

SUPPORTING INDIVIDUALS WITH APHASIA LEARNING TO USE HIGH TECH AAC SYSTEMS

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DISCLOSURES

- I am paid an annual salary by the University of Kansas
- KSHA provided one night of lodging for me at this conference
- KSHA provided a small stipend for each presentation at this convention
- I have no other disclosures to provide

AAC AND ACQUIRED DISORDERS – EVIDENCE AND AVAILABILITY?



Individuals with dysarthria
(without cognitive or
linguistic difficulty)

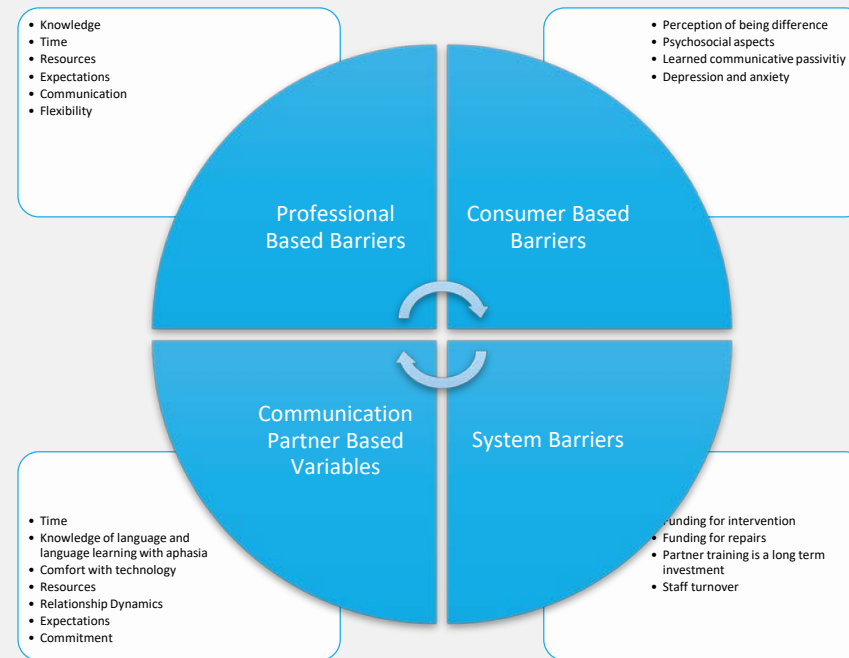


Individuals with aphasia

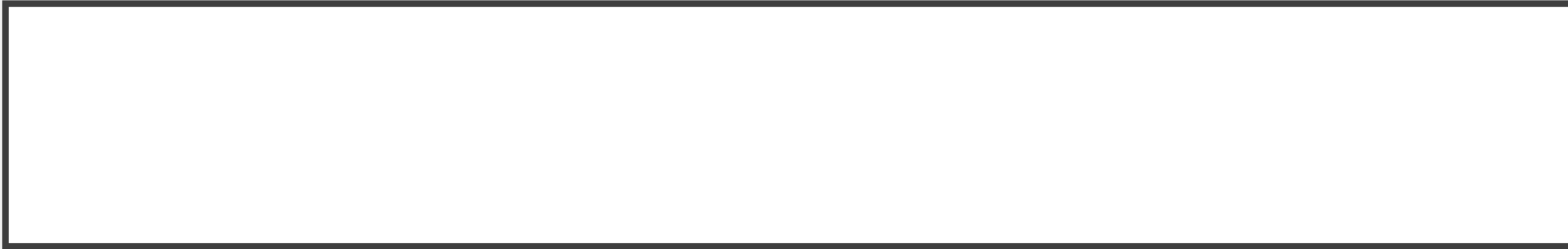


Individuals with cognitive
communication disorder

BARRIERS



Express Participate
Integrate
Technology
Augmentative Visit
Community Share Communicate
Aphasia Use Communication
Explore
SGD Adapt Success Participation
Device
Advocate Alternative AAC
Achieve Support
Independence Talk Voice Socialize
Social Life Preferences
Partner Heard
Information Talking Socializing
Message



- “Every person, regardless of the severity of his/her disabilities has the right....to communicate with others, express everyday preferences and exercise at least some control over his or her daily life. Each individual, therefor, should be given the chance, training, technology, respect and encouragement to do so”

