UCLA:
Alternative Spring Break
Exploring AT & Disability

AMAC Accessibility Solutions and Research Center
Georgia Tech
Rachel Wilson, COTA/L
AT Specialist
March 25, 2016

www.gatfl.gatech.edu
www.amacusg.org

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

Georgia's Assistive Technology Act Program

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**.

Georgia Tech

TOOLS for LIFE
Georgia's Assistive Technology Act Program

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

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 - 5,000 unique visitors a month

Georgia Tech TOOLS for LIFE
Georgia's Assistive Technology Act Program

HOME | ASSISTIVE TECHNOLOGY | TFL NETWORK | CALENDAR OF EVENTS | Search our Site | Go

- 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 choice.

Tools for Life and the TFL Network work collaboratively together to accomplish

2015 GATE SEMINAR

DEC 4 — Georgia Tech Student Center

WEBINARS

- Current Webinar Schedule
- Webinar Archives

TOOLS FOR LIFE APPFINDER

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

AT ONLINE EXCHANGE

gTRADE

AT FUNDING GUIDE

DOLLARS & SENSE
NAVIGATING THE AT FUNDING STREAM

Normal mode: You can dictate and use voice commands
Profile Tools Vocabulary Modes Audio Help
Firefox
Zimbra: Inbox
Assistive Technology Solutions for Li...
www.gatfl.gatech.edu
GT Mail Tools for Life TFL Wiki AMAC Facebook Adobe Connect Centr... Playbook TFL Database Gmail GT Sites Eventbrite Websites Quickbase MailChimp Bookmarks

Georgia Tech TOOLS for LIFE

Georgia's Assistive Technology Act Program

TRAINING

View Presentations

Request Training

FUNDING

Resource & Assistance

Dollars & Sense

gTRADE

RESOURCES

TFL Newsletter

CONTACT US

Meet the TFL Team

Advisory Council

Get a Financial Loan to purchase AT

The CFII - The Center for Financial Independence & Innovation, Inc. (The CFII) is a nonprofit organization dedicated to helping individuals with disabilities and their family members advance their financial independence and security.

Obtain AT through our AT Cooperative Buying Program

The Georgia AT Depot is a state-wide buying Cooperative for Assistive Technology for customers in the state of Georgia. The Georgia AT Depot is modeled after the Maryland AT Co-op, which has operated a successful cooperative buying program since 1998. The Georgia AT Depot is a collaborating partner with the Maryland Co-op. In this way we can provide Georgia customers the best discounts possible.

Obtain Reused/Gently Used AT Devices

gTRADE, 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.

FODAC - Friends of Disabled Adults and Children (FODAC) is Georgia's statewide provider of home health and durable medical equipment. FODAC has distributed 20,000 wheelchairs and thousands of other pieces of DME since 1986. Internationally, 65 countries have received some equipment over those years.

2013 IDEAS CONFERENCE

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

- Conference Registration
- Conference Website
- Exhibitor Details

WEBINARS

MAY 29 — A Closer Look at Apps and the Tools for Life AppFinder: A Live Demo

JUL 17 — Social Security 911: Understanding Your Rights & Resources

- Current Webinar Schedule
- Webinar Archives

TOOLS FOR LIFE APPFINDER

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

AT ONLINE EXCHANGE

gTRADE gTRADE, Georgia's Online Equipment Exchange, encourages members to offer AT and DME for sale or donation to others who may benefit from using

11:32 PM 5/27/2013

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

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

Public Law 108-364

The TFL Network is Growing!

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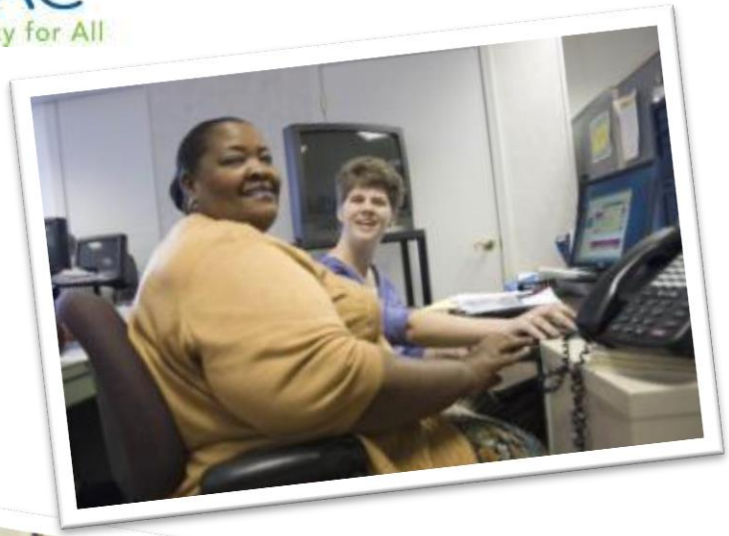
Accessibility for All

TOOLS for LIFE
Georgia's Assistive Technology Act Program

1 out of every 5



- 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.

Language can Change Everything

What does the word "Handicapped" mean?

Value-Laden Language

- "Handicapped" is an archaic term (it's no longer used in any federal legislation) that evokes negative images of pity, fear, and more.

- A legendary origin of the "H-word" refers to a person with a disAbility begging with his "cap in his hand."

Words to Avoid

What are some words to avoid that are associated with disability?

