## ASSISTIVE TECHNOLOGY AND PLANNING FOR ADULT LIFE

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### **AGENDA FOR SESSION**

- I. Assistive Technology Overview:
  - Conceptual Framework
  - Process for Evaluations
- 2. AT Tools:
  - Mobile/ Wearable
  - Computer Access
  - Reading and Writing
  - Procedural Tasks
  - Focus / Memory/ Daily Living
- 3. Wrap Up/ Questions



### **ADVANCING OPPORTUNITIES**

Used to be CP of NJ – changed to AO

Career Services

Community and Individual Supports

Residential Services

Advocacy

Family Support Services



### **ADVANCING OPPORTUNITIES**

#### **Assistive Technology**

AT Evaluations and trainings

DDD, DCF, DVR, CBVI, Traumatic Brain Injury Fund, various school districts

All disabilities

**Mobile Services** 



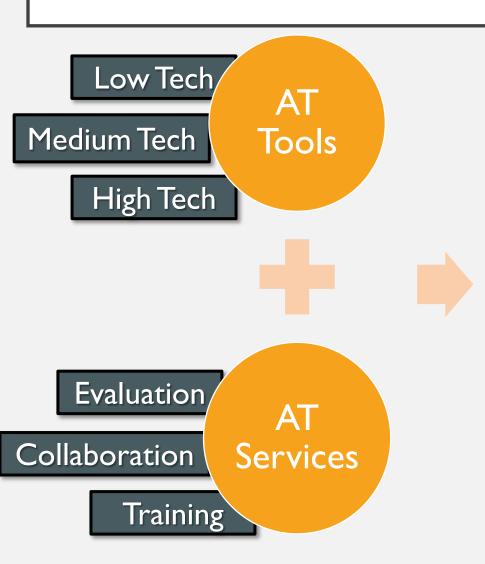
#### WHAT IS ASSISTIVE TECHNOLOGY?

#### Definition:



"Any item, piece of equipment, or product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of [persons] with disabilities." (section 300.5)"

## CONCEPTUAL FRAMEWORK BEST PRACTICE



Feature Matching
Assistive
Technology



#### AT EVALUATIONS

Start with a GOAL

Person Centered Planning:

What are their goals? What are their strengths?

We conduct an evaluation using the SETT framework to determine what tools/modifications will support their goal.

- Student/Person
- Environment
- Task (what do they have to do)
- Tool (to be used to achieve goal)



### EVALUATION AS IN THE DDD MANUAL

Section 17.1 Assistive Technology, page 84

Procedural Code: T2028HI – AT Evaluation

What does that look like?

Home Modification

**Bathroom Modification** 

Augmentative and Alternative Communication (AAC)



#### **TECHNOLOGY TOOLS**



# TECHNOLOGY LENDING CENTER

Try it before you buy it!

Wide variety of devices

Loans for Up To Six Weeks

Free Shipping

Knowledgeable Staff

609 882 4182 ext 536 - Eden





# MOBILE AND WEARABLE TECHNOLOGY

Smartphones/tablets (including iPad Touch)

Apps and built-in tools

Fitness trackers

Smartwatches (Apple Watch; Gear S3)

Portable/wearable alerting devices, recorders, etc.





# ADVANTAGES OF MOBILE/WEARABLE AT TOOLS

Mainstream technology

Doesn't make person look or feel different

People often already have these tools

Often less expensive and more capabilities than previous stand alone AT tools

All of this often EQUALS less technology abandonment and easier access to tools.



