Assistive Technology & Me

Carolyn Phillips, Director, Tools for Life

With contributions from Christopher Lee, Martha Rust, Liz Persaud & Ben Jacobs & Ben Satterfield

www.gatfl.org

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

Ga. College & Career Readiness Institute
Macon, GA
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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
- Understanding Assistive Technology
- Trends to Watch
- where we are and perhaps, where we are going.

…all in 60 minutes!

For Handouts: http://www.gatfl.gatech.edu/tflwiki
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.
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- **Captioning Services** makes classrooms, meetings, labs and other audio environments fully accessible for deaf or hard-of-hearing.
- **Professional E-Text Producers** provide high-quality e-text in many formats such as PDF, DOC, DAISY, and HTML.
- **Certified Assistive Technology team** provides on-site and remote assessments, demonstrations, training and technical assistance for education, work, and daily living environments.

For more information, please visit our website at [www.amacusg.org](http://www.amacusg.org)
AccessGA is a joint initiative of the Georgia State ADA Coordinator’s Office, the Georgia Institute of Technology’s AMAC Accessibility Solutions and Research Center, and The Georgia Technology Authority. AccessGA’s purpose is to support Georgia state agencies with Information and Communication Technology (ICT) accessibility, promoting equal and timely access for employees and customers with a wide range of disabilities.

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Administrative Office of the Courts
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Resources
WAVE
WebAIM
Wiki
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.
TFL AppFinder
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
Come Visit Us!
Welcome to the Georgia College & Career Readiness Institute…
AKA:
Welcome to Creative Trail & Bridge Building 101!
Guiding Principles

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

• Smooth Transitions Make The Difference!

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

• We Must Focus on Abilities!

• Assistive Technology is Key to Success.

• Success Breeds Success

• 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.
Guiding Principles

TIP: To be Successful –

- We need to move from Transactional Relationships to developing **Transformational** Relationships.

- We need to moved from Independent to **Intradependent**.
L. J. vs. Frances V. Phillips
The Neurology of My Brain

The “rate” at which you learn will become the only sustainable competition advantage you’ll have in your life.

- Peter Senge

- Visual Perception & Discrimination

- Auditory Perception & Discrimination
Carolyn’s Specific Learning Disabilities

- **Dyslexia** - Difficulties with learning to translate printed words into spoken words with ease

- **Dysgraphia** - Deficits in writing (organization, clarity, unity, mechanical errors, spelling, handwriting)

- **Dyscalculia** - Difficulty with numbers and/or remembering facts over a long period of time (columns, number reversal, mathematical operation)
Carolyn’s Specific Learning Disabilities

• **Auditory Perceptual Deficit** – Has trouble receiving accurate information from the sense of hearing (trouble with how the brain interprets what it hears) - oral instructions, differentiating between similar sounds, hearing one sound over a background of other noise
“...What do we mean when we call something a disadvantage? Conventional wisdom holds that a disadvantage is something that ought to be avoided—that it is a setback or a difficulty that leaves you worse off than you would be otherwise. But that is not always the case....I want to explore the idea that there are such things as “desirable difficulties.” That concept was conceived by Robert Bjork and Elizabeth Bjork, two psychologists at the University of California, Los Angeles, and it is a beautiful and haunting way of understanding how underdogs come to excel.”

~Malcom Gladwell from Chapter 5
Why Am I Here Today?

- Master Our Skills!
- Expand Our Knowledge and
- Build Stronger Schools to Create
Begin with the End in Mind!
Transition Success: Understanding the Self-Advocacy & AT Connection
Transition Success: Consider this…

• My Success relies on
  – Knowing Myself
    • Self-Exploration
      – Who Are You?
    • Learning Style
      – What is Your Learning Style?
  • Honestly Exploring –
    – What do I want to Do When I Grow Up?
    – What Assistive Technology do I need to accomplish my Goals?
Transition Success: Consider this…

- My Success relied on
  - Communication about My disAbilities
    - Understanding My disAbility
      - Language is Powerful
      - Talking with Housemates, Partners, Professors and Employers about my specific disAbilities
        - And Listening
    - Understanding My Weaknesses
    - Understanding My Strengths
Transition Success: Consider this…

• How did You see yourself?
  – Strengths
  – Areas of weakness
• Talk with me about your disability.
• Where are You Headed?
  – Got a Map?
• What do You Consider to be Success?
• What is Your Vision for Your Future?
• What is Our Collective Vision for the Future?
• Who is in/needs to be in Your Circle of Support?
Transition Success:
Understanding the Assistive Technology Connection
Why Assistive Technology?

