







Navigating Augmentative and Alternative Communication (AAC)

Augmentative and Alternative Communication (AAC) involves two distinct components: augmentative and alternative.

- An augmentative system is used to support or add to an individual's vocal communication.
- Alternative communication involves a completely different method or system.

These systems can be unaided (i.e., don't require any additional materials) or aided (require additional materials or equipment). Aided alternative systems can also be described as low- or mid-tech, where they have a static display (e.g., switches/buttons or picture-based systems), or as high-tech (e.g., speech-generating devices).

	Low-tech	Mid-tech	High-tech
Aided	<p>Communication Boards</p>  <p>Communication Books</p> 	<p>Dedicated Static Screen Device</p> 	<p>Tablets with Communication Applications</p>  <p>Speech to Text Applications</p> 
Unaided	<p>Manual Sign Language</p> 		

Key Facts

- 30% to 50% of autistic individuals will not develop functional spoken communication. [1]
- AAC may be beneficial for increasing communication.
- 60% of AAC systems have been shown to be abandoned by autistic users for a variety of reasons [2] including lack of support for training and using the system.
- Picture Exchange Communication System (PECS) has been shown to be very effective for increasing requesting skills. [3]
- Speech Generative Devices (SGDs) have mixed effects and outcomes are dependent on the individual, the training provided, and generalization across the day and in all environments. [4,5]

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Providers

The following clinicians may have training and experience in the assessment, implementation, and ongoing coaching and evaluation of AAC systems:

- AAC Specialist
- Behaviour Analyst
- Educator/Special Educator
- Occupational Therapist
- Speech Language Pathologist

Intended Outcomes

The main outcome for all AAC is to increase the individual's expressive language skills, including:

- requesting
- commenting
- answering/asking questions
- having conversations
- increasing their overall communication competence

AAC may also be effective in reducing challenging behaviours by providing the individual another way to communicate.

Current Level of Evidence

When considering introducing AAC, in order to increase expressive language skills and to decrease other challenging behaviours, it is important to use interventions that have been shown to be effective with the majority of autistic individuals.

As an overall category of interventions, AAC is considered an effective strategy for autistics across the lifespan. However, AAC includes many different types of systems. The Picture Exchange Communication System (PECS) is considered to have the strongest evidence to date [3]. Some high-tech systems, such as Proloquo2Go and GoTalk, also have emerging evidence depending upon the implementation, ongoing coaching, and training. [4, 5]

Research

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2. Park, H. (2020). Parents' Experiences and Acceptance Factors of AAC Intervention for Children with Complex Communication Needs. *Communication Sciences & Disorders*, 25(2), 318-333. doi: [10.12963/csd.20729](https://doi.org/10.12963/csd.20729)
3. Hume, K., Steinbrenner, J.R., Odom, S.L. et al. Evidence-Based Practices for Children, Youth, and Young Adults with Autism: Third Generation Review. *J Autism Dev Disord* 51, 4013–4032 (2021). doi.org/10.1007/s10803-020-04844-2
4. Muharib, R. & Alzrayer, N.M. The Use of High-Tech Speech-Generating Devices as an Evidence-Based Practice for Children with Autism Spectrum Disorders: A Meta-analysis. *Rev J Autism Dev Disord* 5, 43–57 (2018). doi.org/10.1007/s40489-017-0122-4
5. Lorah, E.R., Holyfield, C., Miller, J. et al. A Systematic Review of Research Comparing Mobile Technology Speech-Generating Devices to Other AAC Modes with Individuals with Autism Spectrum Disorder. *J Dev Phys Disabil* 34, 187–210 (2022). link.springer.com/article/10.1007/s10882-021-09803-y