Digital Accessibility

What is it and why should you care?

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Digital Accessibility - Presenters

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Digital Accessibility - Outcomes

- Understand the basics of digital accessibility and how this affects library resources
- Gain knowledge about how to work with library vendors on accessibility features
- Leave here with some resources to begin/continue this discussion at your library.

What is digital accessibility?

For the web, it "*...means that people with disabilities can perceive, understand, navigate and interact with the Web and that they can contribute to the Web.*" - W3C Consortium

"Libraries play a catalytic role in the lives of people with disabilities by facilitating their full participation in society. Libraries should use strategies based upon the principles of universal design to ensure that library policy, resources and services meet the needs of all people."

- Association of Specialized, Government and Cooperative Library Agencies

Services to People with Disabilities - An Interpretation of the *Library Bill of Rights*

"The American Library Association recognizes that people with disabilities are a large and vibrant part of society. Libraries should be fully inclusive of all members of their community and strive to break down barriers to access. The library can play a transformational role in helping facilitate more complete participation in society by providing fully accessible resources and services...**Libraries are committed to providing equal access to collections, services, and facilities for all library users.** When this is not possible, reasonable accommodations and timely remediation should be employed to provide an equivalent experience to people with disabilities. Libraries should comply with all applicable laws, including the standards and requirements of ADA and state or local disability accessibility guidelines."

Databases & Other Electronic Products

Access to assistive technology does not equal access to Internet resources or other electronic resources due to inaccessible design.

- Library Websites & Online Catalogs
- Databases
- Digital Ebook & Audiobook platforms
- Streaming services

The Legal Stuff

Section 504 - Rehabilitation Act of 1973: Prohibits federal agencies, programs, or activities from discriminating and requires reasonable accommodation for qualified individuals with disabilities

Section 508 - Rehabilitation Act of 1973: In 1998, Congress amended the Rehabilitation Act of 1973 to require Federal agencies to make their electronic and information technology (EIT) accessible to people with disabilities. The law ([29 U.S.C § 794 (d)](#)) applies to all Federal agencies when they develop, procure, maintain, or use electronic and information technology. Under Section 508, agencies must give disabled employees and members of the public access to information comparable to the access available to others.

Americans with Disabilities Act (ADA) of 1990 (and Amendments)
Title II prohibits public entities from, on the basis of disability, denying qualified disabled persons an equal opportunity to participate in or benefit from aids, benefits, or services that are delivered either directly or through contractual, licensing, or other arrangements.

"*Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990 and its amendments mandate that qualified people with disabilities have access to public programs and services. According to these laws, **no otherwise qualified individuals with disabilities shall, solely by reason of their disabilities, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination in these programs and services, unless it would pose an undue burden to do so.** Although Section 504 and the ADA do not specifically address access to technology, the United States Department of Justice and the U.S. Office of Civil Rights have clarified that the ADA accessibility requirements apply to electronic resources. Court cases and complaints about the accessibility of online content to the Office of Civil Rights continue to increase. Dealing with complaints and litigation that result from inaccessible services can be unpleasant and costly.*"

**40 million Americans living with a disability*
in 2015 - 12% of the population**
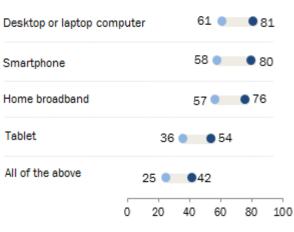
1. Older Americans significantly more likely
   to have a disability.
2. Most common disabilities: difficulty walking
   or independent living.
3. Disabled Americans earn less.
4. Disabled Americans have lower rates of
   technology adoption.

https://www.pewresearch.org/fact-tank/2017/07/27/7-facts-about-americans-with-disabilities/

*defined ty the Census Bureau's American Community Survey as measuring
serious difficulty with hearing, vision, cognition, walking or climbing stairs, as
well as difficulty with self-care and independent living.

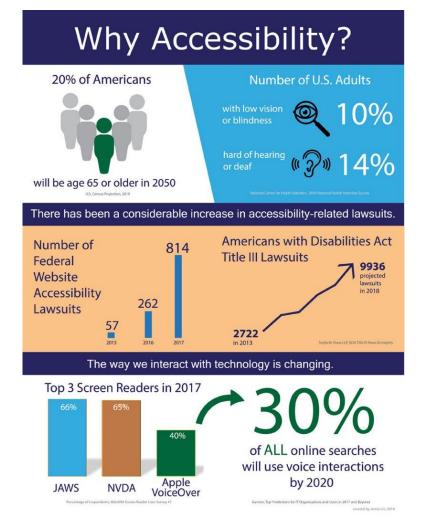**Disabled Americans are less likely to
have home broadband, tech devices**

% of U.S. adults who say they have ...

