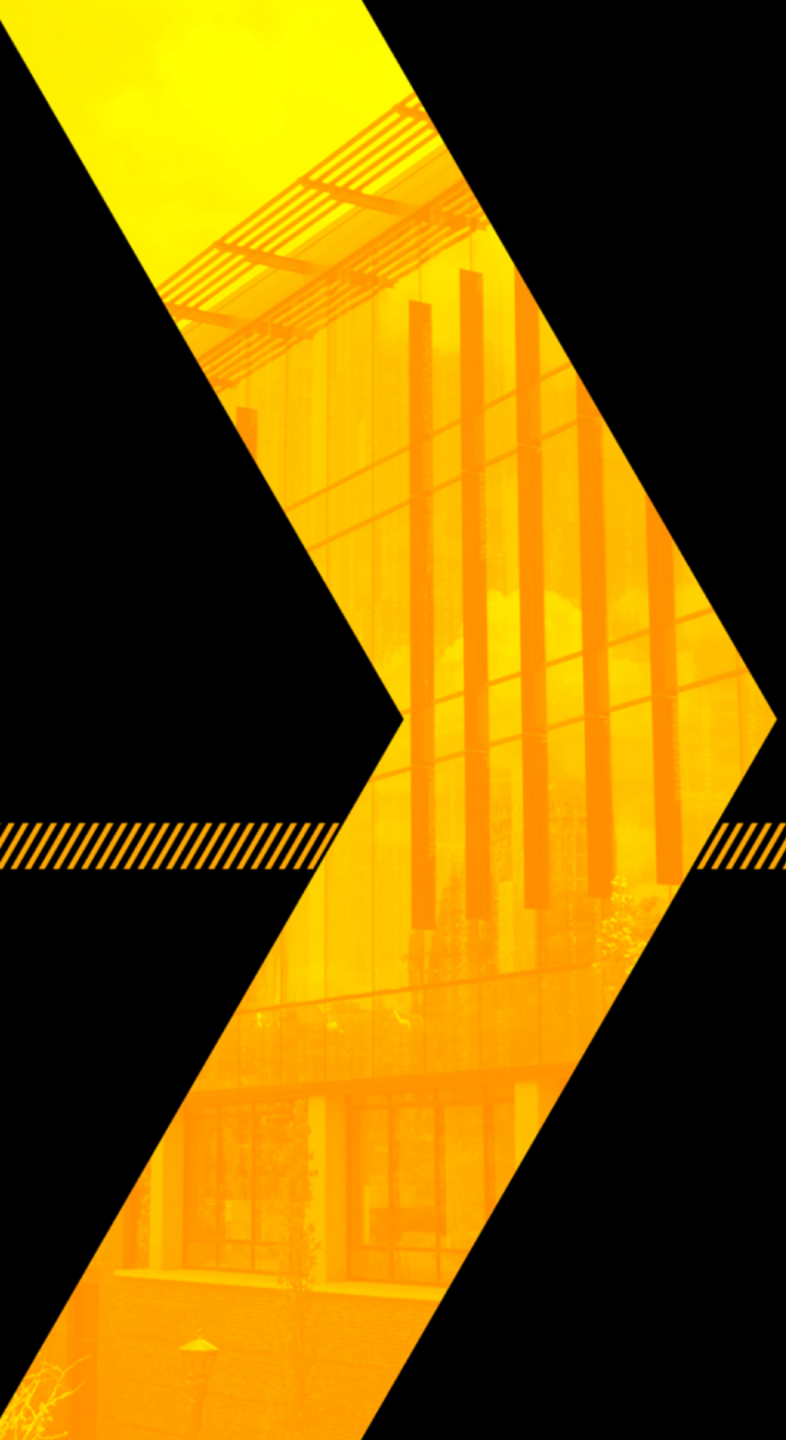
Georgia Tech Center for Inclusive Design and Innovation

Building a More Accessible Future for Everyone



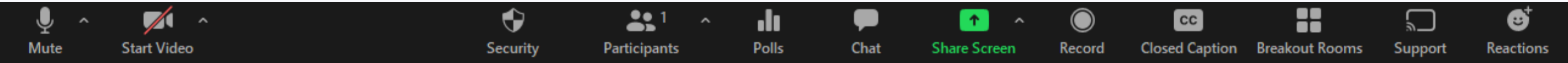
CREATING THE NEXT®

Live Captions Provided

Two Options:

1. Access StreamText link available in the “Chat” (“Chat” control in Zoom toolbar)

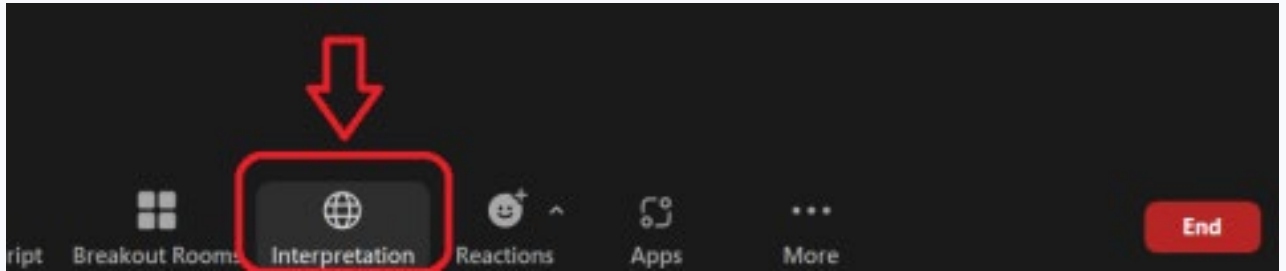
2. Access the “Closed Captions” option (“Closed Captions” control with “CC” above it in Zoom toolbar)



Sign Language Interpretation View

Interpretation View for Participants

- Sign language interpreters are shown in dedicated video channels
- Participants can resize or relocate the video window as needed.
- Interpretation option on the Zoom toolbar



Today's Presenters

Martha Rust, Interim PI for Tools for Life/Edu and Development Manager

- **Oversees Tools for Life, statewide Assistive Technology Program**
- **Works with individuals, employees, families on finding AT that can assist with being more independent in work/ school/ community**
- **Creates and train on AT Strategies and Solutions**
- **Works with all ages and disabilities**

Johan Rempel ICT-UX Quality Assurance Manager CIDI

- oversees the UX/ICT Accessibility unit within CIDI
- previous experience and training as an AT Specialist, Vision Rehabilitation Therapist, Orientation & Mobility Specialist, and Digital Accessibility Specialist.
- oversees several Information and Communication Technology (ICT) Accessibility initiatives, including the AccessGA Project.

Georgia Tech Center for Inclusive Design and Innovation

Center for Inclusive Design and Innovation (CIDI)

CIDI’s Mission and Purpose

Georgia Tech Center for Inclusive Design and Innovation

CIDI's mission is to improve the human condition through equal access to technology-based and research-driven information, services, and products for individuals with disabilities.