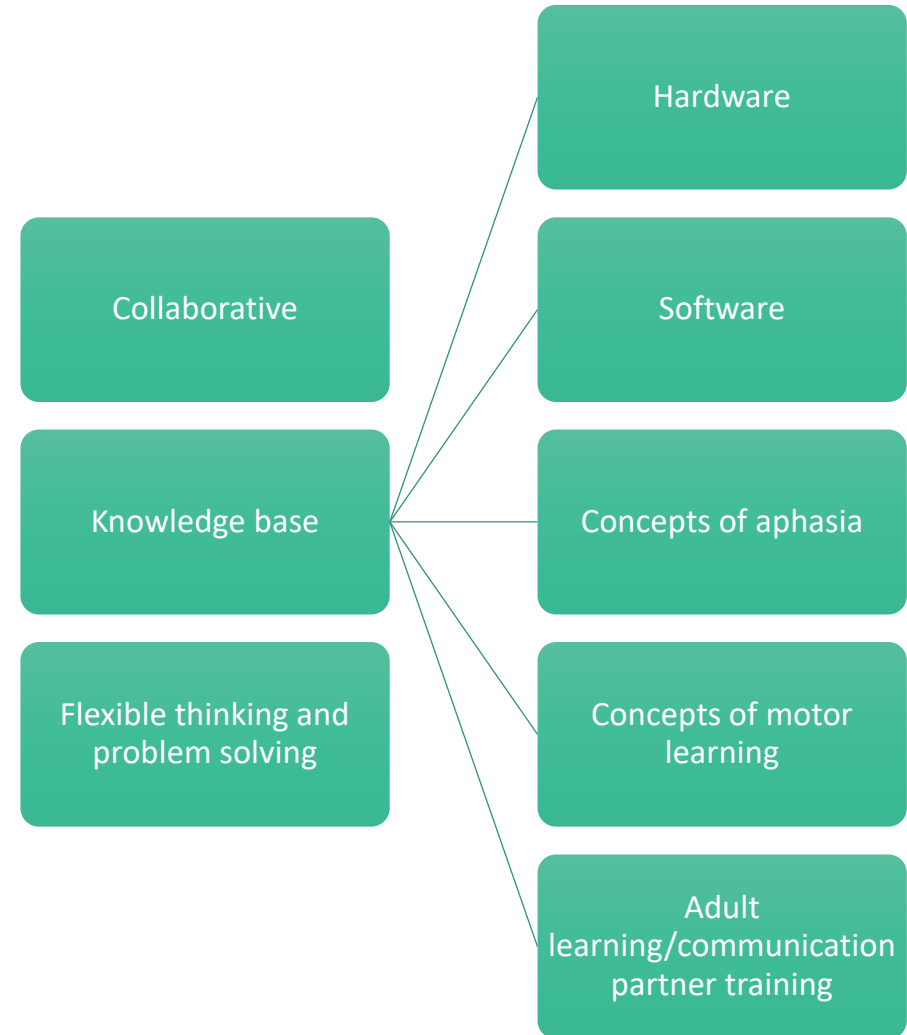
Bob Williams, former U.S. Deputy Assistant Secretary and an AAC user.

Taken from the Vermont Communication Resource Guide (2002)



- How comfortable are you working with high tech AAC systems with people with aphasia?
- What makes/made you comfortable?
- What makes/made you uncomfortable?

CLINICIAN VARIABLES



CONTINUUM OF COMMUNICATION INDEPENDENCE (UNIVERSITY OF WASHINGTON AUGCOMM)

- Emergent
 - Context dependent
 - Independent
-
- Level of communicator will guide how you set up the system and teach use of it. It also determines the length of an intervention program and the format.

EMERGENT

Does not have a **reliable** method of **expressive** communication through **symbolic language**.

They may use non-symbolic gestures

Trials with AAC strategies and devices may be happening but performance is inconsistent.



CONTEXT DEPENDENT

Has **symbolic communication** that is **reliable** but is limited to particular **contexts** or **partners**.

Use of AAC techniques with vocabulary chosen by others or

AAC strategies that are effective only with familiar persons



INDEPENDENT

The ability to
communicate
anything on any
topic to anyone
in any context.



KEYS TO SUCCESS

**Education for
communication partners
and PWA (ongoing)**

**Individualization of the
system (ongoing)**

**Individualization and
integration of teaching
strategies and techniques
and use in natural
interactions**

EDUCATION FOR PERSON
WITH APHASIA AND
COMMUNICATION PARTNER/S

EDUCATIONAL COMPONENTS



COMPONENTS OF A PARTNER TRAINING PROGRAM/COLLABORATIVE INTERVENTION PROGRAM

Education

- Aphasia
- Intended use
 - Contexts
 - Independence
 - Purposefulness long term

Device

- Hardware
- Software Set up
 - Dynamic
 - Functional
 - Individualize

Role of Communication Partner

- Knowledge of user system
- Collaborating with user set up
- Facilitation and purpose of strategies
- Creating opportunities for use

EXPECTATIONS

Outcomes

- How will the system be used?
- When will the system be used?
- What is the purpose of the system?
- Why?