● Any disability   ● No disability

	Any disability	No disability
Desktop or laptop computer	61	81
Smartphone	58	80
Home broadband	57	76
Tablet	36	54
All of the above	25	42

0   20   40   60   80   100

Source: Survey conducted Sept. 29-Nov. 6, 2016.

PEW RESEARCH CENTER

https://www.pewresearch.org/fact-tank/2017/04/07/disabled-americans-are-less-likely-to-use-technology/

Why Accessibility?

20% of Americans will be age 65 or older in 2050
U.S. Census Projection, 2010

Number of U.S. Adults

with low vision or blindness — **10%**

hard of hearing or deaf — **14%**

National Center for Health Statistics, 2016 National Health Interview Survey

There has been a considerable increase in accessibility-related lawsuits.

Number of Federal Website Accessibility Lawsuits
57 — 2015
262 — 2016
814 — 2017

Americans with Disabilities Act Title III Lawsuits
2722 in 2013
9936 projected lawsuits in 2018
Seyfarth Shaw LLP, ADA Title III News & Insights

The way we interact with technology is changing.

Top 3 Screen Readers in 2017
JAWS — 66%
NVDA — 65%
Apple VoiceOver — 40%
Percentage of respondents, WebAIM Screen Reader User Survey #7

30% of ALL online searches will use voice interactions by 2020
Gartner, Top Predictions for IT Organizations and Users in 2017 and Beyond

created by Jamie Lin, 2018

http://www.infotoday.com/cilmag/apr19/Lin--Top-10-Ways-to-Make-a-Document-Accessible.shtml

What types of disabilities benefit from accessible design?

- Mobility
- Communication
- Learning disabilities
- Reading
- Writing
- Sensory

- Low vision
- No vision
- Hearing
- Reduced sense of touch

Great video from WCAG: https://www.w3.org/WAI/videos/standards-and-benefits/

Accessible/Inclusive design is for **everyone**!

- A person who has a broken limb, or who doesn't have their reading glasses
- Shifting abilities due to aging
- The growing use of smaller devices to access content
- People who may have issues with bright light or loud/quiet environments impacting audio
- Various internet connections, particularly those who live in areas without high-speed internet

Top Accessibility Issues

- lack of captioning / transcripts for videos / ALT tags for images
- motion, animation, cluttered pages
- small font size
- zooming messing with the layout / navigation
- low color contrast
- bright color schemes (bright white backgrounds)
- relying on color to convey meaning (doesn't help the color blind)
- navigation relying on the mouse and too-small targets

What can we do?

1. Talk about digital accessibility at your libraries and with library vendors.
2. Familiarize yourself with standards and terminology - WCAG, VPATs, various assistive technologies.
3. Review your existing digital products, learn about accessibility features and make sure your staff know about them too.

Resources (Kim)

- Introduction to Web Accessibility (WAI - Web Accessibility Initiative) https://www.w3.org/WAI/fundamentals/accessibility-intro
- University of WA Accessible Technology: Laws, Policies & Standards http://www.washington.edu/accessibility/requirements
- Accessibility, Usability, and Inclusion (WAI - Web Accessibility Initiative) https://www.w3.org/WAI/fundamentals/accessibility-usability-inclusion
- Office of the Chief Information Officer (Washington State) - https://ocio.wa.gov/policy/accessibility
- Web Content Accessibility Guidelines (WCAG) Overview - https://www.w3.org/WAI/standards-guidelines/wcag
- Accessibility Technology at the UW - http://www.washington.edu/accessibility
- *Creating Inclusive Library Environments: A Planning Guide for Serving Patrons with Disabilities*. Michelle Kowalsky and John Woodruff. ALA Editions. 2017.
- West, Jessamyn. "Accessibility is More than Curb Cuts and ALT Tags." *Computers in Libraries* 36.1 (2016): 22-4.
- Multiple articles on accessibility: "Think Before You Buy: Questions to Ask to Ensure that the Electronic Resources Your Library Plans to Purchase are Accessible" https://cpl.org/wp-content/uploads/think_accessible_before_you_buy.pdf
- Kent State University – Questions for Vendors: https://www.kent.edu/sites/default/files/file/ICT%20vendor%20form%20-%20question%20preview.pdf
- Kirsten Ostergaard (2015): *Accessibility from Scratch: One Library's Journey to Prioritize the Accessibility of Electronic Information Resources*. The Serials Librarian,69:1–14, 2015
- Making Electronic Resources Accessible in Libraries - https://www.washington.edu/doit/making-electronic-resources-accessible-libraries