Disability Awareness

Disability Negative	Disability Neutral
Handicapped accessible	Accessible parking Accommodations
Handicapped, crippled, deformed	Person with a disability Individual with a disability
Quadriplegic, paraplegic, incapacitated	Individual with a spinal cord injury
Wheelchair-bound/ Confined to a wheelchair	Person who uses a wheelchair
The blind	Individual who is blind or has low vision

Disability Awareness & Language

Disability Negative	Disability Neutral
The deaf, deaf and dumb, mute, hearing impaired	Individual who is deaf or hard of hearing
Dwarf Midget	Individual of short stature
Stroke victim Suffered from a stroke	Person who had a stroke
Slow Retarded	Individual with an intellectual disability
Crazy, maniac, lunatic, demented, schizo, psycho	Person with a psychiatric disability or with a mental health diagnosis

History of AT Legislation

- 1980s and 90s, the civil and education rights of individuals with disabilities were strengthened.

- "...for all individuals, technology can provide important tools for making the performance of tasks quicker and easier, but for some individuals with disabilities, assistive technology is a necessity that enables them to engage in or perform many tasks."

Assistive Technology Laws

- There are a wide range of laws and policies related to assistive technology (AT) services and devices.
- Following are brief summaries of laws that impact the provision of assistive technology and special education services.
- Federal laws are amended regularly.

Assistive Technology Laws:

- Americans with Disabilities Act (ADA)
  Public Law 101-336 [42 USC 12101]
  The ADA prohibits discrimination on the basis of disability in employment, state and local government, public accommodations, commercial facilities, transportation, and telecommunications.
  - Title I addresses employment, saying that any employer who has 15 or more employees must offer “equal opportunity” to employment-related activities.
  - Title II applies to state and local governments, and insists that people with disabilities be given equal access to public education, employment, transportation, recreation, health care, and other areas under their control.
  - Title III addresses public accommodations that may be provided by private companies, including private schools, restaurants, stores, hotels, doctors’ offices, etc.
  - Title IV addresses assistive technology specifically, as it requires that telephone companies provide the necessary services to allow people who are deaf or hearing impaired to use telecommunications devices.

AT Laws: Section 508

- Section 508 of the Rehabilitation Act requires that all electronic and information technologies developed and used by any Federal government agency must be accessible to people with disabilities.
- This includes websites, video and audio tapes, electronic books, televised programs, and other such media. Individuals with disabilities may still have to use special hardware and/or software to access the resources.

Assistive Technology Laws:

- Individuals with Disabilities Education Act (IDEA).
- The Individuals with Disabilities Education Act (IDEA) was initially passed in 1975, and guaranteed that eligible children and youth with disabilities would have a free and appropriate public education (FAPE) available to them, designed to meet their unique educational needs.

AT Laws:

- **Telecommunications Act of 1996**
- **Title I - Public Law 104-104 [47 USC 255]**
  This law requires that telecommunications equipment and services be accessible to and usable by persons with disabilities.
- **Title III - Public Law 104-104 [47 USC 613]**
  Discusses rules on closed captions and video descriptions of video programming.

Assistive Technology Act of 2004

- With the 2004 edition, the Act now required States to provide direct services to individuals with disabilities to ensure they have access to the technology they need. As a result, the majority of State efforts are required to be conducted in the following areas:
  - assistive technology reutilization programs,
  - assistive technology demonstration programs,
  - alternative financing programs
  - device loan programs

CATADA

CATADA Center for Assistive Technology Act Data Assistance
Home
About
Contact us
Home
Generate Data Summary
Overall Summary Report
Activity Summary Report
Trend Chart
State AT Program Information
AT Program Activity Participation
National Activities
Publications
AT Program Resources
Website Tutorials
Tweets
CATADA
Welcome
State and Territory Assistive Technology Programs focus on improving the provision of Assistive Technology (AT) through comprehensive, statewide programs that are consumer responsive. The goal of these programs is to increase access to and acquisition of AT. Programs serve people with all types of disabilities, of all ages, in all environments.
Assistive technology devices are items, pieces of equipment, or product systems that are used to increase, maintain, or improve functional capabilities of individuals with disabilities. AT's primary purpose areas are education, community living, employment and IT.
IT & Telecommunications
This includes computers, software, websites, telephones, offic equipment, and media. With the appropriate AT devices, indiv with disabilities can access information more easily.
Latest CATADA Publication

