

Built-in Accessibility Features

Making everyday tools more accessible for people with disabilities



PENNSYLVANIA
TECH ACCELERATOR

**Institute on Disabilities
at Temple University**



Institute on Disabilities



Accessibility during this presentation



Image
descriptions



ASL Interpreter



CART captions



Other
accommodations

Why we are here

- This project is made possible by Pennsylvania's Department Human Services through funding from the American Rescue Plan Act.



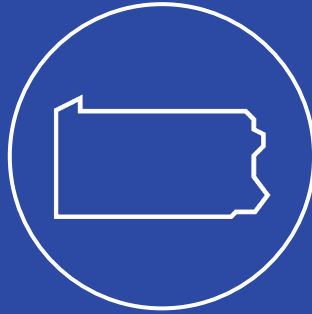
Tech Accelerator initiatives



**Enhance
technology
resources**



**Develop
readiness
evaluation
and tools**



**Advance
technology
first
statewide
assessment
and planning**



**Execute
statewide
technology
solutions
provider
assessment**



**Build capacity
through online
trainings,
webinars, and
regional
centers**



**Plan and
execute
statewide
technology
summits**

Tech Accelerator webinar series

- Every third Thursday at 12 PM and 4 PM until December 2025
- Recorded webinars will be on the Institute on Disabilities website
- Register at bit.ly/PATechAccelerator

Presenters

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Today we will talk about:

- Adjusting settings to make your phone easier to use
- Turning your phone into a tool to better see, hear, and enjoy the world around you
- How to find more resources and support



About us

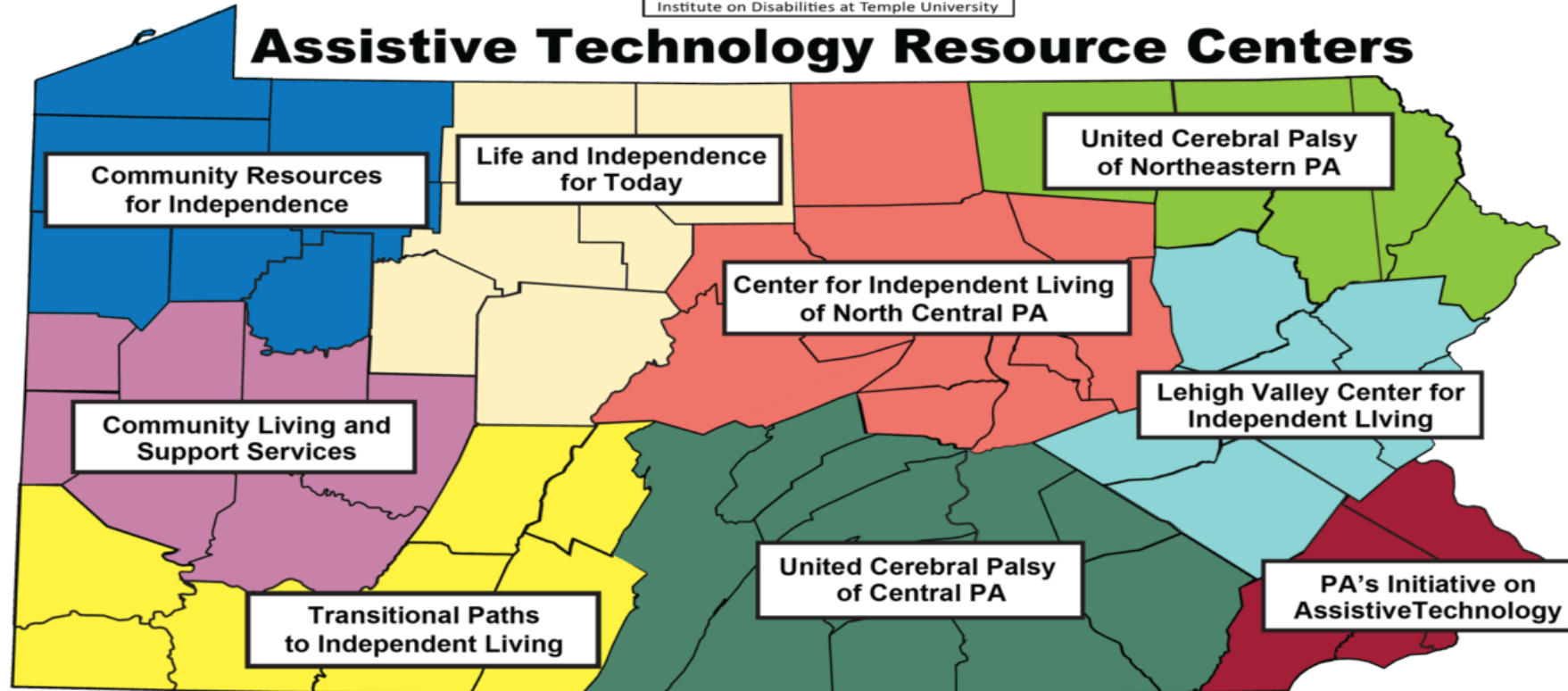
- Technology for **Our Whole Lives**
- We are the state assistive technology act program for the state of Pennsylvania.
 - Find your state program at AT3center.net/stateprogram
- Based at the Institute on Disabilities at Temple University

More about Tech0WL

- We are a federal and state funded non-profit organization.
- We view disability through social and holistic models.
- We believe in a user-centered experience.
- We educate, inform, and empower Pennsylvanians about assistive technology.