### **MOUSE ALTERNATIVES**















#### **KEYBOARD ALTERNATIVES**















### **SWITCH ACCESS**



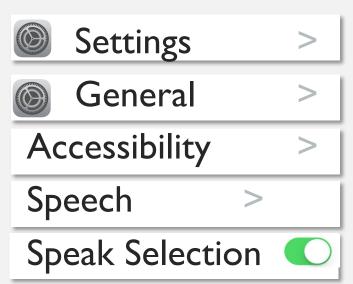
# READING AND WRITING FOR ADULT LIFE

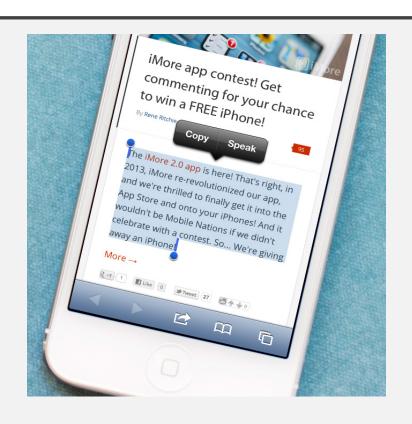




### TEACH YOUR PHONE TO SPEAK

#### iOS





#### **Android**

- Settings > Accessibility > Select to Speak
- If not there, go to Google Play and download latest version of Android Accessibility Suite



### DICTATION

Smartphones

**Tablets** 

**Smartwatches** 







### SCANAND READAPPS

## Apps that allow user to take picture of text and have them read aloud.

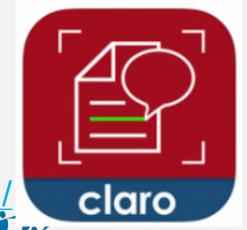
- ClaroScanPen (iOS-\$9.99 and Android-free): <u>www.claro-apps.com/claro-scanpen/</u>
- Prizmo Go (iOS-free):
   <a href="https://creaceed.com/iprizmo">https://creaceed.com/iprizmo</a>

#### Apps that do "more" than read

Seeing AI (iOS-free):

www.microsoft.com/en-us/seeing-ai/

Be My Eyes (iOS- free):



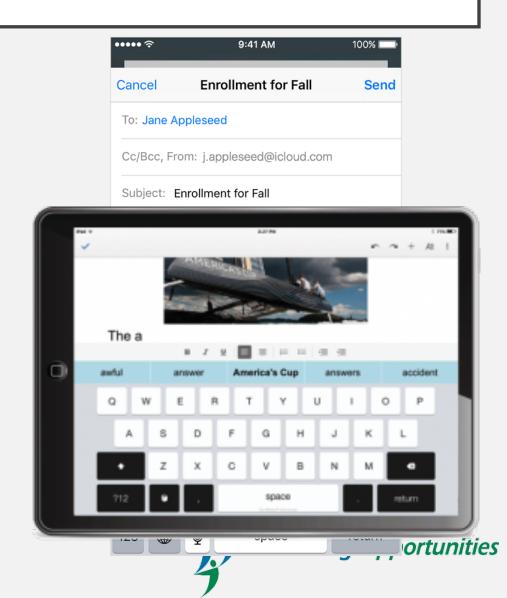
Advancing Opportunities

### SPELLING SUPPORT

Predictive text on iOS and Android devices

Co:Writer Universal app and keyboard for additional support

- iOS
- Free app initially,\$4.99/month subscription
- https://bit.ly/2JO0yrC



### C-PEN READER

Portable, pocket-sized device that reads text out aloud with an English human-like digital voice.

http://www.readerpen.com/

Free 30 day trial from company

\$250





# VIDEO SUPPORT FOR MULTI-STEP TASKS

**Video Modeling:** review video examples before performing a job task

Continuous Video Modeling: Video is played while person follows along.

Video Prompting: Watch short video segments of steps of a task (watch a step, do a step), etc.

Video Feedback: Video employee as they perform task and have them watch to review





### **MULTI-STEP TASKS**

# FTVS HD (First Then Visual Schedule HD) app

- Picture support
- Audio support
- Video support

www.goodkarmaapplications.com

iOS \$14.99







### IOS ACCESSIBILITY TOOLS



#### Invert Colors

- Large Text
- Zoom
- Shake to undo
- Siri Shortcuts
- Subtitles & Captioning

- AccessibilityShortcut
- Safari Reader
- Guided Access and Screen Time
- Predictive Text
- Voice Over



### FOCUS AND ATTENTION TO TASK



# REVIBE ANTI-DISTRACTION WRISTWEAR

Reminder vibration wristband

4 modes that have varying levels of reminder frequencies

Feel vibration → Ask self— "Am I doing what I should be doing?"