2014: The Workforce

Get to Know Your AT Act

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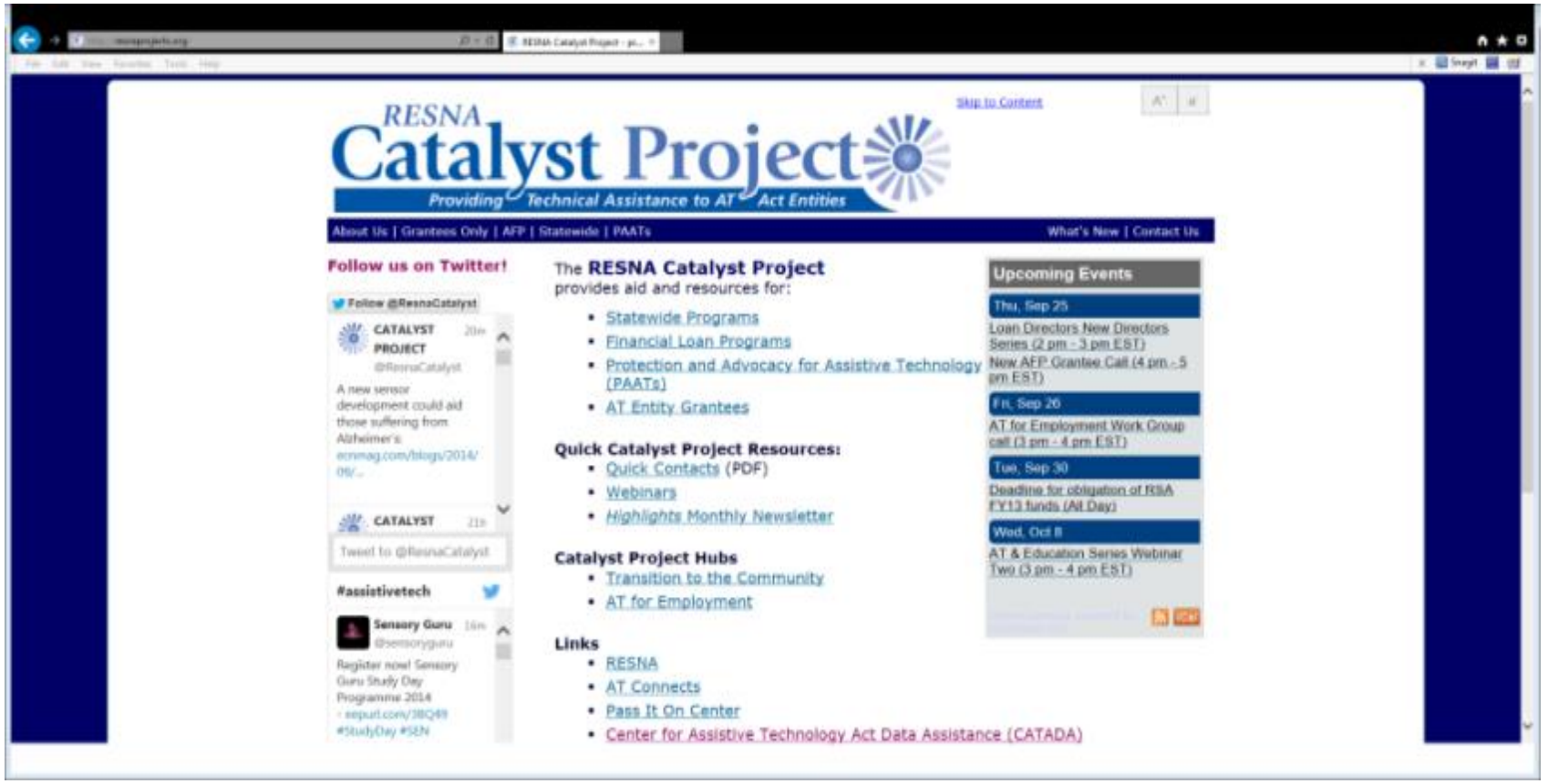

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CATEA

Tech and Environmental Access
College of Architecture

Google™ Custom Search | Search

- Home
- Research Laboratories
- About CATEA
- News
- For Students
- For Professionals
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Find us on Facebook

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CATEA is a multidisciplinary engineering and design research center dedicated to enhancing the health, activity and participation of people with functional limitations through the application of assistive and universally designed technologies in real world environments, products and devices. More about us.

NEWS AND FEATURES

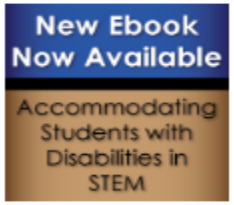
Sep 15 2015 — DATHA Talk on Transportation and Aging

Apr 14 2015 — Healthy Environments and Active Lifestyles (HEAL) Open House Event 2015

Charlie Kemp's TechSAge research featured Georgia Tech Research Horizons Magazine

Interdisciplinary teams from the Schools of Industrial Design and Computer Science win first and second places at the 2014 Convergence Innovation Competition.

More News...



Georgia Tech College of Architecture

The Center for Assistive Technology and Environmental Access
Georgia Institute of Technology (GT) College of Architecture (COA)
490 Tenth Street, Atlanta, GA 30332-0156 (for shipping, please use 30318) U.S.A.

Phone: 404-894-4960 (v/tty) Fax: 404-894-9320 Toll Free: 1-800-726-9119

Why Assistive Technology?

- For a person without a disability, technology makes ~~things~~ LIFE easier.

- For a person with a disability, technology makes ~~things~~ LIFE possible.

Exploring Assistive Technology

Staying off the FAST Track!

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

- Lee & Phillips

Defining Assistive Technology

Assistive technology – “Any item, piece of equipment, product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.”

Public Law 108-364

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

Effective AT Assessment

- Uses a feature-match approach
- Incorporates on-going educational/life planning
- Hanging out with Intent
- Targets natural environments
- Utilizes the competencies of multiple team member
- Demands meaningful follow-through

How do I decide what assistive technology is needed?

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Requires consideration of the:

PERSON + ENVIRONMENT + TASK

What activity does the person want to do?

What skills are needed to do the activity?

What skills does the person have to do activity?

What supports exist to help learn a new way?

Where is this activity done and under what conditions?

Institute on Disabilities
TEMPLE UNIVERSITY
College of Education

PENNSYLVANIA'S INITIATIVE
PIAT
ON ASSISTIVE TECHNOLOGY

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Assistive Technology Matching: A Team Approach

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- ✓ The Person with the disAbility
- ✓ Circle of Support – Family of Choice
- ✓ Case Managers
- ✓ Technologist
- ✓ Occupational Therapist
- ✓ Speech & Language Pathologist
- ✓ Physical Therapist
- ✓ Engineer

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Assistive Technology Continuum

