



The Impact of Emerging Technology Trends on Individuals with Learning Disabilities

LDA 2017

*Maria Kelley, Martha Rust and Rachel Wilson with contributions by
TFL Team*

www.gatfl.gatech.edu

Tools for Life Website



The Georgia Institute of Technology logo, featuring the words "Georgia Tech" in a bold, sans-serif font.

The "TOOLS for LIFE" logo, with "TOOLS" in a large, blue, stylized font and "for LIFE" in a smaller, blue, sans-serif font. Below it is the text "Georgia's Assistive Technology Act Program".

A small, stylized bee icon.

HOME ASSISTIVE TECHNOLOGY TFL NETWORK CALENDAR OF EVENTS

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

A banner image showing a close-up of a person's hand typing on a yellow, tactile keyboard. The text "Learn More about AT through Hands-On Demonstrations" is overlaid on the image.

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:

IDEAS CONFERENCE

JUN 2

Epworth 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: Exploring Accessibility and Apps for Android](#)

JUL 30

[Position for Work: A Closer Look at Workplace Accommodations & Assessments](#)

Current Webinar Schedule

Webinar Archives

TOOLS FOR LIFE APPFINDER

A graphic showing a smartphone surrounded by various app icons.

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

AT ONLINE EXCHANGE

The gTRADE logo, featuring a stylized 'g' and the word "TRADE".



TFL AppFinder Categories



Search by:

✓ **App Name**

✓ **Categories**

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

Making Informed Decisions



Get to Know Your AT Act Program



search on at3...

[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

512 Means Street, Suite 250
Atlanta, GA 30318

Program Coordinator: Carolyn Phillips

Phone: (404) 894-0541
TTY:
Fax: (404) 894-8323

Email: info@gatfl.org
Website: <http://www.gatfl.gatech.edu>

[Find Your State](#)

[Learn about the AT Act](#)

[Center for AT Act Data](#)

[ACL Admin Comm Living](#)

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

Find Us Online – watap.org

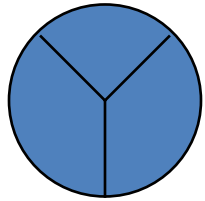


A screenshot of the Washington Assistive Technology Act Program (WATAP) website. The header includes the WATAP logo and the text "Washington Assistive Technology Act Program Technology for Independence". Below the header is a navigation bar with links: Services, Learn About AT, About Us, Contact Us, and Administrative Backdoor. The main content area is divided into several sections. On the left, there are two vertical menus: "Sort Content by Activity" and "Sort Content by Function". The "Sort Content by Activity" menu includes links for Tools for Everyday, Communicating, Accessing a Computer, Environmental Adaptation, and Recreation and Leisure. The "Sort Content by Function" menu includes links for Seeing, Hearing, Speaking, Managing Information, and Fine Motor & Getting Around. Below these menus is a "Follow Us" section with Facebook and Twitter icons. The main content area features a large image of a person in a wheelchair using a laptop, with the text "What Is AT?" and a definition of assistive technology. Below this image are three colored boxes: a teal box with a question mark icon titled "What is Assistive Technology", a red box with a puzzle piece icon titled "How Can WATAP Help?", and a purple box with a calendar icon titled "AT Events in Washington". Each box contains a list of services or events. At the bottom of the page, there is a copyright notice for 2015 University of Washington and a disclaimer about the website's content.

- Borrow a device
- Request a demo
- Find reused equipment
- Get a low interest AT loan
- Request an evaluation
- Find AT resources
- Learn about AT



