Effective Posters—
Presenting your Results
Clearly and Persuasively

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First, consider your objectives in presenting a poster

Tell an interesting, persuasive story of your work

Get immediate feedback from other researchers—questions, suggestions, criticism

Get noticed

Talk to other scientists about related work

Meet prospective collaborators, “network”
Presenting your results in a poster instead of a paper has advantages

- Personal interaction
- Immediate feedback
- Forum for preliminary ideas

Tip: While both communicate results, a poster is _NOT_ just a paper stuck on the wall

Your poster must be tailored to your audience to be effective

- Who is your audience?
- What do they want to know?
- _What will capture their interest?_
An effective poster should have the following features:

Must attract an audience—
- prominent title
- visually interesting figures (lots)
- clean, uncluttered appearance

Must highlight key points so they are immediately recognizable

Must be arranged logically so a viewer quickly understands the “story”

Must contain all elements of a good research paper—motivation, methods, results, discussion, conclusions, acknowledgments

Make your topic “jump off the wall”

Make the title informative, descriptive, and concise (one line)

Use at least one eye-catching graphic

Use humor?

Tip: Your audience will not approach you if it is not clear from a “safe” distance (3 m) what your topic is
Distill your message

Don’t try to tell the “whole story”

Present only enough data to
• support your conclusions and
• show the originality of your work

These three posters were the 2006 winners of an annual UK particle physics conference poster award—what do you think?

Every poster must have a “headline” (title) and a “byline” (authors)

Title—
in 120-pt font

<10 words

Your name and affiliation—
in 80-pt font

Better title?
Prokinetic Action of NaHCO₃ in Humans Using MRI

Tip: If it’s important, make it BIG
Include an “abstract” only if your poster is going to be unattended for lengthy periods*

If you’re standing there explaining the work, nobody’s going to read it anyway

Use the space for something more compelling and visually interesting

If you must include an abstract, keep it very brief (<50 words)

*or if your adviser tells you to...

Most viewers will start at the upper left corner of the poster and read down and across

Break up your “story” into columns (think “newspaper”)

Put important points at the top of each column

Tip: Keep lines of text <20 words long. People’s eyes don’t easily track strings of text longer than that, even at 30 pt
If your poster is laid out in landscape orientation, use columns, not rows, to organize the information.

![Image of people looking at posters](http://www.soe.uoguelph.ca/webfiles/agalvez/poster/poster_making/entry.htm)

The viewer may not be able to fight his way back to the left side to look at the lower rows of your poster; he’ll probably just quietly move on to the next poster.

How is the viewer going to navigate through this poster?
If navigation is not immediately obvious, number the elements or use arrows to guide the viewer through the poster.

Tip: A title is recommended, too

This poster uses arrows to guide a viewer through a complex story

Tip: Don’t make the viewer guess the sequence
Remember that people will be looking at your poster while standing, not sitting

Tip: Don’t put important points or tiny print at the bottom

The center of the poster should feature the methods and results

Problem statement, motivation, objectives

**Methods**

**Results**

Applications or future work

Sources of additional information

Acknowledgments

Tip: Visually represent the relative importance of text elements
Use headings to guide the viewer through the poster

Make your key points immediately recognizable

Use headings to create an “information hierarchy”
- Descriptive
- Concise
- Parallel
- Logical

But avoid wimpy, content-less headings

Tip: Use the section headings to present ideas, not categories
Position your important points strategically

- At eye level
- At the top of columns
- In the center

From 3 m away, how does the viewer know what is important?

Tip: People look at color first

Here’s a good example of strategic positioning

Production of $\Lambda$ Particles from $\Sigma^*$ Decays at HERMES

Tip: Position important information above the midline and in the center
Use the visual elements of the poster to tell the story

- Emphasize main points
- Illustrate apparatus, methods, and results
- Summarize numerical data to show trends or reveal relationships
- Use printed handouts to:
  - Convey complicated information
  - Provide additional details
  - Give your contact information

Tip: Keep all text (total) to <600 words

At least half your “story” should be told in pictures

- No graphic should be smaller than 5 in × 7 in (13 cm × 15 cm), and most should be larger
- Crop and enlarge photos and simplify drawings to focus attention on important details
- Scan photos at 300 dpi
- Provide a brief caption for every graphic; tell people what to look for

Tip: People remember pictures, not words
But you have to have *some* text...