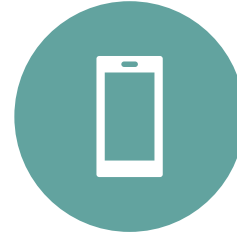
Level of Involvement

- PWA
- Communication Partner
- SLP

Time Line – This is a journey, not an event

- Process
- For the Duration

FOCUS ON PARTICIPATION



SET UP OF DEVICE



MESSAGES AND
VOCABULARY



TEACHING WITHIN
ACTIVITIES

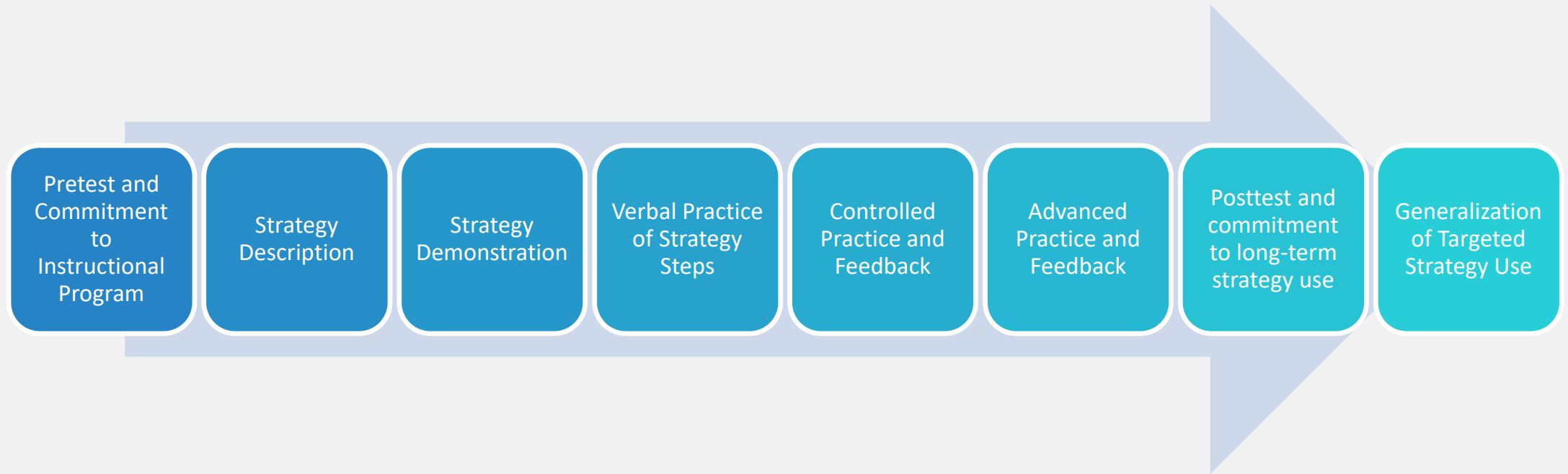


CONTEXT/LOCATION
(HOME, COMMUNITY,
IMPORTANT EVENTS)

PARTICIPATION

Pre-Aphasia Participation and Activities	Current Participation and Activities	Goal for Participation and Activities
Work as a clinical educator at a University		Share my story with students and professionals
Walk each evening		Walk each day and if in wheelchair have longer rolls
Cook a few meals a week but enjoy cooking new recipes		Cook one new recipe a week
Attend church on Sunday's and run the sound board		Attend church on Sundays and join a Bible study
Talk with daughters on the phone - 5 times a week		Talk with daughters by face time several times a week
Listen to audio books (thrillers)		
	Attend therapy	
Watch sports and a few shows on TV	Watch TV	Watch sports and a few shows

