AT 101: Begin with the End in Mind

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With contributions from Tools for Life Team

www.gatfl.org

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

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.

This session will take a closer look at:

- AMAC | Tools for Life – AT Act Program
- Advocacy & Knowing Your Rights
- Making and LD Evaluation Your Action Plan
- Understanding Assistive Technology
- Using “Low/Light Tech” to inform “Mid/High Tech Solutions”
- 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

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

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Tools for Life Website

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

Get to Know Your AT Act Program

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

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Considering the Lifespan

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

Successful Transitions Help Create a Successful Life Journey

- Teach Students to:
  - Get to know themselves
  - Plan for Success – in school, work, life!
  - Begin with the end in mind
  - Be able to tell their story
  - Listen & Learn
  - Try – Fail & Try again…
  - When things get off track - Evaluate and Evolve
  - Explore & USE Assistive Technology
  - Laugh much!
  - Celebrate their successes!!

Begin with the End in Mind!

- Know Your Rights

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 with disabilities who doesn't use Any AT.**

What is an AT Service?

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Assistive Technology Services

Any service that **directly assists an individual with a disability** in the selection, acquisition, or use of an assistive technology device.

Includes:

- Evaluating
- Providing devices
- Selecting, Designing, Customizing
- Maintaining, Repairing
- Coordinating
- Training/Technical Assistance –student, family and school service providers

- Public Law 105-394 [29 USC 2201]

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.

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

Moving from Information to Action

Evaluations for Learning Disabilities

- 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 LD Evaluation?
- Moving from Information to Action
  - Using your Evaluation results as an Action Plan for AT

Moving from Information to an AT Action Plan

Dyslexia

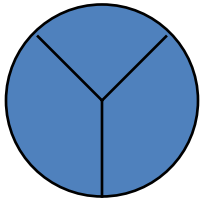
- A specific learning disability that affects reading and related language-based processing skills. Dyslexia is sometimes referred to as a Language-Based Learning Disability.
- The severity can differ in each individual but can affect:
  - reading
  - fluency,
  - decoding,
  - reading comprehension,
  - recall,
  - writing,
  - spelling, and
  - sometimes speech and can exist along with other related disorders.
- What does this information tell us regarding our AT Action Plan? http://ldaamerica.org/types-of-learning-disabilities/

Building a Firm Foundation for AT Success!

The "FAST" Track

- **Frustration**
- **Anxiety**
- **Stress**
- **Tension**

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

- Developed by Cook & Hussey

The SETT Framework

S = Student/Skills

E = Environment

T = Tasks

T = Tools

Adapted from Joy Zabala www.joyzabala.com

Exploring Assistive Technology Strategies and Solutions

- Try before you buy

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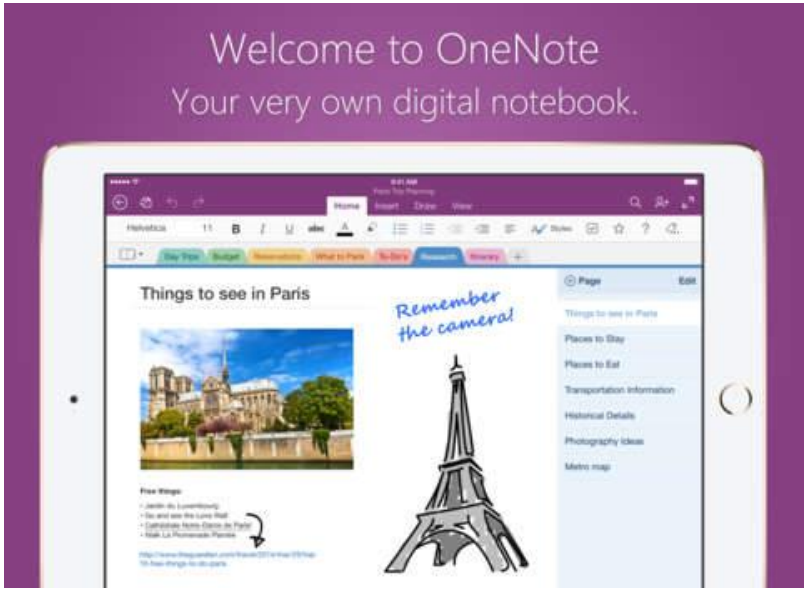
Know Your Tablets

Mobile Tablets/ eReaders

- What do I need?
- Does it read out loud?
- Do I need Apps?
- Change colors?
- Change line spacing?
- Textbooks?
- Fun Reading?