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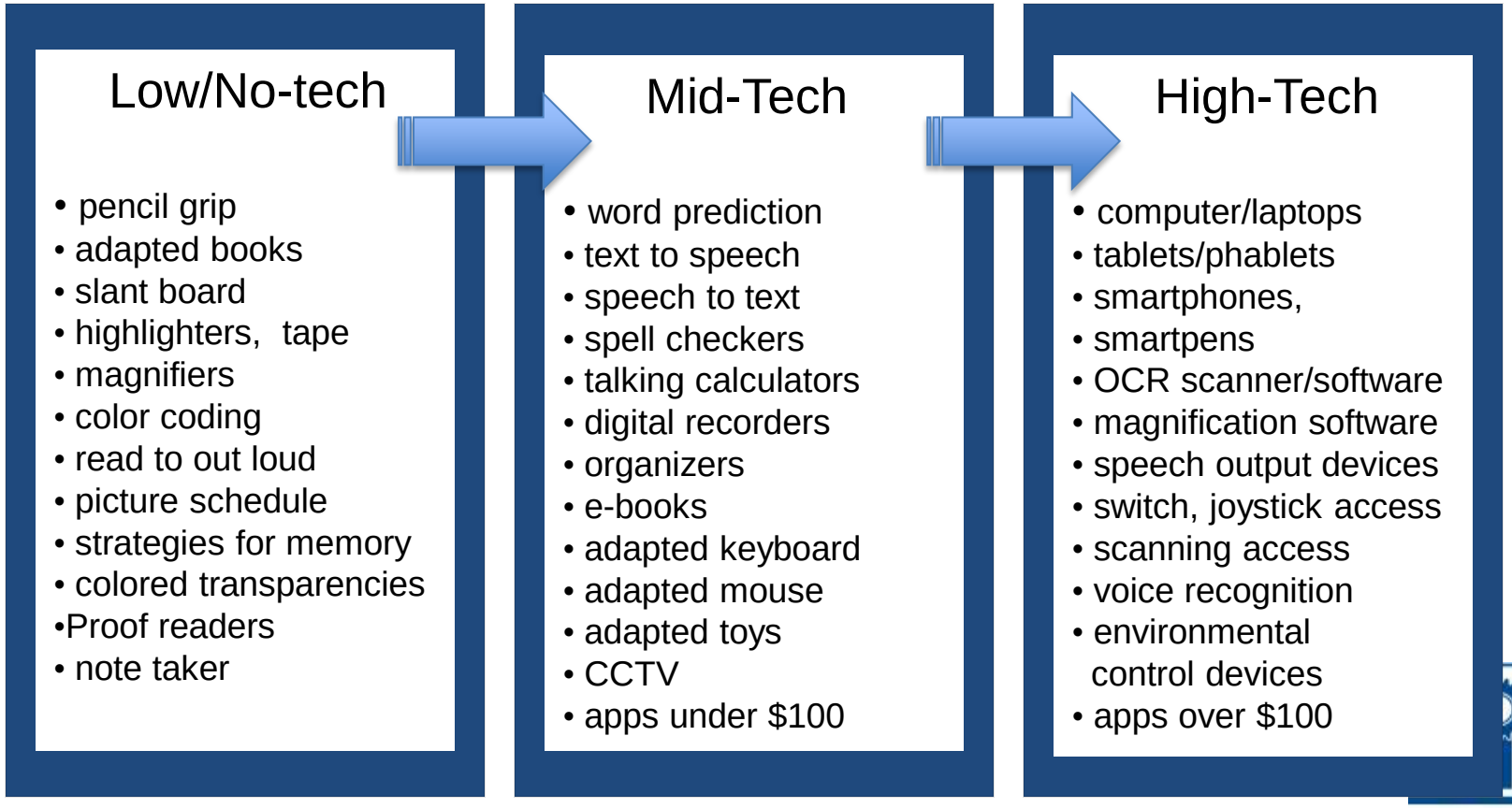
Observations & "Hanging out with Intent"

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



Consider Accessibility

Features of Access Solutions

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

ASL Switch Labs

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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

Electronic Switches

200 Series

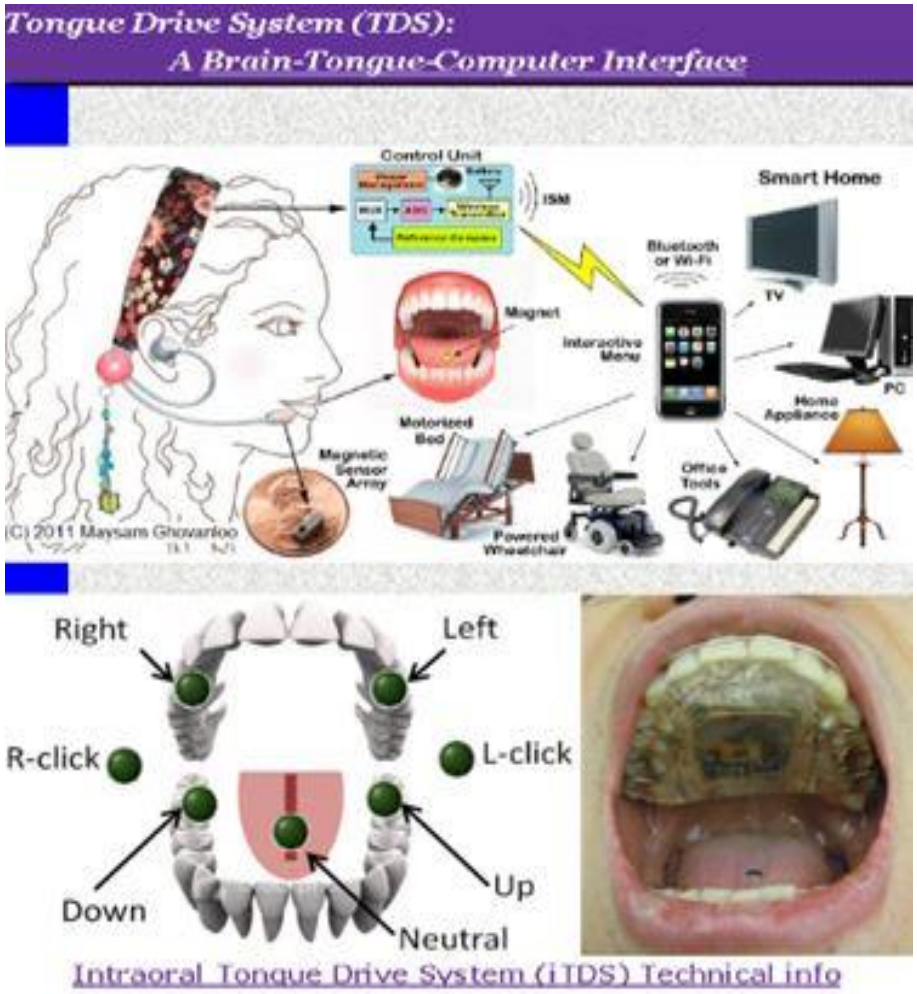
ASL 215 Round Proximity Sensor with Mono Port and 24 Volt Connector

