

AUGMENTATIVE AND ALTERNATIVE COMMUNICATION ASSESSMENT:

Essential skills and knowledge when
assessing children and adults

Augmentative and Alternative Communication Assessment

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assessing children and adults

Notecards at tables



*Please write any specific questions you have regarding
the AAC Assessment process.*

What were you hoping to learn from this presentation?

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Course Objectives:

1. Participants will learn about the principles of augmentative and alternative communication (AAC) assessments with children and adults.
2. Participants will learn about resources, iPad applications, and dedicated speech generating devices that will help them conduct augmentative and alternative communication assessments.
3. Participants will learn about applying the principles of AAC assessment through case studies.

What is AAC:

- “...an area of clinical practice that attempts to compensate (either temporarily or permanently) for the impairment and disability patterns of individuals with severe expressive communication disorders”
- AAC includes all forms of communication (other than oral speech) that are used to express thoughts, needs, wants, and ideas

AAC vs. Assistive Technology

Assistive technology is technology used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible. Assistive technology can include mobility devices such as walkers and wheelchairs, as well as hardware, software, and peripherals that assist people with disabilities in accessing computer or other information technologies.

Resource: Technology Access Center

www.tacnashville.org

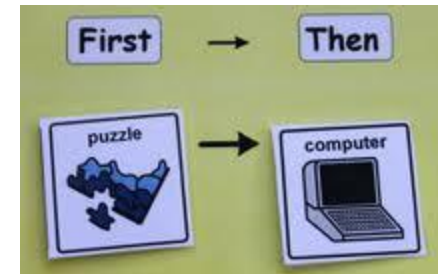
AAC and Visual Supports

Visual supports is a more general term that describes using objects, props, photos, or symbols for the following:

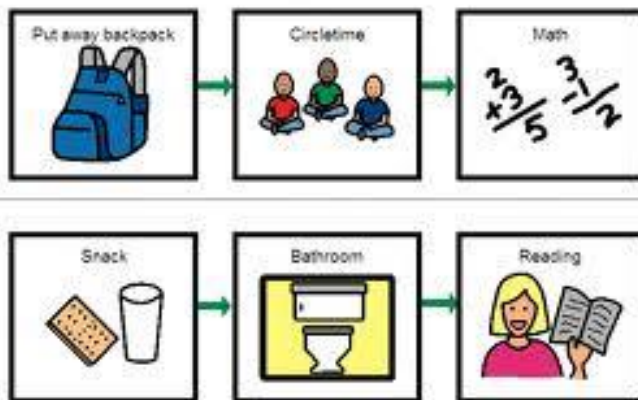
- Comprehension supports
- Behavior supports (e.g., First-Then boards, Time Timer)
- Video modeling
- Visual schedules
- Social stories

Resource: Visual Strategies for Improving Communication
by Linda A. Hodgdon

Visual Supports



Morning Schedule



AAC Users

The AAC Assessment Process

Assessment with Children:

- Immediate  Future  Ongoing

Assessment with Adults:

- Temporary  Long-Term  Therapeutic

What are needs of the individual?

- Spoken communication
- Written communication
- Environmental control/adapted play/visual supports
- Communication environments
- Communication partners



