

Part I:

Introduction to Augmentative and Alternative Communication (AAC) for Autistic Individuals

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AutismONTARIO

TRACIE LINDBLAD



Speech-Language Pathologist

Masters of Education (Curriculum)

Board Certified Behavior Analyst (BCBA®)

Trained/Certified in:

- Assistive Devices Program (AAC)
- The Picture Exchange Communication System (PECS)
- Paediatric Feeding Disorders

Conflict of Interest

- Salaried employee
- Clinical Advisor for Linggo

Statements

Language

- Identity-first (e.g., autistic person)
- Person-first (e.g., person with autism)

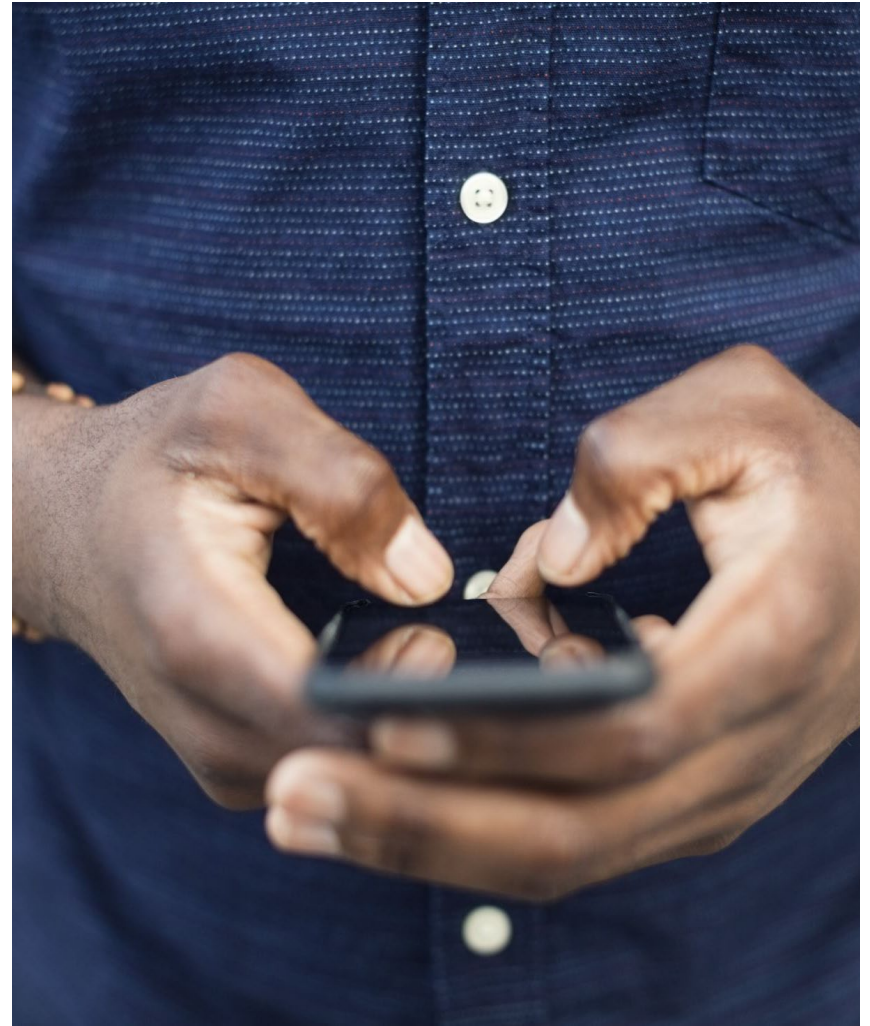
Use During the Presentation

- Both terms will be used interchangeably
- Respectful of all attendees and stakeholders – right to choose any label

Agenda

- What is AAC (Augmentative and Alternative Communication)?
- Who would benefit from AAC?
- What does the research say about AAC for autistic individuals?
- How can I access AAC services, supports, and funding?

What is Augmentative and Alternative Communication (AAC)?



What is AAC?

Augmentative and alternative communication (AAC) is:

- an area of research
- an area of clinical practice
- addresses the needs of individuals when speech alone cannot meet their communication needs

What is AAC?

