

Poster Sessions: Designing and Printing Posters

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Designing the Poster

- Consider the audience and the context at the poster session - People may spend only a few minutes at each poster, so make message easy to see.
- Think about the visual flow - use vertical columns rather than horizontal so that people can follow the flow as they move along
- Think of the poster as an illustrated abstract of the work.
- Easy to follow structure with clear headings - Objectives, Methods, Results, Conclusions
Emphasize the findings and implications - what you accomplished and why it matters.
- Don't bury main points in paragraphs of text, think visually - make your points with simple charts and graphics as much as possible
- Everything should support message, no noise, no overly detailed discussion of methods or supporting evidence, distractions, chartjunk (Tufte 1983)
- Include full contact information for the author(s). Acknowledge affiliations and sponsors.
- Consider preparing a short overview presentation if you will be presenting the poster at a formal session - don't just read the poster. Consider providing a single page handout.

Keep in mind the actual physical size of the poster elements

Poster elements must work at their actual size; images must have sufficient resolution

Readability at the poster session - most people will read the poster from 3 to 6 ft away

What size to make poster?

Typical is 3x4 ft or 3x5 ft, more than adequate for most messages

Custom large sizes possible; often organizers will have specs telling how much space you can use.

You may need to design at half size and then print at 200 percent. This involves the page setup, font sizes, image resolutions.

Images - Resolution: how big is the physical size at a particular resolution?

Resolution should be at least about 150 dpi at the final physical size on the poster

For example: scan a 4x6 photograph at 300 dpi, place it on the poster at 200% or about 8 x 12, effective resolution will be 150 dpi. Digital camera photos have high enough resolution unless taken at an unusually low setting.

Images saved from the web will be 72 dpi, too small for good quality results.

Background colors

warm accent, cool background or vice-versa, limit to 2 or 3 colors to avoid visual distraction

Fonts

serif (Arial, Verdana) - good for headings, work fine for body text at large sizes for posters

sans-serif (Times New Roman) - more readable for body text

Font sizes

1 inch = 72 points

Main headings: 96 - 108 pt (1.5 in.) at full poster size or 48 - 54 pt. at half size

Sub-titles: 72 pt (1 in) at full poster size or 36 pt. at half size

Explanatory text: 24 - 36 pt at full poster size or 12 - 18 pt. at half size

Poster Layout in Powerpoint

Organize, have content materials at hand: Word, Excel, other Powerpoint, etc.

Images - digital photos or scanned JPEGs, charts, graphs. Figures from PDF files may be converted to usable format in Photoshop, but also often work by simple copy and paste

Overview: New presentation - page setup - add the containing boxes - paste in and otherwise add the content - add background colors - proofread, adjust - print on rollfed laserjet plotter

Launch Powerpoint

File - New blank presentation

Format - Slide Layout - blank layout

Page Setup - width, height

leave 2 inch margin thus for a 3 x 4 poster, set size to 32 x 44, then you can run your design elements, especially page background, right to the edge of the slide

View - Ruler - Grids and Guides. Snap to guides, adjust grid spacing

Add a text box. Think of it as a template - make the first one, edit its appearance, then copy and paste this original to create the others that you will need. Keep in mind the actual physical size. Paste in the other text boxes for each column of your layout, following your "pen and pencil" design. Adjust the text boxes vertically and if needed, horizontally, to match your design. Pay attention to the details, make them consistent.

Selecting objects on the screen: Much of the challenge of computer graphics lies in how you select the objects to edit. If you click inside a text box, you will get the blinking cursor and will be ready to add or edit text within the text box. To select the entire text box as an object that you can move or resize, first click in the box, then carefully click on the crosshatched selection border. You can then drag the item around, resize it by grabbing the "handles" at the corners and on the middle of each side, or even delete it with the Delete key. Also, when the box is selected as an object, you can right-click (still on the crosshatched selection border) and bring up the Context menu, which gives you access to format the Text Box, changing its background colors, etc.

Order and Grouping When an object has been selected, it can be moved in front of or behind other objects - this is often useful for backgrounds, for extending text over an image, or for placing a caption or label on a chart. Select the item - right-click - Bring to Front or Send to Back. Grouping is another useful technique to link two or more objects so they can be moved together, for example a chart and its heading. Select the item, hold the shift key down and select the other item(s), the right click over one of the selected items - Grouping - Group (or Ungroup, which is sometimes needed for later re-editing of a grouped item).

Navigating on the page To move around on the screen, use the Zoom drop-down menu on the standard Powerpoint toolbar. Select "Fit" to see the entire poster. Click in the general area that you'd like to edit, then select 50% (or 66% or 75%, whatever works) to zoom in to see what you are doing. Often when you insert an image or paste something in, you'll need to zoom out (using "Fit") to see where it went.

If you don't see the Zoom drop-down menu, go to View - Toolbars - make sure Standard is checked.