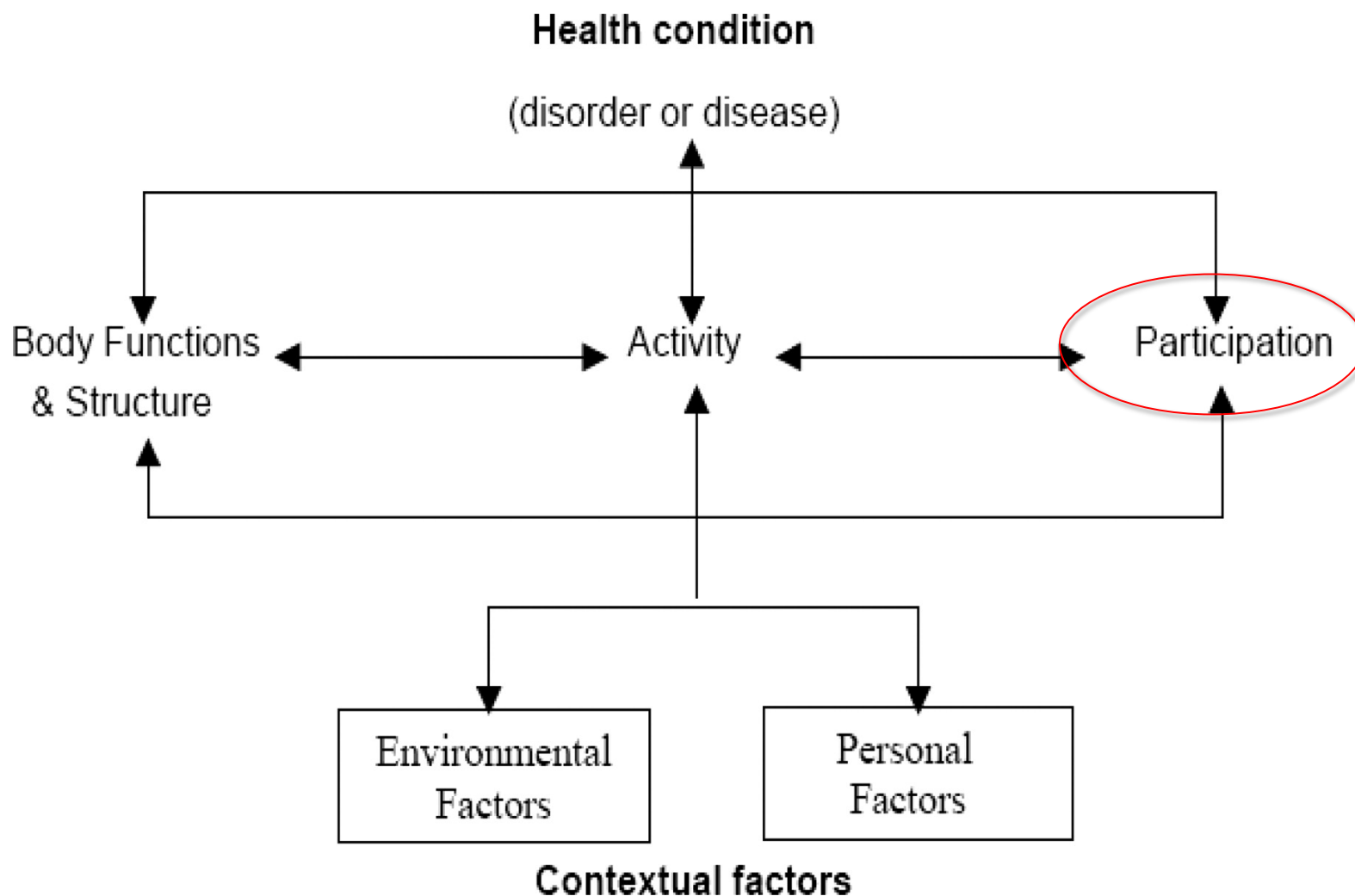
The Human Factor

- Patricia Ourand, MS, CCC-SLP-presented the free CEU course: “An Overview of the AAC Assessment Process”



- She spoke about matching the Human Factors with the Features of the Communication System.
- Who is the **individual**?
- Interview
- Needs Assessment
- Assessment Data-Language, Cognition, Sensory, Motor,

