. Please note that the IRIS Center does not collect your Assessment responses. If this is a course assignment, you should turn them in to your professor using whatever method he or she requires. If you have trouble answering any of the questions, go back and review the Perspectives & Resources pages in this module.

1. Identify the two major characteristics of ASD. For each characteristic, provide at least two examples of how a child with ASD might display them.
2. Watch the video of a mother interacting with her twins, Nathan and Benjamin (time: 1:20).
    a. View the video below.

Video Player
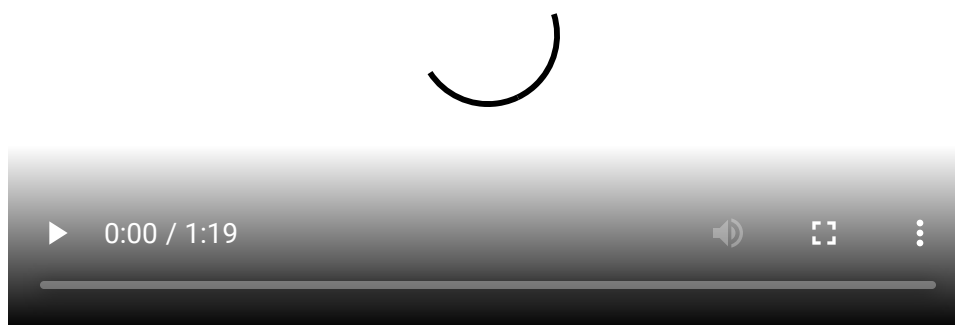
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🔘 None

Use Up/Down Arrow keys to increase or decrease volume.

Source: Centers for Disease Control and Prevention
View Description

In this video, an adult plays with each of a pair of identical twins. In the first segment, Benjamin, who is one year and seven months old, plays with a toy truck. The adult pushes the truck toward him, and Benjamin pushes it back. making engine sounds as he does so. When he

accidentally pushes it off the small table, he acknowledges it and waits for the adult to reset the toy, at which point their play resumes as before.

In the second segment, Benjamin's brother Nathan plays with the truck. However, this time, when the adult pushes the truck toward him, Nathan lifts it off the table and turns it upside down. Several times, he turns away from the adult or tries to leave his chair. His gaze wanders, and he seems uninterested in the play.

The third segment splits the screen and shows both twins playing at once, so that their styles of play and interaction with the adult can be more easily observed and compared.

    b. Identify the twin who demonstrates early signs of ASD and describe the characteristics.
    c. Compare the behavior of the twin who demonstrates early signs of ASD to that of his brother.
3. There are two ways that children can be identified as having ASD.
    a. Compare and contrast the two methods of identification.
    b. Explain why having both diagnoses is important for a child and her or his family.
4. Pick one of the scenarios below (from the Challenge) and answer the questions.

Scenario: Jaquese
This is Jaquese, a ten-year-old student in an inclusive fourth-grade classroom. Jaquese loves mathematics and science and is above grade level in both subjects. Because of this, his teachers have a hard time keeping him engaged during mathematics and science instruction. On the other hand, Jaquese has difficulty with reading and writing. He also struggles with reading comprehension, both when a story is read to him and when he reads it independently. He's obsessed with superheroes and will often quote and act out scenes from their comic books or films. This is often frustrating for the teacher, because no matter how she tries to distract him from his imaginary superheroics, he always comes back to them. In fact, he often cannot begin his work until he has finished acting out an entire scene. Further, most students do not understand his obsession; they find Jaquese annoying and do their best to avoid him.

Scenario: David
This is David, a 2½-year-old with autism spectrum disorder and intellectual disabilities. He is not interested in other children, and he does not play with toys as they were designed to be played with. For example, instead of pushing toy cars around on the floor, he flips them over and spins their wheels. On the other hand, David loves to play in the water and listen to music. At night, he remains awake for extended periods, something that is exhausting for his parents. Mealtimes are a struggle as well. David eats only a few specific foods and avoids others with textures or consistencies he doesn't like. He is non-verbal and lacks a systematic way to let his teachers and parents know what he wants. Often, when he is not successful at communicating what he wants, David throws himself on the floor, hits his parents, and throws objects. He has recently been introduced to the Picture Exchange Communication System, often referred to as PECS, but has not yet learned enough to communicate his needs.

    a. Would this child or student have an IFSP team or an IEP team? Explain.
    b. Who are the required members for this team?
    c. Identify at least two additional team members that might be on this team and explain why?
5. Cherith is a single parent of six-year-old twins who have ASD. Both have cognitive impairments, language deficits, and behavior issues. Additionally, one child requires almost total assistance for daily living skills in areas such as feeding, dressing, and toileting and the mom reports that the other child does not sleep. Both children receive services and supports in school and in clinic settings.

Identify and explain four struggles or difficulties this mom might face.

6. Recall Jaquese from the Challenge. Jaquese is a ten-year-old student in an inclusive fourth-grade classroom. Jaquese loves mathematics and science and is above grade level in both subjects. Because of this, his teachers have a hard time keeping him engaged during mathematics and science instruction. On the other hand, Jaquese has difficulty with reading and writing. He also struggles with reading comprehension, both when a story is read to him and when he reads it independently. He's obsessed with superheroes and will often quote and act out scenes from their comic books or films. This is often frustrating for the teacher, because no matter how she tries to distract him from his imaginary superheroics, he always comes back to them. In fact, he often cannot begin his work until he has finished acting out an entire scene. Further, most students do not understand his obsession; they find Jaquese annoying and do their best to avoid him.

   Imagine you are Jaquese's general education teacher. Using what you know about Jaquese, select three strategies discussed in this module that you could implement to increase his success in the classroom. Explain why you chose each and how it will benefit him.