

# The Role of Augmentative Alternative Communication Systems for Children with Autism Spectrum Disorder



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## Definition of AAC

From the American Speech Language & Hearing Association (ASHA)

- Augmentative and Alternative Communication (AAC) includes all forms of communication (other than oral speech) that are used to express thoughts, needs, wants, and ideas.
- This includes...

**AIDED-** tools or equipment in addition to the user's body.

- Writing
- Pictures (PECS)
- Voice output devices (high and low tech)

**UNAIDED-** using your body to communicate

- Facial expressions
- Signs
- Gestures

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## AAC: Who Should It Be Used For?

AAC is useful for any child with Autism Spectrum Disorder (ASD) who is unable to use speech to meet their communication needs

- Across all communication partners
- Across all contexts/settings

### Communication Partners

- Parents - Caregiver
- Teacher/therapist
- Friends
- Extended family
- Employer - co-workers
- Strangers
- Acquaintances

### Settings

- Home
- School
- Community



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## AAC: Who Should It Be Used For?

Most, if not all, children with ASD can benefit from some form of AAC support

### Children with mild-moderate social/ communication deficits

- Visual schedules
- Topic boards to generate language
- Social stories
- Visuals for social skills



### Children with moderate-severe social/ communication deficits

- Visual schedules
- Picture Communication systems
- Voice output devices



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## Does your child need **AAC Supports**?

Think about **PURPOSES** of communication

- Requesting wants/needs
- Developing social closeness
- Giving information
- Joining in social etiquette routines

Think about **HOW** your child communicates

- Across different people, in a variety of environments...
- Are there communication breakdowns?
- Does your child know how to repair a communication interaction?
- Is your child's communication system meeting all of his or her communicative needs?



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## How do I get started?

- Contact your child's IEP team to discuss an Assistive Technology evaluation
- Discuss concerns with your child's intervention team (both school-based and private)
- Consider an Augmentative- Alternative Communication evaluation through a private facility (e.g., Kennedy Krieger Institute)



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## Preparing for an Assistive Technology/ AAC evaluation

- Identify your child's current mode(s) of communication
  - Gestures (symbolic, socially-directed vs. reaching to grab/hand as tool)
  - Eye contact
  - Current AAC systems: Picture Exchange Communication System (PECS), Topic Boards, Speech-generating device
  - Vocalizations (sounds, words, phrases)
    - Related to context vs. scripted



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## Preparing for an Assistive Technology/ AAC evaluation

- Gain access to previous speech-language evaluations and/or AAC evaluations to provide them to the speech-language pathologist prior to or during the evaluation
- Prepare a list of objects, activities, familiar people, etc. that the child would need to communicate about
- Consider bringing motivating toys, books, snacks, etc., that the speech-language pathologist could use during the evaluation to tempt your child to communicate
- Limit your child's screen time



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## AAC Assessment: What to expect

During the evaluation, the speech language pathologist will:

- Talk to you about your child's **current communication abilities and needs**
- Conduct a **standardized assessment** of communication if one has not been completed within the six months
- Identify the child's **motivators**
- Initiate a fun & engaging **context-based** activity w/ a variety of AAC tools programmed for the experience
- Obtain consent to communicate with your child's teachers, intervention providers, etc. to learn more about how he or she is communicating in other environments



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## AAC Assessment: What to Expect

SLP will determine which type of communicator your child is to assist with AAC system selection



Emerging Communicator	Intentional Communicator But context dependent	Independent Communicator
Unintentional communication	Reliable symbolic communication	Novel Utterances
Non symbolic communication	Limited vocabulary and pragmatic functions	Several pragmatic functions and topics
Basic Wants/Needs	Limited partners	Multiple partners



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## Emerging Communicator

- Emerging/limited understanding of symbols (e.g., pictures, words, etc.)
- May use the following methods of communication
  - Facial expressions
  - Body movements/physical manipulation (e.g., pulling others by the hand)
  - Basic gestures (e.g., reaching, pointing, giving)
  - Requires substantial assistance from caregivers or other familiar communication partners to successfully communicate
  - May be difficult to determine how much the child understands (e.g., inconsistently follows directions)



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## Intentional/Context Dependent Communicator

- Understands picture symbols or photographs that represent familiar objects, people, and actions that occur frequently in their environment
- Follows simple instructions in both highly-familiar and new environments.
- Able to use symbols to communicate basic wants and needs spontaneously
- Starting to use symbols to communicate for other purposes
- Initiates interactions with familiar adults and peers
- Most successful communication occurs within familiar contexts with familiar communication partners
- May still need some support from familiar communication partners when the topic, partner, or context is less familiar



