

Introduction to Research Posters

Presented by
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Presented to
LaSPACE Funded Students
in advance of the 2024 LaSPACE Annual Meeting

Thursday, September 5, 2024, 4:30 pm on Zoom

Introduction to Research Posters

Presentation Overview

Introduce students to the basic principles, objectives, and approaches to creating a research poster.

- Objectives, Benefits, Limitations
- Storyboarding
- Format and Design
- LaSPACE Annual Meeting Student Poster Session



<https://laspace.lsu.edu/laspace-meetings>



[Student Poster Sign-up Document](#)



What is a Research Poster?

Posters are widely used in the research community, and most science & engineering conferences include poster sessions in their program.

- Research posters summarize information or research concisely and attractively to help publicize it and generate discussion
- The poster is usually a mixture of a brief text mixed with tables, graphs, pictures, and other presentation formats
- Posters are typically displayed for an extended period of time with a set timeframe for the author(s) to be available



Poster Sessions enable far more participation in time-limited contexts:

- Large scientific conferences & meetings
- Campus events like research fairs, symposia, senior design reviews, and even course curricula
- Community engagement opportunities and outreach events



Posters & Poster sessions function differently from research papers & formal talks

- Fosters personalized interaction
- Offers a comprehensive representation
- Serves as an excellent format for illustrations & equations
- Functions well as a stand-alone product and as an interactive communication tool
- Works well in-tandem with other communication products



Guiding Principles for a Research Poster

Provides a concise, visual representation of the research

- Quickly orients the audience to the subject and purpose of the poster
- Employs clearly labeled sections & subsections to help the audience navigate the poster
- Limited and explicit text so that the poster can be read & understood quickly amid distractions
- Follows a visual logic, with a hierarchical structure that emphasizes and specifically names the main points
- Sections are relatively self-contained so that a viewer *could* enter the poster at numerous points



Limitations of Research Posters

While posters provide some advantages, there are also challenges specific to this format

- The audience is typically not captive
- Space is limited
- Format and design are complex and cannot be plugged into one size fits all templates
- At a session you contend with noise and other distractions, as well as compete with other presenters
- When hung in a hallway or lab, you are often not there to champion, clarify, or defend your work



Identify sections and layout options

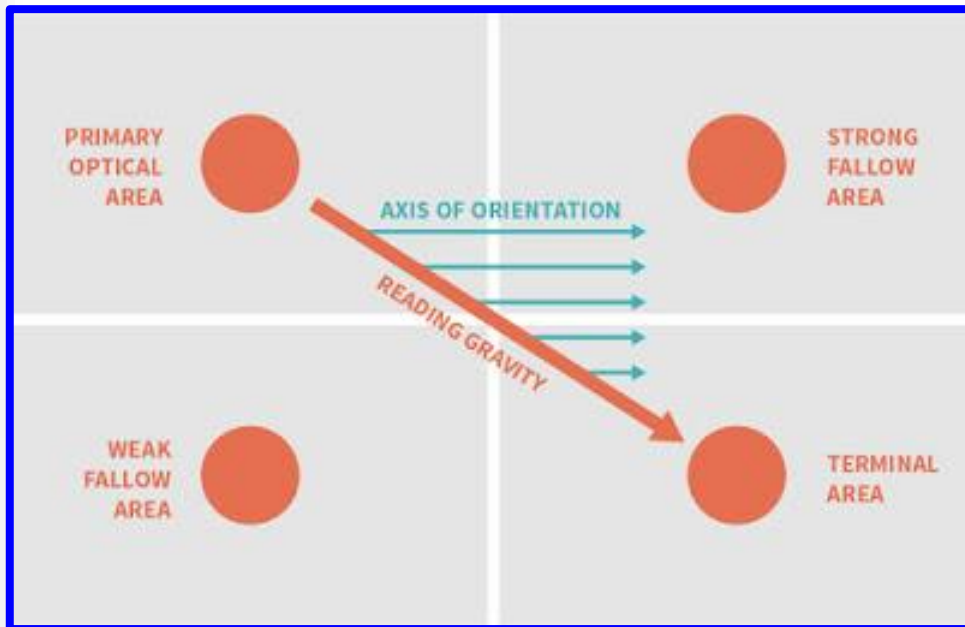
- Know the purpose, the audience, and your role
- Recommended sections; Required content
- Specific instructions for a class or competition
- Example content for a conference

