

## Designing with Accessibility in Mind: Key Takeaways

### Introduction

What is digital accessibility? It is “the process of making digital products (websites, mobile apps, and other digital tools and technologies) accessible to everyone.”\*

These takeaways are derived from Chax Training & Consulting’s workshop, Designing with Accessibility in Mind, which took place online on July 28, 2022, for organizations in ArtsFund’s Cultural Partners Network. \*Quotes are pulled from Chax Training & Consulting’s presentation slide deck.

### Accessibility is a journey

With the goal to “provide all users access to the same information, regardless of the disabilities they may have or the method they may use.”

#### Current standards for web accessibility

- [WCAG 2.1](#) – Web Contents Accessibility Guidelines (Global)
- [Section 508](#) – of the Rehabilitation Act and Americans with Disabilities Act (Federal)
- [Policy 188](#) – Office of Chief Information Officer for the State of Washington (State)
- [PDF/UA](#) – Universal Accessibility standard
- [DDA](#) – Development Disabilities Administration

#### Get to know the P.O.U.R. basic principles

- **Perceivable:** data must be available for access by sight and through assistive technology like screen readers.
- **Operable:** The user must be able to navigate through the data presented with a keyboard or assistive technology.
- **Understandable:** Data presented must be clear and understandable. The use of color only or complex symbols without secondary means of interpretation should be avoided.
- **Robust:** There should be multiple ways for the user to interpret the data and navigate through the document or web page.

#### Overcoming Common Barriers

Within your design programs:

- Assign styles for structure: the relationship between one item and another. Tag headings, paragraphs, lists, bullet, figures, etc. give equitable solutions to those using screen readers.
- Ensure consistent read order
- Check table formats and structure
- Use PDF tags

Use more than color to convey information and don’t forget symbols!

### Incorporate accessibility early in your process

The most important piece of designing for accessibility: at the start of a project, ask yourself ‘what do I want the user experience to be?’

## How the story unfolds

Color palette:

- Change colors in the source document & use style guidelines as a standard.

Walk the “tags tree”:

- The tag order is the order assisted technology will use to read, so check the sequence by opening tag to see order in which content is being read.

Print pieces:

- Even if collateral is intended to be printed, if it’s put on the web, ask yourself ‘how can I present this so audiences using assistance technology will get the same information in the same sequence?’

## Do not wait till the end!

20/70 rule:

- Accessibility adds 20% to a project when considered from the start.
- Accessibility can add up to 70% of time to a project when addressed only after the project is completed.

## Use the tools you have

Using the accessibility features built into programs as they were intended -- with designed lists, styles, and captions -- can get you 80% of the way there.

## Establish a workflow with accessibility along the way

Accessible Design Cycle:

- Overall style & color
- Content development
- Source changes & revisions
- **Test your Accessible PDF draft** (after this step is the point of no return) – export a draft with tags & alt-text
- PDF modifications
- Final accessible PDF

## Consider the user experience

Font:

- While there is no standard for minimum font size, everyone’s experience is going to be different.
- Turn off ligatures and stay away from light/thin fonts.

Links:

- Add descriptive text to your links: no more “Click here”.
- Give meaning to a hyperlink by adding alt text.

Alt text:

- “Alternative text used to give meaningful description of a figure.”
- Be concise as possible while still accurately describing the image.

- Consider ‘artifacting’ graphics if the image is nonessential (hides decorative items from screen readers).
- Add alt text into the image’s metadata, which will show up in WordPress!
- For charts & graphs: “describe format, describe range, describe trend/key data points/comparative data.”

## Resources

Chax Training & Consulting:

- Email Dax Castro: [training@accessibilityunraveled.com](mailto:training@accessibilityunraveled.com)
- [Accessible deliverables: What will it cost and how long will it take?](#) YouTube webinar video
- Podcast: Chaxchat.com
- Facebook Group: PDF Accessibility

Color:

- [Color Contrast Analyzer](#)
- [Adobe Contrast Checker](#)
- [Sim Daltonism](#) – Mac browser extension for color blindness simulator
- [Color Oracle](#) – browser extension for color blindness simulator
- [Funkify – Disability Simulator](#) - browser extension
- [Doug Schepers](#) - technologist and accessibility advocate
- Adobe Illustrator Colorblind Evaluation View > Proof Setup > Colordblindness > Deuteranopia-type

Font:

- [Understanding Point Sizing and Font Characteristics](#) – article
- [“Accessible Font Sizing, Explained”](#) – article on font sizes and how they relate to pixels

Alt text:

- [“Alt text helps the visually impaired experience for the James Webb Telescope images”](#) – NPR article
- [Adobe InDesign scripts for accessibility remediation](#) – extension for InDesign
- [Social visual alt text](#) - browser extension
- Alt text in InDesign: Select object > Object (top menu) > Object export options > Alt text > Custom > Enter text

Additional recommendations:

- [Emojipedia](#) – notes how emojis are described with a screen reader
- [“Demystifying Disability: What to Know, What to Say, and How to be an Ally”](#) by Emily Ladau - book recommendation
- [Callas pdfGoHTML](#) – software for tagged PDFs
- [NonVisual Desktop Access \(NVDA\)](#) – open-source portable screen reader