What Does the Research Say?

Ask the Expert Series Part I: Introduction to Augmentative and Alternative Communication (AAC) for Autistic Individuals with Tracie Lindblad M.Sc., Reg. SLP, M.Ed., BCBA

Speech Generating Devices (SGDs)

- Large effect for the use of SGDs (although very few studies with individuals with autism)
- Not a manualized intervention
- Most common (and greatest effect) was for requesting only
- Additional studies are needed to determine the effect on social skills, academics, and challenging behaviours
- Overall, there appears to be a significant preference for SGDs over other types of AAC (PECS, sign language)
- Not sure of the 'why' but there is a definite preference

ightarrow individual's right to self-determination

- AAC intervention alone may not help speech development for individuals with limited speech imitation skills (Gevarter et al, 2013; Schlosser and Wendt, 2008)
- For those with limited speech imitation skills, the addition of intervention components that target speech sound development may be necessary to see speech gains (Brady et al., 2015; Gevarter et al, 2016)
- **Behavioural methods** such as differential reinforcement, reinforcer delay, and speech imitation prompting **may be required** in order to maintain previous speech and/or increase speech during SGD use (Gevarter et al, 2016)
- With increasing media coverage and pressure by parents to obtain the latest technology for their child, the balance between client satisfaction and professional ethics becomes more difficult
- However, speech-language pathologists and behaviour analysts must follow their professional standards and ethical obligations to evaluate the effectiveness of their services and of any technology, materials, and/or products recommended and to provide services or products only when benefit can reasonably be expected.



AAC will hinder speech development	 Not exactly But it does not guarantee that speech will development either 		
Children don't need to match pictures or receptively identify pictures before using AAC	 But a learner needs to have good visual skills There is some benefit to having good matching & comprehension skills so that your child can focus on learning a new communication system 		
Children do not have to start with low-tech systems before SGD.	 A good question to ask yourself is, "Why would you not want to consider a students' current skills when evaluating appropriate AAC systems support?" 		
There are no cognitive or behavioral pre-requisites to SGD use	• There is no research that supports no pre- requisite skills for high tech AAC – there was <u>no</u> <u>tech</u> when the field of AAC started		

Speech Generating Devices (SGDs), Voice Output Communication Aids (VOCAs) <u>Prerequisite skills</u>

- Selection skills → gross and fine motor skills (accurate pointing); accuracy for increasing numbers of pictures (which are smaller in size)
- Access skills \rightarrow gross and fine motor skills (need to be able to access the app, swipe up/down, turn on/off the device, etc.)
- Visual Discrimination skills \rightarrow understanding what pictures 'mean' and be able to identify one picture from another
- Tolerate **delayed access to the item requested** →immediately hearing the speech/name of the item and getting the item is often difficult due to speech output delays embedded within the app/device
- Lorah et al. (2015) underscore the point that:

"the research is not about "iPads[®] as SGDs" but rather [it] is about the combination of hardware, software, and training protocols. All three must work together to provide support for the individuals..."



How can I access AAC services, supports, and funding?

Many different AAC devices to choose from:

- Different apps
- Different platforms / hardware
 - The 'i' Family \rightarrow iPod, iPhone, iPad, iPad mini
 - Android tablets
 - Windows tablets
 - Standalone devices
- Assessment or trial is always recommended prior to purchasing
- AAC Comparison Chart

AAC Comparison Chart

http://www.aactechconnect.com

Name	Go Talk Now	ProLoQuo2Go	Sono Flex	Touch Chat
	GoTalk NEW		\Diamond	TouchChat
Price	\$79.99	\$189.99	\$99.99	\$149.99/\$299.99
Preview	http://itunes.apple.com/us/ app/gotalk- now/id454176457?mt=8	http://itunes.apple.com/us/ app/proloquo2go/id308368 164?mt=8	http://itunes.apple.com/us/ app/sono- flex/id463697022?mt=8	http://itunes.appie.com/us/ app/touchchat-aac-with- wordpower/id429344385?m t=8
Mobile Technology Options	iOS version 4.0 or later Version 1.1.0	iPod Touch iPad iPhone iOS 4.2 or later Version 1.7.2.	iPod Touch iPad iPhone Android iOS 4.0 or later Version 1.0.2	iPod Touch iPad iPhone iOS 4.0 or later Version 1.1.2
Symbol Options	Pictures only (digital or icons) Words only Pictures with labels Digital photos Videos included	Alphabet for spelling Words only Pictures with labels Digital photos	Alphabet for spelling Pictures with labels	Pictures only (digital or icons) Alphabet for spelling Words only Pictures with labels Digital photos



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