Center for Inclusive Design and Innovation: https://cidi.gatech.edu/

Products and Services

Georgia Tech Center for Inclusive Design and Innovation

- **Braille Services:** produces customized projects from both print materials and electronic text including partial books and chapters or graphics only using cutting-edge technology
- **E-Text Department:** provides high-quality e-text in many formats such as PDF, DOC, DAISY, and HTML
- **Captioning and Audio Description Services:** makes classrooms, meetings, labs and other audio environments fully accessible for deaf or hard-of-hearing, including remote captioning and captioned media

Additional Products, Services & Research

Georgia Tech Center for Inclusive Design and Innovation

- **Tools for Life (TFL), Georgia's Assistive Technology Act Program:** Offers access to, and acquisition of, assistive technology for Georgians of all ages and disabilities in order to live, learn, work, and play independently in the communities of their choice
- **Accessibility Compliance, Best Practice and User Experience:** We focus on accessibility and usability needs through evaluations, testing, training, technical assistance, and comprehensive website/application accessibility evaluations
- **Research** focuses on accessible environments for people with disabilities including students and aging individuals in the built and virtual environment.

AccessGA

Georgia Tech Center for Inclusive Design and Innovation

AccessGA is a joint project of the State ADA Coordinator's Office – Georgia State Financing and Investment Commission (GSFIC), Georgia Technology Authority (GTA) and Georgia Tech's Center for Inclusive Design & Innovation (CIDI) . AccessGA's purpose is to support State of Georgia agencies with Information and Communication Technology (ICT) accessibility, promoting equal and timely access for employees and customers with a wide range of disabilities.

Georgia Agencies Served Under AccessGA

Georgia Tech Center for Inclusive Design and Innovation

More than 35 state agencies and Higher Ed Institutions Served

AOC	DPH	GDCS	GTA
DBHDD	DPS	GA Dept. of Law	GVRA
DDS	EPD	GA Public Libraries	Jekyll Isl. Park Serv.
Dept. of Juv. Justice	GBA	GGG	ODSO
DNR	GCDD	GPB	Office of the AG of GA
DOAS	GDC	GSFC	Sec. of State's Office
DOL	GEMA	GSFIC	Univ. System of GA

AccessGA: https://accessga.gatech.edu/

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Finding YOUR Assistive Technology Program

What is the AT Act?

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- Legislation in 1988 to help increase awareness, access, and acquisition of assistive technology.
- The law was reauthorized in 2004 with significant changes converting it from a competitive grant program to a formula grant program for State AT Programs.
- The 2004 reauthorization also authorized and described a set of state level and state leadership activities for State AT Programs to implement. Begins June 1st as the 21st Century Act.

Tools for Life

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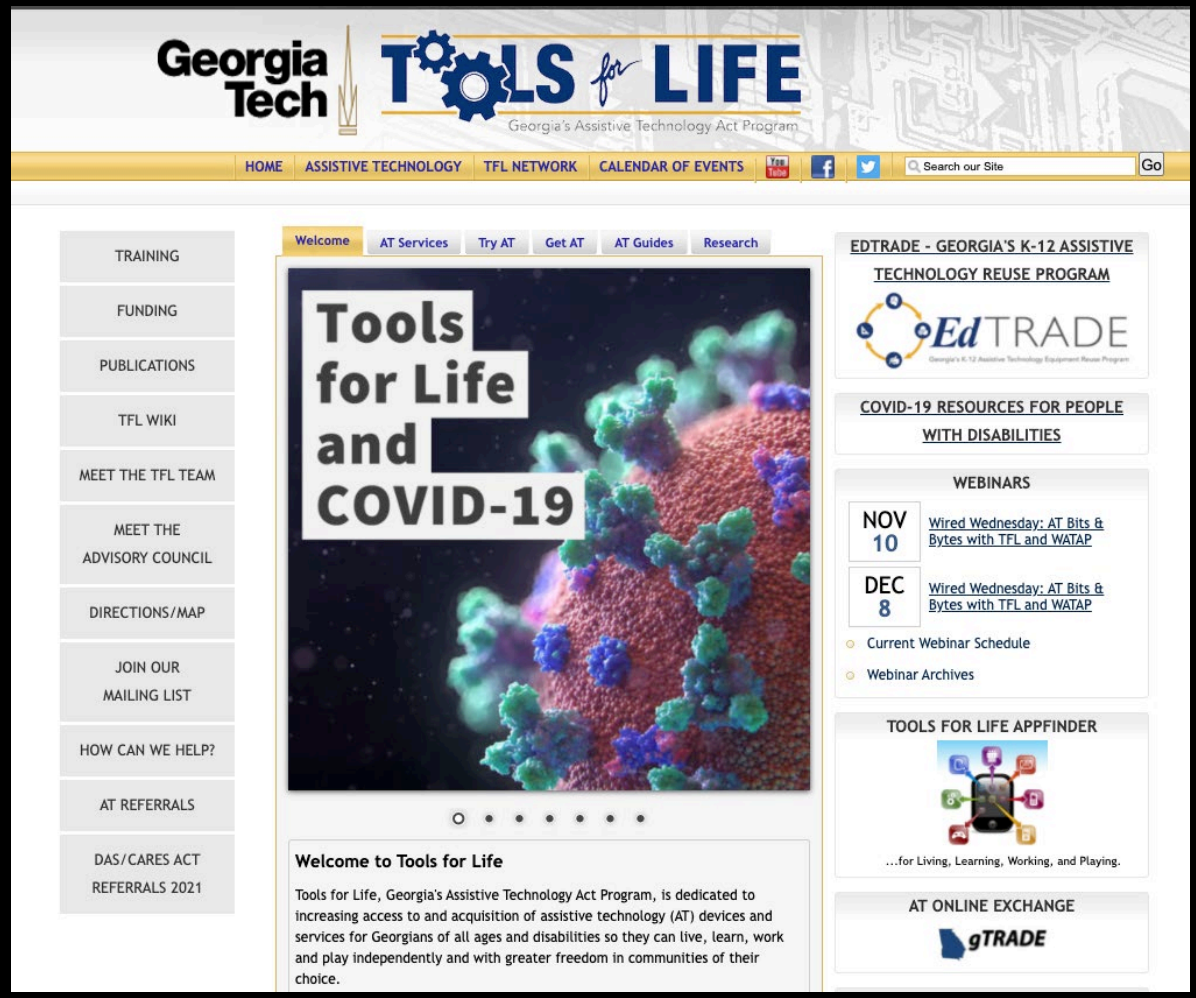
Tools for Life (TFL),Georgia's Assistive Technology Act Program, increases access to and acquisition of assistive technology devices and services so Georgians of all ages can live, learn, work, and play in the communities of their choice.



What is Assistive Technology?

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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.

Who has an AT Act Program?