The AAC Assessment Process



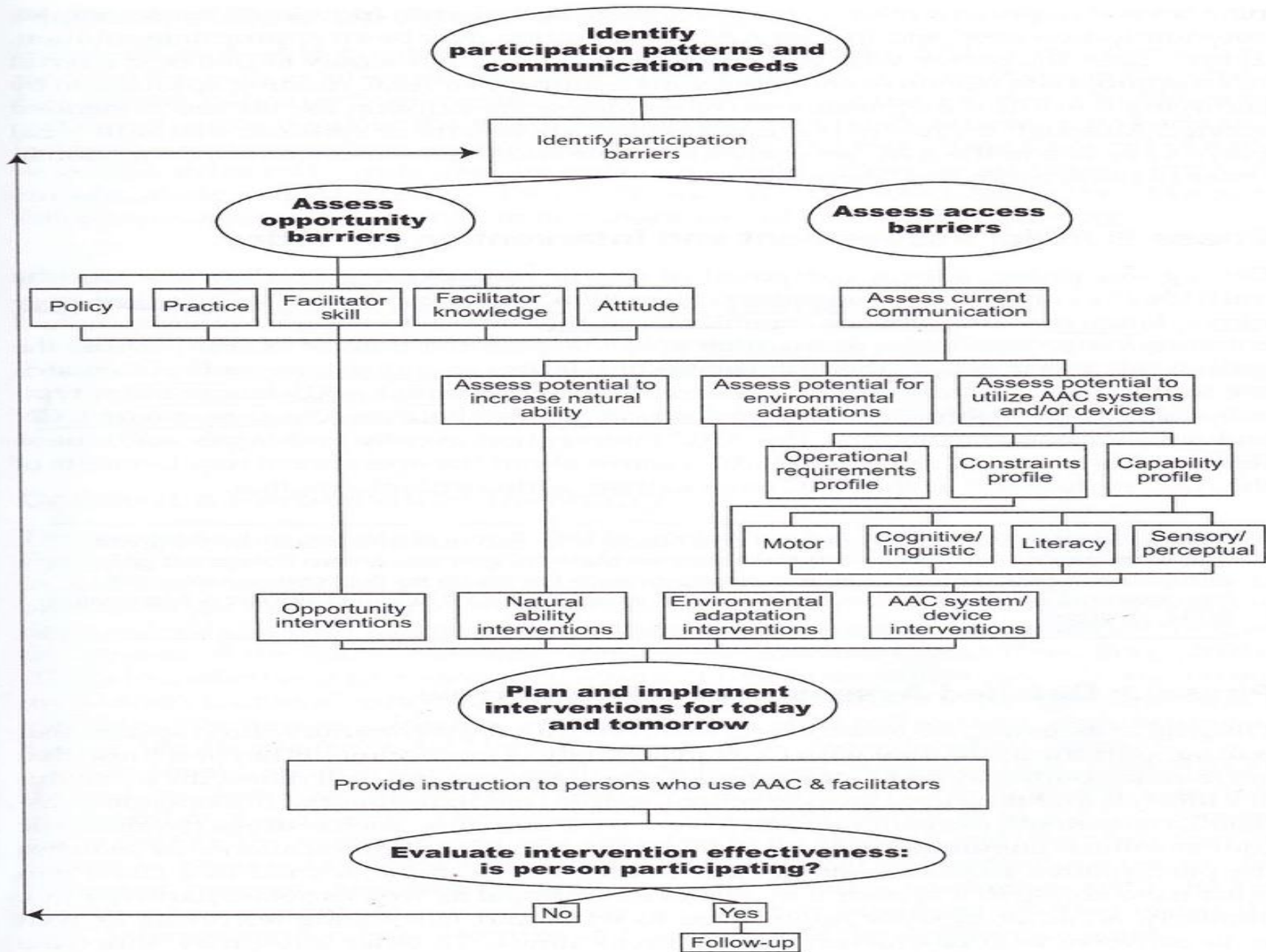


Figure 5.1. The Participation Model for augmentative and alternative communication (AAC).