Microsoft OneNote

- Crosses all platforms
- Type, write, or draw with the free form feel of pen and paper
  - Use stylus or finger
- Search and clip from the web to picture ideas
- Brings students together in a collaborative space or can give individual support in private notebooks



OneNote Learning Tools

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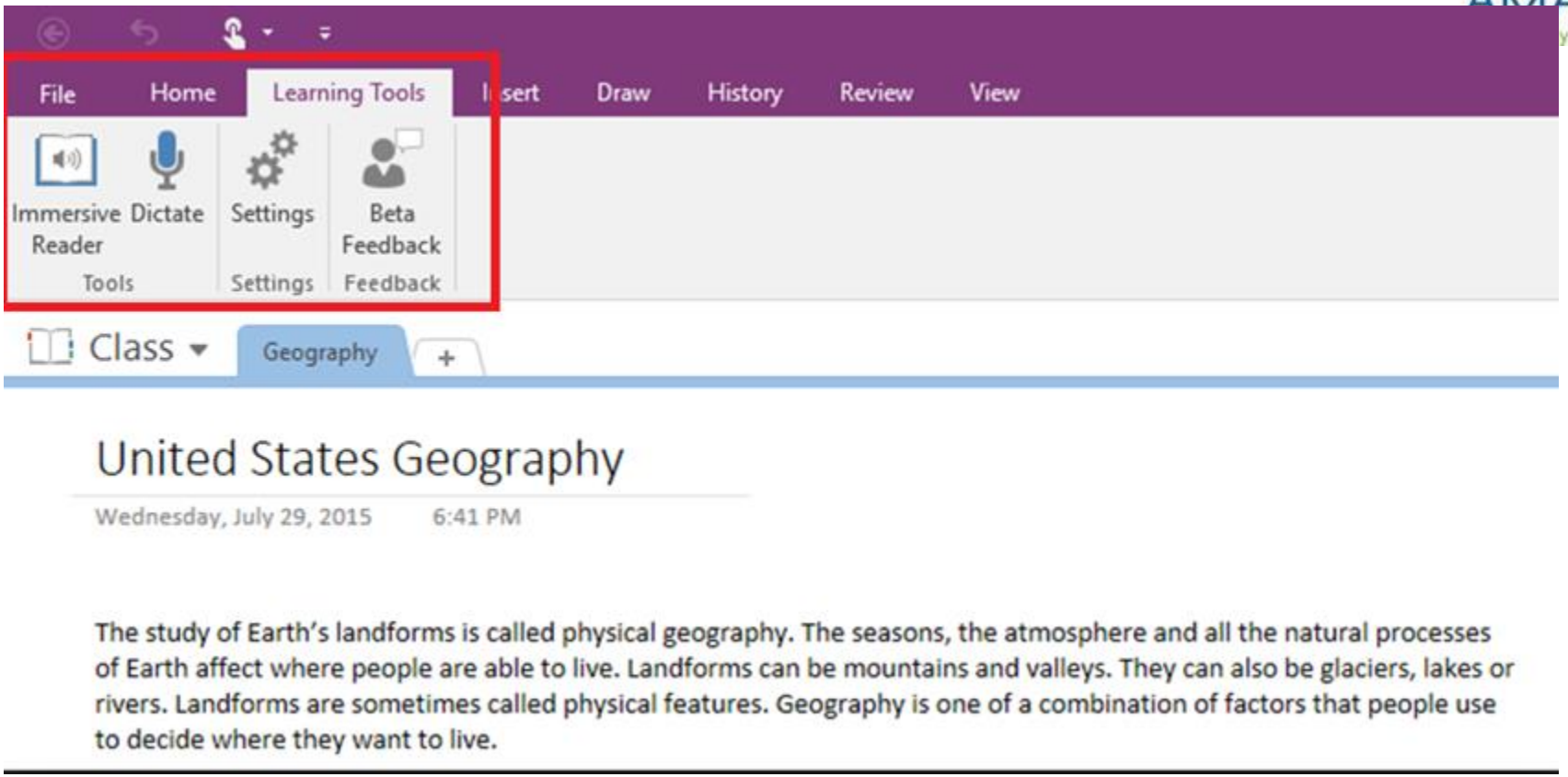
Feature	Proven Benefit
Enhanced dictation	Improves authoring text
Focus mode	Sustains attention and improves reading speed
Immersive reading	Improves comprehension and sustains attention
Font spacing and short lines	Improve reading speed by addressing "visual crowding"
Parts of speech	Supports instruction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

