



Georgia's Assistive
Technology Act Program

Tools for Life: A Conversation on the Intersection of Innovation and Learning Disabilities

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College of Design | Georgia Institute of Technology***

With contributions from the TFL Team

LDA & Remake Learning Webinar

January 24, 2018

www.gatfl.gatech.edu

For Handouts: <http://www.gatfl.gatech.edu/tflwiki>

Welcome to the Assistive Technology Revolution!



The world around us is evolving at an astounding rate. Assistive Technology developments have been foundational in this evolution and a catalyst for producing positive life-changing results for individuals with disabilities.

This session will take a closer look at:

- AMAC | Tools for Life – AT Act Program
- Advocacy & Knowing Your Rights
- Creating Your Action Plan
- Understanding Assistive Technology
- Using “Low/Light Tech” to inform “Mid/High Tech Solutions”
- Trends to Watch
- Where we are and where we are going.

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

Tools for Life Mission

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.



Guiding Principles

We – Collectively – are Brilliant & Can find an Innovative Path and Create Brighter Futures

We must Think, Live and Act from a place of Abundance – We have enough time, money, resources...

We Must Focus on Abilities!

YOU have the Power to make the Difference!

- Change vs. Progress (Bob Phillips)



Guiding Principle

Disability is a natural part of the human experience and in no way diminishes the right of individuals to—

- (A) live independently;
- (B) enjoy self-determination and make choices;
- (C) benefit from an education;
- (D) pursue meaningful careers; and
- (E) enjoy full inclusion and integration in the economic, political, social, cultural, and educational mainstream of society in the United States.

Public Law 108-364

Why Assistive Technology?

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

Tip: USE AT! We have yet to meet a successful student who doesn't use any AT.



Tools for Life: Georgia's AT Act Program



- Tools for Life is a program of AMAC Accessibility at Georgia Tech.
- We serve individuals of all ages and disabilities in Georgia.
- TFL Network
 - Assistive Technology Resource Centers/Outreach Sites/Community Partners
 - Lending Libraries
 - Demonstrations
 - Training
 - AT/DME Reuse
 - AT Funding Education/Assistance and Resources
- Online Resources
 - www.gatfl.org

Get to Know Your AT Act Program



Search on all S...

Search

[HOME](#) [ABOUT AT3](#) [AT ACT GRANTEES](#) [EXPLORE AT](#) [EVENTS](#) [CONTACT US](#)

Program Directory - Find Your State Program

Select a State to View Contact Information:

Georgia

Tools for Life, Georgia's Assistive Technology Act Program
Georgia Institute of Technology
College of Architecture
AMAC Accessibility Solutions and Research Center
515 Hovens Street, Suite 210
Atlanta, GA 30318

Program Coordinator: Carolyn Phillips

Phone: (404) 894-0512

TTY:

Fax: (404) 894-6523

Email: info@gttl.org

Website: <http://www.gatlif.org/amac>

Find Your State

Learn about the AT Act

Center for AT Act Data

ACL Admin Comm Living

<https://www.at3center.net/stateprogram>

Tools for Life Website: Visit Us Online



TFL AppFinder



Search by:

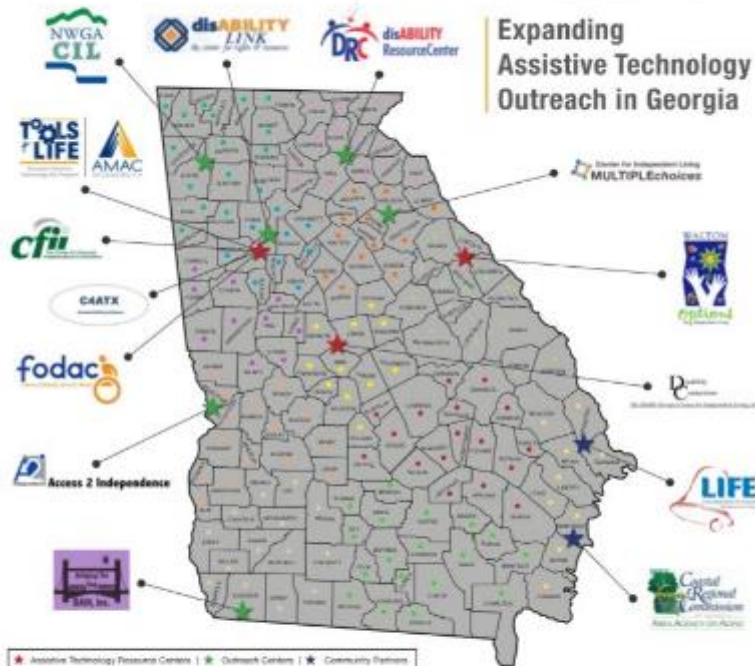
✓ App Name

✓ Categories

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

Tools for Life Network

Assistive Technology Resource Centers, Outreach Centers, Community Partners and Affiliates



GEORGIA'S AGING & DISABILITY RESOURCE CENTERS

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> Atlanta Regional Commission Aging Division Cherokee County Aging Services DeKalb County Aging Services East Cobb Aging Services East Point Aging Services East Point Aging Services East Point Aging Services East Point Aging Services East Point Aging Services East Point Aging Services | <ul style="list-style-type: none"> Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services | <ul style="list-style-type: none"> Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services Lawrenceville Aging Services |
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Tools for Life Assistive Technology Lab at Georgia Tech



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.

