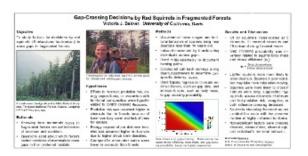
Making a Great Poster



Marilee P. Ogren PhD Ogren@mit.edu

A Great Poster is:

Readable

Unreadable = grammatical problems, complex, passive sentences, misspellings

Legible

Illegible = small font, fancy font, too much text

Well organized

Disorganized = takes too much time to find the main idea, next idea, or data

Succinct

Not succinct = doesn't direct attention to punch line within 11 sec

Posters are **visual communications** tools that encourage **conversation** with colleagues. They **summarize and advertise** your work.

Great Posters are COMPACT and VISUAL



COMPACT:

Focus on **ONE**, clearly stated question with a clear take-home message.

VISUAL:

Use diagrams, arrows, and other **graphics** to direct attention **rather than text.**

How To Put a Poster Together?



FIRST: decide on a handmade or software generated poster

SECOND: Develop a plan

Consider:



- 1. Audience
- 2. Content
- 3. Graphics
- 4. Text (Language)
 - 5. Colors
 - 6. Layout

1. Who is Your Audience?







Your audience determines the **tone** of your Poster.

Are they likely to be?

- Specialists?
- Wide-ranging disciplines?
- Very general audience?
- All three?



2. What's Your Story?

Your **central research question** should be reflected in the **content** of your:

- Title
- Text
- Graphics
- Conclusions



Determine a **logical sequence** for your story

- e.g., methods, results, implications, conclusions
- e.g, focus, justification, findings, conclusions

Show the sequence in your headings

3. What are Effective Graphics?



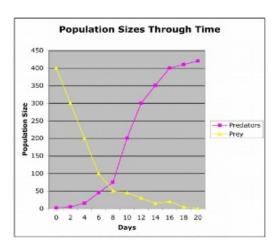
Graphics are the most important part of your poster.

Graphics should be:

- Simple and clean
- Self explanatory
- Require a minimum of supplemental text
- Readable from 6 feet away

Example

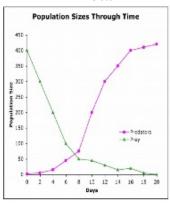
Total Ink > Information Ink

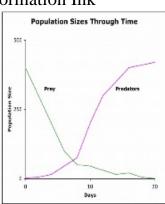


This is straight out of Excel. See anything unnecessary?

Example Improved Again

Total Ink = Information Ink





- **Grid lines:** Your audience is unlikely to care about the exact values at each data point, and the grid lines compete with the data's graphic pattern.
- **Legend:** Why make the reader look back and forth between lines and legend? Just label the lines then eliminate the legend.
- Axes: The labeling between major tick marks is unnecessary.

4. What's Effective Text?

Minimize Text

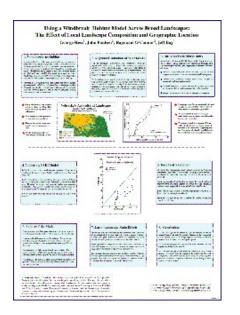
Use Images and Graphics
Instead
Use short conteness

Use short sentences
Use simple words

Avoid jargon, acronyms, and unusual abbreviations.

TOO MUCH TEXT





As with Graphics... Make Total Ink = Information Ink

SIMPLE LANGUAGE IS BEST

Avoid needlessly complex words
Avoid unnecessary words
Use strong verbs and active voice...

Examples of Passive Versus Active Voice

- The voltage was displayed by the oscilloscope.
- The feedthrough was composed of a sapphire optical fiber,
- which was pressed against the pyrotechnic
- that was used to confine the charge.

- The oscilloscope displayed the voltage.
- The feedthrough contained a sapphire optical fiber,
- which pressed against the pyrotechnic
- that contained the charge.



5. What is Effective use of Color?

Use dark letters on a light background

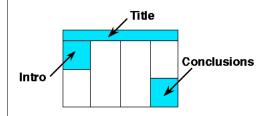
Avoid dark background with light letters...very tiring to read



Stick to a theme of only 2-3 colors, NO MORE!

Overly bright colors attract attention, but are tiring

What's an Effective Layout?





Heed reader gravity

– People naturally read left → right, top → bottom.

A **column format** is easy to read in a crowd.

Use **headings** to direct readers to key sections.

Use white space effectively and balance it with text.

How To Put a Poster Together?



THIRD: do the plan

Consider:

1. Time

Software generated posters can take whole day to print

- 2. Software
- 3. Title and Text
 - 4. Editing
 - 5. Assembly

What's Useful Software?