Electronic Switches

200 Series

ASL 215 Round Proximity Sensor 3 Pin

Tongue Drive System



Speech Recognition Software

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

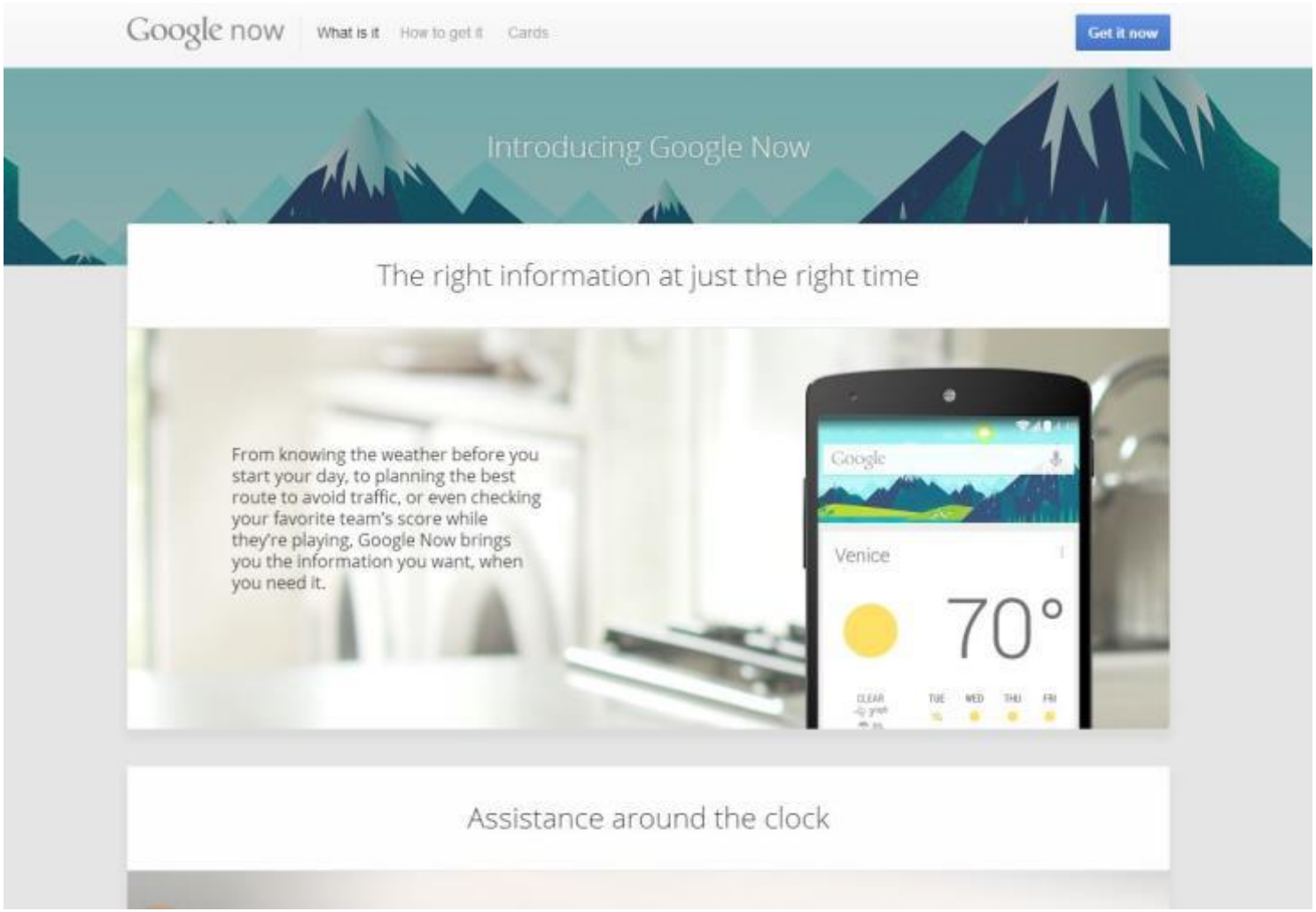
Ginger

- 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

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.
Google
Venice
70°
Assistance around the clock

