

# Tracking Trends and Transferring Knowledge

**Martha Rust and Rachel Wilson**

With contributions by: Carolyn Phillips, Liz Persaud, Daphne Brookins, Ben Jacobs, and Ben Satterfield

[www.gatfl.gatech.edu](http://www.gatfl.gatech.edu)



[www.amacusg.org](http://www.amacusg.org)

# Hope

Hope begins in the dark, the stubborn hope that if you just show up and try to do the right thing, the dawn will come.

Anne LaMott



# 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)



# Tools for Life Mission

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](http://www.gatfl.org) - 5,000 unique visitors a month





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### 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:

### 2014 GATE SEMINAR

DEC  
5

Georgia Tech Student Center

### WEBINARS

OCT  
29

[Lighting the Path: A Guided Discussion on AT for Dementia](#)

NOV  
6

[Unlocking Communication in the Severely Impaired Child](#)

- Current Webinar Schedule
- Webinar Archives

### TOOLS FOR LIFE APPFINDER



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

### AT ONLINE EXCHANGE



### AT FUNDING GUIDE

**DOLLARS & SENSE**  
NAVIGATING THE AT FUNDING STREAM

# Why Assistive Technology?

- For a person without a disability, technology makes things easier.
- For a person with a disability, technology makes things possible.





# Staying off the FAST Track!

- ✓ **Frustration**
- ✓ **Anxiety**
- ✓ **Stress**
- ✓ **Tension**

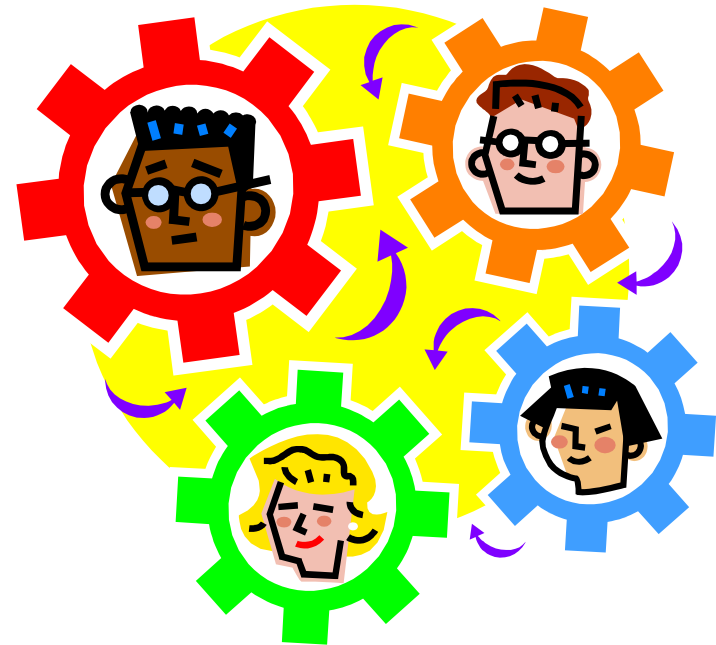
# Multidisciplinary Evaluation

## HATT/SETT Framework

- Identify **human/student** needs
- Determine **activity/environmental** demands and resources
- Define the **tasks** that the student must perform
- Recommend **tools**, technology, or techniques that will address needs

SETT – Joy Zabala

QIAT/HATT – Cook & Hussey





# Assistive Technology Services

- Any service that directly assists an individual with a disability in the selection, acquisition, or use of an assistive technology device.
- Includes:
  - Evaluating
  - Providing devices
  - Selecting, Designing, Customizing
  - Maintaining, Repairing
  - Coordinating
  - Training/Technical Assistance –student, family and school service providers
- Public Law 105-394 [29 USC 2201]



# Tracking Trends



# iOS 8 is Here: Typing made Easier



## iOS 8 Preview

What's New ▾



Our smartest  
keyboard ever.

iOS 8 makes typing easier by suggesting contextually appropriate words to complete your sentences. It even recognizes to whom you're typing and whether you're in Mail or Messages. Because your tone in an email may be different from your tone in a message.