TOOLS for LIFE
Georgia's Assistive Technology Act Program

Learning Tools Toolbar



Android Tablets

- Many different options for user preference
  - Amazon Fire
  - Samsung Galaxy
  - Lenovo Yoga
  - Asus ZenPad
- Wi-fi compatible
- Some accessibility built in

Apple iPads

- Three sizes/varieties
  - iPad Pro
    - 9.7 inches and 12.9 inches
  - iPad Air 2
    - 9.7 inches
  - iPad mini 4
    - 7.9 inches
- iOS 10
- Countless apps
- Organization
- Accessibility
- High quality photos

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AT Solutions for Reading

Low Tech AT Solutions

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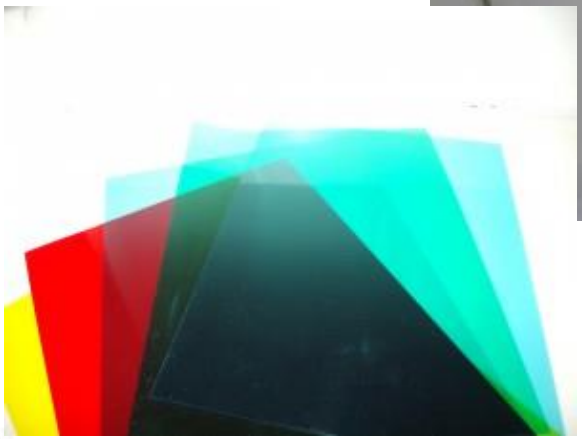
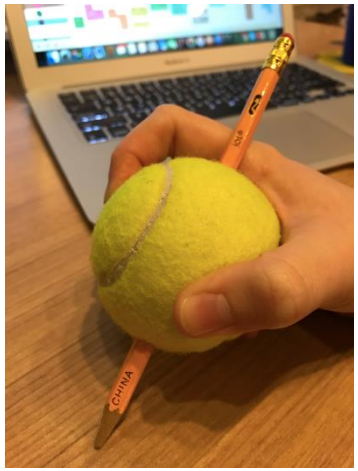


Low Tech AT Solutions for Writing

- 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.



Livescribe

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

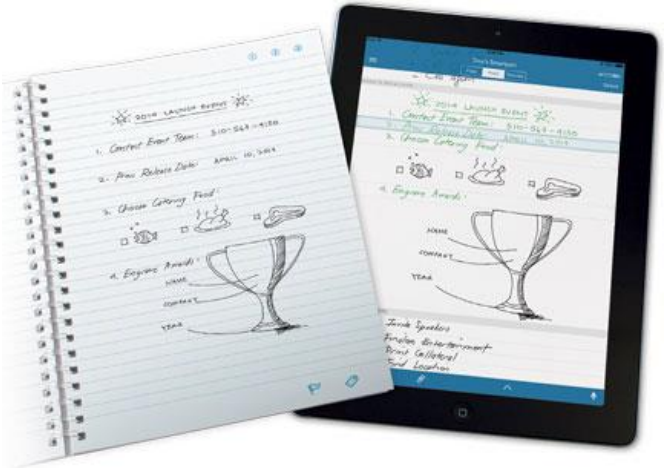
- Livescribe 3
  - Uses Bluetooth Smart to send everything you write to your smartphone or tablet
  - Saves written notes in memory

www.livescribe.com/en-us

Livescribe Tools Cont.

