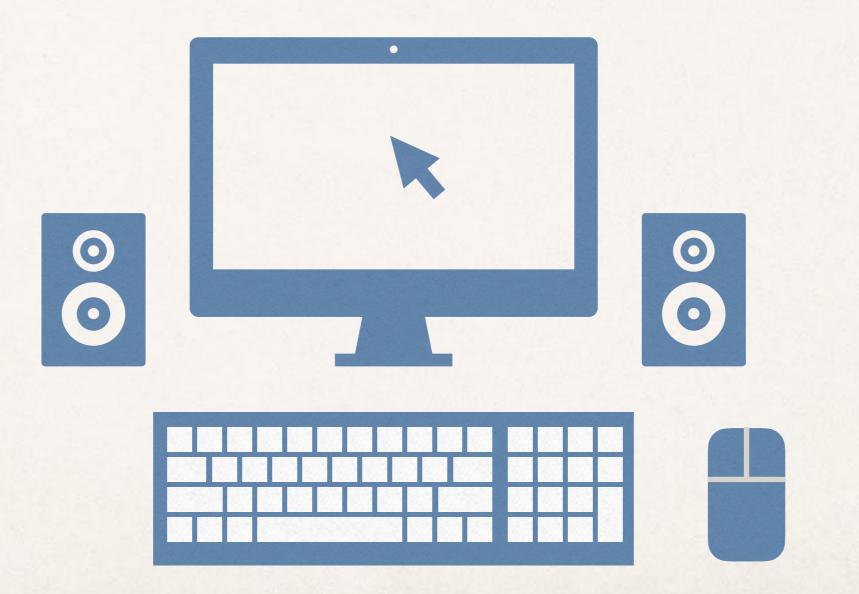# Web Maintainer Lunch & Learn

Accessibility

Dec. 12, 2017 • Chris Dallager, Doug Bratland, & Matt Ryan

What is Web Accessibility?

"The degree to which a website is usable
by as many people as possible"

Laura Kalbag

Accessibility for Everyone

Reality:

Diversity

Not everyone uses the web the same way.

Visual disabilities

Blindness

Impaired vision

Colorblindness

Not able to see screen or visuals

Screen blurry or distorted

Difficulty distinguishing colors

Screen readers

Screen magnifiers

~

Auditory disabilities

Deafness

Auditory sensitivity

Audio not able to be heard

Audio can be painful or distracting

Motor disabilities

	Low hand dexterity	No use of hands	Unable to access physical spaces
Examples	Low hand dexterity	No use of hands	Unable to access physical spaces
Impacts	Unable to use mouse	Unable to use keyboard or mouse	Information needs
Common tools used	Keyboard	Eye tracking, custom input devices	~

Cognitive disabilities

Dyslexia

Autism spectrum

Developmental disabilities

Brain injury

Difficulty processing texts

Difficulty reading subtexts

Difficulty with pace of videos & slideshows

Temporary conditions can affect use of web in similar ways to permanent disabilities

- **Visual Impairment**
  - Eye surgery
  - Lost glasses
  - Using device in bright sunlight
- **Auditory Impairment**
  - Loud environment
  - Quiet public space (e.g. library)

- **Mobility Impairment**
  - Broken arm
  - Broken leg
- **Cognitive Impairment**
  - Tired
  - Recent Concussion
  - Distracted
  - Poor air quality (!)
  - Small screen (!!!)

Our ability to use a website "normally" can be impaired even if we don't have a long term disability!

Demonstrations

* Screen reader

* Keyboard navigation

Screen Reader Demo

Why is web accessibility important?

Because it is a **legal** responsibility.

✤ Americans with Disabilities Act (ADA) of 1990

  ✤ Title II: Public Entities

  ✤ Title III: Public Accommodations of Private Entities

✤ Section 504 of the Rehabilitation Act of 1973

"No individual shall be discriminated against on the basis of disability in the full and equal enjoyment of the goods, services, facilities, privileges, advantages, or accommodations of any place of public accommodation by any private entity"

–ADA Title II 28 CFR 35.160

Real World Legal Implications

✤ Carleton & many other schools have been investigated by the Department of Education's Office of Civil Rights.