[Learn more >](#)



# iOS 8 is Here: Access made Easier



## iOS 8 Preview



iCloud Drive.  
Any kind of file.  
On all your devices.

The good news: You can work on any file, anywhere. The bad news: You can work on any file, anywhere. That includes presentations, PDFs, images, and more — right from iCloud. On whichever device you're using, including your Mac or PC.

[Learn more >](#)





# iOS 8 is Here: Tracking Health made Easier

A screenshot of a web browser displaying the Apple website's iOS 8 Preview page. The browser's address bar shows the URL "http://www.apple.com/ios/ios8/". The page title is "Apple - iOS 8 - Overview". The main heading on the page is "iOS 8 Preview". Below this, there is a red heart icon in a white square, representing the Health app. The text "Health." is followed by "An entirely new way to use your health and fitness information." Below this, a paragraph states: "Now your activity tracker, heart rate monitor, and other health and fitness apps can talk to each other. Which means they'll be able to work even harder for you. And all the information is accessible in one easy-to-read dashboard." A link "Learn more &gt;" is provided. The main visual is a large image of two white iPhones. The left iPhone displays the "Dashboard" of the Health app, showing "Calories Burned" with a daily total of 467cal and a daily average of 428. It also shows a line graph of activity over time, with a peak of 136 on June 2. The right iPhone displays the "Calories Burned" screen, showing the same 467cal total and 428 average, with a line graph showing activity over time, with a peak of 136 on June 2. The bottom of the screenshot shows a Windows taskbar with various application icons and a system clock indicating 6:59 PM on 6/11/2014.

# *Microsoft, Changing Tack, Makes Office Suite Free on Mobile*

By NICK WINGFIELD NOV. 6, 2014



Satya Nadella, Microsoft's chief executive, last month in San Francisco. Robert Calbraith/Reuters







Georgia Institute of Technology

# Human Factors & Aging Laboratory

*We are able to implement various methodologies  
to address many types of research questions -*

*Tracy Mitzner*

[Overview](#)[Projects](#)[Opportunities](#)[Publications](#)[People](#)[Photos](#)[News](#)[Links](#)[Contact Us](#)

## Points of Excellence

- Our research advances both science and practice
- We aim to improve quality of life for adults of all ages
- Students graduating from our lab are very successful

## Resources

[!\[\]\(166772600a13ad0a433053f90fe45649\_img.jpg\) Senior-to-Senior Brochure](#)

## Overview of the Human Factors and Aging Laboratory



[Increase/Decrease Font Size](#)

A<sup>+</sup> A<sup>-</sup>

[Participant Information \(PDF\)](#)

[!\[\]\(aceb1790ece33f2eac474d4a9431c6d6\_img.jpg\) Older Adults](#)

[!\[\]\(b9742ff0bb3da904abeeee81c2bcb456\_img.jpg\) Younger Adults](#)

## News





Georgia Institute of Technology

# Human Factors & Aging Laboratory

*We maintain a basic theoretical grounding while solving applied problems. - Andrew Mayer, Alumnus.*

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## Projects

### Healthcare

[Keeping Older Adults Healthy in Senior Living Communities](#)[Understanding Use Errors for Medical Devices](#)[Understanding Older Adults' Memory Issues in the Home](#)[Gist Memory Project](#)[Age-Related Differences in Fraction Comparison](#)[Human Factors Issues of Home Health Care Providers](#)[Pain Management Among Older Adults](#)

Below is a list of current projects in the HFA lab. To view a list of past or completed projects, please visit our [archived projects page](#).

### Healthcare



#### Identifying Strategies to Keep Older Adults Healthy in Senior Living Communities

Contact Person: [Sara McBride](#)

Many older adults choose to make the transition into senior living

communities, such as independent living or assisted living. We are interested in understanding the types of strategies used and decisions made by staff in these types of communities that are aimed at supporting residents' health. By identifying these processes, we may be able to improve training or design decision support systems that could facilitate portions of the decision making process.

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*Participant Information (PDF):*

[Older Adults](#)[Younger Adults](#)

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## Home







Create a world without ALS.