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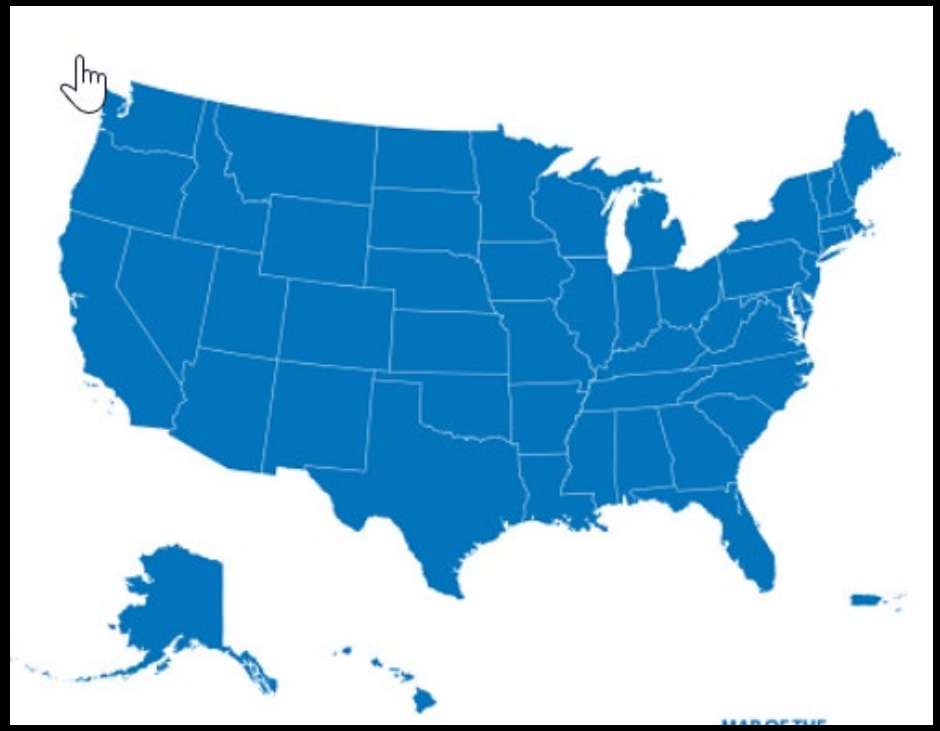
- All 50 States
- 4 U.S. Territories
  - American Samoa
  - Guam
  - Northern Mariana Islands
  - U.S. Virgin Islands
- District of Columbia
- Puerto Rico



Tools for Life Network

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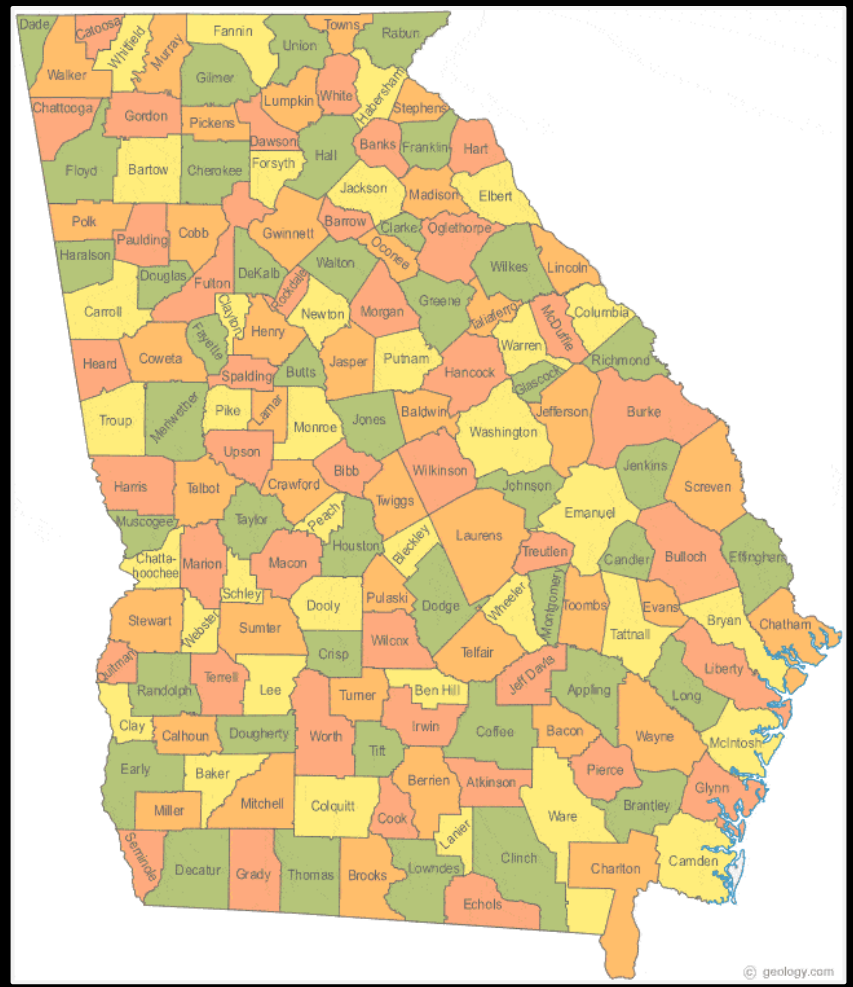
- Assistive Technology Resource Centers
- Outreach Centers
- Centers for Independent Living
- Aging and Disability Resource Centers



Core Services of AT Programs

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As the Assistive Technology Program, we are charged with core activities:

1. Information & Assistance
2. AT Demonstrations
3. AT Equipment Lending
4. Training
5. Funding Education & Solutions
6. AT Reuse

AT Services Flow

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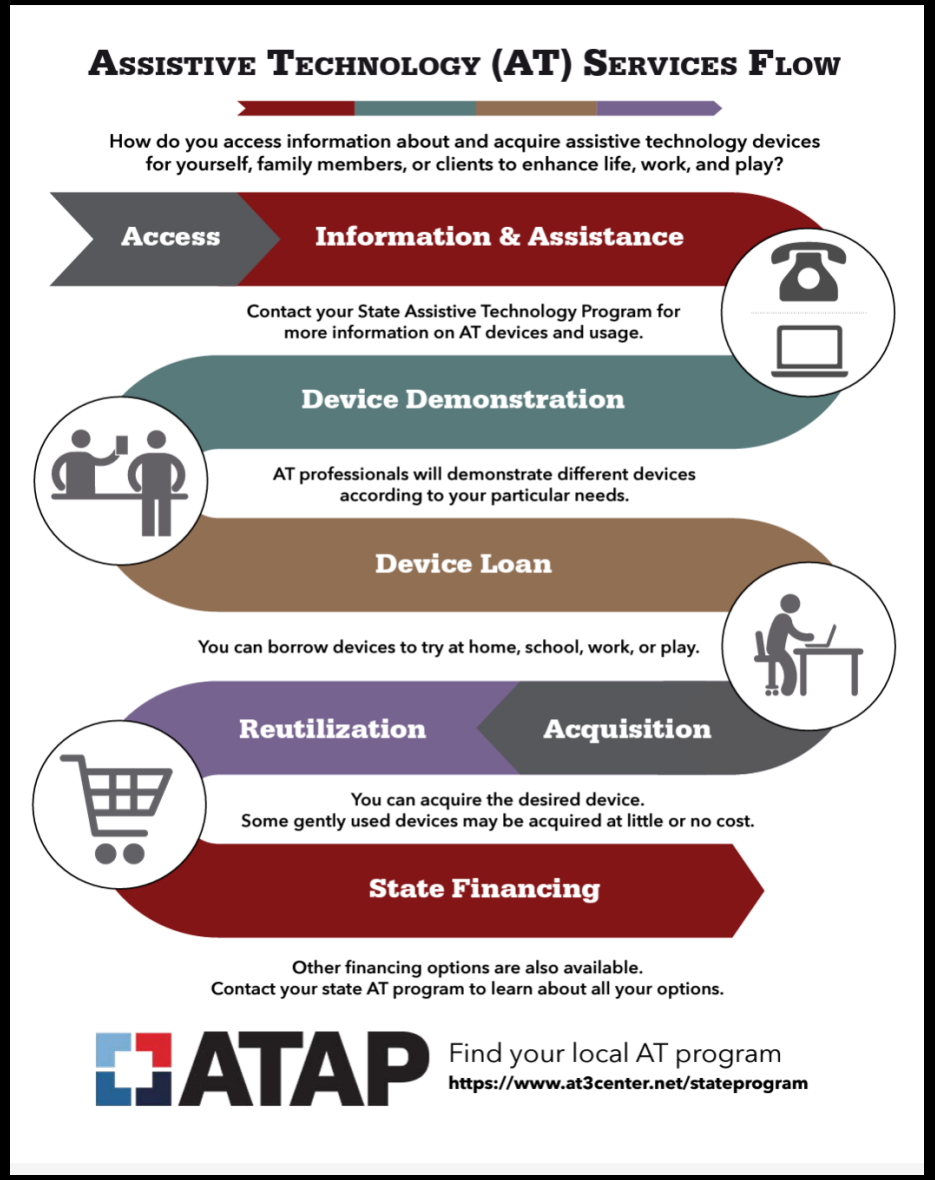