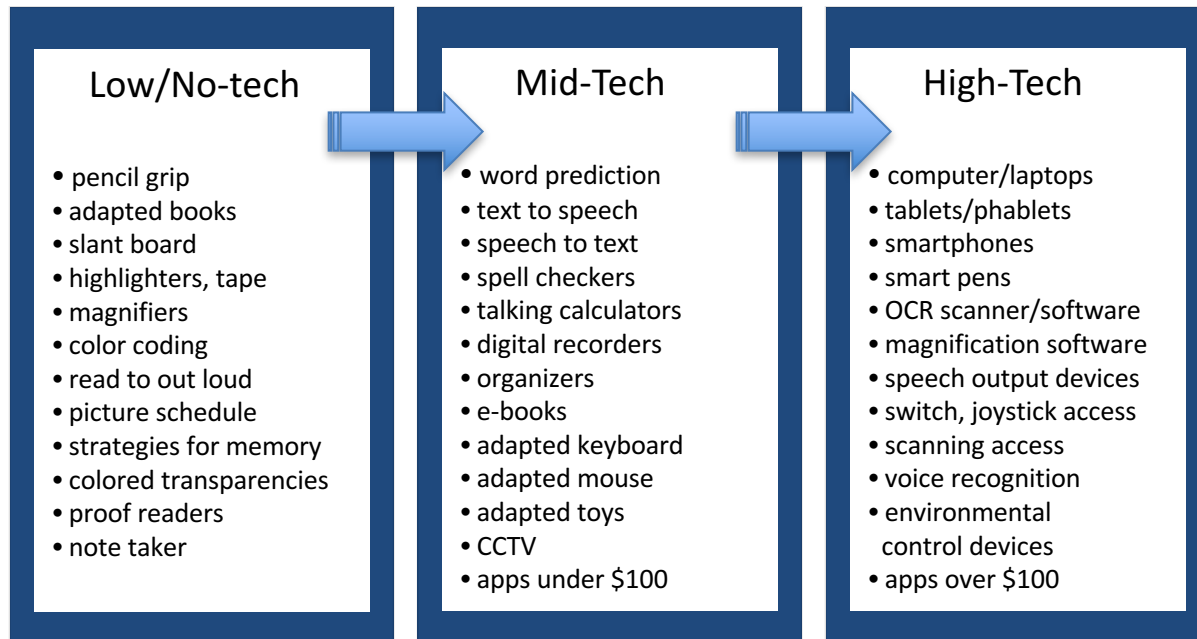
- Assistive Technology ranges from no/low/light tech to high tech devices or equipment.



Assistive Technology Continuum

Observations and “Hanging out with Intent”

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



Assistive Technology Services(“Tech Act”)



Assistive Technology Services are any services that directly assists an individual with a disability in the selection, acquisition, or use of an assistive technology device. These services include:

- 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]

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.

AT Acquisition!

- Tools for Life endeavors to break down the barriers which prevent individuals with disabilities, their families, and service providers from acquiring and effectively using Assistive Technologies to gain greater independence.
- To insure that AT products are available to Georgians with disabilities
- Eliminate Funding Barriers



Moving from Information to Action



Evaluations for Learning Disabilities

- One-to-one assessment
- Comprehensive battery of tests
- Detailed report with recommendations for support in work and/or learning

What did you learn in your LD evaluation?

- Moving from information to action
- Using your evaluation results as an action plan for AT

Moving from Information to an AT Action Plan



- What does this information tell us regarding our AT action plan?
- Avoid the temptation of a “cookie-cutter approach”
- Customize approach – no two individuals are the same.
- We all have different strengths and abilities to build upon.

Building a Firm Foundation for AT Success!

The “FAST” Track

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

Human Activity Technology (HAAT) Model



Human: represents the skills and abilities of the person with a disability

Activity: a set of tasks to be performed by the person with a disability

Context: the setting or social, cultural and physical contexts that surround the environment in which the activity must be completed

Assistive Technology: devices or strategies used to bridge the gap between the person's abilities and the demands of the environment

