



Tools for Inclusion of All K-12 Students: Part 1: *The Evidence*

Carolyn Phillips
Tools for Life
www.gatfl.org

www.amacusg.org

Agenda

- **What happens when the person who needs assistive technology is unable to access it? What happens when someone has the assistive technology they need but doesn't know how to use it? Students with disabilities have a dropout rate twice as high as students without disabilities. The majority of young people with disabilities remain unemployed two years after graduation from high school and have higher rates of incarceration than the general population. Many students encounter roadblocks because of the lack of exposure to training and access to assistive technology.**
- **This session will explore:**
 - Tools for Life & AMAC Resources,
 - Define Inclusion & Myths
 - Define successful AT principles,
 - Begin to explore Tools for Inclusion.

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



Join us for Upcoming Webinars!

- Thursday, May 9 at 2:00 PM EST - Universal Design for Learning and the Common Core: The Power of THE PACT with Phyl Macomber, Make A Difference, Inc.
- Wednesday, May 29 at 2:00 PM EST - Apps and a Closer Look at the Tools for Life App Finder: A Live Demo with Martha Rust, Tools for Life/AMAC

Sign up on the TFL mailing list to receive our email announcements or send an email to Liz - liz.persaud@gatfl.gatech.edu



Join us for TFL Webinars!

- Thursday, April 18, 2:00pm to 3:30pm EST – Free for All! Resources for Students and Teachers, Pat Kent, Douglas County Schools and Chris Swaim, Forsyth County Schools
- Wednesday, April 24, 2:00pm to 3:30pm EST – Assistive Technology and Adapted Recreation: A Perfect Match, Carolyn Phillips, Martha Rust and Liz Persaud

Sign up on the TFL mailing list to receive our email announcements or send an email to Liz - liz.persaud@gatfl.gatech.edu

Join us!

IDEAS Conference, June 3-6, 2013

- St. Simons @ Epworth by the Sea
- Call for proposals is open until April 30
- Last year we exceeded our goal and had 586 participants! We are expecting more than 700 participants this year!
- For more information visit www.gatfl.org



Tools for Life

Georgia's Federal AT Act Program

On February 1, 2012 we joined:
AMAC @ Georgia Institute of Technology
www.amacusg.org

AMAC

AMAC Accessibility is a social change organization on a mission to create affordable services for governmental, private and non-profits organization working with individuals with disabilities. Services include e-text, braille, captioning, assistive technology, office management software and consulting.