Find YOUR Assistive Technology Program – at3center.net

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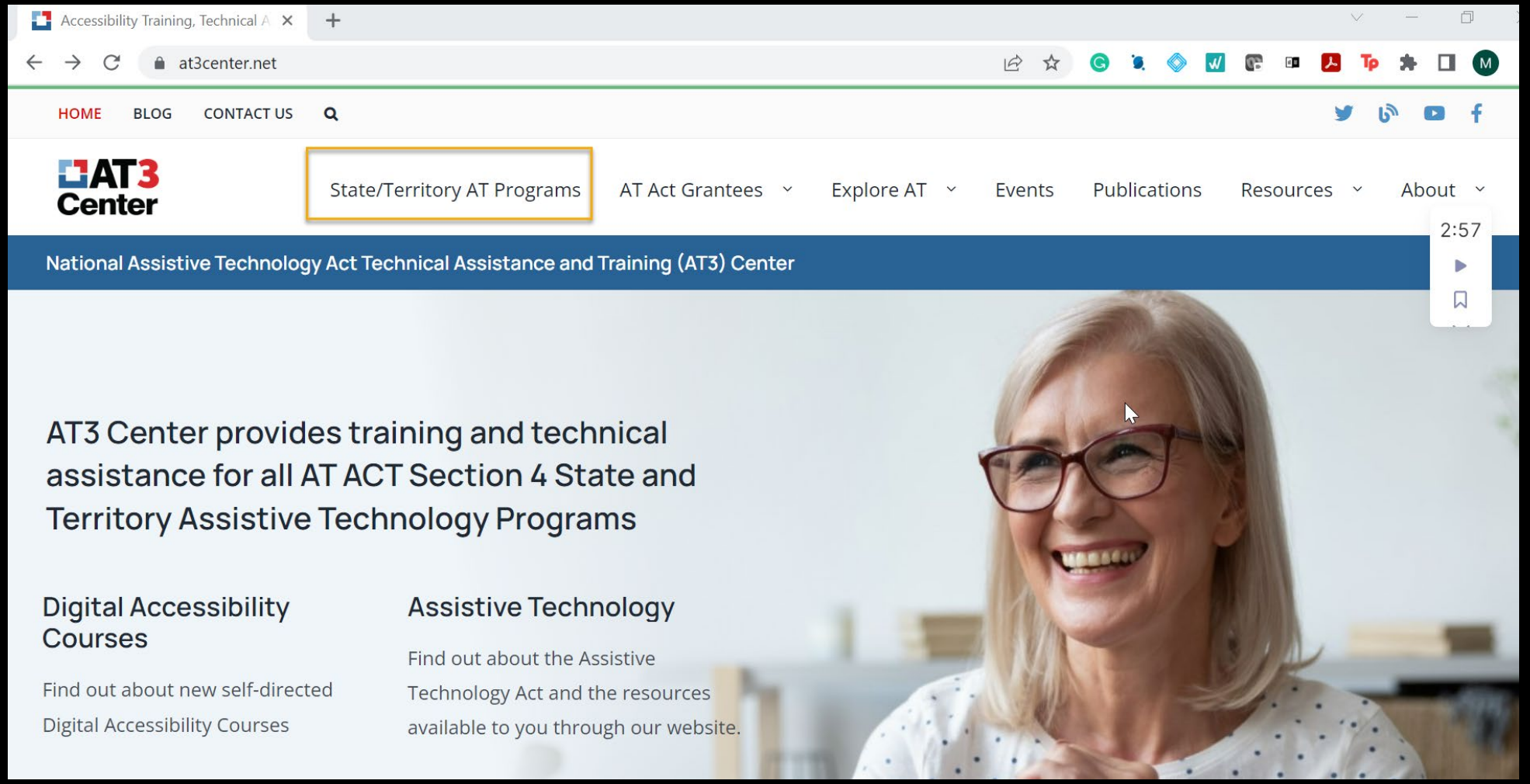

Why is Digital Accessibility Important?

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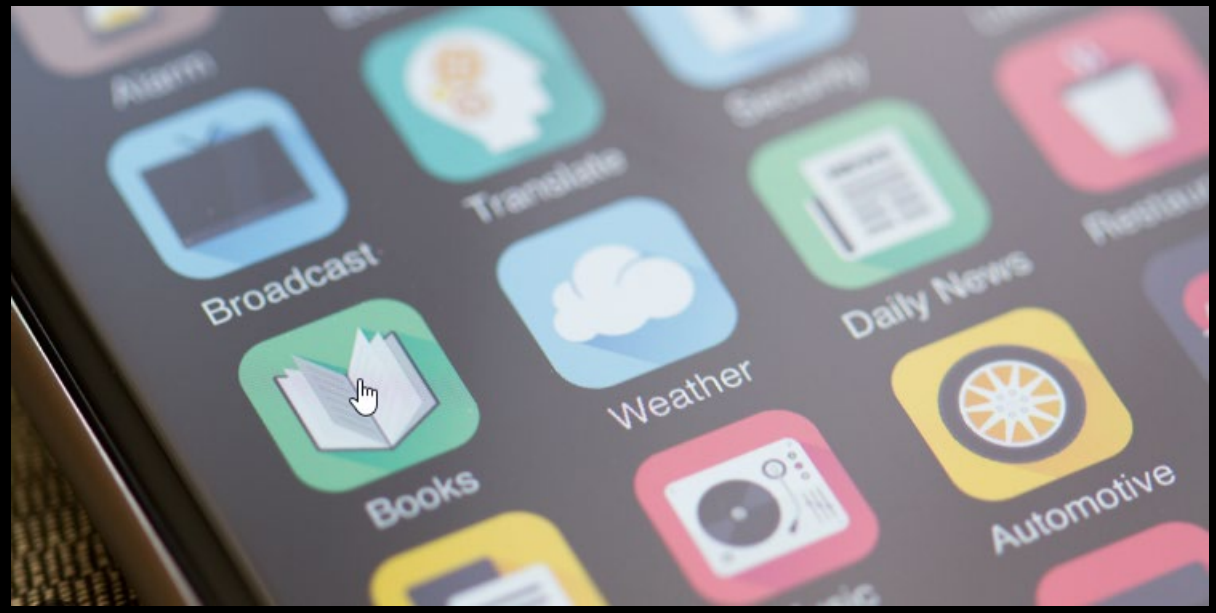
- World Wide Web
  - Information at our fingertips
- Applications
  - Employment
  - School
- Daily Life Items
  - Tickets
  - Banking
  - Medical
  - Calendars