Inserting images

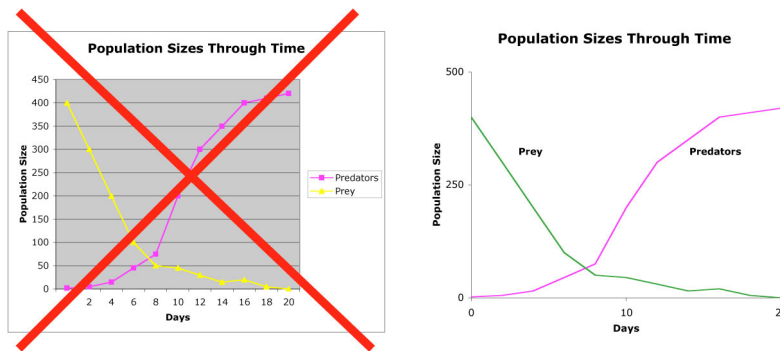
Go to the Insert pull-down menu - Picture - From File - select the image from you hard drive. Once the image is inserted, drag to the approximate location where you want it. Then, right-click - Format Picture - select the "Size" tab and type in a Scale percentage (Height and Width) for best results, use a multiple of 25% and size the images beforehand to have enough resolution to print well at the size

you want. You can resize images by dragging with the mouse, but grab them at the corners, never at the sides, which will distort them.

Inserting charts and tables

From Excel, charts can usually be pasted straight in to Powerpoint and can then be resized as needed without losing resolution. Be attentive to how you select the chart in Excel - are you selecting the chart graphic or the chart itself with its data sheet embedded. The latter option will increase your poster's file size and is not needed unless you want to interactively update the data in Excel file.

Importantly, prepare the appearance of the chart in Excel first. Fonts need to be much bigger relative to the chart for the graphic display on your poster as compared to the way they look on your monitor or a manuscript page. Remember that the chart info will need to be readable from a distance of 3 - 6 feet. (16 point font at a minimum). Eliminate the "chartjunk" - the gray background, detailed tick marks on the axis, even the legend itself - if possible, simply label the data right on the chart (you can add such labels later in Powerpoint).



from Hess, George R. and Leon H. Liegel. Creating Effective Poster Presentations

Another method of inserting a chart from Excel is to use the Insert pull-down menu - Object (not Chart) - Create from File - Check the Link box if you want the interactive link to your data in the Excel file - hit the browse button and navigate to the Excel file. You'll be able to double-click on the embedded spreadsheet and edit it as if you had it open in Excel.

Adding a background color or design

As with any Powerpoint, you can right-click on an empty part of the slide - Background - Select a color in the drop-down color menu or choose Fill Effects, where you can select a texture, pattern, or image. If you select a texture or an image for the background, make sure it will have the needed resolution of about 150 dpi when printed on the physical poster. The Gradient choices can be quite effective and will print well at any size. To make a background for only part of the poster, select the rectangle tool and draw a rectangle (or circle!) covering exactly the part of the poster that you want, carefully matching the edge of the poster if you want the pattern to extend to the edge of the printed area. Once drawn, right-click on the rectangle and Format Autoshape - choose a fill color and a line color, or perhaps no line. Also, of course you'll need to adjust the "Order" of this rectangle so that it prints behind and not in front of, the poster content.

Ready to go to the printer?

- Proofread carefully!
- Embed fonts: Probably not strictly necessary if you only used Arial and Times New Roman, but a very good idea nonetheless.

To save your fonts with your poster: File - Save As. In the save dialog box, choose the Tools drop-down menu and select Save Options. At the bottom of the save options make sure Embed True Type Fonts is checked and that Embed All Characters is selected.

References/Resources

Hess, George R. and Leon H. Liegel. Creating Effective Poster Presentations.
<http://www.ncsu.edu/project/posters/IndexStart.html>, accessed Feb 7, 2006.

Throckmorton Computing Graphics. Poster Construction Using PowerPoint
<http://www.oznet.ksu.edu/throckmorton/tutorials/pwrpoint/PosterPRESENTATION.pdf>, accessed Feb 7, 2006

Tufte, Edward. 1983. The Visual Display of Quantitative Information. Graphics Press, Cheshire, CT.

Tufte, Edward. 1997. Visual Explanations: Images and Quantities, Evidence and Narrative. Graphics Press, Cheshire, CT.

Tufte, Edward. The Cognitive Style of Powerpoint. <http://www.edwardtufte.com/tufte/powerpoint>, accessed Feb 7, 2006.

Where to print? Here are some suggestions, which are not meant as endorsements, but are places where IBS people have successfully printed posters. Another good idea - at least one IBS researcher designed her poster in PowerPoint, submitted it online to Kinkos, and had them print it at a branch near her hotel in the conference city.

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Eight Days a Week
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CIRES
CIRES Main Communication Center
Phone: 303-492-1143
Ask for someone in IT to set up a time to print.