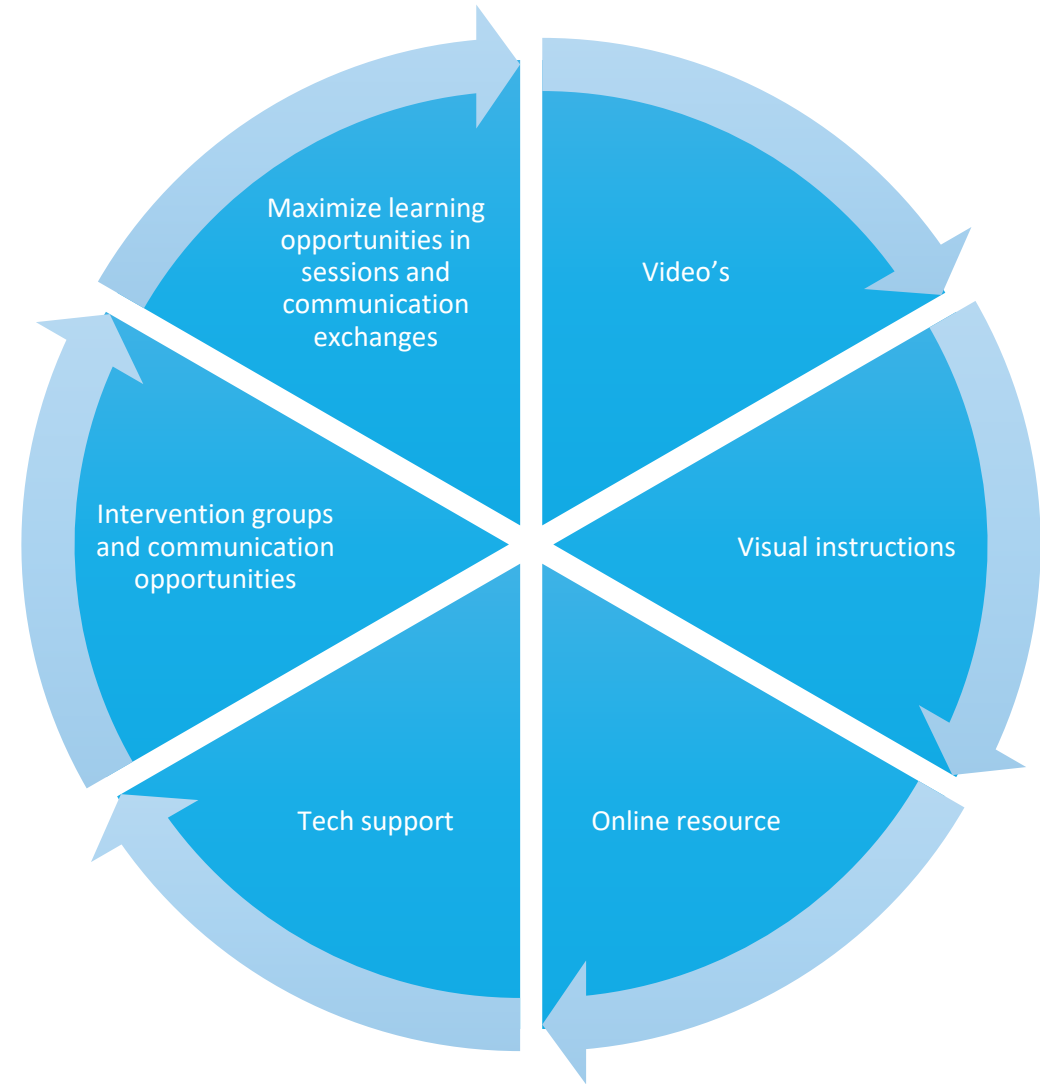
EIGHT SUGGESTED STAGES OF PARTNER INSTRUCTION (KENT-WALSH & MCNAUGHTON(2005))



WHAT DOES PARTNER EDUCATION LOOK LIKE IN AN INTERVENTION SESSION

- Intervention Protocol
 - Review of concerns/issues/successes (hardware and software)
 - Changes to pages or user layout based on above
 - Education and review of concepts
 - Education, modeling, and demonstration of use facilitation strategies
 - Brainstorm changes
 - Identify questions or concerns

PROVIDING ONGOING SUPPORT/RESOURCES



INDIVIDUALIZING THE USER

CONCEPTS FOR CREATING THE USER PAGES



What do they want to communicate – prioritize availability of this



Talk like they talked



Using the device is a process not an event



Use is not a test



Understand how they sort, categorize, and think about language and build on what they have in this area

INDIVIDUALIZATION OF SYSTEM

- User
 - Layout
 - Pre-programmed content
- Organization
 - Pages
 - Icons on the page
- Home page and easy links
 - Topics
 - Pages
 - Words
- Visuals
 - Photo's
 - Obect or action
 - In context
 - Icon's
 - Text
- Actions
 - Auditory
 - Visual
 - Respond with an action (link)

B'S USER

- Photo's and icon's paired with single word text most helpful
- Limited semantic organization
- Strong desire to communicate
- Participation Focus
- Topics of interest include: travel, farming, family, music and Lawrence
- System: NOVA Chat 8 'Tabby' with a 20 button grid
- Changes over time
- Context Dependent Communicator
- Interests: geography, culture, people, music, farming

G'S USER

- NOVA Chat Communication Journey Aphasia as a template
- High contrast icons, bolded text, photo's
- Direct access triggered on release
- Consistent location when possible
- Fewer buttons spread out but same grid
- Binary choices if needed
- Emergent Communicator
- Interests: TV, sports, calling/face timing with friends and family, joking with people

P'S USER

- Compass App on ipad – Stroke and Brain Injury Persona
- Home page is Quick Phrases
- Two primary pages on the user
 - Quick Phrases
 - Photo Album or Stories
- Started with Topics but needed to simplify
- Photo's in context
- Written word or phrase
- Emergent Communicator
- Interests: history, Lawrence, Germany, political hearings