Assistive Technology Resource Centers



PA's Initiative on Assistive Technology,
 Institute on Disabilities at Temple University
 (Philadelphia)

- **Community Resources for Independence**
(Erie)
- **Community Living and Support Services**
(Pittsburgh)
- **Life and Independence for Today**
(St. Marys)
- **United Cerebral Palsy of Central PA**
(Camp Hill)

- **Lehigh Valley Center for Independent Living**
(Allentown)
- **Center for Independent Living of North Central PA**
(Williamsport)
- **United Cerebral Palsy of Northeastern PA**
(Scranton)
- **Transitional Paths to Independent Living**
(Washington)

Core Services of AT Act Programs



Device demonstrations



Equipment lending



Equipment donation



Presentations, training, and technical assistance

Changing role of technology

- 75% of older adults use the internet and 61% have a smartphone.
- 72% of adults with disabilities in the US own a smartphone.
- Internet access is more like a utility than a luxury
 - Access to medical records
 - Applying for jobs
 - Paying bills
- Being online has many social and emotional benefits.



Poll: What kind of device(s) do you use?

Built-in accessibility features

Accessibility Settings

- Free and built into your smart phone or tablet
- Allows you to customize how your phone looks and responds to you





Where do I change settings?

- Find the gear icon in your setting's menu
- Notice the different options for display and accessibility

Android disclaimer!

- Android devices are more varied than iPhones
- If you/your client use an Android device and need help figuring out settings, please let us know! We are happy to work with you to set up accessibility features.



Hearing tools

Live captioning

- Display automatic captions across all apps
- **iPhone:** You can turn on live captions just for FaceTime
- **Android:** To turn Live Caption on or off:
 - Press the volume button.
 - Under the volume controls, tap Live Caption

Hearing devices

- **iPhone:** Turn on Hearing Aid Compatibility to improve audio quality with some hearing aids
- **Android:** Pair hearing aids by opening “Connected devices” in settings



