



# **Tracking Trends and Transferring Knowledge: Exploring Innovative Technologies for Postsecondary and Transition Planning Success**

Session presented by:  
Carolyn Phillips and Liz Persaud  
AMAC Accessibility Solutions and Research Center  
College of Architecture  
Georgia Institute of Technology

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

# Session Description



## **At the end of today's session, you will understand:**

The world around is evolving at an astounding rate. Assistive Technology, or AT, has been foundational in this evolution and a catalyst for positive life-changing results for individuals with disabilities.

Beginning a path that leads to college or technical school can be an overwhelming experience. Students need independent access to the curriculum to become life-long learners. AT can increase opportunities for education, social interactions, and employment especially when there is a focus on technology like tablets, apps, wearables and robotics. With such a wide range of assistive technology solutions, how does one include their choices into transition planning?

This presentation will provide a brief overview of the AT consideration process including hands-on demonstration of cutting-edge technology aligned to postsecondary and transition planning. Join presenters for a discussion on what's new in AT, in the AT community and explore where we were, where we are, and where we are going.

# Session Presenters



**Carolyn Phillips**  
**Tools for Life Director**

Carolyn P. Phillips is nationally recognized in the field of assistive technology and disabilities. Carolyn serves as Director and Principal Investigator of Tools for Life, Georgia's Assistive Technology (AT) Act Program at Georgia Tech | AMAC.



**Liz Persaud**  
**Training and Outreach  
Coordinator**

Liz Persaud is a nationally recognized keynote and public speaker focused on technology and disabilities. She currently serves as the Training and Outreach Coordinator of Tools for Life, Georgia's Assistive Technology (AT) Act Program at Georgia Tech | AMAC Accessibility Solutions.

# 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)

# Mission



To help Georgians with disabilities gain **access to and acquisition of** assistive technology devices services so they can **live, learn, work, and play independently in the communities of their choice.**