Use figures to attract and explain

Tip: Different types of figures best convey different types of information; use different styles to present the most information in multiple ways
**Don’t use pointless graphics***

While an impressive display of expensive stainless steel and electronic circuitry, this photo conveys zero meaning.

This simple cartoon shows how a scanning tunneling microscope works and what elements are important.

* That includes aerial photos of the accelerator!

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**This excellent graphic shows the apparatus and the process**

Tip: Don’t show pictures of equipment if they are unrelated to an important idea that you want to convey.
Avoid using graphics taken from the Internet; they’re too low-res to print acceptably

Looks fine on your monitor; looks awful blown up to poster size and printed.

Make every graphic mean something; avoid “eye candy”
Critique this poster:

Tip: If you’re going to make the viewer *read* everything, why does he need you?

Use a software presentation program to combine text and graphics easily on one page.
Choose colors carefully

Colors affect how easily your poster can be read
Use a high contrast between background and text
“Warm” colors are more visible, but don’t overpower with orange
Avoid using red/green or red/blue

Tip: Gradient backgrounds that look great on your monitor may not print properly

Use color to highlight, separate, or associate information visually

Tip: People expect color to mean something; don’t use color randomly
Choose neutral, light-colored backgrounds

Leave adequate “white space”

Effective posters look uncluttered

Use white space to isolate and emphasize important details

Leave at least 1.5 in (4 cm) of white space between columns

Balance elements on the page

Tip: Leave at least 1.5-in (4-cm) margins on all sides of your poster; no plotter prints to the very edge of the paper
"White space" doesn’t have to be white

Use easy-to-read fonts
Sans-serif fonts usually print well and are easier to read from a distance

ORNATE FONTS ARE HARDER TO READ
DON’T USE ALL CAPS, EVEN IN THE TITLE —much harder to read (and proofread!)

Title—120 pt
Section headings—60 pt
Figure captions—48 pt
Text—36 pt
Present text in lists rather than paragraphs

Figures promote audience interest, provide supporting evidence, help explain complex ideas and relationships quickly, and give the viewer something to remember.

Use figures to:
- promote interest
- provide supporting evidence
- explain complex ideas quickly
- show relationships
- give the viewer something to remember

Make a timetable for preparing your poster, and stick to it!

- Identify your objectives
- Analyze your audience
- Make an outline of key points
- Assemble graphics
- Decide on text
- Prepare handouts if desirable
- Proofread everything three times
- Practice your “stump speech”
- Rehearse questions
Find out *before* your session . . .

The location and time by which your poster is to be displayed

What kind of surface your poster will be mounted on

Whether you need to provide your own tape, thumbtacks, Velcro strips...

Whether other needed equipment will be provided (electrical outlet, table, easel)

Tip: Don’t expect the meeting organizers to supply you with anything other than space

Be prepared to mount your poster on any surface

Your poster-hanging toolkit should include:

• Push pins or thumbtacks
• Straight pins or drawing pins
• Plastic mounting putty
• Velcro® strips and glue
• Clear PCV tape or masking tape
• Scissors

Have a permanent marker the color of your text

Have a small notebook and pen handy for notes
Tips for successfully presenting your poster:

Arrive early (early birds usually get the desirable locations)

Bring your own “poster hanging” emergency kit

Have a 2-min “stump speech” prepared to explain your work to visitors
  • Give the big picture
  • Explain why the work is important
  • Have two versions—one for experts and one for non-experts

Greet each visitor with a smile; ask questions to elicit interest and level of understanding

Convey your enthusiasm for your research project

Greet people as they walk up to your poster

By your stance and expression, invite them to ask questions

Have your business cards, copies of your paper, or other handouts ready

Tip: Open your hands, lean forward, and smile
Have hand-outs available
A miniature version of your poster
An extended abstract or a summary
Reprints or preprints
Include your complete contact information

Tip: an 11-in x 17-in sheet of paper, folded in half, gives you four pages for additional information about your work in one sheet

References and further guidance...
Edward R. Tufte,

http://www.personal.psu.edu/drs18/postershow/
http://www.soe.uoguelph.ca/webfiles/agalvez/poster/
http://www.ncsu.edu/project/posters/
http://www.writing.engr.psu.edu/posters.html