

Designing Effective Research Posters Guidelines for Making a STEM Expo Display

Research Posters are widely used in the academic community and at research conferences to share and communicate research findings. An effective research poster summarizes research and results concisely and attractively to help publicize it and generate discussion. A poster is usually a combination of brief text mixed with tables, graphs, and pictures. At the STEM Expo, the researcher stands by the poster display while other participants and judges can come and view the presentation and interact with the author.

Effective Science Research Posters:

- Are engaging, easy to read posters that convey what was researched, how it was done and what was learned in a clear readable format of around 800 words or less.
- Include essential, or important information only. They generally have the same parts as a lab report, but typically do not go into as much detail as a lab report. Consider what is your goal, plan, and analysis.
- Your goal should include your research question, or design problem and a hypothesis or proposed solution.
- Your plan should give the reader a good idea of what was done. Identify variables, explain basic procedures and data collection, and focus on unique processes or actions. Listing the most important steps (more like a recipe) is better than a narrative.
- Results and analysis should include only data relevant to your conclusion. Discussion should focus on what you learned and any interesting findings, noting patterns or surprising results. Tables, graphs, charts, and pictures are very useful to help show data.
- Conclusions should summarize key points.
- Numbered or bulleted lists are easy to read, make use of them.
- Include lab notes or reports on the table to be referenced during discussions if needed.
- Text should be large print and clear. Readable for someone standing 5 - 10 feet away.

It may be helpful for the researcher to answer the following questions about their research:

1. What is the most important/interesting/astounding finding from my research project?
2. How can I visually share my research with STEM Expo attendees and judges? Should I use charts, graphs, photos, images?
3. Can some information be conveyed by talk, demonstration, or lab notes/report to complement my poster?

STEM Expo posters are meant to communicate scientific information in a clear and concise way so that it can be quickly read and understood. They summarize the key points and what was learned. Additional information should be conveyed during an interview or via notebooks or reports.