- Livescribe+ Mobile App
  - Stores and organizes everything you write on paper
  - Uses leading handwriting conversion technology to make it simple to search your notes for what you need
  - Available for iOS, Android, and Amazon devices

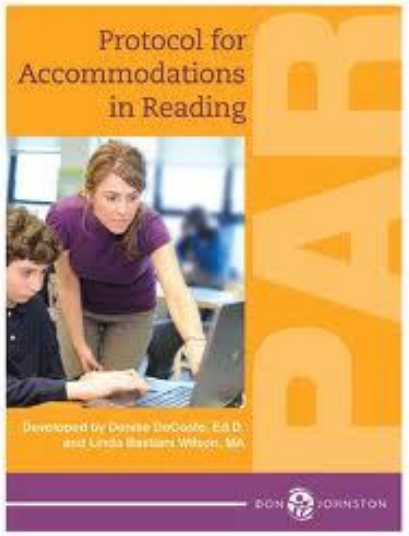
- Livescribe Dot Paper
  - Feature an innovative dot pattern that tells the smartpen precisely what you've written or



www.livescribe.com/en-us

PAR: Protocol for Accommodations for Reading

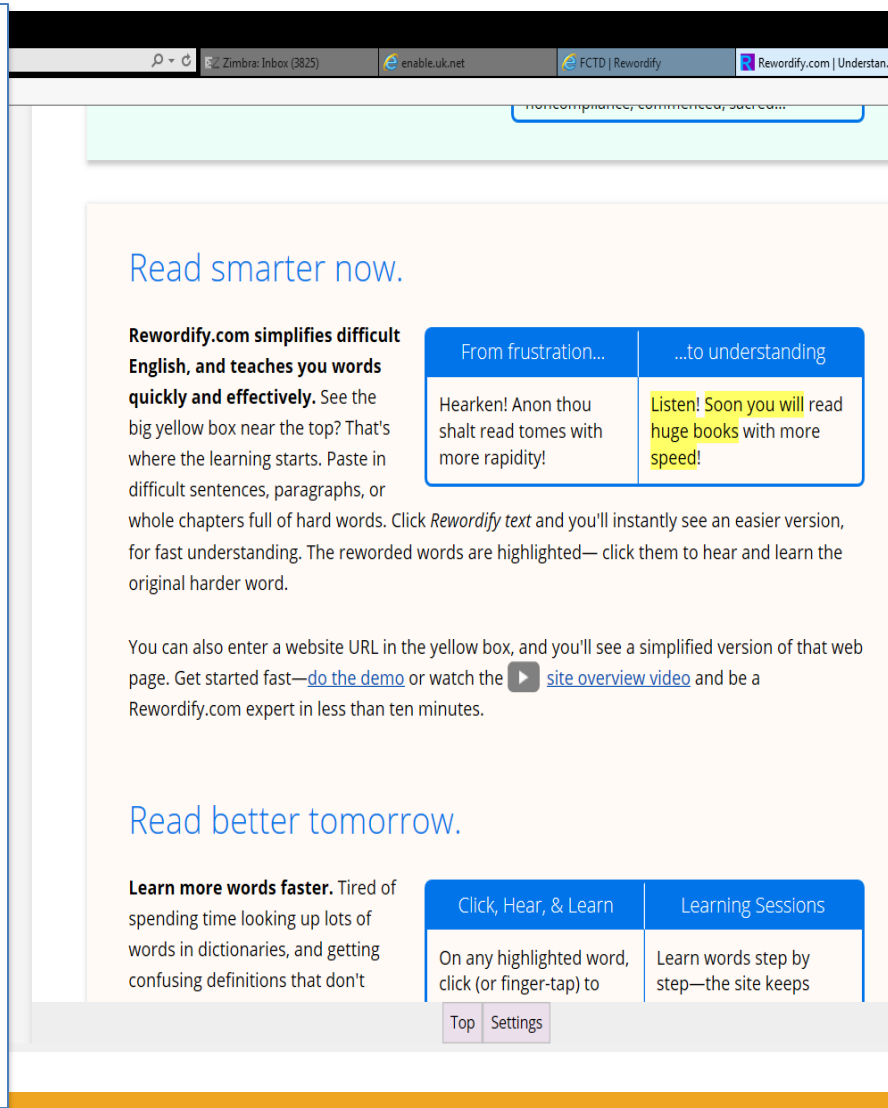
- Don Johnston
- Assist with accommodations for reading
- 3 Steps
  - 1) Student's Oral Reading
  - 2) Adult Reader
  - 3) Text Reader
- How did the student like?
- Help with adding in AT for reading solutions



