

Assistive Technology Assessment Basics

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Agenda

Introductions

Overview of AT categories

Online resource

Assessing opportunity and participation

Assessing communication

Choosing devices

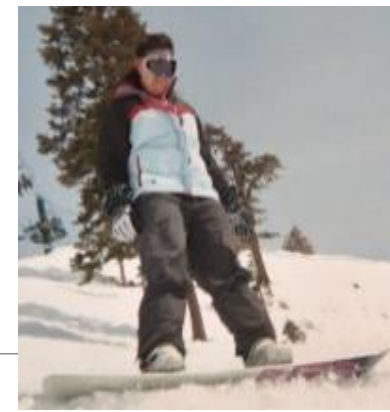
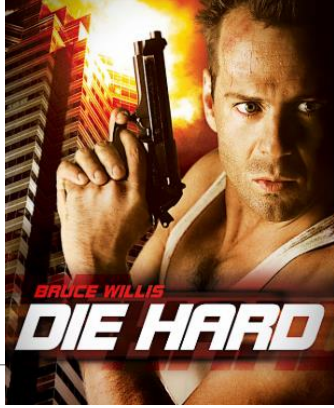
About me

Background

Experience



Interests



MUSE



Assistive Technology (AT)

Assistive technology (AT): products, equipment, and systems that enhance learning, working, and daily living for persons with disabilities

AT helps people

- speak
- type
- write
- remember
- point
- see
- hear
- learn
- walk

AT: Not just iPads

Four levels of “techniness”

No Tech	Low Tech	Mid-Tech	High-Tech
Graphic organizers Visual supports Mnemonic devices	Pencil grips Raised line paper Highlighters/ tape Modified fonts	Calculators Digital recorders Audio books Switches	Apps Text to speech devices Supported text eBooks Power wheelchairs

Assessment of Participation

Participation inventory

Discrepancy analysis

Participation Inventory

Directions:

1. Identify and list steps in the activity
2. Observe a typical peer who can be expected to meet the required skills of the activity
3. Mark what level of assistance the peer needed under Level of Independence with a P
4. Observe the target child in the same activity
5. Repeat step 3, but mark a T under Level of Independence
6. **If there is a discrepancy**, indicate relevant barriers for the target student on each step with a discrepancy (check all that apply)

[illegible]

[illegible]

Discrepancy Analysis

Look at environmental requirements and how person with disability meets the requirements

1. Identify each skill/step required for activity
2. Observe/record the target person's performance on each skill
3. When skills cannot be/are not performed, indicate why, what is missing
4. Note options/ideas for teaching and adapting

Sample: Completed Discrepancy Analysis

Student: Jason Green
Activity: Playing a tabletop game
Date: March 11, 2006

Peer Inventory	Student Performance	Discrepancy	What to do: Teach or adapt
Choose game to play	+		
Ask peer(s) to play	+		
Take game to playing area	+		
Set up game	+	Poor reading skills	Peer or adult assistance. Teach directly.
Read instructions	-		
Select first player	+		
Take turn	+	Yells at others to hurry	Teach self-management program
Wait for turn	-		
Complete following rules	-	Loses temper, hits peers when frustrated	Use point system and teach self-management program
Add score	-	Poor math skills	Teach use of calculator
Return game to box	+		
Put game away	+		
Go to next activity	+		

What peers are expected to be doing

Does the target student do it?

+ = yes
- = no

What target student did instead or why they did not do it/could not do it

Some ideas for targeted teaching, accommodations, or AT

Augmentative/Alternative Communication (AAC)

What is AAC?

AAC is all the ways someone communicates besides talking

Augmentative=add to someone's speech

Alternative=used instead of speech

People of all ages can use AAC

Some people use AAC all their life

Others may use AAC for a short time (e.g., can't speak after surgery or stroke)

What have you heard about AAC?

Is it true that...

AAC is a “crutch” and stops someone from developing verbal communication?

AAC requires a minimum cognitive ability, or the person won't be able to do it?

AAC requires someone have certain prerequisite skills (eye contact, pointing, basic literacy)?

No, no, and no

No evidence that AAC prevents development of verbal communication (may even assist this development for some)

There is no prerequisite or “getting ready” to communicate

It's our job as professionals to assess for and implement AAC that works for the person

Anyone who is conscious can communicate

AAC Assessment

Symbol understanding

Communication guide

Symbol assessment

Determining the “language” of symbols a person understands now

- Text
- Line drawings (software programs or clip art)
- Black and white photos
- Color photos
- Partial objects
- Full objects

Formats for assessment

- Functional Use
- Receptive Labeling
- Yes/No
- Question and Answer
- Matching
- Requesting

First

Determine up to 10 items the person is familiar with
(can confirm with teacher, parent, caregiver)

Gather objects, photos, and line drawings of these
items

Sampling of Potential Types of Symbols:



Actual Objects



Miniature Objects



Partial Objects



Tactile Symbol



Product Logos & Packaging



Digital Photos
(With appropriate contrast)



Photos
(From various software programs)



Line Drawings
(From various software programs)

Examples

Full guidelines

<https://praacticalaac.org/praactical/praactical-questions-how-can-we-make-data-based-decisions-about-aac-symbols/>

Symbol assessment form

Name:

Format (circle): Functional Use Receptive Labeling Yes/no

Matching

Q&A

Requesting



Number of items in array:

Instructions used:



Response accepted as correct:



Objects used	Confirmation of item knowledge by informant? Who?



Check the format you are using

What instructions is the person given?

How do you know they respond correctly?

List out each object/item used in assessment and if you confirmed familiarity with teacher/parent/caregiver

WATI COMMUNICATION FORM

Collects the following information

1. Present means of communication
2. Those who understand the student's present attempts
3. Current level of expressive language
4. Current level of receptive language
5. Communication interaction skills
6. Needs related to devices/systems
7. Literacy skills related to communication
8. Visual abilities related to communication
9. Sensory considerations

Selecting a Device

TAPE Framework for mass produced tech

WATI AT Checklist

Choosing AT

TAPE FRAMEWORK

1. Transportable
2. Available
3. Practical
4. Engaging

Fig. 1. Repurposed AT. Adapted from “Generic Mobile and Hand [image of drawing],” by Jones, M. (artist) (2008), Copyright by Creative Commons. Retrieved from <http://www.flickr.com/photos/blackbeltjones/2654801951/in/photostream> (color figure available online).



Choosing AT, continued

Wisconsin Assistive Technology Initiative (WATI) AT Checklist

Comprehensive list of devices to choose from based on your assessment results

No, low, mid, and high tech

Resource: Job Accommodation Network

www.askjan.org

- “A to Z of Accommodations”
- Scroll down to middle of page, tabs
- Can search by disability type OR barrier/need the person is having (“limitation”)
- Brings you to page on disability or barrier/need
- Accommodations at bottom: Includes specific adaptations and assistive technology ideas

Questions?
