Augmentative & Alternative Communication

Next Steps
(Assessment and Implementation)
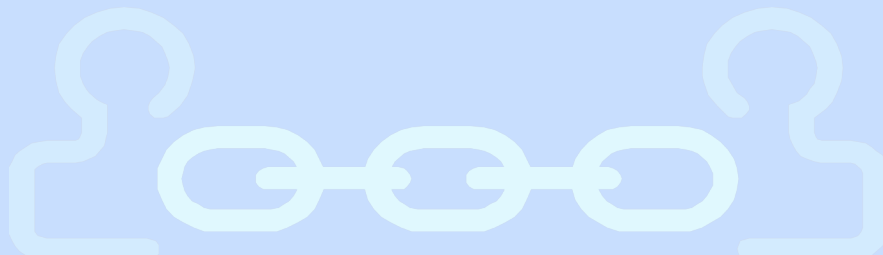## Kathleen Post, MS-CCC/SLP
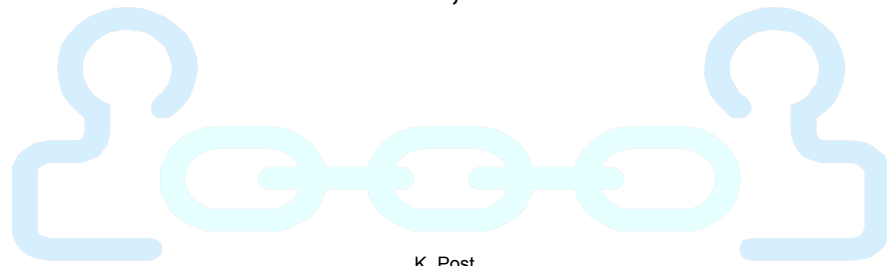
Welcome!

Plan for the day

IL State Standards

o Social Emotional Learning
   o Goal 2 - Use social-awareness and interpersonal skills to establish and maintain positive relationships.
   o Goal 3 - Demonstrate decision-making skills and responsible behaviors in personal, school, and community contexts.
o Listening and Speaking
   o Goal 4: Listen and speak effectively in a variety of situations.
   o Plus more (reading, writing, etc.)!
   http://www.isbe.net/ils/

Learning Assignment

Forms
   Due in January:
      Parent Consent Form
      Student Summary Form (Background Form)
      Photo Release
      Student IEP (just for reference)
Task
   Initiate Assessment process
   Trials
   Video
Short Summary to Share in February and March on progress
      Use Extended Trials Form

Jelly Beans

o Please take only your favorite color at this time (you can take more than one, just make sure you have at least one of your favorite color!)

    o (once this task is done, you can have your fill!)

o Please DO NOT eat it yet!

Jelly Bean Personality Assessment

WHITE OR BLACK:
- o This individual is highly structured and organized
- o Surrounds are neat
- o If given an assignment, wants to know how many pages, exact requirements
- o Always wants to know the rules
- o Memorizes things well
- o Can't stand sloppy, unorganized people
- o Deliberates before making decisions

Jelly Bean Personality Assessment

YELLOW:
- Not usually outspoken
- Always in a state of transition, whether they are 8 or 80
- Usually smart and innovative, often artistic
- Sometimes confused in making decisions, unsure where they're supposed to be
- Hard workers
- Exciting to be with – will try anything as long as it's safe
- Spiritual aspects usually important to them
- They look at things with perspective and respect others' opinions

Jelly Bean Personality Assessment

ORANGE:
- Cheerful and good-natured
- Have the ability to get along well with almost anyone
- They are friendly and have a ready smile
- Usually have a quick wit
- Fluent, often eloquent and profound in speech
- Do not like to be left alone
- Enjoy life and inspire others to reach their highest potential

Jelly Bean Personality Assessment

RED AND PINK:
- Are courageous and their energy seems boundless
- Smile much of the time
- If they see someone not smiling, will ask what the problem is
- Genuinely care about people and become involved in others' problems
- Highly influenced by others, share their sadness or grief
- Make their decisions with feelings, act on impulses of the heart
- Spend a great deal of time on the phone, usually listening to others
- Sensitive, enthusiastic friends and lovers

