

**Augmentative & Alternative Communication  
Next Steps  
(Assessment and Implementation)**

**AAC - Augmentative & Alternative Communication**

**Types of users:**

Alternative Language Group  
Who

Goal

Expressive Language Group  
Who

Goal

Supportive Language Group  
Who

Goal

(Martinsen & vonTetzchner, 1996)

**How do we help?**

**Assessment & Evaluation defined**

In AAC, assessment and evaluation are used interchangeably, but perhaps they should be used together!

**Augmentative Communication Assessment**

Goal of AAC- Assist individuals with communication disorders to become communicatively competent to meet current needs and to prepare them for future needs.

**Purpose of AAC Assessment:**

- Determine which methods and tools will improve the exchange of information between the individual and others- communication!
  - Knowledge of individual
    - Assessment of the skills and needs of the individual in multiple areas affecting access to and understanding of communication (vision, motor, hearing, language, etc.)
  - Knowledge of AAC (not just devices, but also techniques and strategies)
  - Integrated with Evidence Based Practice
    - Includes research

- o Clinician's expertise
- o Consumer's values and preferences

Beukelman & Mirenda, 1998  
 Heling & Rush, 2009

**Results of the AAC Assessment:**

- o To provide a plan for communication supports that includes:
  - o Details of recommended non speech and/or speech generating systems
  - o Recommendations for any changes to the environment to support communication (including training partners)
  - o Recommendations for intervention to address or improve operational, linguistic, strategic and social competence

**Team Approach**

Who should participate?

Why?

**Types of AAC Assessments**

\_\_\_\_\_ models

Who needs AAC?

Replaced by \_\_\_\_\_ models

Based candidacy on needs, not on impairments

\_\_\_\_\_ model

Assess and base AAC on functional participation requirements of peers

\_\_\_\_\_ for Speech-Generating Devices (SGD)

## **Feature Based Assessment**

### **Plan to Assess and Evaluate**

- o Identify and define areas of concern
- o Gather information related to concerns
  - o Gather relevant information for various skill areas related to the use of SGD
- o Analyze information
  - o Create a Feature List
- o Generate and prioritize potential solutions
  - o Compare intervention options
- o Develop trial action plan
- o Conduct trials and collect data on effectiveness
- o Formulate recommendations
- o Document

### **State the Need or Goal**

- o Make sure that everyone is on the same page!
- o What do you hope to achieve by the end of this assessment and evaluation process?

### **Gather the Information**

- o **Survey family and team members or service providers**
  - o Current problems
  - o Current communication behaviors or skills
  - o Activity preferences
  - o Any history of usage of communication supports

#### ***What can I use?***

*Any case history form obtained or developed or customized for this purpose*

*WATI forms*

<http://www.wati.org/?pageLoad=content/supports/free/index.php>

*Easter Seals DuPage forms*

[http://dfvr.easterseals.com/site/PageServer?pagename=ILDU\\_AssistiveTech](http://dfvr.easterseals.com/site/PageServer?pagename=ILDU_AssistiveTech)

*Infinitec Student Summary forms (handout)*

- o **Sensory/Perceptual**

***Goal is***

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- 
- o Vision (Any standard assessment information and/or informal notations by team members)
  - o Visual Acuity
  - o Visual Field
  - o Oculomotor Functioning
  - o Light Sensitivity
  - o Color Perception

**What can I use?**

*Formal or Informal testing materials may be:*

*TASP (Test of Aided-Communication Symbol Performance by Joan Bruno)*

*Created boards/electronic displays with differing symbol sizes and placements (eye gaze and direct selection)*

*Pogo Boards (<https://www.pogoboards.com/Login.aspx>)*

*Speech Generating Device Page sets/tasks*

*DynaVox, Prentke Romich Company, Tobii, etc.*

- o Hearing (Standard Assessment)
- o If aided, where is sound best heard?
- o Other sensory systems (tactile, olfactory, vestibular, gustatory) \*

*If these are the targets for more in-depth investigation, use of Every Move Counts, Clicks and Chats is recommended as the assessment tool. Information from that tool can then be brought to the Feature Match outline for further determination.*

**o Motor Skills**

**Goal is**

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- o Identify appropriate positioning
- o Identify selection method and technique (direct, scanning, encoding)
  - What are three types of scanning?
- o Where on the body (hands, head/voice, feet, arms/elbow, legs/knees, eye gaze)

- o What action will be used
- o How with the movement be used (direct select, head pointing, eye gaze, joystick, Morse code, scanning)

Considerations

Type, range, accuracy, consistency, strength, speed, etc.  
 Activation site: the minimum size of the targets, possible number of targets, spacing of targets, etc., will be determined by accuracy  
 Sensitivity: the amount of pressure or force needed to activate the target.

Questions to ask yourselves:

**What can I use?**

*Formal or Informal testing materials may be:  
 TASP (Test of Aided-Communication Symbol Performance by Joan Bruno)  
 Created boards/electronic displays with differing symbol sizes and placements (eye gaze and direct selection, scanning)  
 Pogo Boards (<https://www.pogoboards.com/Login.aspx>)  
 Speech Generating Device Page sets/tasks  
 What companies? \_\_\_\_\_*

o **Cognition**

**Goal is**

\_\_\_\_\_

\_\_\_\_\_

Gain information on how the student perceives world and how they may use communication within their understanding.