Find services

-Select Service-



Search

Sign up for our newsletter

your email address

Signup

Login



Home

About ALS

About Us

Our Research

In Your Community

Advocate

Get Involved

Donate

## For People with ALS and Caregivers

Newly Diagnosed

ALS Registry

Military Veterans

Augmentative Communication

Caregivers

Resources

- ALS Insight Newsletter
- Living with ALS Manuals
- ALS Association Brochures
- Webinars
- Our Videos
- Factsheets
- Library Order Form
- Products to Aid in Daily Living
- Informative Web Links

[Home](#) > [For People with ALS and Caregivers](#) > [Resources](#) > [Our Publications and Videos](#) > [Factsheets](#)

[Share](#) [Print](#)

*fyi...*  
*for your information*

## Brain-Computer Interface (BCI)

By Betts Peters, M.A., CCC-SLP and Melanie Fried-Oken, Ph.D., CCC-SLP

### Q: What is a brain-computer interface?

A: A brain-computer interface (BCI), also known as a brain-machine interface, is a system that allows a person to control a computer or other electronic device using only his or her brainwaves, with no movement required.

### Q: What is BCI used for?

A: BCIs can be used for communication, computer access, or control of devices such as a wheelchair or prosthetic arm, among other applications. Virtually anything that can be controlled by a computer could, potentially, be controlled by a BCI. BCI is being examined as a rehabilitation device to help people re-gain motor skills that are lost from stroke, as well as a prosthetic device to replace or compensate for motor skills that will never return.

### Q: What does BCI look like?

A: There are basically two types of BCI systems: invasive and noninvasive. Invasive systems require surgery to implant electrodes on or near the surface of the brain. Most noninvasive systems use electrodes placed on the

TECH INNOVATION

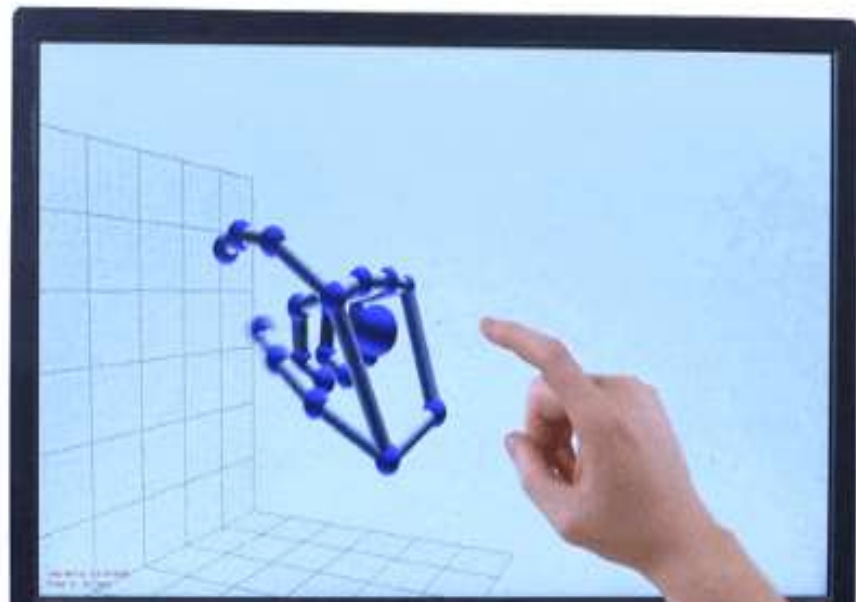
# This Technology Could Change the Way Deaf People Live

Katy Steinmetz / San Francisco @katysteinmetz  
Oct. 22, 2014



**A San Francisco company is crowdfunding a project to make sign-to-word communication the most seamless it's ever been**

Ryan Hait-Campbell says his San Francisco company's invention is



# VGo Telepresence Robot

- Enables a person to replicate themselves in a distant location and have the freedom to move around as if they were physically there
- Reduces travel costs
- School
- Hospital
- Work from home



# Kubi



- Dock your tablet for remote pan and tilt controls
- See and interact with people during a conference call
- Use any Video Client: Skype, FaceTime, Google Hangout, etc.
- Cloud Control