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

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



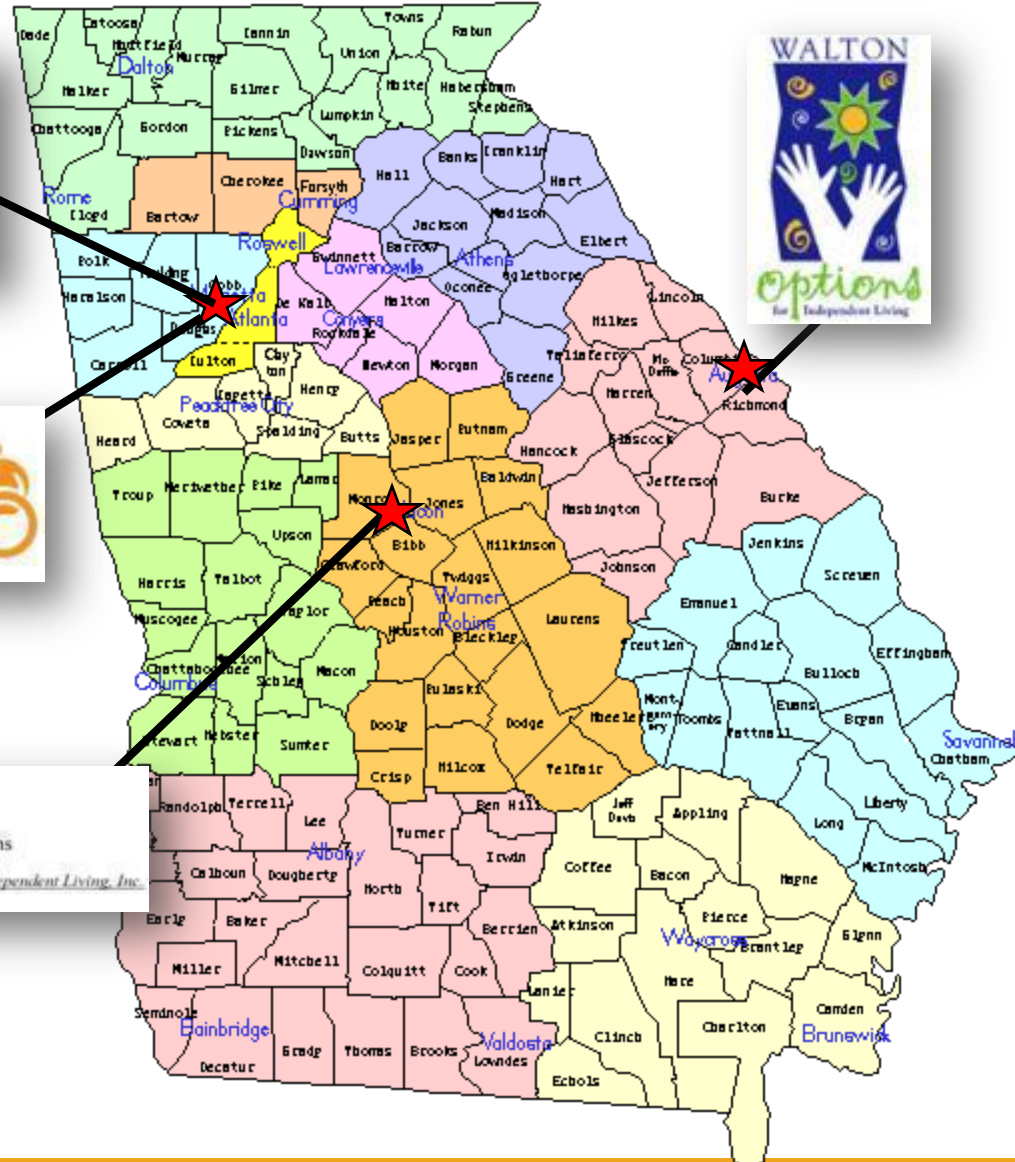
Tools for Life

Georgia's Federal AT Act Program

- TFL developed Georgia's Plan for AT
- We serve individuals of all ages & all disabilities in Georgia
 - Over 50,000 thru various activities throughout the year
- TFL Network
 - Assistive Technology Resource Centers
 - Lending Libraries
 - Training and Demonstrations
 - AT Reuse
 - AT Funding Education/Assistance and Resources
- Online Resources
 - www.gatfl.org - 12,000 unique visitors a month

Tools for Life Network

- AT Lending Library
- AT Evaluations & Training
- AT Demos
- Resource and Assistance
- AT Funding Assistance
- DME Reuse



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



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.



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



TRAINING

[View Presentations](#)[Request Training](#)

FUNDING

[Resource & Assistance](#)[Dollars & Sense Database](#)[Online Equipment
Exchange](#)

RESOURCES

[TFL Newsletter](#)

CONTACT US

[Meet the TFL Team](#)[Advisory Council](#)[Directions/Map](#)[Join our Mailing List](#)[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 our mission through:

- [AT Demonstration](#)
- [AT Evaluations and Assessments](#)
- [AT Funding Options & Education](#)
- [Access to the TFL AT Lending Libraries](#)
- [AT & Durable Medical Equipment Reuse](#)
- [AT Training \(Individual\)](#)
- [AT Training \(Groups\)](#)

2013 IDEAS CONFERENCE

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

- [Submit a Proposal](#)
- [Conference Website](#)
- [Exhibitor Details](#)

WEBINARS

APR
18

[Free for All! Resources for
Teachers and Students](#)

APR
24

[Assistive Technology and
Adapted Recreation: A
Perfect Match](#)

[Current Webinar Schedule](#)
[Webinar Archives](#)

APP FINDER



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

AT ONLINE EXCHANGE



[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.

TRAINING

[View Presentations](#)

Request Training

FUNDING

Resource & Assistance

Online Equipment
Exchange

RESOURCES

TFL Newsletter

CONTACT US

Meet the TFL Team

Advisory Council

AppFinder

[About](#) | [Our Other Favorite Apps](#) [Databases](#) | [Helpful Links](#)

Welcome to the Tools for Life Database - Our Favorite Apps for Living, Learning, Working and Playing!

Search By:

Name: _____

OR

Category:

Please select...

Price:

☒ Free ☐ Up to \$4.99 ☐ Up to \$9.99 ☐ All

Device Type:

☒ All ☐ Android ☐ iOS ☐ Microsoft

Search

[Add an App](#) | [Rate an App](#) | [Comments and Suggestions](#)

Version: 1.0

2013 IDEAS CONFERENCE

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

[Submit a Proposal](#)

- Conference Website

WEBINARS

APR 18

Free for All! Resources for Teachers and Students

APR
24

Assistive Technology and Adapted Recreation: A Perfect Match

[Current Webinar Schedule](#)
[Webinar Archives](#)

APP FINDER



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

AT ONLINE EXCHANGE

 eTRADE, Georgia's Online



TRAINING

[View Presentations](#)
[Request Training](#)

FUNDING

[Resource & Assistance](#)
[Dollars & Sense Database](#)
[Online Equipment Exchange](#)

RESOURCES

[TFL Newsletter](#)

CONTACT US

[Meet the TFL Team](#)
[Advisory Council](#)
[Directions/Map](#)
[Join our Mailing List](#)

My Favorite Apps

You searched for: Learning, Cognition, and Developmental



tango Video Calls

Tango brings you free, high-quality mobile voice and video calls over 3G and Wi-Fi! Millions of people around the world are using Tango in an exciting new way. It

Learning, Cognition, and Developmental iOS

No Ratings

app icon

i-prompt

Professional Tele-prompting software for your iPhone or iPod Touch.

