Access Attitude IHD InclUSion 2026 EVIDENCE FOR SUCCESS Disability Conference

Best Practices for the Incorporation of Assistive Technology in Multiple Environments

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Abstract

In today's educational and workplace environments, literacy, access, and sensory support have become focal points for helping individuals. What are the best practices around how we can use both assistive technology and sensory supports in these and other environments? In this session, we are taking a look at the research and anecdotal evidence for devices which work well and how they can be incorporated in multiple environments. We will discuss how the devices we currently have can be used for the creation of inclusive environments. We will also investigate how certain assistive technology devices can be used in alternative manners to enhance any environment. Finally, we will also look to introduce sensory supports for multiple environments.

Objectives

1. Participants will compare various types of assistive technology for reading support and determine which would work best for their individuals.

2. Participants will differentiate how various types of assistive technology can be utilized by areas outside of the typical usage patterns in order to create more accessible environments.

3. Participants will discuss the various tools and applications that they currently use and how those could be adapted into other settings or activities.

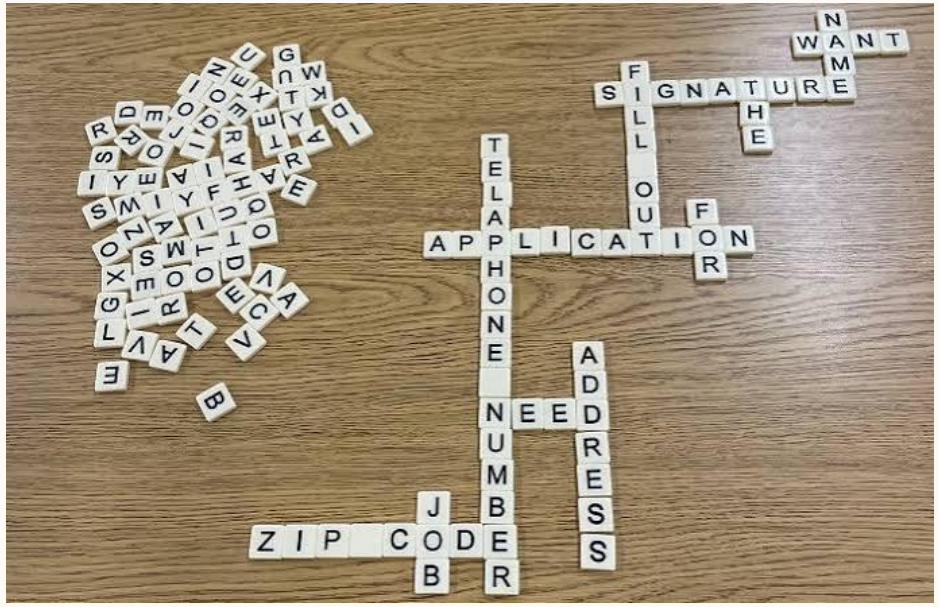
Activity 1

- Stand and face each other
- Right arm extended at shoulder height
- Left arm extended at waist height
- Take turns giving each other a compliment
- Clap hands all the way through and back

- Go back to start: Stand and face each other
- Left arm extended at shoulder height
- Right arm extended at waist height
- Take turns wishing each other a good day
- Clap hands all the way through and back

Addressing Literacy and Reading

- **Workplace**
  - Reading Pens
  - Proper Software
- **Classroom**
  - Manipluatives
  - Reading Pens
- **Daily Life**
  - Home environments
  - Travel



Reading Pens

- **What does the research say?**
  - McKenzie and Arslan-Ari
  - Krish
  - Lazar
- **Evidence-based devices**
  - C-Pen
  - Scanmarker
  - OrCam Read
- **Flexibility**
- **Fit with the environment**

Software

- **Text-to-Speech Capabilities Built into devices**
  - Apple – Live Speech
  - Windows – Narrator
  - Microsoft Edge – Immersive Reader
- **Text-to-Speech Software/apps**
  - ReadSpeaker by Text Aid
  - Read&Write(Everway)
  - Everway for Work
- **AI**