2nd Presentation

King County Library System (KCLS)

Online Accessibility Website Complaint & Resolution Process

Samantha Everett, Vendor Relations Coordinator, King County Library System, 425-369-3205, severett@kcls.org

King County Library System (KCLS)
Online Accessibility Complaint & Resolution Process

- Helpful for all libraries to be *proactive* to being accessible online rather than *reactive*

- US Department of Education, Office of Civil Rights (OCR) *filed a complaint against the KCLS website for violating the Americans with Disabilities Act* of 1990 (Title II), 28 CFR Part 35, which prohibits discrimination on the basis of disability in programs, services, and activities of public entities (https://www2.ed.gov/policy/rights/reg/ocr/28cfr35.pdf)

- Other public libraries with online accessibility complaints - https://www.ed.gov/ocr-search-resolutions-letters-and-agreements?keywords=library&title=&keywords_state=

KCLS Complaint Timeline

2016
- October: complaint filed against KCLS
- November: KCLS submitted a voluntary corrective action plan

2017 & 2018
- Implementation of KCLS corrective actions

2019
- May: Deadline for completion of all corrective actions

Training & Help

- Hired 3rd party online accessibility consulting company: Bureau of Internet Accessibility (BOIA)
- Trained specific KCLS staff about online accessibility
- Tracked online accessibility trainings for OCR progress reports
- Created "Online Accessibility Assistance Service Guidelines" for Ask KCLS staff to offer alternate accommodation for inaccessible products (handout)

Becoming Compliant

- Identified KCLS online accessibility stakeholders (IT, HR, Collections, Online Services)
- Set up intranet page for project management
- Managed official complaint correspondence & deadlines

Project Management

Project management tracking sheet on intranet including:

- Online Product Name
- KCLS Department Owner
- Vendor Name
- Vendor Contact Information
- VPAT/date or Accessibility Checklist/date
- Contract addendum/date
- Accessibility category (supports, does not support)
- Notes (accessibility development timeline, no response, no VPAT available, etc.)

Project Management Cont.

Types of services included for online accessibility:

- Databases and Digital Content Services (ProQuest, Ebsco, Overdrive, hoopla, etc.)
- Library Website Services (including KCLS job application, online library card application, automated renewal reminders, online fine payment, etc.)
- Library Catalog & Mobile App
- Library Events Calendar
- Meeting Room Booking Software
- Staff Intranet
- Reserving a Computer and Printing Software
- Summer Reading Signup

Changes to KCLS Website

- Created "Online Style Guide" for all KCLS content contributors (bloggers, website promotional cards)
- Added closed captioning to KCLS YouTube channel and an accommodation notice
- Provided transcriptions of KCLS readers' advisory podcasts
- Added accessibility ratings for online resources on KCLS website (does not support, partial support, etc.) (to be complete after 4/22/2019)

Changes to KCLS Website Cont.

- Updated the KCLS Accessibility statement on the KCLS website and provided alternate access for inaccessible online services
- Launched a new website with more accessibility features
- Added alt tags to images
- Implemented policies & procedures for existing, modified, or new online services (how to assure services are accessible, functional, and meet benchmarks such as WCAG 2.0)

Patron Feedback

- Launched an accessible online survey for patrons about online accessibility challenges specific to KCLS - https://www.surveymonkey.com/r/2CRJ65K
- Plan to use feedback to shape our service improvements
- Plan to use feedback to shape promotion of online services to patrons with disabilities who are not using them
- Asked for in person feedback from patrons (challenging to reach people in person and compensate them for time)

Vendor Requirements

- Sent letters to vendors asking for a VPAT or online accessibility checklist for each service (handout) - https://kcls.org/accessibility-checklist/
- Asked vendors to provide an accessibility development timeline if product is not fully accessible
- Asked vendors to provide a 3rd party accessibility audit of their product
- Asked vendors to sign New Terms of Service Contracts with an accessibility addendum for all renewals and new services

Vendor Requirements Cont.