Finding the Right Solution

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Assistive Technology Continuum

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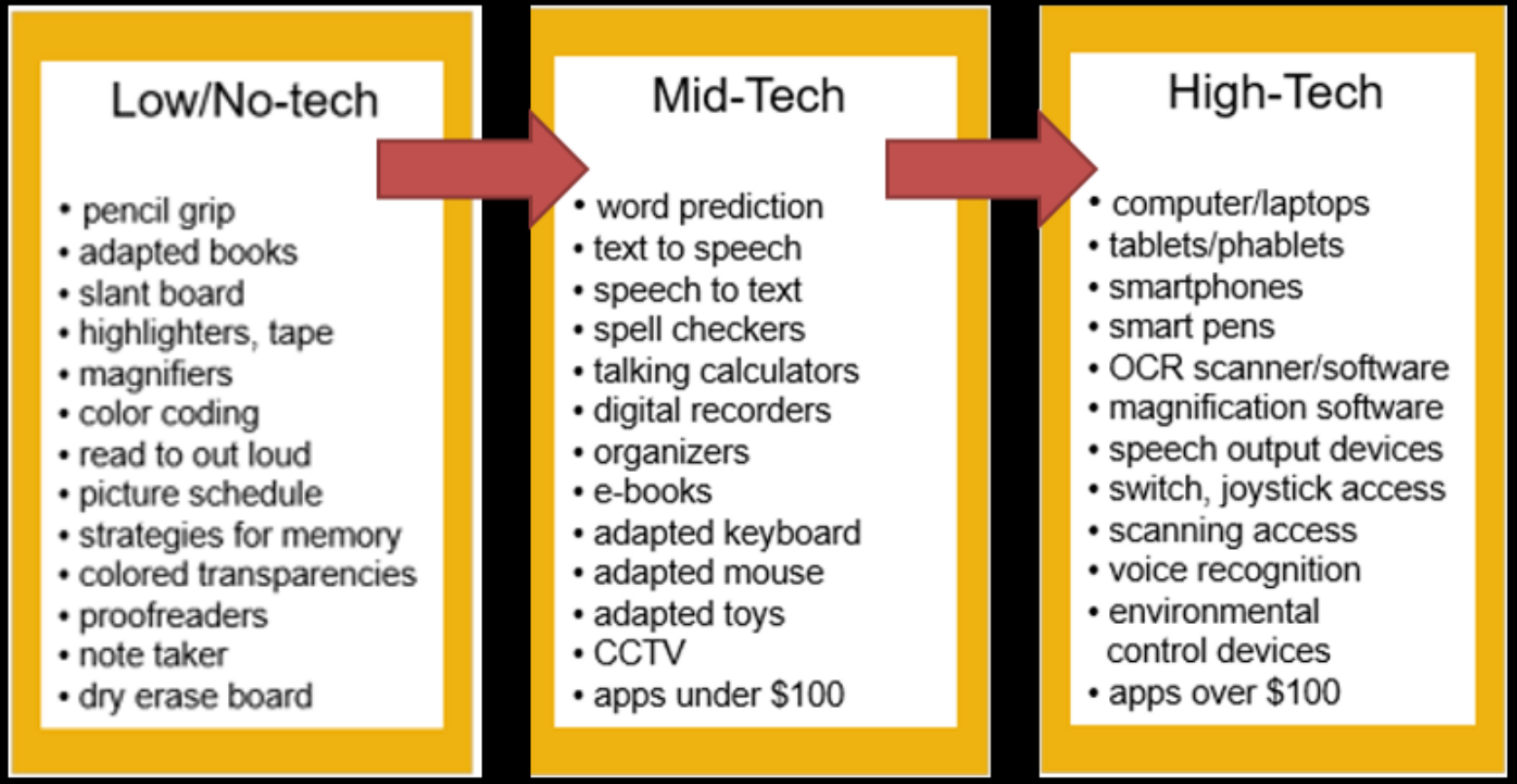
Observations and "Hanging out with Intent"

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



Built-In Solutions

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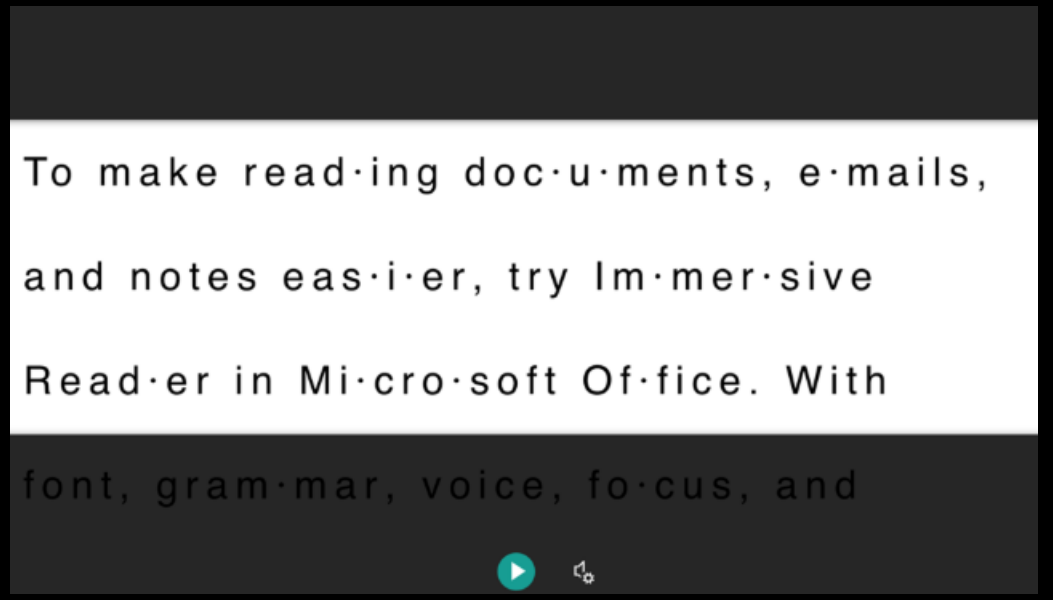
- PCs
  - Ease of Access Center- Narrator
  - Microsoft- Read Aloud; Immersive Reader
- Mac
  - VoiceOver
- Microsoft Edge and Chrome
  - Extension-some are free
    - Helperbird
- Software
  - Texthelp Read & Write
  - ClaroRead