AAC for Multiple Environments

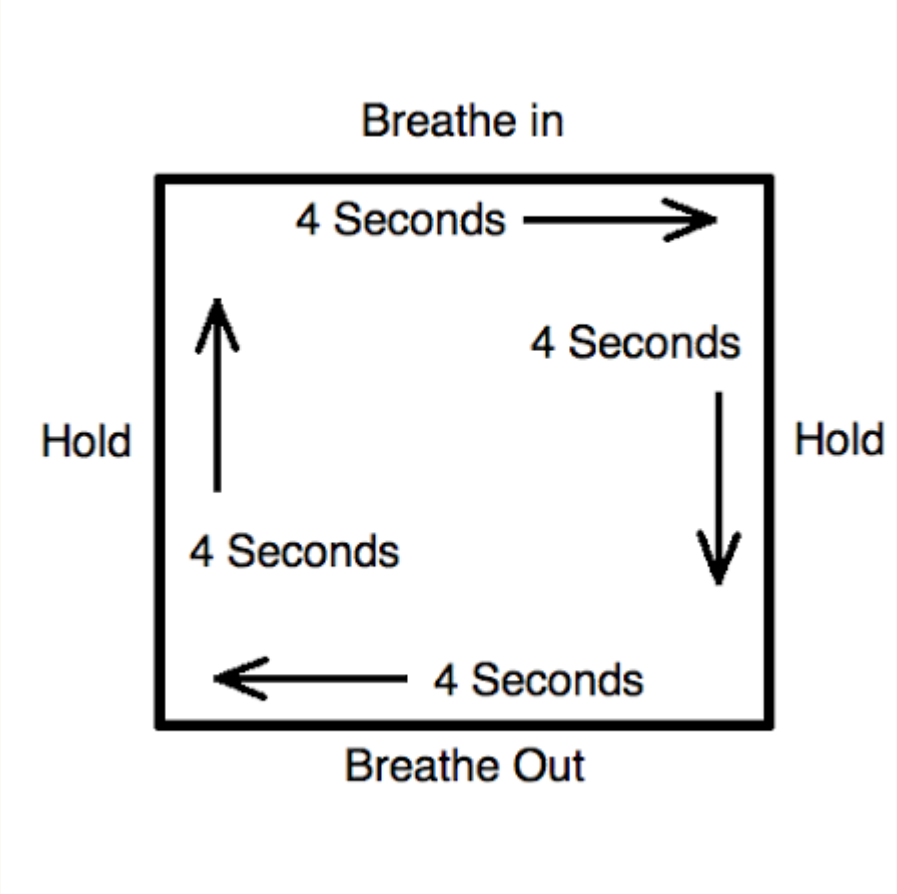
- Break the mold of how these are used
- Put extra devices in offices and other areas where they make sense
- Use them as a support to always having a person answer questions
- Utilize them in areas that can help to strengthen independence.

Focusing on the Mid-Tech AAC

- **Single Message situations**
  - Greetings
  - Questions
  - Intent
  - Directions
- **Multi-message situations**
  - Cafeterias
  - “Read-alongs”
  - Multiple choices for connection

Activity 2

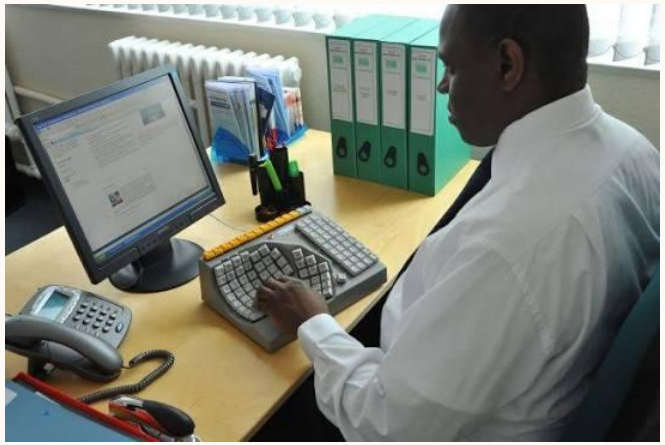
- Close your eyes
- Breathe in for 4 seconds
- Hold for 4 seconds
- Breathe out for 4 seconds
- Hold for 4 seconds
- Repeat three more times
- Open eyes and clap when done



