



Speaker Disclosures (Financial)

- The Vision Team has no Relevant Financial Relationships or Relevant Non-financial Relationships to disclose relating to this presentation.
- As clinicians here at ESC, we provide services such as evaluations and training, and most importantly, support for persons with different abilities.
- We do not sell nor do we receive any benefit from the equipment that we recommend.



AGENDA

1. What is Assistive Technology?
2. Low Tech, Mid Tech and High Tech
3. Personal Assistance / Smart Speaker
4. Wearable Technology
5. Computer Built-in Accessibility
6. When Built-in Isn't Enough



3

What is AT or Assistive Technology

- Any device or system that allows a person with different abilities to perform an activity that they might not otherwise be able to. In essence, it is used to:
 - Increase,
 - Maintain or
 - Improve the
 - Functional capabilities of
 - Persons with disabilities.
- - Courtesy of Assistive Technology Industry Association.
- It can be divided into three categories: low tech, mid tech, high tech.



4

Low Tech - Characteristics

1. Does not require much training
2. May be less expensive
3. Does not have much complicated or mechanical features



5

Low Tech – Tactile Markers



Puff Paint



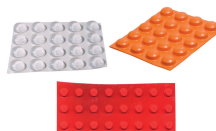
Rubber Bands



Velcro



Shelf Liner




Bump Dots




6


Low Tech




Handheld
Magnifying Glass




Thick, Bold Felt Pen




Check-Writing and Other Writing Guides

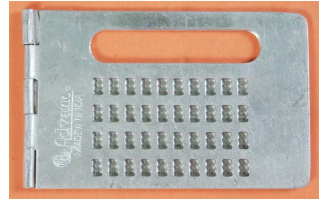




Raised Number Ruler



Large Print Calendar



Braille Writing Slate

easterseals
Crossroads

Mid Tech - Characteristics

1. Electronic in nature
2. Fairly inexpensive
3. Requires less training than high tech

Mid Tech



Magnifying Desk
Lamp



Talking Calculator



Talking
Measuring Cup



Talking Labeling
Wand



easterseals
Crossroads



Talking Books



Electronic Magnifiers

9

High Tech - Characteristics

1. Based on computer technology
2. Require more training
3. Considerably more expensive

easterseals
Crossroads

10



High Tech

Digital Magnifiers with Optical Character Recognition (OCR)



Computer or Laptop with Large Print Keyboard



Transformer with OCR



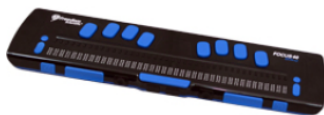
Adaptive Computer Software



ZoomText + JAWS = Fusion

11

High Tech



Braille Display or Notetaker



Mobile Devices



Automated Personal Assistants



Wearable Technology



12

Personal Assistant / Smart Speaker

- Amazon – Echo Dot – Show- Alexa – Look
- Google – Home – Mini
- Computers/Smart Phones – Cortana – Siri – Bixby – Google Assistant



13

What Can My Personal Assistant Do?

- News and Weather
- Home Control – locks – temperature – lights – cleaning – on and on
- Games and Fun
- Entertainment – reading books – listening to music
- Quick calculations / defining or word translations
- Scheduling – timers – alarms – reminders



14

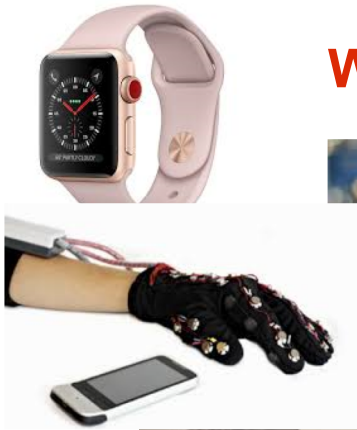
Continued:

- Transportation – directions – requesting a ride
- Shopping
- Making phone calls
- Sending messages



15

Wearable Technology



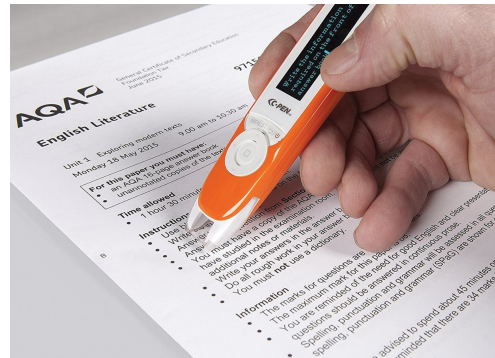
16

Orcam

- Wired or Wireless
- *OrCam MyEye* For persons who are blind and or partially sighted, an artificial vision device with a lightweight smart camera that instantly reads text aloud- from any surface – and recognizes faces, products, and money notes in real time.
- Let's see some examples...

C-Pen Reader

- Reader Pen
- ExamReader
- Dictionary Pen
- TS1
- <https://cpen.com/products/>



C-Pen Reader

- Captures printed information (text, numbers, codes, etc.)
- Decode and transfer it to computers or smart devices.
- Makes information available for further processing, e.g. translation, text-to-speech or general data entry, etc.



19

Built-In Accessibility

- Windows
- Mac
- ChromeBook



20

Chromebook

Display

- High Contrast
- Magnifier
- Text Size



Screen Reader

- ChromeVox



21

Accessibility Options

ChromeBook

How to Enable Accessibility Options In Chrome OS

To enable accessibility options in Chrome OS, go to settings and search accessibility. You can also access them by going to Settings > Advanced Options > Accessibility.



22

Mac

Display

- Contrast
- Magnifier
- Large Text
- Mouse

Screen Reader

- VoiceOver



Accessibility Options

MAC

How to Enable Accessibility Options In MAC OS

macOS features an **Accessibility** Options window that lets you quickly turn on or off common **accessibility** features like Zoom, VoiceOver, Zoom and more. You can bring up this window anytime with a simple shortcut. On the built-in keyboard of a **Mac** notebook computer, press Fn-Option-Command-F5.

Windows

Display

- High Contrast
- Magnifier
- Text Size
- Mouse

Screen Reader

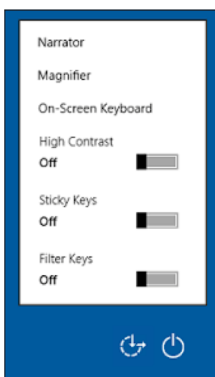
- Narrator



25

Accessibility Options

Windows



Setting up your PC to make it more accessible takes only a few steps. Most Ease of Access options are available in Settings. Select the **Start** button, then select **Settings > Ease of Access**.

Commonly used options are also available from the sign-in screen. Select the **Ease of Access** button in the lower-right corner to see them.



26

When Built in Accessibility Tools Aren't Enough

- Screen Magnification
 - ZoomText Magnifier
 - ZoomText Magnifier/Reader
 - MAGic No Speech or with Speech
 - Dolphin SuperNova
- Screen Readers
 - JAWS
 - Zoomtext Fusion
 - NVDA
 - Dolphin Guide



27

Screen Magnification

- Offers additional contrast settings
- Offers Screen enhancements
 - Pointer
 - Cursor tracking
- With Speech
 - Can read text
 - Can echo as you move the mouse
 - Can give typing echo



28

Screen Readers: (When Magnification no longer works)

- Gives audio and can give Braille feedback to what is on the screen
- Use keystrokes to navigate



29

Thank you! Any questions?

Easterseals Crossroads
Assistive Technology Center
4740 Kingsway Drive
Indianapolis, IN 46205
317-466-2013
888-466-1314

tech@eastersealscrossroads.org

www.eastersealstech.com



30