Prepare for Success! Exploring Successful Transition Practices With Assistive Technology

Jackson County High School
High School High Tech
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With contributions from the TFL Team

www.gatfl.gatech.edu
www.amacusg.org
Welcome to the Assistive Technology Revolution!

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

Today’s Agenda:

– 10:00 AM Welcome & Introductions
– 10:10 AM Learn about Tools for Life and AMAC Accessibility Solutions
– 10:20 AM Successful Practices: Self Advocacy 101
– 10:30 AM Assistive Technology Solutions for You!
– 10:45 AM Let's start the tour! We will be visiting with Braille, Captioning, Assistive Technology Lab, EText Production, and the Environmental Control & Gaming Lab.
– 12:00 PM Wrap up
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](http://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

- Tools for Life is a program of AMAC Accessibility Solutions, Georgia Tech
- We serve individuals of all ages & disabilities in Georgia
- TFL Network
  - Assistive Technology Resource Centers/Outreach Sites
  - Lending Libraries
  - Training and Demonstrations
  - AT Reuse
  - AT Funding Education/Assistance and Resources
- Online Resources
  - www.gatfl.org
The TFL Network is Growing!
What is Assistive Technology?

- Assistive Technology (AT) is any item or piece of equipment that is used to increase, maintain or improve the functional capabilities of individuals with disabilities in all aspects of life, including at school, at work, at home and in the community.

- Assistive Technology ranges from no/low/light tech to high tech devices or equipment.
Observations and “Hanging out with Intent”

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

**Low/No-tech**
- pencil grip
- adapted books
- slant board
- highlighters, tape
- magnifiers
- color coding
- read to out loud
- picture schedule
- strategies for memory
- colored transparencies
- Proof readers
- note taker

**Mid-Tech**
- word prediction
- text to speech
- speech to text
- spell checkers
- talking calculators
- digital recorders
- organizers
- e-books
- adapted keyboard
- adapted mouse
- adapted toys
- CCTV
- apps under $100

**High-Tech**
- computer/laptops
- tablets/phablets
- smartphones,
- smartpens
- OCR scanner/software
- magnification software
- speech output devices
- switch, joystick access
- scanning access
- voice recognition
- environmental control devices
- apps over $100
Defining Universal Design

Universal Design makes things *safer*, *easier*, and *more convenient* for everyone.

Universal Design involves designing products and spaces so that they can be used by the widest range of people possible.
Why Assistive Technology?

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

Tip: USE AT! I have yet to meet a successful student with disabilities who doesn’t use any AT.
The F.A.S.T. Track

✓ Frustration
✓ Anxiety
✓ Stress
✓ Tension
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
You are Among Greatness!

• Business executives who pay great sums for consultants to teach them to “think out of the box” would do well to observe the habitually creative thinkers in their midst – people with disabilities.

• The necessity of addressing mundane problems with creative solutions has likely prepared many people with disabilities to be innovative in more complex areas, including the challenges faced by school and business.
You are Among Greatness!

The following list, a small sample of famous people with disabilities, proves the point:

• Ray Charles
• Helen Keller
• Tchaikovsky
• Agatha Christie
• Mel Tillis
• Winston Churchill
• George Lucas
• Leo Tolstoy
• Charles Darwin
• Henri Matisse
• Alexander the Great
• Handel
• Renoir
• Muhammad Ali
• Hans Christian Anderson
• Steven Hawking

• Charles Dickens
• Toulouse-Lautrec
• Emily Dickenson
• Michelangelo
• Harriet Tubman
• Robert Dole
• John Milton
• Vincent Van Gogh
• Sir Isaac Newton
• Franklin Roosevelt
• Beethoven
• Babe Ruth
• Homer
• Sir Walter Scott
• James Earl Jones

• Leonardo da Vinci
• Albert Einstein
• Friedrich Nietzsche
• George Washington
• George Patton
• Robin Williams
• Woodrow Wilson
• Virginia Woolf
• Goya
• Itzhak Perlman
• Lord Byron
• George Bernard Shaw
• Julius Caesar
• Robert Louis Stevenson
What is Self-Advocacy?

- Developing self-knowledge is the first step in self-advocacy skills. Learning about one's self involves the identification of learning styles, strengths and weakness, interests, and preferences.