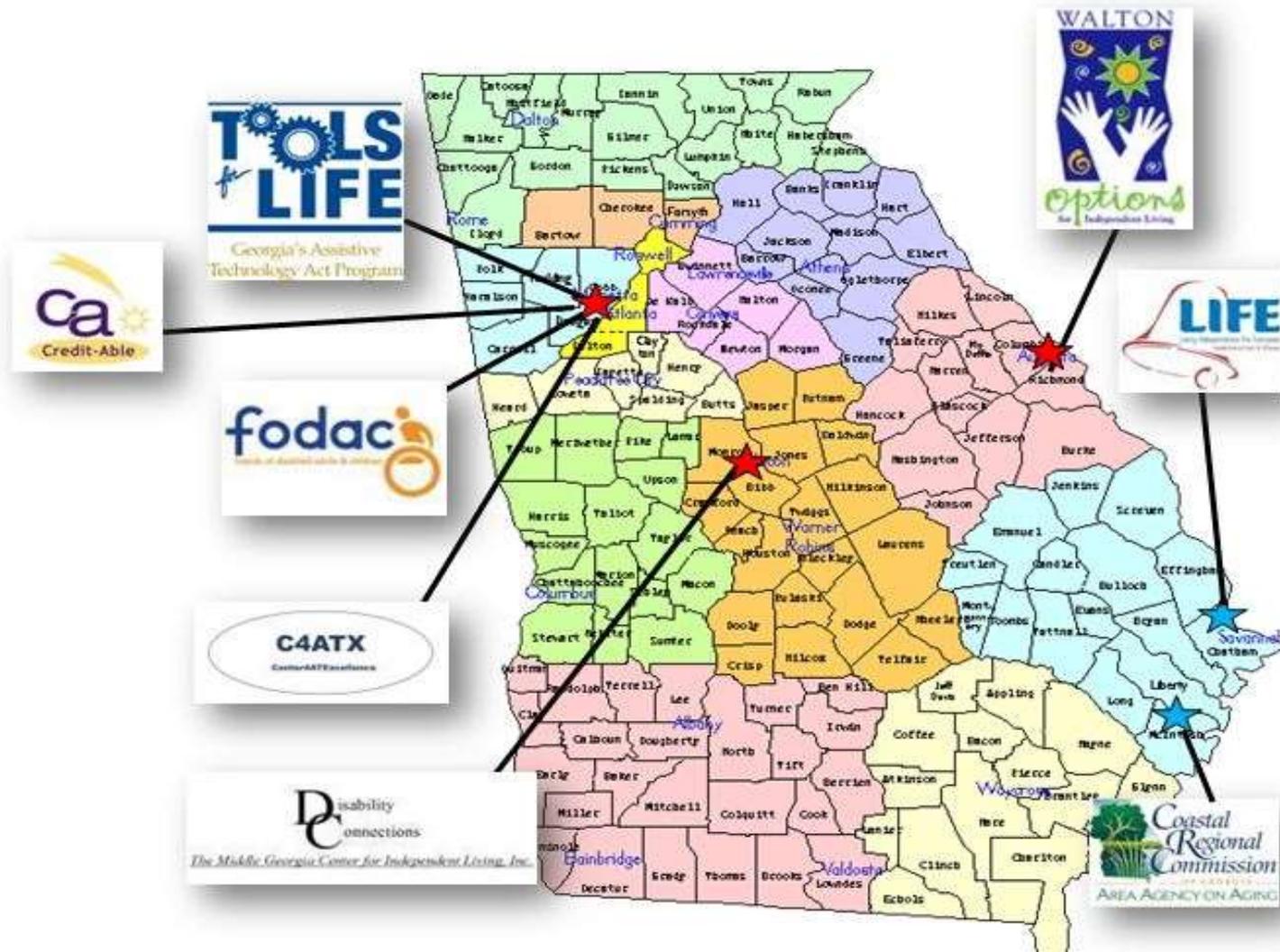


# Tools for Life, Georgia's Federal AT Act Program



- **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 & Outreach Centers
  - AT Lending Libraries
  - Training and Demonstrations
  - AT Reuse
  - AT Funding Education/Assistance and Resources
- **Online Resources**
  - [www.gatfl.gatech.edu](http://www.gatfl.gatech.edu) - 5,000 unique visitors a month

# Your TFL Network is Growing!



TRAINING

FUNDING

PUBLICATIONS

TFL WIKI

MEET THE TFL TEAM

MEET THE  
ADVISORY COUNCIL

DIRECTIONS/MAP

JOIN OUR  
MAILING LIST

SCHEDULE A TOUR

Welcome AT Services Try AT Get AT AT Guides Research



### 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

### ROOM TOWN HALL MEETING

MAR  
19

Goodwill of North Georgia  
154 Hicks Drive, Rome, Georgia  
30161

### WEBINARS

MAR  
19

[Assistive Technology Solutions for Writing](#)

MAR  
26

[Diving Beneath the Surface: Selecting Tablets, Apps and Accessibility Features](#)

APR  
2

[Creating Accessible Documents for Individuals with Learning Disabilities](#)

- Current Webinar Schedule
- Webinar Archives

### TOOLS FOR LIFE APPFINDER



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

### AT ONLINE EXCHANGE



# What is Assistive Technology?

- Assistive Technology (AT) is any item or piece of equipment that is used to increase, maintain or improve the functional capabilities of individuals with disabilities in all aspects of life, including at school, at work, at home and in the community.
- Assistive Technology ranges from no/low/light tech to high tech devices or equipment.



# Defining Universal Design



- **Universal Design makes things *safer, easier* and *more convenient* for everyone.**
- Universal Design involves designing products and spaces so that they can be used by the widest range of people possible.

# In the Shadows - Mainstream



- Tim Cook, Apple Chief Executive
- 2013 speech at Auburn University
  - ...people with disabilities are "in a struggle to have their human dignity acknowledged."
  - "They're frequently left in the shadows of technological advancements that are a source of empowerment and attainment for others."

# Mainstream Example: Mobile/Smart Phones



- iPhone - mobile phone in the mainstream market.
- Apple included a screen reader in the IOS for every iPhone.
- Increased Access for everyone – especially individuals with disabilities
- Decreased Cost – not as costly as it would be for a company specializing on screen readers
- Moved us Out of the Shadows, Into the Light!

# iOS 8 – released in 2014

## iOS 8 Preview



### 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 >](#)



# Why Assistive Technology?

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



# Assistive Technology



## Assistive Technology Device

...any item, piece of equipment or product that is used to increase, maintain or improve functional capabilities of individuals with disabilities.

- Public Law 105-394 [29 USC 2201]

### Low/No-tech

- pencil grip
- adapted books
- slant board
- highlighters, tape
- magnifiers
- color coding
- read to out loud
- picture schedule
- strategies for memory
- colored transparencies
- Proof readers
- note taker

### Mid-Tech

- word prediction
- text to speech
- speech to text
- spell checkers
- talking calculators
- digital recorders
- organizers
- e-books
- adapted keyboard
- adapted mouse
- adapted toys
- CCTV
- apps under \$100

