

CU's AAC Outreach Project for Adolescents with Complex Communication Needs: Assessment, Intervention and Professional Development



Office for Outreach and Engagement

Speech, Language, and Hearing Sciences
COLLEGE OF ARTS AND SCIENCES

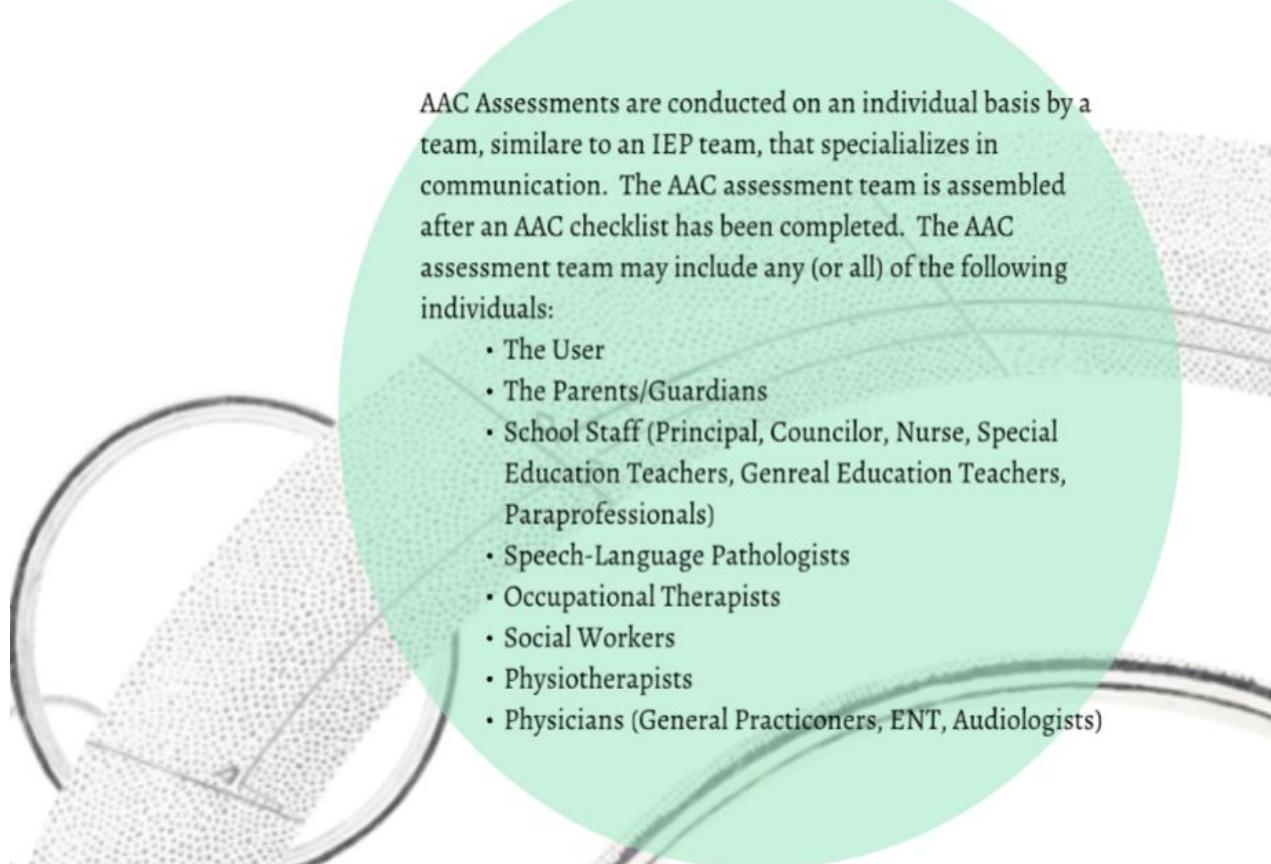
DSST PUBLIC SCHOOLS

Augmentative-Alternative Communication (AAC) Multimedia Modules

- 1 AAC Assessment
AAC Assessment Checklist, Feature Matching
Approach, AAC Profile
- 2 Evidence-Based AAC
Intervention Strategies
Contingent Responding, Cascading Coaching
Model, and Aided AAC Input
- 3 Evidence-Based AAC
Intervention Strategies
Aided AAC Input combined with
Conversational coaching
- 4 Comprehensive Literacy
Intervention
Shared Reading Strategies
- 5 Comprehensive Literacy
Intervention
Self-Selected Writing

