Enhancing Accessibility for All Law Students

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WHAT IS ACCESSIBILITY?

• Designing access for all students/users
  – All Class & Training Content
  – University Websites
  – Library Materials
  – Buildings
WHY DO WE CARE?

• Mandated by Law
• Law Suits
• University Policies and Mandates
• Studies show all students learn better when you design for everyone
HOW TO ACHIEVE?

• Awareness of barriers
• Know how Assistive Technology (AT) works
• Universal Design = Accessible Design
HOW TO TACKLE THE ISSUE

• Accessibility Tasks Force
• Department and Unit Training
• Develop Training Guides (LibGuides, Wikis)
• Creating documentation (VPATS, lists of issues)
• Checklists – Make it part of the workflow
• Audits
HURDLES

- Money
- Time
- Resources
TEXT ACCESSIBILITY TIPS

Things to think about with text:

– Colors
– Contrast
– Font Style
– Font Size
COLOR BLINDNESS EXAMPLE
COLOR/CONTRAST = BAD

BAD EXAMPLE
COLOR CONTRAST = GOOD

GOOD EXAMPLE
COLOR CONTRAST: TEXT

GOOD
• Black on White

BAD
• Font color too light
COLOR ACCESSIBILITY GUIDELINES

• Good Contrast
• Use both colors and symbols
• Keep it minimal (3 colors)
• Use Patterns and textures to show contrast (graphs)
• Avoid Bad Color Combos

Reference: [https://usabilla.com/blog/how-to-design-for-color-blindness/](https://usabilla.com/blog/how-to-design-for-color-blindness/)
CONTRAST RATIOS

The W3C recommendations:

• Small text
  – contrast ratio of at least 4.5:1 against its background.

• Large text (14 pt)
  – contrast ratio of at least 3:1 against its background.
GENERAL FONT GUIDELINES

• Real text rather than image
• Limit number of fonts
• Ensure Contrast
• Avoid small font sizes
• Limit font variations – bold, italics, etc
• Do not rely on variation to convey meaning
ONLINE FONTS GUIDELINES

• Use safe fonts = Sans Serif (Arial, Verdana, Calibri)
• Use relative size vs. absolute
  – Do not use pt
  – Use em, relative (small, large)
• Avoid blinking or moving text
• Avoid underlining (use only for links)
COLOR & CONTRAST GUIDES

• How to design for Color Blindness
• Material Design: Color Tool
• Web Aim: Contrast Checker
• http://accessible-colors.com/
• http://colorsafe.co/
• https://contrastchecker.com/
IMAGES
HOW OUR LAWS ARE MADE

The code of a bill: H.R. 301 [110]

Budget & Engagement

Introducing Legislation

Meetings*

Public Hearings

Mark Up*

Final Reading & Vote

Report

Could fail to pass

The President

Could fail to pass

Enrollment

Final Approval or Disapproval

Publication

Put on Calendar

The Senate

Debate & Amend

Senate Action

Third Reading

Unanimous Consent

2nd Day Waits

Veto

Conference

Each conference committee must report the bill to the Senate and the House of Representatives for their respective chambers. Both Chambers then must pass a bill before it is sent to the President, who has ten days to sign the bill. If the President does not sign the bill, it becomes law. Congress may override a veto with a 2/3 majority vote in both chambers.

Legend

INACCESSIBLE IMAGE EXAMPLE
PROBLEM WITH IMAGES

• Images are inherently inaccessible to people who are unable to see them
WHAT TO DO WITH IMAGES?

• Do not use images alone to convey content
• Mark image as decorative ( `<alt= "" > or `<alt=" ">`)
• Use alternative text ALT tag
• ALT tags:
  – Brief and descriptive
  – Avoid “Image of” for online/web images
• Examples of screen readers and image tags
Creating Accessible Documents

• Know how screen readers work
  – Scan top left to bottom right
• Use Built-in Styles to aid navigation
PDF ACCESSIBILITY IS:

• Searchable Text
• Fonts that allow characters to be extracted to text (braille embosser or read out loud tool)
• Interactive Labeled Form fields
  – Accessible Error Messages
  – No timing
• Document Structure Tags and Proper Reading Order
• Alternative Text Descriptions for Non-Text Elements
HOW TO MAKE PDFS ACCESSIBLE

• Start with an accessible document
• Use Adobe Pro Accessibility Checker and tools
• Create & Verify Instructions
• Adobe PDF Accessibility Overview
OFFICE 365 PRODUCTS

• Have Accessibility Checker
• Enhanced ALT image features
WEB BARRIERS AND FIXES
SCREEN READERS & INTERNET

Video example of screen reader reading the New York Times website:
https://www.youtube.com/watch?v=xpP_Km5L46E
LINKS

• Screen reader say link when gets to <a> tag
  – Do not need to add word “link” to alt text

• Use short description

• Links should make sense out of context
  – Do not use: “click here,” “more”

• Avoid using images as link unless ALT tag
**LINK FORMAT EXAMPLES**

- **Bad:** Click here for directions.
- **Good:** Directions to DU College are available online.
- **Bad:** Learn more about LibGuides here and here.
- **Good:** Learn more about logging into LibGuides and how to create your first guide.
TABLES

• Use only for tabular data
• Do not use to format links or for layout
• Use Table Headers
  – Header cells use <th>
  – Data cells use <td>
• Table Accessibility

[Link to Table Accessibility]
GUIDELINES: WEBSITES

- W3C: Accessibility Standards
- Usability.gov
- Google: Accessibility Guidelines
CAPTIONS

• 90% of students find captions helpful
• Many students use them
• Aid
  – comprehension,
  – accuracy,
  – engagement, and
  – Retention

Source: A Rising Tide: How Closed Captions Can Benefit All Students
VIDEO TIPS

• Captions
  – Must be readable and accurate
• Be keyboard accessible
• Be readable by a screen reader
• Clear Navigation
• Allow enough time
• Allow enough controls
CLOSED CAPTIONS & TRANSCRIPTS

• Captions
  – Convey dialog and/or narration and other audio effects
• Transcript/Speech to text
  – Document that accurately transcribes dialog
• Text to speech
  – Voice over describing content (for hearing impaired)
**HOW?**

- Script
- Human transcription & closed captioning
- Auto-Captioning (Speech-trainable)
- Auto-Captioning (out-of-box)
- Speech-to-text software – Editable Auto transcripts
  - Camtasia
  - Zoom
  - Kaltura
  - Panopto
RESOURCES

• Check Lists
  – WebAIM's WCAG 2.0 Checklist (WebAIM)
  – Web Accessibility Issues (NCDAE one-page)
  – WCAG 2.0 Checklist (Paul Adam)
  – Accessibility Checklist (Nomensa)
  – IT Accessibility Checklist (University of Washington)

• Quick Check References
  – Easy Checks -- a First Review of Web Accessibility (Web Accessibility Initiative)
  – Popular Mistakes in Universal Web Design (Dennis Lembree)
  – Testing for Web Accessibility in 60 Seconds (David A. Kennedy)
ACCESSIBILITY RESOURCES

Websites

• [Web Accessibility Evaluation Tools List](#)
• [Material Design: Accessibility](#)
• [Wave](#)
• [AC Checker](#)