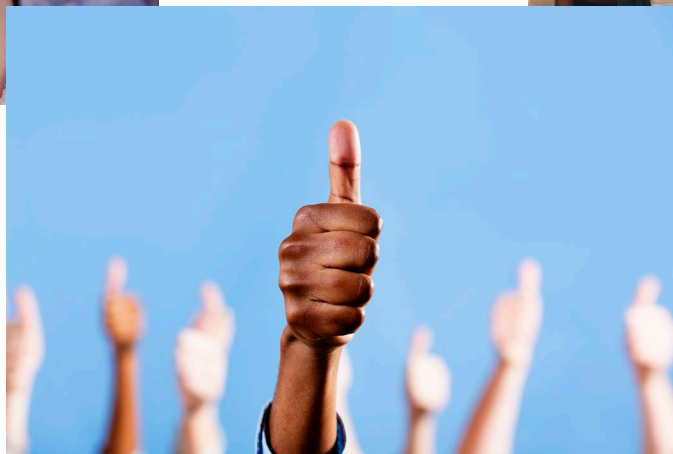
- may or may not be the only way to communicate



What is AAC?

AAC is called **‘augmentative’**

when used to supplement, add to, or clarify speech

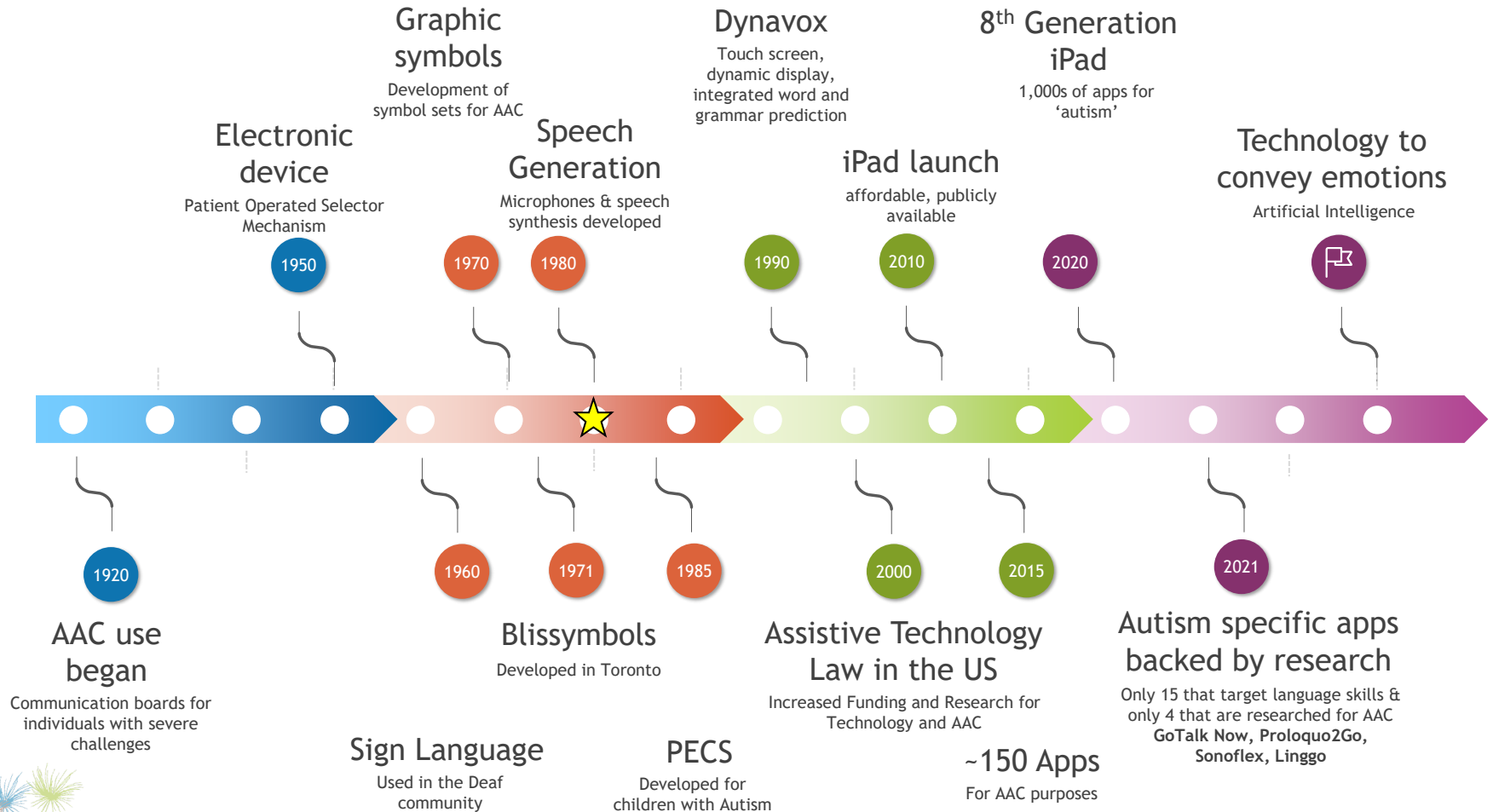


What is AAC?

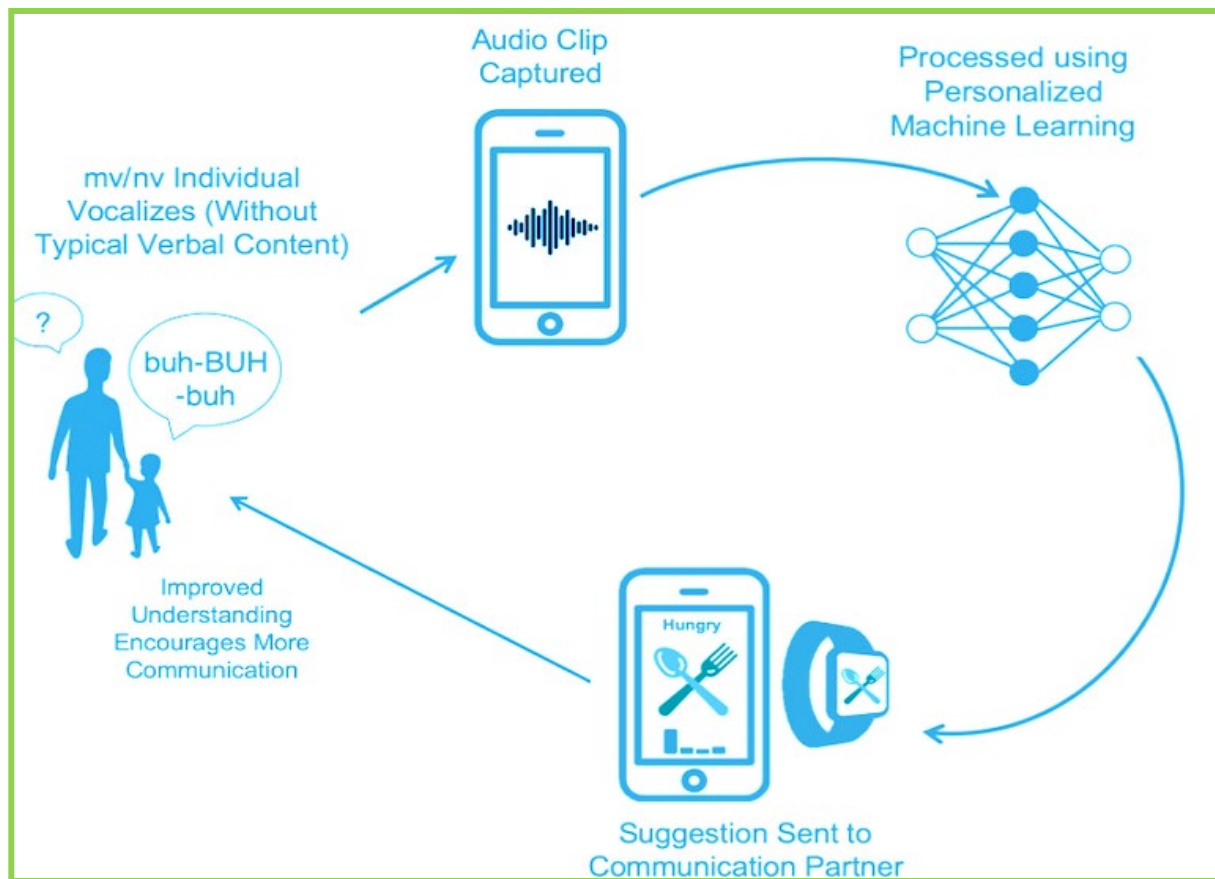
AAC is called '**alternative**'
when used in place of speech



History of AAC



The Future of AAC



Commalla AAC Study of non-speaking Individuals

Types of AAC – Unaided Systems

- Unaided systems do not require any tools or materials
 - Gestures
 - Vocalizations
 - Touch
 - Body Language
 - Facial Expressions
- Formal unaided systems
 - [American Sign Language](#)
 - [Fingerspelling](#)
 - Sign Languages (Sign English, Signed English, [Signed Exact English](#) I and II, Key-Word Signing, [Makaton signs](#), [British Sign Language](#), etc.)