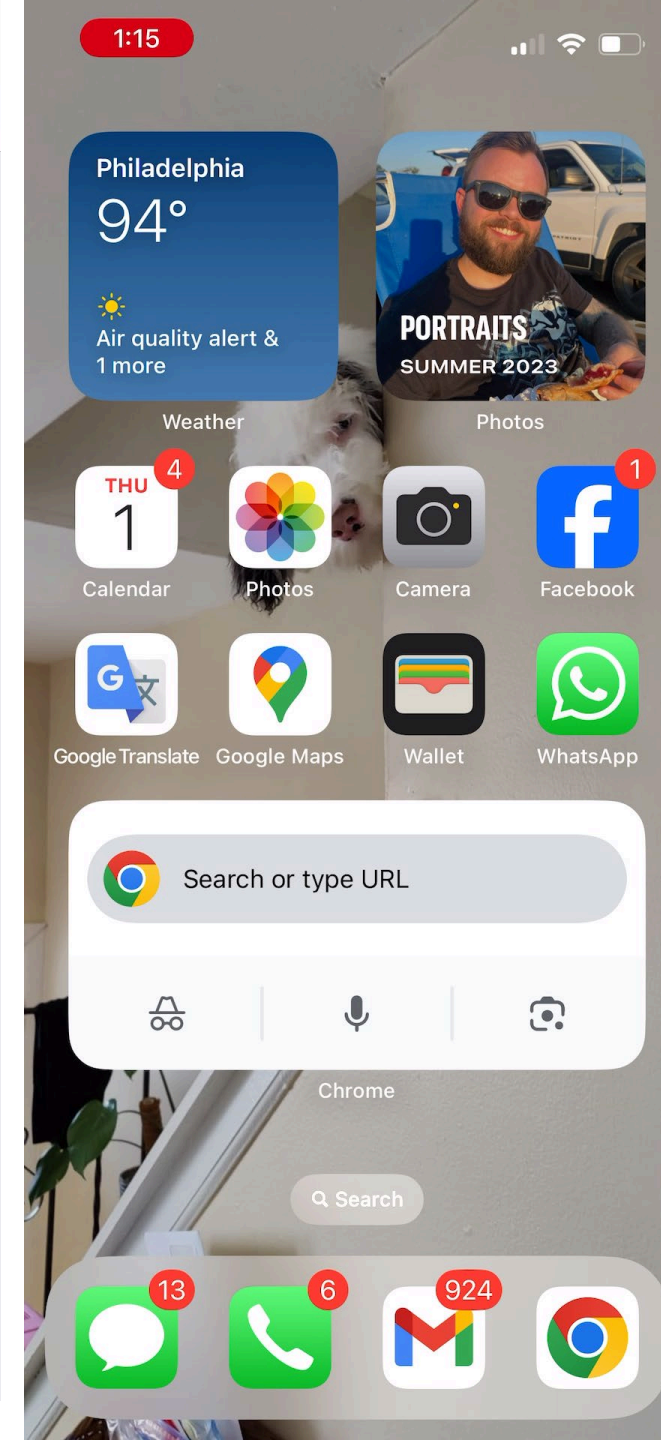
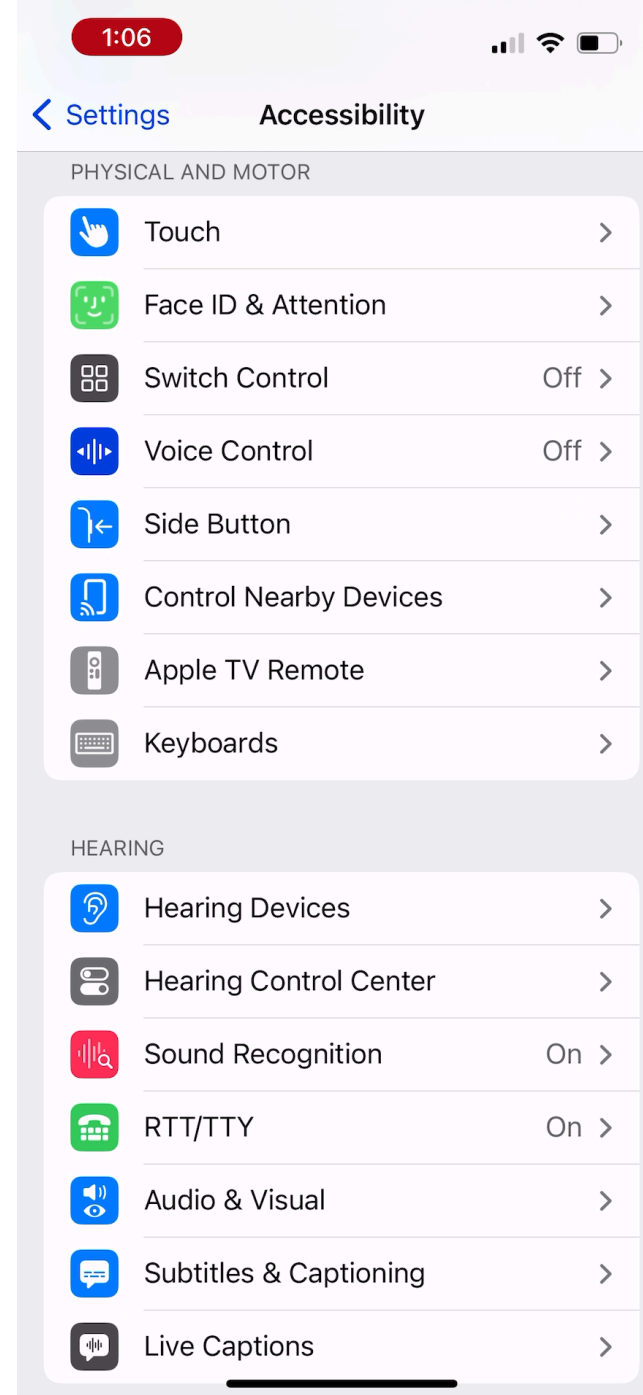
Live captioning on iPhone

Sound recognition

- Your phone will listen for certain sounds and notify you (like alarms, animals, household sounds, and people)

- iPhone: Settings > Accessibility > Sound Recognition

- Android: Accessibility > Sound Notifications > Open Sound Notifications



Hearing tools continued

Real time text

- Use text to communicate during a phone call.
- If you turn on send immediately, your recipient sees your message as you type.

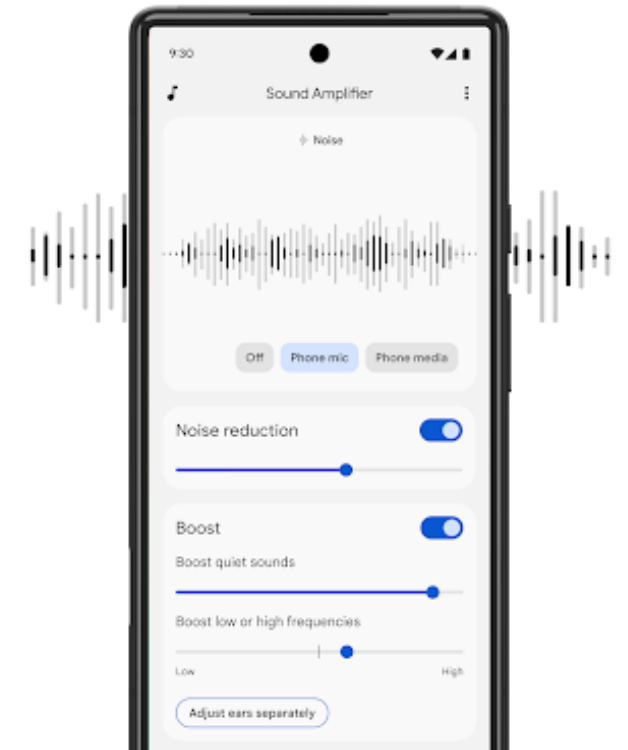
Flash notifications

- Set your device to flash its camera flashlight or screen to alert you of an incoming notification.

