



# No-Tech and Low-Tech AAC for Children with Autism Spectrum Disorders (ASD): A Guide for Parents

## Introduction

**What is AAC?** Augmentative and alternative communication (AAC) refers to using a form of communication to supplement or replace spoken and/or written words. AAC may include using signs/gestures, pictures, or an electronic device to help a person share his or her thoughts.

**Who may benefit from AAC?** Any person whose daily communication needs are not met by natural speech or writing, including young children who are delayed in their speech development.

**How might AAC benefit my child with ASD?** AAC may provide your child a way to express his or her wants and needs, to engage socially, and to develop communication skills. Increasing your child's success in communicating may also help reduce your child's and your family's frustration when trying to communicate. In addition, AAC may decrease your child's challenging behaviors that result from his or her limited ability to communicate effectively.

**How will AAC affect my child's speech development?** There is *no* evidence that a child's use of AAC will slow down his or her speech development. Conversely, there is growing evidence that using AAC facilitates the development of useful speech, as well as social and academic skills.



**Does AAC prevent my child from working on spoken language goals?** No, AAC may be seen as a stepping-stone toward useful speech, particularly in young children who are just learning how and why to communicate.

**Will my child have to use AAC forever?** For young children who use AAC, it is impossible to predict which children will develop clear, effective speech and which children will benefit from some type of AAC system indefinitely. The decision to continue utilizing AAC will be based on your child's communicative, academic, and social strengths and needs. For children who continue using AAC, their AAC systems are modified to match their changing communication needs.

*Continued on next page*



**Are there different types of AAC?** Yes, there are many different types of AAC. Some are “no-tech” and do not require anything beyond the user’s body. Others are “low-tech” and require something external to the user that may be non-electronic or a simple electronic device. “High-tech” types of AAC are electronic devices similar to computers. There is no one best AAC intervention for all children with ASD. The key is matching your child’s individual strengths and needs with the most appropriate type(s) of AAC. Some children may respond best to a combination of different types of AAC.

### **What no-tech and low-tech AAC options may help my child with ASD communicate?**

Research demonstrates that signs/gestures and the Picture Exchange Communication System (PECS) are effective in helping some children with ASD communicate more effectively.

#### **☐ Signs/Gestures: A no-tech option**

Some children who have difficulty learning to talk may be able to use their hands to communicate more easily. Children with ASD may be taught signs or gestures similar to “Baby Signs.” For example, a child may learn to bring his fingertips to his mouth to indicate hunger.

Signs/gestures are portable, can incorporate an unlimited number of words, and may be fast-paced. Your child’s motor skills and ability to imitate motor and verbal acts should be assessed before beginning this type of AAC.

#### **☐ Picture Exchange Communication System (PECS): A low-tech option**

Because many children with ASD respond well to visual information, they may readily learn PECS. PECS makes communication more concrete, more visual, and longer-lasting than spoken messages. Further, PECS requires minimal communication skills in the beginning and only simple motor movements. Initially, a child learns to give a picture of a desired object or activity to a communication partner in return for access to that object or activity. Over time, the child learns to use PECS to communicate increasingly complex messages for a variety of functions (e.g., requesting, protesting, and commenting) through the systematic PECS instruction. Children with ASD may show improvements in spoken language abilities, requesting, joint attention, and problem behaviors. More information is available at [www.pecsusa.com](http://www.pecsusa.com).

### **What are some types of communication interventions that may incorporate AAC?**

#### **☐ Functional Communication Training (FCT)**

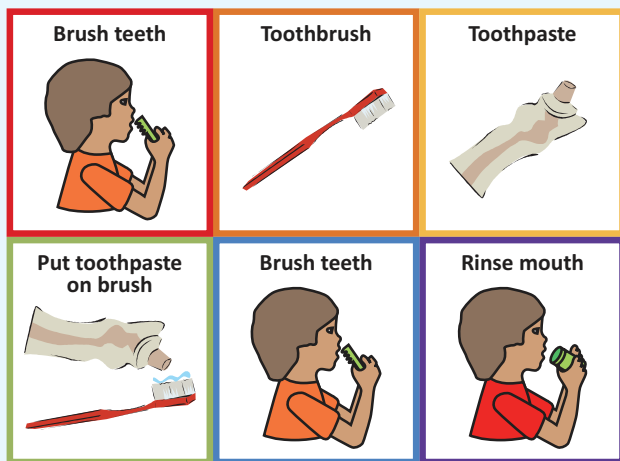
Some children with ASD may engage in challenging behaviors. Functional communication training helps the child use more socially appropriate communication rather than engaging in problem behaviors. First, professionals specializing in behavior—including psychologists, special education teachers, and speech-language pathologists—determine the function of the problem behavior. Then they collaborate with family members and other professionals to implement an intervention specifically designed to decrease the child’s challenging behavior. The intervention may include the use of AAC, such as signs/gestures, picture symbols, or cards with printed words. FCT may address a wide range of problem behaviors both at school and at home.

