

USING SIGNING TIME WITH INDIVIDUALS ON THE AUTISM SPECTRUM



Written for Two Little Hands Productions by **Kimberly Fries MA, CCC-SLP Brenda Gardner-Jones MA, ECSE/Autism**



WHAT IS AUTISM?1

Autism Spectrum Disorders (ASD) are neurological disorders that appear within the first three years of life. An ASD diagnosis is given by a health professional, based on an assessment of a child's behavior, and is defined by the presence of certain deficits and excesses in a child's behavior.

The following chart is provided for general informational purposes only and is not intended as a tool for diagnosis.

| COMMON DEFICITS IN ASD | COMMON EXCESSES IN ASD |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Communication: delay or lack of communication, or an inability to engage in conversation; Echolalia (automatically repeating words or phrases spoken by another person) | Stereotypic Behaviors (sometimes referred to as "self-stimulatory" behaviors): perseverative or repetitive behaviors such as lining up toys; insistence on sameness, or difficulty with changes in routine |
| Play Skills: lack of age-appropriate toy play and/or imaginary play | Aggression: includes self-injurious behaviors such as head-banging, and also hitting, biting, scratching, pinching, etc. |
| Social Interaction: limited or inconsistent eye contact, peer interaction, and joint or "shared" attention (attending to something when referenced by another, bringing items to share) | Non-Compliance: can include running away, body flopping, ignoring others |
| Self-Help Skills: delayed self-feeding, toilet training, etc. | Tantrums: screaming, crying, etc. for prolonged periods of time (can include destructive, aggressive and self-injurious behavior) |

For some individuals with Autism, language and social skills do not develop in early childhood. For others, development appears to be normal for a year or two before children seem to lose language and skills.

Other characteristics of Autism mav include:

- absence of natural imitation tendencies (play behaviors, words/sounds, gestures, etc.)
- short attention span
- impulsivity or acting without thinking of consequences
- oversensitivity (or sometimes lack of sensitivity) to touch or sound
- difficulty sleeping
- limited diets or eating non-food items
- odd/inappropriate display of feelings, facial expressions, or mood ("affect")



COMMON CHALLENGES FOR INDIVIDUALS WITH AUTISM AND THEIR CAREGIVERS

While Autism affects every aspect of development, one of the biggest challenges for children with Autism is communication. The inability to effectively communicate impacts all areas of development. Furthermore, a child with Autism may also struggle with non-verbal language such as gestures, facial expression and body language. This affects play, interaction with peers and family members, and the ability to get wants and needs met without resorting to alternate. and often undesired behaviors. Tantrums, aggression, and selfinjurious behaviors often result from frustration related to an inability to tell others what he/ she wants or needs. The child with Autism may run away from a difficult situation or drop to the floor in protest. He may cry or bang his head when he is unable to tell someone what he wants. He may pinch or hit others because he is unable to get a desired item.

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However, if the child has a way to communicate effectively, tantrums and aggressive behaviors may significantly decrease. Caregivers may also feel like they are finally able to do something to help and to connect with the child. A means of effective two-way communication can positively impact the family dynamic as frustration is replaced with meaningful interactions. Family members are empowered with the ability to personally make positive changes in the child's life.

SIGN LANGUAGE FOR EFFECTIVE COMMUNICATION

While Picture Communication Exchange Systems (PECS) are widely used within the Autism community, there are several studies showing the benefits of sign language. Research has repeatedly shown that sign language does NOT impede the acquisition of verbal language. In fact, studies regarding PECS vs. sign language have shown that teaching sign language can lead to increased levels of verbalizations in children with Autism.² There are approaches such as Applied Verbal Behavior and related assessments such as the ABLLS-R (Assessment of Basic Language and Learning Skills - the assessment protocol commonly used with Verbal Behavior programs) that include and even focus on teaching sign language to individuals with limited verbal skills.

Research also supports the use of videos for the purpose of demonstrating new behaviors ("video modeling") to effective-Iv teach skill sets to individuals with Autism.3



WHAT IS **SIGNING TIME?**

Signing Time is a family of products (DVDs, Music CDs, books, and flashcards) that teach true American Sign Language (ASL) vocabulary. Signing Time products are created for children from 6 months up through 8 years, but appeal to all ages and abilities.

Signing Time DVDs feature children and adults who model each sign, interwoven with original music, real-life scenes, and animated segments. The combination of visual-auditorykinesthetic teaching results in an effective, multi-sensory approach to learning. Each DVD teaches an average of 30 signs. At the time of this publication, there are 34 DVDs available for purchase.



The co-creator and host of Signing Time is Rachel Coleman, who is a mother to two girls: Leah, who is deaf, and Lucy, who has cerebral palsy and spina bifida. She and her husband began signing with Leah when she was diagnosed as profoundly deaf at 14 months old.