Sound amplifier

- **Android:** Use with headphones to filter and amplify the sounds in your environment or your device.
- **iPhone:** Try downloading a sound amplifier app

Amplify the sounds around you or on your phone



Sound amplifier on Android

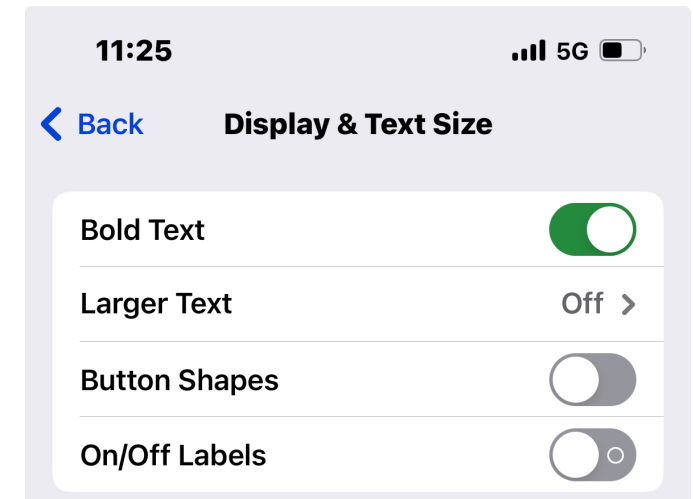
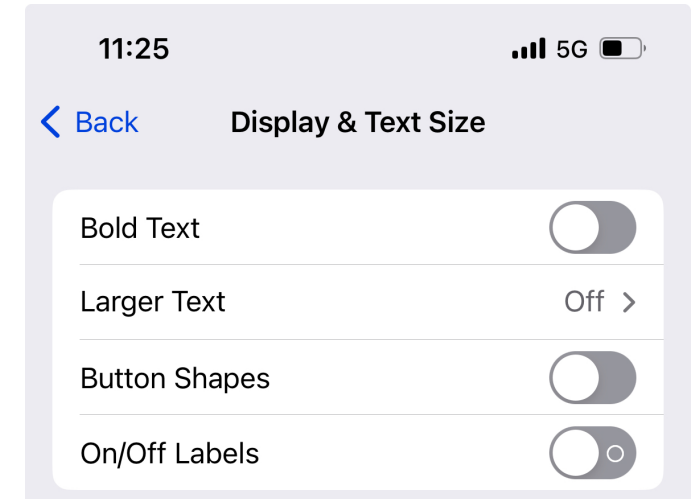
Vision tools

Screen reader

- Helps people who are blind or have low vision to interact with their devices using touch and spoken feedback.
- iPhone: VoiceOver
- Android: TalkBack

Display and text size

- Bold text
- Larger text
- Reduce transparency to increase legibility
- Increase contrast
- Invert colors
- Color filters for color blindness



Bold text on iPhone

Zoom

- iPhone: Turn on Zoom to magnify the entire screen
 - Gestures
 - Double-tap three fingers to zoom
 - Drag three fingers to move around screen