✤ Many schools have been sued for accessibility problems on their websites.

The legal standard
we are held to is
Equal Access

Because it is an **ethical** responsibility.

✤ We have community members who can't use the web the way we do.

✤ If we don't consider their needs we can inadvertently create barriers to their ability to use our sites.

✤ Accessible sites permit our community members to fully participate in our community.

"The core principles of a liberal arts education are based on mutual respect, communication, and engagement, which commits us to create and affirm a culture of respect for people in all aspects of their lives"

–*Carleton's Diversity Statement*

"Carleton aims to be welcoming and hospitable to its neighbors, guests, and the public"

–Carleton's Mission Statement

Web accessibility is an inclusive practice

By designing, writing, and building our websites with accessibility in mind, we ensure that they are inclusive of people of all abilities.

Overwhelmed?

We're in this together.

What WSG is doing

✤ Making sure these are all accessible:

    ✤ Web templates

    ✤ Interactive elements

    ✤ Forms

    ✤ Administrative interfaces

Five Things You Can Do

1. Provide good **image descriptions**

2. Use descriptive **link text**

3. Use **headings**

4. Write & edit text so it is **easy to read**

5. Add **captions** to videos

These are not specific to any tool!

1

Provide good image descriptions

1 Provide good **image** descriptions

- **`<img src="123.jpg" alt="Goodsell Observatory on sunny day">`**
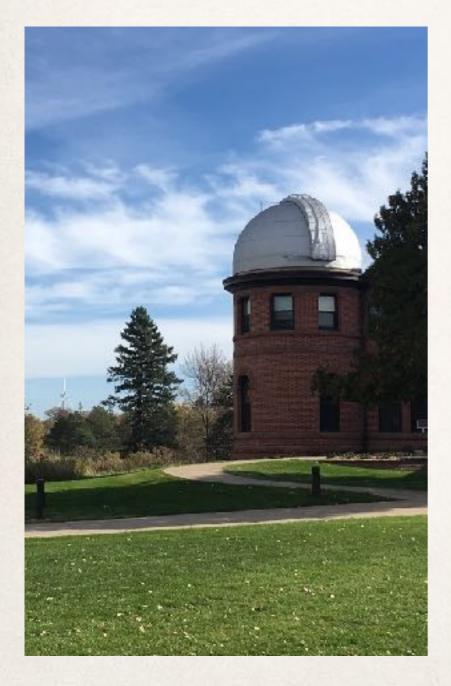
- "Alt text" or "Alt tags"

- Good alt text:

  - Exists

  - Describes the image
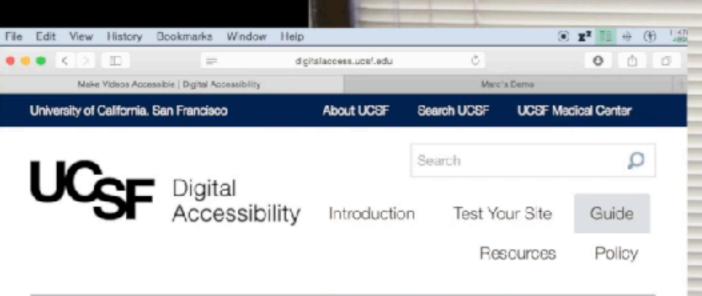
1 Provide good **image** descriptions

✤ Bad alt text:

✤ Doesn't exist

```
<img src="123.jpg">
```

– or –

✤ Doesn't describe the image
```
<img src="123.jpg" alt="123.jpg">
<img src="123.jpg" alt="Photo">
```

digitalaccess.ucsf.edu

Make Videos Accessible | Digital Accessibility   Marc's Demo

University of California, San Francisco   About UCSF   Search UCSF   UCSF Medical Center

UCSF Digital Accessibility

Search

Introduction   Test Your Site   Guide

Resources   Policy

Home » **Guide** » **Make Videos Accessible**

Make Videos Accessible

Captions, Transcripts and Video Player Control

Accessible videos includes playback controls for keyboard use, play only when

You are currently on a heading level 1, inside of a main.

