

Creating Accessible Posters Handout

for the Human Factors and Ergonomics Society (HFES) Events

1. Why create an accessible poster?

Accessible posters ensure that your important research is available to a larger group of potential audience members, including audience members with a variety of access needs, whether because of disability or other life circumstances. By creating an accessible poster, you remove barriers and as a result welcome and connect with more people who may otherwise have been excluded from possible discussions.

2. Quick Tips and Tricks

1. Avoid directly copying and pasting paragraphs from your paper.
2. Avoid low-contrast text and background colors, such as yellow or baby blue font on a white background.
3. Avoid cluttered design.
4. Check that all visuals (images, graphs, etc.) are large enough to be viewed at a distance.
5. Prepare alternative formats of your poster.

3. Recommended Poster Size

Using the software of your choice, create a document that is 42 **inches** wide by 42 **inches** high, or the opposite for a vertical poster. Using the recommended document sizes **in inches** is critical to ensure the later recommended font sizes are accurate.

4. Accessible Visual Design

A. Poster Content Creation and Layout

1. Use no more than 4 columns with a consistent organization pattern.
2. Include white space to avoid overcrowding.
3. Include both image descriptions and captions with all content-based images.
4. Avoid bright and highly saturated colors for graphs and graphics.
5. Avoid relying on colors for meaning.
6. Be consistent with font selection for all text, including but not limited to section titles, body text, and image captions.

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B. Font Style

1. Use **sans-serif** (non-serif) fonts for all text on the poster, such as...
 - a. Arial
 - b. Calibri
 - c. Helvetica
 - d. Verdana
 - e. [Atkinson Hyperlegible](#) - Designed for greater visual access and readability
 - f. Use no more than 3 different fonts to avoid confusion.
2. When emphasizing text...
 - a. **Bold** text
 - b. Place *asterisks* around a word
 - c. But do not...
 - i. Rely on **color** text
 - ii. *Italicize* text
 - iii. Underline text
 - iv. Use all UPPERCASE text
3. Use **black text** on a white background for all body text.
 - a. If using colors in addition to black text, use different colored, **high-contrast** or **dark gray text only for headlines or section titles**.
 - i. Check all other possible text and background color combinations using this [Contrast Checker](#) website to design for contrast and color-blindness.
4. Ensure **poster text** is large enough for viewers up to 6 feet away.
 - a. Title text size:
 - i. 158-point font is best and allows viewers to see the title from up to 15 feet away.
 - ii. 72-point font is minimum
 - b. Section titles text size:
 - i. 56-point font is best
 - ii. 46-point font is minimum
 - c. Body text size:
 - i. 36-point font is best
 - ii. 24-point font is minimum, **including for footnotes and subtext**
5. Use **between 1.0-2.0 line spacing** for body text, and consider a minimum of 1.5 line spacing to maximize readability and minimize overcrowding text.

5. Alternative Accessible Formats

1. Prepare and provide visual descriptions of all images for viewers upon request.
2. Create a text-based alternative format to provide digitally as a .doc file as well as large-print (18+ pt font) and standard-print copies (12+ pt font) in person.
 - a. Print up to 5 large-print and up to 10 standard-print copies to have ready to handout as attendees visit your poster.
3. Create and include both 1) a QR code and 2) a short link (such as bitly.com) on your poster to a folder using your cloud system of choice (i.e., Google, DropBox, etc.) with the following alternative documents/access copies publicly available:
 - a. a downloadable accessible PDF and/or PowerPoint version (not jpg or gif)
 - b. the text-based alternative .doc file

A. Screen-reader-friendly Design

1. Use different text boxes for each specific text item.
 - a. Section titles should be a different text box from section body text.
2. Ensure the correct reading order through the “Selection Pane” tool under “Home” and then “Select” menu.
3. Include alt text or mark images as “decorative.”
4. Avoid or minimize the use of tables. If tables must be used, provide the same data in at least one, if not multiple, alternative formats, also available as supplemental digital access copies:
 - a. Bullet point presentation in up to 3 columns
 - b. Written prose
 - c. A table with hidden tiny text in the color of the background providing information about each cell
 - i. i.e. Cells can include the column and row title hidden before data.
5. Use the “Accessibility Checker” feature, found through the Search function, and make required corrections.
6. Review and confirm [PDF accessibility](#) through Adobe Acrobat Pro, including but not limited to the incorporation of heading levels.
 - a. Heading levels can be corrected through the “Touch Up Reading Order” tool and selecting the appropriate “Heading” level, such as Heading 1, Heading 2, etc. These headings are similar to the section and subsections provided in a table of contents for a longer document.

6. Cognitive Access

A. Language Access

1. Use language that is easy for viewers to understand. This includes:
 - a. Defining all terms, **including** any jargon when used
 - b. Spelling out all acronyms upon their first use
 - c. Using everyday language when possible
2. Avoid lengthy blocks of text.
3. Use bulleted lists with brief statements.
4. Use numbered lists when counting information or if order is relevant to content.

B. Text Alternative Access

1. Include directly relevant images that support text.
2. Caption all images and graphics.

C. Increasing Audience Understanding

1. Include a brief introduction section.
2. Include a concise “Major Takeaways” section with clearly outlined takeaways.
3. Include a list of suggested questions and conversation starters.
4. When in person, speak at a reasonable pace. Pause and take a deep breath after speaking for a little bit (such as every three sentences).

7. Additional Accessible Poster and Infographic Resources

- [Accessible Infographics and Flyers Checklist](#) by CSUN Universal Design Center
- [Dos and don'ts on designing for accessibility](#) by Karwai Pun
- [Guidelines for Creating Accessible Printed Posters](#) by Stephen F. Gilson and Robert M. Kitchin Jr. (Poster font point sizes provided in this document.)
- [How can I create a conference poster that is accessible to people with disabilities?](#) by Disabilities, Opportunities, Internetworking, and Technology
- [Poster Design Principles & Tips: From Font Sizes to Color Contrast](#) by Undergraduate Research Center UC Davis
- [Poster Preparation & Accessibility Guidelines](#) by the [American Anthropological Association](#)
- [Presentation and Poster Accessibility Guidelines](#) by Tapia Conference