Developed by Cook & Hussey

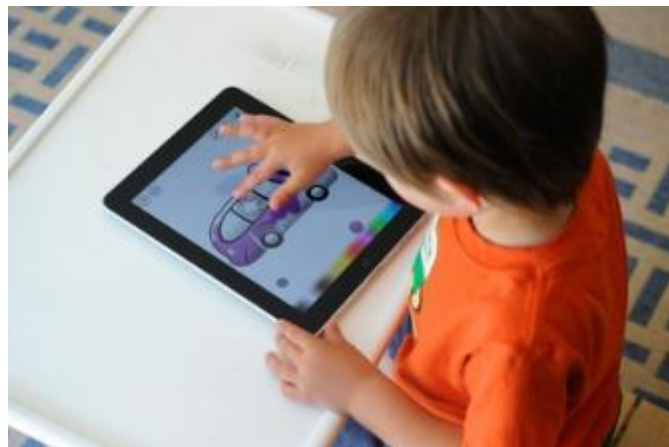
The SETT Framework

S = Student/Skills

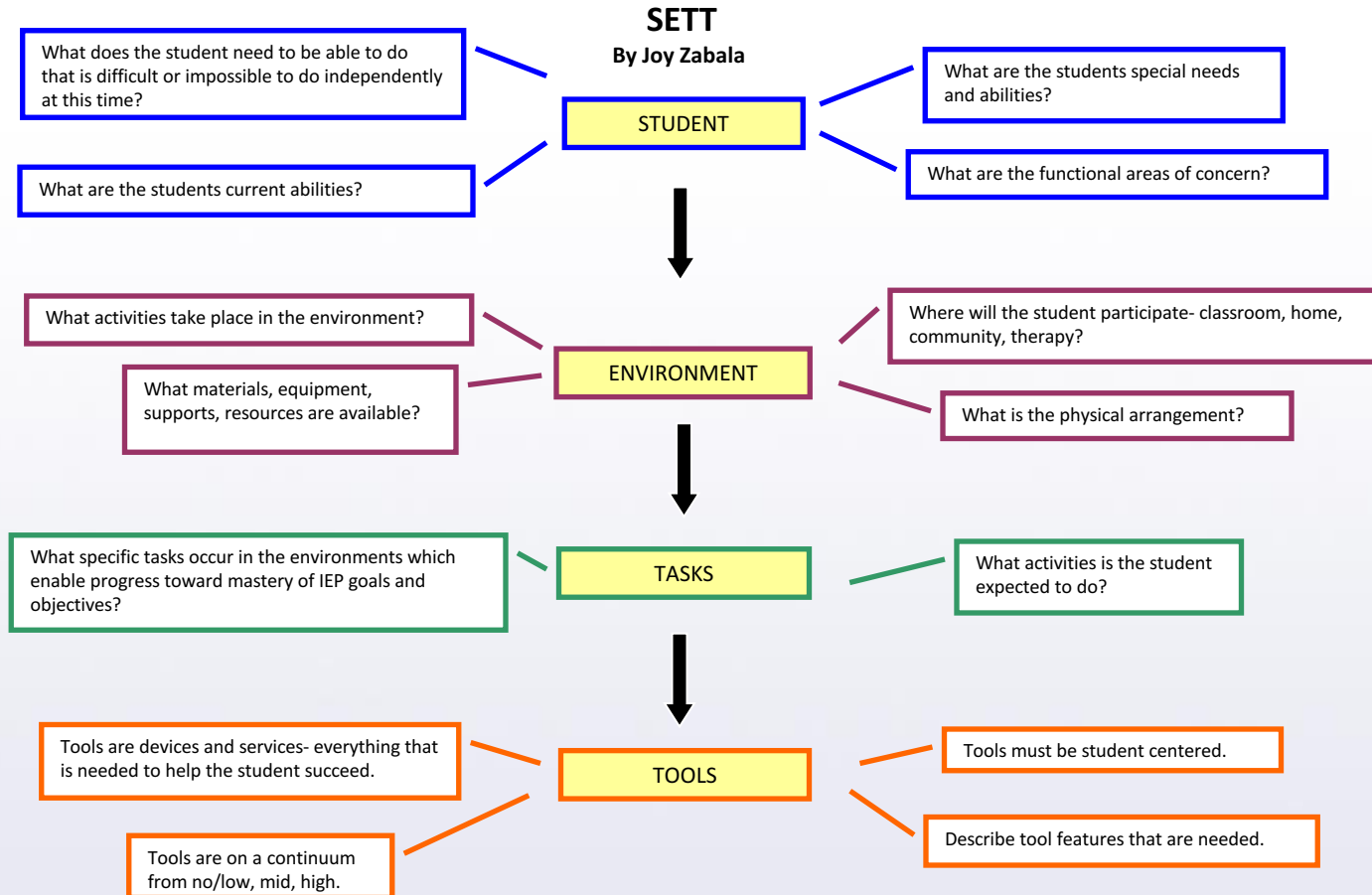
E = Environment

T = Tasks

T = Tools



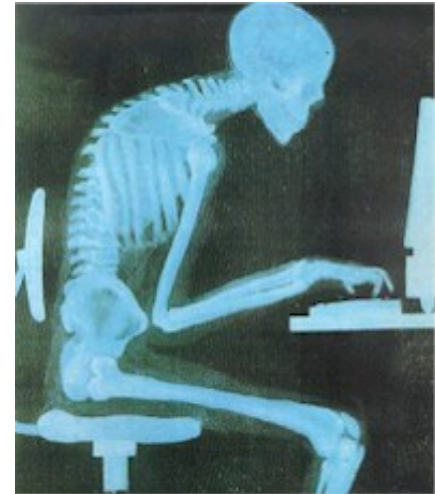
Adapted from Joy Zabala www.joyzabala.com



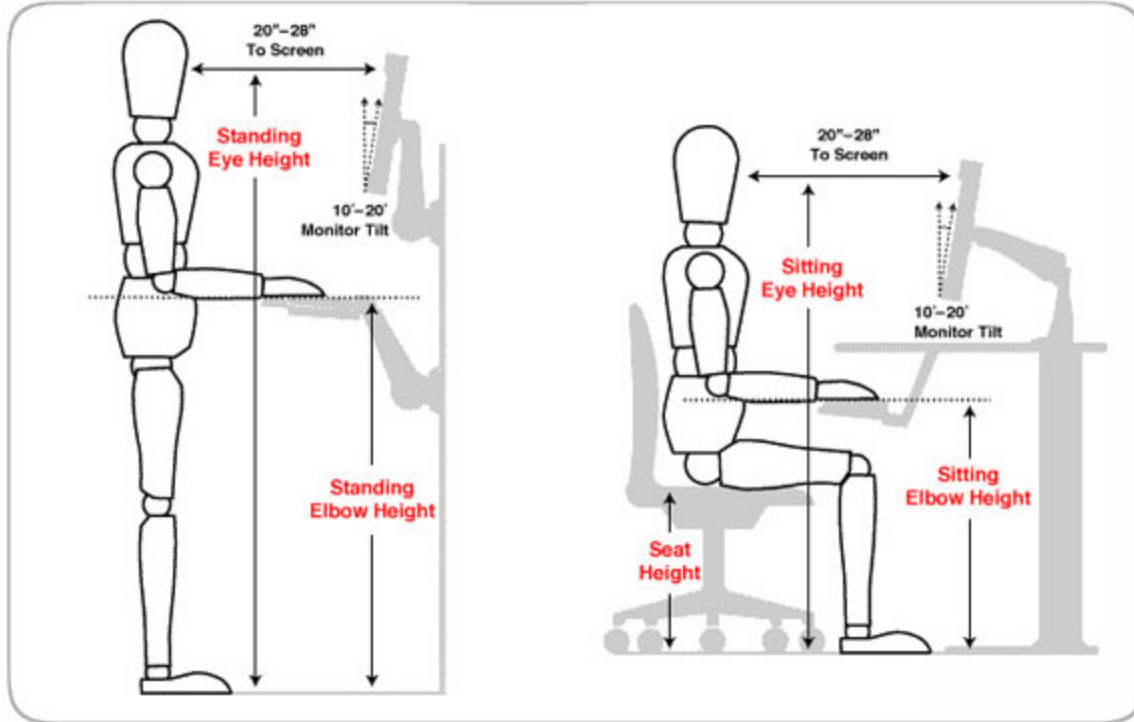
Exploring Assistive Technology Strategies and Solutions