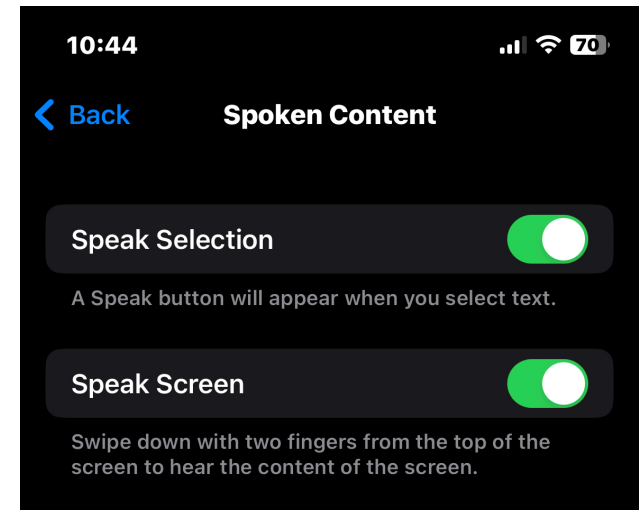
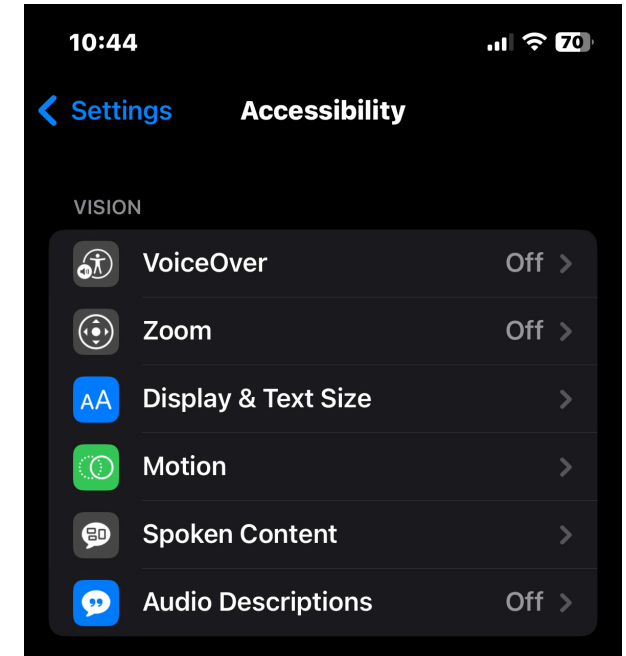
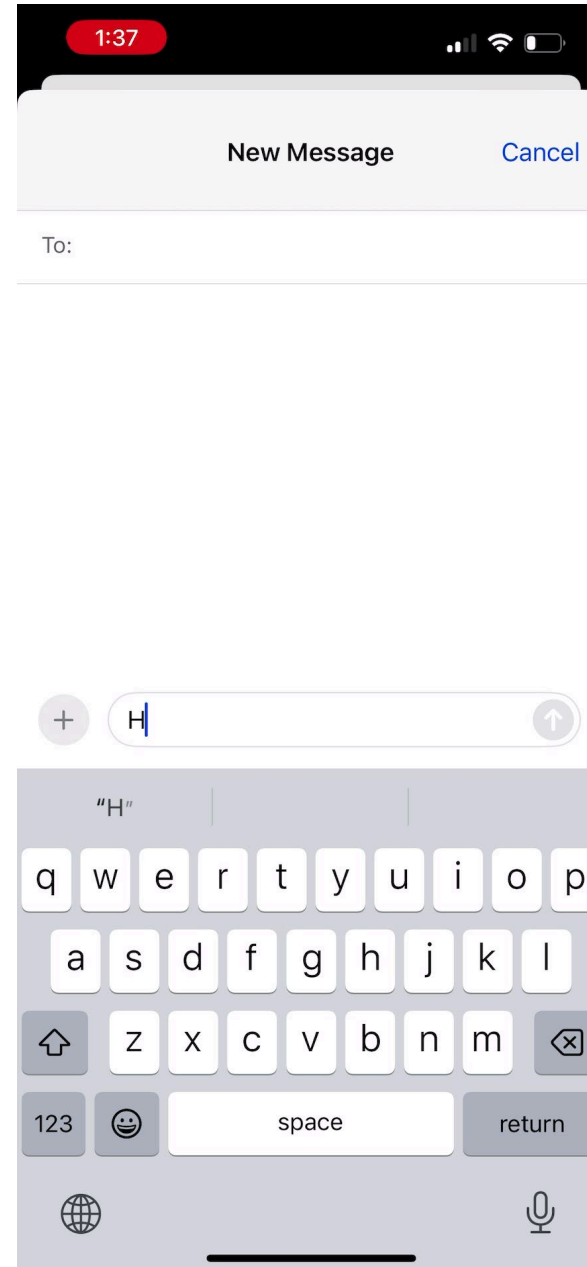
Spoken content

Spoken content (iPhone)

- Typing feedback: hear characters and words while typing
- Turn on Speak selection to hear selected text
- Speak screen (swipe down with two fingers from the top)

Select to Speak (Android)

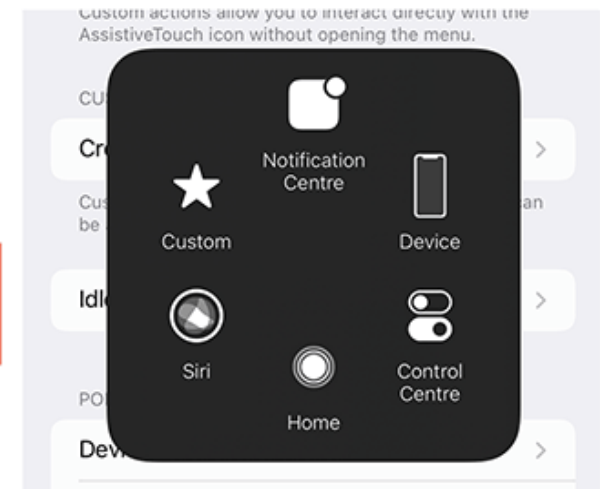
- Spoken assistance reads keyboard aloud
- Tap the Accessibility button or use a shortcut, such as a two-finger swipe up or three-finger swipe if TalkBack is on
- Tap and hold to drag a box over text to have it read aloud. Find this feature in Settings > Accessibility > Select to Speak.