# Google Glass

- Wearable Technology
- Bluetooth Connection
- Navigate
- Make a Call
- Send a Message
- Take a Picture or Video
- Get the News
- Search
- Google Play Music
- Google Now
- Be Social
- Internal Compass
- \$1500



# Environmental Controls

<http://getvera.com/controllers/veralite/>



HOME

PRODUCTS

APPS

ABOUT US

BLOG

SUPPORT

BUY

CONTROL

How It Works ▶

## VeraLite

Smart Home Controller

Home / Controllers / VeraLite

Description

Features & Specs

Warranty & Support

### YOUR NEW ASSISTANT

HOME CONTROL DOESN'T HAVE TO BE COMPLICATED OR EXPENSIVE, SO WE CAME UP WITH THE VERALITE SMART CONTROLLER, WHICH IS SIMPLE AND INEXPENSIVE. IT MAY BE SMALL, BUT IT'S CAPABLE OF BIG THINGS!

- Easily manages up to 70 devices
- Plug and play with your Internet connection
- Controls over 750 smart products of all kinds
- Custom text and email alerts for any situation



VeraLite gives you easy control over lights, cameras, thermostats, door locks, alarm systems and more. Plus you easily can add intelligence to almost anything electronic in your home, and VeraLite can control them too. All the smart home benefits you've been looking for are right here in this easy, inexpensive add-on to your home network.



AN AMAZING AMOUNT OF SMART  
TECHNOLOGY THAT FITS IN THE  
PALM OF YOUR HAND.

VeraLite gives you easy control over  
lights, cameras, thermostats, door locks,  
alarm systems and more.

**ONLY \$179.95**

WHAT'S IN THE BOX



Georgia's Assistive  
Technology Act Program

# Tasker



Tasker is a phone automation application that allows you to really unleash your android device's capabilities.

Tasker in a nutshell is a program that tells your device “When this happens, do this!”

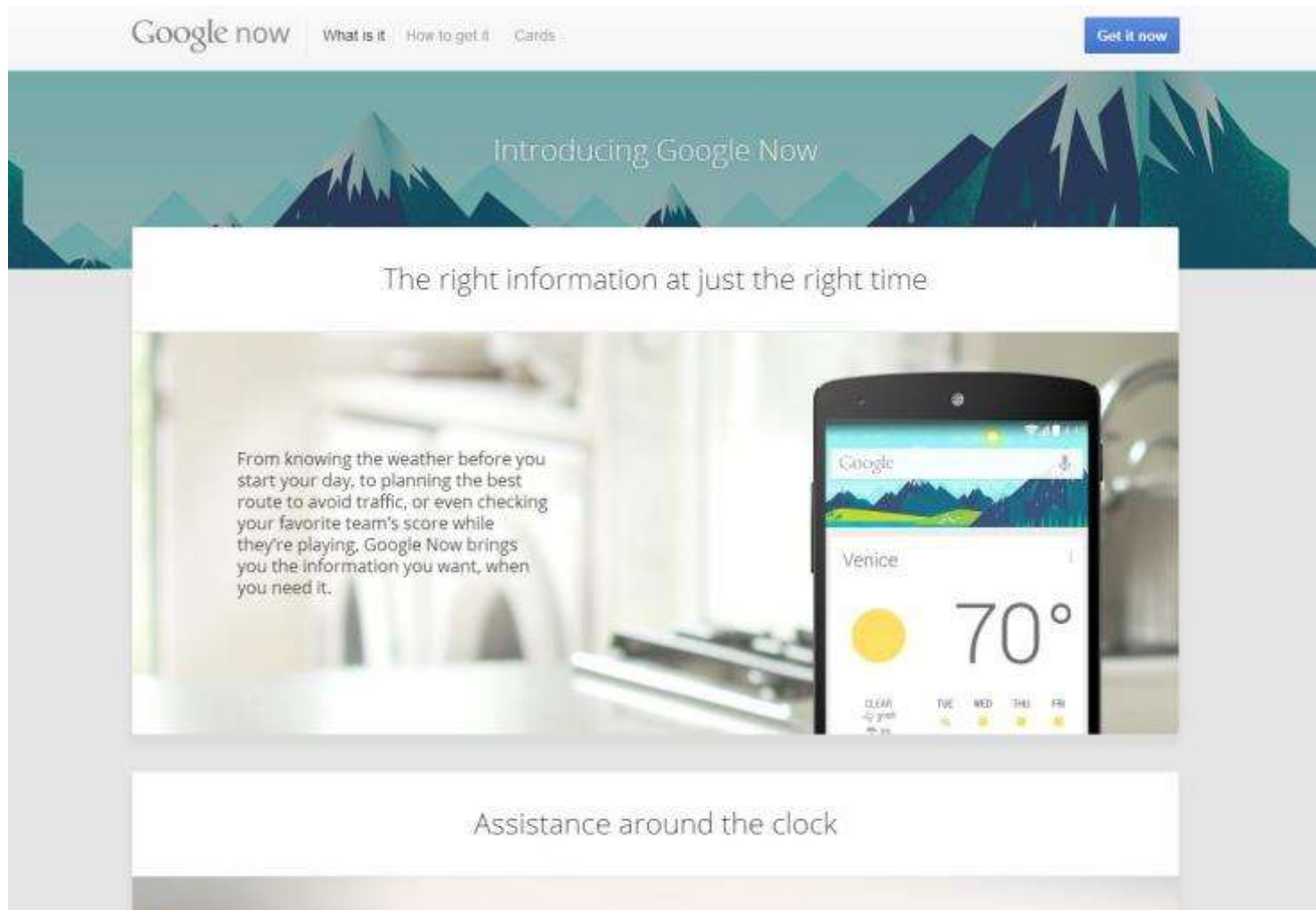
- “When something is plugged into the headphone jack, open my music app”
- “When I open the navigation app, turn GPS on”
- “When my phone is connected to this cell tower, turn on wifi and connect to my home wifi”