Jelly Bean Personality Assessment

VIOLET:
- Flirty and passionate
- Highly creative and highly excitable
- Have new ideas and are visionaries
- Short attention spans – can't stay put for long at a time
- Disorganized, often choosing to close doors rather than deal with the organization
- Procrastinators who thrive on chaos, enjoy the challenges of different problems
- Have a problem dealing with highly structured time
- Questioning – when given an assignment, asks why it must be done a certain way, want to do it differently
- Set high standards for themselves and those who work for them

Jelly Bean Personality Assessment

GREEN:

- o They love recognition
- o These people are seen as leaders, usually in highly visible positions
- o They are respecters of authority and tradition
- o They are decisive, directed, and focused
- o They love black and white jelly bean people to organize their projects for them

Molloy, A., (2008). Jelly Bean Personality Test. Retrieved from: Transformation Education institute,
www.beloinandbrandl.com/files/Jelly_Bean-Personality_Test.pdf

Begin with the end in mind.

-Stephen Covey

What do we know?

o AAC - Augmentative & Alternative Communication
  o Who

  o Goals

Martinsen & vonTetzchner, 1996

Alternative Language Group

o Who
little to no speech & difficulty in understanding language (Autism, severe cognitive impairments, etc.)

o Goal
assist in understanding language, develop interaction skills, increase opportunities for expressive language

Expressive Language Group

o Who

severe speech motor dysfunction (CP, Dysarthria), widening gap between expressive and receptive language

o Goal

provide means to express needs, interests, comment, actively participate, develop literacy skills, etc.

Supportive Language Group

o Who

moderate motor speech dysfunction, problems with speech and language, speech is poor, but may develop more intelligibility (Downs, Apraxia, etc.)

o Goal

provide a bridge for development of speech and language and a means to enhance participation and communicative competency

How do we help?

Assessment & Evaluation

University of Oregon Teaching Effectiveness
Program defines assessment as:

Assessment is the process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what students know, understand, and can do with their knowledge as a result of their educational experiences; the process culminates when assessment results are used to improve subsequent learning.

Assessment and Evaluation

Evaluation can be defined as:
to draw conclusions from, judge,
compare and contrast, interpret,
decide.

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

Augmentative Communication Assessment

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

Beukelman & Mirenda, 1998

Augmentative Communication Assessment

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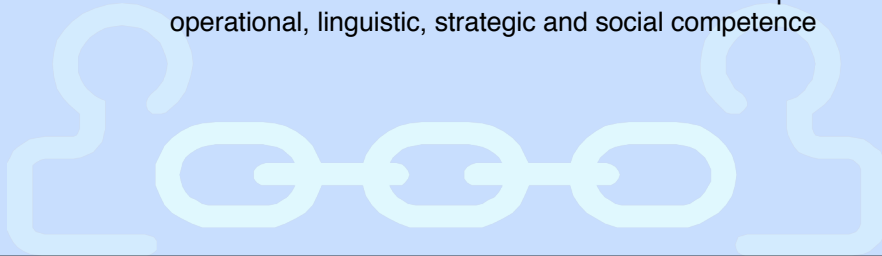
Team Approach

o Who should participate?

o Why?
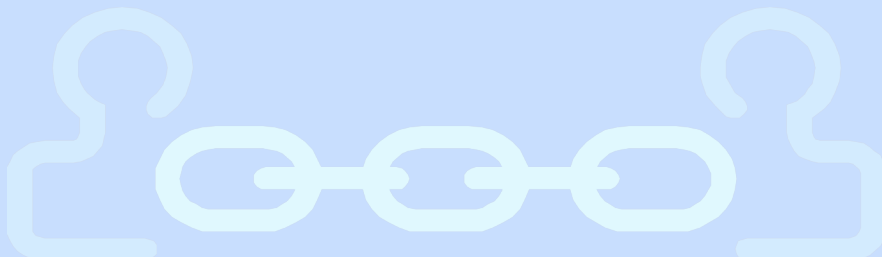
Types of AAC Assessments

o Candidacy models
  o Who needs AAC?
o Replaced by Communication Needs models
  o Based candidacy on needs, not on impairments
o Participation model
  o Assess and base AAC on functional participation requirements of peers
 o Feature-Based Assessment for Speech-Generating Devices (SGD)

Beukelman & Miranda, 1998

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 Speech Generating Device (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

