

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

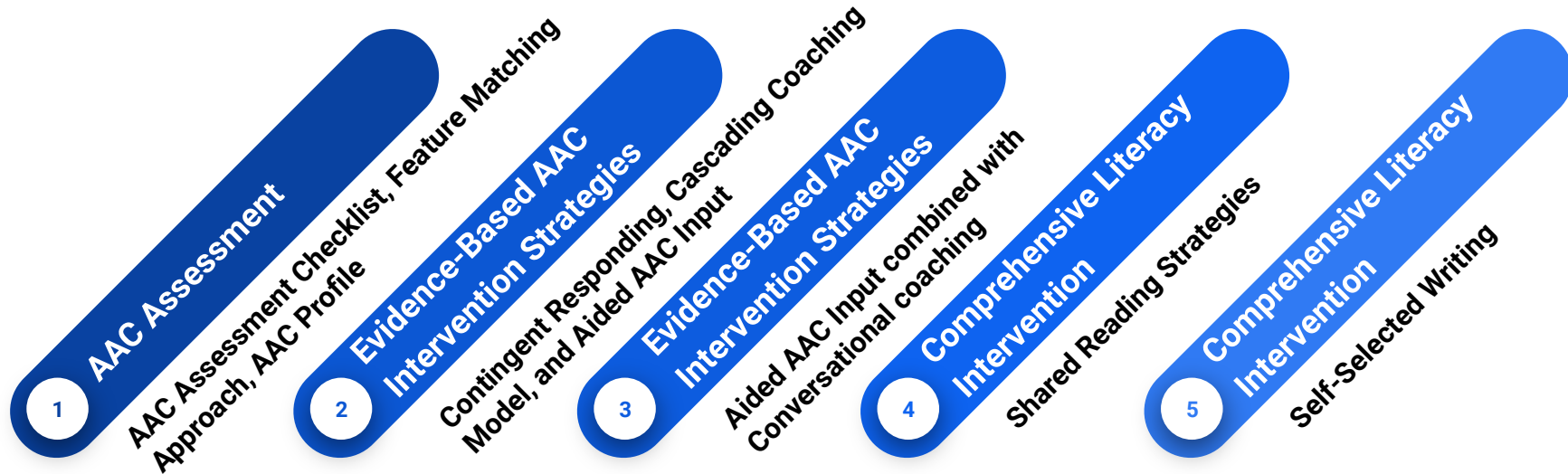


Office for Outreach and
Engagement

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

DSST PUBLIC SCHOOLS

Augmentative-Alternative Communication (AAC) Multimedia Modules



Module 1: AAC Assessments

AAC Team Members

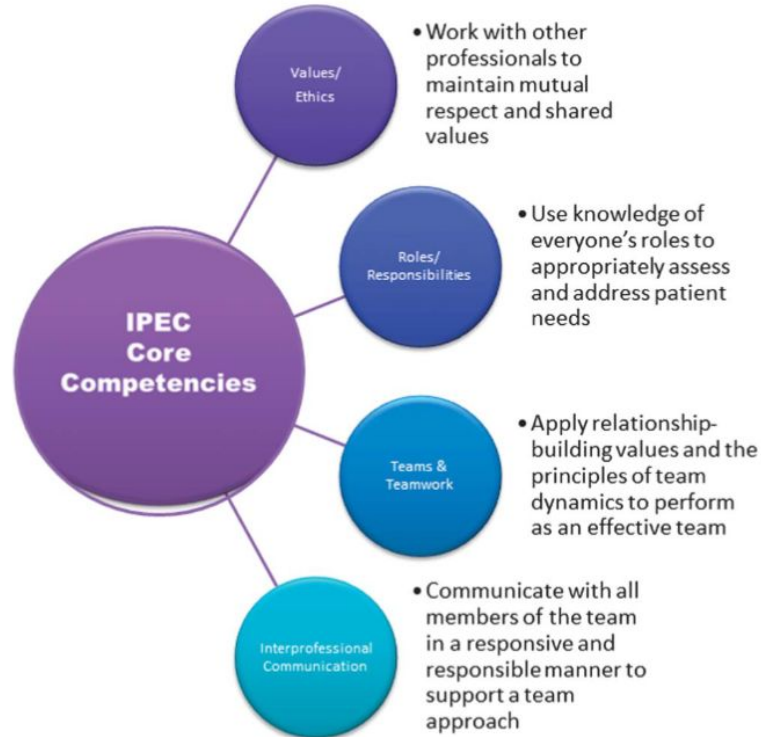
AAC Assessments are conducted on an individual basis by a team, similar to an IEP team, that specializes in communication. The AAC assessment team is assembled after an AAC checklist has been completed. The AAC assessment team may include any (or all) of the following individuals:

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

- 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




Core Words

Speak


Clear

Back


I


want

not

Spanish


Core Words

you

like


more

All Word Lists

QuickFires


it

go


stop


Personal



People


have


Actions





Core Words (Spanish)


Decir

Borrar todo


Atrás

me


quiero

no


Inglés

Vocabulario núcleo

te

da

más

Listas de palabras

Charla rápida


lo


vamos

deja


Personal



Gente

gusta

Acciones

Formas de palabras

Important Feature: Different Grid Sizes

2x2, 2x3, 3x3, 4x4, 5x5, 6x6, etc.

The screenshot displays the 'Core Words (Spanish)' application interface. At the top, a teal header bar contains navigation icons (back, home, settings, search), the title 'Core Words (Spanish)', and a 'Done' button. Below the header, the main area features a grid of word cards. On the left, there are buttons for 'Decir' (speech bubble icon) and 'Borrar todo' (trash icon). The grid includes cards for 'Atrás' (back arrow), 'Vocabulario núcleo' (target icon), 'me' (person icon), 'quiero' (hands holding a red cube), 'no' (prohibited sign), 'Inglés' (speech bubbles with 'Hi' and 'Hola'), 'te' (fist icon), 'da' (two people exchanging items), 'más' (pile of red beads), and 'Listas de palabras' (notepad icon). A bottom bar contains tabs for 'Button', 'Page', 'Page Set', 'User', and 'System'. The 'Page Set' tab is active, showing a list of settings: 'Page Set', 'Grid Size', 'Style', 'Preferences', and 'About'. The 'Grid Size' option is selected, displaying a row of grid size icons: 1x2, 2x2, 2x3, 3x3, 3x4, 4x4 (selected with a checkmark), 5x5, and 6x6. Below these is a 'Custom Grid Size' option.

