ACCESSING THE LIBRARY THROUGH ASSISTIVE TECHNOLOGY

PENNSYLVANIA’S UNIVERSITY CENTER FOR EXCELLENCE IN DEVELOPMENTAL DISABILITIES EDUCATION, RESEARCH, AND SERVICE.
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WHO ARE WE?

Assistive and Accessible Technologies (AT)

- **TechOWL**

  *Technology for Our Whole Lives*

  - Formally known as Pennsylvania’s Initiative on Assistive Technology (PIAT)
  - A program at the Institute on Disabilities
  - Pennsylvania’s AT Act Program
  - Implements all AT programs for Pennsylvanians with disabilities and older Pennsylvanians with AT needs.
Topics covered today:
- Accessing online books
- Apps for reading
- Computer Access (software for reading)
- Ways to obtain digital books on the computer
- Writing/Notetaking Apps and Software
- Assistive Technology Hardware for accessing the library
READING SERVICES FOR THE BLIND/VISUALLY IMPAIRED AND/OR PRINT DISABILITIES

- Typically requires membership by either an individual or institution
- Online Accessible Libraries:
  - Bookshare
  - Learning Ally
  - National Talking Book Service
  - OverDrive
BOOKSHARE

- Repository of books that have been scanned as digital text
- All books have navigation structure
- Individual membership available with proof of print disability
- Students in the US can obtain a Bookshare membership free of charge
- Schools and post-secondary education institutions can apply for an Institutional membership
- Books can be read with synchronized speech and display options through computer software, apps, accessible playback equipment

Website: www.bookshare.org
LEARNING ALLY

- Narrated recorded books (human voice)
- Navigation structure included
- Individual membership or institutional membership available
- Primarily textbooks or classic literature
- Read through computer software, apps, and accessible playback devices

Website: www.learningally.org
Individual membership only with proof of vision loss or physical disability that prevents reading standard print books

Narrated books - Primarily general literature, popular titles, and magazines

Braille books that are digitized:
- Can be played using technology devices such as talking book players or Braille displays

Navigation structure included

Playback device for narrated books available or download service

Description and Membership Information: [http://www.loc.gov/nls/](http://www.loc.gov/nls/)
Borrow eBooks, audiobooks, and more for free from your local public library – anywhere, anytime!

- Millions of titles
- Find the library closest to you and sign in with your library card number
- Overdrive App and Libby App
  - Available on Android and iOS for free!

Website: www.overdrive.com
COMMERCIAL BOOK SELLERS

- Audible: [https://www.audible.com/](https://www.audible.com/)
  - There is an app for iOS and Android
- iBooks
- Kindle store from Amazon
  - Always sample a book prior to purchasing (samples are free)
WHAT MAKES AN E-BOOK ACCESSIBLE?

- PDF files that are more than images – not just a photo of text
- Optical Character Recognition (OCR): Takes image of text and creates best recognition into a digital text.
- Screen reading software can only access digital text. It cannot access an image of text

RESOURCE: ASCLA. “Think Accessible Before You Buy: Questions to Ask to Ensure the Products the Library Plans to Purchase are Accessible” 
Think Accessible Before You Buy.pdf
OBTAINING ACCESSIBLE PDF BOOKS FROM PUBLISHERS

- Students with documented print disabilities and registered with college or university disability services can request accessible e-book (typically PDF) from textbook publisher
- Students purchase a textbook and submit receipt to disabilities services at college or university
- Disability services contacts publisher to obtain accessible e-book
- Publisher sends (or provides download link) to accessible PDF to disability services
- Disability services provides accessible textbook to qualifying registered students
E-BOOK SOURCES

- VitalSource

- Online textbooks for rent or purchase can be read using multiple devices (computer or mobile technology)

- Accessibility Statement:
  - http://get.vitalsource.com/accessibility
Louis Database contains information on approximately 255,206 titles in accessible formats, including braille, large print, sound recording and electronic files.

ONE BLIND USER EXPERIENCE

- Reference Article from AFB Access World
Both Apple and Android have accessibility features built into their settings:
- Magnifier on Android and Zoom on Apple iOS
- Screen reader TalkBack on Android and VoiceOver on Apple
- Text-to-speech
- User customization (font size, inverted colors, contrast)
- Touch accommodations and switch access
Voice Dream Reader

- Text to Speech app with 36 built-in voices and 27 languages (free)
- Works offline
- Adjust contrast and font size
- Opens the following file types: PDF, Plain text, MS Word, MS PowerPoint, TRF, Google Docs, web articles, EPUB, DAISY, audiobooks, and Rich text
- Opens Bookshare books
- Works with VoiceOver, Braille, and switch control

Dolphin Easy Reader

- For readers with dyslexia, low vision or blindness
- Opens DAISY, EPUB, text books
- Copy text from anywhere on your phone and hear EasyReader read it back to you
- Boost comfort or contrast: color, text size, highlighting for visual needs
- Connects directly to accessible book libraries!
- Cost: Free!
APPS FOR READING

Read 2 Go and Go Read
- Bookshare’s app for reading ebooks
- Browse, search, download, and read books direction from your Bookshare account
- Full control over font size, color, background, highlighting, and text to speech preferences
- Supports DAISY files

Learning Ally Link
- Access Learning Ally’s library of human-read audiobooks
- Highlight text synced with audio
- Customize settings: font size, spacing, reading rate/speed, color, and highlighting
- Built in bookmarking and note taking
APPs FOR READING