Touch tools

Assistive touch

- Create custom gestures
- Use for multi-finger gestures
- Gives you access to functions that you would otherwise control by pressing physical buttons or moving the device.
- **Android:** download Assistive Touch app



Touch tools continued

Touch accommodations

- Turn on ignore repeat so multiple touches are treated as a single touch

Back tap

- Double or triple tap on the back of your phone to perform actions quickly like opening the camera or turning on accessibility features

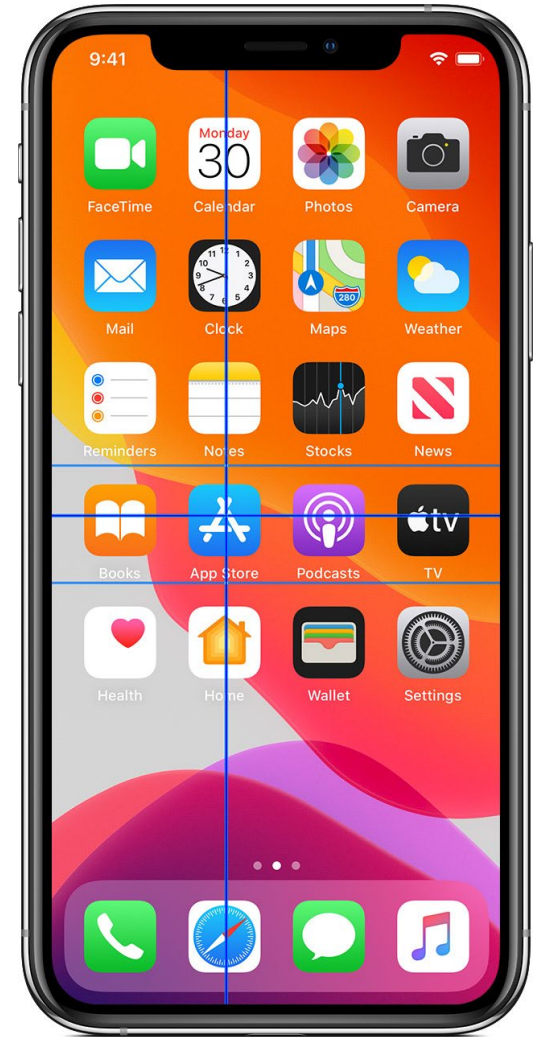
Physical and motor tools

Switch control

- Let's you to use switches to control phone rather than touch screen
- Can sequentially highlighting items on the screen or can use switch scanning to navigate the phone

Head tracking (iPhone) Camera switches (Android)

- Navigate your phone with a few simple facial gestures
- Browse or select apps on your phone with the use of your phone's front camera.



Switch scanning on iPhone

Voice Control (iPhone) Voice Access (Android)

Use your voice to open apps, navigate, and edit text hands-free.

What can I say?

You can ask Siri to turn on Voice Control or to wake the screen by saying "Hey Siri, turn on Voice Control". And, at anytime, say "Show me what to say"

System Commands & Navigation

- "Open <application name>"
- "Open Control Center"
- "Go home"
- "Go back"
- "Go to sleep"

Work with What's On-screen

- "Show grid"
- "Show names"
- "Tap <number>"
- "Tap <item name>"
- "Long press <item name>"