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

The SETT Framework

S = Student/Skills

E = Environment

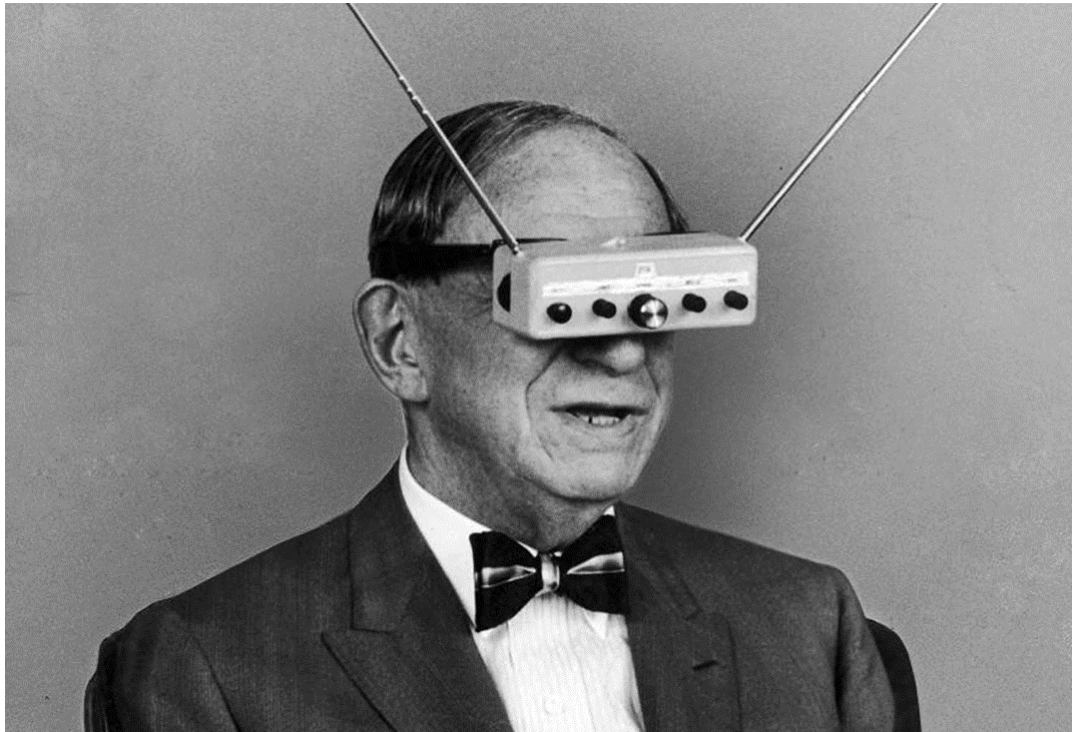
T = Tasks

T = Tools



Adapted from Joy Zabala www.joyzabala.com

Emerging Technologies



Office 365 and OneNote

<https://www.onenote.com/learningtools>

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



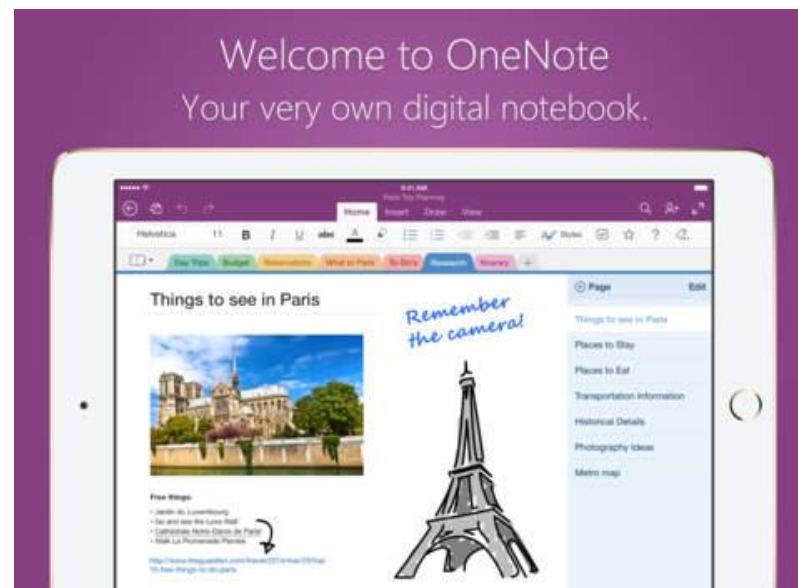
Schools

- Cherokee County in Georgia
- Using One on One Computing
- OneNote Classroom
- Staying organized
 - Notebook/folder for each class
 - Links to documents, PowerPoints, videos
 - Each Student has own private folder that the teacher checks
 - Collaboration
- OneNote Learning tools