Participation Model

Systematic process for conducting AAC assessments and designing interventions based on functional participation requirements (of peers without disabilities at same chronological age as person who may communicate through AAC)

Multi-phase Assessment

Phase 1: Assessment for Today

- Assess current communication system
- Assess physical/motor cognitive, language and sensory capabilities

Goal is to gather information to design initial intervention to match capabilities

Phase 2: Assessment for Tomorrow

- Develop communication system to support AAC use in specialized environments
- Requires careful assessment of expected participation patterns

Phase 3: Assessment for Follow Up

- Examining communication equipment to detect replacement and repair needs, assessing abilities of communication partners; reassessing changing user capabilities

Assessment Data to obtain:

LANGUAGE	COGNITION
SENSORY	MOTOR

Assessment Data to obtain:

Cognition

Attention, Memory, Problem Solving, Planning, Organization, Self Regulation

Language

Auditory Comprehension, Verbal Expression, Reading, Spelling/Writing

- Changes over time (Improvement vs. Decline)

Sensory

- Vision (neglect or inattention)
- Hearing (Communication partner hearing status)
- Sensation/Touch

Assessment Data to obtain:

Motor

- Positioning and seating
- Muscle tone and movement in upper/lower extremities; head control
 - Spastic (increased tone)
 - Flaccid (decreased tone)
 - Range, Control and Accuracy of Movement

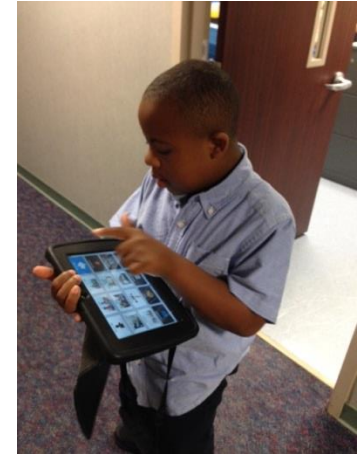
Motor data obtained → Define best access to communication system

- Direct selection
- Switch Scanning
- Eye gaze

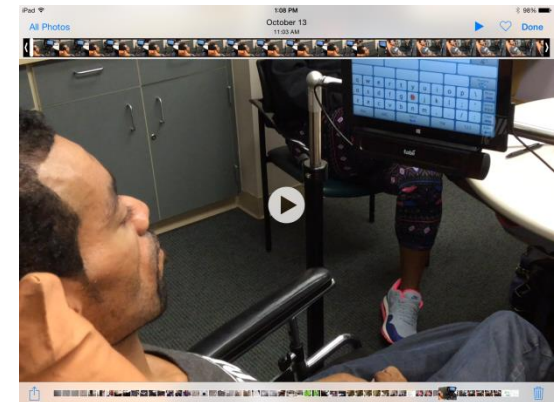
*Access across time → Fatigue, exertion, progression of a disease etc.

Assess AAC Specific skills

- Linguistic Skills
- Operational Skills
- Strategic Skills
- Social Skills



(Light & Binger, 1989)



Assess AAC Specific skills

Linguistic Skills/Competence

- Receptive and Expressive language skills and the specific linguistic code of AAC system (i.e. symbols, words)
- Communication partners must learn language of AAC system to receive messages

Operational Skills/Competence

- Technical Skills needed to operate AAC system accurately and efficiently
- Skills include modifying system for ongoing needs, keeping vocabulary up to date, securing repairs, ensuring daily operational availability
- Users and facilitators need operational skills