Try before you buy

- Inhibits blood flow
- Creates muscle shortening
- Stresses back muscles and compresses spine
- Can inhibit learning
- Compresses diaphragm
 - Affects breathing
 - Voice quality



Ergonomics in the Classroom



Ergonomic Solutions



Vidget Chair

- Stop wiggling or fidgeting in your chair and sit still.
- Being able to fidget in a classroom improves focus, inspires creativity, and promotes calmness.
- It creates a healthier learning environment by providing a safe and quiet way to release energy.
- Inspires kids to move naturally and celebrates imaginative play while learning!



Mobile Tablets and eReaders

- What do I need?
- Does it read out loud?
- Do I need Apps?
- Change colors?
- Change line spacing?
- Textbooks?
- Fun Reading?



Apple iPads

Three sizes/varieties

- iPad Pro
 - 9.7 inches and 12.9 inches
 - iPad Air 2
 - 9.7 inches
 - iPad mini 4
 - 7.9 inches
- iOS 11
 - Countless apps
 - Organization
 - Accessibility
 - High quality photos



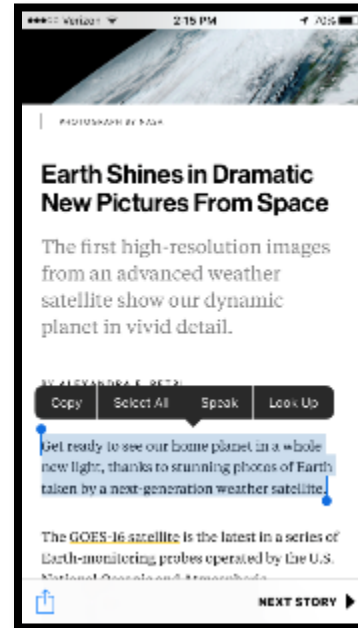
Built-in Accessibility Features

- VoiceOver
- Zoom and Magnifier
- Large and Bold Text
- Invert Colors
- Speak Selection
- Speak Auto Text
- Mono Audio
- Assistive Touch
- Hearing Devices
- Subtitles and Captioning
- Guided Access
- Home-Click Speed
- Switch Access
- Braille Displays



Apple: Read Text Out Loud

- Settings > General > Accessibility > Speech
- Tap the toggle switch on “Speak Selection” to turn on
 - It should move to the right
- When you select any text, a “Speak” option is now available to select
 - This option changes to “Pause” while the text is being spoken
- Can also choose to “Speak Screen” and to highlight as it reads



Android Tablets

- Many different options for user preference
 - Amazon Fire
 - Samsung Galaxy
 - Lenovo Yoga
 - Asus ZenPad
- Wi-fi compatible
- Some accessibility built in



Microsoft Surface Pro and Surface Book

Windows 10

- New and improved Internet Explorer
 - On-screen writing and highlighting features
- Moveable tiles
 - Start Menu can be personally organized
- Built-in accessibility
 - Speech-to-text
 - Narrator
 - Magnifier
 - High contrast

Slim and has a USB port

This pressure sensitive cover that doubles as a keyboard



Microsoft OneNote

- Crosses all platforms
- Type, write, or draw with the free form feel of pen and paper
 - Use stylus or finger
- Search and clip from the web to picture ideas
- Brings students together in a collaborative space or can give individual support in private notebooks

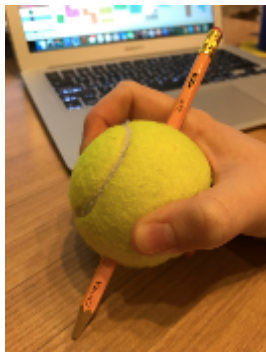


Low Tech AT Solutions



Low Tech AT Solutions for Writing

- Built-in pen and pencil grips
 - Variety
 - Can build you own with a tennis ball or ping-pong ball
- Wide barrel pens and pencils
 - Makes it easier for some people to write due to their contoured shape.
 - There is more surface area to grip which makes it easier to write.



Livescribe is the global leader in the design and manufacturing of smartpens, enabling customers to capture, search and share handwritten notes on the digital devices they use every day.