LEAP Computer Input

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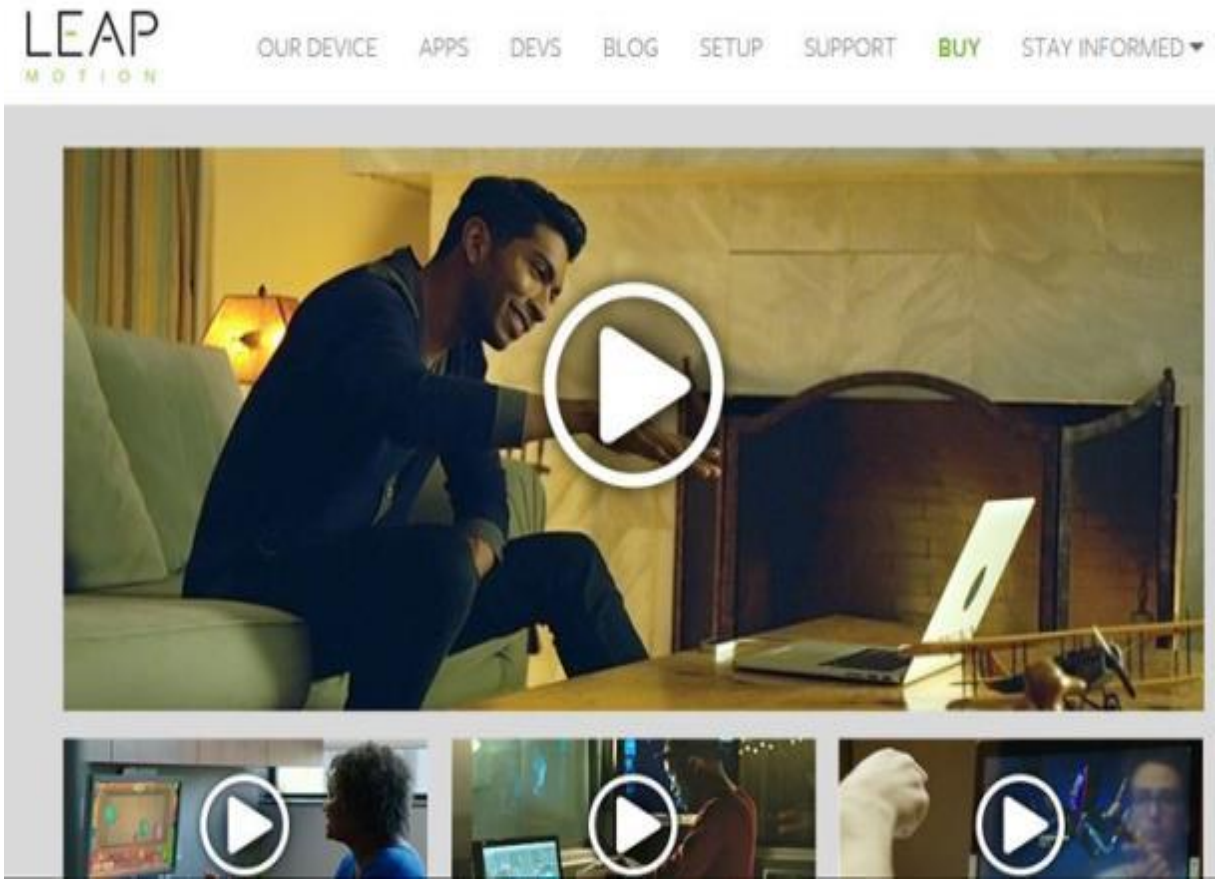
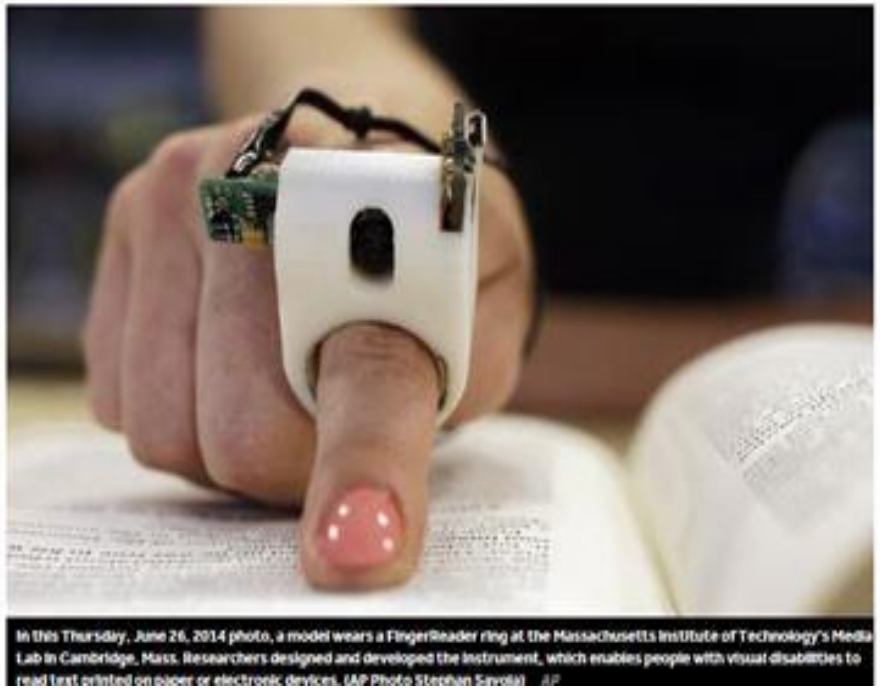


