Balancing Presumed Competence with Appropriate AAC System and Goal Selection

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Learning objectives

- **Objective 1:** Identify 3 limitations to presuming competence (PC) without consideration for an individual's current abilities and zone of proximal development.
- **Objective 2:** Define stimulability and the zone of proximal development as they relate to the AAC system selection and goal development.
- **Objective 3:** Identify 2 tools that provide data to aid in in goal development within the zone of proximal development.

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Disclosures

- Speakers have no financial or non-financial relationships to disclose.

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Why this topic?

- Experiences in our practice: system abandonment or mis-match
- Increasingly consumer-accessible SGD market (Gosnell, Costello, & Shane 2011)
- Increasing prevalence of recommendations being posted to social media sites

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Why this topic?

- Investigate the origins and efficacy of presumed competence
  - "The recent adoption of PC [presumed competence] and returning popularity of FC [facilitated communication] does not appear to be coincidental" (pg. 372, Travers and Ayres, 2015)
- Concern for growing popularity of an intervention strategy without knowledge of its efficacy
- Commitment to evidence-based practice and upholding ASHA's code of ethics

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“Presumed competence” (PC)

- **Presume**:
  - Suppose that something is the case on the basis of probability. (Oxford dictionary)
  - To believe something to be true because it is likely, although not certain (Dictionary.com)

- **Competence**:
  - The ability to do something successfully or efficiently.(Oxford dictionary)
  - *Linguistics* A person's subconscious knowledge of the rules governing the formation of speech in their first language.(Oxford dictionary)

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Presume competence- contemporary

- *“Start by presuming that your client is a learner on his/her way to developing competence. Good intervention, consistent language models, the right tools, and plenty of practice will move them along the journey toward improved communication. It’s important that, as clinicians, we truly believe that. Yes, your clients may be impaired, perhaps significantly so, but they will certainly know if you don’t believe in their abilities.* ***Presume competence****.”*

- Carole Zangari, Ph.D., CCC-SLP
  http://praacticalaac.org/strategy/strategy-of-the-month-engaging-the-learner/

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Presumed Competence- contemporary

"Because we just don't know the person's skills or potential, we make the least dangerous assumption and **presume competence.** This **does not mean**, however, that **we must presume that the person is already fully literate with age-appropriate receptive and expressive language skills.** It means we don't and can't know what that person's potential is until we provide him or her with accessible tools, and the training needed to use those tools. Everyone can learn and grow, given appropriate training and tools. **This doesn't mean that everyone can learn everything. Everyone has potential, but the proper AAC system and instruction are needed before that potential can be revealed and realized."**

- Everyone can learn: Presuming competence on vocabulary design, *Jennifer Marden* (AssistiveWare Blog post)
http://www.assistiveware.com/everyone-can-learn-presuming-competence-vocabulary-design

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Historical perspectives on disability

- Late 1970s - early 1990s
- IQ scores as a measure of ability
- Mass institutionalization (Travers and Ayers, 2015)
- Proof before progress (candidacy model)

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Presumed competence- origins

- The Criterion of the Least Dangerous Assumption (Donnellan, 1984)
  - "In the absence of conclusive data, educational decisions should be based on the assumptions which, if incorrect, will have the least dangerous effect on the student." (p. 142)

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Presumed competence- origins

- "Communication Unbound: Autism and Praxis" (Biklen, 1990)
  - "Attitudinal Dimensions of Facilitated Communication [...] 6. Assume the person's competence"
  - "Biklen was the first to suggest that practitioners and leaders presume competence in his endorsement of and guide to facilitated communication (FC)." (Travers & Ayers, 2015)

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Presumed competence- origins

- "In its simplest articulation, presuming competence means that the outsider regards the person labeled autistic as a thinking, feeling person"
  - (Biklen (2005) as cited in Travers and Ayers (2015))
- Biklen (2006) article *Presuming Competence*, discusses "...the importance of *presuming competence* of students with disabilities, as for all students, and the link between this concept (presuming competence) and inclusive education."

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Evidence for PC

- There are no published experimental studies of PC in the professional literature.
- No empirical evidence for the efficacy of presuming competence, nor that it ensures the dignity of individuals with disabilities.

(Travers & Ayres, 2015)

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Related evidence

- Studies have shown that the beliefs held by teachers regarding their students' abilities to learn to communicate more effectively, is the strongest influence in their willingness to implement AAC. (Soto, 1997)

- Historical studies (Smith-Lewis and Ford, 1987 and Huer and Lloyd, 1990) cite perceived negative attitudes of professionals towards people with disabilities that decreased communication opportunities as major factor mentioned by AAC users.