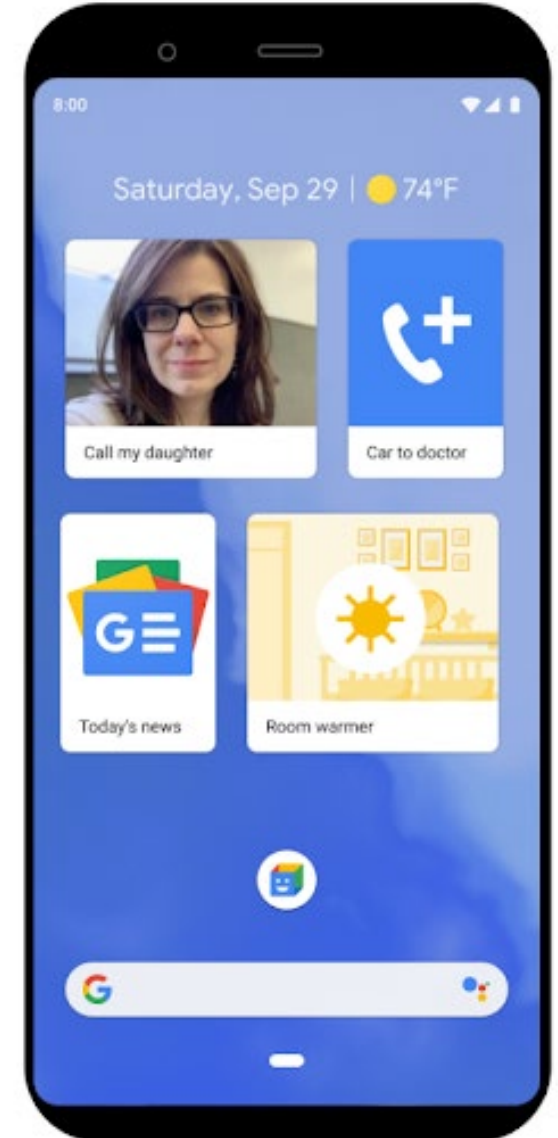
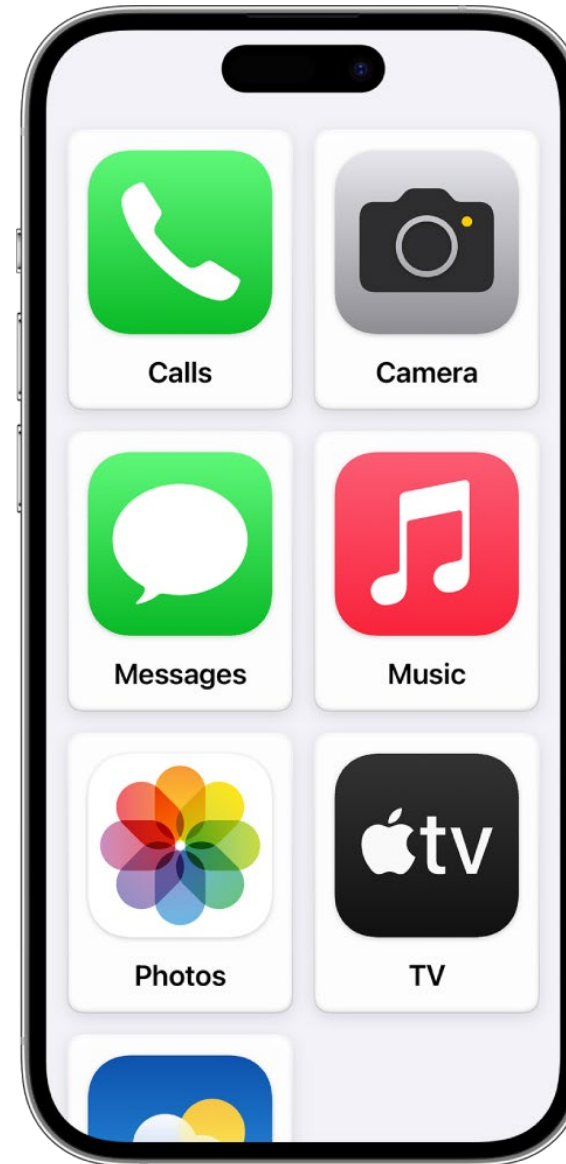
Cognitive tools

Assistive access (iPhone)

- Adjusts apps to be larger and contain core features that can be customized.
- Offers ways to navigate and communicate using visuals rather than text.

Action blocks (Android)

- Add common actions to your home screen with a name or image.
- Activate the Action Block to trigger the corresponding action, like calling a loved one.



Cognitive tools continued

Accessibility shortcut

- **iPhone:** Triple click the side button to turn accessibility features of your choosing on and off.
- **Android:** For each accessibility app, you can choose the shortcut that you want to use.

Guided Access (iPhone) Screen Pinning (Android)

- Keeps phone in a single app and allows you to control which features are available.

Voice assistant Siri (iPhone) Google Assistant (Android)

- Ask questions
- Use apps like calendars, reminders
- Find your phone (“Hey Siri, where are you?”)
- Set timers
- Make phone calls and send texts
- Turn on flashlight
- Play and pause music
- Ask “What can you do?”

Choose one accessibility tool to try

Hearing

- Live captioning
- Hearing devices
- Sound recognition
- Real time text
- Flash notifications
- Sound amplifier

Vision

- Screen reader
- Bold text
- Zoom
- Audio description
- Motion
- Spoken content

Touch tools

- Assistive touch
- Touch accommodations
- Back tap

Physical and motor

- Switch control
- Voice control/voice access
- Head tracking/camera switches

Cognition

- Assistive access (iPhone)
- Action blocks (Android)
- Guided access (iPhone)/Screen pinning (Android)
- Accessibility shortcut
- Siri or Google Assistant

**Answer in the chat: What are
your favorite apps?**

Apps for hearing

Roger Voice

- Transcribes phone calls
- Free for people with hearing loss (eligibility is verified through the FCC's Telecommunications Relay Service)

Ava

- Live captions and transcripts
- Captions who said what
- Text-to-speech with natural voice

Live Transcribe

- Captions in 70 languages
- Requires Wifi or network connection
- Free on Android
- Paid versions on iPhone

Otter

- Automated meeting note taker
- Real time transcription
- Free version: 300 monthly transcription minutes; 30 minutes per conversation

Apps for seeing

Seeing AI

- Speaks short text in real time
- Identifies currency
- Recognizes saved faces
- Identifies colors
- Ask questions about photos
- Recognizes handwriting

TapTap See

- User friendly image recognition
- Requires VoiceOver to be on
- Does not read documents

Be My Eyes

- Connects blind and low-vision users to sighted assistance
- Be My AI uses AI to provide descriptions of images and scenes without connecting to a volunteer

Aira

- A service that connects blind users to a professional sighted guide.
- Free for 5 minutes or you can pay for service plan.