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

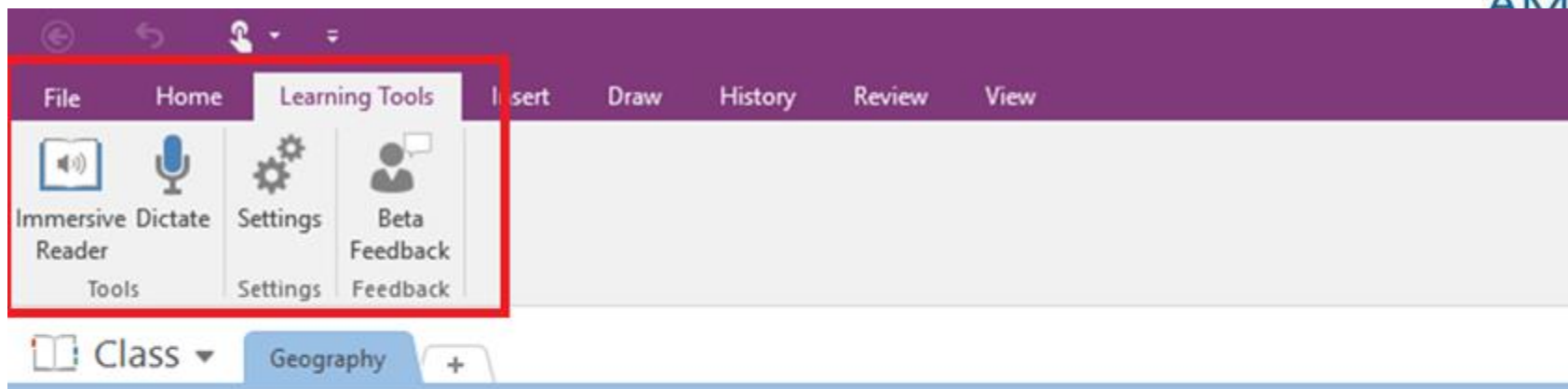


OneNote Learning Tools



| Feature | Proven Benefit |
|------------------------------|---|
| Enhanced dictation | Improves authoring text |
| Focus mode | Sustains attention and improves reading speed |
| Immersive reading | Improves comprehension and sustains attention |
| Font spacing and short lines | Improve reading speed by addressing "visual crowding" |
| Parts of speech | Supports instruction and improves writing quality |
| Syllabification | Improves word recognition |
| Comprehension mode | Improves comprehension by an average of 10% |

Learning Tools Toolbar



United States Geography

Wednesday, July 29, 2015 6:41 PM

The study of Earth's landforms is called physical geography. The seasons, the atmosphere and all the natural processes of Earth affect where people are able to live. Landforms can be mountains and valleys. They can also be glaciers, lakes or rivers. Landforms are sometimes called physical features. Geography is one of a combination of factors that people use to decide where they want to live.

Office Lens

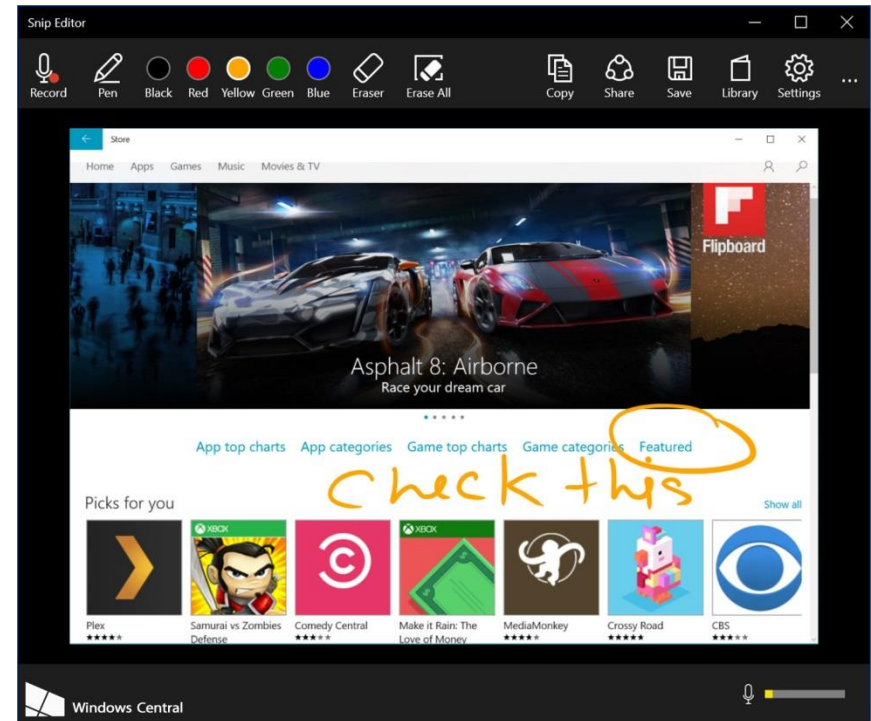


- Free App
- Convert images to PDF, Word and PowerPoint files
- Save images to OneNote or OneDrive
 - Use immersive reader