Identify appropriate graphics

- Visual content necessary to share the work (photographs, schematics, designs, etc)
- Information that can best conveyed via visual presentation (charts, graphs, tables, etc)
- Visuals that are crisp, clean, and legible at poster scale



Identify your message and map your story



Design Drivers:

- Logical layout
- Reader gravity
- Balance text & graphics holistically & by section
- Flexible design

This diagram illustrates reader gravity, the typical way a Western Language person approaches a page.

Let your STORY & AUDIENCE guide all choices!

Banner Space

- Project Title: don't use all caps; do use complete thoughts
- All Authors (names & institutions)
- Logos: institutions, funding agencies, partners (some might go in the footer for space)

Common Body Sections

- Abstract / Introduction / Science Background
- Materials & Methods
- Bench Tests / Protocols / Field Work
- Results / Conclusions / Discussions / Future Work
- References & Acknowledgements



Attract an Audience & Orient the Viewer

- Logical & Specific Titles (poster & body sections)
 - Sub-headers, bullets, tables
- State the what (objectives) & the why (context)
- Relevant, Crisp, & Clearly Labeled Graphics
 - Titles, figure numbers, captions, & citations
- Create a reader-gravity conscious layout
- Use of white space, borders, and shading to clearly delineate sections & to reinforce reader-gravity



Visual Design

- Parallel Design for all elements
 - Consistent placement of headers, subheaders, captions, etc
 - Consistent borders around photos, graphs, charts
- Figure numbers for all graphics; always reference figures directly in the text
- Explicit and concise captions (citations as needed)
- Hi-Resolution Images (800 dpi or higher)
- Do not use images or gradient colors for backgrounds
- Color Guidance:
 - Limit your palette to 2 or 3 colors
 - Dark on Light / Light on Dark
 - Complementary to your Graphics & Logos



Text Design

- Parallel Design
- 3-6 Foot Rule = Body Fonts no smaller than ~18 pt
 - Title: ~68 pt
 - Headings: ~44 pt
 - Body: ~28 pt
 - Captions: ~20 pt
 - Citations: ~18 pt
- Small Blocks of Text, clean use of white space
 - Tables and bullets when possible/useful
- Readable in 10 minutes or less
- References to visual representations



PowerPoint Software Recommendation

Why use PPT when there are so many free design platforms out there?

- Available almost universally on all computers
- User-friendly (or at least user familiarity)
- Compatible with Office Suite
- Easy conversion to PDF
- Reviewers/Authors can easily share in editing



Getting Started in PowerPoint

- **First Step: Slide Dimensions!**

- Design → Page Set up → Change the Size
- Typical Poster size: 36" x 48"

- **Boxes, Boxes, Boxes!**

- Insert → Text Boxes
- More text boxes makes it easier to modify the layout later

- **Format Shapes & Backgrounds**

- Right Click → Format Shape or Background
- Fill (background colors & style)
- Line Color (borders)
- Line Style (border thickness)



Preparing for the Poster Session

Common Expectations

- **Print your poster**

- Most campuses have printing services either through the IT Department or Library, some have more options
- Find out what the turn around time and payment requirements are: Sometimes you can pay cash or card; sometimes you need a campus budget code

- **Transport your poster**

- Gently roll your poster and secure with a rubber band and/or put it in a poster tube

- **Hang your poster**

- Follow instructions from the venue host for hanging your poster
- Double check that your poster size and paper type meet venue requirements