Module 1: AAC Assessments

AAC Team Members



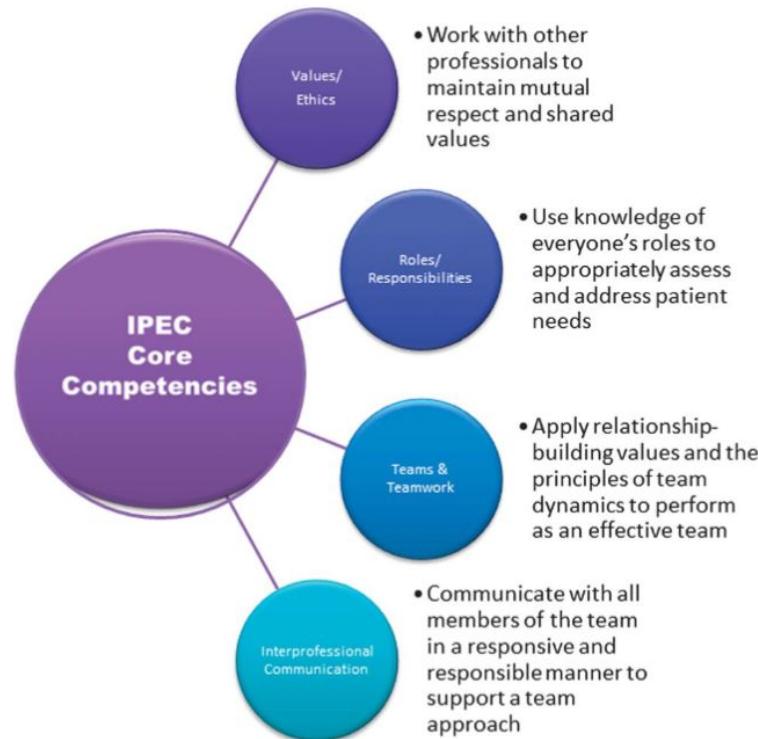
AAC Assessments are conducted on an individual basis by a team, similar to an IEP team, that specializes in communication. The AAC assessment team is assembled after an AAC checklist has been completed. The AAC assessment team may include any (or all) of the following individuals:

- The User
- The Parents/Guardians
- School Staff (Principal, Councilor, Nurse, Special Education Teachers, General Education Teachers, Paraprofessionals)
- Speech-Language Pathologists
- Occupational Therapists
- Social Workers
- Physiotherapists
- Physicians (General Practitioners, ENT, Audiologists)

Teachers of the Visually Impaired (TVI) and Audiologists are often essential team members for individuals who have complex communication needs (CCN).

Interprofessionalism Education Collaborative AAC Teaming

Figure 4. The IPEC Core Competencies (IPEC, 2016).



Feature Matching Approach

Lund, et al., 2017

01	Motor Control	<ul style="list-style-type: none">• Access Method (Direct selection or Scanning)• Seating and Positioning
02	Cognition	<ul style="list-style-type: none">• Grid size• Memory/Recall
03	Language	<ul style="list-style-type: none">• Vocabulary• Bilingualism/Multilingualism
04	Literacy	<ul style="list-style-type: none">• Orthography• Spelling with keyboard• Reading proficiency
05	Hearing/Vision	<ul style="list-style-type: none">• Grid size• High-Contrast symbols• Magnification

AAC Assessment Checklist

Augmentative and Alternative Communication (AAC) Assessment Checklist

Each assessment check is included based on evidence that it will improve assessments for individuals with complex communication needs (CCN). Review and confirm each check.