No screen--distraction free design

\$100 and 90 day return policy

https://shop.fokuslabs.com/





### WATCHMINDER

Watch that discretely vibrates to cue user

Displays reminder messages with text

Use for medications, daily tasks, etc.

www.watchminder.com

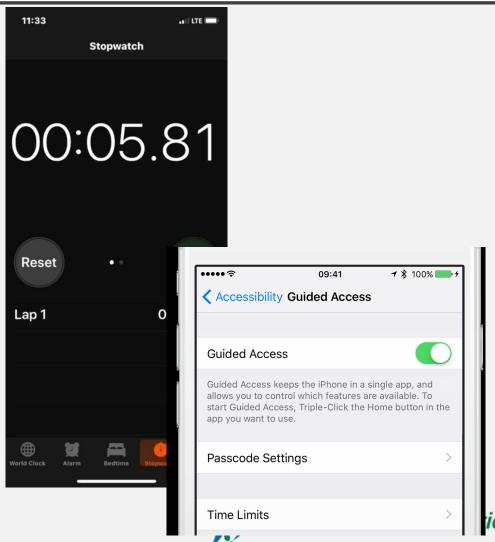
\$69





#### **BUILT-IN IOS TOOLS**

Timer Stopwatch





### TIMETIMER

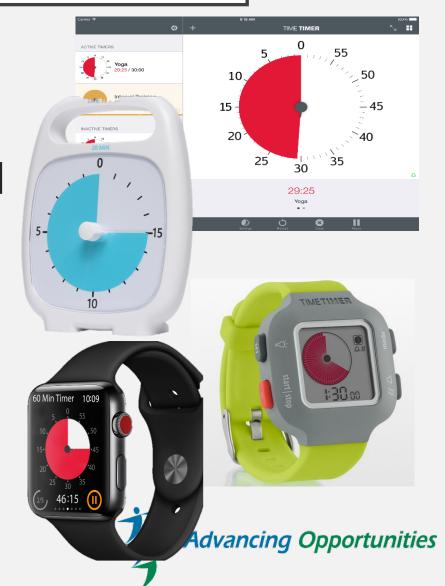
### Time Timer App:

#### www.timetimer.com

- iPhone and Android\$2.99
- iPad \$4.99

Apple Watch app
Time Timer watch

Physical Time Timers

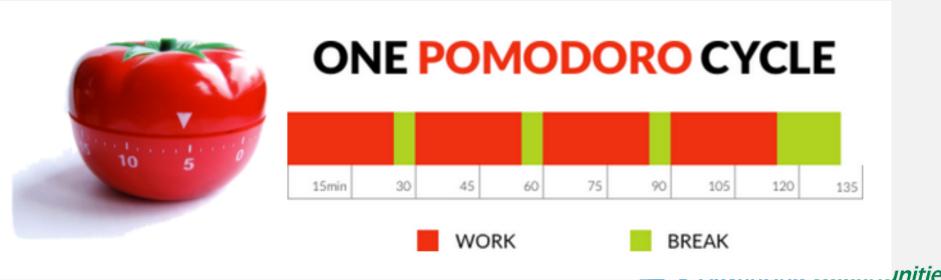


### POMODORO TECHNIQUE

Pomodoro technique:

https://www.focusboosterapp.com/the-pomodorotechnique

Use any timer



#### **REMINDERS**



# SOUND RECORDER OPTIONS



- Built in Voice Memos app on iPhone
- Digital Recorder
- Just Press Record app
- iPhone, iPad, Apple Watch
- \$4.99



### **SMARTWATCHES**

- Vibrate and display calendar notifications
- Can change haptics, alert sounds
- Determine what notifications you want to come to your watch
- \$399+





## MEDICATION REMINDER APP-MEDISAFE

https://medisafe.com/

Free--iOS and Android

Apple Watch and Android Wear smartwatch

components



### VOICE ASSISTANTS: AMAZON ECHO, GOOGLE HOME, SIRI, GOOGLE ASSISTANT

- Calendar access and notifications
- Timers
- Alarms
- Reminders
- Stress Management
- Spelling help
- To do list





#### SIRI....HEY GOOGLE...

Time or location based reminders

"Set an alarm for..."