### High-Tech

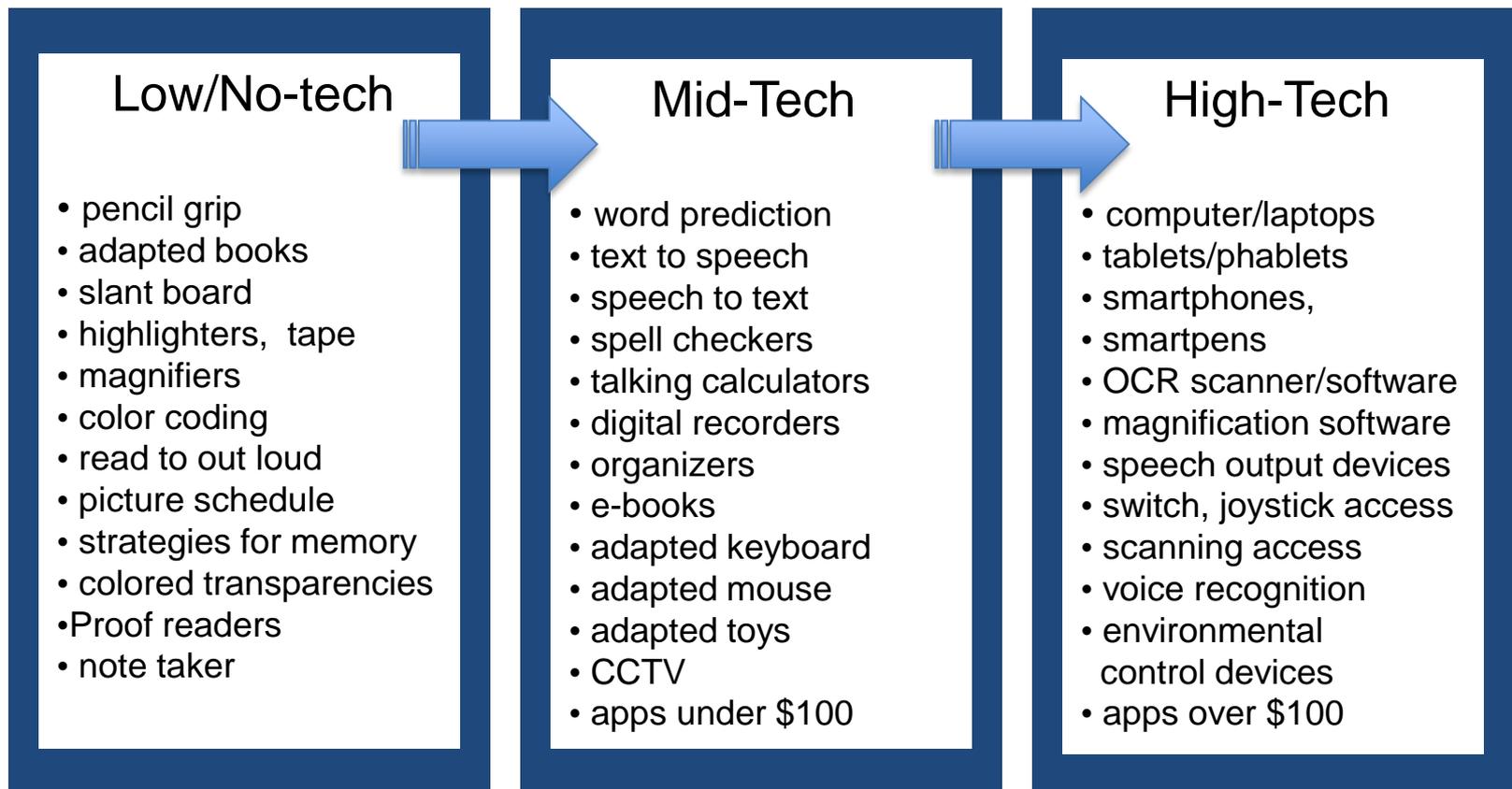
- computer/laptops
- tablets/phablets
- smartphones,
- smartpens
- OCR scanner/software
- magnification software
- speech output devices
- switch, joystick access
- scanning access
- voice recognition
- environmental control devices
- apps over \$100

# Assistive Technology Continuum



## Observations & “Hanging out with Intent”

Assistive Technology is a **continuum of tools, strategies, and services** that match a person’s needs, abilities and tasks.



# The “FAST” Track



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

# AT Helps!



- Assistive Technology strategies and solutions can help support individuals with a variety of disabilities in all areas of life. AT helps to bridge the gap and provide solutions to problems with:
  - speaking
  - hearing
  - seeing
  - moving around
  - getting places
  - memory
  - cognition (thought processes and understanding)
  - daily living activities, such as dressing and preparing meals
  - socializing

# Visit the TFL AppFinder



- TRAINING
- FUNDING
- PUBLICATIONS
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Tools for Life and the TFL Network work collaboratively together to accomplish our vision through:

**IDEAS CONFERENCE**

**JUN 2** Edworth by the Sea, St Simons Island

**WEBINARS**

**MAY 28** Georgia's Leadership Model for Increasing Accessible ICT in State Government

**JUN 25** Learn More and Do More: Explore Accessibility and Apps for Android

**JUL 30** Position for Work & Career: Look at Workplace Accommodations & Assessments

- Current Webinar Schedule
- Webinar Archives



**AT ONLINE EXCHANGE**

**gTRADE**

# TFL AppFinder



## Search by:

✓ **App Name**

✓ **Categories**

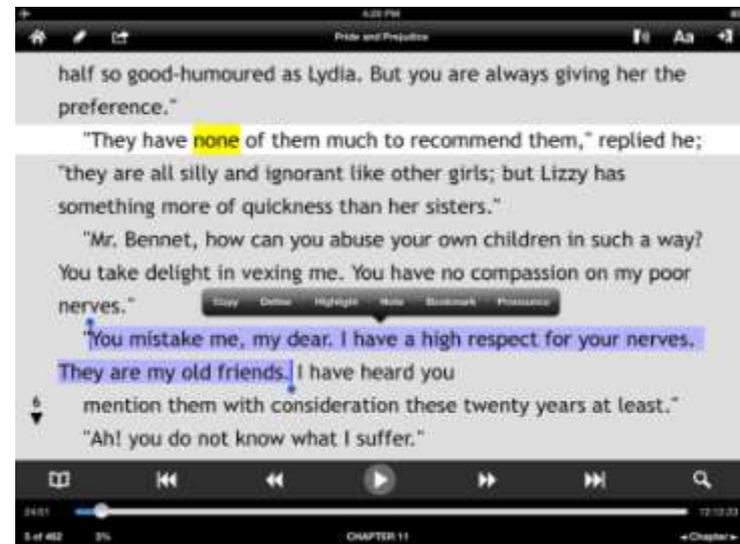
- Book
- Education
- Environmental Adaptations
- Hearing
- Cognition, Learning, Developmental
- Navigation
- Personal Care and Safety
- Productivity
- Communication
- Therapeutic Aids
- Vision

# Voice Dream



- Text to Speech
- Highlights as it reads
- Import
  - Bookshare
  - Dropbox
  - Gutenberg
  - Word Doc
  - PDFs
- Buy different voices
- Change rate of speed

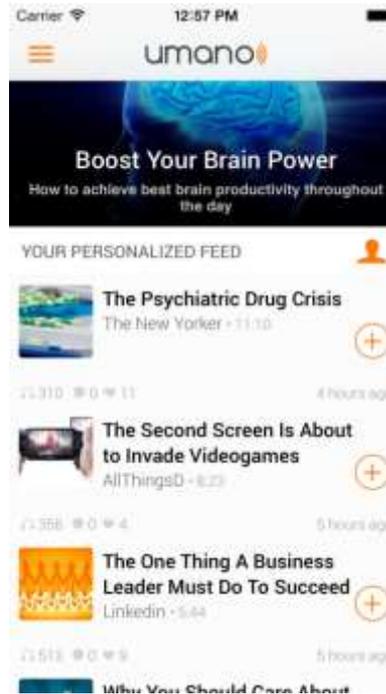
- Download for later reading
- \$9.99



# Umano



- News read to you by real people
- Make a playlist of articles
- Download to listen to offline
- Upgrade to premium for \$3.99/ month
- Free

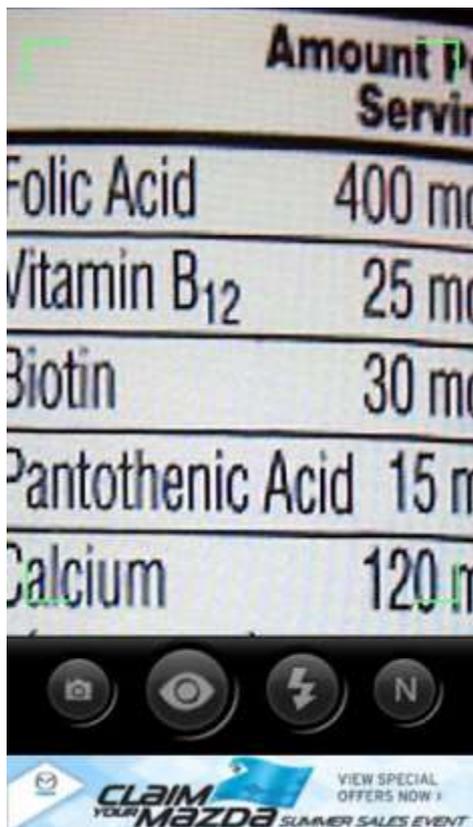


# Perfect OCR



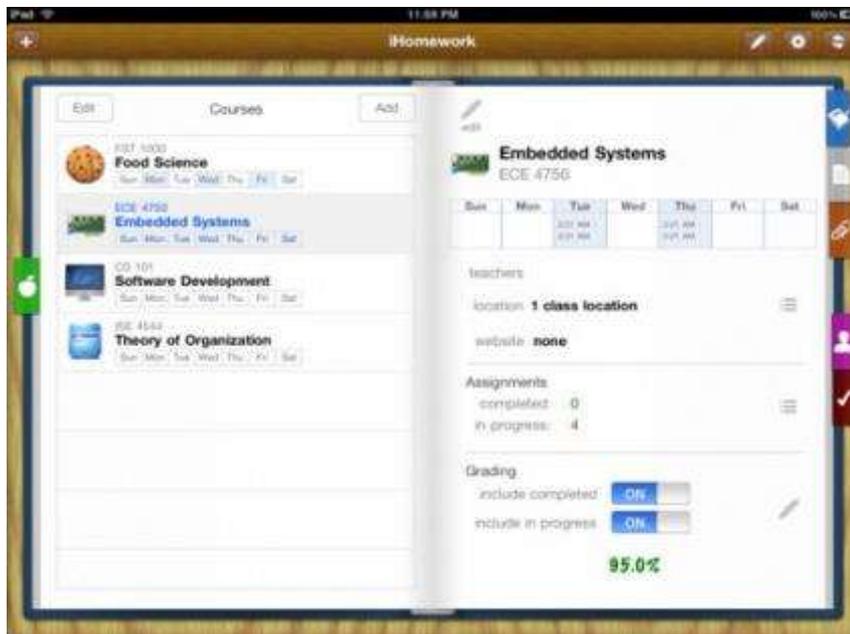
- \$3.99
- Uses the built in camera to scan documents
- Edit, copy, store, email documents
- Upload to online storage is as Evernote
- Does take practice for picture

