



#### Assistive Technology Breakthroughs for Students with Disabilities

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Where disabilities become possibilities

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# Assistive Technology Breakthroughs

#### Objectives:

- Learn from each other!
- Discuss state and local resources for assistive technology
- Present examples of breakthroughs in assistive technology
- Provide resources for further research and investigation





#### Tennessee Technology Access Program Centers

**East Tennessee Technology Access Center** www.ettac.org

Mid-South Access Center for Technology, Memphis http://www.memphis.edu/act/index.php

The Star Center, Jackson http://www.starcenter.tn.org/

Technology Access Center, Nashville http://tacnashville.org

Signal Centers Assistive Technology Center, Chattanooga http://www.signalatcenter.org/





Where disabilities become possibilities

#### Tennessee Technology Access Program Centers

TTAP provides funding to five regional assistive technology centers across Tennessee. The centers provide training, evaluation, minority outreach and advocacy services. The staff at each of the centers works closely with businesses, school systems, vocational rehabilitation and the medical community to increase the independence and productivity of persons with disabilities through the use of assistive technology devices and services.

Funding Assistance
Device Demonstration
Device Loan
Device Reutilization



#### **ETTAC Services**

- Equipment Demonstration
- Educational Technology Services
- Vocational Technology Services
- HeartSong Center
- Community Services
- Workshops



#### Service Philosophy

- Presume competence
- Customer Driven
  - includes family and caregivers
- Trial use
- Vendor neutrality
- Service staff work as a team

#### Assistive Technology Breakthroughs

- Wireless/Bluetooth
- Mobile devices
- Web and Cloud Based Applications
- E-text Options
- Eye Gaze Technology
- Social Media
- Free Tools

#### Wireless/Bluetooth

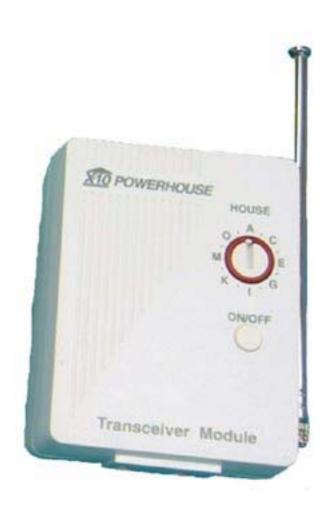
- Reduces wires and increases safety
- Devices can be placed at a distance from the computer for positioning needs
- Allows access to standard Bluetooth enabled devices

## Intelliswitch www.intellitools.com



## Wireless Pal Pad Switch www.adaptivation.com





## Wireless Keyboard and Wireless Mouse www.maxiaids.com



## Wireless Headset Microphones



# Switch Access for iPad and iPod Touch



Ablenet Bluetooth Switch for iPad

www.ablenetinc.com



iPad Switch Interface www.rjcooper.com



Big Button iPod Remote www.rjcooper.com

# Switch Access for iPad and iPod Touch



Hook™ iPod Switch Access

www.ablenetinc.com

### It's a Mobile World!













## Mobile Devices- What Do They Offer?

- Communication
- Learning
- Entertainment
- Mainstream technology
- The "cool" factor
- Universal Design options
- Portable apps
  - USB jump drives to take applications with you

#### Switch Access for iPad and iPod

- Apps must be written for switch access
  - http://www.janefarrall.com/html/ipad.html
- Single click
  - one hit of the switch makes the screen change
- Linear scanning
  - items are presented one by one for selection
- Group item scanning
  - multiple items are presented in rows



## There's an App for That!

- THE Journal
  - http://thejournal.com/articles/2012/04/11/9-new-apps-for-autism.aspx?=techinspecialed
- Moms with Apps http://momswithapps.com/
- Technology in (Spl) Ed http://techinspecialed.com/
- AACTechConnect http://www.aactechconnect.com/
- Boston Children's Hospital
  - –http://www.childrenshospital.org/clinicalservices/Site2016/mainpageS2016 P19.html
- Apps for Children with Special Needs
  - -http://a4cwsn.com/

## Text Capture and Reading



Intel Reader http://www.humanware.com/en-usa/home



Livescribe Pen www.livescribe.com



## Text Capture and Reading



IRIScan Book 2 http://www.irislink.com/



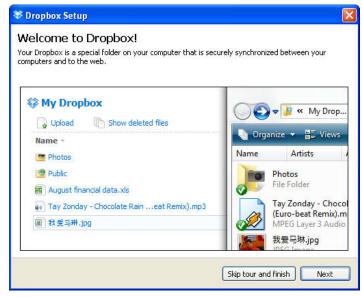
Any Book Reader www.donjohnston.com www.amazon.com