What are the student's communication needs?	What are the student's skills?	What are the partner and environmental supports and limitations?
<input type="checkbox"/> What are the student's communication needs? What does the student need to understand? With whom does the student need to communicate? Why does the student need to communicate? About what does the student need to communicate? When and where does the student need to communicate? How does the student need to communicate? <input type="checkbox"/> Which of the student's communication needs are unmet? <input type="checkbox"/> Which of the student's communication needs are priorities for the student? Family? School?	<input type="checkbox"/> What are the student's vision skills? Visual field Visual acuity <input type="checkbox"/> What are the student's hearing skills? <input type="checkbox"/> What are the student's motor skills? Gestures and signs Access to systems (direct selection and/or switch) Seating and positioning <input type="checkbox"/> What are the student's receptive language skills? Understanding words, morphology, and sentence structure <input type="checkbox"/> What are the student's expressive communication skills? Turntaking Natural speech and intelligibility About what and how does the student communicate? <input type="checkbox"/> What are the student's literacy skills? Letter-sound correspondences Decoding Sight-word recognition Reading comprehension Spelling Writing <input type="checkbox"/> What are the student's symbol representation skills? Types of symbols (Objects, gestures, signs, photographs, line drawings, print) <input type="checkbox"/> What are the student's cognitive organization skills? Display (Grids, visual scenes) Symbol organization (Context, category, syntax, alphabet, other)	<input type="checkbox"/> What are partner supports to communication? Opportunities for communication Knowledge of AAC services, systems, and/or instructional strategies <input type="checkbox"/> What are partner limitations to communication? Limited opportunities for communication Limited knowledge of AAC services, systems, and/or instructional strategies <input type="checkbox"/> What are environmental supports to communication? Educational placement Environmental access <input type="checkbox"/> What are environmental limitations to communication? Educational placement Limited environmental access Limited use (Student is unable to use the AAC system across environments)
Who is involved in the assessment?		
<input type="checkbox"/> Student <input type="checkbox"/> Family <input type="checkbox"/> Professionals Instructional assistant Regular education teacher Special education teacher Assistive technology specialist Occupational therapist Physical therapist Speech-language pathologist Others		

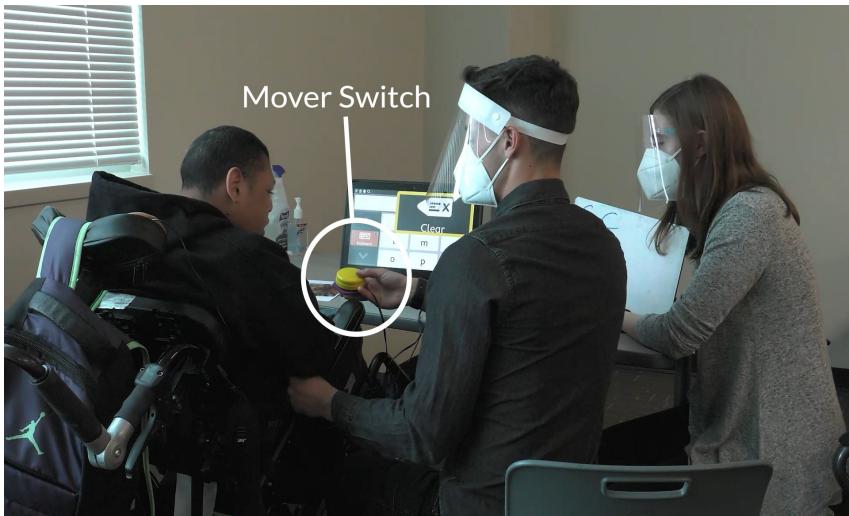
- **What are the student's communication needs?**
- **What are the student's skills?**
- **What are the partner and environmental supports and limitations?**
- **Who is involved in the assessment?**

AAC Access Methods - Eye Gaze



Customized 2x2 grid with videos linked to buttons in Communicator 5 software. Eye gaze position is optimal.

AAC Access Methods - Two-Switch Scanning



Two different switch sites are established for the **mover** and **chooser** switches.



Robust Bilingual Vocabulary: English and Spanish

The image shows a bilingual communication app interface. At the top, there are navigation icons: a house, a person, a magnifying glass, and a lightbulb. The main title is "Core Words". Below the title, there are two sections: "Speak" and "Clear". The "Speak" section contains a speech bubble icon and the word "Speak". The "Clear" section contains a speech bubble icon and the word "Clear".

