AT Support for Executive Functioning

Pat Satterfield and Martha Rust

AMAC
Accessibility for All

CREATE

www.amacusg.org
Credits

- **CEUs** are administered through Georgia Tech Professional Education
- **CRCs** are not provided for today's webinar
- To receive your verification form, send an e-mail with the webinar title and date, your full name, organization, city, state, e-mail address and date of birth to Liz.Persaud@gatfl.gatech.edu
Webinar Evaluation

At the end of today’s webinar, we ask that you please take a moment to complete our survey:

https://www.research.net/s/TFLwebinar
Agenda

• Welcome and Introductions
• What is Executive Functioning
• Exploring Tablets
• Considering Accessibility
• Our Favorite Apps
• Sharing Your Favorite Apps
• Wrap-up
What is Executive Functioning?

Executive function is a set of mental processes that helps connect past experience with present action. People use it to perform activities such as planning, organizing, strategizing, paying attention to and remembering details, and managing time and space.

NCLD.org
Four Categories

- Self-management
- Information Management
- Time Management
- Materials Management

WATI / Assessing Students Needs for AT (2009)
More...

- Task initiation and follow through
- Working memory
- Sustained attention
- Performance monitoring
- Inhibition of impulses
- Goal directed persistence

(Dawson & Guare, 2004)
What is the Impact on Classroom Tasks?

• Need help to get assignments in on time
• Need help keeping up with materials
• Need help with note-taking
• Need help completing multi-step assignments
• Need help maintaining attention
• Need help remembering what they read
• Need help organizing information
Tools for Life
Georgia’s Federal AT Act Program

• On February 1, 2012 we joined:
  • AMAC
  • Georgia Institute of Technology
  • Enterprise Innovation Institute [EI2]
  • www.amacusg.org
Tools for Life
Georgia’s Federal AT Act Program

• Developed Georgia’s Plan for AT
• Serve individuals of all ages & all disabilities in Georgia
  • Over 50,000 thru various activities throughout the year
• TFL Network
  • Assistive Technology Resource Centers
  • Lending Libraries
  • Training and Demonstrations
  • AT Reuse
  • AT Funding Education/Assistance and Resources
• [www.gatfl.org](http://www.gatfl.org) - 12,000 unique visitors a month
Tools for Life: Mission

Tools for Life increases access to and acquisition of assistive technology devices and assistive technology services for Georgians of all ages and disabilities so they can live, learn, work, and play independently in the communities of their choice.
Welcome to Tools for Life

Tools for Life, Georgia's Assistive Technology Act Program, is dedicated to increasing access to and acquisition of assistive technology (AT) devices and services for Georgians of all ages and disabilities so they can live, learn, work and play independently and with greater freedom in communities of their choice.

Tools for Life and the TFL Network work collaboratively together to accomplish our mission through:

- AT Demonstration
- AT Evaluations and Assessments
- AT Funding Options & Education
- Access to the TFL AT Lending Libraries
- AT & Durable Medical Equipment Reuse
- AT Training (Individual)
- AT Training (Groups)

We Want to Hear from You! Join us for our Town Hall Meetings.

Georgia Tools for Life leads the US in Assistive Technology Services! Click here to view the data:
TFL App Data Base

Search by...
• App Name
• Categories
  – Book
  – Education
  – Environmental Adaptations
  – Hearing
  – Cognition, Learning, Developmental
  – Navigation
  – Personal Care and Safety
  – Productivity C
  – Communication
  – Therapeutic Aids
  – Vision
Microsoft Surface

- Windows 8
- Slim and has a USB port
- Moveable Tiles
- Built-in Accessibility
  - Speech-to-text
  - Narrator
- Thin pressure sensitive cover that doubles as a keyboard
- Starts at $499
Samsung Galaxy

- Download Accessibility Features
- 7 inch or 10 inch screen available
- Compatible with flash/ WIFI
- 8.0 coming out February 2013 in Europe
- 8.0 will have a better camera and use a SIM card for storage
- Starts at $199.99 but 8.0 may be more
Motorola XOOM

- Android System
- Must download accessibility features
- Compatible with Flash
- Camera
- Wifi
- Uses micro SIM card for external storage
- Starts at $319.00
Apple iPad

- Multi-touch screen
- New iOS 6
- Thousands of apps
- Surf web
- iTunes
- Videos
- Organization
- Accessibility
- Books
- Photos
- Speakers
- New iPad had 5.0 megapixel camera
- Starts at $499/$399
Apple iPad - mini