## Web and Cloud-Based Applications





Evernote www.evernote.com



Drop Box www.dropbox.com

### Web and Cloud-Based Applications



www.donjohnston.com

### Web Apps and Portable Apps



"the objectives or targets of the lesson in terms of what the children will learn and be able to do: making clear the targets to be achieved by the end of the lesson helps to make the lesson purposeful and helps the children to take appropriate responsibility for their learning." Teachernet (2007)

www.texthelp.com



Read and Write Web



eBook Reader



#### **Skill Based Applications**

\* Can be accessed via web with accounts

MindPlay

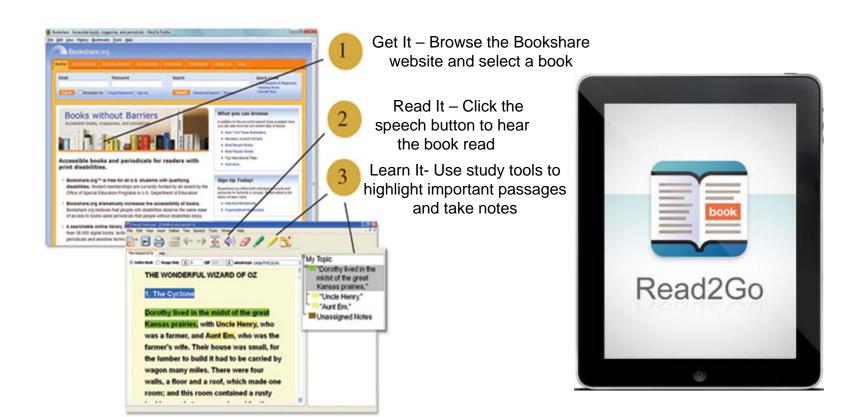
TextHelp

**PLATO** 

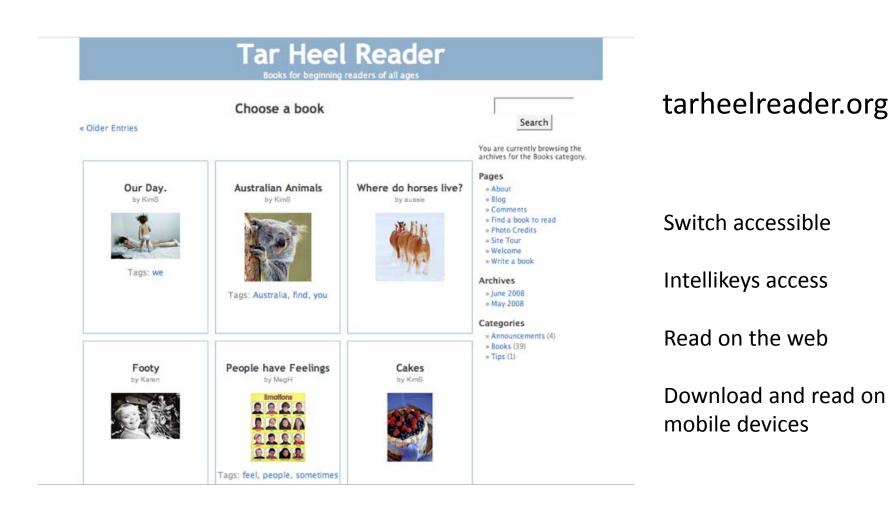
**Reading Horizons** 

#### **E-Text Options**

## BookShare www.bookshare.org



#### **E-Text Options**



### So Many Books. So Little Time....

- iBooks
- Books on-line
- Apps with interactive books
- Audio Books and Pod Casts
- Creating your own books
  - Pictello



Digital Storytime



## Eye Gaze



www.tobiiati.com





www.dynavoxsys.com

## Eye Gaze



http://www.words-plus.com/



www.prentrom.com



#### Social Media



- Life long learning
  - blogs, information from developers, news, etc.
- Communication
- Opportunities for language and writing
- Motivation
  - E-Pals
  - http://www.donjohnston.com/wollakepal/index.html

#### For Free?!

- Natural Reader www.naturalreader.com
- Read Please www.readplease.com
- ClickNType http://cnt.lakefolks.com/
- Camera Mouse http://cameramouse.org/
- Open Office http://www.openoffice.org/
- Give Away of the Day
  - http://giveawayoftheday.com/
- My Study Bar http://eduapps.org/?page\_id=7

#### Resources

- Each Other
- Webinars
- Blogs
  - http://atclassroom.blogspot.com/
- Family Center on Technology and Disability
  - http://www.fctd.info/
- Quality Indicators in Assistive Technology
  - www.qiat.org

### What's next?