# **The Future of this OS is Limitless**

- Google has the futuristic ambition and the funds to take Android to unprecedented heights. In many areas — such as predicting what users will do next.
- Google Now knows that in the morning you're getting ready for work and will tell you about the traffic.



# Google Now



Google now   What is it   How to get it   Cards   [Get it now](#)

## Introducing Google Now

The right information at just the right time

From knowing the weather before you start your day, to planning the best route to avoid traffic, or even checking your favorite team's score while they're playing, Google Now brings you the information you want, when you need it.

Assistance around the clock

# Exploring Assistive Technology

# Video Screen Microscope



- Digital Microscope that captures videos and pictures
- Internal Memory and SD Card Slot
- LED Lighting
- 3.5 inch color screen

# Transformer



- Portable video magnifier
- Moveable camera to see items far away
- USB port connects its to a lab top
- Great for students and employees with low vision
- Can change background colors





# Roomba

- Robot vacuum cleaner
- Cleans hardwoods and carpet
- Set Schedule
- Home base for charging
- Built in sensors to avoid stairs
- Great for those who can not use a handheld vacuum



# Automatic Feeder

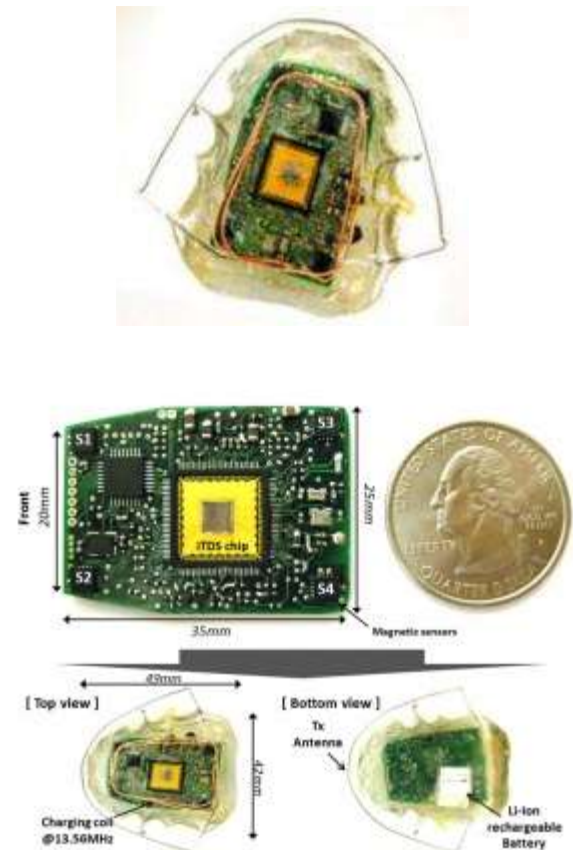
- Mealtime Partner
- Different mounts
- Battery operated
- Bowl tops controls amount of food
- Control Pause time between spoonful
- Adjustability of the spoon



