Creating a Research Poster

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Prepared for the CSI Undergraduate Conference on Research, Scholarship, and Performance

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Topics Covered

- Defining “poster”
- Elements to include
- Design aspects of poster creation
  - Planning
  - Focus
  - Headings, Graphics, Text, and Colors
- Technical aspects of poster creation
  - Layout
  - Editing
  - Software
Posters defined

- Posters are visual tools that allow an author(s) to communicate main findings and conclusions about a project or research.

- You will not just cut and paste a paper and put it on a poster.

- Messages should be clear and succinct.

- Visuals and texts always point to main points and conclusions.
Elements to include

- **Title**: make it descriptive of the takeaway message.
- **Authorship**: includes you and usually your mentor (and maybe others). Give departmental and college affiliations.
- **Introduction**: why is your objective/question/thesis interesting or novel or interesting? Give the audience some context!
- **Objective/question/thesis/hypothesis**: make it is clear and concise.
- **Methods**: If you did an experiment, briefly explain how you did it.
- **Results**: What did you find out? What are your conclusions?
- **Significance**: Describe why the results matter.
- **References**: If you cite others’ work, properly cite references.
- **Acknowledgements**: Include funding support.
- **CSI/CUNY logo** (Verrazano and Macaulay students must also use their official logos)
Design aspects: Planning

- Determine message:
  - If your audience remembers only one idea about your work, what should it be?
  - Craft message around main points and conclusions.
  - Apply the “So what?” test: Evaluate each piece of text or graphic and try to see if it is really necessary to include. Does it pass the “So what?” test? If not, remove it.
  - Establish milestones—deadlines by which you will complete the poster.
Establishing milestones

- Hess, Tosney, & Liegel (2013) recommended “to start with due date and work back to create milestones.” Based on suggestions from these authors, here is a table to help you establish milestones for your poster:

<table>
<thead>
<tr>
<th>When</th>
<th>What</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Poster presentation</td>
</tr>
<tr>
<td>1 week**</td>
<td>Final print</td>
</tr>
<tr>
<td>1 week</td>
<td>Make changes suggested</td>
</tr>
<tr>
<td>1 week</td>
<td>Distribute draft for 2nd review</td>
</tr>
<tr>
<td>2 weeks</td>
<td>Make changes suggested</td>
</tr>
<tr>
<td>2 weeks</td>
<td>Distribute draft for 1st review</td>
</tr>
<tr>
<td>3 weeks</td>
<td>Edit draft</td>
</tr>
<tr>
<td>3 weeks</td>
<td>Create draft</td>
</tr>
<tr>
<td>4 weeks</td>
<td>Create mock poster</td>
</tr>
<tr>
<td>4 weeks</td>
<td>Establish message and main points</td>
</tr>
</tbody>
</table>

** Weeks can be turned into days depending on time constraints
Design aspects: Focus

- Keep it simple.
  - Use simple messages
  - Omit anything that is not essential
  - Edit text carefully avoiding sentence complexity
  - Leave out the nitty gritty details—you can talk about those when you interact with your audience.

Hess, Tosney, & Liegel (2013)
Design aspects: **Headings**, Graphics, Text, and Colors

- Use headings for your title, section titles, and figure captions.
- Use headings to summarize work
  - A reader should be able to understand your main point by just looking at your headings.
Design aspects: Headings, Graphics, Text, and Colors

- Keep graphics simple
  - Use simple, 2-dimensional graphics, such as line graphs, bar graphs, and pie charts
  - Do not use 3-dimensional graphics (unless necessary)
- Use photos that may help to convey the message
- Use spot art (sparingly) to focus audience attention
- Write any explanation directly on figures (legends are hard to read)

(Hess, Tosney, & Liegel, 2013)
Design aspects: Headings, Graphics, Text, and Colors

- Text should be minimal (images and graphics are better)
- Text elements should be fewer than 50 words
- Use phrases rather than full sentences
- Use active voice rather than passive voice
- Left-justify your text
- Use a serif font, such as Times, for your text—it is easy to read (at least 24 point)
- Use a sans-serif font, such as Helvetica, for titles (5 cm high) and heading (at least 36 point)
- Text in figures should also be large
- Avoid all caps

(Hess, Tosney, & Liegel, 2013)
Design aspects: Headings, Graphics, Text, and Colors

- Light color background with dark color letters help with contrast.

- Avoid dark backgrounds with light letters (hard on the eyes).

- Use only 2 or 3 colors to avoid overload.

- Avoid red and green combinations because some audience members are color-blind.

(Hess, Tosney, & Liegel, 2013)
Technical aspects: **Layout**, Editing, and Software

- When considering the layout of your poster, consider:
  - Visual cues to guide readers to the important components of your poster (Experts called this “visual grammar.”)
  - The format of your poster. **Experts suggested the use of a columnar format.**
  - Organizational cues
  - Balance between text and graphics
  - Space: use of white space

Let me show some visual examples provided by Hess, Tosney, & Liegel (2013).
According to Hess, Tosney, & Liegel (2013), a “visual grammar is a graphic hierarchy that helps readers identify the most important parts of your poster.”
According to Hess, Tosney, & Liegel (2013), the use of columns makes it easier to read through the content of your poster.
According to Hess, Tosney, & Liegel (2013), if you use organizational cues such as numbers, letters, or arrows, readers will be able to navigate the poster more easily.
Hess, Tosney, & Liegel (2013) have said “Your poster should have a good visual balance of figures and text, separated by white space. Balance occurs when images and text are reflected (at least approximately) across a central horizontal, vertical, or diagonal axis. This axis is know as the axis of symmetry.”
Technical aspects: Layout, **Editing**, and Software

- Editing your text will help you:
  - fix mistakes and typos
  - eliminate deadwood to focus on relevant information

So...

Edit, edit ...and edit again!

(Hess, Tosney, & Liegel, 2013)
Technical aspects: Layout, Editing, and Software

- Adobe Illustrator and InDesign are good software applications, which offer many features that provide very professional results, but they are very difficult to learn and more expensive.

- PowerPoint is a relatively easy to use tool and is widely available.

- Excel is a spreadsheet application that can be used to create graphics which you can export into PowerPoint.

(Hess, Tosney, & Liegel, 2013)
Instructions on how to use PowerPoint

- Open PowerPoint
- Create a New document with a blank page layout
- Tell PowerPoint how large is the paper for your poster
  - Go to the File/Page Setup menu and enter the width/height you want
  - Per the URC guidelines (Height=36” and Width=48”)
  - PowerPoint should choose Portrait or Landscape automatically
  - Click OK

Special considerations:
- Work on this PowerPoint slide as you would do it on a regular slide
- For all but the largest font sizes zoom in on the section you need to work with
References


http://www.ncsu.edu/project/posters/TheAuthors.html
Note

I’d like to thank Professor Susan Imberman. It was from her “Creating a Great Poster Session” presentation in the Faculty Center that I got the idea of using the authors’ content mentioned throughout this presentation to help prepare for the 2018 URC. F.C.

Thank you!
Submission

- Click here to send an email to UGConference@csi.cuny.edu to confirm that you have read the Creating a Research Poster instructions. Please include your name, email address, and mentor’s name in the email.
- Please send via email your completed poster in both PDF and Powerpoint by April 19, 2018 to UGConference@csi.cuny.edu.