Livescribe Pens

Echo

- Record and playback
- Save, search, and organize
- Send and share

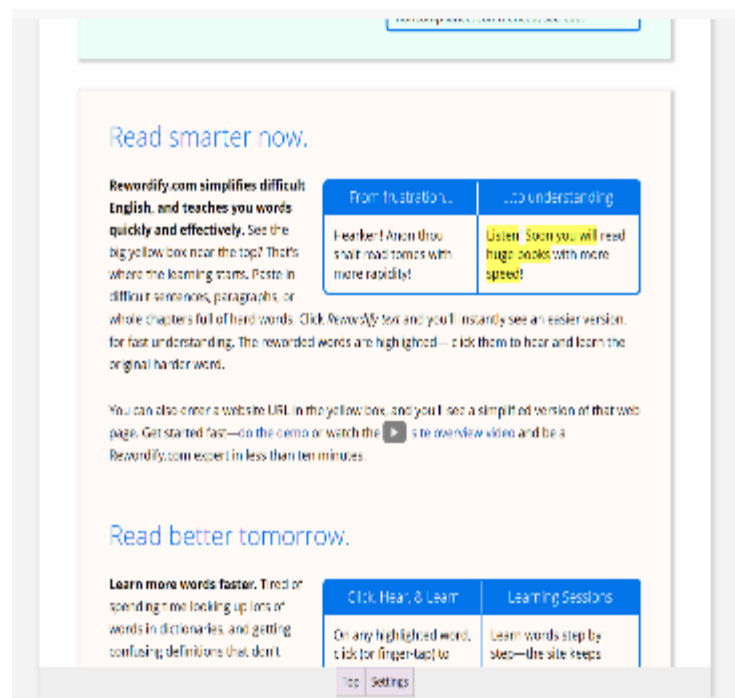


Livescribe 3

- Uses Bluetooth Smart to send everything you write to your smartphone or tablet
- Saves written notes in memory



Students can use this tool to make passages more understandable. Simplified words are highlighted for quick comparison with the original word(s)."



- Online Accessible Library
- Free membership to qualified students and schools
 - Textbooks if school is member
- 389,675 titles
- Serves individuals with:
 - Vision disabilities
 - Physical disabilities
 - Learning disabilities



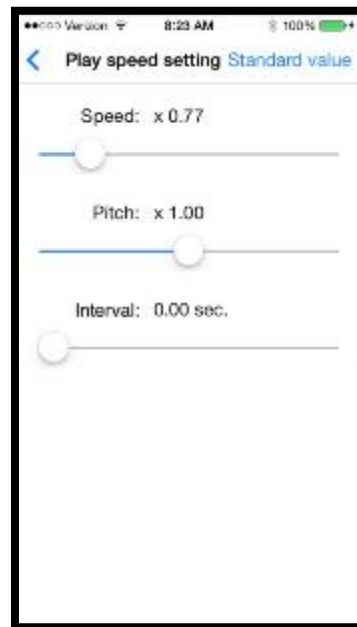
- Digital audiobooks
- Read by Hollywood stars, authors, and professional narrators
- Listen anywhere
- Over 180,000 titles
- Membership
 - \$14.95/ month for one book



Learning Ally



- [DAISY](#)
- Membership required
 - Free trial
- Over 75,000 audiobooks, audio textbooks, and other recorded books



Learning Ally))((
TOGETHER IT'S POSSIBLE



Smart Home Families Expanding Alexa Devices

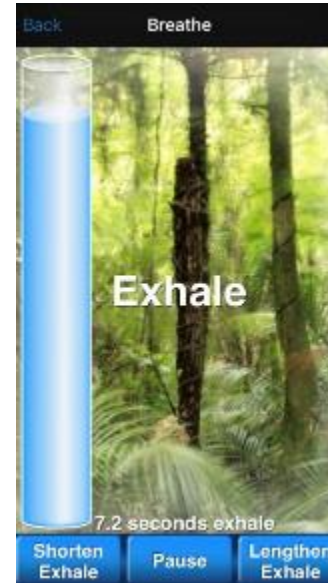


Amazon Echo Products

- Echo 2nd Gen - ~~\$99.99~~ \$79.99
- Echo Dot - ~~\$49.99~~ \$29.99
- Echo Plus - \$149.99
- Echo Show - \$229.99
- Echo Spot - \$129.99
- Echo Look - \$199.99

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
- Free on iOS and Android



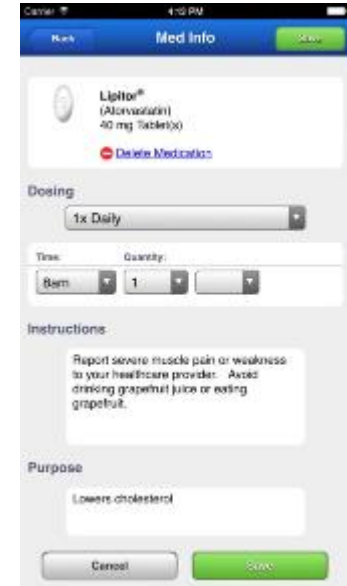
Key Ring

- For loyalty cards and savings while shopping
- Plan, save, and organize by carrying your cards, stores' weekly ads, coupons, and your shopping lists
- Free on iOS and Android

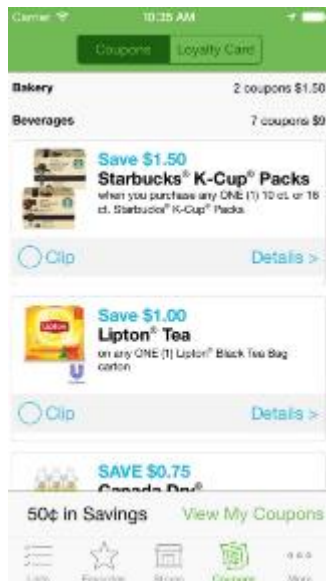


MyMedSchedule

- Keep track of medication
- Reminders
- Refill Reminders
- Healthcare Provider Profiles
- Insurance Information
- Allergies
- Works across Platforms
- Free for iOS and Android
- www.mymedschedule.com