Learning, Cognition, and Developmental iOS

No Ratings



Dragon

Dragon Dictation is an easy-to-use voice recognition application powered by Dragon

Learning, Cognition, and Developmental iOS



5 stars by 1 users



iBooks

iBooks includes the iBookstore, where you can download the latest best-selling books or your favorite classics

Learning, Cognition, and Developmental iOS



Say Text

SayText reads out loud the text in the image. It is intended for the visually impaired users. SayText is a free spin off product from the DocScanner team.

Learning, Cognition, and Developmental iOS

2013 IDEAS CONFERENCE

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

- [Submit a Proposal](#)
- [Conference Website](#)
- [Exhibitor Details](#)

WEBINARS

APR
18

[Free for All! Resources for Teachers and Students](#)

APR
24

[Assistive Technology and Adapted Recreation: A Perfect Match](#)

[Current Webinar Schedule](#)
[Webinar Archives](#)

APP FINDER



...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 technology unneeded by others.

What is Inclusion?

- **Inclusion**

Inclusion is a term which expresses commitment to educate each child, to the maximum extent appropriate, in the school and classroom he or she would otherwise attend. It involves bringing the support services to the child (rather than moving the child to the services) and requires only that the child will benefit from being in the class (rather than having to keep up with the other students).

Proponents of inclusion generally favor newer forms of education service delivery.

- http://www.weac.org/Issues_Advocacy/Resource_Pages_On_Issues_one/Special_Education/special_education_inclusion.aspx

Positive Effects

- Students may be learning things we are unaware of
- Students have the opportunity to interact with their same age peers
- Students become less dependent on adult support and more dependent on peers
- All students become more accepted
- Students are able to participate in hands on learning with their peers
- The students learn appropriate social skills
- The students get to be part of a group
- Students see positive role models
- Students learn to take direction from more than one adult

Positive Effects: “Regular Education”

- Instruction is taught in a variety of ways, meaning students who learn differently may have a better chance
- Peers learn how to interact with students with a wide range of abilities
- The students learn appropriate social skills
- Students learn that everyone is not the same and we need to accept everyone for who they are
- The students peers learn acceptance and patience
- Students may become a better leader
- Students become well rounded to what is really out there

A Closer Look at Points of View

Misconceptions

- Teachers need to form two completely different lesson plans
- It is not possible to do this at the secondary level
- Special education students are too disruptive

Reality

- Teachers should be differentiating their instruction to meet the needs of ALL students (regular ed students, also)
- Standards can be modified
- ALL students can be disruptive

A Closer Look at Points of View

Misconceptions

- Regular education teachers cannot meet the needs of such a range of students
- The classroom teacher says, “I am not prepared to educate these students.”
- The paraprofessionals are in the classrooms to teach the students with special needs

Reality

- There are no two students who are exactly the same in a regular education classroom
- Special education teachers are more than willing to help educate you on each student's individual needs
- The paraprofessionals are in the classroom to support the teacher in whatever ways possible

Considering Assistive Technology: What Works for the Individual



Why Assistive Technology?

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



Collaborative Team Approach

In the collaborative team approach, it is assumed that no one person or profession has an adequate knowledge base or sufficient expertise to execute all functions associated with providing services.

(S.W. Blackstone, 1992)

Assistive Technology Matching: A TEAM APPROACH

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

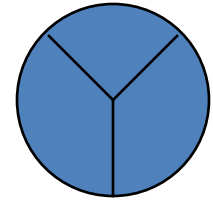


Multidisciplinary AT Evaluation

SETT Framework

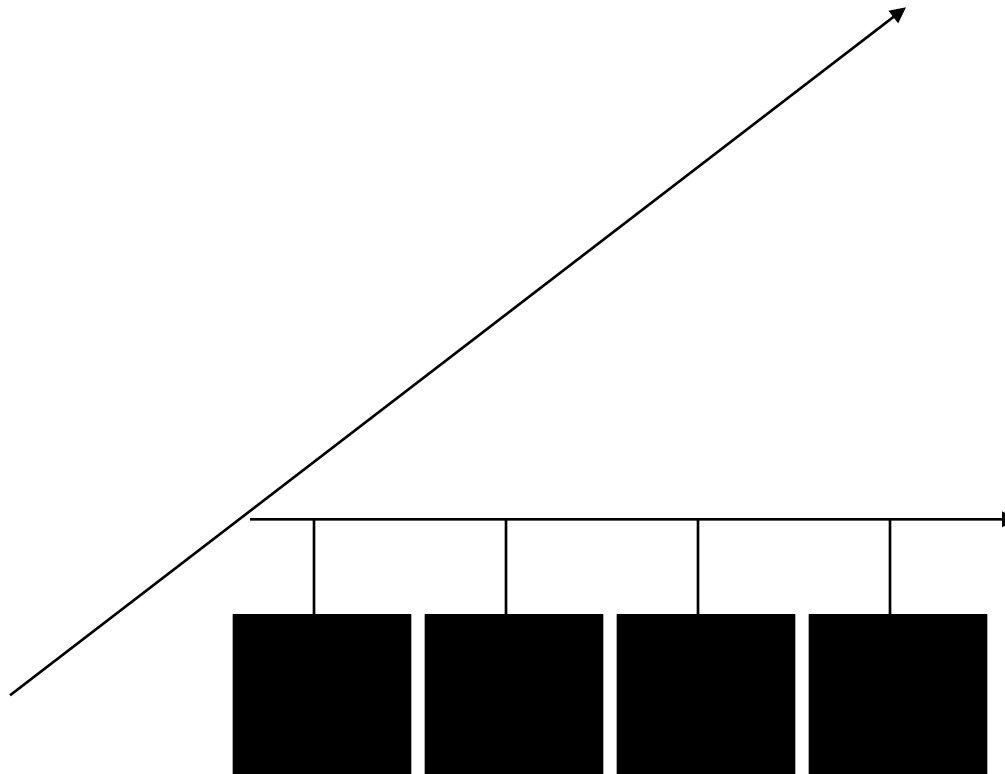
- ▶ Identify **student** needs
- ▶ Determine **environmental** demands and resources
- ▶ Define the **tasks** that the student must perform
- ▶ Recommend **tools**, technology, or techniques that will address needs