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Limitations of PC

False dichotomy

- Thinking critically about PC does not mean that we aim to *presume incompetence*
- Travers and Ayres (2015) note that there is a "false dichotomy that failing to embrace PC means non-subscribers must believe students are inherently and therefore eternally incompetent" (pg. 373)

Limitations of PC
AAC system selection

- Importance of feature matching
- Opportunities that are mismatched or a poor fit are missed opportunities
- When PC is NOT the "*least dangerous assumption*"

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Limitations of PC
AAC system selection

- Slow rate of progress
- Underestimation of skills due to mismatched system
- Missed time and opportunities
- Total system abandonment

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AAC System Abandonment

- AAC system abandonment occurs in approximately ⅓ of cases (Zangari & Kangas, 1997)
- System abandonment due to a variety of factors including (Johnson, J., Inglebret, E., Jones, C., & Ray, J. (2006):
  - Vocab/messages do not meet daily living needs
  - System too difficult or too simple
  - User's cognitive abilities are over or underestimated
  - System is not modified in relation to the user's progress or deterioration in communication
  - Mismatch between expectations and the user's actual ability.
- "When a person who used AAC experienced success with the system and when that user and his or her communication partner highly valued the system, this resulted in success more than 90% of the time." (Johnson et al, 2006)

Striking a balance

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Striking a balance

- Many positive elements to the way many people in our field are using this term.
- However, we must acknowledge the wide range of skills and abilities of individuals with CCN and match a system that meets her/his individual needs.
- False dichotomy--"That a failure to embrace PC means embracing a position that the person is incompetent" (Travers & Ayres, 2015)

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Evidence-Based Practice

- "It is the position of the American Speech Language Hearing Association that audiologists and speech-language pathologists incorporate the principles of evidence-based practice in clinical decision making to provide high quality clinical care. The term ***evidence-based practice*** **refers to an approach in which current, high-quality research evidence is integrated with practitioner expertise and client preferences and values into the process of making clinical decisions**."
  - *ASHA Position Statement on Evidence-Based Practice in Communication Disorders retrieved from http://www.asha.org/policy/PS2005-00221?*

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Evidence-Based Practice

Image retrieved from: https://www.asha.org/Research/EBP/.

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Evidence-based practice

Thoughtful system selection

Dynamic assessment

Evidence-based trials

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Evidence-based practice

Dynamic assessment considerations

- Gather information about all domains of assessment (motor, cognitive/linguistic, sensory, literacy, etc.)
- Feature matching (Shane & Costello, 1994)
- Stimulability testing
- Adapting and re-assessing over time
  - "In the broadest sense, the goals of augmentative and alternative communication (AAC) interventions are 1) to assist individuals who rely on AAC to meet their *current* communication needs and 2) to prepare them to meet their *future* communication needs." (Beukelman & Mirenda, 2005)

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Stimulability

- Term generally used in speech sound assessment and choosing treatment objectives.
  - "Stimulability assessment seeks to determine whether production of an erred sound is enhanced when elicitation conditions are modified (i.e., simplified)" -(Powell, 2003)
- Assess during evaluations and ongoing trials/dynamic assessment
  - e.g.: symbolic understanding, linguistic complexity, navigation skills, etc

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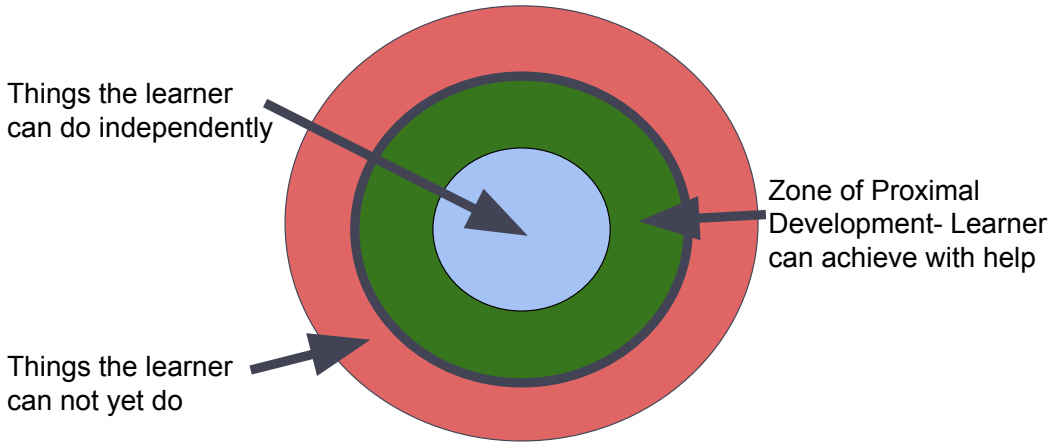
Zone of Proximal Development (ZPD)



Vygotsky (1978)

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Evidence-based practice

Dynamic Assessment: Assessment tools

- **Formal assessment tools (examples)**
  - *Dynamic AAC Goals Grid 2 (DAAG-2)*
  - *Communication Matrix*
  - Functional Communication Profile-Revised
  - Augmentative & Alternative Communication Profile: A Continuum of Learning
  - Test of Aided-Communication Symbol Performance (TASP)
  - AAC Evaluation Genie

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Evidence-based practice

Assessment tools

THE DYNAMIC AAC GOALS GRID 2

DAGG-2

ABILITY LEVEL CONTINUUM*

Use this guide to help provide insight to current and potential target skills and strengths. Mark the statements that best describes an individual's observable communication behaviors. You may not check all of the boxes in any skill area. You may also find that you check boxes in more than one Ability Level.

