What is a poster presentation?

A poster presentation is a formal, research-based presentation of your work. A poster presentation provides a visual representation of your research through text, charts, graphs, and other visual aids. A poster presentation allows viewers to read your research material at their own leisure and to interact with you—perhaps asking questions about your methods or your findings.

Posters range in size, and you can usually present your poster either arranged portrait or landscape. Often, meeting or conference organizers will provide presenters with a foam board or easel and binder clips, or some other method of securing and displaying their posters. Some presenters will laminate their posters before presentation, to ensure that the content is safe (just in case coffee gets spilled on the poster, or if they have to run through the rain to get to the presentation room).

What's expected of you and your presentation?

Typically, for a poster presentation, you can expect to be presenting in a room where others are presenting posters—sometimes 10 others, sometimes 100 others, or more. You will have a space to mount your poster and stand. A poster session might last for a half-hour, or it might last for three hours, depending on the meeting or conference. You'll be expected to stay near your poster during the entire session, and to be available if people have questions or want to talk about your research.

The best thing to do when planning a poster presentation is to get answers to the following questions:

- 1. Who will attend this conference and potentially view my poster presentation? What can I assume they know? What can I assume they'll need explained?
- 2. What do I need to cover or include in my poster? How can I best make use of the space that I have?
- 3. What are the conventional norms for poster design and layout for my discipline?
- 4. What are some design and layout specifics, and what are the tools available to me to create my poster?
- 5. How can I best prepare to interact with people who stop to read my poster?

Who is your audience?

One of the key questions above is "Who will attend this conference and potentially view my presentation?" Different audiences have different information needs and different expectations. The audience depends on where you are presenting your research. If you are giving a presentation in a class, your audience is your professor and the other students in the class. If you are giving a presentation at a research forum, like UURAF or another campus, state, regional, or national conference, your audience is much more broad.

In a class context, you and your audience have spent weeks together studying the same topic and reading roughly the same materials. You might assume that they know what you know, and you might not need to spend a lot of time in your presentation covering background information. At a conference presentation, however, you might be presenting to a really general audience who doesn't share your background or you might even be presenting to a very narrow audience who researches topics similar to you, but might do so from a different perspective.

What do I need to cover or include in my poster?

Whittling an entire research project down to a poster can be a challenge, and designing a poster takes time and care. Outlining your poster first is a great way to get started. Your poster should generally contain the following content:

- 1. A title and list of authors; the title should be catchy and serve to provide a sense of your research, and serves to intrigue people into reading your poster
- 2. Presenters also often include an institutional logo on their poster, often near the title and authors' names (e.g., the MSU logo, the logo of a specific research lab or department)
- 3. An introduction section, which provides a brief background of your research and, for instance, definitions of key terms
- 4. A materials and methods section, which briefly describes your procedures, methods, and/or materials used
- 5. An implications and/or conclusions section, which conveys your key findings or major results and convinces readers that your work is important and has impact on the world
- 6. Acknowledgements, which, if appropriate, includes your research mentor, any funding sources, etc.

There are a few key things that may or may not fit on your poster presentation, such as citations. You'll want to cite the other studies and research you've drawn from on your poster, either in quick parentheticals (e.g., Smith, 2011) or through summaries or quotes.

Second, your abstract may not fit on your poster, either. Your audience might have access to your abstract if it is published, for instance, in a meeting or conference booklet, but they might not have your abstract handy.

If you want to provide citations and share your research abstract, you might consider creating a handout to supplement your poster presentation. A good handout might include your title, your name, your contact information, your abstract, and also your citations.

All of the conventions above are fairly general. As you get started, review poster presentations typical of your discipline or research area. Then, once you've familiarized yourself with the general outline for poster presentations in your research area, you can begin filling in your outline. One helpful way to begin filling in the details of your presentation is to focus on what, who, how, and why:

- What was the problem or issue?
- Who is involved, affected, etc.?
- Why is this problem or issue important?
- How does your research fit into already existing research?
- How does your research extend or contribute to already existing research?
- How did you research or analyze the problem or issue?
- What are your findings?
- What do these findings tell us?
- What are the implications of these findings?
- What are your conclusions?

If you're not sure of the answers to these questions, you might consult your research mentor and ask them to help you flesh things out. It's always a good idea to share your draft poster with your research mentor.

What are some design and layout specifics, and what are the tools available to me to create my poster?

