



Building and Utilizing an AAC Evaluation Toolkit and Process

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Evaluation Toolkit

We have gone **GREEN**

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What is the Goal of AAC Assessment?

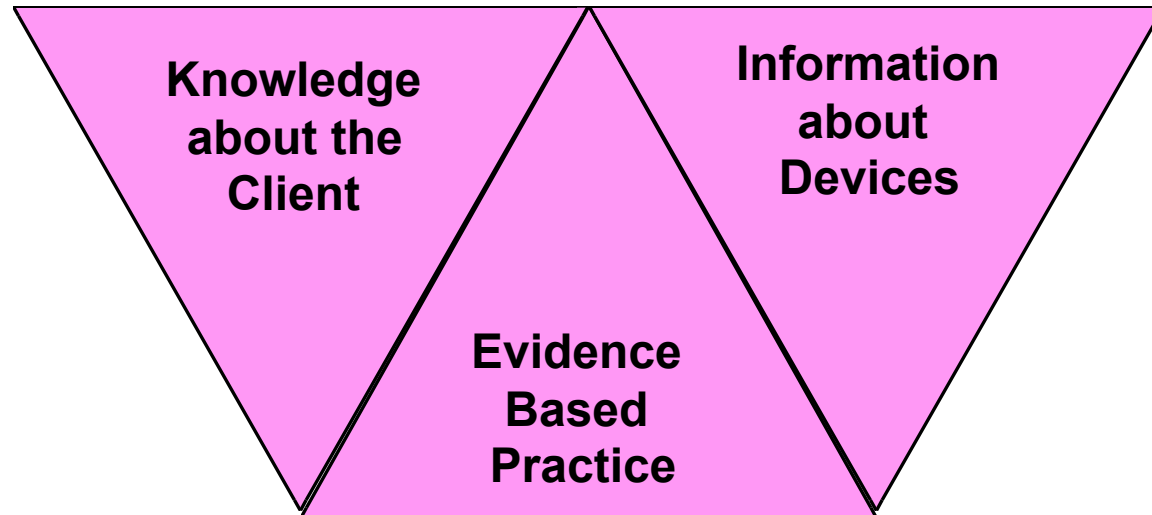
To facilitate the most effective communication possible across a variety of communication environments, situations or frameworks

Speech Language and AAC Evaluations

- Traditional speech/language evaluation focus is on describing the nature and extent of the communication disability, estimating prognosis, designing an initial framework for intervention.
- AAC assessment assumes that the communication is chronic and that natural language is not likely to occur. Therefore, the focus on the assessment shifts to designing an AAC system that will provide for the highest level of generative communication that can be achieved.



Important Information





Three Types of Information

- Evidenced Based Practice
 - Knowledge about best practices
- Knowledge about the client
 - Assessment Process
- Knowledge about devices, technology and systems
 - Gathering information about technology and remaining current
 - Feature Matching



Three Types of Information

Evidence Based
Practice

Evidence Based Practice (EBP)
is a Decision Making Process

- ❖ Current high quality research evidence
- ❖ Clinician's Expertise
- ❖ Consumer's values and preferences



Three Types of Information

Knowledge about the Client

Knowledge of client involves assessing the individual, communication partners and environment to identify

- Individual's communication needs or goals
- The person's strengths and abilities
- Possible barriers preventing the individual from achieving his/her full communication potential
- The aids and adaptations needed to accomplish the individual's goals given his/her strengths and abilities, and current circumstances?



Three Types of Information

Information about Devices

Knowledge about devices, technology and systems

- Remember that AAC is not just technology and devices.
- Technology discontinuance varies from 8% to 75% depending on type of technology (About 1/3 of all technology is abandoned).
- Technology discontinuance results in lost revenues, time in supporting and developing/rehabilitating language and lost opportunity in establishing an effective communication system and resultant frustration for AAC users and their partners.
- Technology is ever changing and it is critical that the practitioner knows where to obtain reliable and objective information about technologies, devices and aids.