Types of AAC – Aided Systems

- A system where some type of physical object or device is used:
 - symbols, pictures, photos
 - communication boards, communication binders or books
- Divided into:
 - Low- or light-technology (printed material)
 - Mid-tech (device but not complex, static display)
 - High-tech (complex electronic device)

Types of AAC – Aided Systems

Concrete / Easy to Understand



Abstract / Difficult to Understand

Materials:

- real objects
- miniature objects
- photos
- partial objects
- coloured pictures
- black & white pictures
- line drawings (outline)
- Braille
- abstract symbols
(Blissymbolics, Makaton symbols)

Types of AAC – Aided Systems

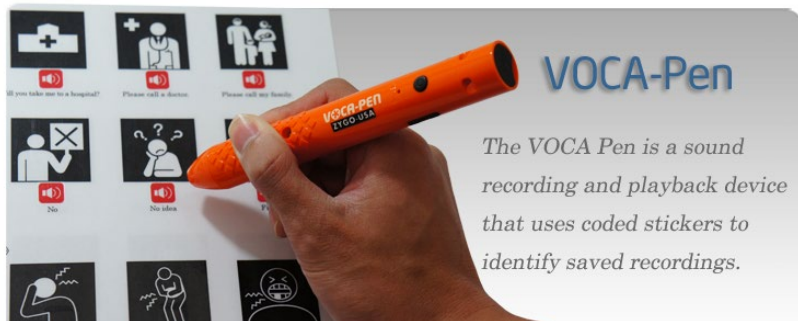


Picture Exchange Communication System (PECS)



Flip'n Talk
Communication system

Types of AAC – Aided Systems



VOCA-Pen

The VOCA Pen is a sound recording and playback device that uses coded stickers to identify saved recordings.

VOCA-Pen



GoTalk 20+



wego



NOVA-CHAT



Eyespeak



BIGmack Communicator

Types of AAC – Aided Systems



DynaVox



Zygo



Cough Drop

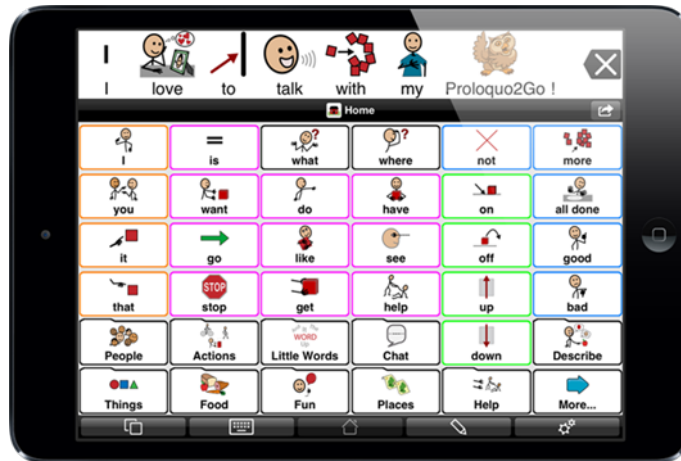
Types of AAC – Aided Systems



LAMP Words For Life



Linggo



Proloquo2Go

Who would
benefit from
AAC?



Goal of AAC

The primary goal of the field of AAC is supporting the **communication** and **participation** of individuals with **complex communication needs**

– ([McNaughton and Light, 2015](#))

Who would benefit from AAC?

- Approximately **25%-50% of individuals** with autism spectrum disorders (ASDs) remain minimally verbal throughout their lives, with **little or no functional speech**

([Rose et al., 2016](#), [Brignell et al., 2018](#))

Who would benefit from AAC?