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

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

- **TIP: USE AT.** I have yet to meet a successful student who doesn’t use Any AT.
Consider this -

• My Success relied on
  – Assistive Technology!!
    • Try before you buy – Explore!
    • Training
    • Think across environments –
      – Laptop – Still Need!
      – iPhone – I used 13 apps yesterday and today!
      – iPad – use everyday
    • Organization – Learn Your Style
      – efficiency brings peace
    • Evaluations – Hot Button
      – Working from No/Old/Incorrect info
      – Don’t trust everything you read & hear
    • Advocate for an AT Evaluation/Assessment
"Research indicates that many of the emotional or social difficulties gifted students experience disappear when their educational climates are adapted to their level and pace of learning."

**TIP:** Differentiation in education can also include how a student shows that they have mastery of a concept. This could be through a research paper, role play, podcast, diagram, poster, etc.

**TIP:** The key to differentiation is finding how your students learn and displays their learning that meets their specific needs.
Use Multi-modal Input Supports

- Communication breakdowns
- Reduce anxiety and behavioral meltdowns
- Teach functional skills
- Help with transitions
- Teach instruction, organization & expression
- Teach independence
Consider this -

- My Success relies on
  - Failing
  - Dignity of Failure
    - I learned More from My “Failures” sometimes than my “successes”
    - Give yourself room to fail – and Grow from the experience
    - Learn to Laugh…a lot!
    - Be Optimistic…
    - Evaluate & Evolve!
“Audentis fortuna juvet!”

means...Fortune favors the bold. Sometimes 'audentis' is translated as 'brave'. The literal meaning is more like 'daring'. The line is from Virgil (A. 10.284).
Moving from Information to Action

Educational Psychological Evaluations
- 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 Evaluation?
Moving from Information to Action
  - Using your Evaluation results as an Action Plan for AT
The “FAST” Track

• Frustration
• Anxiety
• Stress
• Tension
The SETT Framework

S = Student/Skills
E = Environment
T = Tasks
T = Tools

Adapted from Joy Zabala  www.joyzabala.com
Examples of Where and When Assistive Technology Supports MY Perception & Discrimination Process
Enhancing All of Life’s Functions

Considering AT:

- Identify Environments
- Determine the Functional Areas
- Select AT

- Dr. Cheryl Wissick and
- Dr. Elizabeth Bagley
Smooth Transitions: Making Informed Decisions
Low Tech AT Solutions
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 $349
Apple iPad/mini/ Touch

- Multi-touch screen
- New iOS 7
- Millions of apps
- Surf web
- iTunes
- Videos
- Organization
- Accessibility
- Books
- Photos
- Speakers
- 5.0 megapixel camera

Height: 7.87 in
Width: 5.3 in
Depth: 0.28 in
Weight: 0.68 lb
iOS 8 is Here!

iOS 8 Preview

Our smartest keyboard ever.

iOS 8 makes typing easier by suggesting contextually appropriate words to complete your sentences. It even recognizes to whom you’re typing and whether you’re in Mail or Messages. Because your tone in an email may be different from your tone in a message.

Learn more ›
Ergonomics

• Inhibits blood flow
• Creates muscle shortening
• Stresses back muscles and compresses spine
• Can inhibit learning
• Compresses diaphragm
  – Affects breathing
  – Voice quality
• Learning Ally
  – DAISY
  – Membership required
  – over 75,000 audiobooks, audio textbooks, and other recorded books
  – Free Trial
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ClaroSpeak US

- Text-to-Speech
  - import documents and PDFs into ClaroSpeak from apps such as Mail, or import PDF, Word, Pages and other files directly from Dropbox using
- Change font and color
- Save text as an audio file
- Visual Tracking
- Send Text
ClaroRead

- Reads text as it highlights
- Moveable tool bar
- Can read doc, PDFs, internet, and more
- 6.2 version
  - In Europe
  - Can save directly to iTunes
  - Create a video
- Can change highlighting colors
- www.claroread.com
TextHelp

- Text-to-Speech software
- Helps improve reading skills
- Built in text and picture dictionaries
- Study skills highlighter

- Has a Google Chrom version
- www.texthelp.com
Live Scribe Pen

• Records what it hears and what you write
• Uses specific paper for playback
• Connects to computer by USB for saving
• Tap on note and playback from there
• Jump forward and back in notes
• Dictionary
• Translation Apps
• Purchase Apps online
• Demo
Speech Recognition Software

- 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](#)
Inspiration

- Mind Mapping software
- Allows User to “connect” ideas together
- Add in pictures and hyperlinks
- Can produce an outline form

• Better organization of essays
• $39.95
• App $9.99
Memory & Cognitive Supports

- Calendar & Reminder Software
- Friendly Interface Layout

VS.
Google Calendar

• Color Code items
• Share Calendars
• Access across multiple platforms
• Customize Notifications
  – SMS Text
  – Emails
  – Popups
• Multiple ways to view
  – Daily
  – Weekly
  – Monthly
Tools for Life
AppFinder
MyMedSchedule

