Yale ITS Accessibility Training

CONTENT CREATORS AND EDITORS

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Yale ITS Web Technologies
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Outline

• Disabilities & Assistive Technology
• Standards
• Policy
• Text
• Links
• Tables
• Images
• Media & Animation
• Odds & Ends
Kinds of Disabilities

1. Visual
2. Auditory
3. Motor
4. Cognitive, Attention, Learning Disability, Neurological, and Seizure
5. Speech
Assistive Technology

• Screen readers & Braille readers
• High contrast settings in browsers, inverted colors
• Screen magnifiers, text resizing, zooming
• Captions and Transcripts
• Keyboards, speech-recognition software, mouth-operated accessories
• Disabling images, media, and styles
Standards

- WCAG: Web Content Accessibility Guidelines
- WCAG 1.0: 1999
- WCAG 2.0: 2008
- More up to date than Section 508
- Three levels: A, AA, and AAA
  - Yale aims for AA
  - Almost no one aims for AAA
WCAG

- WCAG provides standards for:
  - Content editors
  - Web developers and site builders
  - Visual designers
  - Software engineers
  - Device manufacturers
Why is Action Required

1. Legal Compliance

2. Risk (reputational, legal, financial)

3. Being proactive lets us set our own process, timeline, and agenda

4. Supports Yale’s aspirations

5. Aligns well with making “an accessible Yale”.

Making Yale’s Digital Campus accessible to people with disabilities is the right thing to do.
Thinking About Yale’s Future: Goals for the University

Yale seeks to become the world’s most student-centered research university, a preeminent institution unified, innovative, and accessible across all schools, departments, and programs.

A unified Yale leverages its broad scope but modest size to bring together schools and programs to synthesize or enrich new areas of teaching and scholarship. An innovative Yale values and promotes creativity and entrepreneurial spirit in all of its activities. And an accessible Yale opens its doors based on individuals’ accomplishments, potential, and ability to contribute to and learn from others in the university community.
Draft Policy

- Requires conformance to WCAG 2.0 AA

- Applies to all websites and web applications conducting university business, both custom and vended
  - New or redesigned websites must be accessible at launch
  - Existing websites must be remediated on request of the Accessibility Steering Committee

- Responsibility is on the site owner and their Dean, VP, Chair, or Director

- Exceptions for technical feasibility alone
Digital vs Physical Process: Why Is Accessibility Hard?

Physical accessibility is managed differently than digital accessibility because so many people can alter our digital campus.
Accessibility remediation is a gradual process of improvement.

Unlike building a bridge, we realize value for each step along the journey.
The Web is Different!

- Users have less attention on the internet.
- Help users spend as little effort as possible on your website.
Avoid Text Decorations

• Always avoid: underline, strikethrough
• Always avoid: changing the font, color, or text size
• Generally avoid: center, right, or justified alignment
• Generally avoid: All Caps (acronyms OK)
• OK if used judiciously for emphasis: **bold**, *italics*
Use True Headings

- Six levels: H1 - H6.

- Nest the headings hierarchically, don’t skip levels (don’t jump from h2-h5)

- Don’t choose headings based on appearance

- Not the same as bold
Paid Time Off

To help you manage your work/life needs, Yale provides all staff paid time off for the following:

- Official Yale Holidays
- Bereavement
- Jury duty and military leave

Paid time off (PTO) is designed to provide staff time away from work to attend to personal responsibilities and balance the demands of both their professional and personal lives. Staff are encouraged to provide advance notice and coordinate schedules with their managers for planned days off. PTO is provided to staff as follows:

Clerical and Technical and Security

- Personal time, sick pay and vacation time summary for those hired before July 1, 2009
- Personal time, sick pay and vacation time summary for those hired after July 1, 2009
- Carryover

Faculty

- Leave of Absence
- Faculty Handbook

Managerial and Professional

- PTO and Flex Days
- Sick pay and short-term disability

Postdoctoral Associates

- Leave of Absence

Service and Maintenance
Use True Headings
Avoid Images of Text

• If possible, use text itself, rather than uploading images of text

• When zoomed, images of text can become illegible
Use Lists

- Lists are easier to scan, better guide the eye than paragraphs

- Use numbered and bulleted lists, where possible
• Cognitive, attention, and learning disabilities are by far more common than all other disabilities combined.