- **Self-advocacy** refers to an individual's ability to:
  - effectively communicate, convey, negotiate or assert his or her own interests, desires, needs, and rights.
  - It involves making informed decisions and taking responsibility for those decisions.
Best Practices & Solutions!

• Know how to describe your disability, as well as your specific academic strengths and weaknesses to a variety of different audiences.

• Begin to accept the term "disability". Do not let it determine your identity.

• Try out different accommodations and then decide which ones work for you.
Questions to Consider

• How did You get to this Point?
• 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 or needs to be in Your Circle of Support?
More Best Practices & Solutions!

• **Read** about other people with disabilities who are successful.

• **Join** a support group for students with disabilities on your campus, or start one!

• **Enjoy** relaxing and growth-oriented activities.

• **Get involved** in an activity for as much time as you feel you can afford. It's a great way to meet people and develop social skills.

**Seek** a balance academically and socially
• **Don’t apologize for your disability.** Instead, explain clearly and honestly how it has impacted you and made you an even stronger applicant.

• For example, you could describe how your disability has taught you to take responsibility for your own education, tasks or made you a more active listener.
AMAC’s AT Software

- ClaroRead
- Premier Literacy (including PDF Equalizer)
- Learning Ally
- Dolphin EasyReader
- Read Write Gold
ClaroRead with MS Word

- For PC or Mac
- Reads aloud any print that is highlighted
- Floating toolbar
- Quickly and easily change the font size
- Change colors and spacing
- Check definition and meaning of words
ClaroPDF for iPad

- Synchronous highlighting and text to speech for PDFs
- Navigate by page or headings
- Write notes, highlight text
- Customizable options
- Cannot read image PDFs
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
- **Change font and color**
- **Save text as an audio file**
- **Visual Tracking**
- **Send Text**
Premier Software

- Read documents in standard file formats such as Microsoft Word, Rich Text, text file format, HTML, and PDF
- Converted to audio files for use on a CD or MP3 player
- Scan and read documents
- Look up a word or definition in the integrated dictionary
- Create study notes and much more!
Dolphin Easy Reader

• Read multiple formats including MathML, Daisy, HTML, and EPUB
• Highlights text as it speaks
Learning Ally

- Audiobooks
- Requires Learning Ally software
- Requires first time activation
Read & Write Gold

- PC and Mac Compatible
- PDFs, DOCs, DAISY, and Webpages
- Synchronous highlighting
Low Tech AT Solutions
Livescribe is the global leader in the design and manufacturing of smartpens, enabling customers to capture, search and share handwritten notes on the digital devices they use every day.

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

- **Livescribe 3**
  - Uses Bluetooth Smart to send everything you write to your smartphone or tablet
  - Saves written notes in memory
“Rewordify is a free website that makes English easier to read. In some ways it is similar to a thesaurus, but allows users to enter not just single words, but entire sentences, pages, and even websites, for clarification. Passages are preferred, as difficult words are 'rewordified' using the context of the sentence. For example, paste in "The tempest raged outside while the throng huddled inside.", and it is 'rewordified' into, "the storm raged outside while the crowd huddled inside."

Students can use this tool to make passages more understandable. Simplified words are highlighted for quick comparison with the original word(s).”
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 mobile app for Android, iOS, and Windows

- Works inside Microsoft Word and emails
- Text to Speech
  - Read emails and docs
  - Can choose voice and accent

**Ginger Demo**
Speech Recognition Software

• Dragon Naturally Speaking
  – Turn spoken words into text
  – Connect with the timing of your thoughts
  – Dictation speed 70 to 100 words per minute

• Microsoft Speech Recognition
  – Built in solution for Windows
TFL AppFinder

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

- Text-to-Speech
- Highlights as it reads
- Import
  - Bookshare
  - Dropbox
  - Gutenberg
  - Word Doc
  - PDFs
- Buy different voices
- Change rate of speed
- Download for later reading
- $14.99 in iOS App Store
- $9.99 in Android App Store
Genius Scan

- Scan documents or handwritten notes
- Email the scans as JPEG or PDF
- Free for iOS and Android
- Genius Scan Plus ($2.99)
  - allows upload to Dropbox, Skydrive or Evernote
Breathe2Relax