- Multi-touch screen
- New iOS 6
- Thousands of apps
- Surf web
- iTunes
- Videos
- Organization
- Accessibility
- Books
- Photos
- Speakers
- New iPad had 5.0 megapixel camera
- Starts at $329
Apple iPod Touch

- 5 Megapixel Camera
- Thousands of apps
- Videos
- Surf Web
- Voice Over
- Organization
- Speakers
- Bluetooth
- New iOS 6
- Starts at $299

-$199 4th generation
# Difference Between Tablets

[www.bluebulge.org](http://www.bluebulge.org) 12/17/2012

<table>
<thead>
<tr>
<th>Property</th>
<th>Android</th>
<th>iOS</th>
<th>MS Windows</th>
<th>Amazon Kindle</th>
<th>Barnes &amp; Noble Nook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number and variety of tablets</td>
<td>Several</td>
<td>iPad &amp; iPad Mini</td>
<td>A few</td>
<td>Kindle Fire &amp; Fire HD</td>
<td>Nook HD</td>
</tr>
<tr>
<td>Operating System</td>
<td>Android (latest Jelly Bean)</td>
<td>Apple iOS 6</td>
<td>Windows RT &amp; Windows 8 Pro</td>
<td>Modified version of Android ICS</td>
<td>Modified Android ICS</td>
</tr>
<tr>
<td>Apps</td>
<td>Nearly 700,000 (including the ones not</td>
<td>Total of 700,000, out of</td>
<td>Around 100,000</td>
<td>Around 60,000 (from Amazon’s</td>
<td>Around 10,000 (available from Barnes &amp; Noble store for Android)</td>
</tr>
<tr>
<td></td>
<td>optimized for tablets specifically)</td>
<td>which 275,000 optimized for iPad &amp; Mini</td>
<td>(including phone apps) of which most are plain junk.</td>
<td>special app store for Android)</td>
<td></td>
</tr>
<tr>
<td>Software Updates</td>
<td>As it becomes available on Google (for</td>
<td>Apple releases updates</td>
<td>MS releases updates</td>
<td>Amazon releases updates</td>
<td>BN releases updates</td>
</tr>
<tr>
<td></td>
<td>Nexus, directly, and for other manufacturers, as they become available)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interface</td>
<td>As designed by manufacturer (on Nexus</td>
<td>Icons &amp; widgets designed by Apple similar to Mac OS</td>
<td>Metro style designed by</td>
<td>Modified version of regular</td>
<td>Modified Android</td>
</tr>
<tr>
<td></td>
<td>line, the original unaltered Android</td>
<td></td>
<td>Microsoft</td>
<td>Android interface (known to be</td>
<td>(criticized for worse looks)</td>
</tr>
<tr>
<td></td>
<td>interface)</td>
<td></td>
<td></td>
<td>slightly better looking)</td>
<td></td>
</tr>
</tbody>
</table>
Considering Accessibility
Android Tablets

- Accessibility features are not built in
  - Talkback, Kickback, and Soundback
  - Gesture Feature in Jellybean
  - Eyes-free keyboard
  - IDEAL Web Reader for internet
  - No zoom or contrast right now

- What operation system is tablet running
  - Jellybean, Ice cream sandwich, Honeycomb, Gingerbread

- Google Play Store to buy apps
  - Must have Gmail address
  - Can use Amazon gift cards

- Not the best to use with someone who has low vision and/or blind or cognitive disabilities
Accessible Android Apps

- Big Launcher- icons look darker and text is larger
- Vlingo Virtual Assistant and iris. (alpha)- voice command apps
- Text to Speech Toy- Text-to- Speech
- Eyes-free keyboard
- IDEAL web reader
- Mobile Accessibility Suite for AT&T users
  - 12 different apps / 30 day free trial - $99
- www.androidaccess.net
Demo: Built-in Accessibility Features

- VoiceOver
- Zoom
- Large Text
- Invert Colors — (white on black)
- Speak Selection
- Speak Auto Text
- Mono Audio
- Assistive Touch
- Guided Access
- Home-Click Speed
- Incoming Calls
- Braille Displays
Demo: Creating Keyboard Shortcuts

• Go to General => Keyboard and make sure Shortcut is turned on
• Go to Add New Shortcut
• Put in your Phrase
• Create Short Cut
• Example:
  – Phrase : Martha E. Rust, MS CRC, ATP
  – Shortcut is: MER
  – So when I type MER it will put in the above Phrase
  – OMW => On My Way!
Demo: Reader feature for Websites