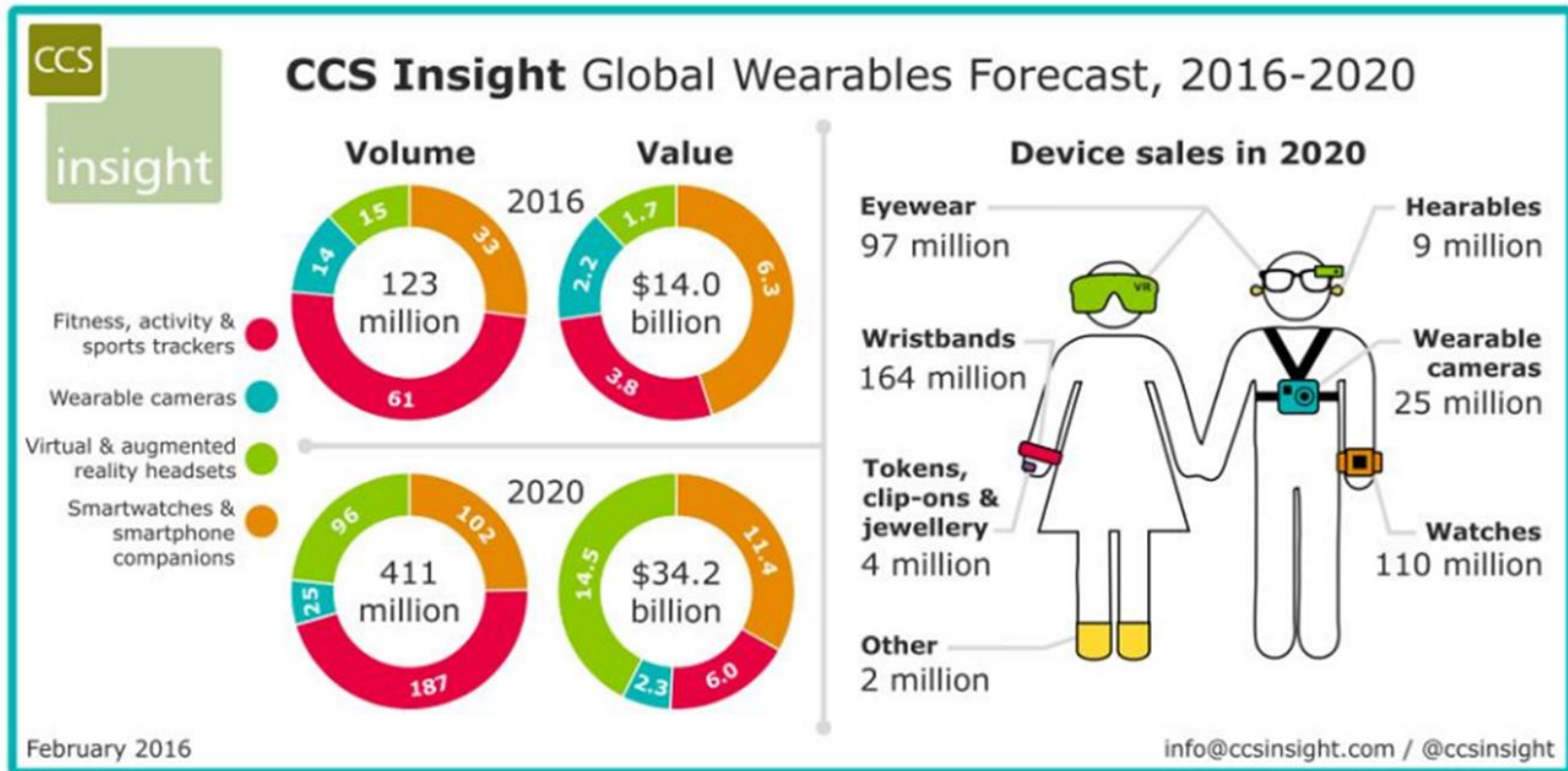
Snip

- Free app through Microsoft Store for web browser
- Click and drag to capture any window or area of your screen
- Also can make notes or draw on your “snip”
- Send your “snip” as a URL or save it



Wearables

CCS Wearables Forecast



Octopus Watch

- Indiegogo funded July 2016
- Icon based watch designed to teach kids (3+) concept of time
- \$69



WATCH

It's a **watch**. It gives the time with icons, making it the first clock that young kids can actually read and understand. **It links time to events.**



SCHEDULER

It's a **scheduler** for children that **fosters responsibility, independence and self-esteem**. Parents can program reminders from their smartphone that pop up on the kid's watch.