- o Assess ability to categorize
- o Assess ability to use memory skills/motor patterns

**What can I use?**

*Communication Matrix, Every Move Counts-Clicks & Chats,*

*Communication and Symbolic Behavior Scales by Wetherby and Prizant, TASP, other formal or informal tests and inventories.*

o **Language skills**

**Goal is**

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- o Vocabulary (assess understanding if possible and survey needs)
- o Grammar
- o Discourse/Pragmatics
- o Literacy
  - o Assess reading, spelling, and writing skills if present.
  - o Can the student use letter cues, recognize words when offered, understand alphabetical arrangements, etc.

**What can I use?**

*Use word lists, use interview and observation inventories. Take a language sample! What types of words used, how frequently, etc.*

*Use formal tests (TACL, CELF, SPELT)*

*Video an interaction opportunity, take a language sample! What topics initiated, continued, terminated?*

*Use formal or informal assessments regarding literacy levels, sight words, etc.*

o **Symbol Selection**

**Goal is**

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- o Determine how an individual can communicate with symbols & possible symbol types
  - Objects, Texture cues or symbols, Cut Out Photographs, Pictures, and Symbols, Photographs, Line Drawings (Color), Line Drawings (Black & White), Realistic (Color), Realistic (Black & White), Visual Scenes, Alphabet/Spelling

**What can I use?**

*TASP; Speech Generating Device Protocols; Metaphor Protocol by Gail Van Tatenhove*

*(<http://www.vantatenhove.com/showfree.php?id=182>), informally*

*created comparisons*

o **Use of Communication Partners & Environments**

Why is this important?

***What can I use?***

*Informal observation/documentation, video clips, interview, Social Networks by Sarah Blackstone.*

**Analyze the Information**

*Determine a list of features needed based on performances, behaviors, needs gathered.*

**Input Features and Selection Methods**

- o Access Method
  - o Direct Selection-
    - o Range/size, touch sensitivity or responsiveness, position, zoom
  - o Scanning-
    - o Number of choices, prompting (auditory/visual), zoom, highlighting, etc.
- o Input Features and Selection Methods (cont'd)
  - o Display Design
    - o Size of targets, number of targets, arrangement, contrast, etc.

**Output Needs**

- o Speech output
  - o Type- digitized, synthesized, combination
- o Display output
  - o Words/letters for partner/user reference
- o Activation Marker
- o Environmental controls
- o Interface to computers, printers, phone systems
  
- o Message Characteristics
  - o Whole sentences
  - o Phrases
  - o Words
  - o Letters

- o Pictures
- o Ability to combine any of the above?
- o Rate Enhancement Strategies
  - o Visual scenes, topical dictionaries, Unity, word prediction, abbreviation-expansion

### **Physical Characteristics**

- o Size
- o Weight
- o Battery Life
- o Durability
- o Mounting
- o Transferability
- o Ease of setup
- o Visibility
- o Backup systems

### **Determine Options**

- o Generate a list of systems that meet many or most of the needs list

#### ***How do I do that?***

*AAC TechConnect (trial)*  
*Manufacturer Websites*  
*Handouts from other sources*  
*Own Experience*

### **Resources for Systems Comparison**

AAC TechConnect [aactechconnect.com](http://aactechconnect.com)  
 My Dynamic Therapy  
[www.mydynamictherapy.com/tools\\_for\\_professionals.htm](http://www.mydynamictherapy.com/tools_for_professionals.htm)  
 Closing the Gap [www.closingthegap.com](http://www.closingthegap.com)  
 SETBC <http://www.setbc.org/lcindexer/default.aspx>  
 ABLEDATA <http://www.abledata.com>  
 Assistive Technology Exhibits (ATIA, CTG, CSUN etc)  
 Speech Generating Device manufacturers  
 Enabling Devices <http://enablingdevices.com>  
 Gus Communications Inc. <http://www.gusinc.com/Communicators/>  
 Dynavox Technologies <http://www.dynavoxtech.com/products/devices.aspx>  
 AMDI <http://www.amdi.net/comparisonMain.php>  
 Ablenet <http://ablenetinc.calls.net/Home/Products/CommunicationProducts>

### **Trials**

- o Obtain the top \_\_\_\_\_ systems for trial



### **Where can I go?**

*State Assistive Technology Program- Lending Program, [www.iltech.org](http://www.iltech.org)  
Infinitec Coalition  
Speech Generating Device Companies  
Professional Loan  
Local Representative  
Device Rental  
School Districts and Special Ed Cooperatives*

- o Set up systems for student
  - o Vocabulary, access method, voice, positioning
  - o Train staff that will be involved with student for trial
- o Try systems with student and note performance, behaviors
- o Length of trial may depend on student and equipment availability
- o Determine what is important to observe during the trial
  - o Ease of access
  - o Use of the system functionally (where and with whom and with what other supports)
  - o Document performance
  
- o Compare performances and data and discuss with team members
- o Determine next plan of action
- o Further trials
- o Procurement of system and supports
- o Develop communication intervention plan
- o Determine responsibilities for ongoing training, troubleshooting, and updating

### **Where do I go to write the report/submit for purchase?**

- o *Report Templates and Funding Information*
  - o AAC-RERC <http://aac-rerc.psu.edu/>
- o *Assistive Technology Law Center, Inc. [www.aacfundinghelp.com](http://www.aacfundinghelp.com)*
  - o *Funding Sources*
  - o *AAC Report Coach*
- o *Funding Assistance from Speech Generating Companies*
- o *Other processes within district or use of established forms from WATI or GPAT ([www.gpat.org/](http://www.gpat.org/))*

PowerPoint and other resources available at <http://aacworkshop.pbworks.com/>