

Assistive Technology Strategies for Students with TBI

Sarah Pickford MS, OTR/L, CBIS

Assistive Technology and Cognitive Rehabilitation Specialist

Brain Injury Services

Please note: This document is a plain text adaptation of the original PowerPoint presentation. It includes the core content and structure but does not contain any visual design elements, images, or animations present in the original file.

“For people with cognitive disabilities 90% of devices are discarded. This is because AT is not typically evaluated in the context of the whole person and their environment.” – Scherer, M.J. (2005)

The tool or technology is the least important thing.

- Validation
- Empathy
- Resiliency
- Agency
- Hope

The Visitor, the Complainant, [and] the Customer

Adapted from Solution Focused approaches

The Visitor

- There is no problem or
- The problem belongs to someone else
- Want to get others off their back
- Sees no reason to change
- Compliment willingness to attend and listen
- What is working?
- How can you show others you can ____?
- How can I help you demonstrate your skill?

The Complainant

- Understands there is a problem
- Uncertain how to address issues
- Views self as a victim
- May not see self as part of solution or be committed to taking action
- Praise awareness and insight
- Ask for exceptions and analyze for ideas
- Encourage creative problem solving
- Identify small actions to take and monitor

The Consumer

- Aware of issues and ready to address
- Has concrete goals
- Willing to try new things and make changes
- Can be active partner in exploring new strategies
- Praise current efforts and provide positive feedback
- Keep focused on goals and prioritize
- Prepare for setbacks and frustrations
- Reinforce growth mindset

The Power of **Yet**: Assistive Technology for Cognition

- [Types of AT for Cognition with Examples](#)
- [Three Components of Independent Use](#)
- [Environmental Modifications](#)

Types of AT for Cognition (Adapted from Gillespie, 2012)

- Alerting
- Reminding
- Prompting
- Storing and Displaying
- Self-Regulating

Alerting Technologies

Definition: Direct attention to internal or external stimuli

Examples:

- Drowsiness Alert
- Spell Check

Mid-Tech Alerting

- MotivAider
- Vibrating Pager
- RE-vibe

Reminding Technologies

Definition: Time-dependent reminders to cue action.

Examples:

- MyHomework
- My Study Life
- Pillboxie
- Aida Reminder (Reminder, Alarm and Voice Reminders. Remind Me App)
 - Record own voice
 - Pre-Alarms
 - Auto-Snooze
 - Images
- 360 Thinking Time Tracker
 - Indicates ready, midpoint and stop points
 - Users can compare the planned vs. actual use of time.

Mid-Tech Reminding

Examples:

- WatchMinder3
- VoiceCue
- Time Timer

Prompting Technologies

Definition: Step-by-step prompts for present task.

Examples:

- Step-by-step cues (Next Thing)
- Checklists (EpicWin)
- Functional Planning System
- Choiceworks

- One Big Thing
- ReachMyGoals
- TickTick is a cross-platform app with to-dos, subtasks, and reminders
- Use a pillbox as a visual schedule and reward system. Place small tokens (coins, stickers, etc.) inside the box. Try a bead in each compartment/the student can keep a string and see how many they can earn. Put the reward activity in the last box so it's a surprise! – From Shannon of the [Speechy Musings Blog](#)
- StepPad Mini
- Visual Schedule Planner App
- Low-tech solution
- Brili works on iOS devices, Android devices, and the Pebble watch. It will soon also work in your browser.

Fading Prompting Technologies

- Customized keyboard with fading prompts created in the Abilipad App

Create Tutorials on Class Computer

Examples:

- Screenpresso
- Screencast-O-Matic

Storing & Displaying Technologies

Examples:

- Countdown (AT - Countdown reminder)
- Notes (Evernote)
- Study (Bitsboard)

Password Management

- lastpass
- Creating Passwords
 - Wizard of Oz
 - ?g&pOzem11
 - Question (?) for the great and powerful (g&p) Oz in the emerald (em) city (11)
 - Space System
 - plnts@\$UN*
 - Eis3rdfr0m*

Storing and Displaying iPad Apps

- Walk Through Your Day Time Banner
 - 1 x 16 feet laminated banner
 - Students walk on the banner to see how their day will unfold as they “walk across the day”.

- One day 7:00 a.m. - 11:00 p.m. with 15 minute time slots
- Plan My Day Academic Planner
 - Students block their Chill Time, Obligated Time and Productive Time.
 - The choices of Important Goal, Must Do, Should Do and Want to Do encourage prioritizing skills
 - Time estimation
 - To Think About & Coming Up
- BeeLine Reader
- SymbolSupport App
- Accessible Wallpaper
 - [Example 1](#)
 - [Example 2](#)
 - [Example 3](#)
- Livescribe Pen

Other Tools

- Souolver Calculator
- MyScript Calculator
- GCFLearnFree.org

Self-Regulating Technologies

Examples:

- Breathing or Meditation (Breathe2Relax)
- Personal Strategies (Pace My Day)
- Sensory-Based (Fluid)
- Yoga Studio app
- Doasone.com
- Unstuck

3 Components of Independent Use

1. Initiation

- a. Student retrieves the device when it is required.
- b. Student displays awareness of the device's purpose.

2. Operation

- a. Student is able to perform basic device functions.
- b. Student displays increasing skill levels.

3. Management

- a. Student is tasked with caring for the device.
- b. Student accepts responsibility and ownership.

Environmental Modifications

- Light Filters

Questions?

You can view the presentation file and other resources by visiting [this link](#) or contact [Sarah Pickford](#).