- Keep track of medication
- Reminders
- Refill Reminders
- Healthcare Provider Profiles
- Insurance Information
- Allergies
- Works across Platforms
- Free
- www.mymedschedule.com
Key Ring

• One Place to store all reward cards
• Organized
• Android & Apple version
• www.keyringapp.com
• Free!
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
SkyGrid

- Personalize news events by categories
- Simple interface
- Free
- www.skygrid.com
Sleep Cycle

- Tracks your sleep patterns
- Uses iPhone accelerometer to track how often you move at night
- Set an alarm range
- Woken up gradually when you are in like sleep
- Feel refreshed and energized
- $2.99
Fooducate

- Track calories
- Provides healthier options
- Educates on food ingredients
- Save favorites
- Create lists
- App for allergies and gluten-free
- App for diabetes nutrition
- Free
- www.fooducate.com
AudioNote

- Records your notes, meetings or lectures
- Can take notes by typing, stylus, or drawing
- Time stamps so you can go directly to where you want to hear
- Highlights notes when read back
- $4.99
Perfect OCR

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

- Emergency contact list
- Central place for you to record any medications
- List allergies or medical conditions
- Pre-loaded medical information to choose from
- Free
- www.ice-app.net
Emergency Aid

- What To Do in a personal threat, disaster or emergency
- Detailed medical profile
- Emergency contacts and health information with photo and customizable notes
- Distress Signal and light
- Illustrated instructions with highlighted “What to do”, “Warnings” and “Do Not”,
- One-Tap Call to emergency aid services or web sites
- $1.99
Favorite Navigation Apps

- **Around Me**
  - Identifies where you are
  - Lists what is around you
  - View route to place from where you are
  - Add information to contact list

- **Talk and Drive Waze**
  - Operate your map applications simply by talking
  - Launch the application, say your destination
iZen Garden

• Choose from 100s of objects, plants and creatures to place in your garden
• Rake the sand and share your creations
• Helps you to center your mind, relax your psyche and relieve your stress
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
Pandora

- Free internet radio
- Create custom stations based on genre
- Free
Future

• Evening out the playing field

• More schools Bring Your Own Technology

• The Future is Contextual
  – GPS apps
  – Ads on Internet
  – Smart watches

• Martha Rust
MIT Finger Device Reads to the Blind in Real Time

By RODRIQUE NGOWI
Associated Press
JULY 8, 2014 1:24 AM

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

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

Image Gallery (7 images)

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

My first few days with Google Glass were mostly about the self-contemplation of the device as a personal assistant and communication tool. The second few days were mostly about the strange feeling of wearing a device that I thought I'd only ever see in the movies or on TV. (Yes, some people actually wear them in real life!) It was more than a little strange to be wearing a device that blinks at me every few seconds to show that it is in standby mode - and every few seconds to show that it is ready to receive an image or audio signal. It was also a little strange to be able to talk to people with Google Glass and have them hear me. This is something that is not possible with any other device I've ever used.

I've come to appreciate the convenience of using Google Glass to take photos and videos, to interact with apps (such as the Google Maps app), and to use voice commands to control devices. However, I'm not sure if I will ever use Google Glass for anything other than personal use. I don't think it's a good idea to use Google Glass in public places, as it is too intrusive and it is too easy to accidentally trigger an image or audio recording.

I'm not sure if I will ever use Google Glass for anything other than personal use. I don't think it's a good idea to use Google Glass in public places, as it is too intrusive and it is too easy to accidentally trigger an image or audio recording.
Transition Success:
Consider this...

• My Success relies on
  – Building win-win relationships
    • Establishing a solid circle of support
      – Receiving and providing support
    • Diversify your Circle of Friends and Acquaintances
    • It sometimes is “Who you know”
  • BALANCE - Social Life and Studies
Transition Success: Consider this…

• My Success relies on:
  – Developing a Vision for My Future
    • Created a “Map” and “Vision Board”
      – Personal Goals
        » Strong Relationship with my Family
        » Build a Habitat House (12)
        » Climb the Great Wall of China (2004)
        » Adopt a Child (2! Tucker and Meera)
    – Educational Goals
      » BA from UGA (Took 10 years…)
      » Masters Degree (2005 – M. Ed. UK!)
  – Career Goals
    » Help people through technology (Director of Tools for Life @ Georgia Tech)
Successful Transitions Helps Create a Successful Life Journey

Teach Students to:
• Get to Know Yourself
• Plan for Your Success – in school, work, Life!
• Begin with the End in Mind
• Be able to tell Your Story
• Listen & Learn
• Try – Fail & Try again…
• When things get off track - Evaluate and Evolve
• Explore & USE Assistive Technology
• Laugh Much!
• Celebrate your Successes!!
Our Question to You: What have You Learned today?
Thank You!
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