ASSISTANT

It's an **assistant** that helps parents **prioritize expectations and stay consistent with daily routines**. It gives tips and personal notes.



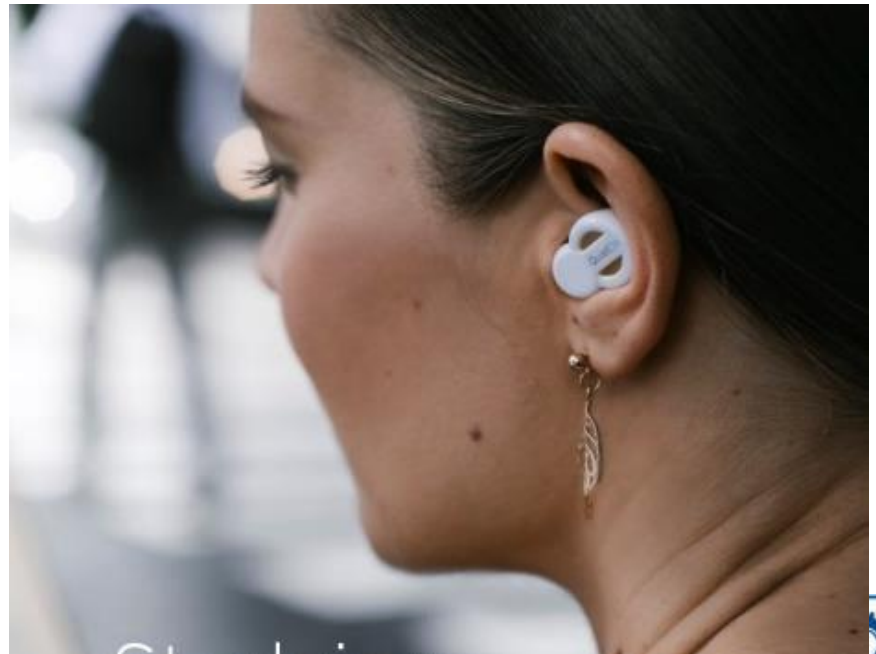
GlassOuse

- Helps people control electronics without using their hands.
- Based on your head movements, it moves the cursor onscreen. You bite on a blue extension to click, and it can go a week without charging.”
- <https://vimeo.com/158593763>



QuietOn

- Indiegogo fully funded March 2016
- Wireless noise reduction; reduces noise to create silence
- \$160



Mental Health

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.



Reveal

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



Vidget chair

- Do you need stop wiggling or fidgeting in your chair and sit still? With the this, you don't have to! Plus, it's actually better for you.
- 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 some of the endless energy kids have.
- Inspires kids to move naturally and celebrates imaginative play while learning!