	Ability Level 1: Emergent	Ability Level 2: Emergent Transitional
Understanding	☐ Limited or no understanding that symbols (e.g., pictures, words) represent ideas. ☐ Pictures may or may not help increase understanding and expression. ☐ Difficult to determine how much he/she understands verbally.	☐ Responds to common gestures (e.g., come here, go away, greetings). ☐ Shows understanding of the use of common objects. ☐ Pictures seem to help increase both understanding and expression. ☐ May be starting to follow simple directions within familiar routines and activities.
Expression	☐ May communicate most successfully using facial expression, body language, gestures, and/or behavior (either socially appropriate or challenging). ☐ May indicate acceptance (e.g., smile) or rejection (e.g., turn away) but does not reliably answer other yes/no questions. ☐ May desire or try to communicate in familiar and motivating activities. ☐ Requires help from communication partner to communicate successfully (e.g., narrowing choices, interpreting gestures/body language/behavior). ☐ Sensory behavior is very important for calming (e.g., rocking, mouthing objects) and determining likes and dislikes.	☐ Understands symbols (e.g., objects, pictures) for basic, common or concrete items. ☐ Starting to use clear and simple symbols (including objects, photographs and picture symbols) in motivating situations or favorite activities. ☐ If using picture symbols, he/she will use one picture at a time to communicate messages. ☐ May use gestures, body language, facial expression or behavior intentionally to communicate (e.g., pointing, showing, giving) however, reliability varies from day to day or activity to activity.
Social Interaction	☐ Reacts to familiar people and/or motivating activities. ☐ Takes turns in familiar and motivating routines (e.g., "high five" or when someone spreads arms to receive a hug). ☐ May respond to close physical interaction by looking, smiling, or reaching.	☐ Shows clear preference for certain objects, activities, and people. ☐ May be starting to show some interest in social interactions, especially in specific situations. ☐ May not use symbols to interact socially.
Literacy Skills	☐ May not be interested in reading or book activities.	☐ May demonstrate a beginning interest in participating in shared reading and/or is beginning to engage with books more independently. ☐ May be able to identify own name and a few other frequently seen words.
Other	☐ Performance with forms of AAC may be inconsistent. ☐ Benefits from help from his/her communication partner as skills are developing.	

ty of Washington, Communicative Independence Model.

LINGUISTIC COMPETENCY

Ability Levels		Goals	Chain of Cues*
Emergent	GM	Communicates behaviorally (e.g., eye gaze, point, pull partner toward) to request/respond/comment and socially interact.	IC DVC DPC PA
	GM	Rejects undesired propositions or items behaviorally (e.g., brief glance, nod, eye contact, smile or touch).	IC DVC DPC PA
	GM	Accepts propositions, activities and/or offered items behaviorally.	IC DVC DPC PA
	GM	Demonstrates intent to communicate with a partner such as selecting single button message in a joint action routine (e.g., repeated story line, request repetition of preferred activity).	IC DVC DPC PA
	GM	Signals a desire for something (e.g., gesture, device, speech).	IC DVC DPC PA
	GM	Engages in turn-taking for one communication exchange (can include gestures, pointing, facial expression, eye movement).	IC DVC DPC PA
	GM	Demonstrates joint attention toward an object with partner.	IC DVC DPC PA
Emergent Transitional	GM	Uses at least 3 reliable signals (e.g., sign/sign approx., obj/pic symbol, verbal/verbal approx.) to control their immediate environment (e.g., "More." "All done." or "Stop").	IC DVC DPC PA
	GM	Requests/comments/labels a tangible object with single noun symbol given an array of 2 or more symbols in familiar routine/context.	IC DVC DPC PA
	GM	Requests/comments/labels a familiar concrete action with single verb symbol given an array of 2 or more symbols during a familiar routine/context.	IC DVC DPC PA
	GM	Selects single button messages in familiar contexts to participate in or move an interaction along.	IC DVC DPC PA
Context-Dependent	GM	Uses abstract descriptive concepts: quantitative/qualitative/spatial (at least 2 in each category).	IC DVC DPC PA
	GM	Uses learned sentence constructions (carrier phrases) for creative 2+ word phrases (e.g.,"I want ___." "I see ___." "I have ___") in structured or routine activities.	IC DVC DPC PA
	GM	Uses action concepts (at least 10 verbs across situations).	IC DVC DPC PA
	GM	Generates novel or creative 2+ word simple sentences.	IC DVC DPC PA
	GM	Uses plural "s" to denote more than one.	IC DVC DPC PA
	GM	Recognizes letter/sound associations.	IC DVC DPC PA
	GM	Demonstrates early use of letter combinations (e.g., initial sound recognition, creative spelling).	IC DVC DPC PA
	GM	Generates simple grammatical sentences using present ("ing") and past ("ed") tense.	IC DVC DPC PA

