VRA Accessibility Support for Digital Collections

This doc compiles a variety of accessibility resources relevant to visual resources and cultural heritage digital collections. There are several other such compilations, including the notable [Web Content Accessibility Guidelines (WCAG) 2.1](#) and the guides maintained by the Digital Library Federation (DLF) [Digital Accessibility Working Group](#), but this selection is maintained by the VRA Core Subcommittee of the Visual Resources Association [Cataloging and Metadata Standards (CaMS) Committee](#). We are indebted to all the [presenters](#) and to Franny Gaede and Kate Thornhill, organizers of the November 2021 virtual conference, [Digital GLAM Spaces: Building a Community of Practice for User Experience and Accessibility](#), hosted by the University of Oregon and The Andrew Mellon Foundation.

The VRA Core Subcommittee plans to update the VRA Core metadata standard (and XML schema). Among other changes, it is our intention to identify specific places/elements in the schema for alt-text.

This document is a work in progress. If you have any questions or suggestions, please write to [Susan Williams](#) and [Bridget Madden](#). [Last updated 3/22/2022]

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General Resources

[Digital GLAM Spaces](#) (Conference recordings and resources)
[Higher Education Accessibility Online Resources Center, National Federation of the Blind](#)
[Digital Accessibility Group, Digital Library Federation](#)
[The A11y Project](#)
[Understanding the Four Principles of Accessibility](#) (WCAG)
[Carnegie Museums of Pittsburgh Web Accessibility Guidelines v1.0](#)
[Vox Media Accessibility Guidelines](#)
[Accessible digital documentary heritage: guidelines for the preparation of documentary heritage in accessible formats for persons with disabilities](#) (UNESCO, 2020)
[Distributed DIY: A Consortial Accessibility Cohort in New York State, Resources and Further Reading](#)

Policies

Below we have collated a variety of accessibility policies at the institutional and departmental level, as well as the accessibility policies of different major digital collections management systems.

Institutional Policies

[Block Museum of Art, Northwestern University Accessibility](#)
[SUNY Electronic & Information Technology Accessibility](#)
      [SUNY Library Procurement Accessibility Toolkit](#)
      [SUNY Library Vendor Accessibility Repository](#)
[OCLC Accessibility Statement](#)
[Example Policies in Higher Education](#) (compiled by the University of Washington)

Departmental Policies

[Digital Repositories at Duke - Policy for Accessibility](#)
[University of Chicago Visual Resources Center](#)

Content Management System Policies

[Artstor Accessibility](#)
[JSTOR Accessibility](#)
[LUNA Accessibility Information](#)
[Omeka Accessibility Statement](#)

Identifying the Supported User and Their Needs

Inclusive Language Resources

Although not a technological solution to accessibility barriers, the use of inclusive language and critical cataloging principles may further help make your digital collections and other web content more broadly accessible.

SEI Inclusive Language Guide
Inclusive IT Language Guide, Office of Information Technology, University of California at Irvine
Inclusive Language Guide, University of Washington Information Technology
Inclusive IT Language: Replacement Terms, University of Guelph
Inclusive Language Resource, University of Chicago Campus Health Needs Assessment

Best Practices for Media and Web Content Elements

Images

Guides to Writing Alt-Text for Images

Describing Visual Resources Toolkit
Art Beyond Sight Guidelines for Verbal Descriptions
Writing Alt Text at the Block (Northwestern University)
Harvard University Digital Accessibility, Write Good Alt Text to Describe Images
The Diagram Center has guidelines and training tools for description, with specific submodules for art:
      Standards: http://diagramcenter.org/specific-guidelines-final-draft.html
      Training: https://poet.diagramcenter.org/how.html
The Cooper Hewitt Guidelines for Image Description (article on process)
Museum of Contemporary Art Chicago Guidelines for Describing
      Part of the Coyote software

Text

Make your Word documents accessible to people with disabilities
Create accessible documents, spreadsheets, or presentations with Pages, Numbers, or Keynote
Accessibility for Google Docs editors

PDFs

Create and verify PDF accessibility (Adobe)

- [Creating accessible PDFs (Adobe, with sections on tagged PDFs)](#)
- [Reading Order tool for PDFs](#)

Note: Identifying the document language is important for PDF files to be read properly. You can specify the document language in Adobe Acrobat Pro and other PDF editors.