- Microsoft PowerPoint is a good, relatively easy-to-use tool for creating posters.
- Adobe Illustrator and InDesign are even better, but more complex and expensive.
- Microsoft Excel can create graphics and export them for PowerPoint - but you'll need to clean them up.
- **DeltaGraph** is also a nice tool, but keep your graphs clean.
- Adobe Photoshop is great for manipulating images.

Special Advantage of Software Generated Posters



You can **take a copy** of the poster on your laptop or a disc to out of town meetings.

In an emergency, you can **make a new copy** at a local Printer (e.g., Kinkos).

NOTE: Always save and back-up softward posters.

Title Mechanics

Create a banner:

Title (largest)
Authors (smaller)
Institution(s) (same or smaller still)





Use **Large**, **Boldface type** (36 - 48 point) for titles so they're readable from 15 - 20 feet away (at least 2 inches high)

Left justify or center

Simple, sans-serif font (e.g., Helvetica) for title (and headings)

Title Case or ALL CAPS: Plain text, no **bold**, <u>underline</u>, *italic*, or shadow

Text Mechanics

- Use **large**, **boldface type** (36 48 point) for **Headings**
- Use 24 or 28 point type for accompanying text
- Left justify with ragged right margins (no centering)
- Use a serif font (e.g., Times or Times New Roman)
- Use sentence case and AVOID BLOCKS OF TEXT IN ALL CAPS
- Use **bold**, <u>underline</u>, and *italics* sparingly

Editing

Posters ALWAYS have too much text.

Strive for:

- 20% text
- 40% graphics
- 40% empty space

Best "text" comes from here

Condense and delete ANYTHING you can

- Leave out detailed methods and vast tables of data
- If it doesn't focus on your central question, LEAVE IT OUT!

Finally...

- Always acknowledge other contributors and funding organizations
 - Use small type (14 18 point)
- Always **SAVE** your work and make a **BACKUP**
- Spell-check Spell-check Spell-check
- Get feedback (use 60 checklist)

How To Present a Great Poster?



- 1. Prepare a five minute version of your story and point to graphics but don't read the poster.
- 2. Consider preparing a handout with additional details for people to take away with them.
- 3. Smile.

Checklist

Appearance

- 1. Display attracts viewer's attention.
- 2. Words are easy to read from an appropriate distance (3-5 feet).
- 3. Poster is well organized and easy to follow.
- 4. Graphics and other visuals enhance presentation.
- 5. The poster is neat and appealing to look at.

Content

- 6. Content is clear and easy to understand.
- 7. Purpose (question) is stated clearly.
- 8. It is possible to see why someone might be interested in the results.
- 9. There is enough detail about methods to understand the results.
- 10. The approach taken is appropriate for the problem and technically sound.
- 11. Poster is free of unnecessary detail.
- 12. Conclusions are stated clearly.
- 13. Conclusions are supported by results.

Presentation

 Presenter's response to questions demonstrated knowledge of subject matter and project.

60-Second Poster Evaluation

Overall Appearance

- Cluttered or sloppy appearance. Gives the impression of a solid mass of text and graphics, or pieces are scattered
 and disconnected. Little white space.
- Pleasant to look at. Pleasing use of colors, text, and graphics.
- Very pleasing to look at. Particularly nice colors and graphics.

White Space

- Very little. Gives the impression of a solid mass of text and graphics.
- OK. Sections of the poster are separated from one another.
- Lots. Plenty of room to rest the eyes. Lots of separation.

Text / Graphics Balance

- **Too much text**. The poster gives an overwhelming impression of text only.
- Not enough text. Cannot understand what the graphics are supposed to relate.
- Balanced. Text and graphics are evenly dispersed in the poster. There seems to be enough text to explain the graphics.

Text Size

- Too small to view comfortably from a distance of 1-1.5 meters.
- · Main text OK, but text in figures too small.
- Easy to read from 1-1.5 meters.
- · Very easy to read.

60-Second Poster Evaluation

Organization and Flow

- Cannot figure out how to move through poster.
- Implicit. Headings (Introduction, Methods, etc) or other device implies organization and flow.
- Explicit numbering, column bars, row bars, etc.

Author Identification

- None.
- Partial. Not enough information to contact author without further research. This includes missing zip codes on addresses.
- · Complete. Enough information to contact author by mail, phone, or e-mail without further research.

Research Objective

- · Can't find.
- Present, but not explicit. Buried at end of "Introduction", "Background", etc.
- Explicit. This includes headings of "Objectives", "Aims", "Goals", etc.

Main Points

- Can't find.
- Present, but not obvious. May be imbedded in monolithic blocks of text.
- Explicitly labeled (e.g., "Main Points", "Conclusions", "Results").

Summary

- Absent.
- Present as "Summary" "Results" or "Conclusions"