An advanced accessible video would also have Audio Descriptions and Live Captioning. Another thing to consider is Localization.

1 Exercise: Alt text rewrite #1

Current Alt Text:
CARL

1 Exercise: Alt text rewrite #1

Revised Alt Text:
Four students, two in cow costumes, spell out "CARL" with their bodies

Current Alt Text:
House Calls: 5/18/17

1 Exercise: Alt text rewrite #2

WEB HELP HOUSE CALLS THURS MAY 18 2:00 — 4:00 WEITZ

♣ Revised Alt Text
Web Help House Calls: Thurs May 18, 2:00-4:00, Weitz

1 **Find Bad Alt Text**

How-
To!

✤ In Reason:

 ✤ Use the new accessibility report

✤ In other tools:

 ✤ Use WAVE: wave.webaim.org

Carleton :: **Reason 4.8** :: **Master Admin**

Site: [Accessibility Demo   ▼]   **Go to public site**

Accessibility Demo
Not Live

- 🔲 **Pages**
- 🖼 Images
- 📝 Text Blurbs

Site Tools
- 🔲 Themes
- 📊 Analytics
- 👤 Users
- ✏️ Site Setup
- 🗂 Export
- ♿ Accessibility

🔲 Pages

Search

Id:	[ ]
Name:	[ ]
Author:	[ ]
Content:	[ ]
Description:	[ ]
Keywords:	[ ]

Search

⊕ **Add Page**

Current Items (1)
Deleted Items (0)
Pending Items (0)

[View: Tree   ⇅]

Sort these items

Id		Name	Visibility	Last Modified	Admin Functions
1658044	🏠	**Accessibilty Demo**		Dec 11th, 2017	**Add Child** | **Edit** | **Preview**

1 **Find Bad Alt Text**

✤ In Reason:

    ✤ Use the new accessibility report

✤ In other tools:

    ✤ Use WAVE: <u>wave.webaim.org</u>

✤ These only find the worst offenders – they would not have caught the poor alt text in the two examples.

1 **Fix Bad Alt Text**

How-To!

✤ Images placed in editor:

 ✤ Click on the image

 ✤ Edit the "Alt text" or "Description" field in image popup

✤ When you upload a photo the metadata you provide is used as the default alt text. Save yourself work and provide descriptive alt text when you upload images.

○ Normal Page

○ Photo Gallery (Shows associated images in a gallery format)

○ Shows children (Shows child pages in a list with their descriptions. Note: this includes pages not shown in navigation.)

○ Shows siblings (Shows this page's sibling pages after the content of the page. Note: this includes pages not shown in navigation.)
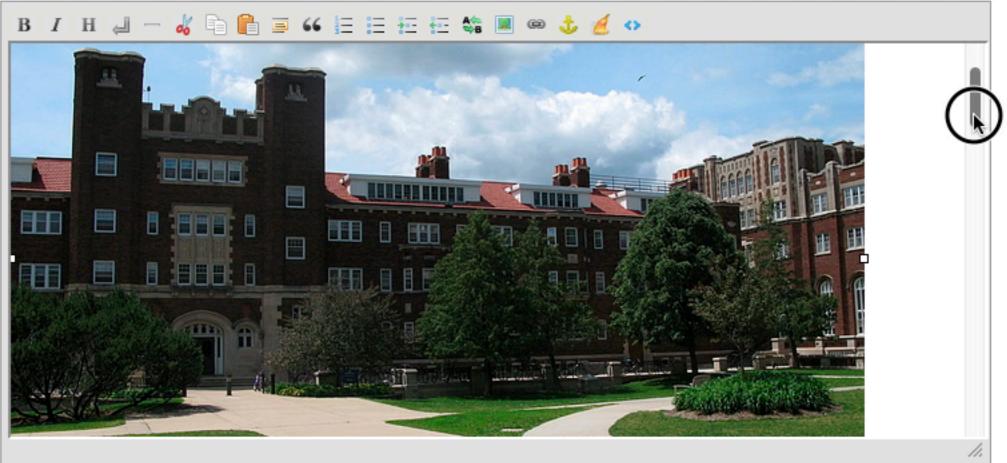
○ Sidebar blurbs (Shows blurbs in the sidebar instead of images)

○ Other: [--]

Page type definitions • Default page type definition

Content

Current Reading Grade Level: 9.5

Visibility

These options control how easily people can find this page. *If this page should not be visible to the public,* you should set State = Pending or contact your Reason administrator about adding access groups to your site.