- Asked vendor to provide accessibility & tech support contact information for services not fully accessible
- Added accessibility requirements to KCLS Request for Proposals (RFP) for all online services
- Decided to not purchase services that are not accessible or delayed a product launch (ie, Newsbank, Kanopy)
- Tracked vendor responses or lack thereof

VPATS - Voluntary Product Accessibility Template

- Created a VPAT repository on our intranet (document title included product name, VPAT, date to keep track of different versions)
- Read VPATS and plan to verify vendor accessibility claims
- Understand the limitations of VPATs

VPAT Cont.

- Created a basic checklist for accessibility testing (JAWS Inspect, keyboard only navigation)

- Decided what happens when a vendor does not respond

Communication & Collaboration

KCLS Staff Communication
- Informed the KCLS Leadership team about our online accessibility efforts
- Informed all KCLS staff

Collaboration
- Shared information and best practices with other libraries
- Online accessibility is a continuous learning process – you never finish

Citations - KCLS

- **Communicating Accessibility with 3rd Party Vendors: Digital Accessibility 101** by Faye O'Reilly, Wichita State University Libraries, 2018.
- **Accessibility of Electronic Resources: A Pilot Project by the University of Washington** by Hana Levay, University of Washington Libraries, 2019.
- **Toto, we're not in Canvas anymore: Accessibility and Third Party Materials**, Jess Thompson, Washington State Board for Community & Technical Colleges (WSBCT), 2018
- **UW Accessible Technology Services**, conversations with Hadi Rangin and Dan Comden, https://www.washington.edu/accessibility/checklist/
- **UW Libraries Accessible Library Resources Day**, October 2018

Referral Resources - KCLS

Washington Talking Book Library - https://www.wtbbl.org/

LEAP – Library Equal Access Program through the Seattle Public Library
Our Library Equal Access Program (LEAP) coordinates accessible Library programs, services and assistive resources. We also offer accommodations under the Americans with Disabilities Act. Offers: Lab with Assistive Equipment and Software at Central Library in downtown Seattle

If you have a question or need help, Ask Us, email our LEAP department or call 206-615-1380 (V/TTY).

Northwest ADA Center - http://nwadacenter.org/audience/people-disabilities

Providing information, training and guidance on the American with Disabilities Act to Washington. Information for people with disabilities:

Washington Assistive Technology Act Program - http://watap.org/activity/tools-everyday

Offers information on the types of assistive technology available

3rd presentation:
Additional Resources to Explore (Clare)

- Some terms & explanations
- Procurement-related
- Perspectives on Accessibility
- Understanding WCAG standard
- Designing & Developing & creating accessible documents
- User & helping users at front line in Library

Link URLs can be found in the "Speaker Notes", if the presentation is printed out.

Some Terms and explanations

VPAT® – **Voluntary Product Accessibility Template** by Information Technology Industry Council (ITI), a standard fillable form for use by product vendors as an aide in communicating product compliance with required accessibility standards. Compliance is based on meeting testable functional criteria.

Section 508 – Section 508, of the Rehabilitation Act of 1973, Amended 1998. (Recently updated rules (2018) are also known as "Revised Section 508"; "ICT Refresh", or "**Final Rule**". Codified into **36 CFR Part 1194**, July 2018. "Information and Communication Technology (ICT) Standards and Guidelines".) 36 CFR Part 1194 , as amended in 2018, now has Appendices A-D. **Appendix C** has the current functional criteria, with numbering as E301.1(+) range. Appendix D is the previous version in full, for use in legacy safe haven cases. Its criteria numbering has 1194() ranges.

ICT – Information and Communication Technology, a general term for all information and communication technology, including both the hardware and software used in the Internet, and other data technologies.

Some terms (continued, page 2)

Section508.gov GSA Government-wide IT Accessibility Program – website of the US General Services Administration's programs to help federal agencies meet the requirements of Section 508, including procurement processes.

Access Board - The Access Board is an independent federal agency responsible for government regulation in accessible design of all aspects and the development of rules involving accessibility guidelines and standards. (Created in 1973, originally named the Architectural and Transportation Barriers Compliance Board, it has responsibility for rules in regard to Section 508 law.)

WA State Office of the Chief Information Office - Minimum Accessibility Standards. A statement which refers to WCAG 2.0 as its accessibility standard for the state.