Politano, 2009

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?
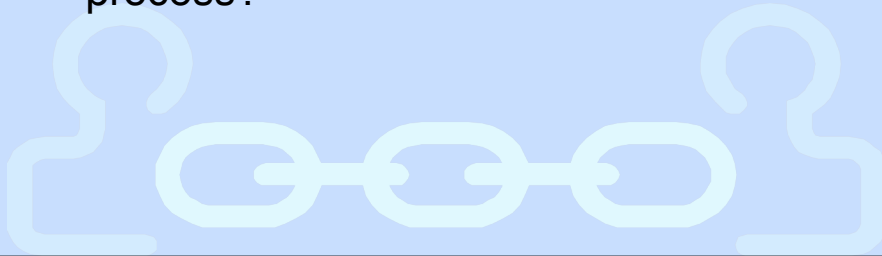
Gather the Information

o Survey family and team members or service providers regarding:

  o Current problems

  o Current communication behaviors or skills

  o Activity preferences

  o Any history of usage of communication supports
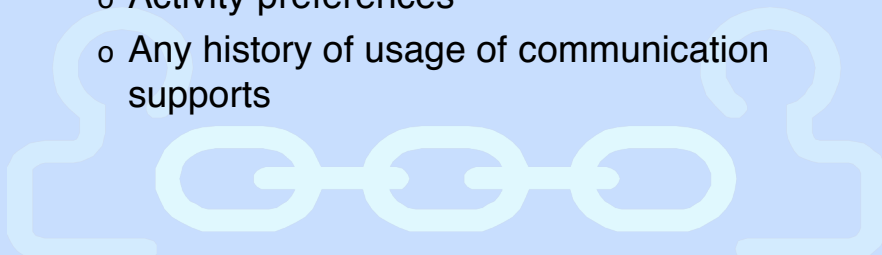
Gather the Information

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

Infinitec Student Summary forms (handout)

Gather the Information

o Sensory/Perceptual

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

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

Gather the Information

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.

Test of Aided-Communication Symbol Performance (TASP)
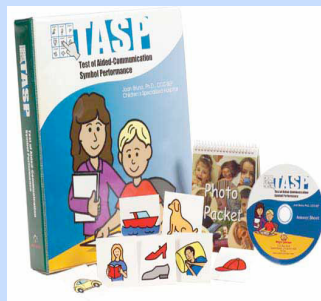
Written by Joan Bruno, available from Mayer-Johnson, www.mayer-johnson.com

o A tool for the assessment of Mayer-Johnson symbol-based communication skills

　o Includes subtests on symbol size and number, grammatical encoding, categorization and syntactic performance

o Results may help determine AAC intervention strategies and goals

o Provides starting point for designing communication boards or selecting a page for an AAC device

Gather the Information

o Sensory/Perceptual (cont'd)
   o Hearing (Standard Assessment)
      o If aided, where is sound best heard from?
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.

Gather the Information

o Motor Skills

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

Work with other members of the interdisciplinary team, as necessary
   o Identify appropriate positioning
   o Identify selection method and technique (direct, scanning, encoding)
      o Where on the body (hands, head/voice, feet, arms/elbow, legs/knees, eye gaze)

Definitions

o Direct Selection-

   o Directly touching the item or target desired

o Scanning-

   o Moving a highlight to a specific target

      o Linear, circular, row column, column row, group row column, etc.

      o Single switch automatic scanning, two switch step scanning, inverse scanning, etc.

Gather the Information

o Motor Skills cont'd

   o What action will be used

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

Considerations

   o Type, range, accuracy, consistency, strength, speed, etc.

   o Activation site: the minimum size of the targets, possible number of targets, spacing of targets, etc., will be determined by accuracy

   o Sensitivity: the amount of pressure or force needed to activate the target.

Gather the Information

Gather the Information

o Questions to ask yourselves:
   o Can the method of access be used repeatedly without undue fatigue, discomfort or embarrassment?
   o What does the student like/tolerate?
   o Can this method be used across all environments or will there need to be other options for other situations/positions?

Gather the Information

What can I use?

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Gather the Information

o Cognition

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

Modification of existing assessment instruments may be necessary along with the expertise to interpret results

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

Gather the Information

o Cognition cont'd

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

What can I use?

Communication Matrix (www.communicationmatrix.org), Every Move Counts-Clicks & Chats, Communication and Symbolic Behavior Scales by Wetherby and Prizant, TASP, other formal or informal tests and inventories.

Gather the Information

o Language skills

Goal is to identify language skills for communication and comprehension.

Modification of existing assessment instruments may be necessary along with the expertise to interpret results

- o Vocabulary
- o Grammar
- o Discourse/Pragmatics
- o Literacy

Gather the Information

What can I use?