The "Core Words" section contains a grid of words with corresponding icons:

- Back: A person icon in a yellow box.
- I: A person icon in a yellow box.
- want: A person icon in a green box.
- not: A red circle with a diagonal line in an orange box.
- Spanish: A speech bubble icon with "Hi" and "Hola" in a black box.

The "Core Words (Spanish)" section contains a grid of words with corresponding icons:

- Atrás: A person icon in a yellow box.
- me: A person icon in a yellow box.
- quiero: A person icon in a green box.
- no: A red circle with a diagonal line in an orange box.
- Ingles: A speech bubble icon with "Hi" and "Hello" in a black box.

The "All Word Lists" section contains a grid of words with corresponding icons:

- Core Words: A target icon in a yellow box.
- you: A person icon in a yellow box.
- like: A person icon in a green box.
- more: A pile of rocks icon in an orange box.
- Vocabulario núcleo: A target icon in a black box.
- te: A person icon in a yellow box.
- da: A person icon in a green box.
- más: A pile of rocks icon in an orange box.
- Listas de palabras: A notepad icon in a pink box.

The "QuickFires" section contains a grid of words with corresponding icons:

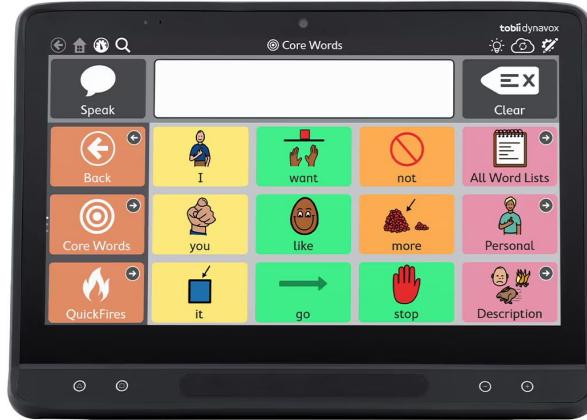
- QuickFires: A flame icon in a yellow box.
- it: A blue square icon in a yellow box.
- go: A green arrow icon in a green box.
- stop: A red hand icon in a green box.
- Personal: A person icon in a pink box.
- Charla rápida: A flame icon in a black box.
- lo: A person icon in a yellow box.
- vamos: A green arrow icon in a green box.
- deja: A person icon in a green box.
- Personal: A person icon in a pink box.

The "People" section contains a grid of words with corresponding icons:

- People: A plus sign icon in a yellow box.
- have: A hand icon in a green box.
- Actions: A plus sign icon in a green box.
- Gente: A plus sign icon in a yellow box.
- gusta: A person icon in a green box.
- Acciones: A plus sign icon in a green box.
- Formas de palabras: A notepad icon in a pink box.

Important Feature: Different Grid Sizes 2x2, 2x3, 3x3, 4x4, 5x5, 6x6, etc.

Best Practice and Medicaid Requirement: Trial at least THREE Different AAC systems