Human Activity Technology (HAAT) Model

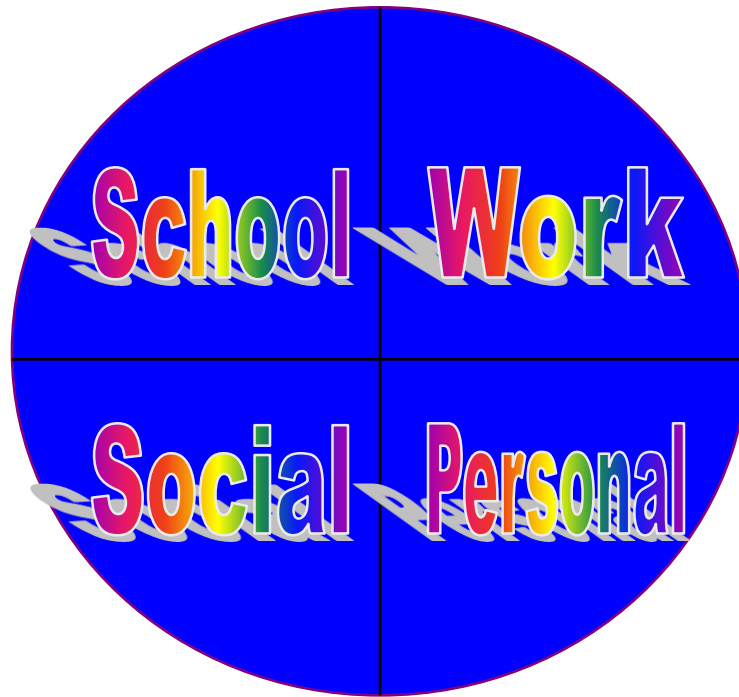


- Human: represents the skills and abilities of the person with a disability
- Activity: a set of tasks to be performed by the person with a disability
- Context: the setting or social, cultural and physical contexts that surround the environment in which the activity must be completed
- Assistive Technology: devices or strategies used to bridge the gap between the person's abilities and the demands of the environment

Promoting Strengths & Managing Weaknesses



A Holistic Approach



Selection of an AT Device

Depends on an analysis of the following conditions:

- Prior experience or knowledge, and interests;
- The individual's specific strengths, weaknesses;
- The specific device (reliability, ease of operation, technical support, cost)
- Usefulness across settings
- **Usefulness over time and/or as symptoms manifest!**

Most Effective Technological Products

- Able to level out the playing field
- Work in cross-settings
- Portable
- Easy to maintain
- Affordable to replace and/or maintain
- Good and reliable technological support
- Accessible training format

Staying off the **FAST** Track!

Frustration

Anxiety

Stress

Tension

Effective AT Assessment

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

How Is Assessment Conducted?

- Dynamic
- Multimodal
 - Inventory
 - Interview
 - Observation
 - Formal Testing
 - Informal Testing
- Assessment should focus on features and strategies rather than on a specific device
- Matches abilities, needs, and expectations to AT features



Feature Match: Abilities, Needs and Expectations

- Daily needs
- AT history
- Individual & family input
- Cognition
- Language
- Sensory issues
- Motor issues
- Life transitions

Try before you Buy!