Rewordify.com

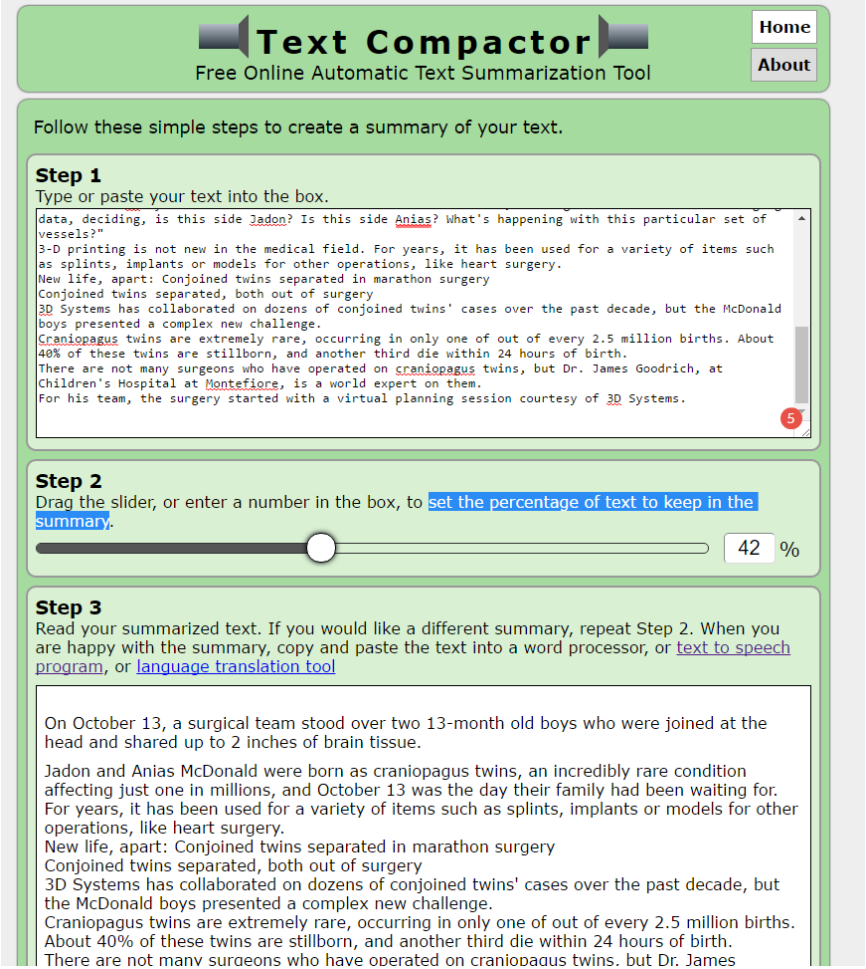
"Rewordify is a free website that makes English easier to read. In some ways it is similar to a thesaurus, but allows users to enter not just single words, but entire sentences, pages, and even websites, for clarification. Passages are preferred, as difficult words are 'rewordified' using the context 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)."