State

Live

1

Provide good image descriptions

2

Use descriptive link text

2 Use **descriptive** link text

* Screen reader users rely on ability to read a list of all links on the page.

* "Click here" & links that use URLs as link text can't be understood on their own.

* Use link text that describes the page you are linking to.

2 Use **descriptive** link text

Bad

✤ Click here

✤ Download PDF

✤ http://www.example.com

Good

✤ the New Student Checklist

✤ Sample Résumé (PDF)

✤ Community Standards Policy

2 Exercise: Link text rewrite

Click here for more about Accepted Student Days.

2 Exercise: Link text rewrite

More about Accepted Student Days

2 Exercise: Link text rewrite

To learn about why you should get the flu vaccine, go to https://www.vaccines.gov/diseases/flu/index.html

2 Exercise: Link text rewrite

Why you should get the flu vaccine

2 Exercise: Link text rewrite

You can see our 2018 senior celebration photos here.

2 Exercise: Link text rewrite

Our 2018 senior celebration photos

2 Empty Links

✤ What are empty links?

   ✤ `<a href="http://google.com"></a>`

✤ How do they happen?

   ✤ Deletion of link text without deleting link itself

✤ Why are they a problem for accessibility?

   ✤ Screenreaders & other tools still announce them

   ✤ Confusing

2 Find Bad Link Text

How-
To!

✤ In Reason:

  ✤ Use the new accessibility report

Site: | Accessibility Demo [▼] | **Go to public site**

Accessibility Demo
Not Live

- Pages
- Images
- Text Blurbs

Site Tools

- Themes
- Analytics
- Users
- Site Setup
- Export
- Accessibility

Accessibility Demo

Search this site: [   ] [Go]

Pages (1)
Recently edited: Accessibilty Demo

Images (3)
Recently edited: Photo | Photo | RS12671_IMG_3995.JPG

Text Blurbs (0)

This site is not live.

Among other things, that means that it's excluded from search engines (so people won't stumble upon a site that isn't ready for public consumption).

Edit this site

2 # Find Bad Link Text

How-To!

✤ In Reason:

   ✤ Use the new accessibility report

✤ Other tools:

   ✤ Use WAVE: <u>wave.webaim.org</u>

2 Fix Bad Link Text

How-To!

✤ All tools:

✤ Rework links & sentences

✤ Use html view to remove empty links

Site: Accessibility Demo ▾   **Go to public site**

Accessibility Demo
Not Live

- 🌐 Pages
- 🖼 Images
- 📝 Text Blurbs

Site Tools

- 📰 Themes
- 📊 Analytics
- 👤 Users
- ✏️ Site Setup
- 🗂 Export
- ♿ **Accessibility**

Accessibility Issue Review

Site to review:	Accessibility Demo
Narrow results by type:	All

Search for:
- ☑ Ambiguous link text ?
- ☑ Empty link text ?
- ☐ Entire lines of bold text ?
- ☐ Images with poor alt text ?
- ☐ Images without alt text ?
- ☐ Large amounts of bold text ?
- ☑ URLs as links ?
- ☐ Underlined text ?

Show items borrowed from other sites? ☐

Number of results to show: 10

Search

Found 1 entities with issues

Pages

- **Accessibilty Demo** | ID: 1658044 | Edit | Show/Hide Issues

2

Use descriptive link text

3

Use headings

3 Use headings

- ✤ Screen reader users rely on ability to read a list of all headings on the page.

- ✤ It's common to highlight an entire line of text and bold it to draw the eye and to indicate a subheading.