- ▶ Team Consensus –
Equipment trials and
timelines
- ▶ Emphasis on
meaningful,
motivating activities
 - Activities should reflect
key environments
 - Use should be
consistent
- ▶ Careful collection and
review of data,
outcomes, &
recommendations
- ▶ Closure through team
decision-making

Ongoing Implementation

- In-house equipment
- Low-tech and no-tech solutions
- District purchase
- Family purchase
- Insurance/Medical Access

Implementation Barriers

- Assistive Technology as a goal
- Device breakdown
- Juggling too many issues
- Juggling too many environments or tasks
- Unrealistic expectations
- Lack of team coordination
- Short-term planning vs. Long-term objectives
- Environmental factors
- Standard equipment maintenance

Implementation & Training

- Develop training plan
- Select target activities
- Consider no, low, high tech
- Develop back-up system
- Physical management of equipment
- Research and implement effective practices
- Review training information
- Participate in on-going trainings
- Prepare for life transitions

Ongoing Re-evaluation

- ▶ Current steps & future goals for implementation
- ▶ Measurement of student's performance
- ▶ Degree of technology use
- ▶ Effect of AT on empowerment or advocacy
- ▶ Improvements in AT

Including AT in the IEP

- Student's AT needs should be documented in the Evaluation Report (ER)
- Current program modifications/specially designed instruction should be documented in the Individualized Education Plan (IEP)
- Outcomes of the AT assessment should be discussed by the IEP Team and included when the IEP is reconvened

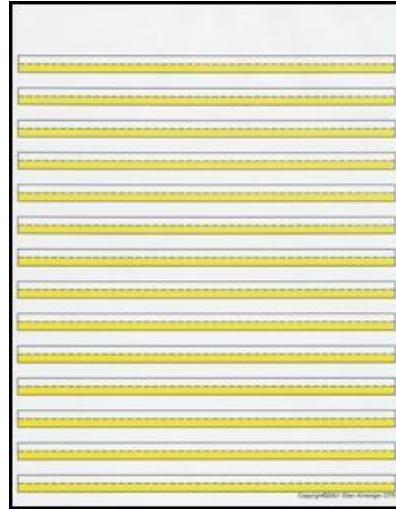


AT & UDL Promote Inclusion

- Universal Design for Learning is determining...
 - Reception and Representation
 - Engagement and Motivation
 - Expression and Demonstration

AT & UDL Promotes Inclusion

- Think about who your students are?
- Think about what you need to teach?
- Then, think about how you can teach this content to these learners?
- Then, think about, is this working or do I need to make changes?



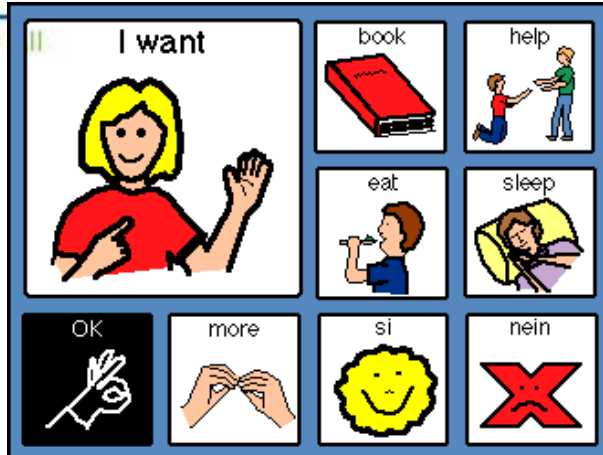
No-Tech

- Highlighter tapes & pens
- Specialized paper
 - Raised line
 - Contrasting line
- Pencil grips
- Picture cards
- Line guides

Low-Tech

- Portable keyboards
- Spell checkers
- Talking calculators
- Stand-alone switches
- Digitized communication devices





High-Tech

- Computer software
- AAC devices
- Power wheelchairs
- CCTV displays





Android & Apple



Microsoft Surface

- Windows 8
- Slim and has a USB port
- Moveable Tiles
- Built-in Accessibility
 - Speech-to-text
 - Narrator
- Thin pressure sensitive cover that doubles as a keyboard
- Starts at \$499



Samsung Galaxy



- Download Accessibility Features
- 7 inch or 10 inch screen available
- Compatible with flash/ WIFI
- 8.0 coming out February 2013 in Europe
- 8.0 will have a better camera and use a SIM card for storage
- Starts at \$199.99 but 8.0 may be more

Motorola XOOM



- Android System
- Must download accessibility features
- Compatible with Flash
- Camera
- Wi-Fi
- Uses micro SIM card for external storage
- Starts at \$319.00

Apple iPad

- Multi- touch screen
- New iOS 6
- Millions of apps
- Surf web
- iTunes
- Videos
- Organization
- Accessibility
- Books
- Photos
- Speakers
- New iPad had 5.0 megapixel camera
- Starts at \$499/\$399



Height: 9.50 in
Width: 7.31 in
Depth: 0.37 in
Weight: 1.44 lb

Apple iPad mini

- Multi - touch screen
- New iOS 6
- Millions of apps
- Surf web
- iTunes
- Videos
- Organization
- Accessibility
- Books
- Photos
- Speakers
- 5.0 megapixel camera
- Starts at \$329



Height: 7.87 in
Width: 5.3 in
Depth: 0.28 in
Weight: 0.68 lb

Apple iPod Touch

- 5 Megapixel Camera
- Millions of apps
- Videos
- Surf Web
- Voice Over
- Organization
- Speakers
- Bluetooth
- New iOS 6
- Starts at \$299 / \$199 4th gen