Reading Finger Device

MIT Finger Device Reads to the Blind in Real Time



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) AP

By RODRIQUE NGOWI
Associated Press

JULY 8, 2014 1:24 AM

TFL AppFinder

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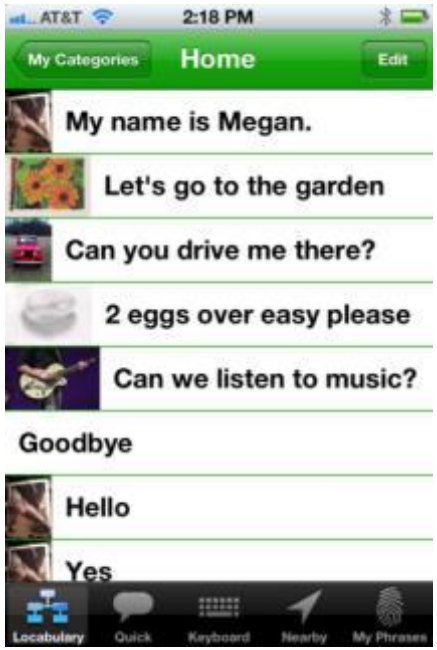
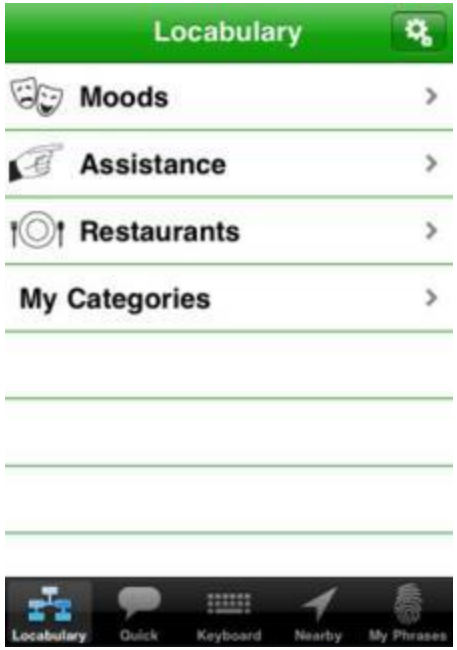
Search by:

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

Locabulary





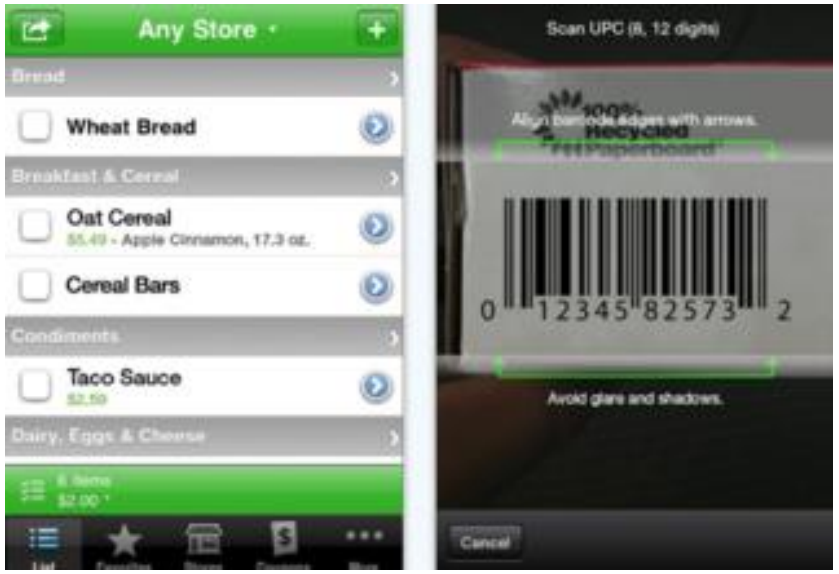
- Uses GPS to track user location and suggests appropriate vocabulary based on location
  - ie: Starbucks
- A keyboard to type for text-to-speech
- User can tag their own locations and create vocabulary for each location
- Lite version Free; Pro version $130

MyMedSchedule

- Keep track of medication
- Reminders
- Refill Reminders
- Healthcare Provider Profiles
- Insurance Information
- Allergies
- Works across Platforms
- Free
- 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
- $4.99



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

Tracking Trends

Bestic Feeder

- Bestic can best be described as a small, robotic arm with a spoon in the end that can easily be maneuvered.
- Bestic is small and compact, has an attractive, discreet design and is very quiet which makes it blend into the dining environment in a natural way.
- By choosing a suitable control device, the user can independently control the movement of the spoon on the plate and choose what and when to eat.

Talkitt

- Enables people who have motor, speech, and language disorders to easily communicate using their own voice
- Translates unintelligible pronunciation from any language into understandable speech
- http://www.talkitt.com/

WeHaptic In Soles

- Connects to smartphone via Bluetooth technology
- Foot gestures and voice commands
- Navigation via vibration of the soles, i.e.: left sole turn left
- http://lechal.com/products.html

Lumo Lift

- Lumo for back and head/shoulders
- Sends gentle vibration alert when posture needs to be corrected
- http://www.lumobodytech.com/

T. Jacket

- Wearable technology vest
  - Provides customizable deep touch pressure
    - Uses adjustable air pressure compression controlled via smartphone app
    - http://www.mytjacket.com/

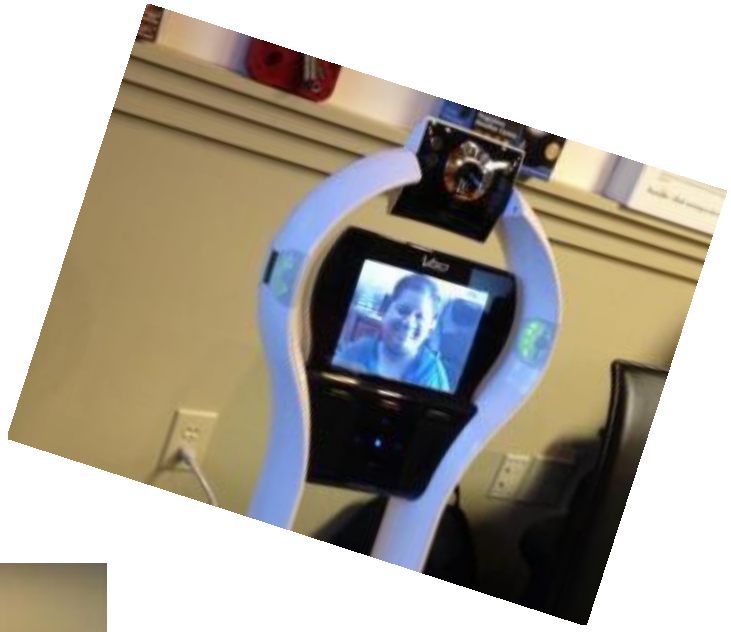
Pixie

- Maps all of the digital things in your life
- Place a pixie chip on any device and map will tell you it's precise location
- https://www.getpixie.com/

Telepresence Robots

VGo Telepresence

- 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



People with Disabilities in the Work Place

Sector: Business

VGo increases productivity and effectiveness while lowering costs by enabling a person to get to a location instantly and easily. VGo is not designed as a replacement for in-person interaction but rather as the next best alternative to "being" in the workplace. VGo also eliminates the deficiencies associated with other video solutions that are locked to a TV or computer monitor by providing 100% remote controlled mobility. delete that

In addition to "being" at work from home, VGo can help people who can get to the workplace, but who cannot practically move about the facility or campus. A VGo can be used to enable a person to move around in one part of the facility while they are physically in another.