Thoughts on Testing

- It is the responsibility of clinicians to seek out, learn techniques, strategies, approaches that will maximize the potential AAC user's outcomes
- Issues in AAC assessment are complex and at times, teams over-evaluate
- Testing places time and energy demands on the potential users and others which can be counterproductive
- However incomplete assessment can lead to erroneous outcomes



Thoughts on Testing

- How an individual responds to an evaluation task may give more insight than whether the response is correct/incorrect
- Evaluation is more than a battery of tests and a written report
- Assessment is not a one shot deal, it is an ongoing process
- AAC evaluation involves more than assessing the individual, it looks at the potential AAC user, the environment and the communication partner
- May be formal or informal



Testing Guidelines

- Use pre-evaluation questionnaires & results from previous tests to gain information
 - Testing can be tiring
be prepared and have materials and equipment readily available
- Make a video to share with team members
 - Don't test what is not needed



Testing Guidelines

- Be transdisciplinary: evaluate and observe with other team members so testing is not unnecessarily duplicated
 - Focus on what the client can do not what he can't do
- As with articulation assessment attempt to determine stimulability or potential for learning or using various AAC systems



Testing Guidelines

- Assess the individual within various environments, situations and settings
- Gather information about and insight into potential communication partners
- Evaluate the environment as well as the potential user in the daily environment
- Provide immediate written feedback after each session



Assessment Process

- Who
 - Knowledge about the AAC user
 - Knowledge about communication partners
- What
 - What is the goal of the assessment
- Where
 - Where to perform evaluation
- When
 - Not a one night stand
- Why
 - Provide most effective communication possible
 - Means of implementation



Pre-Assessment Preparation

- Questions at Initial Contact
 - Preservice Questionnaire
- Information that can be obtained prior to assessment session
 - Pre Evaluation Questionnaires
Obtaining previous reports, evaluations and supplemental information
 - Communication Questionnaire



Assessment

- **Sensory/Perceptual: Goal is to determine size, type, placement of symbols and identify language input and output options**
 - **Linguistic: Goal is to identify AAC techniques & strategies & select types of symbols**
- **Access: Goal is to identify optimal seating & positioning and motor technique for access**

(adapted from Beukelman & Mirenda 2005)

Sensory/Perceptual

Goal is to determine size, type, placement of symbols & identify language input & output options

- Vision
 - Visual Acuity
 - Visual Field
 - Oculomotor Functioning
 - Light Sensitivity
 - Color Perception
- Hearing
 - Standard Assessment

Access

Goal is to identify optimal seating, positioning, and motor technique for using AAC system

- Identify appropriate positioning (Positioning has a direct impact on motor control, which is necessary for use of all AT)
- Identify selection technique
 - Hierarchy of anatomic sites: hands, head/voice, feet, arms/elbow, legs/knees, eye gaze
 - Action: Identify functional movement pattern(s) with regards to range, accuracy, consistency, strength, speed
- Assure that access method can be used repeatedly without fatigue, discomfort or embarrassment across all environments; identify possible need for multiple means of access
- Identify device features and system input requirement (activation site size and number, sensitivity, selection methods, and physical access)

Access

Implications for functional use of system

- Mounting
- Portability
- Transferability
- Flexibility
- Ease of setup
- Visibility
- Backup systems
- Independent access
- Access to other technologies
- Other users
- Access to other activities (dining, work, school, leisure)
- Consider device appearance and match with personality of user
- Take care in voice selection (gender, age, regional dialects, cultural diversities)

Linguistic

Goal is to identify AAC techniques & strategies & select types of symbols

- Cognition: Examines how individual perceives world and how might use communication within his understanding
- Language Skills: Examines use of a single word vocabulary to common language structures
- Literacy: Assesses reading, spelling, and writing skills
- Symbol Selection: Examines how an individual can communicate with symbols & possible symbol types

Linguistic

Cognition & Language

- Many of these assessments have been performed prior to an Augmentative Communication Evaluation and results should be obtained from those evaluations
- Modification of existing assessment instruments may be necessary along with the expertise to interpret results; requires sound knowledge of language development and communication, and understanding of what each test is designed to assess
- Informal assessment may be necessary when standardized tests are not sensitive enough to accurately depict levels of communicative functioning

Assessing the Individual

- Lack of formalized and standardized AAC assessment tools
 - Must adapt and modify existing instruments
 - Must search for and find additional protocols, tools and techniques
 - Must have expertise to interpret informal/nonstandardized assessment
- Absence of formal tests often results in unorganized and incomplete recording of what was tested, how it was tested and exact results
- Programming is an essential form of ongoing assessment
- Regardless of the type of assessment used, thorough documentation is necessary to communicate results across people and time