Access: Stylus

- Ten One Design Pogo Stick- \$15
- AluPen- \$20



- Bamboo Stylus- \$30



Areas of Need

Communication

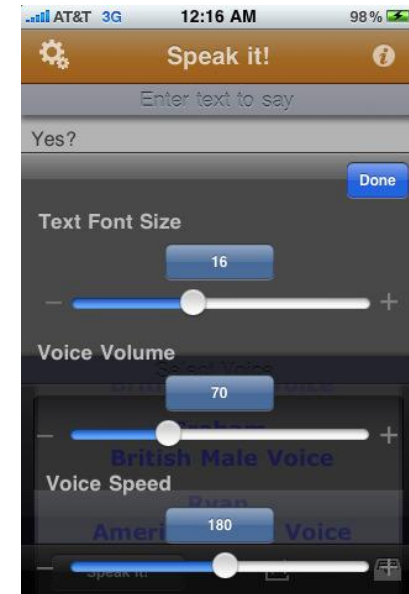
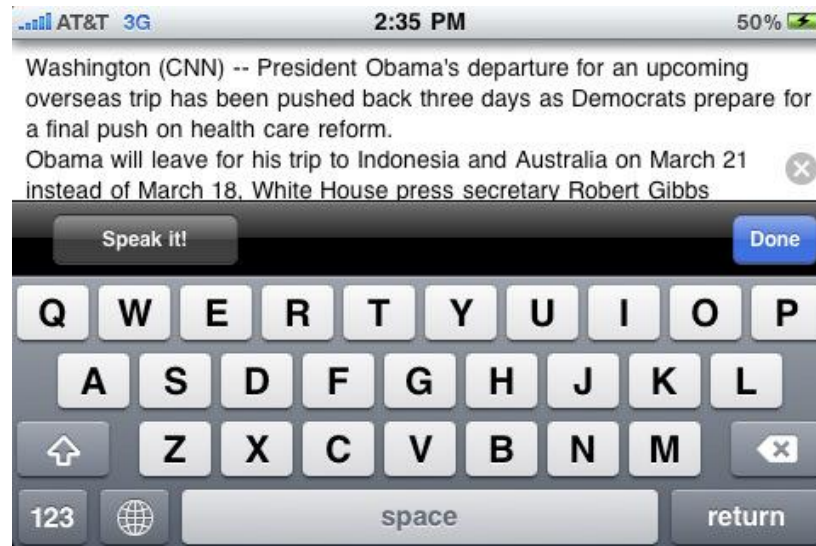


App Solutions

Speak it!



- Copy emails, documents, web pages, PDF files, and more; paste them into Speak it!, and have the text spoken back to you.
- Email text to speech files
- Make announcements over PA system
- Endless phrases and possible uses
- \$1.99



Lingraphica

Aphasia Facts

- Major cause in US is stroke ~700,000 strokes/year
- New aphasia cases per year ~100,000 (ALS ~5,000; CP ~10,000)
- Currently ~1,000,000 Americans living with aphasia
- Year 2020 prevalence of aphasia projected: ~2,000,000
- Why: aging US population, more stroke survivors, living longer



Proloquo2go



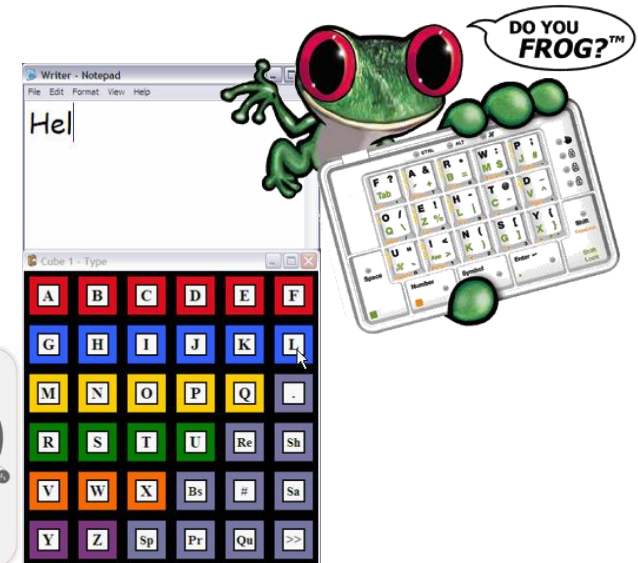
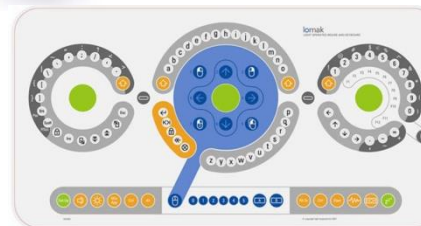
App Solutions

Communication:

- NeoKate/ NeoPaul
- Free
- Type and Speak



Computer Access



REACH Interface Author Applied Human Factor, Inc.