• Even users without disabilities have fewer cognitive resources available on the web.
Reading Level

• Aim for a lower secondary reading level

• Aim for ~80 words per paragraph

• Use resources like
  http://www.hemingwayapp.com
Sensory Characteristics

• Avoid describing where things are on the page
  – “To apply, click the button in the sidebar on the right”

• Avoid describing things by their color
  – “To apply, click the blue button”
Links
Links

• Many users with blindness prefer to have their screen reader announce a list of all links
• Links can’t be understood if the link text is not descriptive
  – “Click Here”, “More”, “Proceed”
• Bad link text can be made accessible, but it requires effort from developers
• Aim to have link text make sense out of context
Links

• To apply for the program, click here.
• Apply to the program.
• Apply to the program.
• Apply to Yale Undergraduate Admissions.
Links

• Avoid having multiple links to the same destination next to one another, or even on the same page
• Avoid using images as links (it can be done, but save it for developers)
• A “title” is unnecessary and generally not helpful, but it’s not harmful, either.
Tables

- Tables are for *data*, not for layout
Joe is one of our favorite students. He is a sophomore from anytime, USA. He is majoring in Philosophy. In his spare time, he is a member of the football team, the crew team, the cross country team, and swim team.
## Good: Data Tables

<table>
<thead>
<tr>
<th>Year</th>
<th>Coldest Day</th>
<th>Warmest Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>2016</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>2017</td>
<td>49%</td>
<td>51%</td>
</tr>
</tbody>
</table>
Tables

• Tables should always have column headings

• Longer tables should have row headings and column headings
## Complex Tables

<table>
<thead>
<tr>
<th>Day</th>
<th>Schedule</th>
<th>Seminar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Begin</td>
<td>End</td>
</tr>
<tr>
<td>Monday</td>
<td>8:00 a.m.</td>
<td>5:00 p.m.</td>
</tr>
<tr>
<td>Tuesday</td>
<td>8:00 a.m.</td>
<td>11:00 a.m.</td>
</tr>
<tr>
<td></td>
<td>11:00 a.m.</td>
<td>2:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>2:00 p.m.</td>
<td>5:00 p.m.</td>
</tr>
<tr>
<td>Wednesday</td>
<td>8:00 a.m.</td>
<td>12:00 p.m.</td>
</tr>
</tbody>
</table>
Complex Tables

- They are confusing even for users without disabilities

- How to avoid:
  - Split the content into multiple tables
  - Split the content into multiple pages
  - Ask whether complex headings are really necessary
Images

• Users with blindness cannot see images

• Users with cognitive disabilities or users with low quality internet connections may prefer to turn images off altogether

• Images that are not seen may require alternative text ("alt" text)
Image Purpose

• If the purpose of the image is purely decoration — to convey a mood, to take up space, etc — the image should **not** have alt text.

• If the purpose of the image is to convey information, it **does** need alt text.
Alt Text

• Alt text should cover the context and purpose of the image, not describe the image.

• Avoid “image of”, etc.

• Search Indexes (e.g. Google) will see the alt text
Alt Text
“title” and “longdesc”

• “title” is unnecessary

• “longdesc” should be avoided
Complex Images

Did you study or speak a foreign language before coming to Yale?

No

Did you get a score of 5 on the AP test in French, German, or Spanish, or a score of 4 or 5 on the AP test in Latin?

Yes

No

Take a placement test at Yale or, for languages in which no placement test is offered, consult the appropriate director of undergraduate studies. Place into:

Language 1 (L1)
Take 3 courses, designated L1, L2, and L3.

Language 2 (L2)
Take 3 courses, designated L2, L3, and L4.

Language 3 (L3)
Take 2 courses, designated L3 and L4.

Language 4 (L4)
Take 1 course, designated L4.

Language 5 (L5)
Take 1 course, designated L5, or take a different language through L2.

Yes
Complex Images

• Simple alt text isn’t sufficient, because the information is too complicated for a short sentence or two.

• Include short alt text anyway.

• Include the same information in a close by paragraph or table.
Images as Links

• Avoid images as links

• Image links must have good alt text
Media and Animation
Animated Gifs

• These are practically never OK
Videos and Audio

• For videos, captions and descriptive transcripts are required for accessibility.

• YouTube automatic captions are frequently error prone. They can be an OK starting point, but they should be edited.

• Look for already-captioned options if possible.

• For audio recordings, transcripts are required.
Odds and Ends
Odds and Ends

• If possible, make something a web page, rather than a file.

• If something must be a file, a PDF is best, followed by a Word file.

• For more info: see webaim.org and Lynda.com videos
Thank you!

Yale Information Technology Services