TOOLKIT

- **Objects, photos and symbols**
- **Dry erase board**
- **Display board with Velcro sensitive fabric**
- **Sequencer**
- **Progressive communicator**
- **Auditory choice making communicator or Talk 4 with levels**
- **Switch activated devices (toy or fan or vibrating Pillow)**
- **Battery adaptor**
- **Array of Switches**
- **Switch Interface**
- **Switch Mounting system**
- **Laptop computer or tablet computer**
- **Touch Screen**
 - Dynamic Display Software**
 - Download AAC software demos**
 - PowerPoint**



Symbolic Representation

Symbol Types

- Objects
- Texture cues or symbols
- Cut Out Photographs, Pictures, and Symbols
- Photographs
- Realistic (Color)
- Realistic (Black & White)
- Line Drawings (Color)
- Line Drawings (Black & White)
- Visual Scenes
- Alphabet/Spelling

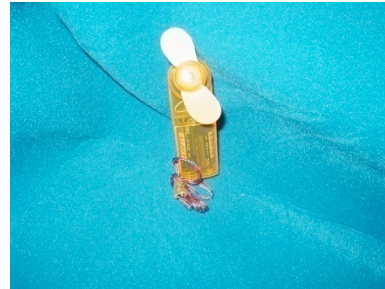


Symbolic Representation

Symbol Types

- Mayer-Johnson Picture Communication Symbols (PCS)
- Dynasyms
- Gus Overboard!
- Photos (Picture This, Photo Sentence Maker)
- Picture Master Language Software (PMLS)
- Widgit Literacy Symbols (formerly Rebus)
- Slater Software Literacy Support Pictures
- Unity icons based on Minspeak symbols
- Symbol Stix
- Tech/Syms
- Imagine Symbols
- Sclera Pictograms
- Go Talk
- Blissymbols
- BlinkTwice
- Pictograms Symbols
- Icons from Enabling Devices
- High Contrast Icons
- Lingraphica
- Object-Symbol Resource, LLC
- Talking My Way
- Transition Textures