The prevalence of autism spectrum disorder is 1 in 66

(Canadian Public Health Agency of Canada, 2019)



Who would benefit from AAC?

25% - 50% of these children will never develop functional speech

(Brignell et al., 2018, Kasari et al., 2014)



Who would benefit from AAC?

These children are strong candidates for AAC



25% - 50% of individuals diagnosed with autism

Who would benefit from AAC?

If communication isn't functional (independent and clear), frustration and challenging behaviours can develop.



What does the research say?

Children (Basel), 2021 Nov; 8(11): 1001.

Published online 2021 Nov 3. doi: [10.3390/children8111001](https://doi.org/10.3390/children8111001)

PMCID: PMC8620483

PMID: [34828713](https://pubmed.ncbi.nlm.nih.gov/34828713/)

The Implementation of Application Software to Improve Verbal Communication in Children with Autism Spectrum Disorder: A Review

Research Article

AAC Interventions for Individuals with Autism Spectrum Disorders: State of the Science and Future Research Directions

Jennifer B. Ganz 

Pages 203–214 | Received 01 Sep 2014, Accepted 19 Apr 2015, Published online: 21 May 2015



 Download citation

 <https://doi.org/10.3109/07434618.2015.1047532>

 Check for updates

Article

AAC and Autism: Manual Signs and Pecs, a Comparison

Alessandro Frolli ^{1,*} , Sonia Ciotola ², Clara Esposito ², Sara Frascchetti ¹, Maria Carla Ricci ¹, Francesco Cerciello ²  and Maria Grazia Russo ¹

REVIEW ARTICLE | [Published: 23 August 2021](#)

A Systematic Review of Research Comparing Mobile Technology Speech-Generating Devices to Other AAC Modes with Individuals with Autism Spectrum Disorder

[Elizabeth R. Lorah](#) , [Christine Holyfield](#), [Jessica Miller](#), [Brenna Griffen](#) & [Cody Lindbloom](#)

[Journal of Developmental and Physical Disabilities](#) **34**, 187–210 (2022) | [Cite this article](#)

What does the research say?

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 needed to determine effect on social skills, academics, and challenging behaviours

What does the research say?

- 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
 - individual's right to self-determination

What does the research say?

- AAC intervention alone may **not** help speech develop 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](#))

What does the research say?

- 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.**

What does the research say?

Current Beliefs

AAC will not hinder speech development

Children don't need to match pictures or receptively identify pictures before using AAC

Children do not have to start with low-tech systems before SGD.

There are no cognitive or behavioral pre-requisites to SGD use

What the current research actually tells us

- Not exactly
- But it does not guarantee that speech will develop either
- 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
- A good question to ask yourself is, “Why would you not want to consider a student's current skills when evaluating appropriate AAC systems support?”
- There is no research that supports *no pre-requisite skills for high tech AAC* – there was no tech when the field of AAC started



What does the research say?