# Tongue Drive System

- Wireless device that enables people with high-level spinal cord injuries to operate a computer and maneuver an electrically powered wheelchair simply by moving their tongues
- dental retainer embedded with sensors
- detect movement of a tiny magnet attached to the tongue
- Testing with iPods and iPhones

- *GA Tech*
- *Shepherd Center and Rehab Institute of Chicago*





## Products / New Products

ASL brings innovative products to our clients! We are here to help each client reach their full potential – our team creates products and designs as a direct result of the needs of those we serve. Our goal has always been independence and equal rights for those we work with....

### Driver Control Packages

100 Series

ASL 138 Extremity Control Joystick



Specialty Products & Adaptors

### Electronic Switches

200 Series

ASL 215 Round Proximity Sensor with Mono Port and 24 Volt Connector



Specialty Products & Adaptors

### Electronic Switches

200 Series

ASL 215 Round Proximity Sensor 3 Pin



Specialty Products & Adaptors



# Live Scribe Pen

- Records what it hears and what you write
- Uses specific paper for playback
- Connects to computer by USB for saving
- Tap on note and playback from there
- Jump forward and back in notes
- Dictionary
- Translation Apps
- Purchase Apps online
- [Demo](#)



# **Exploring Mobile Technology: Know Your Tablets**

# Comparing Tablets

Property	Android	iOS	MS Windows	Amazon Kindle	Barnes and Noble Nook
Number and variety of Tablets	Over 11,000	iPad and iPad mini	Several	Kindle Fire and Fire HD	Nook HD
Operating System	Android (Jelly bean)	ios7 (Sept 18, 2013)	Microsoft Windows 8	Modified version of Android ICS	Modified version of Android- Microsoft bought 2013
Apps	860,815 (AppBrain.com updated 9/13/13)	900,000 with 375,00 optimized for iPad/mini (mobileburn.com updated June 2013)	104,917 (winbeta.org updated July 4, 2013)	50,000 in Amazon App store also shop in Google Play Store (theverge.com updated August 2013)	10,000 in Barnes and Noble and have access to Google Play store (barnesandnoble.com updated August 2013)
Software Updates	As it becomes available on Google	Apple releases updates	MS releases updates	Amazon releases updates	Barnes and Noble releases updates
Interface	As designed by manufacturer	Icons and widgets designed by Apple	Metro style designed by Microsoft	Modified version of regular Android	Modified version of regular Android

# Apple iPad/ mini iPad

- Multi- touch screen
- New iOS 8
- Millions of apps
- Surf web
- iTunes
- Videos
- Organization
- Accessibility
- Books
- Photos
- Speakers
- New iPad had 5.0 megapixel camera
- Starts at \$499/\$399 and mini \$329





# 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
- Switch Access
- Braille Displays





# Microsoft Surface



http://www.microsoftstore.com/store/msusa/en\_US/...

Top 10 Best Tablets Compariso...

On sale: Surface, PCs, Xbox ...

Amazon.com : Samsung Galax...