Adult Objects



Juvenile Objects

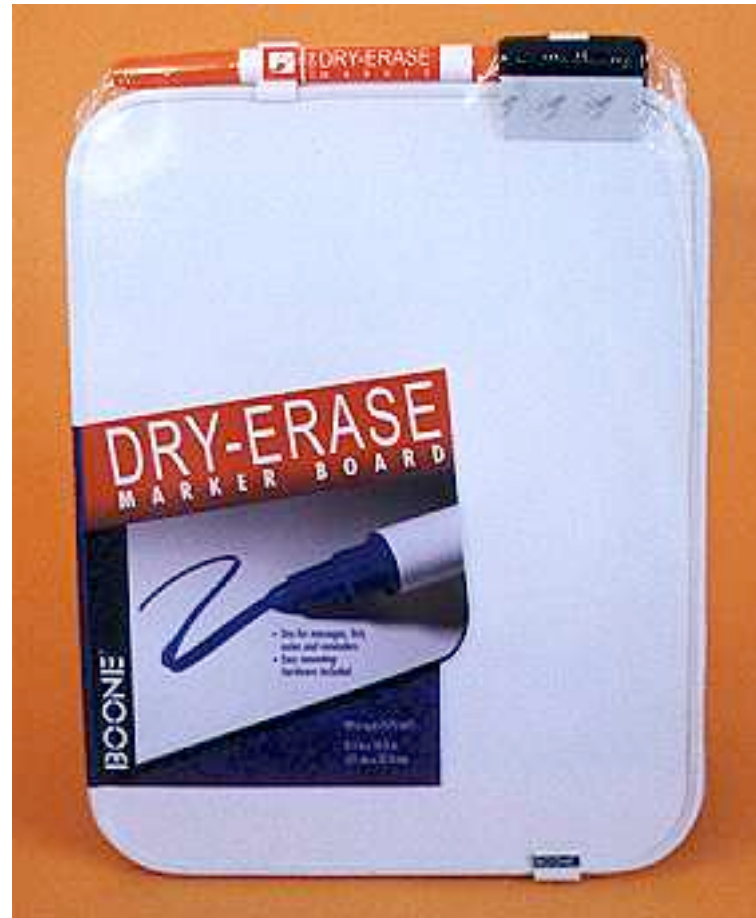


Display Board with Velcro Sensitive Fabric





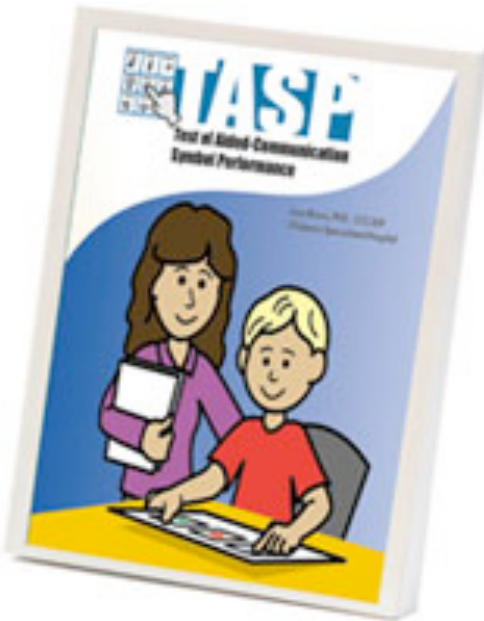
Dry Erase Board



Formal Assessment Tool

The Test of Aided-Communication Performance (TASP)

by Joan Bruno, Ph.D., CCC-SLP



A tool for the assessment of symbol-based communication skills. Includes subtests on symbol size and number, grammatical encoding, categorization and syntactic performance. Results may help determine AAC intervention strategies and goals. Provides starting point for designing communication boards or selecting a page for an AAC device.

Sequencer



Static Display Progressive Communicator



\$339.00

\$325.95



\$599.00

Auditory Choice Making Communicator



Auditory Choice
Making Communicator

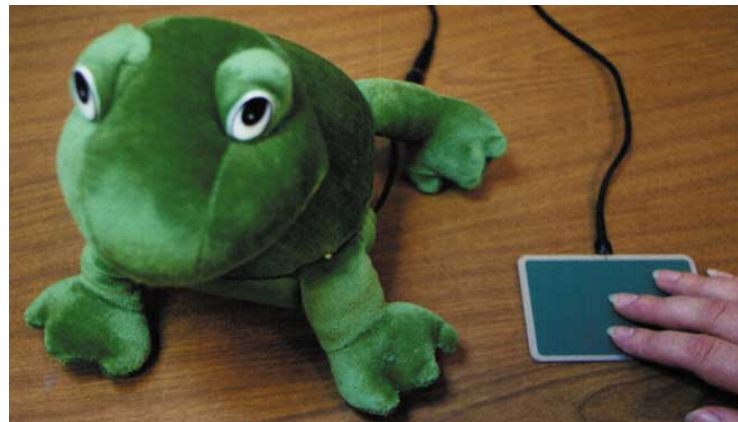
\$153.95

Talk 4 with levels

\$249.95



Switch Activated Devices



Battery Adapter



Array of Switches



Switch Interface



Switch Mounting System



Laptop Computer, Touch Screen and AAC Software



Thoughts on Assessment when Considering High Tech

- a. Know the device (s)
- b. Have a solid schema for how language and communication can be represented
- c. Have an intimate understanding of the consumers language disorder
- d. Prescribe based on how the AAC device can:
 - 1. Provide the capacity for generative language (SNUG)
 - 2. Accommodate the language disability
- e. Be sensitive to features not directly related to AAC that are common to high-tech devices that can enhance the user's quality of life. Environmental Control and computer access are the two main considerations



Evaluation Notes

- A form to provide consistent means of recording information during the evaluation session
- Use of form helps to promote an organized method for keeping work records
 - Evaluation Notes Form

Assessment Resources

- W.A.T.I. Assessment Package
(Wisconsin Assistive Technology Initiative)
 - www.wati.org (click on Materials)
- GPAT Evaluation Toolkits and Protocols
(Georgia Project for Assistive Technology)
 - www.gpat.org (under Resources, click on AT Evaluation)

Assessment Resources

- The Triple C – Checklist of Communication Competencies Communication Resource Center-SCOPE
Box Hill, Vic Australia

http://www.scopevic.org.au/therapy_crc_r&p.html

A Communication Independence Model: For People with Severe Communication Disabilities by Yvonne Gillette,
The University of Akron

[http://www.speechpathology.com/articles/
article_detail.asp?article_id=215](http://www.speechpathology.com/articles/article_detail.asp?article_id=215)



Evaluation Session Summary

- Attempt to talk with all participants at the end of each evaluation session
- Provide written summary at the conclusion of each session
 - Means of sharing information that helps everyone to understand what was done
 - Way to communicate what will happen next
 - Method of recording information to use for report writing
- Evaluation Consult Summary