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## Independent Communicator

- Understands at a level commensurate with age (i.e., no delay in receptive language)
- Combines words, phrases, and written text to communicate across a variety of topics and environments
- Able to engage in conversation
- If using a speech generating device, able to prepare content in his or her device (e.g., stories, narratives) and use features, such as word prediction, independently



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## AAC Assessment: Device Selection

Emergent Communicator	Intentional/ Context Dependent Communicator	Independent Communicator
Picture Exchange Communication System (PECS)	Static display devices (e.g., Go Talk, Tech Speak, etc.)	Keyboards, letter boards, text-to-speech apps for iPhone
Single- button speech generating devices	Simple speech generating communication apps (e.g., Go Talk Now, Scene Speak, etc.)	High-tech AAC systems that afford the opportunity to use predictive-text, create narratives, etc.
Simple gestures/body language and facial expressions	Picture-based communication systems (e.g., Flip 'N Talk, topic boards)	
	Dynamic Display, speech-generating devices (e.g., NovaChat, TouchChat Express, Prio, Accent, QuickTalker, etc.)	
	Communication apps for the iPad (e.g., Proloquo2go, LAMP Words For Life, TouchChatHD-AAC, etc.)	



## AAC Assessment- Funding

Options for obtaining a device include the following:

- Self pay (out-of-pocket)
- Grant funding
- Request an Assistive Technology evaluation through school
- Insurance funding
- Rental through Maryland Technology Assistance Program (MDTAP)



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## AAC Assessment- Funding, cont'd.

- Parent forms
- PCP/ CARD MD forms
- SLP forms- in addition to evaluation report



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## Getting Started with AAC with your SLP

1. The new AAC device gets delivered to your speech-language pathologist (SLP)
2. The SLP works with you to identify important vocabulary and then he or she will program the AAC device
3. Your child will come in for several initial training sessions (follow-up/referral for treatment programs dependent on child's progress your interest in pursuing further parent training)
4. The SLP may refer to other short-term treatment programs within CARD or ongoing treatment closer to home



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## Getting started with AAC at home

- Identify motivating activities that your child enjoys
- Work with your child's SLP on learning to program the new device so that you feel comfortable adding words and icons to the system
- Ensure the words your child would need to use during the activities are available on the AAC system
- Initially, model language on the AAC system while you are talking
  - Improves understanding of the purpose of the system
  - Builds receptive vocabulary
- Accept all attempts your child makes to use his or her AAC system, even if he or she makes a mistake
  - Repeat the word or phrase your child activates on his or her system if correct
  - Model a word or phrase that is relevant to the activity if your child's attempt was not related
  - Expand on his or her communication by adding words to his or her utterance



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## Tips for getting started- ENCOURAGE

- Make simple changes to the environment to “tempt” your child to communicate using his or her AAC system
  - Snacks
  - Toys
  - Daily living activities
  - Book activities



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## Tips for getting started- MODEL

- Model words and short phrases on your child’s AAC system
  - Throughout the day
  - During many different types of activities (play, dressing, snack time, family outings, etc.)
- Work on generalization
  - Model the same words or phrases across multiple activities



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## Tips for getting started- REWARD

- Reward all attempts your child makes to use his or her AAC system
  - He or she may make mistakes, and that's OK!
  - If your child chooses an incorrect icon, model the correct icon as you are rewarding your child for the attempt
  - After practicing this several times, you can challenge your child by prompting him or her to select the correct icon before giving the reward



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## Tips for getting started: PROMPT

- Model prompts
- Physical Prompts
- Gesture Prompts
- Wait prompts
- Expansions



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## Tips for getting started- RESPOND

- Make sure to respond to all attempts your child makes to communicate with you with his or her new system
- At first, your child may initiate communication in a different way
  - Grabbing the item himself
  - Vocalizing
  - Looking at the item and/or you
- Shape attempts by responding positively
  - Model a word or phrases on your child's system and then give the child access to the item he or she wants
  - If your child presses an incorrect icon, model the correct icon
  - Provide a "natural consequence"

**Children need a lot of practice to start using AAC independently.**



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## Final Thoughts, Questions, and Resources

- Maryland Technology Assistance Program (MDTAP)
  - 1-800-832-4827
  - <http://mdod.maryland.gov/mdtap/Pages/MDTAP-Home.aspx>
- CARD's AAC Program
  - 443- 923-9400
  - <https://www.kennedykrieger.org/patient-care/make-appointment>
- <http://praacticalaac.org/>



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