



# NRP January 2025 Education Session

*Bridging the Digital Divide:  
An Introduction to the Accessibility Mindset*



## Just a few Housekeeping items:

- This presentation will be recorded and available on the NRP website
- Please keep your lines muted and enter your questions into the chat.
- We are holding questions until the end of the presentation.

**Bridging the Digital Divide:  
An Introduction to the Accessibility Mindset**

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# **What is digital accessibility?**

Digital accessibility is a practice ensuring that content, resources, and technology communicated electronically can be used regardless of ability, disability, or assistive technology.

# **What does this mean for you?**

- Disability impacts us all.
- It's the right thing to do.
- There are ramifications for failing to make accessible content.



# What is the digital divide?

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The digital divide is the gap that emerges from unequitable access to digital resources

- Macro and micro-level influences

*What are some common experiences of the digital divide through a digital accessibility lens, and how can these be remediated? We'll talk more about barriers later.*



# The Digital Accessibility Mindset

- Closing the gap that is the digital divide
- Ask yourself these questions:
  - Is this easy to use/read/understand?
  - How do I make this so all users can engage?
  - What is missing? What can I take away?
  - Who is the expected audience? Who might engage if barriers didn't exist?
- Consider accessibility from the start





# Closing the Gap

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- An accessibility mindset involves proactive/strategic planning and insight. It means getting ahead of requirements and designing with these concepts from the start.
- Takes cues from:
  - Disability justice
  - User experience design
  - Universal design for learning
  - Psychological safety and inclusion
  - Compliance and law
  - Assistive technology



# Laws and Regulations

- Americans with Disabilities Act (1990, originally amended 2008, 2024 updates)
- Rehabilitation Act of 1973
  - Updated in 2017 to include Web Content Accessibility Guidelines (WCAG) as the standard for relevant web accessibility applications
- [UNC Digital Accessibility Standards](#)
  - Ensures digital content is accessible to everyone, by making it easy to understand, find, and use
  - Establishes WCAG 2.2 AA as norm for conformance
  - Applies to and supports all members of the Carolina community and its visitors
  - Procurement of compliant software

# Americans with Disabilities Act, Title II Amendment

- The federal government requires all public institutions to make their digital content conform with WCAG 2.1 AA by **April 24, 2026**
  - Websites are public spaces!
- Limited exceptions
  - Archived, outdated, unused content AND content is only for reference
  - Third party content (limited)
  - Password-protected content (unless a student requests this content)



# Web Content Accessibility Guidelines (WCAG)

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- Used to measure accessibility
- Organized into:
  - 4 principles: Perceivable, Operable, Understandable, Robust (POUR)
  - 12 guidelines
  - 3 levels of success criteria: A (lowest), **AA (most common, our goal)**, AAA (highest)
  - [Quick Reference WCAG 2.2](#)

# Web Content Accessibility Guidelines (WCAG)



## Perceivable

user can identify content and interface elements through their senses

**Example:** Add alternative text and captions



## Operable

user can successfully use controls, buttons, navigation, and other necessary interactive elements

**Example:** Use descriptive links and headings



## Understandable

consistent and predictable in its design and usage patterns, concise, and appropriate to the audience in its voice and tone

**Example:** Write content using plain language



## Robust

designed to function on all appropriate technologies

**Example:** Make sure site or app can be accessed on different devices like laptops and mobile phones



# Universal Design



- Universal design has its origins in the design of physical and spatial environments
  - Architecture
  - Interior design
  - City planning
  - Products and services
- Human-centered
- Radical empathy
- Universal Design for Learning (UDL) transforms the architectural realm to the cognitive and academic space





# Common Barriers to Accessibility You Can Solve

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Determining color contrast with a tool such as [TPGi Colour Contrast Analyser](#)



Ensuring content has accurate captions or transcripts



Making sure images have alt text or are marked as decorative



Writing content in plain language



Making sure documents and tables are formatted appropriately



# What types of materials do these cover?

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- PDFs – recruitment fliers, white papers, reviews
- Images – any and all (unless decorative/stock)
- Tables and other forms of data representation
- Websites
- Electronic forms, surveys, and data capture
- Videos, lectures, and podcasts (prerecorded and live)

# Guiding Questions

1. Is the content perceivable?
2. Is the content operable?
3. Is the content understandable?
4. Is the content robust?
5. Have you considered all possible users?
6. Are you following legal standards?
7. Have you involved users in the design process?
8. Are you providing training and resources?



# Inclusive and Accessible Research Design

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- Keep in mind Universal Design when designing a research study or report, but also allow for accommodations to help a research subject take part in your study
- White papers and PDFs- make sure that your documents are OCR compatible
- Be sure charts/graphics have detailed written descriptions
- Make sure that documents and web pages use appropriate headings for optimal semantic structure, as opposed to bold/underlined/larger text
- An accessible and inclusive study is one that includes representation from disabled folks, which in turn enriches your findings

# Data Visualization Tips & Tricks

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- Use plain language when possible and avoid jargon
- Clearly define the parameters of the map or chart
- Describe what is being displayed as if someone cannot see at all
  - Remember that there may be circumstances under which even sighted users may not be able to access or see the image– screen sharing failure, joining from phone, eyes closed because of a headache, etc.
- Avoid using color as a defining feature without some other way to differentiate among categories of information
- Make a screen-reader friendly version of a map or table



# Tables

## Do

- Data
  - Includes row headers (`<th scope="row">`), column headers (`<th scope="col">`), or both to present data
- Keep it simple and avoid tables with nested rows and columns or merged or splits cells



## Don't

- Layouts
  - Use columns, rows, CSS
- No nested rows and columns
- Merged or splits cells



**01** **Headings**  
Use headings instead of large or bold text to break content into skimmable sections and give your content structure, making it easier to read.

**02** **Consistent Layout**  
A consistent layout helps to keep viewers oriented from page to page and sets the expectation of interactive elements, such as navigation.

**03** **Keep It Text**  
Try to avoid images of text and instead use actual text whenever possible. Images of text can become pixelated or blurry when zoomed in.

**04** **Text Size and Spacing**  
Keeping your text size and spacing at the default for whichever platform you are using will ensure the best accessibility.

**05** **Readability**  
Content written in plain language can ensure that users can quickly understand and act on your content.

**06** **Link Text**  
Link text must be descriptive, concise, and unique. Avoid URLs, and instead describe where the link will be going.

**07** **Color Contrast**  
Ensuring that your text and background colors have a high enough contrast will help improve readability of your content for all users.

**08** **Alternative Text**  
Alternative text is the text equivalent of an image in context. If the image is unavailable, web browsers display the text for users or screen readers read it.

**09** **Captions and Transcripts**  
Like alternative text on images, captions provide a text alternative for video content. Transcripts provide the same for audio-only content.

**10** **Ask the DAO**  
The Digital Accessibility Office is here to help you make all your digital content accessible. Schedule a consultation with us and we will be happy to discuss your projects.



# Evaluation

Please complete the post-session evaluation

<https://go.unc.edu/NRPSurveyJanDAO>



Email: [NRP@unc.edu](mailto:NRP@unc.edu) if further questions or suggestions for future education.