*Chain of Cues Prompting Hierarchy
GM: Goal Met (Natural Cue) – IC: Indirect Cue – DVC: Direct Verbal Cue – DPC: Direct Po

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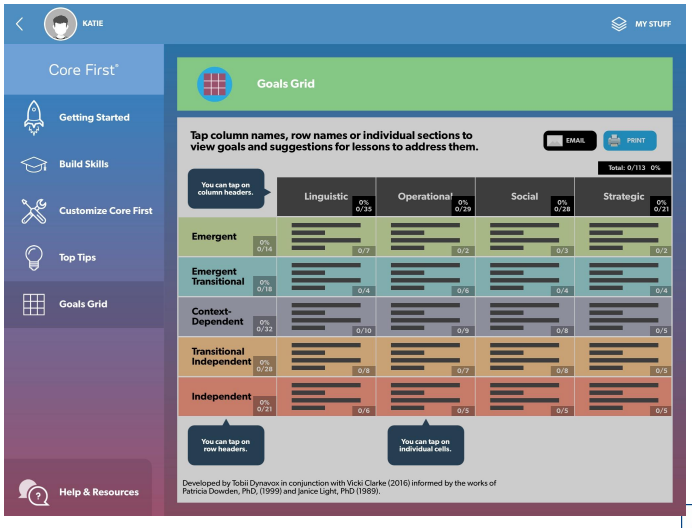
Evidence-based practice

Assessment tools: TD Pathways for Core First companion application



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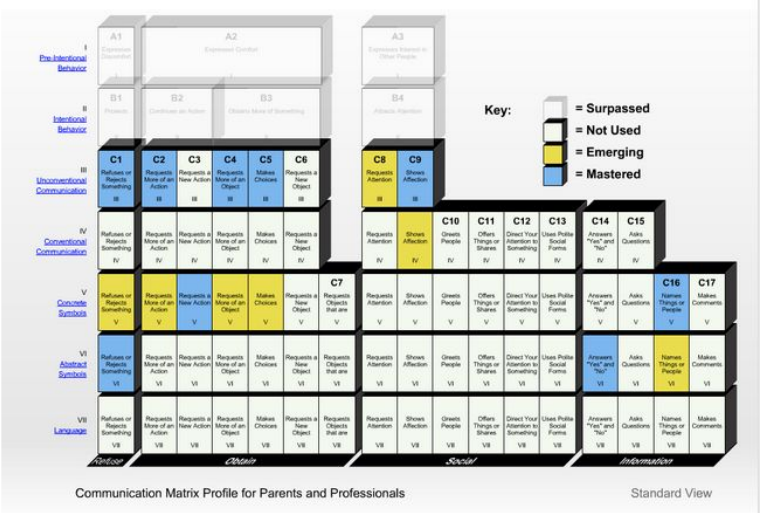
Evidence-based practice

Assessment tools: Communication Matrix



Trials

- Trial periods are critical for determining the effectiveness of a selected AAC strategy/tool.
- Component of evidence-based practice

Trial data collection

General Guidelines:

- Provide the individual with **ample opportunity to explore** the vocabulary within the device.
- **Model the language on the device** by using the device as you talk.
- **Choose activities that are fun and motivating.**
- Support use of the device for **many pragmatic functions.**
- **Avoid frequently 'testing.'**
- **Use a prompting hierarchy.**

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Trial data collection: Planning

Activity	Language goals	Support
Example: *- music* *- snack time* *- after school*	*Example:* *- Child will select if the song will be played loud or quiet* *- Child will select "eat" + "[specific snack]"* *- Child will share 3 activities completed at school and offer a comment (e.g., it was fun, it was boring, etc.)*	*Example:* *- Teacher's assistant will provide initial model* *- Parent will help child navigate to page of school activities, ask multiple choice questions, and prompt as needed*

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Trial data collection

TRIAL SUMMARY	
Pre-trial	**Using device (at the end of the trial)**
(circle #) Generally uses **1 2 3 4+** word phrases *(may include all modes of communication, speech, signs, devices, pictures, etc.)*	*(circle #)* Generally uses **1 2 3 4+** word phrases *(may include all modes of communication, speech, signs, devices, pictures, etc.)*
Communicates for the following functions: ☐ **Requesting** ☐ **Asking questions** ☐ **Commenting** ☐ **Directing activities** ☐ **Providing information/answering questions** ☐ **Gaining attention** ☐ **Conversation** ☐ **Other:**	*Communicates for the following functions:* ☐ **Requesting** ☐ **Asking questions** ☐ **Commenting** ☐ **Directing activities** ☐ **Providing information/answering questions** ☐ **Gaining attention** ☐ **Conversation** ☐ **Other:**
Communicates about: ☐ **Things/activities within the physical environment** ☐ **Events in the past** ☐ **Events in the future**	*Communicates about:* ☐ **Things/activities within the physical environment** ☐ **Events in the past** ☐ **Events in the future**
Use the following parts of speech: ☐ **Nouns** ☐ **Verbs** ☐ **Pronouns** ☐ **Adjectives** ☐ **Prepositions** ☐ **Other:**	*Use the following parts of speech:* ☐ **Nouns** ☐ **Verbs** ☐ **Pronouns** ☐ **Adjectives** ☐ **Prepositions** ☐ **Other:**

Does the child?

