Tablet Accessibility? App-solutely!

Liz Persaud and Martha Rust
*Tools for Life*
www.gatfl.org
www.amacusg.org
• With the introduction of Apps, we are experiencing a drastic technology evolution that is revolutionizing the field of Assistive Technology and producing positive life changing results for individuals with disabilities.
• Apps are assisting students by promoting more independence, increasing opportunities for inclusion, promoting depth of learning, providing equal access in educational settings and supporting smoother transitions.
• This session will provide participants with opportunities to explore tablets and their accessibility features as well as learn about some apps that can assist students at school.
Agenda

• Tools for Life Overview
• Understanding the Difference between Android & Apple
• Closer Look at Tablets
• Considering Accessibility
• Access the Tools For Life AppFinder
• Exploring a Few of Tools for Life Favorite Apps
AMAC Accessibility is a social change organization on a mission to create affordable services for governmental, private and non-profits organization working with individuals with disabilities. Services include e-text, braille, captioning, assistive technology, office management software and consulting.
Accessibility Made Smart

AMAC creates practical solutions that work, with a focus on utility, ease of use, and high quality.

- **Accessibility Consulting** focuses on organizational accessibility needs with evaluation, technical assistance, customer support, and website accessibility solutions.
- **Braille Services** produces customized projects from both print materials and electronic text including partial books and chapters or graphics only using cutting-edge technology.
- **Captioning Services** makes classrooms, meetings, labs and other audio environments fully accessible for deaf or hard-of-hearing.
- **Professional E-Text Producers** provide high-quality e-text in many formats such as PDF, DOC, DAISY, and HTML.
- **Certified Assistive Technology team** provides on-site and remote assessments, demonstrations, training and technical assistance for education, work, and daily living environments.

For more information, please visit our website at [www.amacusg.org](http://www.amacusg.org)
We’re here to help Georgians with disabilities gain access to and acquisition of assistive technology devices and assistive technology services so they can live, learn, work, and play independently in the communities of their choice.
Tools for Life
Georgia’s Federal AT Act Program

• TFL developed Georgia’s Plan for AT
• We 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
• Online Resources
  • www.gatfl.org - 12,000 unique visitors a month
• AT Lending Library
• AT Evaluations & Training
• AT Demos
• Resource and Assistance
• AT Funding Assistance
• DME Reuse
Who are We Serving

Over 54,000,000 individuals in the United States have disabilities that affect their ability to:
- see
- hear
- communicate
- reason
- walk
- perform other basic life functions

People with disabilities are the largest minority group in America.

This group cuts across racial, ethnic, religious, gender and age boundaries.

Anyone can become a member of this minority group at any time.

Public Law 108-364
Android & Apple
Which One???
So how do you like that new iPad?

http://www.youtube.com/watch?v=R6WuHzE-1fk
LET’S TAKE A LOOK AT SOME OPTIONS
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
Motorola XOOM

- Android System
- Must download accessibility features
- Compatible with Flash
- Camera
- Wi-Fi
- Uses micro SIM card for external storage
- Starts at $319.00
Nook HD

- eBook Reader and mobile tablet
- No Camera
- Access to shop both Google Play Store and Barnes and Noble
- Purchase apps
- Starts at $129
Apple iPad

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

Height: 9.50 in
Width: 7.31 in
Depth: 0.37 in
Weight: 1.44 lb
Apple iPad mini

- Multi-touch screen
- New iOS 6
- Millions of apps
- Surf web
- iTunes
- Videos
- Organization
- Accessibility
- Books
- Photos
- Speakers
- 5.0 megapixel camera
- Starts at $329

Height: 7.87 in
Width: 5.3 in
Depth: 0.28 in
Weight: 0.68 lb
Apple iPod Touch

- 5 Megapixel Camera
- Millions of apps
- Videos
- Surf Web
- Voice Over
- Organization
- Speakers
- Bluetooth
- New iOS 6
- Starts at $299 / $199 4th gen
Refurbished Tablets

• If you do not need the latest and greatest consider an 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
CONSIDERING ACCESSIBILITY

![Android Logo](android-logo.png)  ![Apple Logo](apple-logo.png)
# Comparing Tablets

www.bluebugle.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 optimized for tablets specifically)</td>
<td>Total of 700,000, out of which 275,000 optimized for iPad &amp; Mini</td>
<td>Around 100,000 (including phone apps) of which most are plain junk.</td>
<td>Around 60,000 (from Amazon’s special app store for Android)</td>
<td>Around 10,000 (available from Barnes &amp; Noble store for Android)</td>
</tr>
<tr>
<td>Software Updates</td>
<td>As it becomes available on Google (for Nexus, directly, and for other manufacturers, as they become available)</td>
<td>Apple releases updates</td>
<td>MS releases updates</td>
<td>Amazon releases updates</td>
<td>BN releases updates</td>
</tr>
<tr>
<td>Interface</td>
<td>As designed by manufacturer (on Nexus line, the original unaltered Android interface)</td>
<td>Icons &amp; widgets designed by Apple similar to Mac OS</td>
<td>Metro style designed by Microsoft</td>
<td>Modified version of regular Android interface (known to be slightly better looking)</td>
<td>Modified Android (criticized for worse looks)</td>
</tr>
</tbody>
</table>