Smart Phones/Apps

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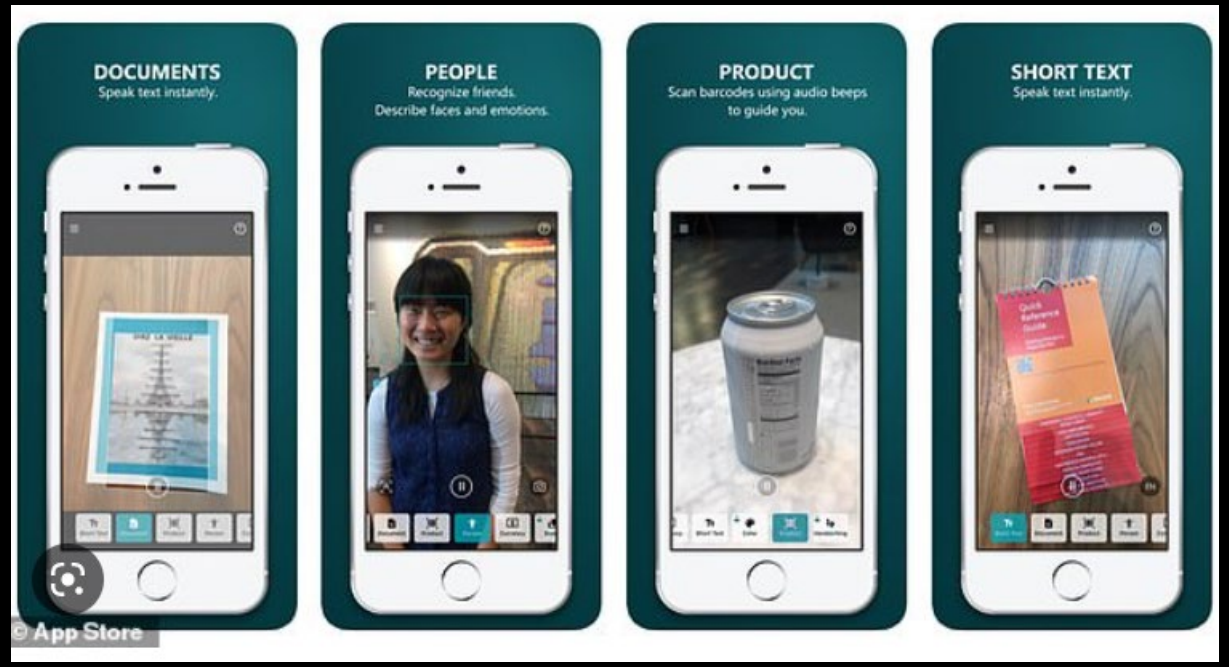
- Built-in Accessibility
  - VoiceOver and Spoken Content
- Seeing AI
- Speechify
- VoiceDream Reader
- Speech Central
- OneStep Reader
- CaptiVoice



AudioBook – BOOM!

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Growing Fast

- In 2022 $5.4 Billon
- Estimated by 2030 $35 Billion
- Amazon reported that Audiobooks was most popular format of 50% of books that hit #1

Reasons:

- Accessibility- several free
  - Project Guntenberg/ Lit2Go/ Bookshare/ BARD
- Apps
  - Audible/ Overdrive/ Libby/Kindle/
- Read Anywhere
  - Exercising/Work/Driving / Riding/ Cleaning/ etc.
- Ease of Reading on the Go
  - Phone
  - Tablet
  - Headphone

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The Essential Relationship Between AT & Digital Accessibility

Access to AT Alone DOES NOT Automatically Assure Full Access

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It is essential that the correct AT solution is in place, and for the digital environment to be accessible, in order to ensure full access to the end user.

An individual using AT does not automatically get the same information from a website or engage with the same services on a mobile app just because they are using AT.

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Section 504 and the ADA

Section 504
Celebrating 50 Years!

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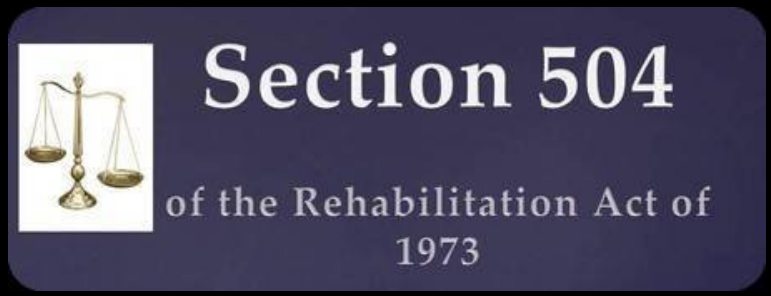
Civil Rights Law Impacting Education Programs and Activities



Section 504 was historic because for the first time people with disabilities were viewed as a class – a minority group. Previously, public policy had been characterized by addressing the needs of particular disabilities by category based on diagnosis.

Kitty Cone, Disability Rights Activist, on the Impact of Section 504

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“If I thought about why I couldn’t attend a university that was inaccessible, I would have said it was because I couldn’t walk, my own personal problem. Before section 504, responsibility for the consequences of disability rested only on the shoulders of the person with a disability rather than being understood as a societal responsibility. Section 504 dramatically changed that societal and legal perception.”

Judy Heumann
"Mother of the Disability Rights Movement"

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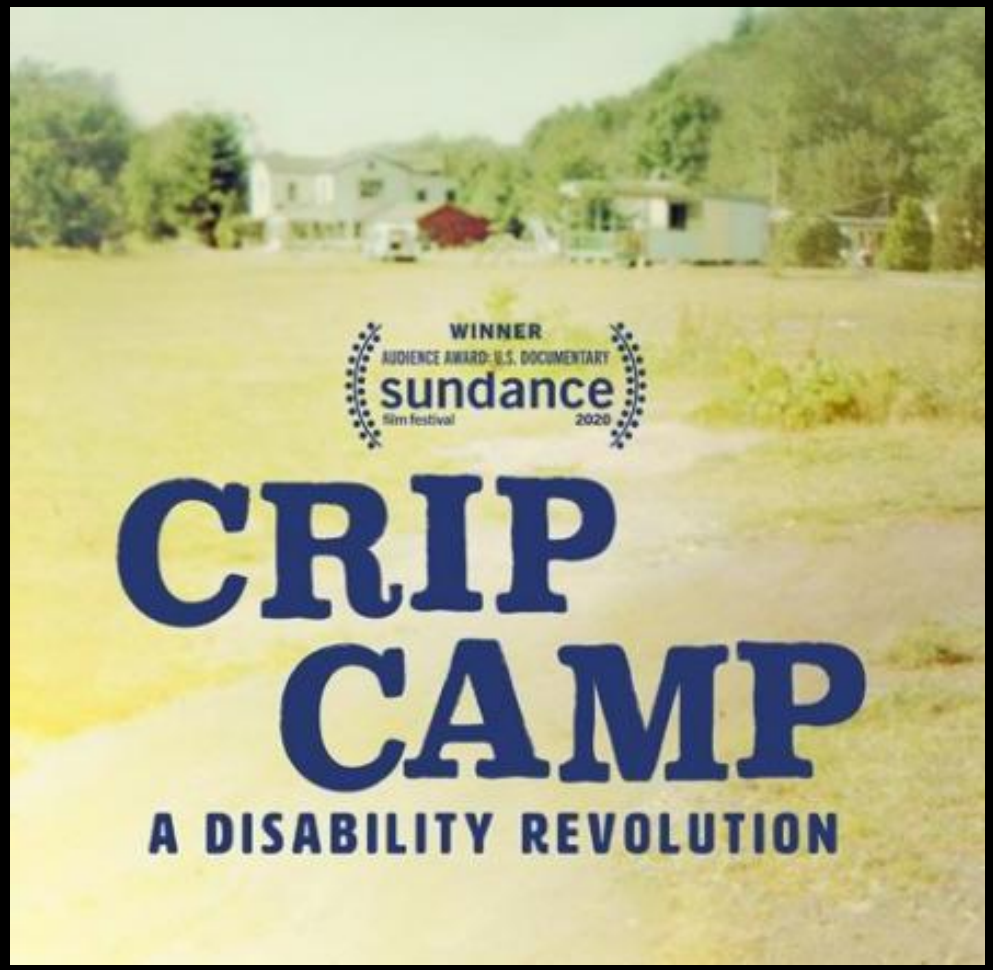
In 1977, she helped lead a 26-day occupation of a federal government building in San Francisco – the celebrated "504 Sit-in" – as part of nationwide action that forced the Carter administration to sign the section 504 regulations that finally enacted the same legislation, ultimately providing the basis of the widely respected 1990 Americans With Disabilities Act.