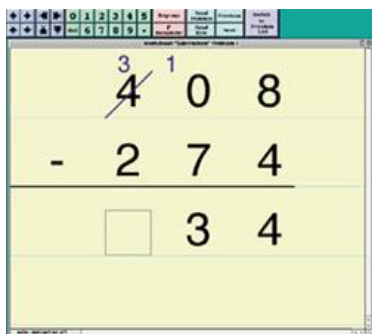
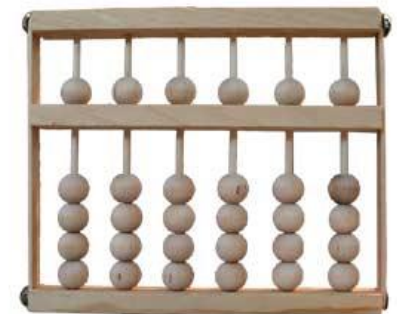
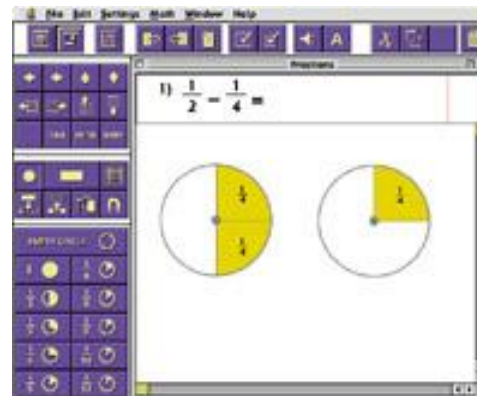
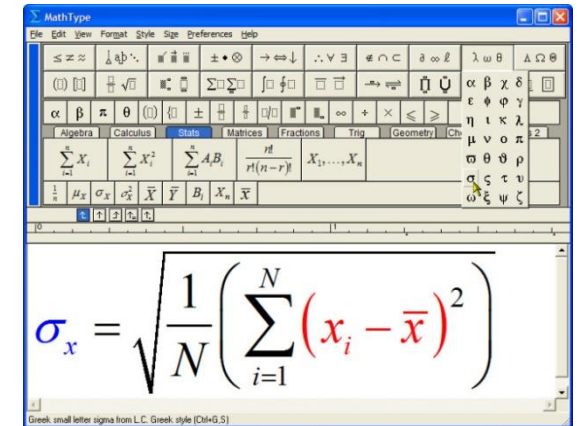
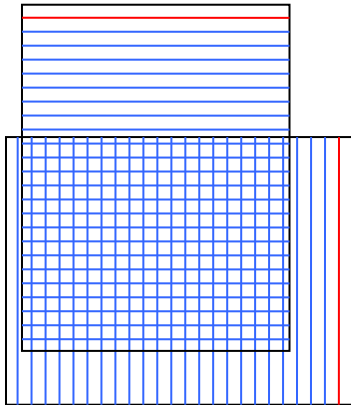
- On-screen keyboard
- Seven years of R&D
- Word/sentence completion
- Speech augmentation
- Scanning keyboard options
- Automatic window management
- 100+ built-in keyboards
- 10 built-in assessment tools

Speech Recognition Software

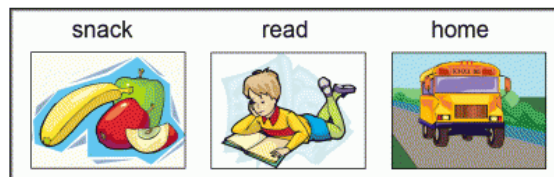
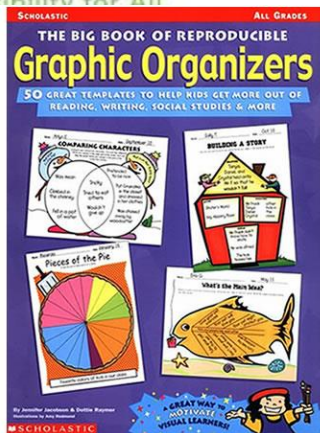
- Turn spoken words into text
- Connect with the timing of your thoughts
- Dictate eyes-free, without watching for errors or stopping to make corrections
- Dictation speed 70 to 100 words per minute



Mathematics



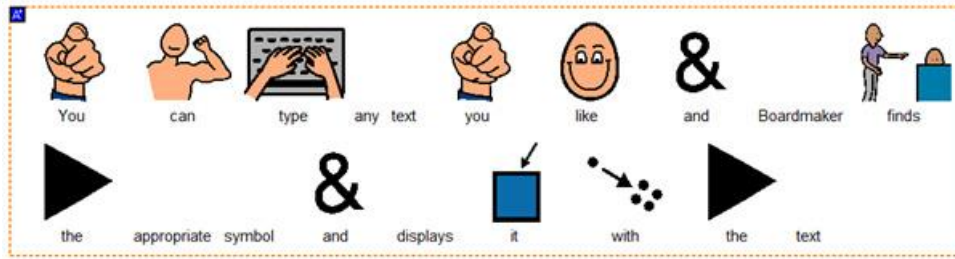
Organization



Talking Watch

- Talking Watch helps students tell accurate time
- Look for easy to read LCD display
- Alarm
- Come in many different styles
- Low in cost