# 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

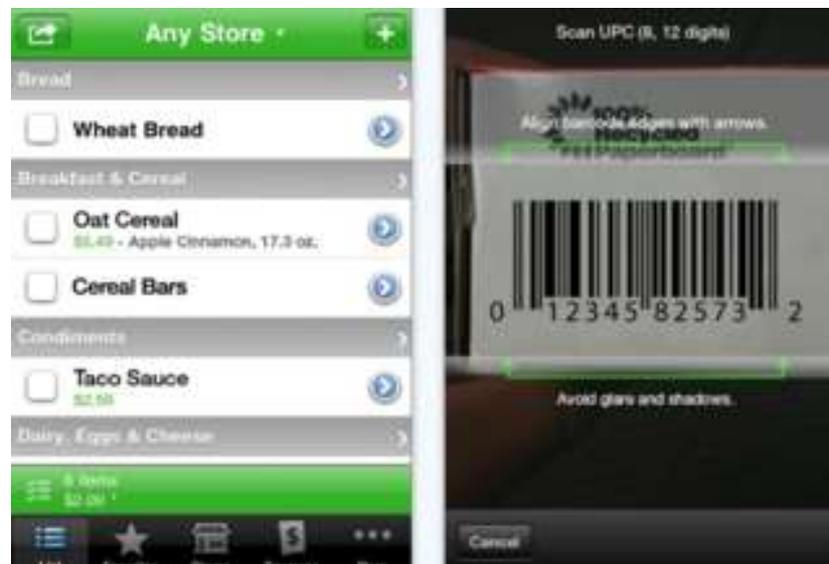
# iHomework



- 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

# Grocery IQ

- Pictorial shopping list
- Customize different lists for different users using pictures on camera roll
- Add your own items and categories
- Assign item prices
- Assign item locations (for example, aisle numbers)
- Several accessibility options
  - text-to-speech
  - uses large easy-to-see images
  - item prices automatically totaled
- \$4.99



# MyMedSchedule



- Keep track of medication
- Reminders
- Refill Reminders
- Healthcare Provider Profiles
- Insurance Information
- Allergies
- Works across Platforms
- Free
- [www.mymedschedule.com](http://www.mymedschedule.com)

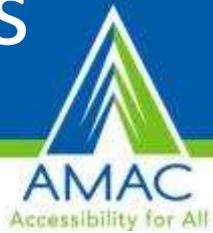


# Breathe2Relax

- Portable stress management tool
- Detailed information on the effects of stress on the body
- Instructions and practice exercises to learn the stress management skill called diaphragmatic breathing



# Common AT Solutions for ICT Access



- Text-to-Speech
- Speech Input
- Display Solutions
  - Magnification
  - Contrast
- Writing Solutions
  - Word Prediction
  - Grammar Check
- Alternative Access

# Text-to-Speech



- Often assist with:
  - reading, studying, and writing,
  - may include optical character recognition (OCR),
  - word prediction,
  - tools to highlight, extract, and organize text, and
  - homophone checkers.

# Screen Readers



- Screen readers are a form of AT useful to individuals who are blind, vision-related disabilities, mobility-related disabilities, print-related disabilities or learning disabled.

# Kurzweil 3000



- Text-to-Speech software
- Helps improve reading speed and comprehension
- Note taking capabilities
  - Different color highlighters
- firefly
  - Access many features of Kurzweil through the internet
  - firefly demo
- Free download trial
  - [www.kurzweiledu.com](http://www.kurzweiledu.com)
  - Kurzweil 3000 Demo



**Kurzweil**  
EDUCATIONAL SYSTEMS®

# WYNN

- What You Need Now
  - Freedom Scientific
  - Scanning and Reading software
  - Highlights text as spoken
  - Icon friendly
  - Built in study tools
- Internet Features



# TextHelp



- Text-to- Speech software
- Helps improves reading skills
- Built in text and picture dictionaries
- Study skills highlighter
- Has a Google Chrome version
- [www.texthelp.com](http://www.texthelp.com)



# TextHelp for Google



- Open a webpage within the Chrome Browser
- Click on the Read&Write for Google icon to open up the toolbar (click on the icon again to close out the toolbar later)



# Premier Software



- Compose
- Predict
- Create study notes and much more!
  