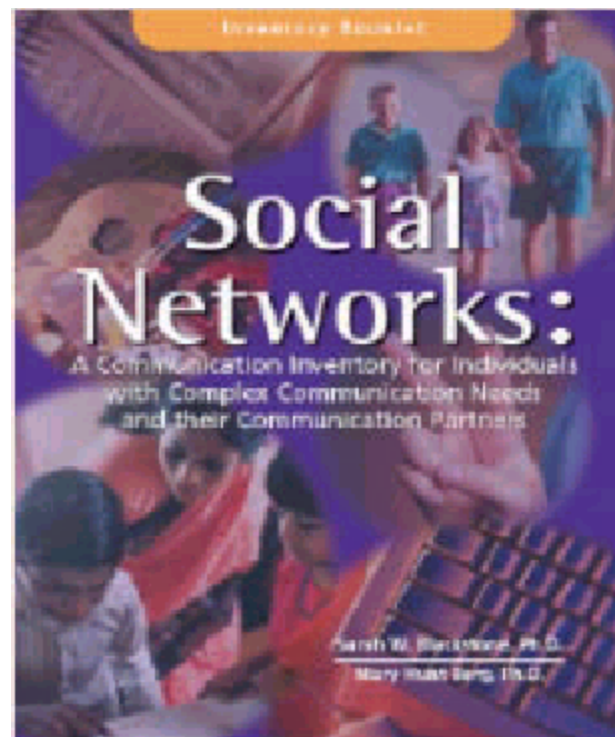
Communication Partners

- Are there partners who have the skills and opportunity to assist in setting up or programming the device?
- Are the expectations of communication partners on target or realistic?
- Do they wait for and/or provide supports for initiation and response from the AAC user?
- Do they recognize communicative attempts and respond accordingly?
- Are they distractingly verbose?
- Do they talk about/over the head of the AAC user to other people, or include them in the conversation?
- Do they support interaction with peers and unfamiliar communication partners?



Communication Partners Social Networks

- Written by Sarah Blackstone and Mary Hunt-Berg, available from Attainment
- Enables collection of information from individuals, their families, and involved practitioners, about their communication partners and current modes of expression to assist in guiding and refining intervention
- Based on principles of functional goal setting and person centered planning





Environments

Environments might include physical space, people present, emotional atmosphere, situation, activity or task

Work with communication partners to identify all environments and what needs to be communicated in each of those

Identify needs for accommodations or modifications to physical environments, routines, or tasks

Communication Supports Checklist from National Joint Committee for the Communication Needs of Persons with Severe Disabilities (McLean, Miller, Paul-Brown, Ronski, Rourke, Yoder, & McCarthy) – available used from various online dealers



Device Knowledge

- Analyzing Devices
 - Short Review
 - In-depth review
- Additional Toolkit Options
 - Gpat Toolkit chart (<http://www.gpat.org>)
- Feature Matching
 - **Needs and abilities of the consumer are assessed to identify the features of the assistive technology solution** (*Identify what features are needed by the consumer based on their abilities and then identify a device that meets these requirements*)



Device Trials

Arrange for and/or conduct device trials or loaner periods

- Good start for identifying vocabulary needs
- Person(s) performing or assisting with trials must be familiar with the device to assure an effective examination period; vendors can be an excellent resource for training and support
- Findings from Brown & Johnson (2004) stated that some subjects indicated that being able to try out a device before buying was a factor leading to successful use of AAC



Ongoing Review Follow Along

- Confirm that the system continues to work for the AAC user
- Establish that vocabulary and symbol selections remain relevant
- Determine if communication needs have changed
- Ascertain whether communication partners have and use the tools necessary for maximizing communication
- Survey environments for changes; decide whether system should be altered to fit environment, or vice versa



Assessment Reports Resources

- www.aac institute.org
- www.aac fundinghelp.com
- www.aac Partners.com
- www.aac products.org
- www.aac-rerc.com
- www.aac techconnect.com
- www.asha.org
- www.assistivetech.com
- www.cms.hhs.gov/medicare/
- www.cms.hhs.gov/states/default.asp
- www.dynavoxtech.com
- www.prentrom.com
- www.words-plus.com
- www.zygo.com



Toolkit Outcomes

- Selecting the most effective tools and
 - Learning to use them effectively during evaluation
 - Leads to mastering the assessment process

Building and Utilizing an AAC Evaluation Toolkit and Process

Thank you for your interest

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