B'S USER



T10 using Compass Brain Injury and Stroke Persona



Pages targeting specific needs



Communicated primarily with family (almost exclusively)



Icons and photo's with text

TEACHING STRATEGIES

TEACHING
STRATEGIES AND
CONCEPTS

Prepare for,
focus on and
practice
natural
interactions in
a variety of
contexts

- Modeling
- Aided Input
- Self Talk

Maximize use
of motor
memory

- Repetition
 - In context
 - Across context

MODELING

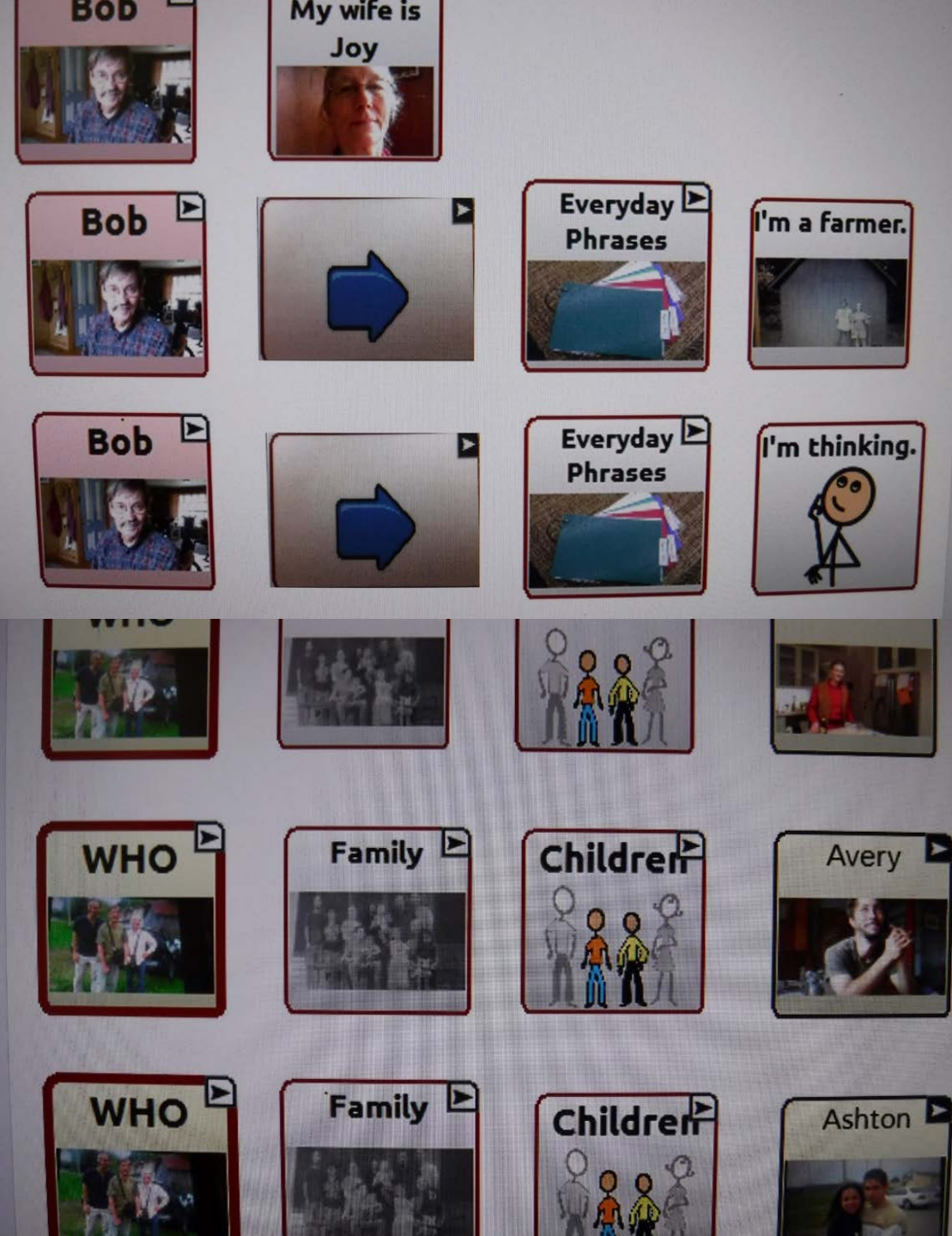
- The clinician models use in tasks and with functional use. Leveling the playing field by using the same language system as they use
- You yourself use the AAC system to communicate so they can see how you navigate to specific information
- You can pair this with **self-talk** to identify how you made the navigation choices
- After you model the expectation is that they complete the sequence of touches but they may require support or then use aided input
- Link to a great description of modeling
- <https://www.youtube.com/watch?v=VppaSuAF0f4>