## ❑ Visual Schedules

Many children with ASD are visual learners. Visual schedules take advantage of this strength by adding images (a type of AAC) to help children with ASD understand language more easily. As a result, the children can complete daily activities more successfully. There are two main types of visual schedules: within-task schedules and between-task schedules (see chart below).

### Within-Task Schedules

**Support completion of a specific task by displaying each step clearly.** *Examples: washing hands, brushing teeth, morning school routine*



### Between-Task Schedules

**Increase predictability and may reduce or eliminate problem behaviors associated with transitions.** *Examples: Sequence of school activities, bedtime routine, vacation schedule*



## Resources:

❑ **Technology Access Center** promotes the independence and participation of individuals of all ages with disabilities in school, work, play and everyday activities through their use of assistive technology.

Local: (615) 248-6733

Voice/TDD: (615) 248-6733

Email: [techaccess@tacnashville.org](mailto:techaccess@tacnashville.org)

❑ **Tennessee Disability Pathfinder** provides a telephone helpline, web, and print resources in English and Spanish that connect the Tennessee disability community with service providers and resources. Pathfinder is a project of the VKC and the Tennessee Council on Developmental Disabilities.

Local: (615) 322-8529

Toll-free: (1-800) 640-4636

Web: [www.familypathfinder.org](http://www.familypathfinder.org)

❑ **Vanderbilt Autism Resource Line** is a free information and referral service for parents, teachers, and community professionals. Information is available about autism-specialized diagnostic evaluation services, school consultation, parent workshops, and professional training at Vanderbilt for children, adolescents, and adults with ASD.

Local: (615) 322-7565

Toll-free: 1-877-273-8862

Email: [autismresources@vanderbilt.edu](mailto:autismresources@vanderbilt.edu)

❑ **Vanderbilt Bill Wilkerson Center** provides speech-language services, including augmentative and alternative communication, for children with autism from 18 mos through adolescence (group and individual).

Local: (615) 936-5000

Web: [www.vanderbilthealth.com/billwilkersoncenter.com](http://www.vanderbilthealth.com/billwilkersoncenter.com)

❑ **Vanderbilt Kennedy Center** facilitates discoveries and best practices that make positive differences in the lives of persons with developmental disabilities and their families through services, research, and training.

Local: (615) 322-8240

Toll-free: (866) 936-8852

Email: [kc@vanderbilt.edu](mailto:kc@vanderbilt.edu)

Web: [kc.vanderbilt.edu](http://kc.vanderbilt.edu)

This publication was authored by Jena McDaniel, Dept. of Hearing & Speech Sciences graduate student and a participant in the Leadership Education in Neurodevelopmental Disabilities (LEND) program as a trainee in 2011-12, with support from Vanderbilt Bill Wilkerson Center. It was edited, designed, and produced by the Dissemination and Graphics staff of the Vanderbilt Kennedy Center for Excellence in Developmental Disabilities.

This publication may be distributed as is or, at no cost, may be individualized so that it includes your organization and its most frequent referrals. For revision information, please contact courtney.taylor@vanderbilt.edu, (615) 322-5658, (866) 936-8852.

---

*This publication was made possible by Grant No. T73MC00050 from the Maternal and Child Health Bureau (MCHB), Health Resources and Services Administration (HRSA), Department of Health and Human Services (HHS). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the MCHB, HRSA, HHS.*

*Printed April 2012. Visual schedule images ©2012 Jupiterimages Corporation*

---



**VANDERBILT KENNEDY CENTER**

LEND—LEADERSHIP EDUCATION IN NEURODEVELOPMENTAL DISABILITIES