Sketching out your presentation once you've brainstormed your content and addressed some of the questions and considerations above is a really helpful task. You can sketch out your poster by hand, or you can sketch it out using a range of software tools. Having a sense of what might go where is a useful step toward design. Regardless of how you lay out your poster, general tips include:

- Make sure all of the text on your poster is in a large, readable font face—a size that people can easily read from standing, say, 10 feet away. (Don't use a size smaller than 20 pt.)
- Make sure that the font faces you use are appropriate for your presentation and your audience (for instance, don't use an "immature"-looking font face like Comic Sans or KidPrint, or a really aggressive, sloppy font face like Brutality or Laundromat.
- Remember that text set in ALL CAPS and long chunks of text set in italics is harder to read than text in standard sentence case.
- Effectively use headings and subheadings for the content of your poster, and make sure these headings stand out visually.
- Don't clutter your poster with long, dense paragraphs of text. When it's appropriate and when you can, present your information in succinct bullet points.
- Avoid using dark backgrounds with light text on top—most readers are most comfortable reading dark text (i.e., black) on light backgrounds (i.e., white). You don't have to stick with black and white, but know that putting light yellow on dark purple might be difficult for your readers.
- Make sure all of your figures, graphs, photos, and other visual content are highquality and will print well (and not get blurred or pixelated); make sure all of this content is clearly visible and readable from 10 feet away.
- Label each of your figures, graphs, photos, and other visual content so that your readers know exactly what the figure is referring to or presenting.

Software for Creating Posters

The most accessible and easy-to-use software is Microsoft PowerPoint. Although PowerPoint is typically used to design screen-sized slides for presentation, you can alter the size of a slide in PowerPoint - for instance, change its dimensions from 11" wide by 8 1/2" tall to 40" wide by 32" tall. Essentially, you're creating a "slide" that is the size of a poster. PowerPoint will allow you to easily embed text, graphics, adjust background colors, and more.

A more professional, industry-standard tool for poster design is Adobe InDesign. Adobe InDesign is a layout program that allows users to embed text and images and design documents like a poster. InDesign has, however, a fairly high learning curve and can be a bit tricky to use.

Regardless of what software you create your poster in, you will want to save your final version for printing as a PDF. A file saved in PDF will "lock down" all of your design elements, so you can save your poster and bring it on a jump drive to your printer and the printed poster should look exactly as you designed and laid it out. Large "plotter printers" are used to print posters, and most FedEx Offices can print posters. On MSU's campus, there is a plotter printer in the Main Library, in the Engineering Department, and in the Art, Art History, and Design Department (and a few other locations). Depending on where you go to print your poster, the total cost for a full-color, full-sized poster print is usually between \$25 and \$70. It's thus a good idea to carefully check and finalize your poster before printing.

How can I best prepare to interact with people who stop to read my poster?

One of the benefits of a poster presentation is that there's typically plenty of time to interact with viewers and to have one-on-one conversations about your research. To prepare to interact with people, you might:

- Prepare a brief (maybe two- or three-sentence) overview of your research. Having that ready will help you to break the ice with viewers. Keep this quick overview general and interesting—perhaps focus on why you were interested in this research, problem, or issue (e.g., "I was curious as to why...").
- Practice explaining your poster. Hang your poster somewhere and have your friends stop by so you can get comfortable talking about your research.
- Be sure to talk to the people who stop by your poster, and not to the poster! Talking at your poster or reading from your poster isn't a great way to engage viewers.
- Consider preparing a handout, so you have something to share with your poster audience and leave a lasting impression.
- Thank people who stop by to read your poster and talk with you.

What are some other resources to consult?

- Your research mentor
- Past <u>UURAF</u> and <u>Mid-SURE</u> Program Books
- Watch Dr. Tom Wolff's (Emeritus Professor) video about <u>Preparing Poster</u> <u>Presentations</u>
- Learn tips for Creating Posters with PowerPoint from the MSU Library.
- Departments on campus often showcase faculty and student research posters. Head to the building where your department main office is and take a look at what's posted in the hallways.
- Visit the Undergraduate Research poster displays in the Neighborhoods.
- Search online for <u>example posters</u> created by people in your research area. Looking at good models is a great way to get started on your own poster.
- Consult other web pages that offer advice on creating research posters, such as 10 Tips on Writing a Research Poster, Research Posters, Scientific Poster Design, and What Makes a Good Research Poster.