- ☐ Seek out the device?
- ☐ Turn it on/off independently?
- ☐ Use 'operational buttons' such as clear, go back, home, etc.
- ☐ Attend to others when using the device? (i.e., shift attention between the device and communication partners)
- ☐ Access the device easily and with accuracy?

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Date/Time	Activity/Task the device was used in:	Level of Prompting:	Interactions observed:	Number of times it was observed (tally)	Examples:
EXAMPLE: 2/6 @ 8:30	Morning meeting	☐ Independent ☒ Minimal ☐ Moderate ☐ Maximum	☒ initiating ☐ commenting ☐ requesting ☒ responding to ?s ☐ Directing ☒ sharing information	I III IIII	"The weather is + sunny" "This weekend I went to grammy's!"
		☐ Independent ☐ Minimal ☐ Moderate ☐ Maximum	☐ initiating ☐ commenting ☐ requesting ☐ responding to ?S ☐ Directing ☐ sharing information		
		☐ Independent ☐ Minimal ☐ Moderate ☐ Maximum	☐ initiating ☐ commenting ☐ requesting ☐ responding to ?S ☐ Directing ☐ sharing information		
		☐ Independent ☐ Minimal ☐ Moderate ☐ Maximum	☐ initiating ☐ commenting ☐ requesting ☐ responding to ?S ☐ Directing ☐ sharing information		
		☐ Independent ☐ Minimal ☐ Moderate ☐ Maximum	☐ initiating ☐ commenting ☐ requesting ☐ responding to ?S ☐ Directing ☐ sharing information		

Created by Jessica Caron, Ph.D., CCC-SLP
2013

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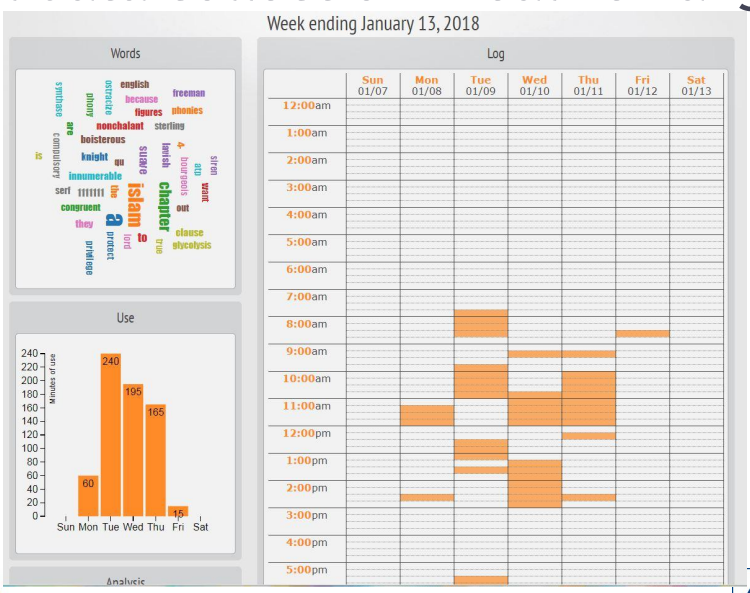
Trial data collection- Realize Language



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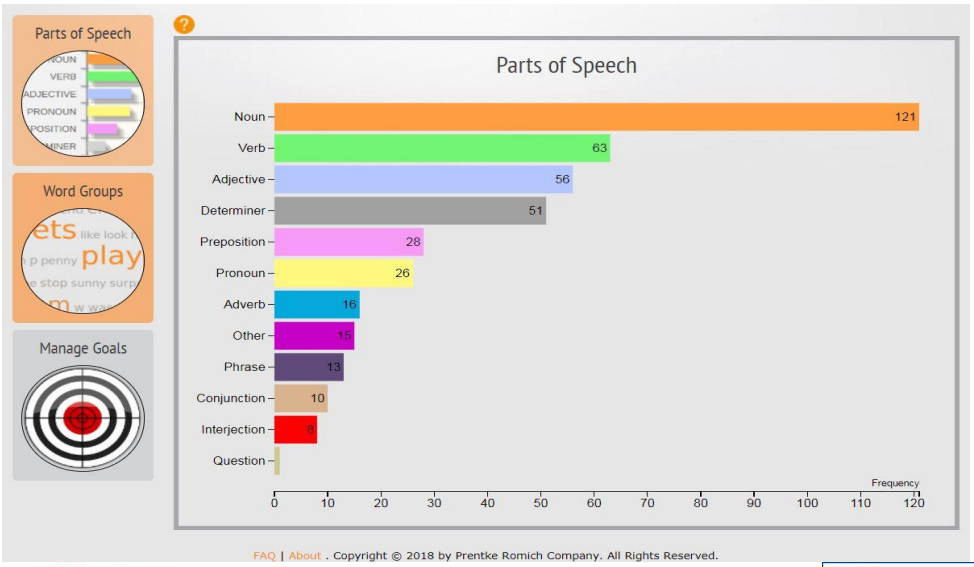