Textcompactor.com

- Free Online Automatic Text Summarization Tool
- Set the percentage of text to keep in the summary
- Cut and Paste into text to speech word program



Bookshare

- Online Accessible Library
- Free membership to qualified students and schools
  - Textbooks if school is member
- 389,675 titles
- Serves individuals with:
  - Vision disabilities
  - Physical disabilities
  - Learning disabilities

Audible.com

- Digital audiobooks
- Read by Hollywood stars, authors, and professional narrators
- Listen anywhere
- Over 180,000 titles
- Membership
  - $14.95/ month for one book

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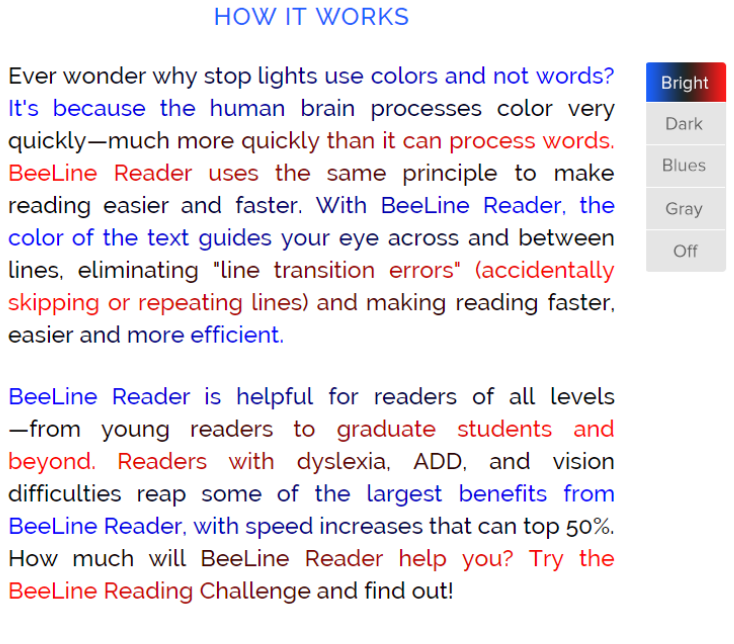
Reading & Writing Software Solutions

BeeLine Reader

- Chrome Extension
- Read by using a color gradient that guides your eyes from the end of one line to the beginning of the next
- Read websites, books, email, and PDFs
- App form too
- 30 days free trial
  - $10/year



ClaroRead

- Reads text as it highlights
- Moveable tool bar
- Can read doc, PDFs, internet, and more
- 7.0
  - Add audio notes
  - Save as mp3 file
  - Save as video

- Can change highlighting colors
- www.claroread.com

TextHelp

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

- Has a Google Chrom version
- www.texthelp.com

textHELP
Literacy ■ Language ■ Learning

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Writing Software Solutions

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

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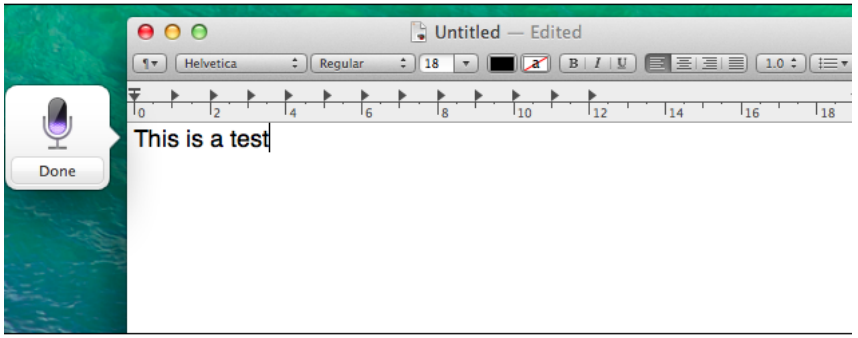
Voice Input Solutions

Built In Dictation

- Voice Dictation in Mac
- Speech recognition in PC
- Free
- Good microphone
- PC some training
- Mac no training