- Portable stress management tool
- Detailed information on the effects of stress on the body
- Instructions and practice exercises to learn the stress management skill called diaphragmatic breathing
- Free on iOS and Android
MyMedSchedule

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

• Digital audiobooks
• Read by Hollywood stars, authors, and professional narrators
• Listen anywhere
• Over 180,000 titles
• Membership
VGo Telepresence Robot

- Enables a person to replicate themself 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
Amazon Echo

- Speech-controlled speaker system
- Voice recognition at further distances
- All functions are server-side
- Compatible with many EC brands
- Full-sized Echo $179.99
- Echo Dot $49.99
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
Lechal

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

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

- Turns your arm into a touchscreen
- Works on every skin color
- iPhone and Android
- Phone screen mirroring
- Removable battery
- Water resistant
- Pre-Orders begins in 2017
- Cicret Bracelet
- https://cicret.com/wordpress/
3D Printers

• Coming down in price
• Creating assistive technology for lower cost
• In classrooms
• Ability to feel how something looks
• Prosthetics
• Medical Advances
Vidget Chair

• Creates a healthier learning environment
  – Provides 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

• Multi-purpose
  – Rocking chair
  – Stool
  – Desk

• Tactile/sensory bumps

available now
Transition Success: Consider This

• Our success relies on:
  – Being involved in “My Plan!”
  – Knowing myself
    • Self-Exploration
      – Who are you?
    • Learning style
      – What is your personal learning style?
    • Honestly exploring
      – What do I want to do when I grow up?
      – What assistive technology do I need to accomplish my goals?
Consider This

• Our 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!
  – Building win-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
My Question to you: What have you learned today?
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Thirsty for more?
Additional information and resources.
ClaroRead with Adobe Acrobat
PDF Equalizer with PDF File

PDF Equalizer

• open PDF inside the program
• text to speech, zoom, note taking, dictionary

Each atom that can share valence electrons has a bonding capacity corresponding to the number of covalent bonds the atom can form. When the bonds form, they give the atom a full complement of electrons in the valence shell. The bonding capacity of oxygen, for example, is 2. This bonding capacity is called the atom’s valence and usually equals the number of unpaired electrons required to complete the atom’s outermost (valence) shell. See if you can determine the valences of hydrogen, oxygen, nitrogen, and carbon by studying the electron distribution diagrams in Figure 2.9. You can see that the valence of hydrogen is 1; oxygen, 2; nitrogen, 3; and carbon, 4. However, the situation is more complicated for elements in the third row of the periodic table. Phosphorus, for example, can have a valence of 3, as we would predict from the presence of 3 unpaired electrons in its valence shell. In some molecules that are biologically important, however, phosphorus...
Read&Write Toolbar

• Grammar Check
• Word Prediction
• Dictionary
• Picture Dictionary
• Homophones
• Verb Checker
• Pause, Stop, Play
• Capture
• Mp3 File maker

• Daisy Reader
• Scanner
• Fact Checker
• Fact Mapper
• Screen Masking
• Speech Input
• Translator
• PDF Aloud
• Word Cloud
Read & Write Gold (additional features)

- Read & Write Gold
  - Multiple tool bars to assist with study skills, research and writing
Key Ring

• For loyalty cards and savings while shopping
• Plan, save, and organize by carrying your cards, stores’ weekly ads, coupons, and your shopping lists
• Free on iOS and Android
Google Drive

- Up to 15GB of storage
- Upload documents, videos, photos, and other files to access wherever you go
- Share photos and files
- Make files available offline
- Scan documents with device camera
- Free for iOS and Android
Bookshare

• Online Accessible Library
• Free membership to qualified students and schools
  – Textbooks if school is membe
• Over 515,000 titles
• Serves individuals with:
  – Vision disabilities
  – Physical disabilities
  – Learning disabilities
T. Jacket

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

What is OrCam?

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

OrCam gives independence.
Low Tech AT Solutions for Writing

• Built-in pen and pencil grips
  – Variety
  – Can build you own with a tennis ball or ping-pong ball

• Wide barrel pens and pencils
  – Makes it easier for some people to write due to their contoured shape.
  – There is more surface area to grip which makes it easier to write.