LaSPACE Expectations for Poster Presenters

- **Poster & Presenter Guidance**

- Register for the Meeting & Sign up for the Poster Session
- Printer Poster: 36" x 48" on regular-weight plain, matte, semigloss, or glossy
- Arrive at the meeting during one of the designated times (tbd)
- Report to the meeting front desk to check in and receive your poster hanging materials and instructions
- Business casual or casual team attire are most appropriate
- Business formal is fine if that's your comfort zone
- Prepare & memorize a 60 second elevator pitch



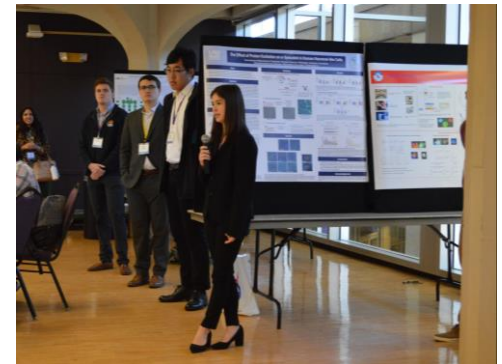
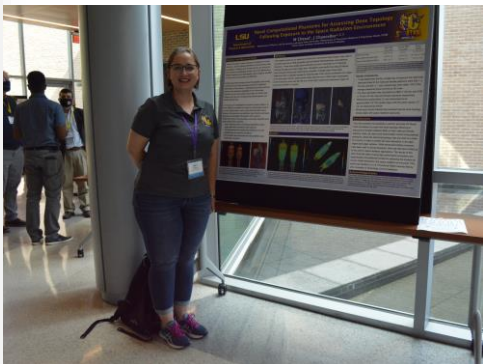
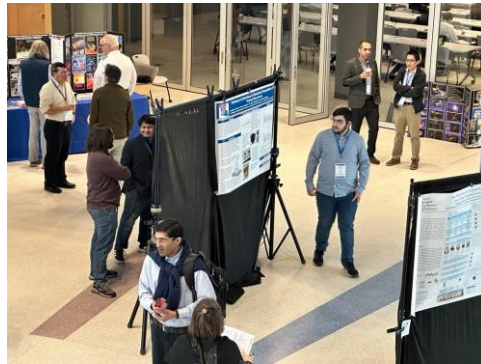
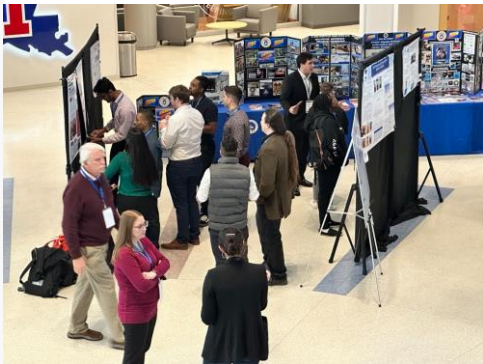
Saturday, October 5th @ Southeastern

- **Logistics**

- Check-in and hang your poster during a designated session
- Attend the morning presentations
- Elevator Pitches ~11 am
- Lunch ~11:30 am
- Poster Session ~12 pm – 2 pm
- Visit some of your peers
- Take posters down/adjourn, ~2 pm
- Every poster needs at least one student presenter



Recent LaSPACE Poster Sessions



Additional (Imperfect) Resources

- **Some more resources on the internet**

- UD Davis Undergraduate Research Center: How to Make an Effective Poster: <https://tinyurl.com/32deyrc5>
- Stanford Undergrad Research & Independent Projects: Make a Good Poster: <https://tinyurl.com/5n794twh>
- The Craft of Scientific Posters:
<https://www.craftofscientificposters.com/>
- PowerPoint Templates: <https://www.posterpresentations.com/free-poster-templates.html>





Thank you! Questions?