- ✤ This does not help screen readers - they don't announce bolding.

- ✤ Use actual headings instead! (demo)

3 Find & Fix Bad Headings

How-To!

✤ In Reason:

  ✤ Use the new accessibility report to find

  ✤ Remove bold from heading lines, then…

  ✤ Use the "H" button to create a real heading

Site: Accessibility Demo ▼   **Go to public site**

Accessibility Demo
Not Live

🖼 Pages

🖼 Images

🗒 Text Blurbs

Site Tools

📰 Themes

📉 Analytics

👤 Users

✏️ Site Setup

🗔 Export

♿ Accessibility

Accessibility Issue Review

Site to review: Accessibility Demo ⇕

Narrow results by type: All ⇕

Search for: ☐ Ambiguous link text **?**

☐ Empty link text **?**

☐ Entire lines of bold text **?**

☐ Images with poor alt text **?**

☐ Images without alt text **?**

☐ Large amounts of bold text **?**

☐ URLs as links **?**

☐ Underlined text **?**

Show items borrowed from other sites?   ☐

Number of results to show: 10 ⇕

Search

Found 1 entities with issues

Pages

- **Accessibilty Demo** | ID: 1658044 | Edit | Show/Hide Issues

Accessibility Demo
Not Live

📄 Pages

🖼 Images

📝 Text Blurbs

Site Tools

🖼 Themes

📊 Analytics

👤 Users

✏️ Site Setup

📇 Export

♿ **Accessibility**

Accessibility Issue Review

Site to review:	Accessibility Demo ▼
Narrow results by type:	All ▼
Search for:	☐ Ambiguous link text *?*
	☐ Empty link text *?*
	☑ Entire lines of bold text *?*
	☐ Images with poor alt text *?*
	☐ Images without alt text *?*
	☑ Large amounts of bold text *?*
	☐ URLs as links *?*
	☐ Underlined text *?*
Show items borrowed from other sites?	☐
Number of results to show:	10 ▼

Search

Found 1 entities with issues

Pages

- **Accessibilty Demo** | ID: 1658044 (Edit) Show/Hide Issues

  ○ Entire lines of bold text *?*

    ■ content: \<p>\What is accessibility?\\</p>

    ■ content: \<p>\How can I learn more about web accessibility?\\</p>

3

Use headings

4

Write & edit text so it is **easy to read**

4 Write & edit text so it is **easy to read**

✤ Our site authors often assume that readers don't have cognitive impairments or reading difficulties. But complex text is problematic for many users.

✤ We want all readers to understand our content.

✤ The lower the reading level, the more inclusive the content will be.

✤ If your reading level is higher than grade 8, try rewriting it to lower the score.

4 Write & edit text so it is **easy to** **read**

- Short words, short sentences, and short paragraphs

- Use lists wherever possible

- Remove redundant words

- Active voice

- Plain language

  - No jargon (or "academese")

  - Write the way you speak

  - Use the words your readers are looking for

4 Reading level exercise

"This website is intended to help students in writing essays and other papers by giving basic information on the proper use and proper acknowledgment of source material."

Reading level: 16th grade (college grad)

Rewrite to an 8th grade level.

Tips: Shorter sentences and words reduce grade level

4 Reading level exercise

"Learn how to properly use and acknowledge your sources when you write essays and other papers."

Reading level: 8th grade

By reworking text for a lower grade level, we make it easier for everyone to grasp quickly (even PhDs!)

4 Find & Fix Bad Reading Levels

How-To!

✤ In Reason:

   ✤ See the new reading level scores right in the editing interface

Site: **Academic Integrity** :: Page :: Academic Integrity at Carleton

Academic Integrity at Carleton

Preview

Edit

🖼 Place images on this page

📝 Place Blurbs

📑 Make Links to Assets (PDFs, etc.)

Finish

Other Action Items

Delete

Lock

📊 Analytics

History (25 edits)

Editing "Academic Integrity at Carleton" (Page)

Title*

[Academic Integrity at Carleton]

What should this page be called?