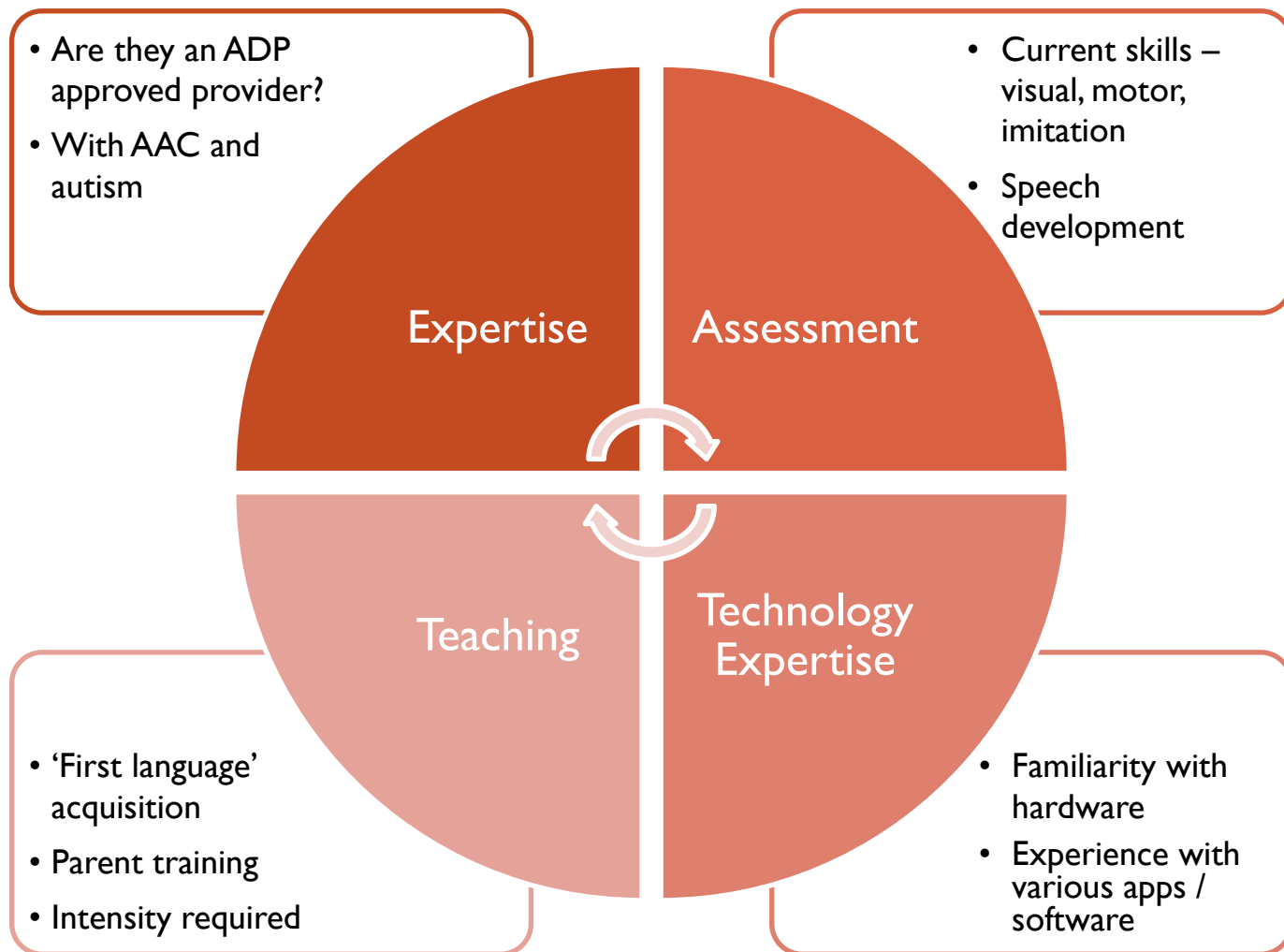
- [Lorah et al. \(2015\)](#) underscore the point that,

“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?



Accessing AAC services, supports, & funding?