• Read articles without distractions.
• Clutter disappears
• Add link into Reading List and finish later
Demo: iOS 6 NEW: Guided Access

- Helps individuals remain on task and focus
- Limit to one app/turn off home button
- restrict touch input on certain areas of the screen
Refurbished Tablets

• If you do not need the latest and greatest
  – Older models for a discount

• Want to make sure that refurbish tablets have been certified

• Look for at least 1 year warranty

• Many places now sell
  – Apple
  – BestBuy
  – Amazon
Our Favorite Apps!
Apps for Writing
Demo: Dragon Dictation

- Voice Recognition
- Dictate notes, emails, Twitter, and Facebook
- Supports many languages
- Cut, Copy, Paste
- Free
Catch Notes

- Free
- Capture ideas instantly with voice, photo, and text notes
- Use online AND offline on your mobile phone or tablet
- Share checklists to collaborate on to-do lists
- Set reminders
AudioNote

- Records your notes, meetings or lectures
- Can take notes by typing, stylus, or drawing
- Time stamps so you can go directly to where you want to hear
- Highlights notes when read back
- $4.99
ThumbPad

- Type with your thumbs on the iPad as you do on the iPhone
- $3.99
- Adjustable keyboard
- Customizable
  - Adjust key width
  - Height
  - Spacing
Swipelt and Swype

- Swipe across the keyboard to type words instead of tapping each key

- Free

- .99
Apps for Reading
Types of Reading Apps

• There are over 27,000 reading apps and over 500,000 books and publications

• Active Reading Apps
  – Studies show that comprehension improves by 38%-70%
  – Defined as eyes are on the screen following the words
  – Highlighting of words, sentences, and paragraphs

• Passive Reading App
  – No pictures
  – Usually synthetic Computer Generated Voices/ VoiceOver

  – Therese Willkomm
**FBReader TTS+ Plugin**

- Free
- eBook Reader
- Text-To-Speech plugin for FBReader for Android
- Can highlight whole sentences or paragraphs
- Change settings for voice and download voices
ClaroSpeak US

- Text-to-Speech
  - import documents and PDFs into ClaroSpeak from apps such as Mail, or import PDF, Word, Pages and other files directly from Dropbox using
- Change font and color
- Save text as an audio file
- Visual Tracking
- Send Text
Read 2 Go

• Read2Go is the most accessible DAISY eBook reader for iOS.

• You can browse, search, download, and read books directly from Bookshare using your Bookshare membership, as well as read DAISY books from other sources.

• Control over visual choices for font size and color, background and highlighting color, and text-to-speech preferences.

• Features word-by-word highlighting for multi-modal reading.

• $19.99
iScroll

• Free!
• Word-for-word narrated audio by real people
• Adjustable reading speed without pitch distortion
• Visually fast-forward and rewind through synchronized text
• Search eBook text and Audio by keyword or phrase
Apps for Organization/Memory
Scene and Heard

- Interactive context based communication aid and learning tool
- Build own scene and import or take pictures
- Record your own voice
- Designed to cater to a range of needs
- Has some built in scenes to try
- $49.99
iHomework

• Keep up-to-date with your school work, grades, to-do's, teacher's information

• School organizer that can be with you anywhere you go, whether that be on your iPhone/iPod touch, iPad, or Mac
• Keeper Password and Data Vault
  – Place to store and access your passwords and personal information
  – Launches websites and logs in
  – Military grade encryption

• Find My iPhone
  – Use another apple device to find your iPhone or iPad
  – Remotely lock or erase all data
  – Lock Mode that displays your contact number on lock screen
  – keeps tracks of locations
• Free
• Keep track of your cash and credit cards
• Pay your bills
• real-time alerts and reminders about upcoming bills, overage charges, and suspicious transactions
• Understand your debt
Reminders

• Built-in App
• Works with VoiceOver
• Organize your reminders
• Siri if have iPhone 4s or 5
• The new iPad
Use Bump™ to share contact information and photos by simply bumping two phones together. Just open Bump, hold your phones, and gently bump your hands together.

- [http://bu.mp/](http://bu.mp/)
- Free!
Key Ring

• One Place to store all reward cards
• Organized
• Android & Apple version
• Watch video
• [www.keyringapp.com](http://www.keyringapp.com)
• Free!
Talk with Us!

What are Your Favorite Apps for Writing, Reading Organization/Memory?
Questions
Webinar Evaluation

At the end of today’s webinar, we ask that you please take a moment to complete our survey:

https://www.research.net/s/TFLwebinar
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Disclaimer
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