Research Poster Design, Construction, and Printing

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As you move through the sequence, remember that you may discover that you need to re-think your **design** or some aspect of the poster that simply doesn’t seem to work for you. Be flexible and open minded to changes.

Be open to making major revisions in the **content**. Improvements will suggest themselves as you see things on the screen or even in print.

Continue to proof read as you go. Get another person to proof as well. It is possible to miss problems when we get immersed in a project.

After printing and review, a second or even third printing may be necessary in order to correct mistakes or improve the design.
Purpose

- What is the purpose of the poster at this event?
- How do you want to communicate to your audience? Is the poster a “stand-alone” item, or will you talk people through your research? What type of audience will you have: specialists in your area, a wide variety of disciplines, a mix, or what?
Slide # 4

Content

- What do you WANT to communicate?
- What do you NEED to communicate?
- Do the above two answers suggest particular designs and illustrations?

Context

- Who is your audience?
- Are there adjustments you need to make to your poster to better communicate with your audience?
- What is your setting? How formal is it? What are the expectations you’ll face from other people there?
Imposed Constraints

- Are there outside (conference or professional) guidelines for or constraints on your poster’s design? Specific examples could include: content, order, or room to display.
- What is your display board size? How much room do you have in general for “your stuff”?
- What is your display board configuration: flat, trifold, tabletop or free-standing, or other? **This will dictate your poster design decisions.**
- Will you have an easel, table space, or what to house your presentation?
- How do you communicate with the conference facilitator to make arrangements for your needs?
Think of your poster as an “ad” for your research, and not a complete replication.

Are there outside guidelines or constraints on how you communicate to your audience? These can dictate the design you choose.

What format: tri-fold or flat, tall or wide?

Size (based on display board)? If you use a tri-fold, remember to measure each panel, and set your poster up accordingly. This can be an … interesting exercise, so maybe we can discuss this if the need arises.

Content: how will what you say best fit on the board? Consider best use of text, pictures, and tables. Regarding text, short paragraphs and/or bulleted or numbered items is better than long paragraphs (which no one will read).

Order of presentation: how do you want to “tell your story”? What is a logical order to communicate? Is there a required outline for your conference? What is visually pleasing and “visually logical”?

What is “attractive” to you from a design standpoint?
Design (2)

- Your poster will have a combination of text, graphics, and/or tables. Consider how to arrange the bigger parts of the poster to best effect. Here are a few options.

For a poster emphasizing tables, statistics output, or pictures

- Design that is more a mixture of text and illustrations. Pictures should be used where they are visually helpful. Tables are likely to show up farther down the left column, in the center, and perhaps in the right column.

You can activate the grid and the guides in order to have helps in aligning and distributing your poster elements. Or, you can use your eyes, realizing that there will be some minor alignment issues. The above layouts are suggestions: feel free to adjust them to suit your material and “eye”.
Software Considerations

- This presentation is centered on PowerPoint 2007 (a Windows product), since that is the most common product available to Clemson Faculty, Staff, and Students. PowerPoint 2008 for Mac is now available. Its interface is supposed to be similar to 2007, though I haven’t used it yet on my Macs. The new user interface in Office products is, shall we say, a “mixed bag”. I’m finding, though, that I like some things they’ve done with PowerPoint.

- There are other software products that can be used to construct posters. Microsoft Publisher is available to many folks, and has templates available for poster construction. Older versions of Office are used by some folks; those editions of PowerPoint and Publisher are also suitable.

- I use some “industrial strength” layout packages: Adobe InDesign (the successor to PageMaker) is about the best thing out there for this sort of work. Illustrator, Freehand, and CorelDraw are very good for this work as well. The advantage of using these tools is that they provide professional level image and typographic tools. They are, however, expensive products, and require you to learn to use them.

- For working with pictures, Photoshop or Photoshop Elements are good. Elements is under $100, and provides much of the functionality of Photoshop. However, for most folks, this may be “overkill”.

- You can “copy and paste” into PowerPoint or other programs from many other tools, including Excel and Word. There are quirks to this, so be patient when doing this.
Page Setup

Set up your poster file to the correct dimensions. It is tough to alter a page size later without ruining your work.

So, what are the “correct dimensions”, and how do you set the page up? If you are using Plot42 (the 42 inch width plotter option), a good page size is 36” x 48”. If your poster board is smaller or larger, you may need to alter these dimensions to match it. To set the document up in PowerPoint 2007, do the following:

1) Click the “Microsoft Office” button in the top left corner, then click “new”. A large dialogue box comes up. Click “create”. Then, with the “home” tab highlighted, click “layout” (a button just to the left of the font listing box) and click “blank” from the slide layout options that appear. This gives you a slide with no content.

2) Click the “design” tab at the top, then click “page Setup” at the top left. A dialogue box will appear. You may need to select “custom” from the “page sized for” item at the top. Type in your page sizes in the forms provided. Be sure to click “landscape” as the page orientation option. This tells the program that you are making a “wide” slide. Click “OK”, and your new presentation appears on the screen.

3) You need to set the page size correctly at the beginning to avoid problems later on.