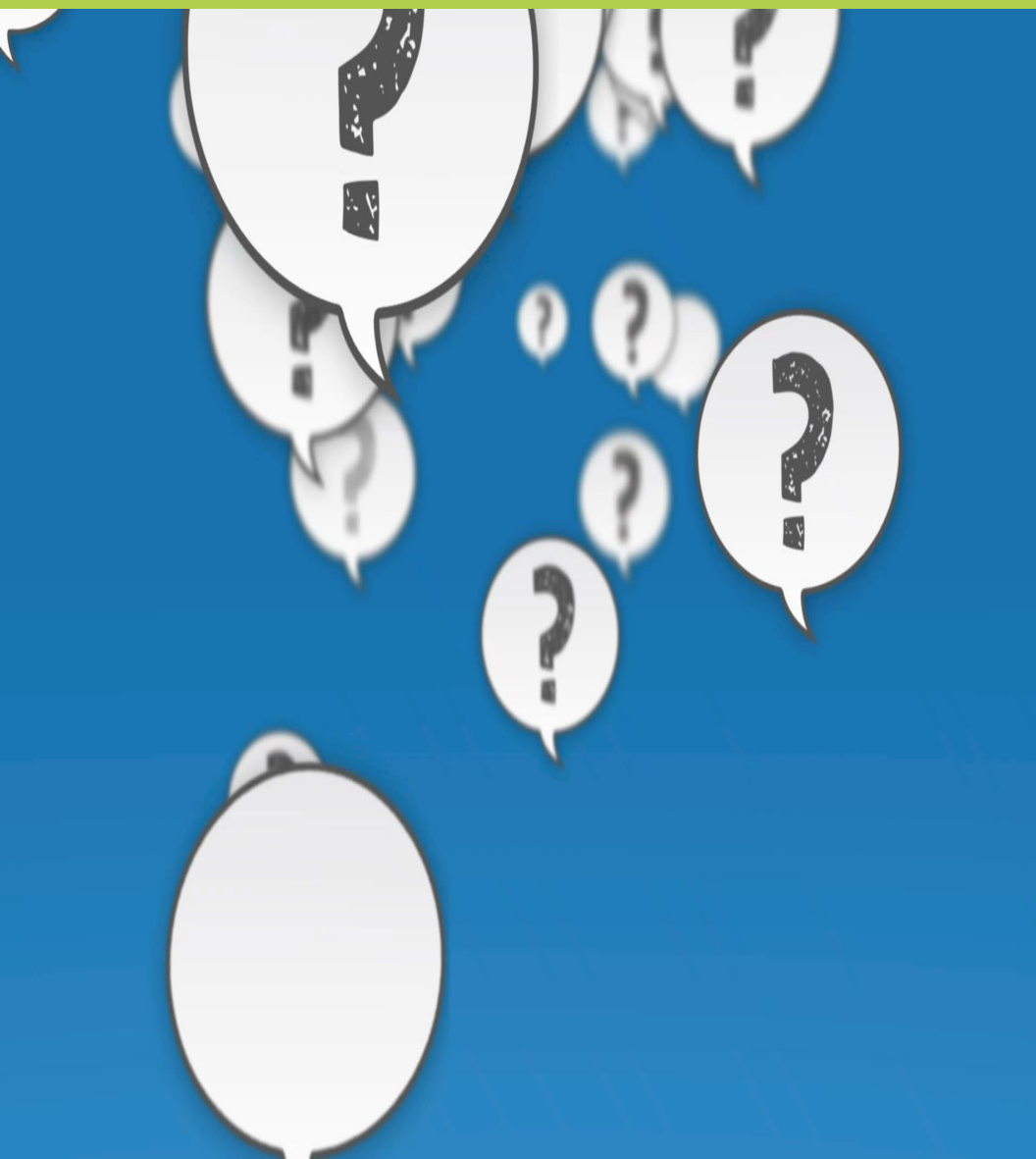
Accessing AAC services, supports, & funding?



Funding

- [Assistive Devices Program \(ADP\)](#) – communication aids
- Ontario Autism Program (OAP)
 - [One Time Interim Funding](#)
 - [Core Clinical Services](#) (with a prescription letter)
- Education – [Specialized Equipment Amount \(SEA\) claim](#)

Questions?



Upcoming Sessions:

Part 2: Assessment and Prerequisite Skills

- Jan. 25th – 12:30pm – 1pm

Part 3: Goal Setting

- Feb. 8th - 12:30pm – 1pm

Part 4: Introducing and Teaching

- Feb. 22nd – 12:30pm – 1pm

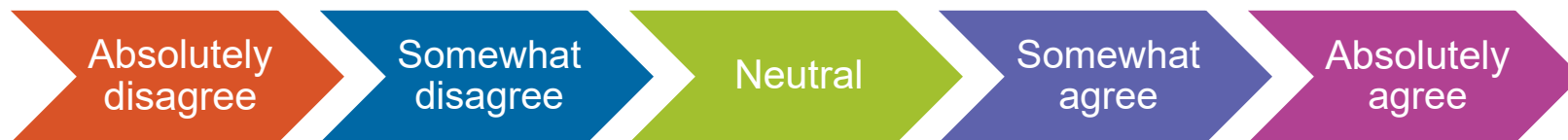
Part 5: Problem Solving and Generalization

- March 9th – 12:30pm – 1pm

Part 1 available on demand.

Feedback Survey

- Please answer each question in the survey
- The questions include items with:
 - A Likert scale (i.e., a 5-point scale with a range of responses)



- Selecting only one answer (single answer)
- Selecting all answers that might apply (multiple selections)
- Text boxes where you type your answer

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Rose V, Trembath D, Keen D, Paynter J. The proportion of minimally verbal children with autism spectrum disorder in a community-based early intervention programme. *J Intellect Disabil Res*. 2016 May;60(5):464-77. [doi: 10.1111/jir.12284](https://doi.org/10.1111/jir.12284).



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