Title Used in Navigation

[Academic Integrity Home]

This is the text of the home page link in the site's navigation.

Type of Page

○ Normal Page

○ Photo Gallery (Shows associated images in a gallery format)

○ Shows children (Shows child pages in a list with their descriptions. Note: this includes pages not shown in navigation.)

○ Shows siblings (Shows this page's sibling pages after the content of the page. Note: this includes pages not shown in navigation.)

○ Sidebar blurbs (Shows blurbs in the sidebar instead of images)

● Other: [No Nav]

Page type definitions • No Nav page type definition

Content

B *I* H ↵ — ✂ 📋 📋 ▤ 66 ☰ ☰ ☰ ☰ ☰ ▦ 🖼 🔗 ⚓ 🧹 <>

This information is intended to help students in

4 Find & Fix Bad Reading Levels

How-To!

✢ In Reason:

  ✢ See the new reading level scores right in the editing interface

✢ All tools:

  ✢ Use Hemingway hemingwayapp.com

Hemingway App makes your writing bold and clear.

The app highlights lengthy, complex sentences and common errors; if you see a yellow sentence, shorten or split it. If you find that your text is presented within a red highlight, your sentence is so dense and complicated that your readers will probably get lost trying to follow its meandering, splitting logic — try editing this sentence to remove the red.

If you see a word highlighted in purple, it means you can utilize a shorter word in its place. Hover your mouse over the word for suggestions of more appropriate words to use instead.

Adverbs and weakening phrases are helpfully shown in blue. Get rid of them and pick words with force, perhaps.

Phrases in green have been marked to show passive voice.

Hemingway *Editor*

Readability

Grade 9

Good

Words: **131**

Show More ▾

3 adverbs. Aim for 2 or fewer.

2 uses of passive voice, meeting the goal of 2 or fewer.

1 phrase has a simpler alternative.

1 of 8 sentences is hard to read.

1 of 8 sentences is very hard to read.

4

Write & edit text so it is **easy to read**

5

Add captions
to videos

5 Add captions to videos

✤ Captions allow people with hearing-related challenges to understand videos

✤ All public videos should have captions added, whether published on Reason, YouTube, Vimeo, Facebook, or any other service.

✤ Auto-captions are not accurate & should not be used.

5 How to get captions on a video

How-To!

✤ Request captions for a video:
go.carleton.edu/captionreq

WEB SERVICES GROUP

≡

Request Captions

Please use this form to request captions for a video.

Note that typical turnaround for captions is 2-3 business days. Please plan your caption requests accordingly.

This form does not accept video uploads directly. Place your video on your chosen hosting service(s) and then request captions. If you are not planning to put your video online, place the video on Dropbox or Google Drive and share the Dropbox/Drive URL in the appropriate field on this form.

* = required field

Your Name*

Matt Ryan

Your Email:*

mryan@carleton.edu

Office or Department

Where will this video be hosted?*

☐ Reason
☐ YouTube
☐ Vimeo
☐ Facebook
☐ YuJa
☐ Offline (DVD)
☐ Other

If "Other " above, please specify.

Please provide the URL or Reason ID of the video*

If there is a date the captions are needed by, please provide it here

| mm | / | dd | / | yyyy | ▦ |

Submit Captions Request

5 # How to get captions on a video

✤ Request captions for a video:
go.carleton.edu/captionreq

✤ If you produce a lot of videos, we can give you direct access to our captioning service and show you how to do it yourself!

5

Add captions
to videos

To Repeat:

1. Provide good **image descriptions**

2. Use descriptive **link text**

3. Use **headings**

4. Write & edit text so it is **easy to read**

5. Add **captions** to videos

Further Learning

* Handouts

* Accessibility pages on WSG site
  go.carleton.edu/accessible

* In-depth workshops winter/spring term

In Conclusion

* Carleton's mission & values lead us to be **inclusive** in our web communications.

* It's also **required** by law!

* These **5 practices** are a great first step.

We're in this **together**!

Please reach out to us with any questions!

Web Services
Doug Bratland & Matt Ryan

Disability Services for Students
Chris Dallager