W3C – World Wide Web Consortium. An organization which develops international standards for Web interoperability. (HTML, etc.) Founded in 1994, its 450+ members are organizations and companies from around the world.

Some terms (continued, page 3)

W3C-WAI World Wide Web Consortium's Web Accessibility Initiative. One of the topic focus areas of W3C. Includes work developing standards for the 3 essentials: Web Content Accessibility Guidelines (WCAG), Authoring Tool Accessibility Guidelines (ATAG), and User Agent Accessibility Guidelines (UUAG)

W3C Recommendation – A final, member-voted and approved, **standard** produced by W3C is called a "W3C Recommendation".

WCAG – Web Content Accessibility Guidelines. WC3 Recommendation (standard) regarding how web content is functionally presented to ensure as much universal access as possible.

WCAG 2.1 is most recent WCAG standard, as of June of 2018. It encompasses and extends WCAG 2.0 entirely. (So if WCAG 2.1 is successfully met, then WCAG 2.0 has also been met.) Anyone now involved with developing web sites or products is encouraged to follow WCAG 2.1.

WCAG 2.0 was incorporated by reference into the updated 36 CFR Part 1194 (via its Appendix A, Chapter 2 E205.4) Jan 2017.

Some terms (continued, page 4)

Principles of Accessibility – for the WCAG there are 4 Principles: Perceivable, Operable, Understandable, and Robust.

Guideline – for each WCAG Principle, several individual aspects are addressed by a specific Guideline, each of which in turn has several associated Success Criteria. (WCAG 2.1 contains 13 Guidelines total combined between the 4 Principles.)

Success Criteria – specific testable criteria elements associated with a specific Guideline within the WCAG. Each Success Criteria is a functional goal, attempting to solve an issue which its related guideline addresses, and each is assigned a relative level of value towards accessibility, expressed as "A, AA, or AAA". (WCAG 2.1 lists 78 Success Criteria in total between its 13 Guidelines.)

Some terms (continued, page 5)

Failure, or Level **A,** or Level **AA**, or Level **AAA**: Each Success Criteria, if met, is said to comply with the associated Guideline at the level assigned to that specific Success Criteria: A, AA, or AAA. (AAA being highest). If product does not meet a Success Criteria, it is said to have failed that Criteria.

(Revised Section 508 law incorporates acceptable compliance with the law to be set at **meeting both Level A and Level AA** compliance for all of the WCAG guidelines.)

WAI-ARIA (or "ARIA") - W3C WAI's Accessible Rich Internet Applications suite of web standards to make dynamic web content accessible. For use with various scripting techniques.

A11Y [a popular shorthand for the term Accessibility. [Accessibility = A(eleven characters between)Y = A11Y.]

G3ICT - Global Initiative for Inclusive Information and Communication Technologies, an advocacy initiative launched in December 2006 by the United Nations Global Alliance for ICT and Development.

Procurement-related resources

BuyICT4ALL.org G3ITC's procurement policies portal.

https://www.section508.gov/buy - offers sample contract requirements language, and a printable Revised 508 Standards Applicability Checklist (of requirements.) There is also a companion "sell" section for vendors.

Voluntary Product Accessibility Template (VPAT ^{tm}) – latest upgrade of this blank template form is dated Dec 2018.

Note on obtaining vendor-filled VPATs for specific products - **Ask your sales rep for VPATs for their specific products. (This way you will get the most up-to-date, and they will know you are concerned about accessibility!)**

Procurement - related (continued)

Since VPATs are a sales tool, VPATs are often on public-facing pages of their website.
To view some actual filled-out VPATs, here are a few VPAT repositories as examples:

https://www.cengage.com/accessibility/ (Gale Cengage)

http://support.infobaselearning.com/index.php?/Tech_Support/Knowledgebase/Article/View/822/332/voluntary-product-accessibility-template-vpat (InfoBase Learning)

https://support.proquest.com/#articledetail?id=kA140000000GuogCAC (ProQuest)

https://vpats.wordpress.com/ (a repository created by librarians over the years, includes VPATs for a variety of vendors' products.)

Perspectives on Accessibility

AFB – American Federation for the Blind : Living with Vision Loss.