Layout of the iPad
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
VoiceOver

- Standard feature on iPhones, iPads, and iTouches
- World’s first gesture-based screen reader
- DOES NOT WORK WITH ALL APPS
  - Does not work with many eBooks or textbooks
  - Works with built-in apps
- Built-in voices that speak 36 languages
- Adjustable speaking rate
- Echoes each character as you touch it when typing or can speak completed word instead.
- Speak Auto-text
- Has the rotor
- Works with all built-in applications
Helpful tips for VoiceOver

- **The Rotor**
  - Virtual control
  - Rotating 2 fingers on the screen like a dial
  - Changes the way VoiceOver (VO) moves through a document based on setting
  - Can use to navigate through web pages
Zoom & Invert Colors

• Zoom
  – Magnify entire screen of any application
  – Double-tap with 3 fingers
  – Can magnify 100%-500%
  – Now work with VoiceOver on!
    • iOS 6 September 2012

• Invert Colors
  – Reverse video effect works in all applications
  – Can be used with Zoom and VoiceOver
More Features

• Tactile buttons
  – Easily discernible buttons
• Large Text
  – Increase font size up to 56-point text in alerts, Calendar, Contacts, Messages, and Notes
Hearing

- Mono Audio
- Custom Vibrations for iPhone
  - Assign unique vibrations patterns
  - Change default in Sounds setting
  - Create your own custom vibrations
    - Save and name it
- LED Flash for Alerts
- Answer calls in Speaker Mode or Headset
  - Accessibility => Incoming Calls
- Visual Voicemails
- TTY mode
- FaceTime (Wifi)
- Closed Captioning
  - Supports playback of open captions, closed captions, and subtitling
Assistive Touch

- Lets you enter Multi-Touch gestures using one finger or stylus
  - Create custom gestures
- Supports the use of adaptive input devices
  - Headsets and switches
- Change Tracking Speed
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
  – Shortcut is: MER
  – So when MER is typed it will put in the above Phrase
  – OMW => On My Way!
Reader for Websites

- Read articles and web pages without distractions
- Clutter disappears
- Add link into Reading List and finish later
iOS 6 NEW: Guided Access

- Helps remain on task and focus
- Limit to one app / turn off home button
- Restrict touch input on certain areas of the screen
Surface

• 2 types
  – RT
  – PRO

• RT
  – Cannot download software
  – Does not support digital pen
  – Built in MS Office
    • Word, Powerpoint, Excel

• Pro
  – 30 day trial of MS Office
  – Ability to download software

• Open 3 Windows

• Tiles
  – Start screen

• Charms
  – Right hand side
Layout of Surface

- Power Button
- Camera
- Speaker
- Micro USB
- USB
- Charger

On Left Side
- Speaker
- Headphone Jack
- Volume control
Accessibility of Surface

- Uses Windows 8
  - Ease of Access
- Narrator
- Magnifier
- On-Screen Keyboard
- Windows Speech Recognition
Some Surface Apps

- **Maluuba**
  - Personal assistant app

- **Apollo**
  - Can be a calendar
  - See when the sun sets and rises

- **Barcode Generator**
  - Free way to create your own barcodes
Layout of XOOM

- Headphone jack
- Front camera
- Volume keys (on back)
- Power/sleep key (on back)
- Micro USB/charger & HDMI connectors
- Battery charging indicator
Layout of the Nook HD

- Volume
- Headphones
- Power
- Home Key
- Charger
Nook HD

- Download Books and Movies
- Access to Barnes and Noble Store
- Access to Google Play Store
- No Camera
- Does not read books out loud

- Note taking features
- Can Change:
  - Font
  - Line Spacing
  - Text Size
  - Background color
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
- Code Factory - Mobile Accessibility Suite for AT&T users
  - 12 different apps / 30 day free trial - $99
- www.androidaccess.net
TFL AppFinder

Search by:

- App Name
- Categories
  - Book
  - Education
  - Environmental Adaptations
  - Hearing
  - Cognition, Learning, Developmental
  - Navigation
  - Personal Care and Safety
  - Productivity
  - Communication
  - Therapeutic Aids
  - Vision
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)

WEBINARS

APR 18
Free for All Resources for Teachers and Students

APR 24
Assistive Technology and Adapted Recreation: A Perfect Match

Current Webinar Schedule
Webinar Archives

APP FINDER

For Living, Learning, Working, and Playing.