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

- Reads text as it highlights
- Moveable tool bar
- Can read doc, PDFs, internet, and more
- 7.0
 - Add audio notes
 - Save as mp3 file
 - Save as video
- Can change highlighting colors
- www.claroread.com



TextHelp

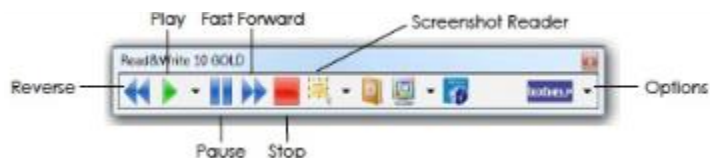
- Text-to- Speech software
- Helps improves reading skills
- Built in text and picture dictionaries
- Study skills highlighter
- Has a Google Chrome version
- www.texthelp.com



Read&Write Gold

Read&Write Gold

- PC and Mac Compatible
- PDFs, DOCs, DAISY, and Webpages
- Synchronous highlighting



Toolbar:

Grammar Check

Word Prediction

Dictionary

Picture Dictionary

Homophones

Verb Checker

Pause, Stop, Play

Capture

Mp3 File maker

Daisy Reader

Scanner

Fact Checker

Fact Mapper

Screen Masking

Speech Input

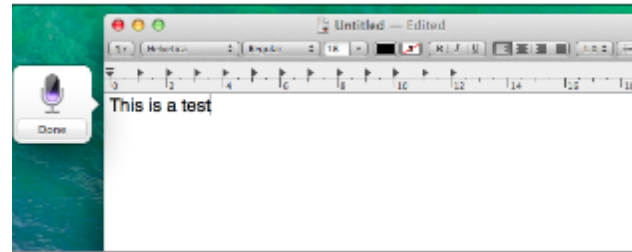
Translator

PDF Aloud

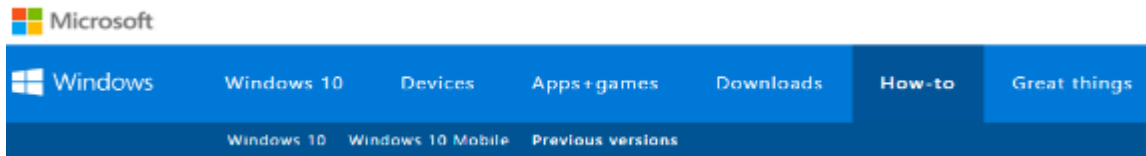
Word Cloud

Built In Dictation

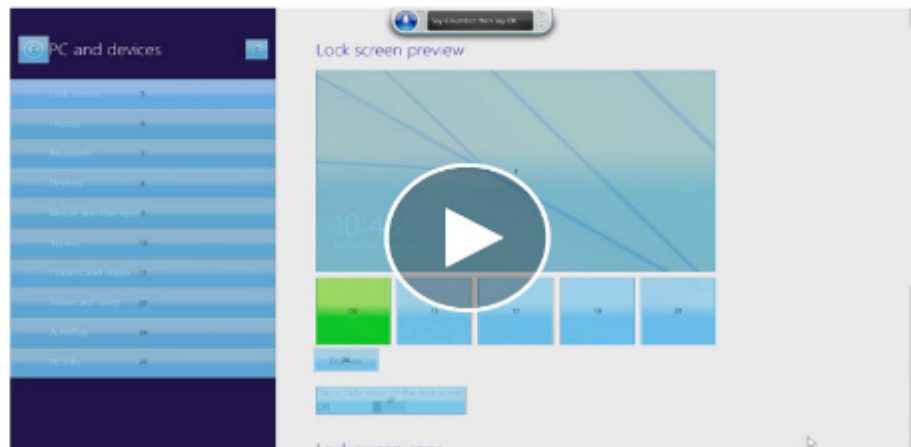
- Voice Dictation in Mac
- Speech recognition in PC
- Free
- Good microphone
- PC some training
- Mac no training