NAD - National Association of the Deaf – Technology

IETF - International Essential Tremor Foundation – Link to its "Tremor Talk" Blog) - **https://tremortalk.org/category/about-essential-tremor/**

Microsoft Inclusive Design https://www.microsoft.com/design/inclusive/

W3C WAI - **Introduction to Web Accessibility https://www.w3.org/WAI/fundamentals/accessibility-intro/** Includes both discussion and links to short videos about different types if accessibility & disability issues.

Understanding Web Content Accessibility Guidelines

Single page printable PDF handout describing the 4 Principles of Accessibility:
https://www.w3.org/WAI/WCAG20/glance/WCAG2-at-a-Glance.pdf

WAI Accessibility Principles (with examples)
https://www.w3.org/WAI/fundamentals/accessibility-principles/ - an overview listing of the principles and specific aspects linked with explanations and examples, and links to related entries in the WCAG Quick Reference tool (with its links to suggested techniques, and common failures.)

Note about WCAG 2.1 at a Glance (text screen capture)

The 3 pages following were captured from:

WCAG 2.1 at a Glance

https://www.w3.org/WAI/standards-guidelines/wcag/glance/

Date: Updated 5 June 2018. First published July 2008.
Editors: Shawn Lawton Henry and Wayne Dick.
Developed with input from the Education and Outreach Working Group (EOWG) and the Accessibility Guidelines Working Group (AG WG).

for presentation purposes, if live Internet connect not available.

WCAG 2.1 at a Glance (first text screen capture)

Perceivable

- Provide **text alternatives** for non-text content.

- Provide **captions and other alternatives** for multimedia.

- Create content that can be **presented in different ways**, including by assistive technologies, without losing meaning.

- Make it easier for users to **see and hear content**.

WCAG 2.1 at a Glance (continued, second text screen capture)

Operable

- Make all functionality available from a **keyboard**.

- Give users **enough time** to read and use content.

- Do not use content that causes **seizures** or physical reactions.

- Help users **navigate and find content**.

- Make it easier to use **inputs other than keyboard**.

WCAG 2.1 at a Glance (continued, third text screen capture)

Understandable

- Make text **readable and understandable**.

- Make content appear and operate in **predictable** ways.

- Help users **avoid and correct mistakes**.

Robust

- Maximize **compatibility** with current and future user tools.

Understanding WCAG

https://www.w3.org/WAI/standards-guidelines/wcag/docs/
Documents related to the WCAG 2.0 standard.

How to meet WCAG 2.1 (Quick Reference) - while the official standard intentionally does not include specific techniques, this quick reference tool includes links to helpful information such as Understanding, Suggested techniques, and common failures, for each WCAG 2.1 Success Criteria.

NOTE: For web developers and web page creators, the above "How to Meet WCAG" resource is likely the main useful resource.

Evaluation Tools

https://www.w3.org/WAI/test-evaluate/ W3C WAI landing page about Testing & Evaluation.

A Before and After Demonstration (BAD) - shows a small group of mocked-up web pages, showing what some commonly needed changes look like, "before and after" updating according to WCAG criteria, in the **Easy Checks** WAI page about getting started in assessing accessibility.

WAVE evaluation tool, an online tool by the WebAIM group, to do a basic evaluation of a webpage (you supply the URL). One of many evaluation tools listed on WAI site at: **https://www.w3.org/WAI/ER/tools/** .

Big 10 Academic Alliance – Library E-Resource Testing Reports

Designing & Developing & Creating Accessible Documents

https://www.w3.org/WAI/design-develop/ W3C WAI landing page about designing and developing accessible web sites. Includes basic tutorials on using HTML for accessibility, and specific suggestions for web writers, developers and designers.

Health and Human Services – Making Files Accessible: includes tips for PDFs, Email, Microsoft Office, and Audio/Visual files.

OCAD University - **Accessible Digital Office Documents**

As users, or helping users in Library

Adjusting Settings in browsers for Accessibility:

Most recent versions of browsers have ability to resize text, and have built-in screen reader (text-to-speech) and speech-to-text capabilities. Look into the browser's Help for accessibility settings; or visit the product's online support pages.

Quick Note:
    Microsoft browser – suggested to use Microsoft Edge, as opposed to Internet Explorer;
    Chrome – uses add-on "extensions" that must be downloaded.

Microsoft Accessibility
Includes Microsoft Disability Answer Desk with help about its products, in the form of webinars, videos, how-tos, contact support via Chat, phone or Videophone (with ASL interpreters)

BOIA – 6 tips for browsing the web if you have cognitive disabilities also links to several other "tips for" articles for other specific disability issues.