"Remind me to call Bob at 9pm."

"Remind me to clock in when I get to work."





### SMART HOME TECHNOLOGY

- Automate specific tasks that an individual is unable to perform (turning lights on or off).
  - Amazon Echo
  - Google Home
  - Apple Home Automation
  - And more



# AMAZON ECHO, GOOGLE HOME, AND SIRI

Ease of use for individuals who are blind, have mobility issues or even dyslexia.



Brings a personal assistant to everyone, not just the rich.

Connected 24/7 to the world around you.



# AMAZON ECHO "ALEXA"

You can ask it the same question 20 times, and still get the answer! No frustration for you or the caregiver. Simple to operate.

- Repeatedly asking questions ("what day is it?", "What time is it?")
- Play music and reads audio books.
   (no complicated controls)
- Tell jokes, riddles.
- Ask it anything: WiFi ("what is the weight of an elephant?")
- Hear weather reports and news.
- · Reminders: take medicine.



## AND YOU CAN

Order groceries by voice

Check the weather

Turn on and off the lights

Stay connencted while moving about your home(not sitting at a computer)

Answer the phone

Organize your calendar

There is no limit to what individuals can do with their virtual assistant.



## **CALENDAR**

- Paper calendars
- Calendar built into device
- Google Calendar



Use calendar to map out day and improve time management.



## AUGMENTATIVE COMMUNICATION

- Low-tech paper-based system
- iPads, iPhones, iPod Touches
- Stand alone devices

#### Low Tech Devices













## AAC CONSIDERATIONS

- Communication skills are critical
- Provide access to AAC as early as possible
- Build in opportunities to communicate
- Communication in job environment:
  - "Let me find someone to help you."
  - "My ride isn't here. Can you help me?"
  - "I need help."
  - "I need more \_\_\_\_."



## SINGLE MESSAGE COMMUNICATORS

Single Message Communicators around workplace

- For communication
- For direction reminders

Ablenetinc.com—Talking Brix, BIGmack, LITTLEmack

Attainment Company: GoTalk One; GoTalk Button









Advancing Opportunities

# FACETIME/SKYPE/PHONE CALL

Ability to provide support remotely using technology many of us already have access to.

May be helpful when fading out in-person supports or when concerns arise







#### DAILY LIVING

#### **Adapted Phones**

One-touch or switch enabled

Can have increased volume







#### DAILY LIVING

Call System – <u>Personal</u> <u>Emergency Response</u> <u>System (PERS)</u>

No Monthly fees

Can connect own switches





#### **ELOPEMENT / SAFETY**

#### **GPS / Cell Services**

Amber Alert GPS PAL from Proj. Lifesaver





Angelsense GPS





# THREE LEVELS OF HOME MONITORING

- Vital Sign Monitoring (least invasive) and Personal Response Systems
- Sensory Monitoring-open doors, toilet flushes, mattress pressure, reminder systems etc, builds a record
- Video Monitoring (most invasive)-cameras throughout the home, access can be via home health agency, family, or other monitoring system



# ETHICAL ISSUES

#### **Privacy Issues**

- 1. Deciding who needs to have access
- 2. Patient/consumer needs to consent Can the person make that decision?
- 3. Is "giving consent" a one-time event or does it need to be repeated/re-visited?



# Funding?

## GET STARTED NOW SUPPORT FROM ADVANCING OPPORTUNITIES



See what's possible! Website and YouTube Channel

www.assistivetechnologycenter.org

#### Try before you buy! Borrow iPads, iPod touches

Technology Lending Center (also on website)



#### Get some help! We come to you

Mobile service, evaluations and training

888-322-1918







## **THANK YOU**

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