Prior to learning that Leah was deaf, Rachel was a singer and songwriter. She has personally written all the songs in the Signing Time series and her fascinating life story has been featured in numerous national publications and media programs, including NBC's TODAY show.

Signing Time appeared on public television stations from 2006-2009, for which Rachel received an Emmy® nomination for the category entitled "Best Performer in a Children's Series." Coleman co-created the series with her sister, Emilie Brown, who is the mother of two boys. Alex. and Zak. (Cousins Alex and Leah are both featured in Signing Time along with Rachel.)

As the host of Signing Time, Rachel teaches each sign before embedding it within an original song, featuring video clips of infants, toddlers, young children and parents who sign the targeted words in real-life context.

This is the key mission of Signing Time: to make basic sign language simple and engaging, not only for the child, but for everyone else in that child's life.



Most adults find it daunting to "learn sign language," but Signing Time DVDs make this process quite

easy and fun.



Autism Play & Sign Set

www.SigningTime.com/ Autism-Play-and-Sign-Set

HOW SIGNING TIME!® CAN HELP?

While children with ASD may learn signs directly from watching the DVDs, best outcomes result from families watching Signing Time together and incorporating the signs into their daily routines. Sign language is a two-way, face-to-face endeavor, and is most effective when everyone around the child is learning and using even a few basic signs.

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Although Signing Time was originally created for typicallydeveloping children as a way to learn ASL as a second language, many families of children with ASD have used the programs with notable success. Signing Time has been proven through the experience of thousands of families to be the premiere communication development tool for children with Autism -- or virtually any special need.

The use of similar-aged peers in the Signing Time DVDs results in effective videomodeling opportunities for the child with Autism.

The Signing Time songs are repetitive and simple to learn, giving multiple opportunities to view and imitate the songs and signs. Some of the more complex songs offer several layers of learning that make multiple viewings purposeful.

Signing Time board books and flash cards provide fun and functional ways for everyone in the family to learn and reference the signs being used for daily communication.

In addition to DVDs and related products, a wealth of free information is available at the Signing Time website, www.SigningTime.com, and in the parenting forums www.SigningTime.com/forums



HOW CAN I INCORPORATE SIGNING TIME INTO MY CHILD'S **TREATMENT** PROGRAM?

Signing Time can fit in seamlessly with any type of educational program and can support your child's learning and behavioral progress.

Consider the following suggestions for incorporating Signing Time videos, CDs, books, and flashcards into your child's program:

- > Use Signing Time DVDs to make "down time" educational, or use as a reinforcer for the child who responds well to videos.
- > Teach Signing Time songs and signs with more direct teaching methods.
- > Use the Signing Time DVDs or CDs to check for skill generalization (transfer of learned skills to untrained or novel situations; seeing if the child will produce the signs they have learned without having to be expressly re-taught each time).
- > Post flashcards on the refrigerator as reminders for signs you are currently practicing.

- > Use the flashcards in your intensive behavior program (such as Applied Verbal Behavior or Discrete Trial programs) the way you would use other flash cards. Have your child identify the sign (receptive - understanding what is being signed to them; or expressive-signing the word themselves), match the sign to a photo of an object, etc.
- > Use flash cards as a visual prompt for verbal imitation and expressive labeling programs.
- > Use the books to check for generalization of learned signs or as a way to practice and maintain them.
- > Share Signing Time DVDs with your community to teach signs to family members and your child's peers. Increasing the number of people around you who sign gives more opportunities for meaningful social interaction.
- > Encourage her teacher to learn and use Signing Time songs in class for education or school performances.
- > Use DVDs as a way to pre-teach or pre-expose your child to upcoming signs/words that will be taught in a more direct method such as speech therapy.
- > Make "practice" books by putting pictures of the

- signs you know into a photo album or plastic baggie for caregivers to use to help the child maintain skills.
- > Make ASL bingo games, matching worksheets, etc. with the flash cards and handouts found in the Signing Time Classroom Edition.
- > Use Signing Time CDs in the car to keep your child engaged in appropriate behaviors or to practice their signs.
- > Because Signing Time videos are thematic, ask your child's teacher to use one or two songs in class to teach the peers signs so they may interact more with your child when working on a coordinating theme.
- > Modify books into independent activities where children attach matching pictures of signs/objects onto the pages (using Velcro® or similar).

Any approach to working with a child with Autism should be tailored to meet your child's needs and to fit with his/her current treatment program. Get creative. The possibilities for incorporating Signing Time materials are limitless.