4) If you are printing to a plotter with a page width narrower than 42 inches, you will need to reduce the size of your page to allow for an inch on the top and bottom, and two inches on the ends. This prevents your poster from being “clipped or not printing at all, but you may also avoid having to trim your output to fit.
Construction

Collecting and assembling your resources:

- Arranging into a design – layout. This is the execution of the “design” phase.
- Pictures – be sure (1) you have the right to use the picture, (2) the picture is of sufficient quality to enlarge to the needed size and print well, and (3) that the picture is appropriate to the setting and purpose.
- Tables – Play around with the PowerPoint table editor. There are some cool formatting options that you can use.
- Color: foreground-background contrast, cohesiveness. Be sure stuff is legible!
- Type: sufficient size (minimum 28 pt for “body” text), legible fonts, title text and body text considerations, foreground-background contrast
- Spacing of content: leave sufficient “white” space so things aren’t crowded. Edit down paragraphs; consider using bulleted and numbered statements where effective

High quality Clemson graphics can be found at:

S:\Media\Graphics\CUgraphics
Review/Revision

Review and Revision should be an ongoing task. However, when your poster has reached an advanced stage, leave it alone for a bit. Come back with fresh eyes and an open mind; and look for ways to improve your poster. Check spellings, alignments, logical order, rhetorical impact, spacing (are there areas too congested with content), and accuracy of your data. Make changes as needed. Don’t be afraid to perform “radical surgery” if it will improve your presentation.

Get a second or third opinion on how you’re doing. Sometimes things we believe communicate clearly may in fact not communicate what we intend. This is a CRITICAL aspect of effective visual communication.

While a poster isn’t a dissertation or juried article (with associated pressures), it is a chance to make a strong impression. Don’t agonize over details, but do take the time to produce a good product. Look for ways to simplify the presentation without losing too much of the message.
Printing (1)

- Printing to a plotter is more complicated than printing to most desktop printers. Please ask for assistance if you feel uncomfortable printing to the plotter. A badly handled print job can waste a lot of ink and paper, and lead to frustration for you and for the CCIT staff.
- Be sure to select the correct Printer to do your printing job, and assign the proper paper size and orientation.
- There are two sizes of paper available for plotting: paper that is 36 inches wide, and paper that is 42 inches wide. If you wish to use either, you must install the plotter driver that corresponds to that paper width (Plot 36 or Plot 42). Unless I am printing really narrow jobs (say, 2 feet wide), I use plot 42, as this provides sufficient paper width to avoid not having sufficient room for the entire poster width to print. They also use better paper on that one.
- Remember: the print dimensions you specify are going to be larger (in most cases) than the page size you set for the poster in “page set-up”. You will likely have to trim your printout to fit the mounting board you use.
- Try not to print until you are as certain as you can that you have selected the correct printing options and edited the poster as completely as you can.
- Do NOT use the “fit to paper” check box when printing to the plotters.
Printing (2)

- CCIT sends an e-mail to the userid of the person printing (the person logged in on the computer sending the print job) when they release the file to the plotter. My experience is that they get faculty and staff jobs done pretty quickly.
- In order to print to Clemson’s plotters, you have to have that printer installed to your computer. Instructions for installing the plotter driver(s) is provided at the url below. It is not difficult to install the plotter, but, if you wish, ask your technical support person to do this for you.
- There are printing instructions and tips on the CCIT web site. Here is the link for those tips:

http://ccit.clemson.edu/services/printing/
Below is a link to a Plotting FAQ page:

http://www.clemson.edu/ccit/support_services/it_support/printing_plotting/docs/faq/plotting_faq.html

Below is the address for the Plotter Installation page. Please note that Faculty and Staff can install both Plots 35 and 42. I recommend you install both, and use whichever one fits your job.

http://www.clemson.edu/ccit/support_services/it_support/printing_plotting/docs/printer_install/index.html

The toughest part of all this is making sure you print to a page that is large enough to contain your poster without clipping off part of it.

Mac Support is now available for Plots 36 and 42, and PowerPoint 08. Please review the appropriate files in the Plotting How-Tos and the Installation pages.
Some things are hard to see on a screen, but become evident when you get a printed copy.

After you get your printed poster, review it for visual problems, typos, alignment issues, and overall visual impact. Get another person whom you trust to aid you with this.

Reprint your poster if you have to. Ink and paper cost money, but you want to get things right. TRY, however, to catch all problems from the draft in order to avoid multiple re-printing. Let’s be efficient with our resources.

Plotted posters can be picked up in the computer center, which is below Harcombe Dining Hall and behind the Post Office in the old student center behind Tilman Hall. This is the old student bookstore site. The plots are available at the right hand end of the service counter. Ask for your plot by the userid under which it was printed.
Presentation

- Be sure to mount the poster onto the proper type of support.
- DO NOT put a poster designed for a flat board onto a tri-fold mounting board! It will look silly if it is bent around the panels.
- Be sure that the poster is attached to the support in such a way as to stay attached.
- You might carry hand-outs for people to take if they want more information or a reminder of your research. You can print your poster to a letter-sized page by using the “shrink to fit” option when your office printer is selected. Be sure that you select “landscape” or “wide” for the paper orientation.
- Observe people for their behavior and reactions as they look at your presentation. If they get too close to the poster in order to read it, they may be having trouble seeing items that are too small. Or, they may be like me, and suffer from limited eyesight. Observe if they are put off by the amount of text on the poster, or if they seem drawn in.
- Remember: not everyone is going to read your poster. Some folk will be interested in your work. For others, you’re “not their cup of tea.” Don’t get your feelings hurt if they move on too quickly.