Judy Heumann (1947-2023)

"Disability only becomes a tragedy when society fails to provide the things we need to lead our lives — job opportunities or barrier-free buildings, for example. It is not a tragedy to me that I'm living in a wheelchair."

– Judy Heumann



Crip Camp Trailer: https://www.youtube.com/watch?v=XRrIs22plz0

ICT Refresh (Section 508 Refresh)

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- U.S. Access Board Final Rule published Jan. 18, 2017, harmonized with WCAG 2.0 (Level AA)
- Applies to federal government agencies
- Many state and local governments have adopted the ICT Refresh and/or the WCAG standards as statutes, regulations, or policies

Section 508: https://www.section508.gov/

The Birth of the ADA

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The ADA is a civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life, including:

- Jobs
- Schools
- Transportation
- All public and private places that are open to the general public

Emphasis placed on the ‘spirit’ of the law, not just the ‘letter’ of the law

The ADA: https://www.ada.gov/

ADA Digital Accessibility Lawsuits

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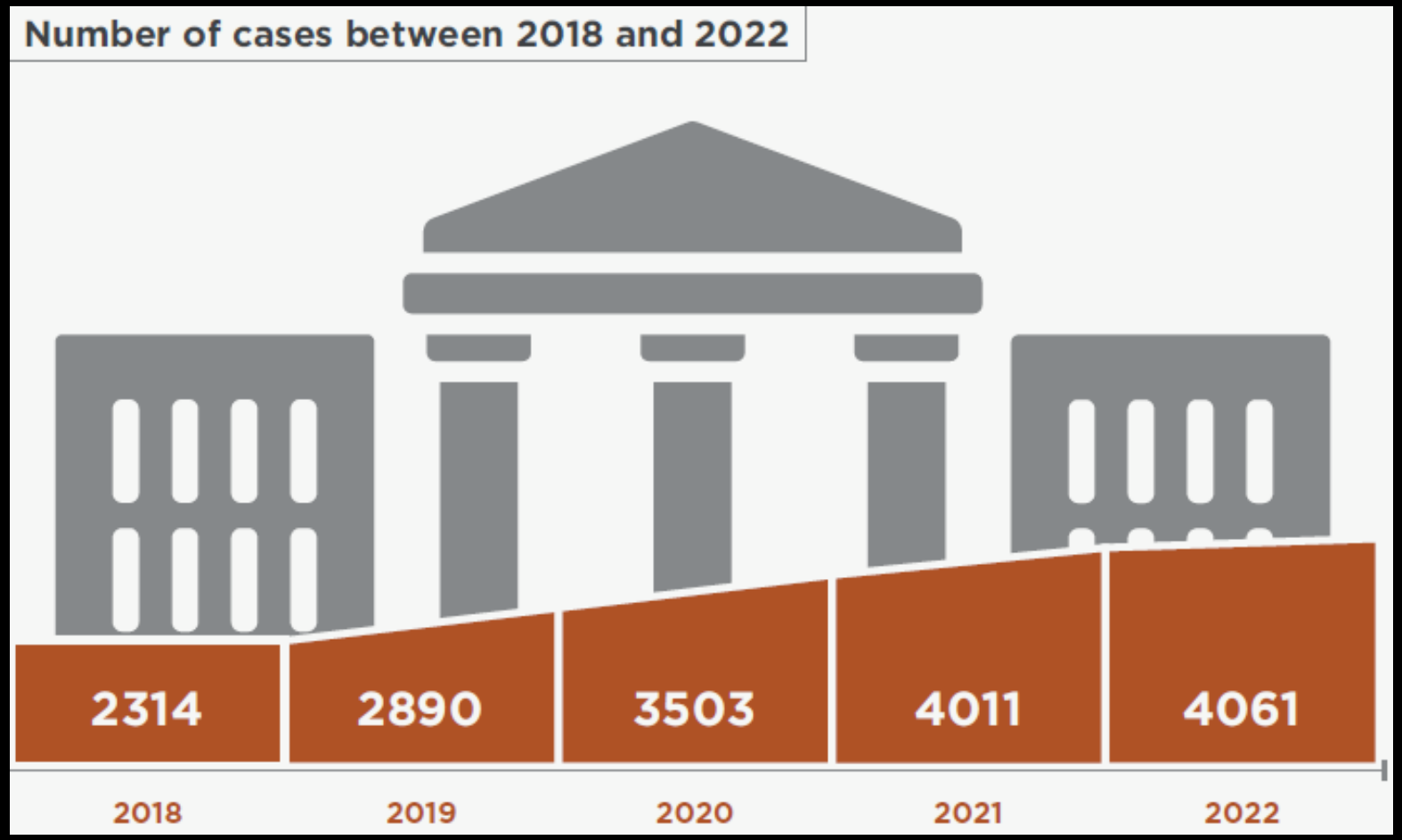

- 2018: 2314 cases
- 2019: 2890 cases
- 2020: 3503 cases
- 2021: 4011 cases
- 2022: 4061 cases

Source: UsableNet

S.4998 - Websites and Software Applications Accessibility Act

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- Proposed legislation introduced in the US Congress in September of 2022

- Its purpose is to establish uniform accessibility standards for websites and applications of employers, employment agencies, labor organizations, joint labor-management committees, public entities, public accommodations, testing entities, and commercial providers, and for other purposes.

Websites and Software Applications Accessibility Act: https://www.congress.gov/bill/117th-congress/senate-bill/4998

DOJ NPRM Publication: Nondiscrimination on the Basis of Disability: Accessibility of Web Information and Services of State and Local Governments

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- Office of Information and Regulatory Affairs
- Specific to ADA Title II
- NPRM: 05/00/2023 – 07/00/2023

The Department intends to publish a Notice of Proposed Rulemaking (NPRM) to amend its Title II ADA regulation to provide technical standards to assist public entities in complying with their existing obligations to make their websites accessible to individuals with disabilities.

Nondiscrimination on the Basis of Disability: https://www.federalregister.gov/documents/2016/05/09/2016-10464/nondiscrimination-on-the-basis-of-disability-accessibility-of-web-information-and-services-of-state

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Brief Overview of WCAG

Web Content Accessibility Guidelines (WCAG)

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Web Content Accessibility Guidelines (WCAG) has been developed through the W3C process in cooperation with individuals and organizations around the world, with a goal of providing a single shared standard for web content accessibility that meets the needs of individuals, organizations, and governments internationally.

WCAG Overview: https://www.w3.org/WAI/standards-guidelines/

WCAG versions

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Introduction to WCAG 2 – W3C.org

- WCAG is intended to be a living standard that changes as the web changes
- Content conforming to WCAG 2.1 or higher will also conform to WCAG 2.0
- WCAG 2.1 does not replace WCAG 2.0, WCAG 2.2 won't replace 2.1
- WCAG 2.2 expected to be released later this year
- The W3C recommends using the most recent version when developing or updating content

White House Accessibility Statement

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"Our ongoing accessibility effort works towards conforming to the Web Content Accessibility Guidelines (WCAG) version 2.1, level AA criteria. These guidelines not only help make web content accessible to users with sensory, cognitive and mobility disabilities, but ultimately to all users, regardless of ability."