AIDED INPUT

- This is modeling with expansion using the device. Take what they give you and add a bit more
- Pairing the language or message on the device when communicating a message.
 - You might model use by saying “I am really hungry” while navigating to the dinner page. “My husband is making dinner tonight and I hope he makes...” while navigating to the dinner item page and touching the buttons so the device says ‘steak, asparagus, sweet potatoes’.
 - You can then navigate back to the main page, and point to and activate ‘dinner’ and say, ‘what do you want for dinner?’.
- Link to someone using aided input with an adult (but not acquired)
- <https://www.youtube.com/playlist?list=PL9yzF58nGHOJ2yBLFud8PSynsqb9IHwf2>

SELF TALK/THINKING OUT LOUD

- Pair with modeling and aided input as appropriate
- ‘I’m looking for the Target. Target is a place (touching places) and is a type of store (touching store). I recognize the big target symbol – target”
- You can use this type of narration even if you aren’t sure where something is....you can demonstrate your thought process and acknowledge its wrong and go back and talk through a different route.



ICON MAP

Create map with icons of the pathway for a message.

Different level of support

Allows practice at home for some

A good method to work on motor memory

Allows you to focus on functional memory practice to use and let the motor memory practice to happen at some level outside of intervention

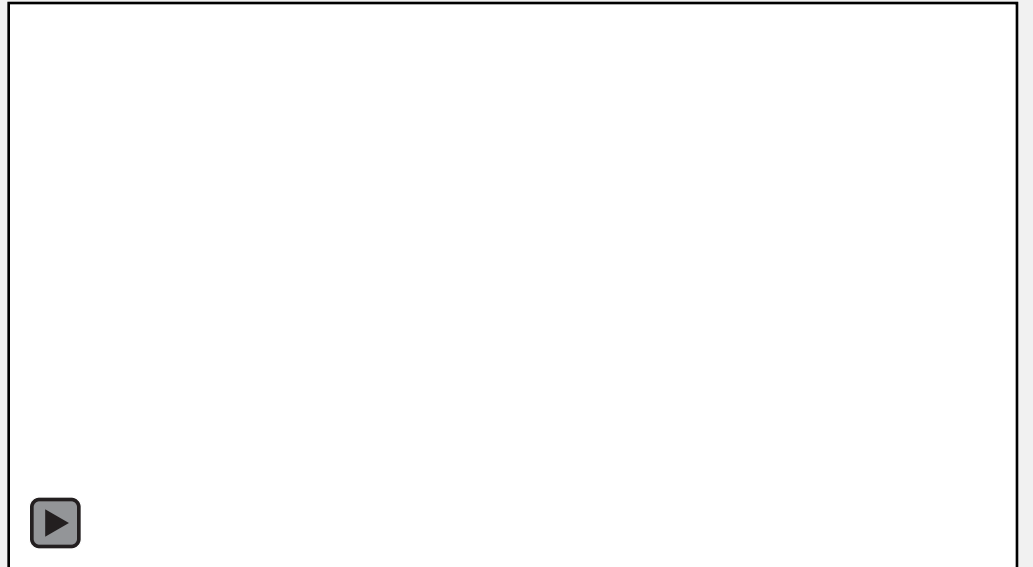
Helps partners learn the routes as well

AUGMENT TRADITIONAL INTERVENTION WITH DEVICE

Word finding/naming

Spelling/graphic modality

Descriptive tasks



HOME USE AND PRACTICE

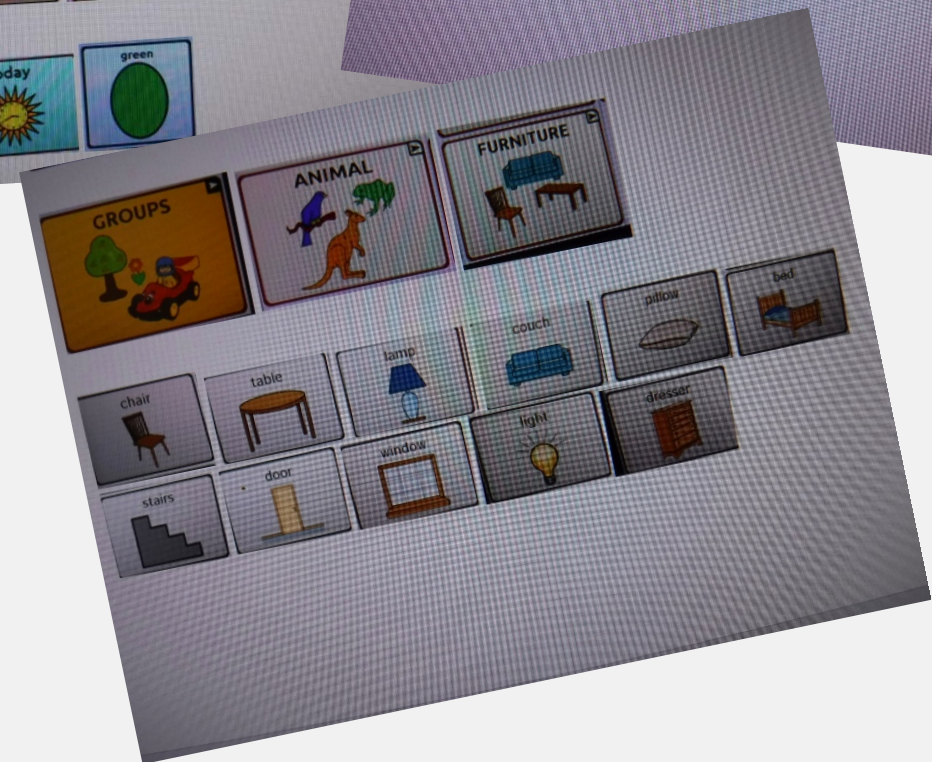
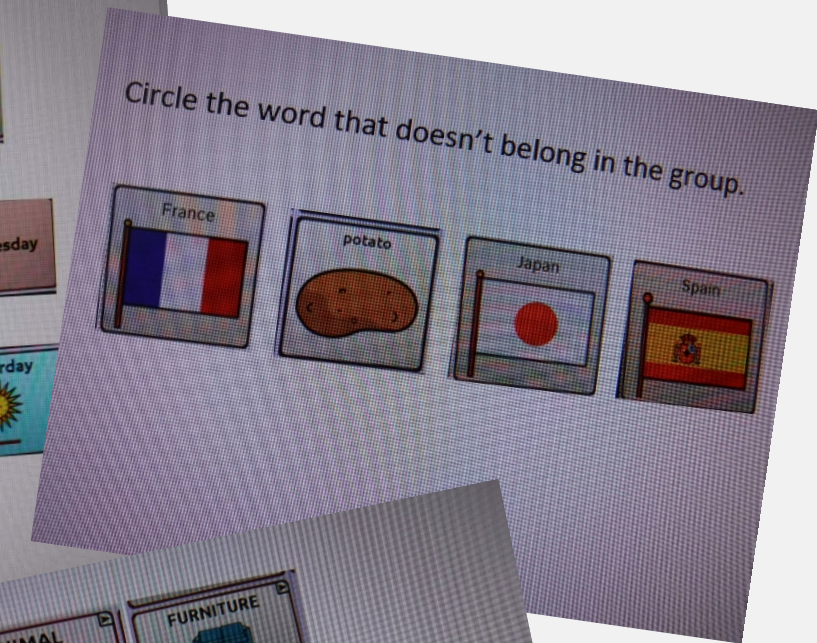
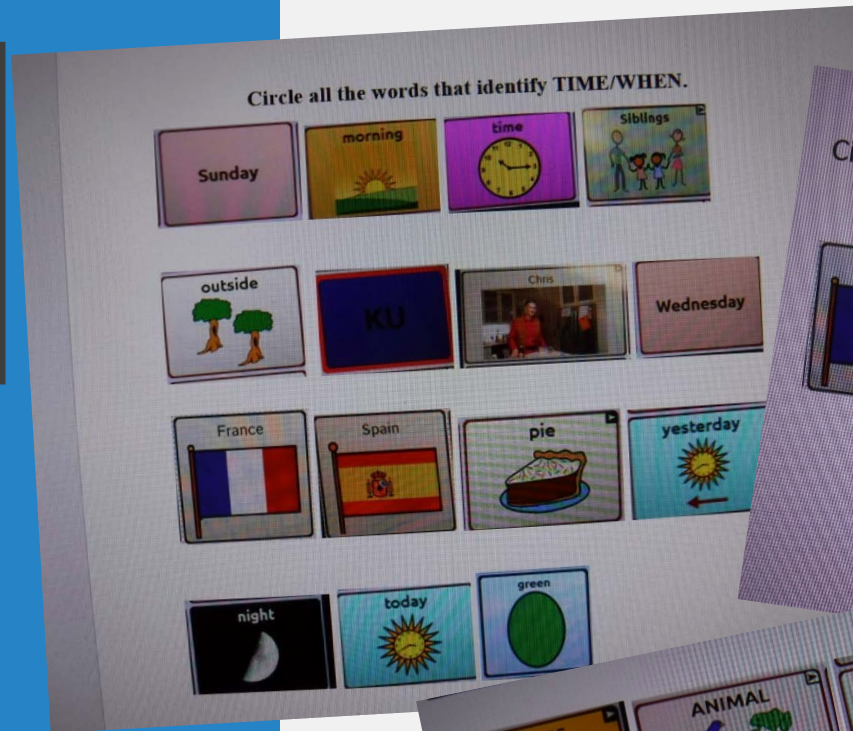
Icon map practice