Fidget Cube

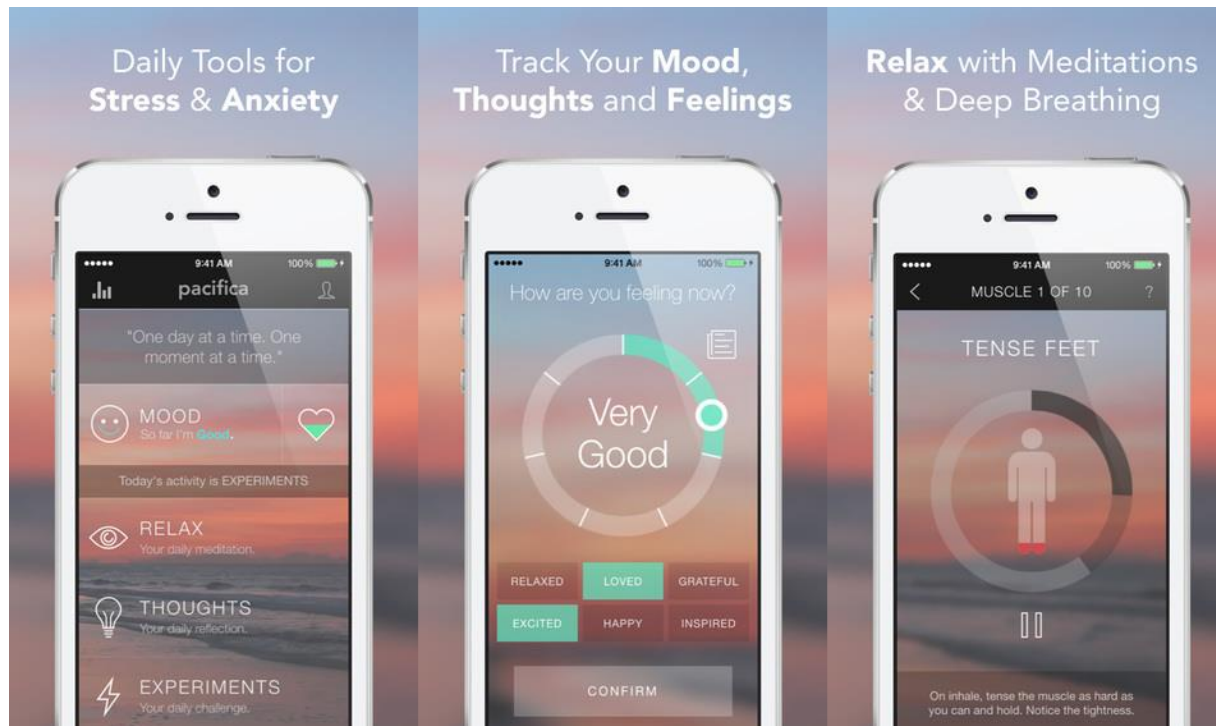
- Kickstarter campaign
- Available February 2017
- Created by Antsy Lab
- \$22



Pacifica



Pacifica App is available on iOS, Android & Web
Learn new techniques for reducing stress and anxiety
Customize to individual preferences



Cognitive

Amazon Echo

- Set reminders, timers, alarms
- Assist with Spelling, Math, vocabulary, language/translations
- Play trivia games for learning
- Reduce anxieties with music



Sonocent Recorder

- Capture high-quality recordings and annotate in real-time using colour markers, photos and text notes. With the Sonocent Recorder app you can take an accurate record of a meeting, lecture or class without having to write anything down.
- Instead of the single stream of information you get with standard audio, Sonocent Recorder splits your recording up into phrases which you can highlight, edit and delete as you record:
- It's FREE!!!



Equil Smartpen 2

- Indiegogo Funded
- Real ink; real paper; digitized
- \$119; shipping in early February 2017



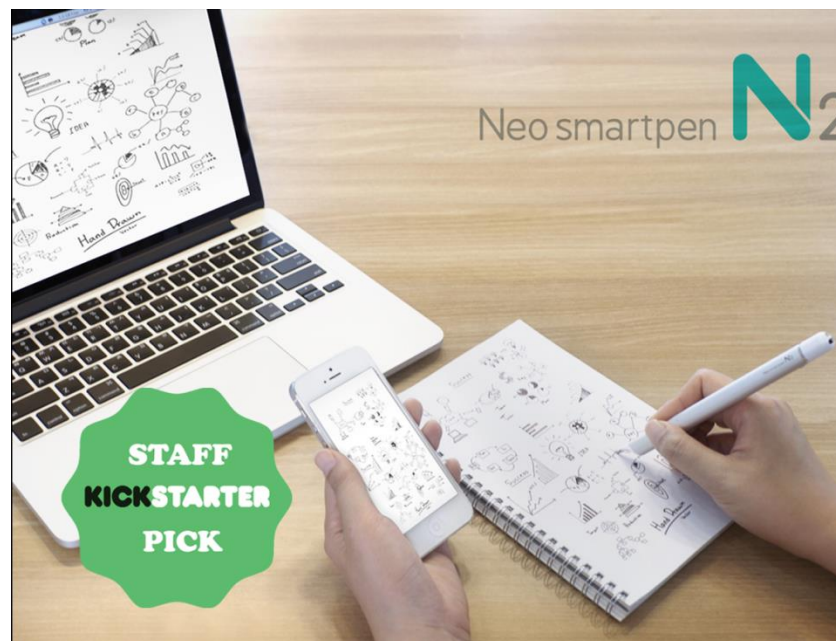
Iris IRIScan Mouse Wifi Cordless Mouse Scanner



- A scanner at your fingertips!
- Just click on the scan button, swipe in any direction on a paper document and watch texts and images appear instantaneously on your computer screen thanks to the direct Wi-Fi transmission. Never retype any text again!
- Embedded OCR technology will turn any type of document, books, magazines, pictures into editable text. Simply drag and drop it into your favorite text editing application, edit and upload to the cloud in a click.