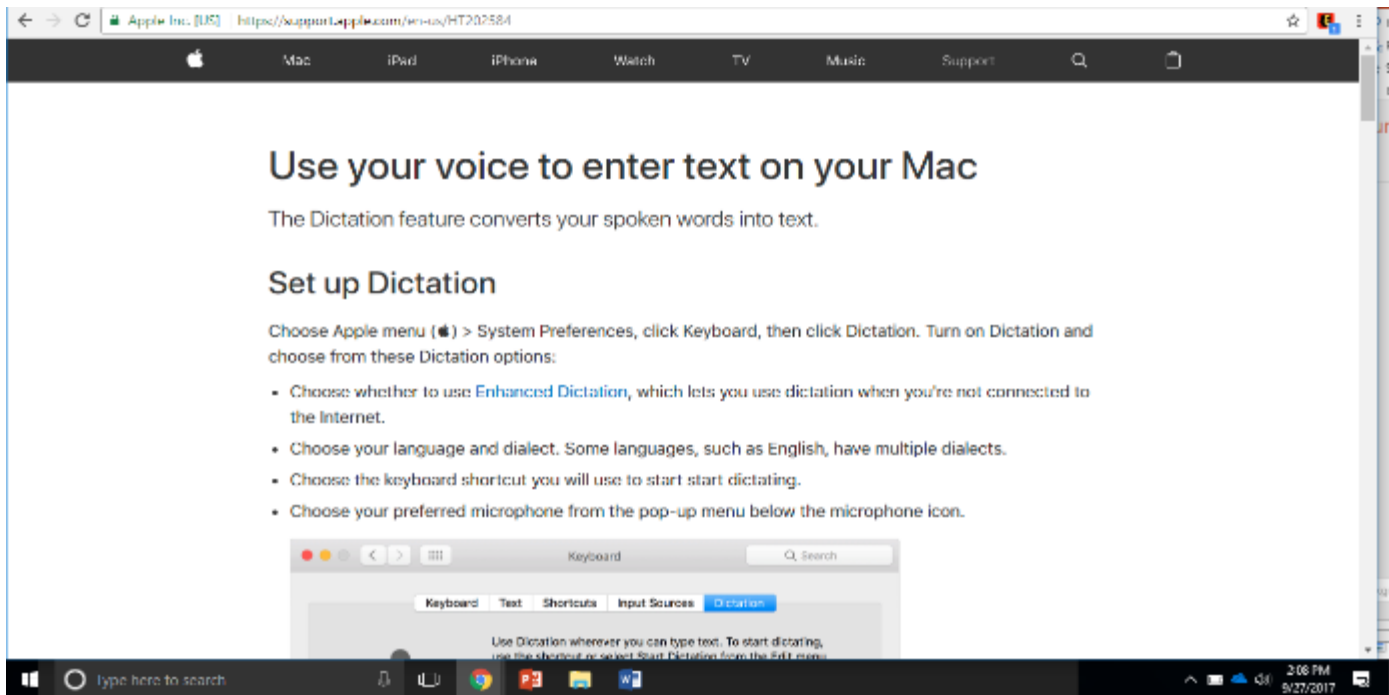
Speech Recognition - Windows



How to use Speech Recognition



Speech Recognition - Mac



The screenshot shows a web browser window with the Apple Support page for Mac Dictation. The page title is "Use your voice to enter text on your Mac". Below the title, it says "The Dictation feature converts your spoken words into text." and "Set up Dictation". The instructions are: "Choose Apple menu () > System Preferences, click Keyboard, then click Dictation. Turn on Dictation and choose from these Dictation options:".

- Choose whether to use [Enhanced Dictation](#), which lets you use dictation when you're not connected to the Internet.
- Choose your language and dialect. Some languages, such as English, have multiple dialects.
- Choose the keyboard shortcut you will use to start dictating.
- Choose your preferred microphone from the pop-up menu below the microphone icon.

Below the list, there is a small image of the "Keyboard" system preference window with the "Dictation" tab selected. The Dictation tab shows a "Use Dictation" button and a "Start Dictation" button. Below the image, it says: "Use Dictation wherever you can type text. To start dictating, use the shortcut or select Start Dictation from the  menu."

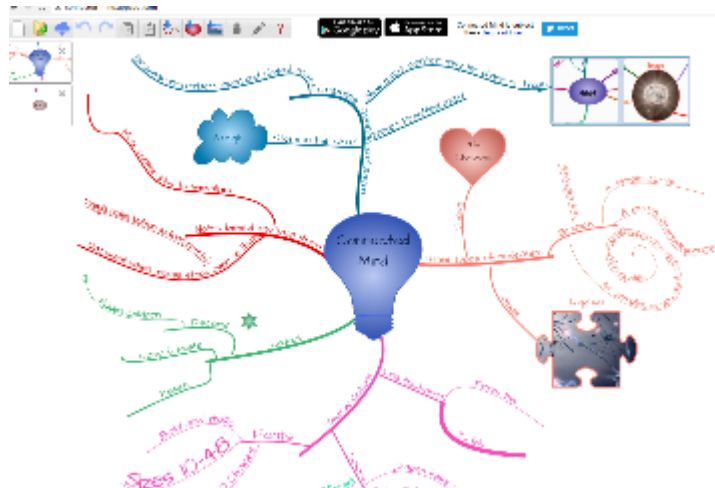
Speech Recognition Software

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



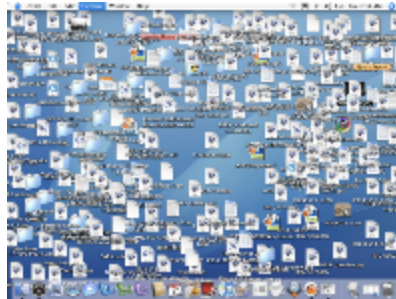
Connected Mind

- Chrome App
- Mind mapping
- Sync across devices
- Free cloud storage
- Different shapes and colors
- Import pictures
- Draw
- Speech Recognition