Speech Recognition Software

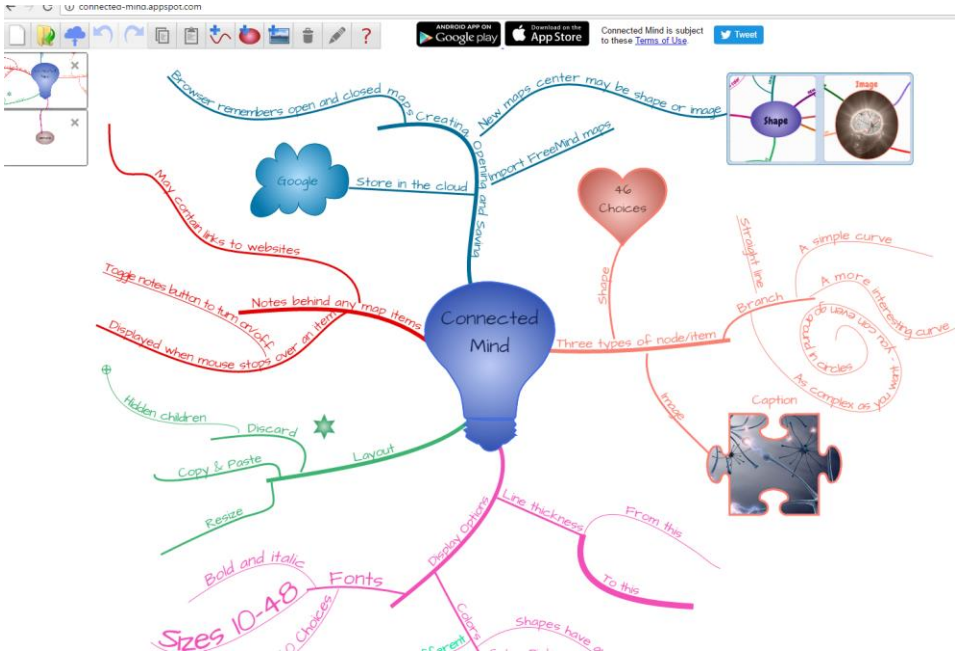
- Turn spoken words into text
- Connect with the timing of your thoughts
- Dictation speed 70 to 100 words per minute

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 a mobile Android, iOS and Windows
- Works inside Word and emails
- Text to Speech
  - Read emails and docs
  - Can choose voice and accent
- Ginger Demo

Connected Mind

- Chrome App
- Mind mapping
- Sync across devices
- Free cloud storage
- Different shapes and colors
- Import pictures
- Draw
- Speech Recognition



Inspiration

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

- Better organization of essays
- $27.96
- App $9.99

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What's New In AT and the AT Community:

- Perhaps, Where We Are Going

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*

Amazon Echo/ Dot

- Speech-controlled speaker system
- Voice recognition - further distances
- All functions are server-side
- Compatible with many EC brands
- IFTTT App

See Us Tomorrow!

The Impact of Emerging Technology Trends of Individuals With Learning Disabilities

11:30AM-12:30PM

Harborside A

Success with Assistive Technology and Advocacy begins with the Individual

- Get to Know Yourself
- Build your self-advocacy and Advocacy Skills
- Plan for Your Success – in school, work, Life!
- Explore & USE Assistive Technology that can Help You
- Begin with the End in Mind
- Be able to tell Your Story
- Listen & Learn
- Try – Fail & Try again…
- Evaluate and Evolve
- Laugh Much!
- Celebrate your Successes! Success Breeds Success.
- AND Visit Us at the LDA & AMAC AT Solutions Lab

Additional Resources

Family Center on Technology and Disability
http://www.fctd.info

WrightsLaw
http://www.wrightslaw.com

National Disability Rights Network
http://www.napas.org/

A Guide to Disability Rights Law – U.S. Department of Justice
http://www.usdoj.gov/crt/ada/cguide.htm

American Association of People with Disabilities
http://www.aapd-dc.org/

Consortium for Citizens with Disabilities
http://www.c-c-d.org/

Many states have their own Disability Law or Protection and Advocacy Organizations. Links to these sites can be found on the Family Center on Technology and Disability's Website under Member Organizations.

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My Question to You:
What have You Learned today?