Use word lists, use interview and observation inventories.

Use formal tests (TACL, CELF, SPELT)

Video an interaction opportunity, take a language sample! What topics initiated, continued, terminated? What types of words used, how frequently, etc.

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

Gather the Information

o Symbol Selection

Goal is to identify types of language representation

Modification of existing assessment instruments may be necessary along with the expertise to interpret results

o Determine how an individual can communication with symbols & possible symbol types

o 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
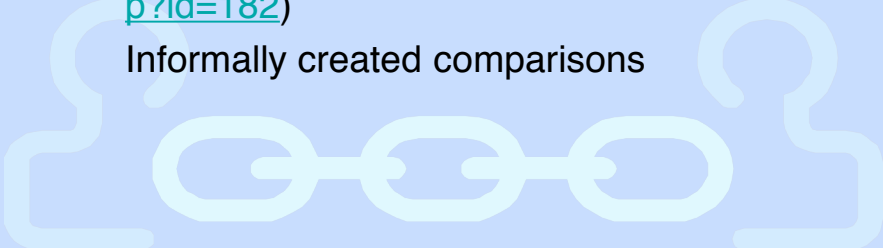
Gather the Information

What can I use?

TASP; Speech Generating Device
Protocols; Metaphor Protocol by Gail
VanTatenhove
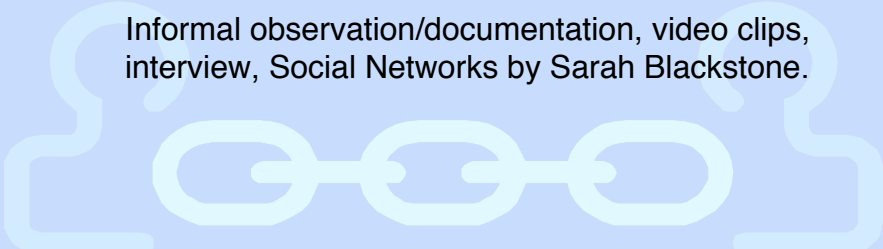(http://www.vantatenhove.com/showfree.php?id=182)

Informally created comparisons

Gather the Information

o Use of Communication Partners & Environments
  o Note support or prompting help given by communication partners
  o Note needs for different environments

What can I use?

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

Analyze the Information

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

Analyze the Information

o Input Features and Selection Methods (cont'd)
  - o Display Design
    - o Size of targets, number of targets, arrangement, contrast, etc.
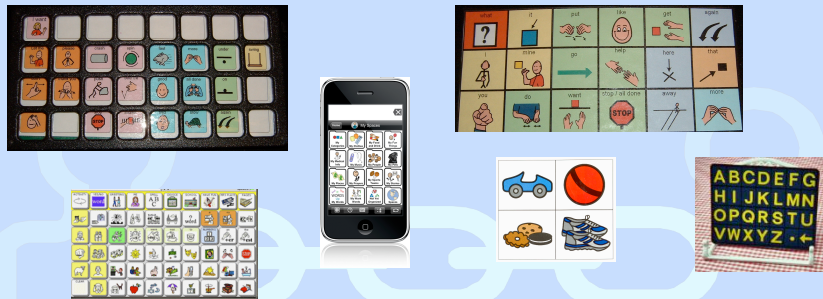
Analyze the Information

o 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

Analyze the Information

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

Analyze the Information

o 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

So many options!

Resources for Systems Comparison

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

Trials

o Obtain the top 3 systems for trial

Where can I go?

State Assistive Technology Program- Lending Program,www.iltech.org

Infinitec Coalition

Speech Generating Device Companies

Professional Loan

Local Representative

Device Rental

School Districts and Special Ed Cooperatives

Trials

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

Trials

o Compare performances and data and
discuss with team members
- o Determine next plan of action
    - o Further trials
    - o Procural 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
    - 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/)

Activity

o Break into small groups
  - o One person volunteers to present a student they work with (no real names please)
  - o Work through the Assessment process with the group and determine:
    - o What type of communicator?
    - o What team members need to be involved?
      - o Roles-responsibilities
    - o What do you know as it relates to the Assessment process?
    - o What information still needs to be collected, how?
    - o Next steps..
- o Be prepared to share key points with group.

Contact Information

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Infinite member website: www.myinfinitec.org

Wiki site for AAC Linked Series: at
http://aacworkshop.pbworks.com/