File Edit View Favorites Tools Help

Great prices on tablets [Shop all tablet deals](#)



**Save up to \$70.00**

Surface

★★★★★ (65)

- The original tablet at a great price
- Built-in kickstand
- Office Home & Student 2013 RT
- Up to 8 hours battery life



**Save \$300.00**

Surface Pro

★★★★★ (92)

- The laptop in tablet form
- Built-in kickstand
- Surface Pen included
- Huge savings while supplies last



**Save \$80.00**

Toshiba Encore WT8-A32M  
Touchscreen Tablet

★★★★★ (3)

- 8-inch HD touchscreen
- Intel Atom Z3740
- 2GB memory/32GB eMMC
- Up to 7 hours battery life



**Save \$50.00**

Lenovo ThinkPad 8 Touchscreen

★★★★★ (8)

- 8.3-inch Full HD display
- Intel Atom Z3770
- 2GB memory/64GB eMMC
- Up to 8 hours battery life

# Surface Pro 3

- June 2014
- 12 inch screen
- Up to 9 hours of web browsing
- Windows 8.1
- Surface pen
- Multi positioning kickstand
- Palm Block Technology
- Install Software
- Starting at \$799



# Surface RT and Pro

- 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

# Accessibility of Surface



- Magnetic Attachments
  - Charger and keyboards
- Uses Windows 8
  - Ease of Access
- Narrator
- Magnifier
- On-Screen Keyboard
- Windows Speech Recognition
- Picture Password





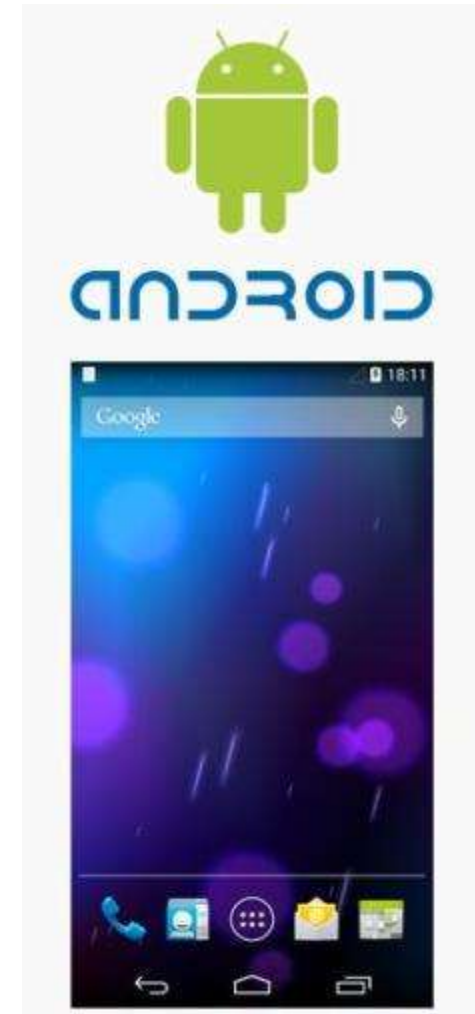
# Surface Apps: OneNote



- Save all your notes in the cloud
  - All devices
- Share for viewing and editing
- Save any web page to OneNote and view it later, online or offline
- Send emails to [me@onenote.com](mailto:me@onenote.com)
  - Put into your notebook.
- Take photos of documents and whiteboards

# The World's Most Popular Mobile OS

- Android powers more than a billion phones and tablets around the world.
- It's customizable, yet easy to use, and since it's made by Google, it works seamlessly with all your favorite Google apps.



# Google Nexus Tablet



- 7 inch screen
- Up to 9 hours of HD video playback
- 10 hours of web browsing
- Made to Share
  - Customize space and personal homepage
- Starts at \$229

# Kindle Fire HD/HDX

- eBook Reader and mobile tablet
- Front facing camera
- Access to Amazon apps
- Free cloud storage for Amazon purchases
- Purchase Apps
- 7inch or 8.9 inch screen
- 'Mayday' button HDX
- Starts at \$139- HD
- \$199- HDX



# 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

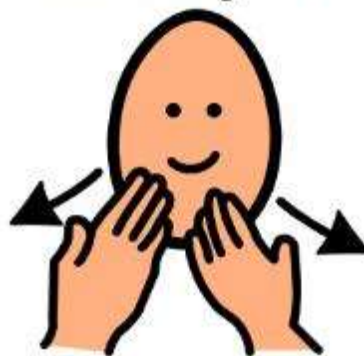




**Our Question to You:  
What have You Learned today?**

# Thank You!

thank you



# Contact



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## Disclaimer

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