Seating and Positioning

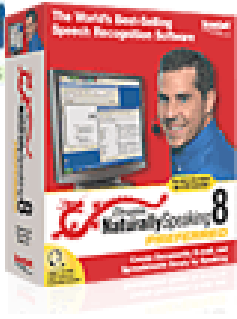


Sensory Needs

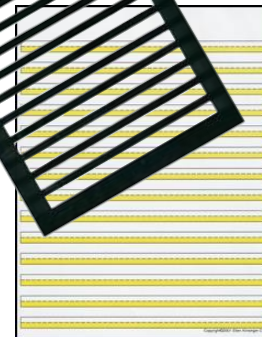
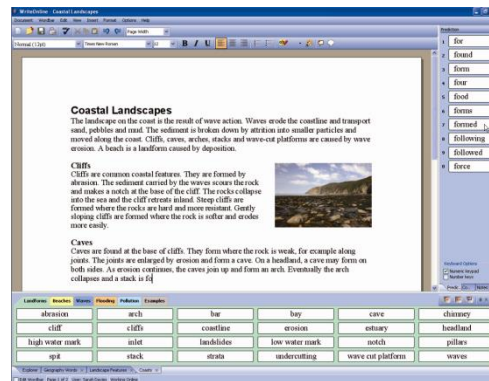
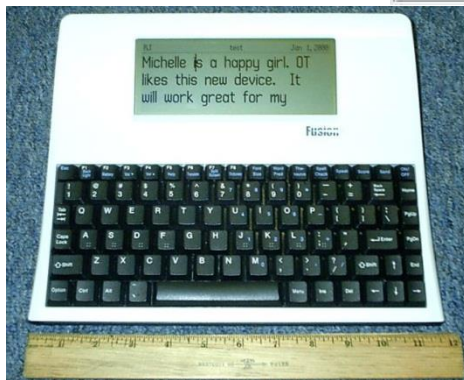
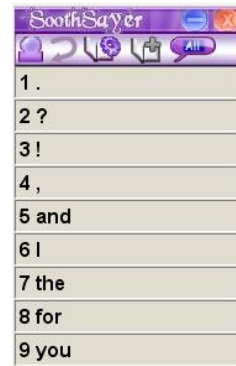
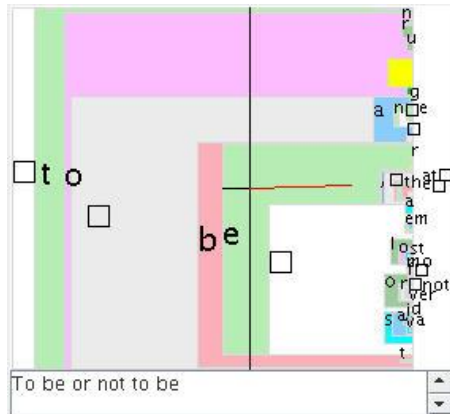


twistable, stickable, buildable,
playable One-of-a-kind
creatable!





Writing

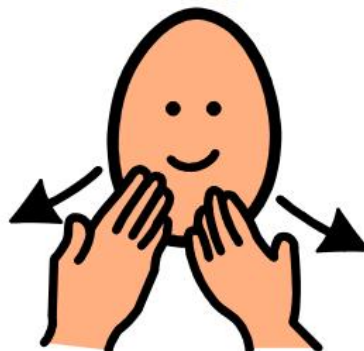




My Question:
What have You Learned today?

Thank You!

thank you





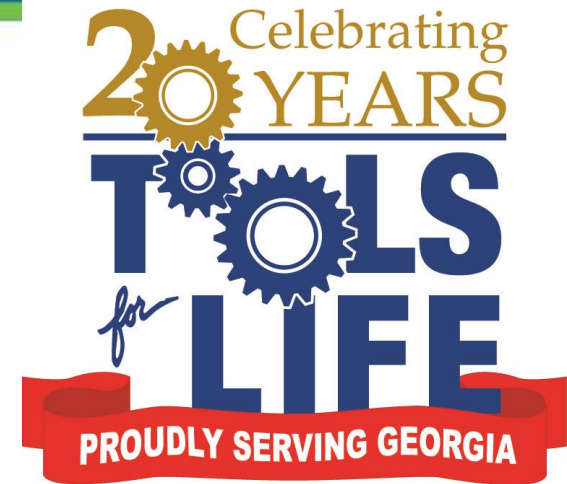
Contact Us!

Carolyn Phillips
TFL Program Director
carolyn@gatfl.org

Liz Persaud
Training and Development
Coordinator
liz@gatfl.org

Martha Rust
AT Specialist
martha@gatfl.org

Jackie Stapleton
AT Funding & Resource Specialist
Jackie@gatfl.org



Tools for Life @
Georgia Tech/AMAC
512 Means Street,
Atlanta, GA 30318

1-800-497-8665
www.gatfl.org

Thank You for Your Time & Interest!