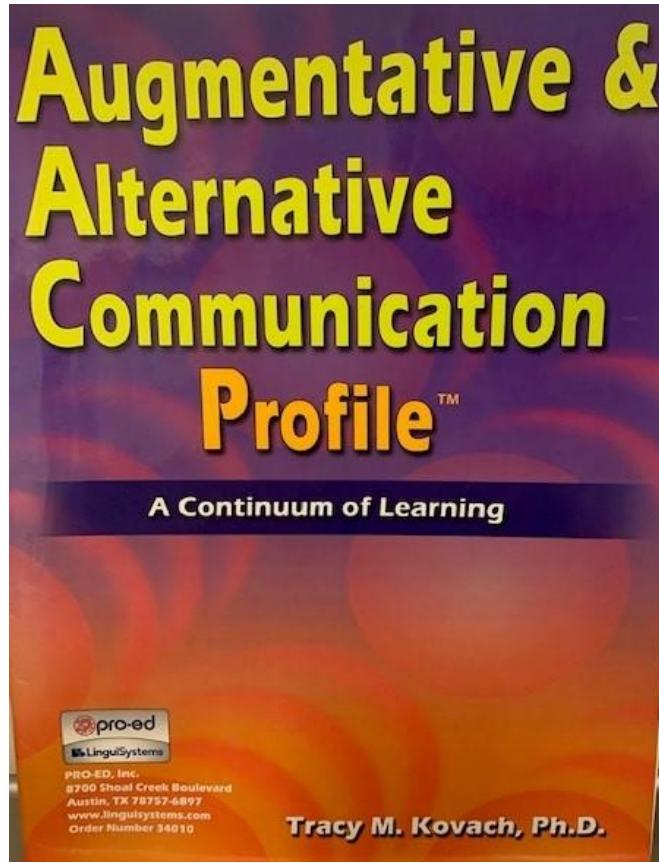


TobiiDynavox I-13 and I-16

Conversation Window on the Back of the Device



AAC Profile - Continuum of Learning

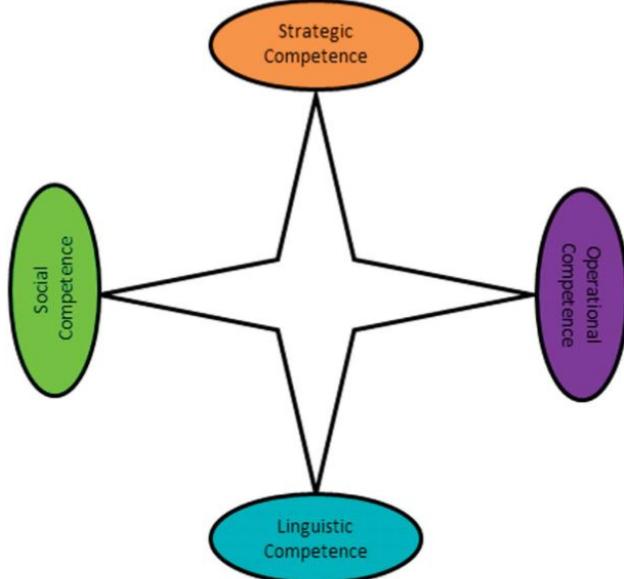


AAC Profile - Assesses continuum of learning

(Kovach, T., 2009)

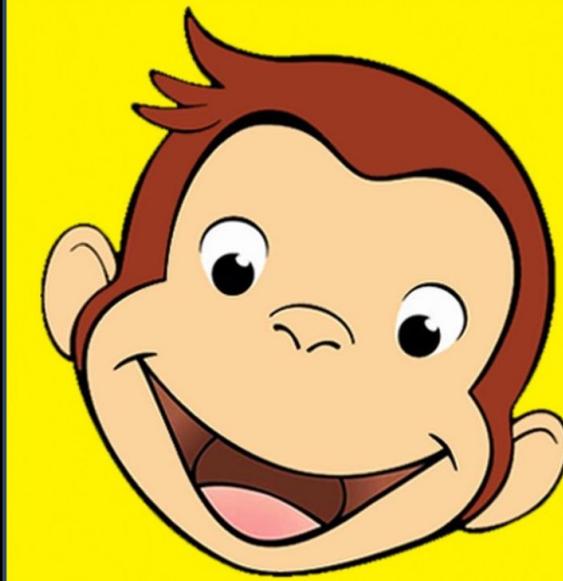
- Profile for students and their communication partner (parent, caregiver, teacher, family member)
- For the student, four areas of competence are evaluated:
 - Operational (functional, positioning, access)
 - Linguistic (receptive/expressive language skills)
 - Social (pragmatic, optimizing opportunities for interacting)
 - Strategic (multiple modalities of communication)
- For communication partner, three areas of competence are evaluated:
 - Operational, social, strategic
- Results - levels 1-5, 5 being the highest level (most advanced level) of competence
- The AAC Profile can be used to assess initial function and to measure progress after treatment has been implemented.