N2 Neo Smartpen

- Kickstarter funded
- NeoLab created smartpen that writes on paper and mirrors information on smart devices (iOs and Android)
- Cost ?



Digit widget

- A tactile & exploratory way to learn about numbers, addition, and so much more! Through imaginative play, a child begins building the foundation for future STEM skills and has a lot of fun in the process.



Libby

- A new app to discover and enjoy thousands of ebooks and audiobooks from your public library.
- Designed to get people reading as quickly and seamlessly as possible.
- Just one tap away from unlocking the power of the written word from the public library.
- **All you need is a library card to get started.**
- **It's FREE!!!**



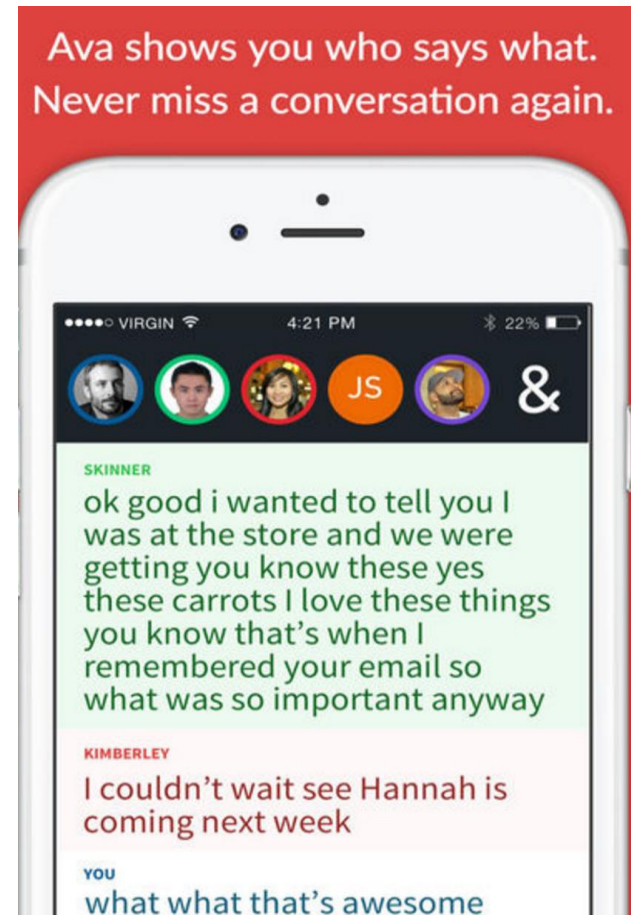
Calculators

- New talking calculator app on iPhone and iPad.
- A comprehensively featured calculator that has become a favorite among adults and primary schools around the world.
- Wide range of uses- has large colorful buttons, optional high contrast, full VoiceOver support, and unique to this calculator; the option to use speech for answers, button names and formulas!
- Creator Adam Croser – has created many different talking calculator apps.



AVA

- Uses microphone to hear and shows word by word what is said
- Instant captions
- Basic Plan – Free For 5 hr/month
- \$29.99