**iBooks**
- Read a variety of Apple books
- Dedicated audiobooks store
- Customize font size and four easy-to-read page colors
- Hear the words on a page spoken by using accessibility features for iPad, iPhone, and iPod Touch

**Kindle App**
- Read eBooks purchased on Amazon
- Sample any eBook for free
- Customize font size and style, page color, and screen brightness
- Make and share in-page highlights
- Access local library eBooks

**Amazon Alexa App**
- Ask Alexa to read a book that was purchased on Amazon out loud
- Connect to your audible account
- Pick up where you left off in an audiobook
KNFB Reader
- Text Recognition app – provides instant access to print anytime, anywhere
- Text-to-speech and Text-to-Braille: Take a photo and the app reads text out loud or displays it on a braille display
- Built in highlighting tools
- Reads image-based PDF, JPEG files, ePub, tagged PDF files
- Great for people with low vision, blindness, dyslexia, and other reading difficulties

BARD Mobile
- Access more than 100,000 books, magazines, music scores in audio and braille formats
- Membership based: Apply for service
- Find which library serves you:
  - www.loc.gov/nls/find.html or calling
  - 1-800-NLS-READ

Seeing AI
- Speak text as soon as it appears in front of the camera
- Text-to-speech for documents captured with the camera
- Scans barcodes and reads package information
- Saves peoples faces and recognizes them
- Describes scenery, identifies currency, identifies color
- Describes photos on your phone
- Works with VoiceOver and has audio feedback
BUILT IN COMPUTER ACCESS

- Windows Ease of Access
  - Cortana: Windows personal digital assistant
  - Includes a magnifier and text to speech accessibility
  - Magnifier enlarges all text and images
  - Narrator (screen reader) provides text-to-speech and some support for menu and control navigation
  - User customization

- Apple Mac built in accessibility features in Utilities:
  - Enable type to Siri: [https://www.intego.com/mac-security-blog/get-hey-siri-on-your-mac-or-use-siri-in-total-silence/](https://www.intego.com/mac-security-blog/get-hey-siri-on-your-mac-or-use-siri-in-total-silence/)
  - Magnifier known as Zoom
  - Text-to-speech known as VoiceOver
  - User customization
Read & Write - Texthelp
- Easy-to-use toolbar makes documents, files and web pages more accessible
- Hear emails or documents read out loud
- Text prediction
- Picture dictionaries
- Summary highlighters
- Grammar, spelling, and word meaning checker
- Capture highlights and create audio notes

Snap & Read
- Read accessible and inaccessible text out loud
- Level vocabulary
- Language translation: read text in other languages out loud
- Built in study tools for creating outlines and bibliographer
- Remove distractions such as ads on webpages
- Read paragraph-by-paragraph or line-by-line
- Built in picture supported dictionary
POPPULAR COMPUTER ACCESS SOFTWARE

- JAWS screen reader software from Freedom Scientific:
  - [https://www.freedomscientific.com/Products/Blindness/JAWS](https://www.freedomscientific.com/Products/Blindness/JAWS)
- Free screen reading option from Non-Visual Desktop Access (NVDA)
  - [http://www.nvaccess.org/about-nvda/](http://www.nvaccess.org/about-nvda/)
- Zoomtext with or without speech support
  - Provides enlargement of text and images, alternative color themes, cursor, and pointer enhancements

Check with your college or university IT department to see if a site license for the above mentioned software is available for you to use in the library.
One of Microsoft’s learning tools
Reads text out loud
Breaks words into syllables
Customize settings: background color, font size, spacing, speed
Built in picture dictionary
Available in OneNote, Word, Outlook, Office Lens App Microsoft Edge browser, and Microsoft Teams
MORE ON COMPUTER ACCESS SOFTWARE

- Adobe Acrobat Reader
- Built in accessibility features in Google docs
- Google Chrome Extensions
ASSISTIVE TECHNOLOGY TOOLS FOR ACCESS

- Ruby Magnifier
- Amigo HD
- Pocket Talker
- Adapted keyboard
- Large roller ball mouse
- Braille display: HIMS Beetle

- JAWS Screen Reader
- AIRA and glasses
- Victor Reader Stream
- NLS Talking Book Player
ASSISTIVE TECHNOLOGY RESOURCES

- Assistive Technology: What you need to know in the library.
  http://www.ala.org/asgcla/resources/tipsheets/assistive-technology

- Apple Accessibility.
  http://www.apple.com/education/special-education/
  At this site visitors can learn about Apple’s built-in accessibility features

- Microsoft Accessibility: Technology for Everyone.
  http://www.microsoft.com/enable/
  Overview of Microsoft’s Accessibility Products

- Section 508.gov: Assistive Technology Showcase Devices
  www.section508.gov/index.cfm?fuseAction=AssistiveTechDevices
  The U.S. government's official showcase of assistive technology and a listing of providers of the technology.
RESOURCES AVAILABLE THROUGH TECHOWL
TechOWL WEBSITE

TechOWLpa.org
TechOWL@temple.edu

AVAILABLE!
- Text Chat
- Video Chat
Thank you.

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Topic: Accessing the Library through Assistive Technology

PLEASE COMPLETE THIS SURVEY.  BIT.LY/PIAT_T1