TOOLS for LIFE
Georgia's Assistive Technology Act Program

Washington Assistive Technology Act Program

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

Technology for Independence

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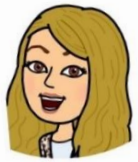

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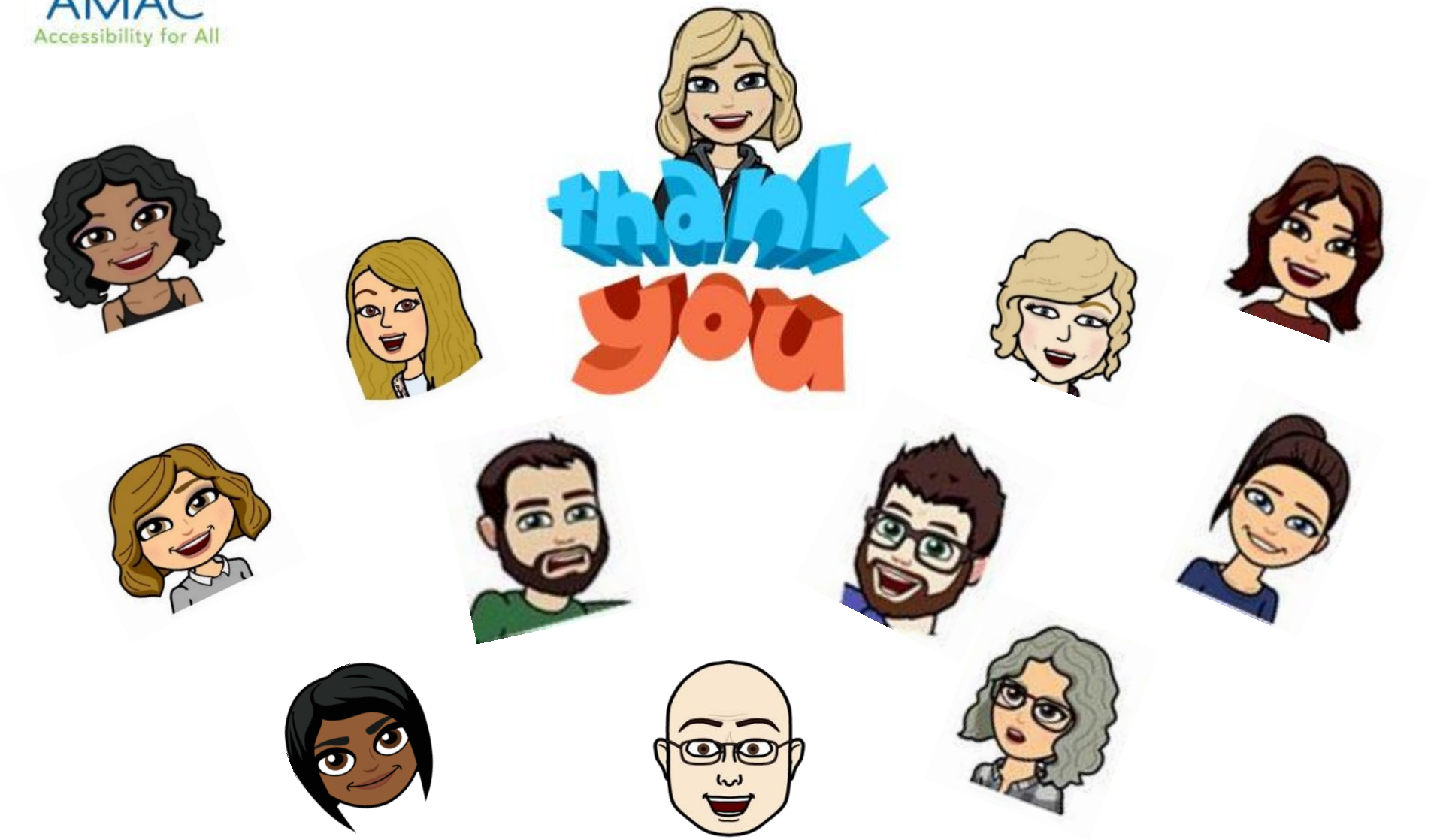

Disclaimer

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