Apps for memory

Alarmed

- Set reminders for when you arrive or leave a specific location

Reminder with Voice Reminders

- Recurring reminders
- Use your own voice or pick a song
- Add images

Remember the Milk

- Reminders via email, text, Twitter, or mobile apps
- Breaks tasks down into subtasks
- Can share your list with others
- Connects to Google Drive and Drop Box

Medisafe Medication Management

- Family scheduling and tracking
- Integrates with Apple Health and Google to track things like blood pressure
- Drug interaction warnings
- Refill and appointment reminders

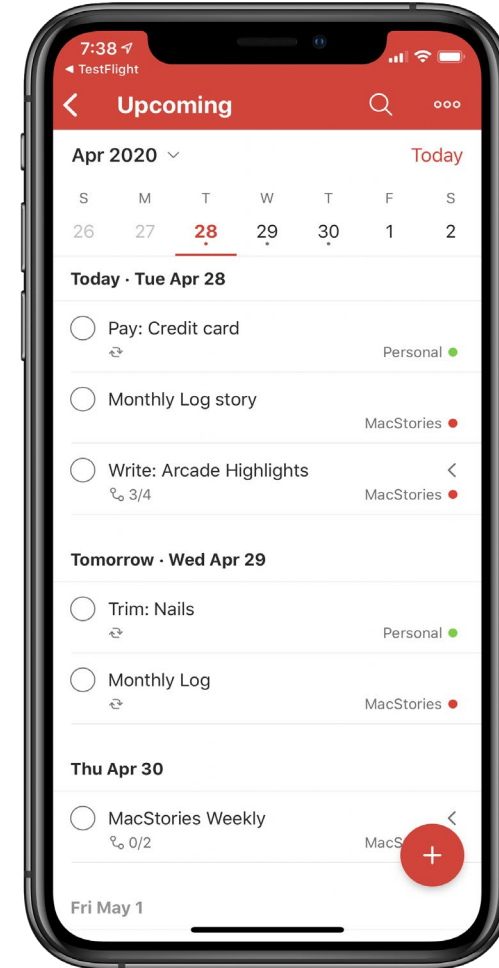
Apps for organization

Recipe Keeper

- Search by name, ingredient, course
- Built in shopping list

ToDoist

- Task tracker that is very easy to navigate
- Can create daily lists and custom lists
- Use filters and priority lists



How Tech0WL can help

Assistive Technology Lending Library

- www.techowipa.org/library
- Loans are 5-9 weeks long
 - Extensions will be granted if there is no wait list
- Free for Pennsylvanians
- Demonstrations to use the technology
- Don't live in PA? Find your lending library at www.at3center.net/state-at-programs



Free Special Phone Program

- Serves residents who have:
 - A disability (hearing, vision, cognitive, or physical) which makes it difficult to use a typical phone, AND
 - Income below 200% of the federal poverty level (e.g. \$30,120 for a single person)
- Applicant is responsible for phone service
- Apply online <https://techowlpa.org/tddp/>
- Or ask for an application to be mailed to you



iCanConnect

- Serves residents who have:
 - **Both** vision and hearing loss
 - Income below 400% of the federal poverty level (eg \$60,240 for a single person)
- Devices for distance communication
- 1-on-1 support/training with devices
- Apply online <https://techowlpa.org/deafblind-services/>
- Or ask for an application to be mailed to you



Del Sordo Fund

- Last resort funding source that provides up to \$400 of financial assistance
- Serves residents who:
 - Need an assistive device and other funding sources (Medicaid/Medicare, insurance, etc.) cannot provide funding.
 - Have an income below 400% of the federal poverty level (eg \$60,240 for a single person)
- Apply online <https://techowlpa.org/help-with-pay/>
- Or email ATfund@temple.edu



Get in touch and follow along

TechOWL main office

- Phone: 800-204-7428
- Email: TechOWL@temple.edu
- Web chat: techowlpa.org

TechOWL Community Space

1392 Cecil B Moore Ave.

Phila, PA 19122

Institute on Disabilities

- Phone: 215-204-1356
- Email: IOD@temple.edu
- www.disabilities.temple.edu



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Survey

bit.ly/CommunicationTechSurvey

Title of presentation:

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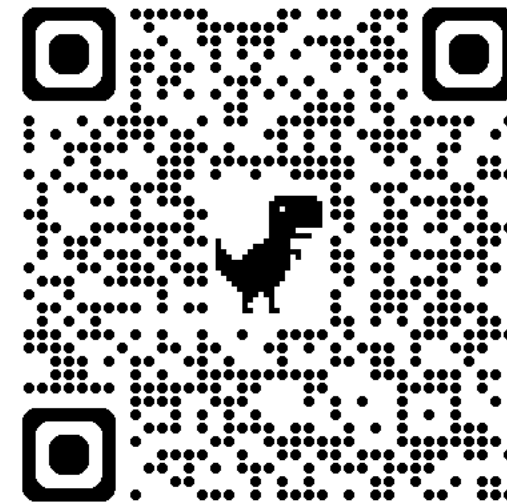
Presenters:

Tom & Alanna



Next PA Tech Accelerator webinar

- Thursday September 19, 2024 12 PM and 4 PM
- **Topic:** A Day in the Life – Work, Home, and Community
- Register at bit.ly/PATechAccelerator



Questions