Presentations and Slide Decks

[Make your PowerPoint Presentations Accessible to People with Disabilities](#)
[Create accessible documents, spreadsheets, or presentations with Pages, Numbers, or Keynote](#)
[Make your Google document or presentation more accessible](#) (Google Slides)

Audio and Video

[Making Audio and Video Media Accessible](#) by W3C
[Captioning, Transcripts, and Audio Descriptions](#) by WebAIM
[Captions and Transcripts and Audio Descriptions, Oh My!](#) by TPGi

Links

[Link Contrast Checker, WebAIM](#)
[Links, Buttons, and Other Clickable Elements, Carnegie Museums](#)

Social Media

[Social Media Accessibility Guidelines, Princeton University Digital Accessibility](#)
[How to be More Accessible on Social Media](#) (Site Improve)

Facebook

[Facebook Accessibility](#)

Instagram

[How do I edit the alternative text for a photo on Instagram?](#)
[How do I add a caption on Instagram?](#)
[Instagram Accessibility for Vision Impairments and Hearing Loss](#)

Twitter

[How to make Twitter images accessible](#)

Technologies and Coding for Implementing Support

WebSchemas/Accessibility, W3.org

Language Tagging

Language Tags in HTML, Accessibility and Usability at Penn State
Language Tagging, Accessibility and Usability at Penn State

Screen Readers and Languages

Screen reader users can customize the text-to-speech (TTS) synthesizer voice and other settings, including the speed, verbosity, and elegance of their screen reader depending on what features the screen reader brand offers. Users can also choose from select languages.

The majority of TTS support is for European and Asian languages. There is currently no support for any Indigenous language in the western hemisphere. We would like to raise awareness of the Canadian Indigenous Languages Technology Project, which seeks to collaboratively create "new speech-and text-based resources for Indigenous language students, educators, translators, transcribers, and other language professionals, and have helped increase the accessibility of audio and video recordings."

For more information about which languages are supported by different screen readers, please see the Screen Readers section of this document.

Punctuation and other Typographic Symbols

Why Don't Screen Readers Always Read What's on the Screen? Part 1: Punctuation and Typographic Symbols

Testing Your Accessibility Efforts

DLF's Accessibility Auditing Resources is an excellent compilation of resources, standards documentation, checklists, tools, and more. In the sections below, we have collated a few resources into specific categories.

Website Evaluation Tools

Section 508 Checklist, WebAIM
WAVE Browser Extension
Check Keyboard Accessibility

Screen Readers

WebAIM's [Testing with Screen Readers Q&A](#) and their [Screen Reader User Survey #9](#) a good starting point to understanding how and when to manually test your web content with a screen reader.

Because screen readers have different interaction models for testing, it's important to conduct screen reader testing with more than one screen reader. For information on how to test PC-only screen readers such as JAWS and NVDA on a Mac, please refer to advice from AssistivLabs on [Testing Any Screen Reader on a Mac](#) and Deque University on [Using Windows Screen Readers on a Mac](#).

For more information on how screen readers interact with languages other than English, please see the resources listed in the [Additional Languages](#) section.

PC

According to research done by WebAIM, the majority of screen reader users use PC machines and the JAWS screen reader.

JAWS

[JAWS](#) (Job Access with Speech) costs $90/year for single users at educational institutions and $95 for at home users.

JAWS Settings offer users to select their preferences for how content like forms and tables should be read. JAWS also has a new Voice Assistant feature, which provides a way to use JAWS using spoken commands rather than keyboard shortcuts.

[Synthesizer and Language Downloads](#)

[JAWS Inspect](#) is a companion tool for accessibility testing.

NVDA

[NVDA](#) (Non-Visual Desktop Access) is free to install. After installation, it will prompt you to select a special "NVDA" key—either (or both) the Caps Lock key or Insert key, thereafter referred to as the NVDA Key.

To start NVDA, press Ctrl + alt + n
To access NVDA menu while running: NVDA + n
To stop/exit NVDA: NVDA + q

NVDA can also be configured to work with touch screens and can be set to read Braille via Bluetooth or USB when it is displayed on a screen.

[Extra Voices for NVDA](#)

Narrator

[Narrator](#): free, built-in to Windows 10 and up

To start or stop Narrator, press Ctrl + Windows logo key + Enter

[Supported languages and voices](#)

ChromeVox

[ChromeVox](#): free, built-in to Chromebook

Mac OS and iOS

[Apple VoiceOver](#): free, built-in to MacOS and iOS. Apple recommends Safari is the preferred browser for use with VoiceOver. Our testing confirms that VoiceOver in Safari works better than in other browsers.

To start or stop VoiceOver: Command + F5

[Instructions to Change VoiceOver Language Settings on a Mac](#)

Contrast and Color Checkers

[WAVE Web Accessibility Evaluation Tool from WebAIM](#)
[WebAIM Contrast and Color Accessibility](#)
[Vischeck](#) (simulates colorblind vision)

Data Standards

[WikiData Property Proposal for alt-text](#)