3D Printers and VR

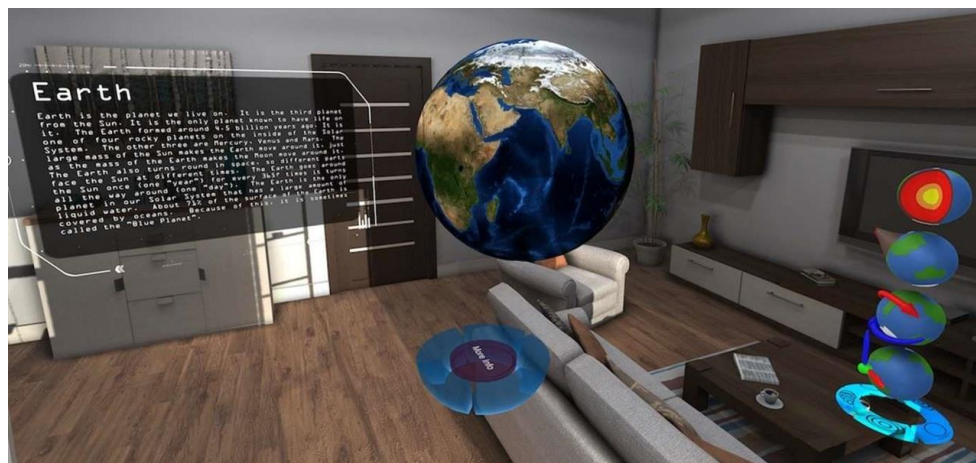
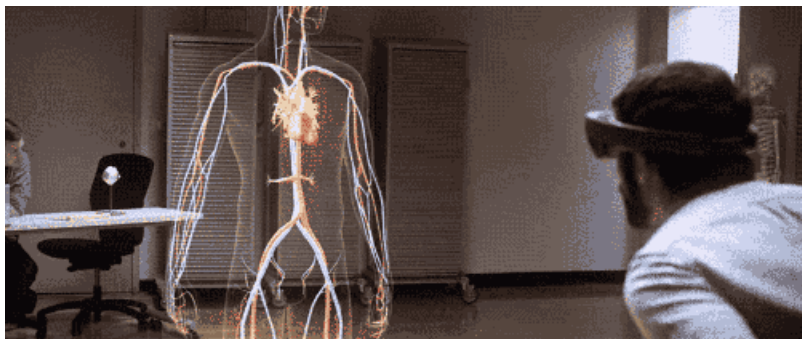
Tiko 3D Printer

- Kickstarter Funded
- Accepting pre-orders shipping in Spring
- Non-proprietary filament
- Wifi Connectivity
- \$199



Virtual and Augmented Reality

- HoloLens
- A new collaboration between Pearson and Microsoft is using a self-contained holographic computer to develop “mixed reality” learning experiences for students.



<http://www.eschoolnews.com/2017/01/23/institutions-mixed-reality/>

Apps

IFTTT



- **Free** web-based service that allows users to create chains of simple conditional statements, called "applets",
- These are triggered based on changes to other web services such as Gmail, Facebook, Instagram, and Pinterest...
- IFTTT is an abbreviation of "If This Then That".

NoteTalker



- Voice Recorder App
- Allows for Audio Bookmarks
- Attach picture within audio
- Edit notes (separate from app)
 - Add, share, edit, attach PowerPoint
- Graphic Equalizer
- \$6.99 for app
- \$105.43 for Editor



Questions?



TOOLS *for* LIFE

Georgia's Assistive Technology Act Program



AMAC
Accessibility for All

thank
you



www.amacusg.org

TOOLS *for* LIFE

Georgia's Assistive
Technology Act Program

The Tools for Life Team



Carolyn Phillips

Director, Tools for Life

carolyn.phillips@gatfl.gatech.edu



Sarah Endicott

Research Scientist

sarah.endicott@design.gatech.edu



Tori Holder

Outreach Specialist

tori.holder@gatfl.gatech.edu



Danny Housley

AT Funding & Resource Specialist

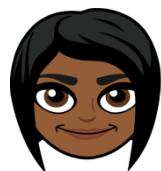
danny.housley@gatfl.gatech.edu



Justin Ingham

Support Specialist

jingham3@gatech.edu



Asha Kumar

Intern, Tools for Life

asha.kumar@gatfl.gatech.edu



Ben Jacobs

Accommodations Specialist

ben.jacobs@gatfl.gatech.edu



Krista Mullen

Speech Language Pathologist

krista.mullen@gatfl.gatech.edu



Samantha Peters

Program Specialist

samantha.peters@gatfl.gatech.edu



Liz Persaud

Training Coordinator

liz.persaud@gatfl.gatech.edu



Martha Rust

AT Specialist

martha.rust@gatfl.gatech.edu



Rachel Wilson

AT Specialist

rachel.wilson@gatfl.gatech.edu



Washington Assistive Technology Act Program



- University of Washington
- (800) 214-8731 Toll-Free Hotline
- (206) 616-1396 TTY
- (206) 543-4779 Fax
- <http://wataap.org/>
- [Email: wataap@uw.edu](mailto:wataap@uw.edu)



Technology for Independence



Disclaimer



Disclaimer: Produced by Tools for Life (TFL), which is a result of the Assistive Technology Act of 1998, as amended in 2004. TFL is a program of the Georgia Institute of Technology, College of Design, AMAC Accessibility Solutions and Research Center and was made possible by Grant Number H224C030009 from the Administration for Community Living. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of HHS.