Computer Access

- **Desktop Computers**
  - Direct connections
  - Access for movement
- **Laptop Computers**
  - USB connections
  - Don’t forget screen size accommodations
- **iPads**
  - Wireless/Bluetooth
  - Beyond Apple supports
- **Tablets**
  - Available connections

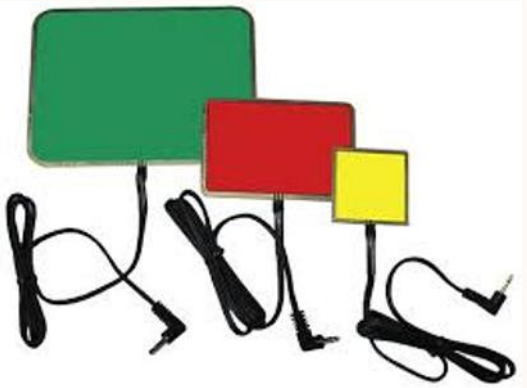
Alternative Access



- **Keyboards**
  - Large Print
  - Single Hand
- **Cursor control**
  - Glassouse
  - Eyegaze
- **Switch Access**

Switch Types

- Standard
- Light Touch
- Wireless
- Proximity
- Alternative/Specialized



Standard/Light Touch/Wireless

- AbleNet Jelly Bean
- AbleNet Blue2
- AbleNet Specs IC
- AbleNet Buddy Button
- Compact Switches – Enabling Dev
- Big Red Switch – Enabling Dev
- Piko Buttons
- Pretorian Smoothie
- Pretorian iSwitch

Specialized or Alternative Switches

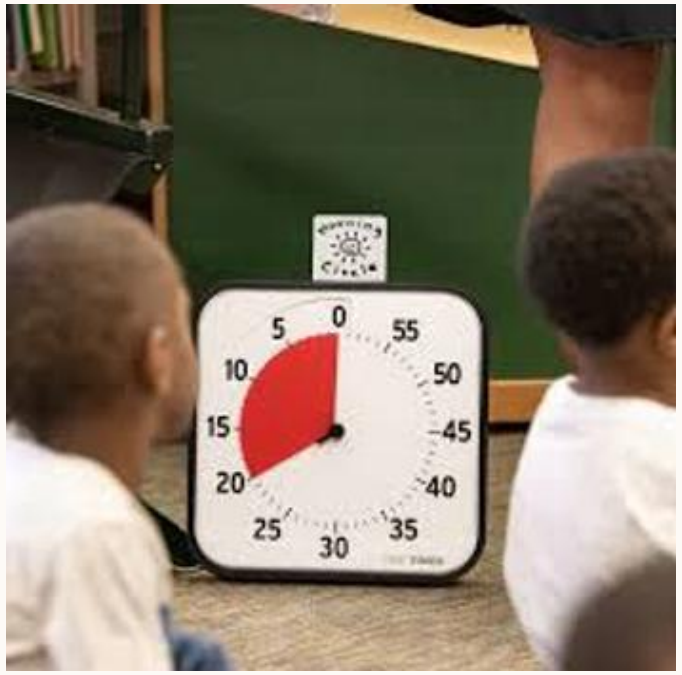
- **Proximity**
  - AbleNet Candy Corn
  - Honeybee
- **Alternatives to pressing**
  - Movement Sensor Switch
  - Pal Pads
  - Wobble Switch
  - Finger Switch

Activity 3

- **Playing as a way of connecting and doing therapy**

Visual Timers

- Research shows the decrease in anxiety when using visual timers
- Timer ranges from brief (seconds) to 24 hours
- Teach patience through passage of time
- Find one which best suits your needs



Environment Supports

- **Colors**
  - Do not overwhelm
- **Furniture**
  - Supportive to groups
- **Lighting**
  - Appropriate
- **Decorations**
  - Be aware of distractability
- **Sensory Supports**
  - Environment and Age Appropriate

Questions?

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Thank You

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