- [www.readingmadeeZ.com](http://www.readingmadeeZ.com)

The screenshot shows the homepage of readingmadeeZ.com. At the top left is the Premier Literacy logo. The main header includes the site name 'readingmadeeZ.com', navigation links for 'Home' and 'About Us', and a Google Custom Search box. Below the header is a banner image of a tablet. A green navigation bar contains links for 'PRODUCTS', 'EDUCATIONAL SOLUTIONS', 'TRAINING', 'SUPPORT & VIDEOS', 'FREE TRIALS', 'ORDERING OPTIONS', and 'CONTACT'. The main content area features a 'LITERACY TOOLS' sidebar with a list of products including 'English Talking Dictionary', 'E-Text Reader', 'PDF Equalizer', 'Scan and Read Pro', 'Talking Calculator', 'Talking Word Processor', 'Text-To-Audio', 'Universal Reader Plus', 'Write Now', and 'Worksheet Wizard'. The central focus is the 'Write Now - Version 4.0' product page, which includes a large graphic with the text 'Write Now' and 'Compose, Predict, Assist, all RIGHT NOW', along with a 'BUY NOW \$59.95' button. Below this graphic are links for 'Overview | Features | Screenshots' and purchase options: 'Buy \$59.95 - Download' and 'Buy \$59.95 - CD Version'. On the right side, there is a 'THE PREMIER STORY' section with two sub-sections: 'The Possibility of Premier...' and 'The Power of Premier...', each containing a short paragraph of text.

# Ginger

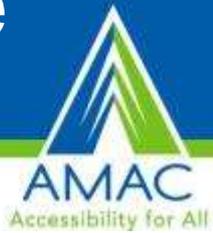


- Online grammar and spell checker
- Can see corrections as you type or use Ginger Proofreader to scan the entire document for mistakes
- Will read corrections out loud
- Has an mobile Android app
- Works inside Word and emails
- Text to Speech
  - Read emails and docs
  - Can choose voice and accent
- [Ginger Demo](#)

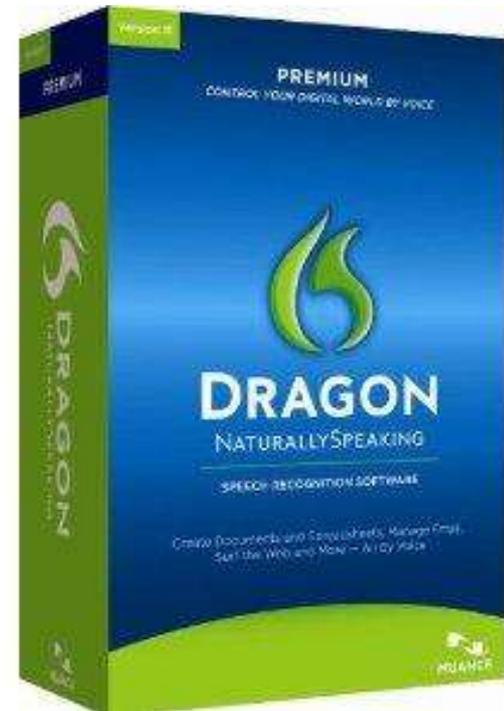




# Speech Recognition Software



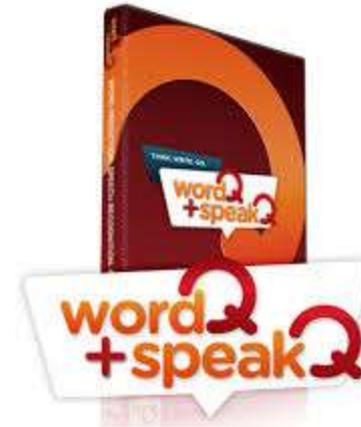
- Turn spoken words into text
- Connect with the timing of your thoughts
- Dictation speed 70 to 100 words per minute



# Word Q/ Speech Q



- Software that has built-in word prediction
- Suggests words
- Spoken feedback to hear what was written
- Speech Q is a plugin for Speech Recognition
- 30 day free trial  
<http://www.goqsoftware.com/trial/>



# wordQ + speakQ

Français | Quick links | Mind Tools | Resources | Contact | Support | Downloads | Store

goQ software

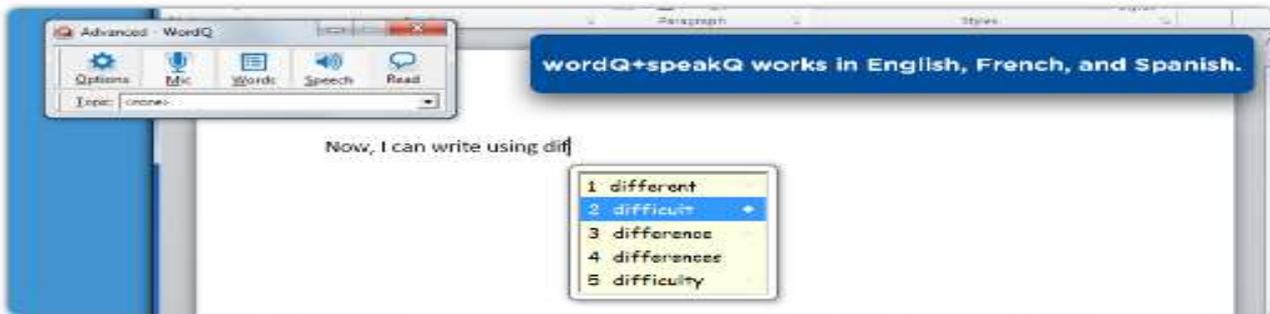
Think. Write. Go!  
1-877-674-7687

wQ: Use > arrow key to show/hear usage example indicated by the triangle New Tip

Download Trial  
Buy Now

## wordQ + speakQ

Word prediction, speech feedback and speech recognition.



wordQ+speaKQ works in English, French, and Spanish.