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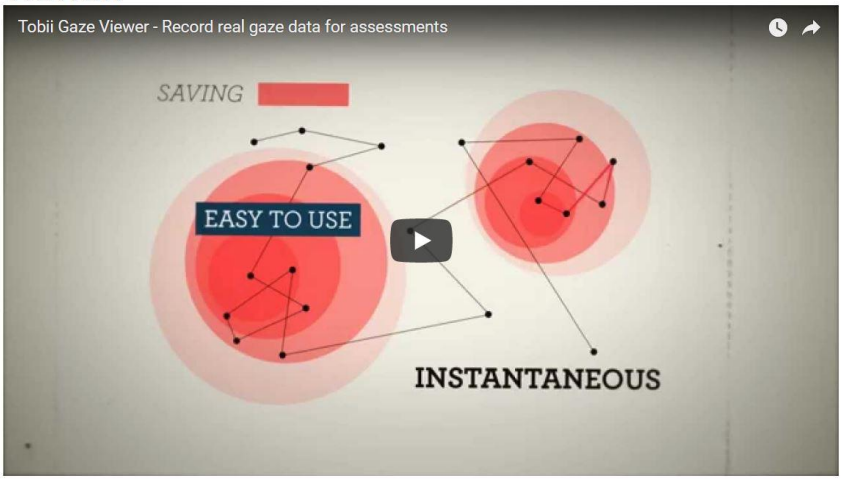
Tobii Gaze Viewer

UNDERSTAND A USER'S CAPABILTIES WITH GAZE VIEWER



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Short term goal development

- Base goals on ZPD and stimulability testing
- Consider goals in all areas of AAC competence
- Consult objective data (e.g., DAGG-2, Communication Matrix, other formal testing measures)

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SGD tools that support current ability and long-term growth potential

- Hidden buttons features
- Progressive vocabulary sets (Progressive language in Proloquo2Go, Vocabulary Builder in PRC Unity)
- Multi-level vocabulary sets (e.g., WordPower, Proloquo2Go Crescendo, Snap + Core First)

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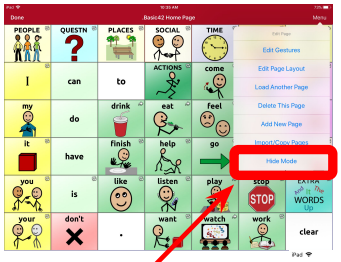
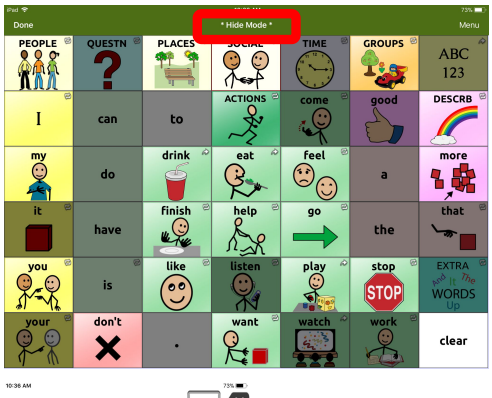
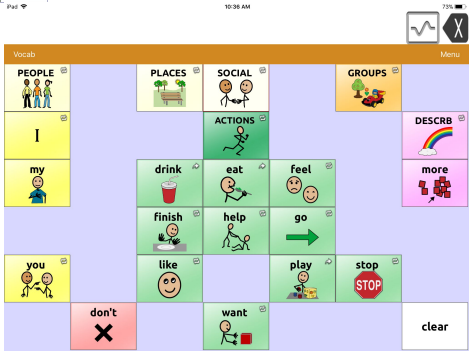
Hidden buttons:

TouchChat HD with WordPower





User interface



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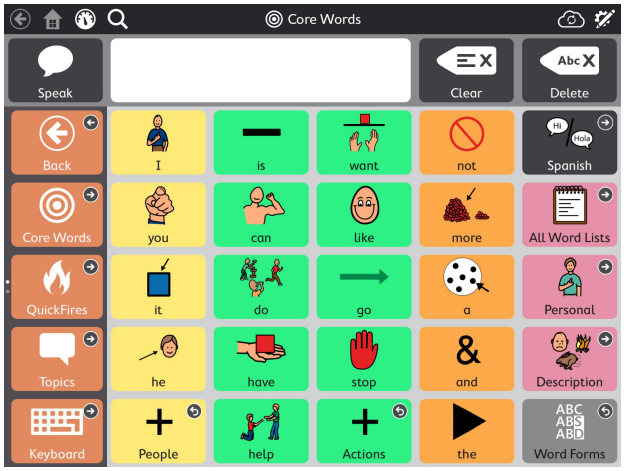
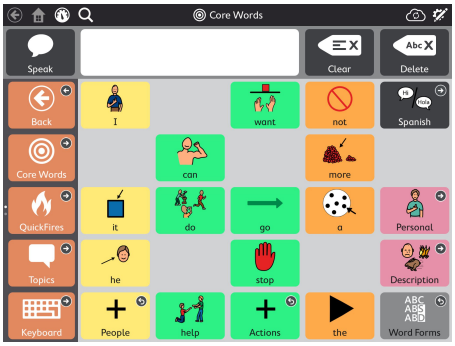
Hidden buttons:

Tobii DynaVox Snap + Core First





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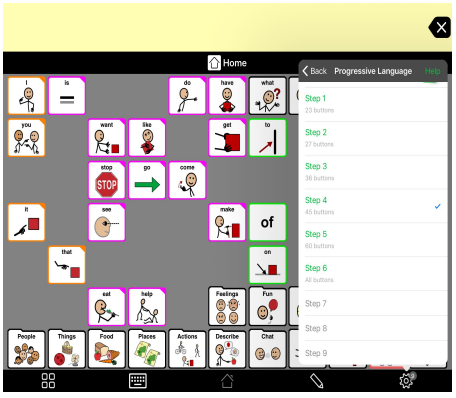
Progressive vocabulary sets:

Proloquo2Go



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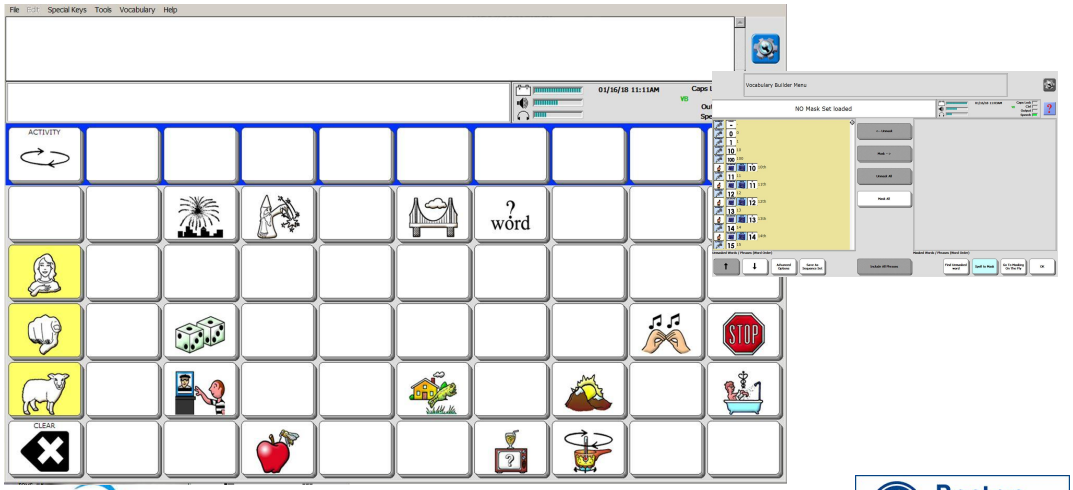
Progressive vocabulary set:

Vocabulary Builder/Masking (PRC)



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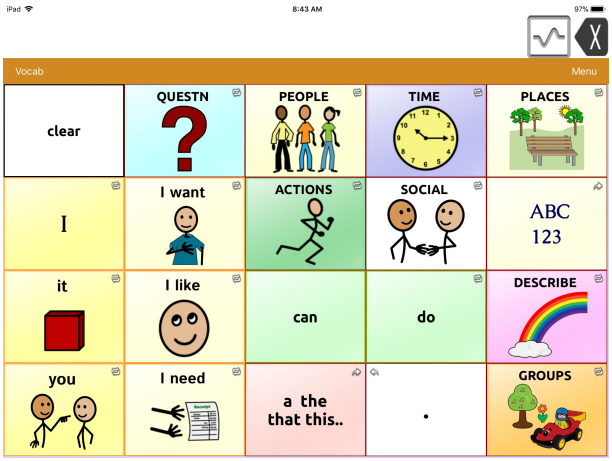
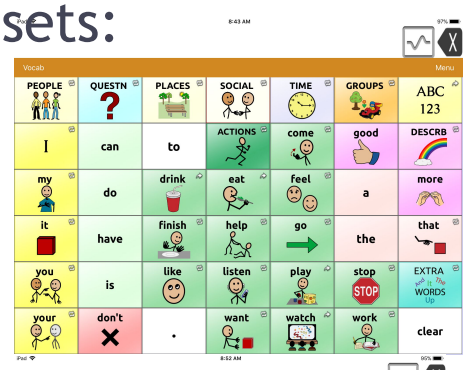
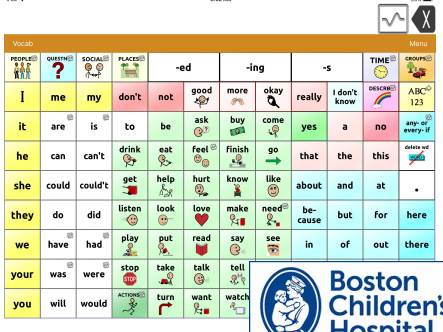
Multi-level vocabulary sets: WordPower