Memory & Cognitive Supports

- Calendar & Reminder Software
- Friendly Interface Layout

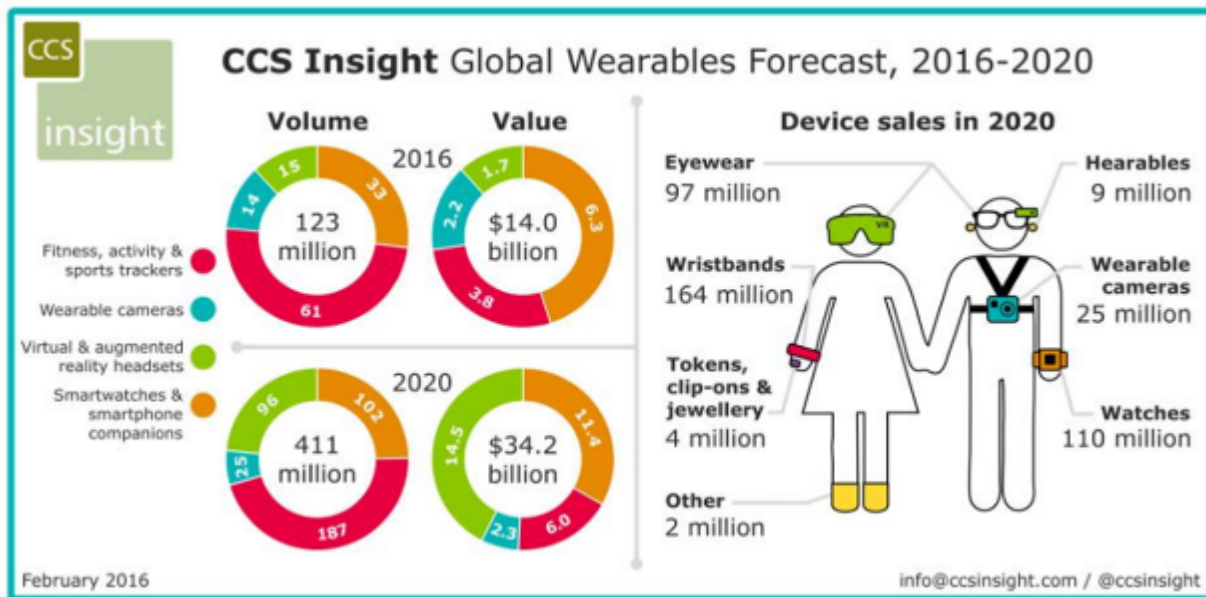


VS.




What's New in AT and in the AT Community

CCS Wearables Forecast





 Large view

Hello Guest | [Login](#)

Home

Order

Q&A

In the News

About

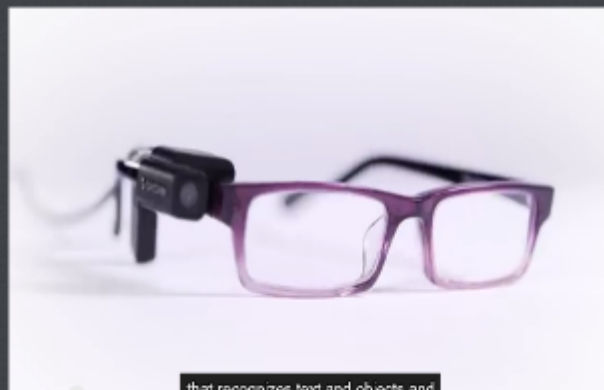
Contact

See for Yourself

What is OrCam?

OrCam is an intuitive portable device with a smart camera designed to assist people who are visually impaired.

OrCam gives independence.



that recognizes text and objects and

speaks to the wearer through a



0:37 / 6:10



- Haptic Footwear
- Uses GPS to let you know where you are
- Connects with app



LECHAL


BUY NOW

INTRODUCING LECHAL FOOTWEAR

NUDGE HOW HAPTICS SPEAK TO YOU

Intuitive, instinctive navigation - that was our aim with Lechal, and **haptics or vibratory feedback** is the best and simplest way to achieve that. Like a tap on the shoulder, Lechal's gentle vibrations at your feet guide you invisibly but intuitively.

OUR INSPIRATION



Chat? - Online

- “Acoustic shield” allows the individual to have control of the sound environment
- Helps reduce off task behaviors and irritability
- Disturbing noises are blocked and replaced with familiar and soothing sounds



T. Jacket

- Wearable technology vest
- Provides customizable deep pressure
- Uses adjustable air pressure compression controlled by a smartphone app



Reveal

Measures and tracks anxiety to help you better understand behavior and prevent meltdowns.



Octopus by Joy

- Smartwatch for Kids
- Icon Friendly
- Watch, Scheduler, and Assistant
- Visual Reminders
- [Octopus by Joy](#)



Apple Watch

- Receive Calls and texts
 - “Inner Circle”
- Apps
- Can be used for fitness
 - Heart Rate Monitor
 - GPS
 - Accelerometer
- “Hey Siri”
- Haptic feed back
- Calendar
- Reminders
- \$499



Breathe on Apple Watch

- The Breathe app guides you through a series of deep breaths, and it will remind you to take time to breathe every day.
- Choose how long you want to breathe, then let the animation and gentle taps help you focus.



Success with AT and Advocacy Begins with the Individual



- ✓ Get to know yourself
- ✓ Build your self-advocacy and advocacy skills
- ✓ Plan for your success – in school, work, Life!
- ✓ Explore & USE assistive technology that can help you
- ✓ Begin with the end in mind
- ✓ Be able to tell your story
- ✓ Listen & learn
- ✓ Try – fail & try again...
- ✓ Evaluate and evolve
- ✓ Laugh much!
- ✓ Celebrate your successes! Success breeds success.

Additional Resources



Family Center on Technology and Disability
<http://www.fctd.info>

WrightsLaw
<http://www.wrightslaw.com>

National Disability Rights Network
<http://www.napas.org/>

A Guide to Disability Rights Law – U.S. Department of Justice
<http://www.usdoj.gov/crt/ada/cguide.htm>

American Association of People with Disabilities
<http://www.aapd-dc.org/>

Consortium for Citizens with Disabilities
<http://www.c-c-d.org/>



Many states have their own Disability Law or Protection and Advocacy Organizations. Links to these sites can be found on the Family Center on Technology and Disability's Website under Member Organizations.

The Tools for Life Team



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TOOLS *for* LIFE

Georgia's Assistive Technology Act Program

thank
you



Disclaimer



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