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AAC Feature Matching Overview

Feature Matching is a collaborative process which involves using criterion-based assessment strategies to gather relevant information about a client's communication and sensorimotor abilities and applying AAC expertise to match the appropriate array of AAC options that offer features relevant for meeting the person's needs and skills.

Feature Matching Principles:

- A complex and dynamic process involving multiple contributors, access to a variety of AAC tools/systems, and knowledge of rapidly changing technology.
- Feature matching is not just picking the system, but is also an ongoing process of ensuring optimization of that system for the individual.
- A combination of features is often necessary to meet all communication needs. For example, use of a combination of photo and symbol-based message pages with text-based sentence construction.
- Must take into consideration an individual's current communication needs and abilities in addition to anticipating future changes to their language and access needs.
- Must involve the AAC user, primary communication partners, and AAC specialists to ensure a quality match which leads to optimal use by the individual and ongoing support from key stakeholders.

Critical Features to consider during the feature matching process include:

Symbol Features	
Individuals vary in their level of understanding symbolic representations along a continuum from real objects, photos of real objects, concrete line-drawn representations of objects, abstract symbols representing concepts, to text. AAC tools offer different combinations of these representation systems.	Photos PCS / Boardmaker SymbolStix Unity App-Specific Text Tactile / Braille

Linguistic Features	
AAC tools offer a variety of page sets which organize and present language in simple to complex ways including full-phrase communication, word-by-word sentence construction, and text-based spelling of words and messages (including use of word prediction). Page sets are selected based on a combination of the individual's levels of cognition, expressive and receptive language, and physical access abilities.	Availability of pre-created page sets Complexity of Language (Emergent to Complex, with ability to advance) Presentation Style (Text-based, symbol, scene, lists, grid) Display Settings (amount of vocabulary or message buttons within each category)

Voice Features	
Important in selecting appropriate AAC options for representing the individual's unique voice and ensuring their ability to be heard and understood by communication partners.	Type of Voice (Synthesized, Digitized) Personalization Options (gender, age, pitch, rate) Language Options (Spanish, Arabic, Bilingual) Built – In / External Speakers

Access Features	
Direct Select Features: Individuals who can access the screen directly with a body part or stylus may require settings or hardware adjustments to maximize accuracy and efficiency.	Keyguard Stylus Options Visual Supports (outline, highlight, zoom) Touch screen settings (dwell, delay, release)
Mouse Options: Individuals who cannot physically touch the screen/display may be able to directly indicate selections via alternate interface.	Head mouse / Light pointer Alternative Mouse / Joystick Trackpad / Trackball
Eye Gaze: Individuals who most accurately and efficiently access AAC systems using directed eye movements require specific methods and/or settings adjustments to optimize communication.	Interaction Settings (calibration/camera settings) Activation Signal (dwell, blink, switch) Feedback (color, cursor style, outline, highlight)
Scanning: Individuals who cannot directly select options require specific evaluation of cognitive and physical ability to use scanning methods.	Switch Options (proximity, button, voice, grip) Feedback (visual, auditory, combination) Pattern (linear, row-column, group) Scan Method (Auto / 1-switch, Step / 2-switch)

Display / Editing Features	
Customization of AAC tools is essential for effectively meeting the language and access needs of an individual. Different systems offer multiple setting and editing features to meet cognitive, language, access, sensory, and physical needs.	Grid settings (size, spacing, number per page) Function/Navigation button placement Message Window Use Visual Support (color, font, border, background)

Portability / Positioning Features	
For individuals to have access to their AAC systems at all times, consideration must be given to their ability to transport the system, position the system for optimal access, and protect the system during use / transport.	Size / Weight Mounts / Stands Protective Case / Durability Carrying Straps / Handles

Operational / Other Features	
Comparison of dedicated communication systems versus "off-the-shelf" options require careful consideration of all features, both necessary communication supports as well as desired and competing functions (e.g., computer functions / other apps). Outside supports including training, carryover and maintenance are critical for successful implementation of an AAC system.	Functioning Requirements (charging, setup) Ease of editing (button / page customization, swap, hide, backups, updates) Funding Options Warranty / Repair Coverage Availability of Technical Support Computer Interface / Access