Assess AAC Specific skills

Strategic Skills/Competence

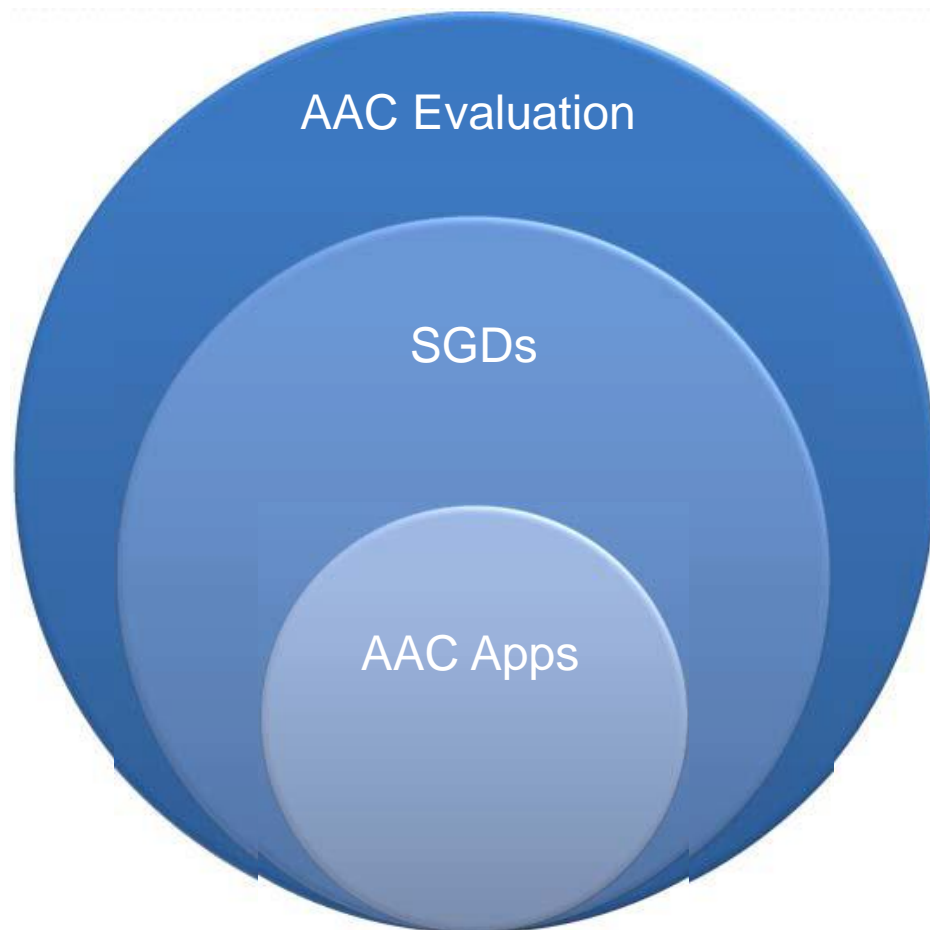
- Use of various adaptive or coping strategies to use when communication breakdowns and functional limitations are present
 - Increasing efficiency across environments and communication partners (i.e. unfamiliar listeners)

Social Skills/Competence

- Need to have knowledge, judgment and skills in **sociolinguistic** aspects of communication
 - Initiating, maintaining, developing, and terminating conversations
 - Turn taking
 - Communicate a variety of functions (requesting, rejecting)
 - Active participation and interest in others

-

Feature Match Approach to Assessment



AAC Assessment: Feature Matching

- Feature Matching is the systematic process by which a person's strengths, abilities and needs are matched to available tools and strategies (Shane & Costello, 1994).
- Feature Matching is the Gold Standard for AAC Assessment for over 20 years (Carole Zangari, 2015)
- Many feature matching checklists available to help determine features needed in AAC device

AAC Assessment: Feature Matching

Voice Output

- Digitized/Synthesized

Display

- Static/Dynamic

Access

- Direct selection (finger extension, eye gaze, joystick)
- In-direct selection (switch scan method)

Portability and Durability

- Size, weight, mounted etc.

Vocabulary

- Language representation system

Training/Support

Additional features

- Environmental control
- Computer access

Identify Participation Barriers

Policy Barriers

- Legislative or regulatory decisions that govern situations for AAC users
 - Education agencies govern inclusion of individuals with disabilities
 - Acute medical settings may limit use of electronics with other equipment

Practice Barriers

- Procedures that are common in different settings (school/work)
 - School districts that restrict use of funded AAC equipment outside of school

Knowledge Barriers

- Lack of information of AAC user communication partner for use of system, often limiting opportunities for participation

Skill Barriers

- Difficulty with actual implementation of an AAC technique or strategy

Patricia Ourand's Bottom Line



AAC Assessment: Pediatric Funding

- Public school
- Private insurance
- Medicaid
- Grants
- Private pay

Typically, insurance and Medicaid will pay for a new device every five years

Be prepared to appeal when the device is initially denied.