TIPS FOR TEACHING AND USING SIGNS IN DAILY LIFE

Start with a few signs that are functional yet motivating,

such as favorite foods, toys, or activities. While you should always speak and sign all the words you know as often as you can, focus on 3-5 frequently-used signs for your child to learn. They will experience success with just one sign. No need to overwhelm them.

Specific, concrete signs are more favorable than "catch**all" signs.** Signs for objects (dog, bird, ball), people (mom, brother), or actions (sit, wait, stop, walk) are likely to be more useful at first than abstract concepts like more and please. Instead of general signs such as eat and drink, favor more specific signs like cookie, cracker, apple, milk, juice, etc., until your child has a large signing vocabulary.

Repetition, repetition, repetition.

EVERY time you say the word, sign it. The more chances your child has to use the signs, the quicker he or she will learn to use them spontaneously. Create occasions where your child can practice signing.

Make it a part of your daily routine. If activities are embedded into your daily routine, they will become natural and will provide cues to your child to use previously-learned skills.

Always talk while signing.

Sign is used to augment, or add to, your child's communication options. It provides a chance for your child to practice through verbal imitation. Pair spoken words with sign as often as you say them.

Use eye contact/joint attention.

Because signing is visual, it is a natural way to teach your child to gain your attention and to shift his or her attention when asked. Use signing as an opportunity to practice pairing eye contact with signed requests.

Be consistent. All caregivers should be aware of the current signs being worked on as well as their proper production. Caregivers should be consistent in how they model the signs.

Hand-over-hand production/ prompting: Many children with Autism have difficulty imitating others. While physical prompting techniques are generally not recommended for teaching sign language, sometimes it may be appropriate to gently take your child's hands and help them form the sign. This is called hand-over-hand signing. It is common for children with Autism to begin to offer their hands to request the physical prompt. If a child cannot imitate a new sign, talk with your child's behavior specialist and speech and language pathologist about whether or not an occasional hand-over-hand teaching approach is appropriate for your child.

Keep it fun! While effective communication is essential, don't make this a drill or a chore. Keep it fun, simple, easy, and natural so as to avoid creating resistance or resentment in your child. Children will sign when they are ready. Be patient.



SUCCESS STORIES

"I am a preschool teacher to six children, ages three to five, diagnosed with autism. All of the boys have normal intelligence but many social and behavioral challenges. Also, all of them have very limited verbal skills, with most of them being essentially non-verbal. Some will echo things they have heard, but purposeful communication is a struggle.

From day one, we have used ASL paired with verbal language in the classroom to encourage communication and prompt verbal skills from each child. After a few weeks, the children were able to use at least one sign consistently, generally with prompting from myself and my aide.

After consulting with the speech therapist, I began bringing Signing Time into the classroom. We've seen an increase in communication attempts with using DVDs and flash cards with the children. The DVDs hold the kids' attention, and the repetition of each sign, shown by several different children, really seems to excite my students.

Because my students are easily over-stimulated, we can show them short clips from within each DVD without it feeling

like cutting anything off in the middle. They also enjoy looking at the flash cards and trying to mimic the signs pictured.

We love Signing Time and it is a fantastic learning tool for our preschool!"

Allison Bailey Beard AU PreK teacher North Carolina

"We've seen an increase in communication attempts with using DVDs and flash cards with the children."



Autism Play & Sign Set

www.SigningTime.com/ Autism-Play-and-Sign-Set "My youngest son Braden's hearing was tested when he was 18 months old and he was diagnosed with a moderate/ severe hearing loss. The next day I went and bought as many volumes of Signing Time as I could find and did 1 to 2 hours a day of Signing Time. It was such a strength to me as a parent to feel that I could physically DO something to try to help my child. Well, four more hearing tests later my son's hearing was normal, but other tests revealed PDD-NOS and finally. Autistic. Signing Time was still a huge factor in communicating with our son. Though we now knew he was able to hear us, he still lacked the attention and desire to communicate. Using sign language gave us more than one option for communication. It turned our spoken vocabulary into works of art, pictures that Braden could better understand. Signing Time will always be close to our hearts as being the first of many helping hands (literally) at a time when we needed it most. Thank you Two Little Hands Productions and all those associated with Signing Time, you have truly changed many lives for the better."

Amy Baker Salt Lake City, Utah Utah Walk Now for Autism Speaks Co-Chair, 2010



"My daughter, Alena, is six and a half years old. The day before her third birthday, she was diagnosed as severely autistic with a global developmental delay. When she turned four, she still wasn't responding to speech therapy, despite every effort being made to coax communication out of her.

Alena would echo lines from television shows or from the people around her, but nothing constructive was coming out of her - no effort to communicate her needs or wants.

My older sister sent me the first three episodes of Signing Time just after Alena's fourth birthday, wondering if they might help her. To my amazement, Alena not only learned to sign, but she quickly started using words along with her signs!! After six months of signing with only the first three videos, my daughter was using more words than she had in her entire life!