AT ONLINE EXCHANGE

gTRADE eTRADE, Georgia’s Online Equipment Exchange, encourages members to offer AT and DME for sale or donation to others who may benefit from using technology unneeded by others.
My Favorite Apps

You searched for: Learning, Cognition, and Developmental

<table>
<thead>
<tr>
<th>Logo</th>
<th>Name</th>
<th>Category</th>
<th>Device Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Tango Video Calls" /></td>
<td>Tango Video Calls</td>
<td>Learning, Cognition, and Developmental</td>
<td>IOS</td>
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<tr>
<td><img src="image" alt="i-pront" /></td>
<td>i-pront</td>
<td>Learning, Cognition, and Developmental</td>
<td>IOS</td>
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<td>Learning, Cognition, and Developmental</td>
<td>IOS</td>
</tr>
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<td><img src="image" alt="iBooks" /></td>
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<td>IOS</td>
</tr>
<tr>
<td><img src="image" alt="Say Text" /></td>
<td>Say Text</td>
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2013 IDEAS CONFERENCE

2013 Institute Designed for Educating All Students Conference
June 3 - 6, 2013
Epworth by the Sea, St Simons Island

- Submit a Proposal
- Conference Website
- Exhibitor Details

WEBINARS

<table>
<thead>
<tr>
<th>Month</th>
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<td>Free for All Resources for Teachers and Students</td>
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Current Webinar Schedule
Webinar Archives

APP FINDER

...for Living, Learning, Working, and Playing.

AT ONLINE EXCHANGE

gTRADE eTRADE. Georgia's Online Equipment Exchange.
encourages members to offer AT and DME for sale or donation to others who may benefit from using technology unneeded by others.
SOME OF OUR FAVORITE APPS!
**Darwin Wallet**

- Uses the camera to determine the currency
- Hold the bill in front of the phone's camera and the app will speak its value
- Free
Magnify

- FREE
- Turns Android phone into a digital magnifying glass with built-in flashlight
- Can use gestures anywhere on the screen:
  - Double-tap: Zoom out/in
  - Single-tap: Focus
  - Long-press: Turn light on/off
Hearing Saver

- Operates in the background to protect your ears automatically
- Simple way to avoid accidentally hurting your ears when plugging in or unplugging your Android device's wired or bluetooth headset
- Does take time to set-up
- FREE
MyMedSchedule

- Keep track of medication
- Reminders
- Refill Reminders
- Healthcare Provider Profiles
- Insurance Information
- Allergies
- Works across Platforms
- Free
- www.mymedschedule.com
Ginger App

- Free
- Grammar and Spell checker
- Personal Assistant
- Use it to correct text messages, Whatsapp messages, Gmail and Outlook emails, and even social media apps such as Facebook
Pageonce

• 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
Key Ring

- One Place to store all reward cards
- Organized
- Android & Apple version
- [www.keyringapp.com](http://www.keyringapp.com)
- Free!
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.

Free!
Dragon Dictation

- Voice Recognition
- Free
- Dictate notes, emails, Twitter, and Facebook
- Supports many languages
- Cut, Copy, Paste
- Android
  - Dragon Go!
  - Dragon Hands Free Assistant
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
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
Perfect OCR

- $3.99
- Uses the built in camera to scan documents
  Edit, copy, store, email documents
  Upload to online storage is as Evernote
  Does take practice for picture
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
Reminders

• Built-in App
• Works with VoiceOver
• Organize your reminders
• Siri if have iPhone 4s or 5
• The new iPad
MyScript Calculator

- Use your handwriting to write any arithmetic formula
- Write and calculate mathematical expressions in with no keyboard
- Scratch-out gestures to easily delete symbols and numbers
- Portrait and landscape operation
- Redo and undo functions
Money Counter Calculator

- iPad only
- Enter amount of coins and dollars and total is provided
- Free
Picture Scheduler

- Create visual tasks with attached audio, video or picture
- Tasks can have alarms
- Alarms can be repeated daily, weekly, monthly or you can select specific weekdays
- Tasks can be organized into categories with a picture
- Can hide task and reveal later
Speak it!

- Copy emails, documents, web pages, PDF files, and more; paste them into Speak it!, and have the text spoken back to you.
- Email text to speech files
- Make announcements over PA system
- Endless phrases and possible uses
- $1.99
BrailleTouch

• Prototype app for touchscreen mobile devices
• FREE Open Source app
• 32 words per minute with 92% accuracy with the prototype app for the iPhone
• Use of the six-key configuration so that the keyboard fits on the screen and users keep their fingers in a relatively fixed position while texting
• GA Tech Researchers

• Type with screen facing away
• Braille like typing
LookTel Money Reader

- iOS App
- $1.99
- Uses camera
- Speaks out loud
- Do not need to hold bill steady or in entire frame
iZen Garden

• Choose from 100s of objects, plants and creatures to place in your garden

• Rake the sand and share your creations

• Helps you to center your mind, relax your psyche and relieve your stress
Talk with Us!

What are Your Favorite Apps?
Our Question to You:
What have You Learned today?
Contact

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Martha.Rust@gatfl.gatech.edu

Disclaimer
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