Now, I can write using diff

- 1 different
- 2 drifficult
- 3 difference
- 4 differences
- 5 difficulty

### wordQ + speakQ

wordQ is a simple but brilliantly designed writing solution that improves with you, regardless of your age or writing ability.



Works in all these and more!

- Word prediction works even if words are spelled creatively or missing parts
- Offers a list of words with similar meaning to add variety to your writing
- Now available. Linguistically aligned dictionaries and speech feedback for English, French, and Spanish
- speakQ plug-in takes everything you love about WordQ and adds forgiving speech recognition in the mix.
- Lets you type the words you know and use voice to text to say the ones you don't, from single words to entire paragraphs
- Lets you type the words you know and use voice to text to say the ones you don't, from single words to entire paragraphs
- Speech recognition helps you write everything you say from single words to entire paragraphs
- Offers suggestions for words you have difficulty pronouncing
- Train its voice recognition to understand your voice, with no reading required
- Allows you to mix typing and speaking for best results
- No voice commands to remember

# Features of Access Solutions



- Keyboard options
- Mice options
- Switch Access
- Alternative Input methods

# ASL Switch Labs



## 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

ASL E38 Extremity Control Joystick



100 Series

### Electronic Switches

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



200 Series

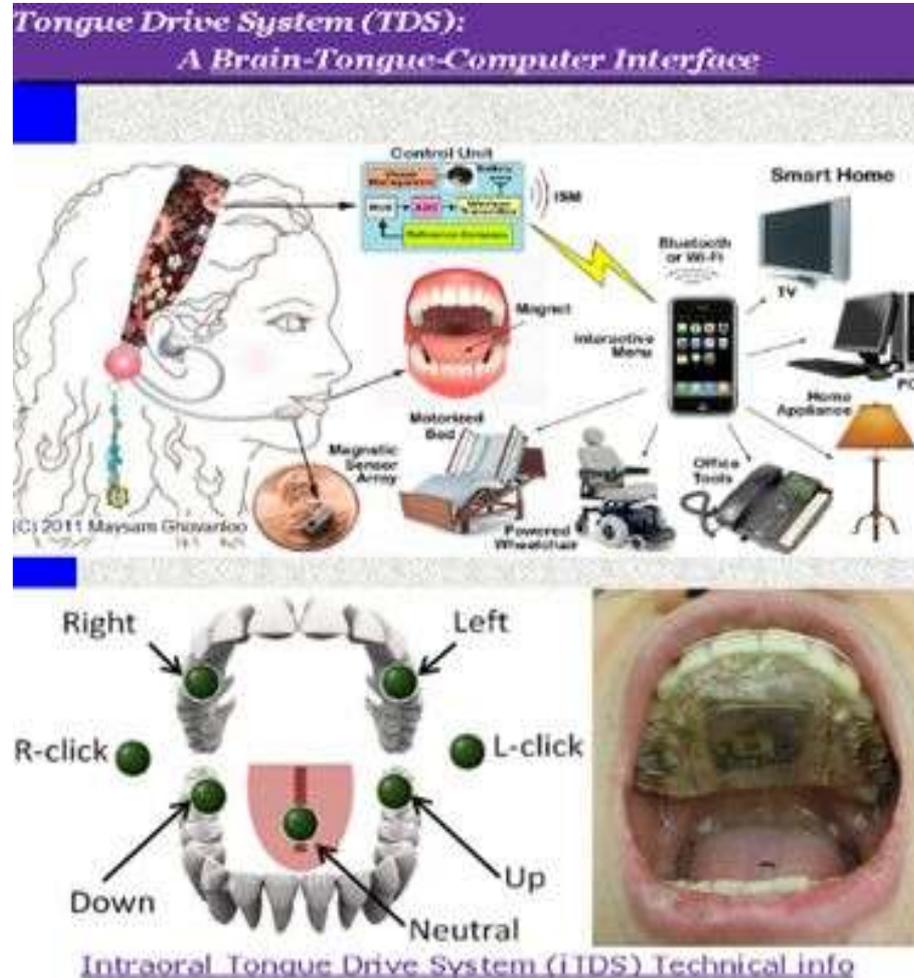
### Electronic Switches

ASL 215 Round Proximity Sensor 3 Pin



200 Series

# Tongue Drive System



# Tracking Trends



- Increase in Universal Design in Mainstream
- Schools incorporate “Bring Your Own Technology”
- Customized reading levels
- Convergence
- The Future is Contextual
  - GPS in technology
  - Ads on Internet
  - Social Media