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

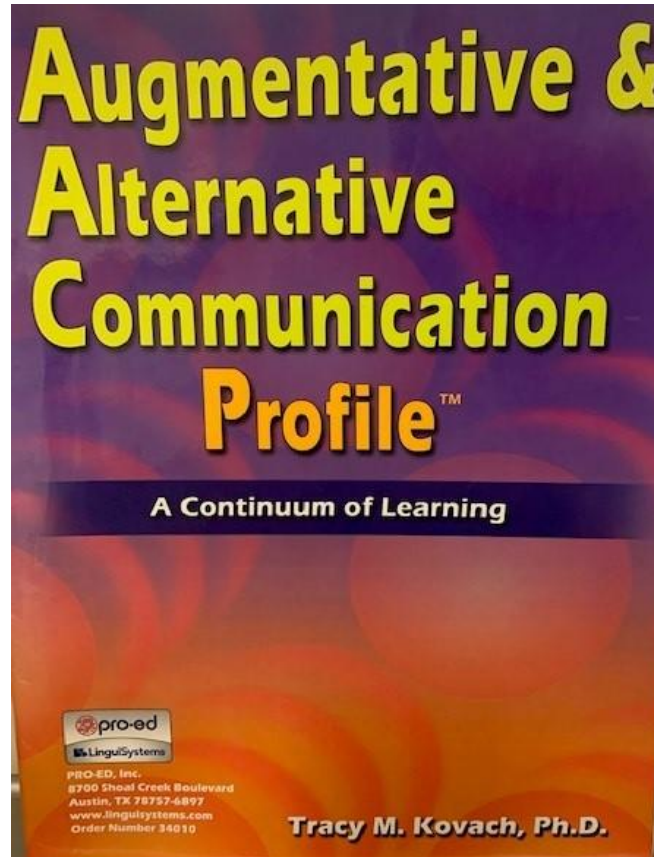


TobiiDynavox I-13 and I-16

Conversation Window on the Back of the Device



AAC Profile - Continuum of Learning

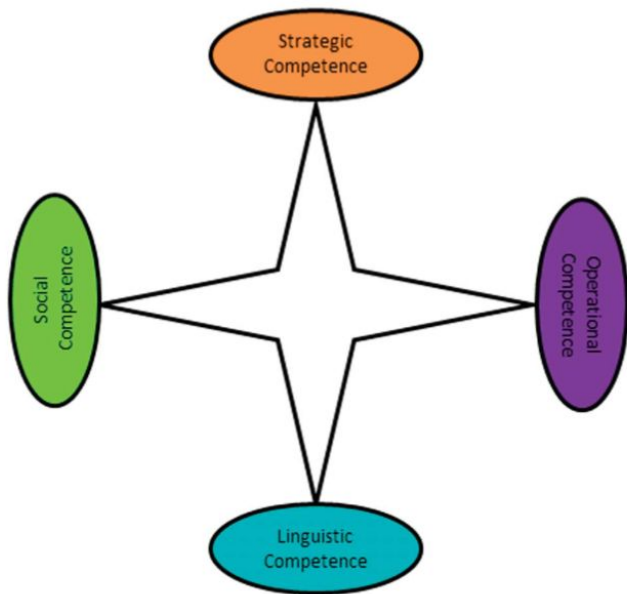


AAC Profile - Assesses continuum of learning

(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

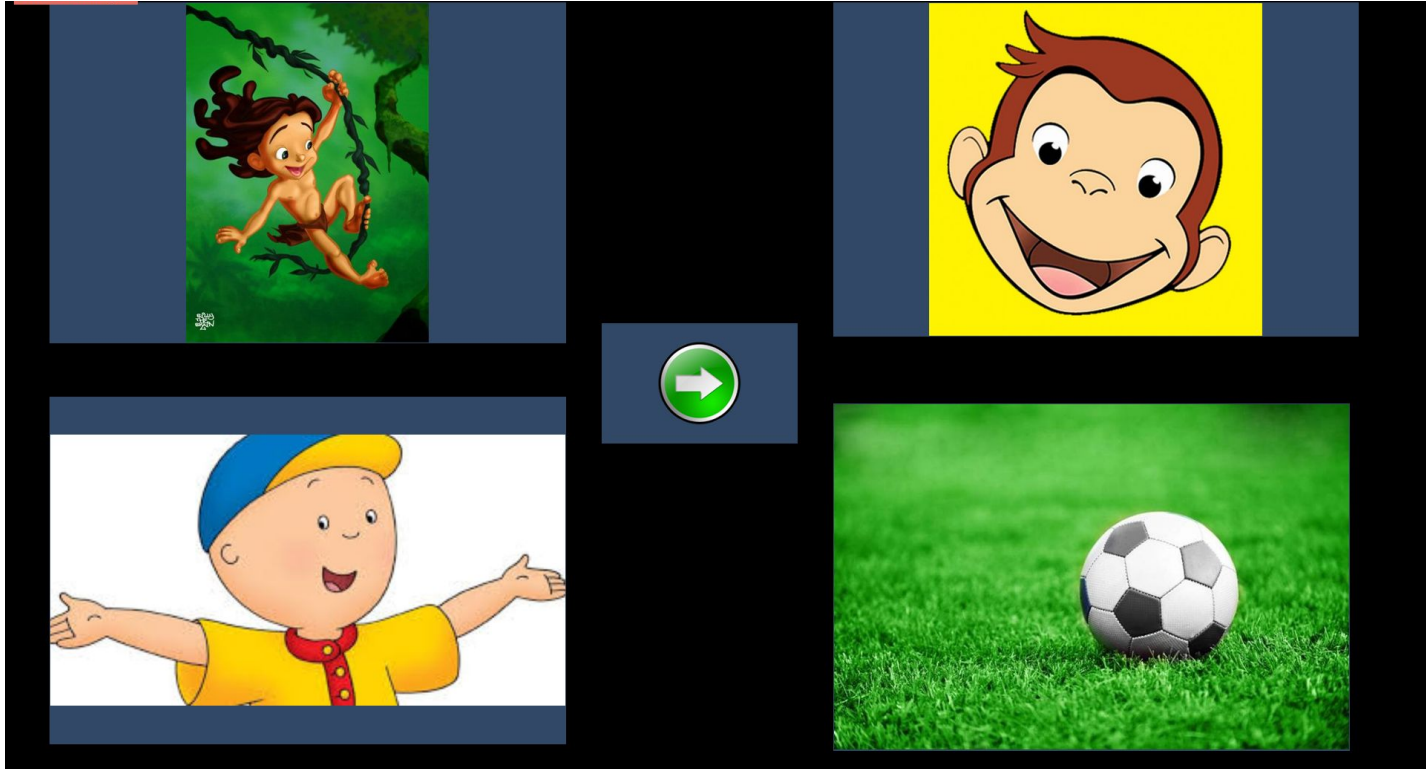


- **Operational competence** refers to one's ability to perform functions of the device, such as clearing the message window, and accessing the device effectively.
- **Linguistic competence** refers to receptive and expressive language skills.
- **Social competence** pertains to the way the AAC user 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.