I quickly purchased the rest of Series One, and watched her communication explode! She will now use two- and threeword sentences, and she'll sign four to five words in a row to tell us what she wants or needs!

Today starts Alena's ABA therapy, and thanks to Signing Time and my own hard work,

she's going to be potty training for the first time, because she's finally got the skills to be able to tell us that she needs to use the toilet.

As a mother, I can't even begin to express my gratitude towards Signing Time, and my sister for introducing me to it. The bond it's created with my daughter has been astronomical."

Jen Norton Ontario, Canada

"When my son was two, he had no spoken language. He had spoken a few words and animal sounds at around 14 months, but over the course of the next few months, he seemed to lose even those. Shortly after his second birthday, he was diagnosed with Autism Spectrum Disorder (ASD).

We started early intervention immediately. Because my son was able to imitate words and sounds on occasion, we didn't use a lot of sign language with him. After six months of therapy, we still weren't getting him to speak. Something wasn't working and I so desperately wanted to communicate with him. I had heard good things about the Signing Time videos from another autism family, so I bought Baby Signing Time Vol. 1. My son loved the videos, and

my daughter, who was about 8 months old at the time, even learned to signed "milk" and "more." I knew they liked the videos so we kept watching them, but I wasn't sure if my son was learning anything.

Then one day, my son spontaneously signed and spoke "eat." I couldn't believe it! We had used "more" and "all done" in therapy, but he learned "eat" entirely from the videos. I realized then that he was learning and that Signing Time was helping him with both expressive and receptive language. Since then, I've been signing consistently at home. He is almost 3 now, and although each new sign is still a challenge for him to pick up, he has recently signed "help," "thank you" and "cookie." If he is upset and can't get a word out, he can often form a sign. And most of the time, when he does use a sign, he pairs it with the spoken word. I even hear him singing the Baby Signing Time theme in his crib."

Jennifer Bush San Jose, California



"We have two students in my first grade classroom that have been identified on the Autism Spectrum. Both of the students are active members of our class and participate in all educational aspects of our classroom along with the signing activities. As a teacher I have noticed positive changes and results for both of the students as well as for my whole class using sign language.

Using the Signing Time Classroom Edition as part of my literacy program increases student vocabulary, improves letter and word recognition, improves formation of sentences during writing time, and helps my students to focus on learning. But for my two students (we'll call them Tim and John), signing plays an important role in communication.

Signing has given Tim a new tool for communication and he is now able to "ask" for what he wants or to respond in a new way to other students, the teacher, and aides in the room. And with improved communication through signing, John seems to feel a greater sense of community within the classroom. This is one area that he sees himself "just like" the other students in the room. This is important for all students but especially for Autistic students. Their need to feel part

of a community is enhanced by signing. Both boys are experiencing success with being able to use their signs. This success also further enriches their sense of self and their pride in themselves.

Both John and Tim, as with all students, develop with different modalities of learning. Both of these boys need a more kinesthetic mode of learning. Kinesthetic learning is a learning that includes active movement. Signing allows them to use the body movement in addition to their cognitive skills for learning, speaking and communicating. Signing allows me, as the teacher, to present information and words and ideas through movement, which enhances the learning for any student."

Jim MacCall Teacher, Grade 1 Belmont Hills Elementary School Bala Cynwyd, PA

ABOUT THE AUTHORS

Kimberly Fries MA, CCC-SLP

holds a Masters Degree in Speech Language Pathology from the University of Central Florida and is a licensed pediatric speech and language pathologist. She works in Early Intervention with birth to three year olds.

Kimberly has been teaching American Sign Language to families for eight years and is a Certified Master Signing Time Instructor with the Signing Time Academy.

Brenda Gardner-Jones MA. ECSE/Autism holds a Masters Degree and teaching credential in Early Childhood Special Education from San Diego State University with a focus on autism in young children. Brenda is trained in AVB, DTT, TEACCH, PECS, and a variety of other interventions related to working with children with autism, as well as teaching and working with families of infants, toddlers and preschoolers with a wide range of developmental disabilities. She is also a certifed Master Signing Time Instructor with the Signing Time Academy.

- ¹ What is Autism? Retrieved April 1, 2010, from Autism Speaks website: http://www.autismspeaks.org/whatisit/ index.php
- ² American Sign Language vs. Picture Exchange Communication System in the Development of Verbal Language in Children with Autism: A review. Retrieved April 1, 2010, from Reinforcement Unlimited website: http://www. behavior-consultant.com/asl-pecs.htm
- ³ Bellini, S. & Akullian, J. (2007), A meta-analysis of video modeling and video self-modeling interventions for children and adolescents with ASD.