# 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

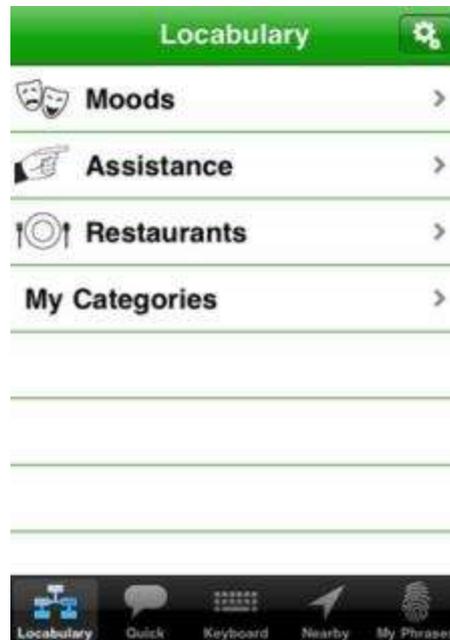
From knowing the weather before you start your day, to planning the best route to avoid traffic, or even checking your favorite team's score while they're playing, Google Now brings you the information you want, when you need it.



Assistance around the clock

The image shows a smartphone displaying the Google Now interface. The screen shows a weather card for Venice with a temperature of 70 degrees and a clear sky icon. Below the temperature, there are icons for the days of the week: TUE, WED, THU, and FRI. The background of the phone screen shows a scenic view of mountains and a lake.

# Locabulary



- Uses GPS to track user location and suggests appropriate vocabulary based on location
  - ie: Starbucks
- A keyboard to type for text-to-speech
- User can tag their own locations and create vocabulary for each location
- Lite version Free; Pro version \$130

# LEAP Computer Input



LEAP  
MOTION

[OUR DEVICE](#) [APPS](#) [DEVS](#) [BLOG](#) [SETUP](#) [SUPPORT](#) [BUY](#) [STAY INFORMED](#) ▾



# Google Glass

## Ten days with Google Glass

By Will Shankin  
December 23, 2013

14 Comments  
7 Pictures

[www.lenscrafters.com](http://www.lenscrafters.com)

Official Site. Visit Us Now & Save!  
Designer Eyewear, Lenses, &  
More.

- 36
- Like
- 54
- Tweet
- 22
- +
- 4
- 8
- Share
- +
- +
- Email



Gizmag shares some more thoughts about being part of the Google Glass Explorer program

[Image Gallery \(7 Images\)](#)

Here at Gizmag, we're very interested in the present and future of w tech. So we thought it was fitting to sign up for the Google Glass Explorer program, to give you a better idea of what Sergey Brin and compa brewing up in Mountain View. Though we aren't quite ready to di proper Google Glass review, we want to share some more thou our first ten days with Glass.



# Mindrdr for Google Glass

## MINDRDR FOR GOOGLE GLASS LETS YOU TAKE AND SHARE PICTURES JUST BY THINKING

NEUROGADGET - JULY 12, 2014

SHARE ON: [f](#) [W](#) [S+](#) [t](#) [in](#) [a](#) [v](#) [v](#)



# Reading Finger Device

## MIT Finger Device Reads to the Blind in Real Time



By RODRIQUE NGOWI

Associated Press

JULY 8, 2014 1:04 AM

In this Thursday, June 26, 2014 photo, a model wears a FingerReader ring at the Massachusetts Institute of Technology's Media Lab in Cambridge, Mass. Researchers designed and developed the instrument, which enables people with visual disabilities to read text printed on paper or electronic devices. (AP Photo/Stephan Savoia)

# Nod



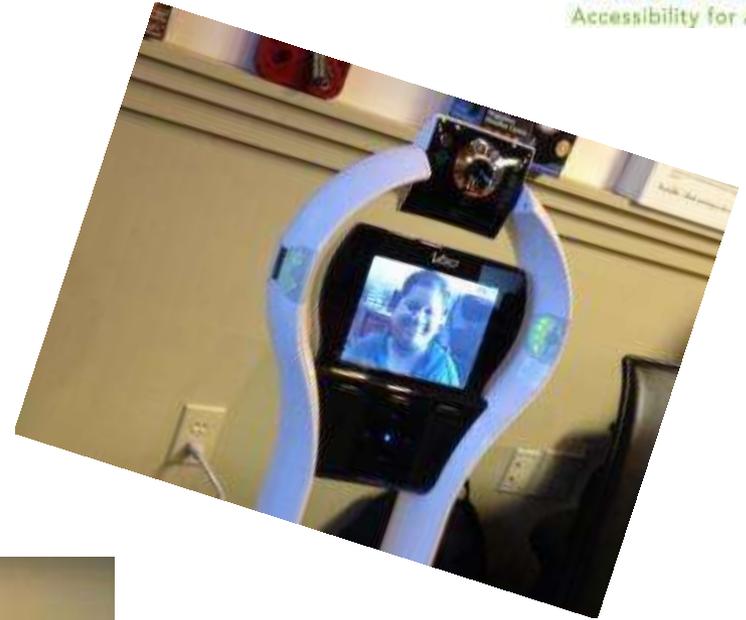
- Controls devices remotely
- Change presentation slides
- Type notes
- Environmental Control Units

\$149, Early 2015

<https://hellonod.com/>

# VGo Telepresence Robot

- Enables individuals 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





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

# The TFL Team



**Carolyn Phillips**

Director, Tools for Life

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## Disclaimer

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