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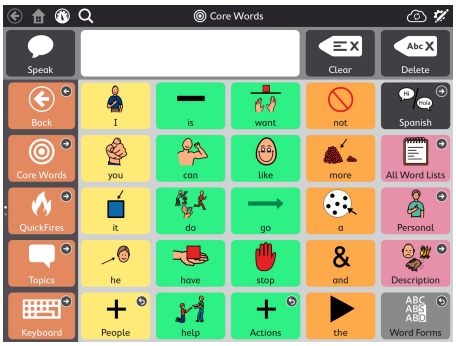
Multi-level vocabulary sets: Snap + Core First



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Multi-level vocabulary sets: Proloquo2Go Crescendo

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Multi-level vocabulary sets: PODD

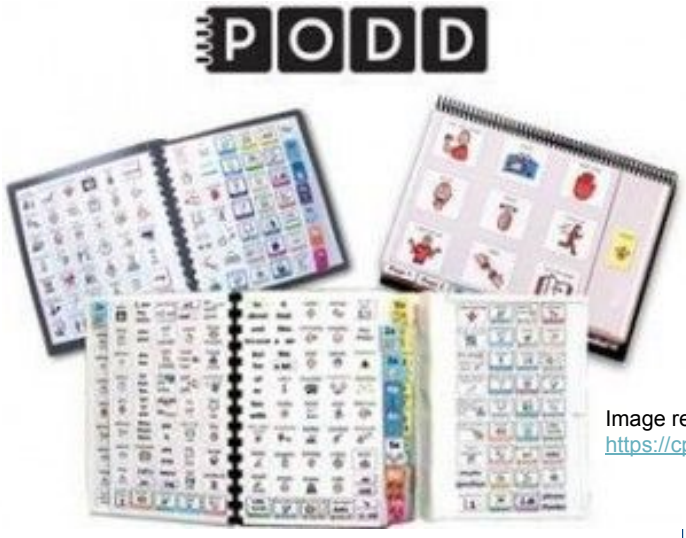

Image retrieved from:
https://cpec.org.au/store/podd/

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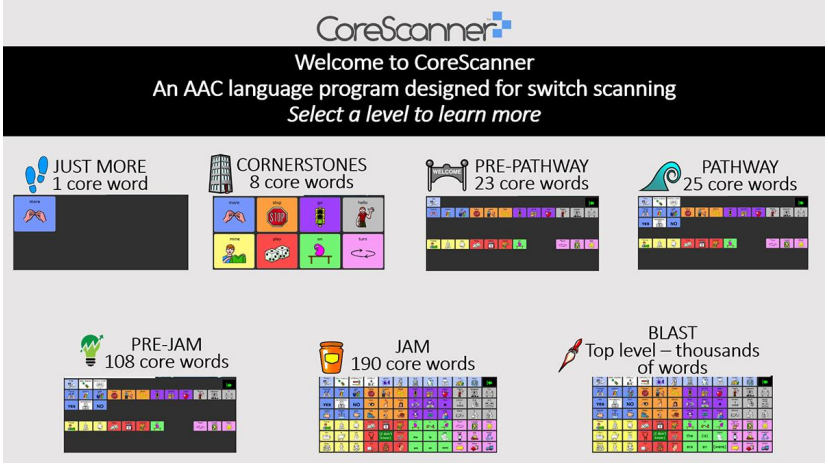
Multi-level vocabulary sets: CoreScanner (PRC)



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Summary points

- The phrase “presumed competence” has pseudoscientific origins.
- Some contemporary use encourages frequent opportunities and high expectations.
- Limitations of presuming competence without evidence may include system mismatch, system abandonment, and missed opportunities/time.

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Summary points

- Thoughtful/evidence-based system selection is necessary to reveal each individual’s potential.
- Assessment should include stimulability testing to determine the zone of proximal development and guide goal development.
- Many tools exist to aid in assessment, data collection, and goal development.

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"The only presumptions required are individual worth, dignity, and a right to effective interventions and supports."

-Travers & Ayres, 2015

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Questions?

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Thank you for attending!

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