Four Areas of AAC Competency

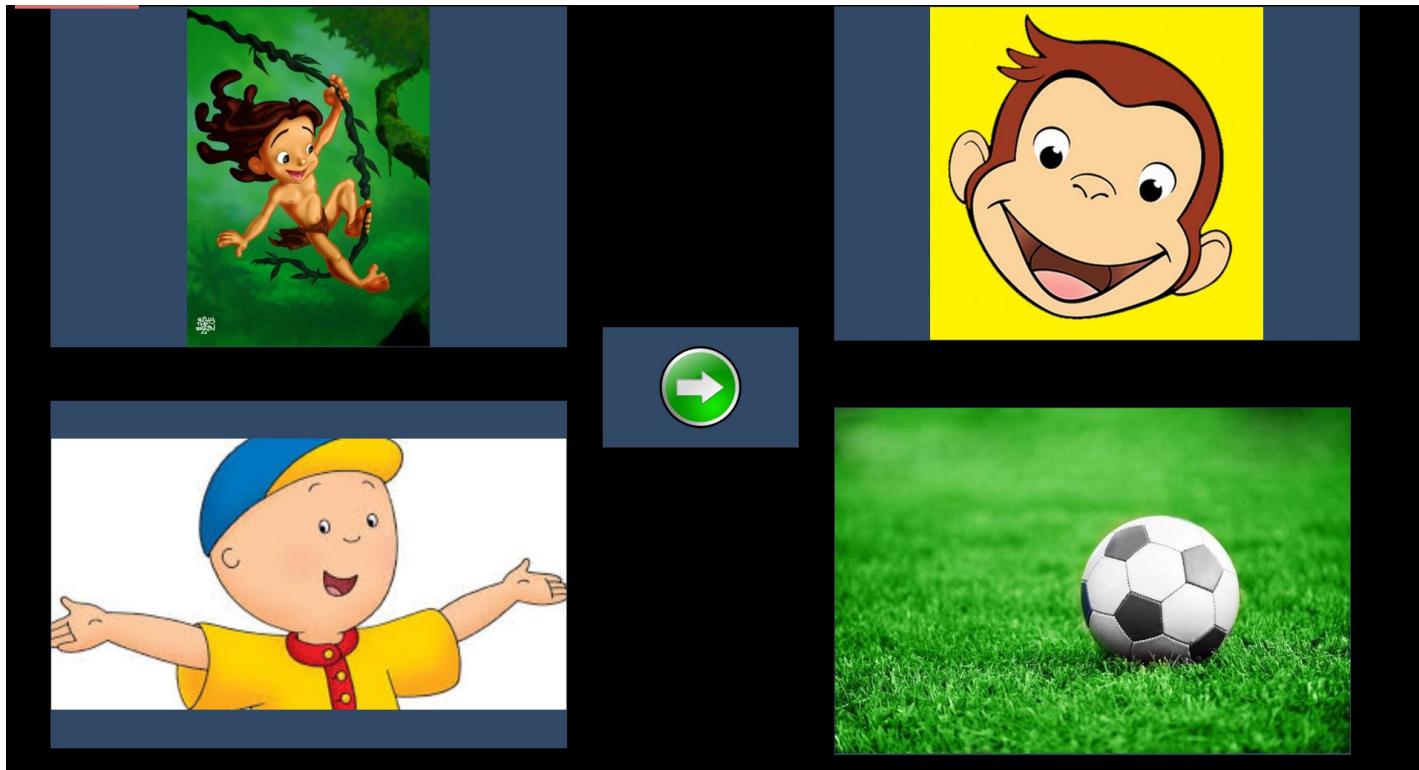


- **Operational competence** refers to one's ability to perform functions of the device, such as clearing the message window, and accessing the device effectively.
- **Linguistic competence** refers to receptive and expressive language skills.
- **Social competence** pertains to the way the AAC user interacts with others.
- **Strategic competence** refers to the way the AAC user conveys ideas and feelings through multiple modalities of communication.

The AAC assessment with BLO started with a customized 1x2 grid with a motivating video that played when each cell was activated.



AAC assessment with BLO continued with customized 2x2 grid with a motivating video that played when each cell was activated.



AAC assessment with BLO continued with customized 2x3 grid with a motivating video that played when each cell was activated.

