Accessibility on iOS

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NLS: National Library Service for the Blind and Physically Handicapped

- A Division of the U.S. Library of Congress
- Established in 1931
- NJ State Library Talking Book & Braille Center
- Serves patrons who cannot read standard print or who cannot hold a book or turn the pages of books because of a physical impairment, a reading disability, or a vision impairment.
Prevalence of Disability in the United States

- Reported Disabilities:
  - 12.6% of Americans
  - 11.1% of undergraduates enrolled in postsecondary institutions

- Does not include those who choose not to self identify
Universal Design

- Design that recognizes and attempts to accommodate all individuals
- Enhance learning for ALL
- Adapt for users rather than require users to adapt
- iOS accessibility features designed for users with disabilities
Versatile Features

- **Siri**: Ask questions, issue commands
- **Dictation**: Converts speech to text
- **Facetime**: Communication using sign language
iOS Accessibility Features

- Vision
- Hearing
- Physical and Motor Skills
- Learning and Literacy
Vision

- Voiceover
- Zoom
- Invert Colors & Grayscale
- Speech
- Font Adjustments
Voiceover

- Screen reading software (text to speech)
- Controlled by **gestures**
  - **Single** tap: reads the item under your finger
  - **Flick**: moves from item to item on the screen
  - **Double tap**: selects the item
  - **Three finger flick**: for scrolling
  - **Double finger double tap**: stops/starts current action
Hearing

- Hearing Aids
- LED Flash for Alerts
- Mono Audio
## Physical & Motor Skills

- Switch Control
- AssistiveTouch
- Touch Accommodations
- Keyboard
- Shake to Undo
- Vibration
- Call Audio Routing
- Home Button
- Reachability

Double-tap the home button to bring the top of the screen into reach.
Switch Control

https://www.youtube.com/watch?v=6puEmp8FSI&feature=youtu.be
AssistiveTouch

- Shortcut menu for alternative gestures and commands
- Access: “Home,” “Siri,” “Control Center,” and “Notification Center”
- Customize gestures to meet specific needs
  - Ex. Scroll
- Specific device features
  - Volume, Screen Lock/Rotate, Shake, Screenshot, Multitasking
Learning & Literacy

- Guided Access
- Speak screen
- Safari reader
Selected Instructional Videos

- Hadley School for the Blind
- NLS Instructional Videos for BARD Mobile
Accessibility Apps

- **Eyenote**: Reads currency
- **Color ID**: Identifies color by taking a photo
- **VisionSim**: Simulates various vision disabilities
- **TapTapSee**: Uses camera to identify objects (even people)!
- **CamFind**: Visual search, QR reader, price comparison, barcode scanner
- **Seeing Eye GPS**: Accessible GPS