AAC Assessment: Pediatric Funding

Additional Resources for obtaining devices or funding

- Device manufacturers have information on their website about the funding process.
- Technology Access Center (TAC)
 - Provide adaptive equipment to meet communication needs
 - Can provide loaner communication devices if available

AAC Assessment: Adult Funding

- Commercial Insurance Policy
 - Exclusions of SGDs
- Medicare
 - Strict guidelines for approval of SGDs
 - Severity of disorder
 - Proof of alternative access methods
 - Accessory equipment funding limitations
 - No coverage of “off the shelf” communication devices or app software
- Medicaid
 - Will not cover SGDs for individual over 21 years of age

AAC Assessment: Adult Funding

Additional Resources for obtaining devices or funding

Tennessee Technology Access Center (TAC)

- Provide adaptive equipment to meet communication needs
- Can provide loaner communication devices if available

Muscular Dystrophy Association (MDA)

- Provide \$500 year to qualified diagnosis patients for equipment
 - Help with repairs on communication equipment

ALS Association

- Provide loaner communication devices or loaner Ipads if available

TOP TEN RESOURCES: PEDIATRIC

- ASHA Special Interest Group: SIG 12, AAC
- Praactical AAC <http://praacticalaac.org/>
- AAC Institute <https://aacinstitute.org/>
- ISAAC <https://www.isaac-online.org/english/home/>
- Technology Access Centers
 - The East Tennessee Technology Access Center (ETTAC) www.ettac.org
 - Technology Access Center-Nashville www.tacnashville.org
 - The STAR Center of Jackson, Tennessee www.star-center.org
- Tobii Dynavox <https://www.mydynavox.com>
- Prentke Romich Company (PRC) www.prentrom.com; PRC Language Lab www.aaclanguagelab.com

TOP TEN RESOURCES: PEDIATRIC

- <https://www.n2y.com/>
- <http://www.ablenetinc.com>
- Knowledge of iPads, tablets, and augmentative communication applications
- Knowledge of switches, environmental control, light-tech devices, and visual supports
- Clinical Expertise, Knowledge, and Judgement!
<http://www.asha.org/policy/KS2002-00067.htm>

Top Pediatric Tools and Checklists:

- AAC Profile
- Functional Communication Profile
- Other assessment measures-modified as needed (example-PPVT pictures for eye gaze)
- Interview/Needs Assessment-Example Tool-AAC Assessment Protocol (we developed)
- Communication Inventory (we developed)
- Communication Temptations and observations (example assessment box)
-

TOP RESOURCES: ADULTS

- ASHA Special Interest Group: SIG 12, AAC
- Praactical AAC <http://praacticalaac.org/>
- AAC Institute <https://aacinstitute.org/>
- ISAAC <https://www.isaac-online.org/english/home/>
- Technology Access Centers
 - The East Tennessee Technology Access Center (ETTAC) www.ettac.org
 - Technology Access Center-Nashville www.tacnashville.org
 - The STAR Center of Jackson, Tennessee www.star-center.org
- Tobii Dynavox <https://www.mydynavox.com>
- Prentke Romich Company (PRC) www.prentrom.com; PRC Language Lab www.aaclanguagelab.com
- Lingraphica: <https://www.aphasia.com/>

TOP TEN RESOURCES: APPS

Communication App Resources:

Resources for Learning the iPad and Help Select Apps

- <http://www.callscotland.org.uk/Resources/Books/iPads-for-Communication-Access-Literacy-and-Learning/>

AAC APP Wheel

<http://www.callscotland.org.uk/Common-Assets/ckfinder/userfiles/files/iPad-Apps-for-Complex-Communication-Support-Needs.pdf>

TOP TEN RESOURCES: APPS

Communication App Resources:

Jane Farrall Websites

Apps for AAC

<http://www.appsforaac.net/applist>

Apps that make life easier: South Carolina AT Program

<http://www.sc.edu/scatp/apps.html>

SLP app list: Tactus Therapy

<http://tactustherapy.com/adultapplist.pdf>

Top Adult Tools and Checklists:

Participation Model Tools:

ASHA FACS: Functional Assessment of Communication Skills for Adults

[http://www.asha.org/eWeb/OLSDynamicPage.aspx?Webcode=olsdetails&title=Functional+Assessment+of+Communication+Skills+for+Adults+\(ASHA+FACS\)](http://www.asha.org/eWeb/OLSDynamicPage.aspx?Webcode=olsdetails&title=Functional+Assessment+of+Communication+Skills+for+Adults+(ASHA+FACS))

Quality of Communication Life Scale (ASHA QCL)

[http://www.asha.org/eWeb/OLSDynamicPage.aspx?Webcode=olsdetails&title=Quality+of+Communication+Life+Scale+\(ASHA+QCL\)](http://www.asha.org/eWeb/OLSDynamicPage.aspx?Webcode=olsdetails&title=Quality+of+Communication+Life+Scale+(ASHA+QCL))

Top Adult Tools and Checklists:

Communication Matrix

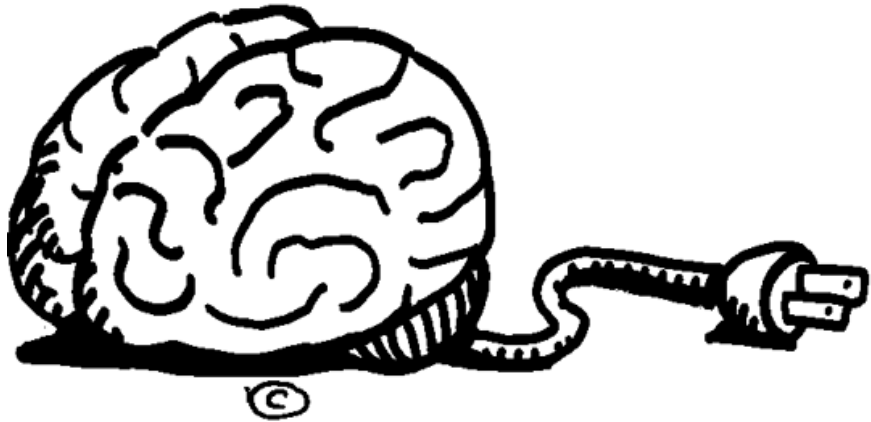
<https://www.communicationmatrix.org/>

Aphasia Assessment Materials: University of Nebraska-Lincoln

- The Multimodal Communication Screening Task for Persons with Aphasia
- Aphasia Needs Assessment
- AAC-Aphasia Categories of Communicators Checklist

<http://cehs.unl.edu/aac/aphasia-assessment-materials/>

BREAK TIME!



CASE STUDIES: ADULTS

- Who is the individual?
- What are their needs?
- How can AAC reduce the number of unmet communication needs?
- Match the skills of the individual with the features of augmentative communication supports, systems, and devices.

Case Studies-Adult population

Patient: 65 year old male

- Onset of Symptoms: Spring 2014 (speech/swallowing)
- Dx with Progressive Bulbar Palsy then later with ALS
- Cognitive/Linguistic: Intact
- Motor: No difficulties with upper or lower extremities
- No functional intelligible speech output

Case Studies-Adult population

- Patient: 33 year old male
- Onset of symptoms: 2007
- Dx with Amyotrophic lateral sclerosis in Dec 2008
- No functional speech output
- No use of upper or lower extremities
- Cognitive/Linguistic: Intact

CASE STUDIES: PEDIATRICS

- Who is the individual?
- What are their needs?
- How can AAC reduce the number of unmet communication needs?
- Match the skills of the individual with the features of augmentative communication supports, systems, and devices.

CASE STUDIES: PEDIATRICS

CASE STUDIES: PEDIATRICS

References

- D.R. Beukelman and P. Mirenda (Eds.) *Augmentative and Alternative Communication: Supporting Children and Adults with Complex Communication Needs*, 3rd edition. Baltimore: Brookes Publishing Co.
- *American Speech and Hearing Association (ASHA)*