White House Accessibility Statement: https://www.whitehouse.gov/accessibility/

WCAG Quick Reference Guide

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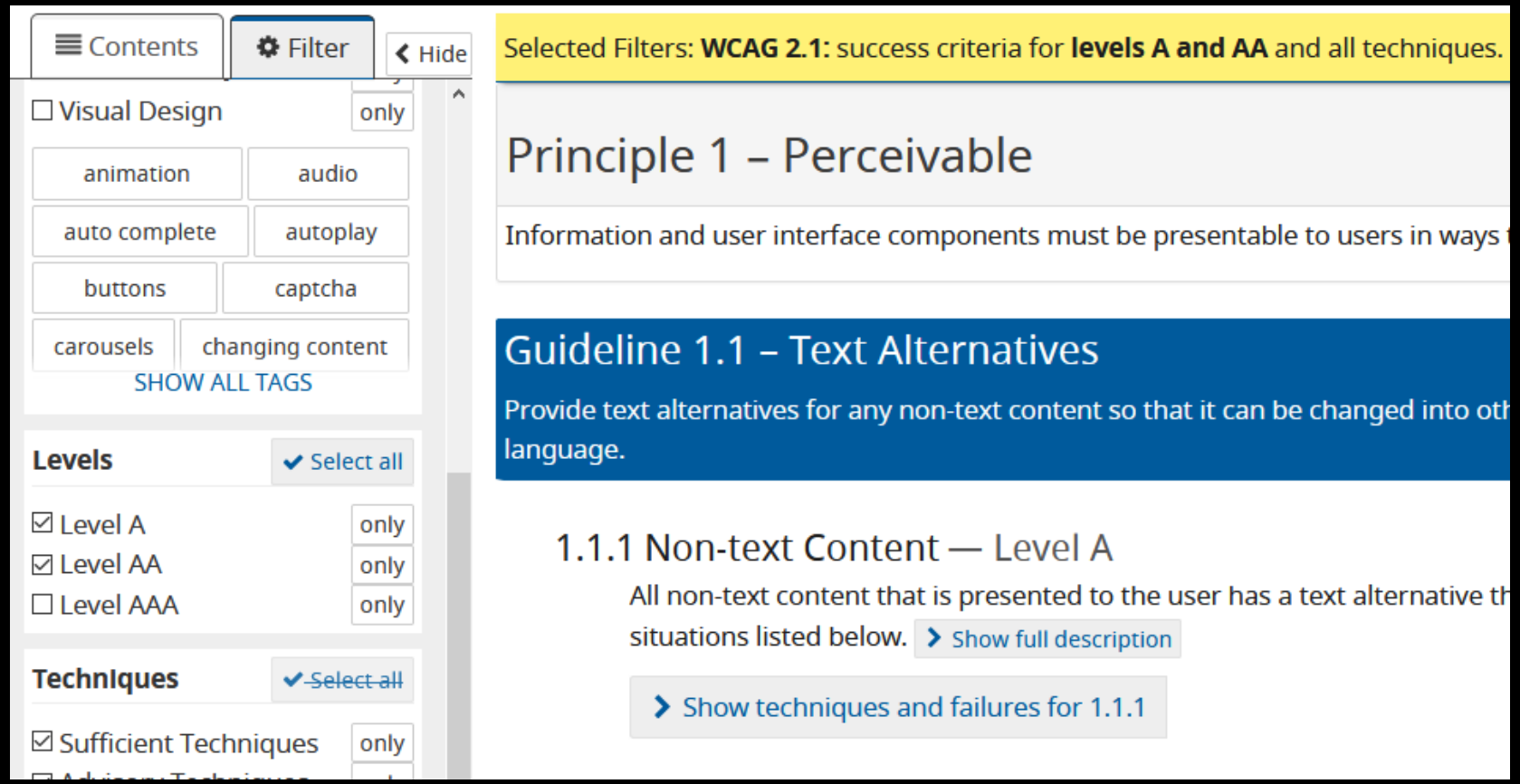
Customizable quick reference to WCAG (Level A, AA, AAA)



WCAG Quick Reference Guide: The WCAG Quick Guide – https://www.w3.org/WAI/WCAG21/quickref/

WCAG 3 (Working Draft)

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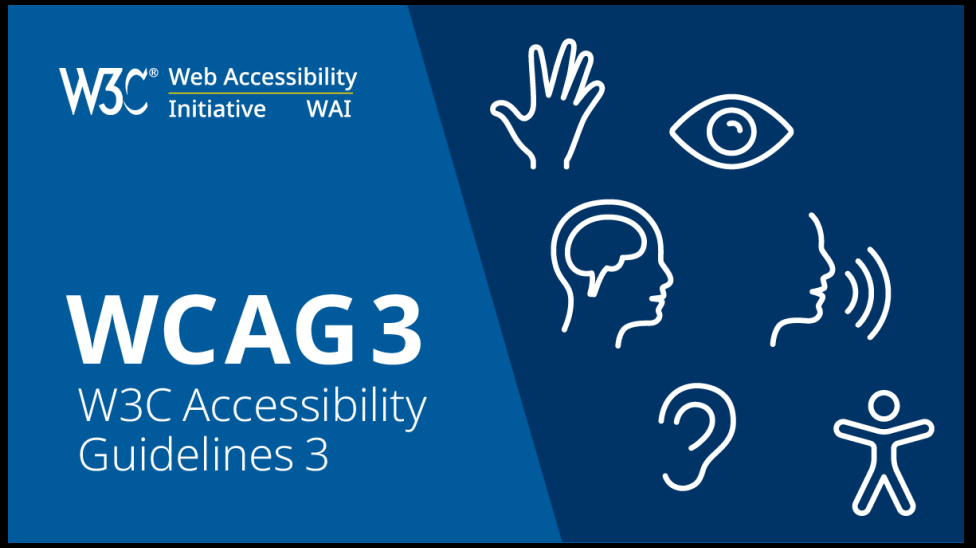
- WCAG 3
  - According to W3C, it will not develop into a standard until at least “a few years.”
  - Rating system of 0 (very poor) to 4 (excellent)
  - Based on “outcomes” rather than the binary “true/false” statements of previous versions



WCAG 3 Introduction: https://www.w3.org/WAI/standards-guidelines/wcag/wcag3-intro/

Best Practice: Accessibility and Usability by End User

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- Include people with disabilities throughout every aspect of the project
- Ensure continued feedback is received by people with disabilities and/or AT users on a regular basis as content is uploaded and new features are added
- Provide an easy and effective means for all users to provide additional feedback on barriers and challenges they may experience

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The Need for a Cultural Change, Not Just a Change in Coding

A Quote from a Name You'll Recognize

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We do not need pity, nor do we need to be reminded that we are vulnerable. We must be treated as equals — and communication is the way we can bring this about.

Louis Braille

Georgia Tech Center for Inclusive Design and Innovation

- 1809 – 1852
- Inventor of braille
- Adapted for use in languages worldwide

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Questions?

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Contact Information

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