Six Tips for Creating a Scientific Poster

A scientific poster needs to be concise, compelling, organized, legible, and readable. Check out these six tips for creating an effective scientific poster.

1. **Showcase the content of your research**
   Include all the parts of a lab report. Highlight out the essential findings. Check out this link for a refresher on the typical lab report: [http://advice.writing.utoronto.ca/types-of-writing/lab-report/](http://advice.writing.utoronto.ca/types-of-writing/lab-report/)

   **Introduction**
   Include only the need-to-know information to set up the background and context.

   **Methods**
   Describe your experimental set-up and protocol. Consider using a figure or flowchart as a summary piece.

   **Results**
   This is the focus of the poster. Describe the results and analysis. Showcase your figures and charts. Remember to include figure captions to facilitate understanding.

   **Discussion and Conclusion**
   Explain what the results mean in a broader context. Refer back to your results and hypothesis. You can connect your findings to future opportunities for research.

   **References**
   Include citations for any works you have referenced. Use a bibliography and embedded citations. The format should be in your discipline’s typical citation style (e.g., APA, AMA, Nature).

2. **Select a typeface**
   Every typeface has its own personality.

   Remember, you need to communicate your research clearly. Maximize the legibility and readability of your content.

   **Legibility**
   Legibility refers to how easy it is for a reader to recognize a letter or symbol.

   CAPITAL LETTERS and sans-serif typefaces are more legible.

   **Readability**
   Readability refers to how easy it is for a reader to read the text.

   It’s easier to read text written in sentence case. Serif typefaces can help the eyes follow the shape of the words.
Serif: A small line attached to the end of a stroke in a character.

Typefaces with serifs are called “serif typefaces”. These include Times New Roman, Garamond, and Bodoni MT.

Typefaces without serifs are called “sans-serif typefaces”. These include Arial, Century Gothic, and Calibri.

Although serif typefaces generally increase readability, they don’t work for all audiences. For some people, the serifs can blend adjacent characters and make them appear as different characters. For instance, the letters “rn” can look like “m”.

\[
\text{rn} \rightarrow \text{m}
\]

3. Use an appropriate text size
The table below summarizes the recommended text sizes for different parts of a poster.

<table>
<thead>
<tr>
<th>Poster Element</th>
<th>Recommended Text Size (pt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>90-100</td>
</tr>
<tr>
<td>Authors</td>
<td>40-50</td>
</tr>
<tr>
<td>Headings</td>
<td>60-70</td>
</tr>
<tr>
<td>Body</td>
<td>20-40</td>
</tr>
<tr>
<td>Captions</td>
<td>20</td>
</tr>
</tbody>
</table>

The `x-height`: the height of a lowercase x for a typeface.

You can choose the same point size, but different typefaces have different x-heights. The x-height affects readability.

Check this out:
This is Arial, 12 pt.
This is Garamond, 12 pt.
This is Verdana, 12 pt.

4. Make accessible colour choices
You can use Adobe Colour CC to browse and create colour swatches: https://color.adobe.com/create/color-wheel/

Make sure that you use high contrast colours so that your information is accessible to everyone.

Use the WebAIM colour contrast checker for accessibility: https://webaim.org/resources/contrastchecker/
Check out CNIB’s great resources on print accessibility: http://www.cnib.ca/en/services/resources/Clearprint/

5. Choose a poster creation tool
Make your decision based on how well the tool meets your design choices and how easy it is for you to use.

Microsoft PowerPoint
✓ Available to all UTM students through Office 365 and UTM computers
✓ Easier to learn for new users

Canva
✓ Great for infographics and image based posters
✓ Includes templates
  — Freemium: some content is made available through a fee

Adobe Illustrator
✓ Highly professional
  — Available on UTM iMac computers
× High learning curve for new users

6. Use an effective layout
Know your audience and organize your information to meet their needs.

If your poster is in English, keep in mind that readers read from left to right and top to bottom. Creating a layout that matches this will help your readers follow the information.

Three Common Layouts

Looking for more resources on how to create an effective poster?
The UTM and UTSC Libraries offer detailed walk-through guides for scientific posters. Check out these links to get a tutorial on how to use PowerPoint to create a poster and see examples of good and bad posters.

UTM Library Guide: https://guides.library.utoronto.ca/posters
UTSC Library Guide: https://guides.library.utoronto.ca/utsc-posters

Get feedback on a draft of your poster at the RGASC: https://www.utm.utoronto.ca/asc/appointments-undergraduate