Finding a message or icon (with or without
maps)

Verbal practice of words or phrases in device

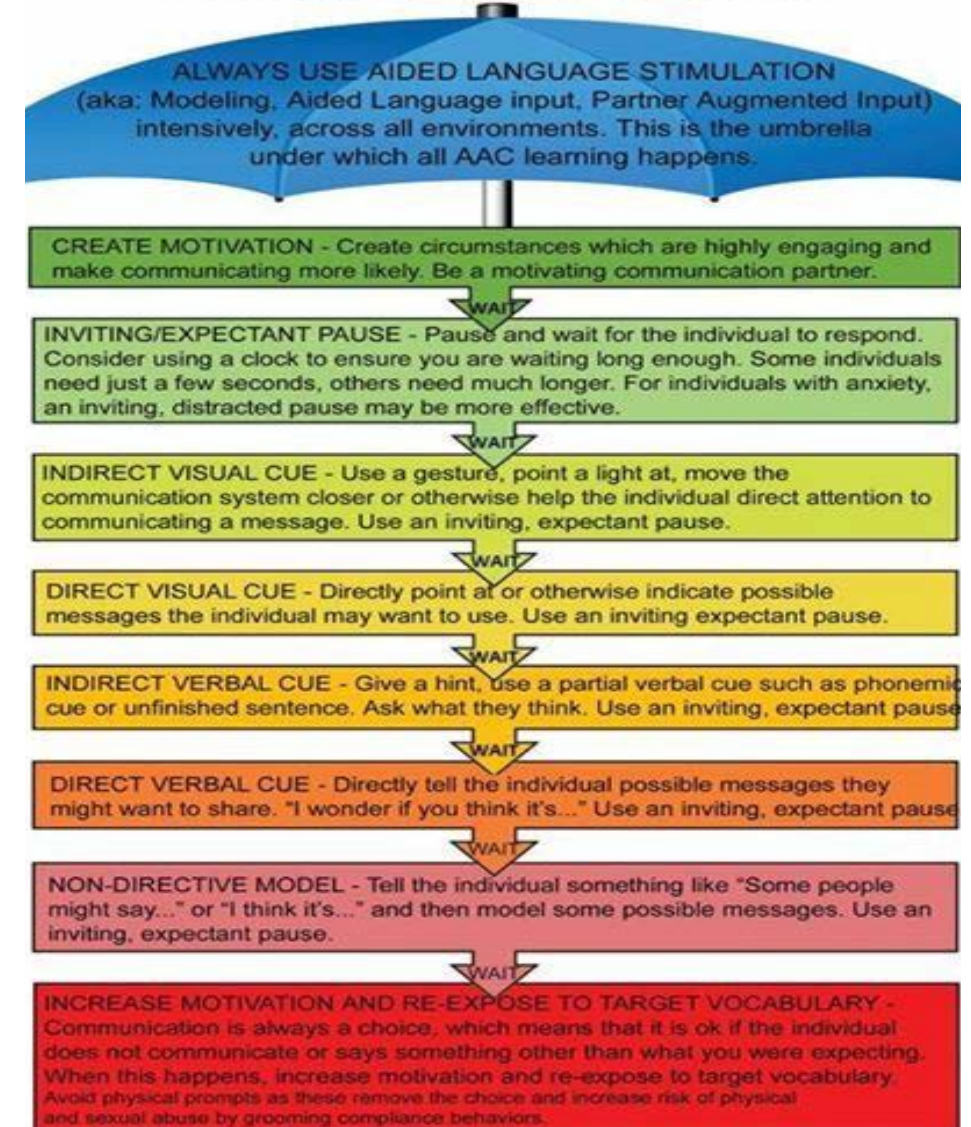
Copying of words in text

Categorization



AHERN HIERARCHY

PROMPT HIERARCHY



IT'S A
JOURNEY



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RESOURCES

- Forbes www.forbesaac.com
- LC Technologies <http://www.eyegaze.com/tag/eyegaze-edge/>
- Lingraphica www.aphasia.com
- Prentke-Romich www.prentrom.com
- Saltillo www.salttillo.com
- Tobii-Dynavox www.tobiidynavox.com
- **Vermont Communication Resource Guide (2002)**
<http://www.state.vt.us/dmh/ddscommunicationresourceguide.pdf> and
http://biz.yahoo.com/bw/020508/82364_2.html
- Vicki Clarke <http://praacticalaac.org/practical/aac-assessment-corner-by-vicki-clarke-procedural-resources/>
- **University of Washington Augcomm Home**
 - http://depts.washington.edu/augcomm/03_cimodel/commind1_intro.htm

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