The benefits of using VGo in the workplace include

- Getting to places previously inaccessible increases opportunities
- Freedom of movement increases personal interaction with others
- Quality of life improvements by expanding the work and social environments
- Costs can be reduced by lowering or eliminating select transportation expenses, and by communications and speeding decision making

Environmental Access

TFL Environmental Control Lab

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Environmental Controls

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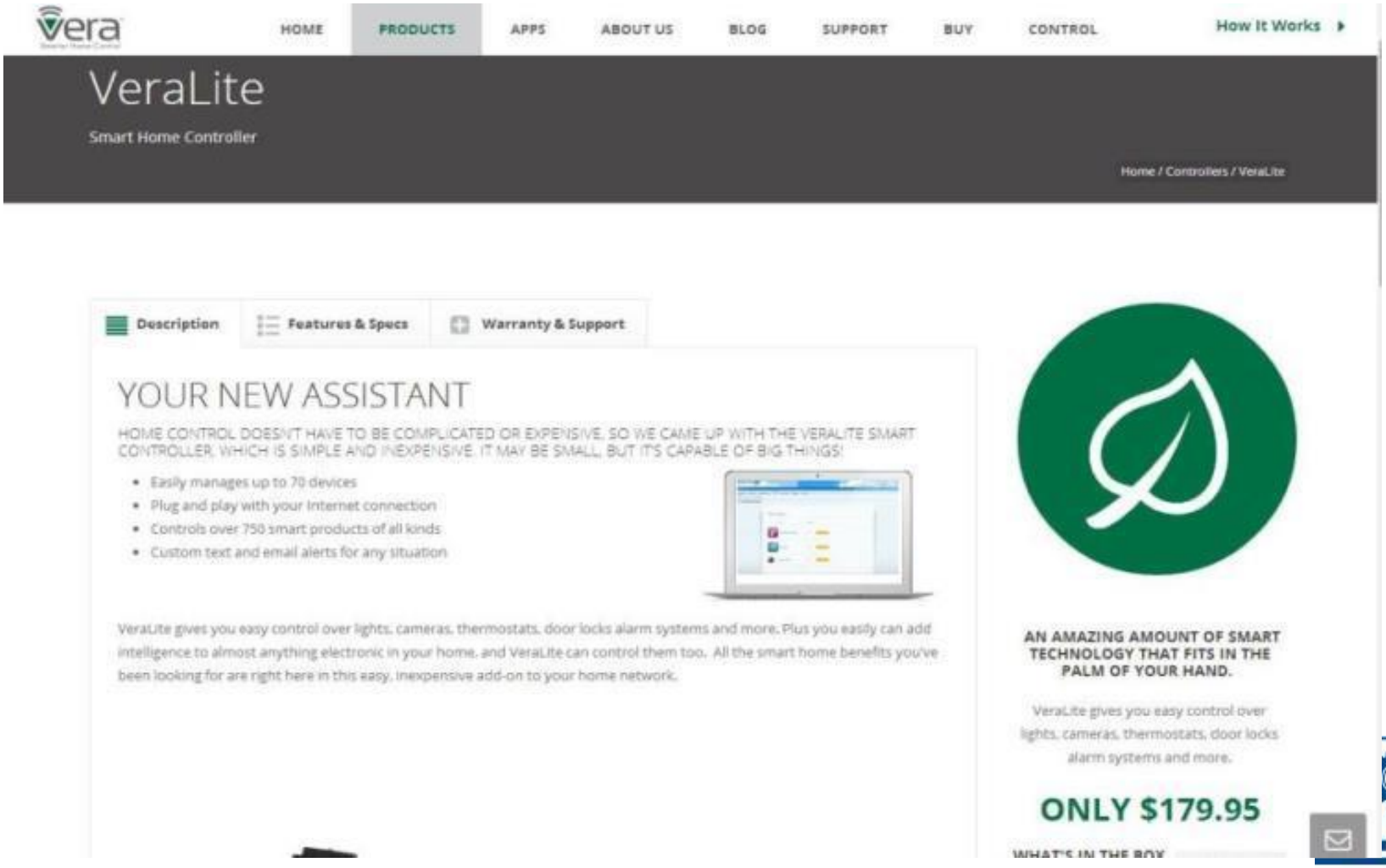

Accessible Gaming

TFL Gaming Initiative

- There are many benefits to playing games
  - Improved Hand/Eye coordination
  - Increased problem solving and cognitive function
  - Better handle stressful environments
  - Social outlet
- Tools for Life has recognized the importance of play and is starting an initiative dedicated to gaming with disabilities. Some objectives of the program are:
  - Demonstrate the accessibility of gaming
  - Build relationships with developers and aid in creating more accessible games
  - Increase public awareness of the importance of accessibility in games

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Our Question to You:
What have You Learned today?

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Safe travels home and Ya'll come back!!

GEORGIA TECH

UCLA BRUINS

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Disclaimer
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Georgia's Assistive Technology Act Program