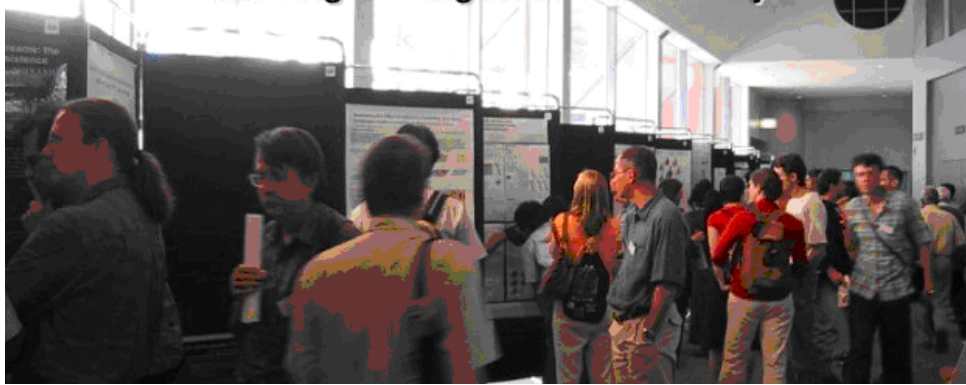


Project 5: *Creating Poster and Participating in Our Very Own Poster Session*

Assigned: Tuesday, April 25

Present Poster in person: Thursday, May 4, 7:15-9:15PM, in the commons area of Claxton Complex

Note: This project is for individuals working alone. No teams on this project.



Example of a poster session (image taken from <http://www.ncsu.edu/project/posters>)

A scientific poster is a large document that communicates your research in a visual manner. Poster sessions are commonly used at conferences, workshops, and symposia, and give you the opportunity to interact with other researchers in discussing your research. During a poster session, you stand by your poster while others study it and ask you questions. You engage in (hopefully) fascinating discussions about your research, network to discover new colleagues, and otherwise gain visibility for all your hard work.

The point of this project is to give you some experience at visually presenting your research in this manner. If you are a graduate student, you will surely some day have to do this “for real” at an actual conference/workshop/symposium. If you are an undergraduate going on to graduate school, the same applies. If you are an undergrad who might work one summer at ORNL, you might end up doing a poster session there with other students (depending on which program you are interning through). If none of the above apply to you, I still think it is helpful to have experience getting your message across in this type of format.

What to Do:

In this project, you will create a poster and present this poster in a “poster session”, to be held during the regularly-scheduled final exam period. This poster should be prepared as if it were a conference presentation poster, according to the guidelines given in the following pages and on the supplied web pages. The subject of your poster must be one of your projects (1-4) from this semester. Your poster should present the objective, methods/experiments, results, conclusions, etc., of that project in a visually appealing manner. If you are so inclined, you may generate new results beyond what you turned in on that project (although this isn’t required), and include them on your poster as well.

The main poster board will be supplied to you in class on Tuesday, April 25, but otherwise you may use any materials you like appropriate for a poster. The provided URLs (later in this document) give lots of examples of what good poster layouts look like. Also, here is a link to a Powerpoint layout that you may use or adapt as you like (or not use at all) to help you in designing your poster:

<http://www.swarthmore.edu/NatSci/cpurrin1/poster-template.ppt>. (This layout is designed for a 36” x 56” poster, but can be adapted as needed.) Because I don’t want you to spend money on this project, you are NOT

ALLOWED to use professional printing services or artists to create seriously fancy, expensive posters. Powerpoint slides, judicious use of color, perhaps some inexpensive art supplies, and so forth, are all that is expected. While such a poster is admittedly primitive in this day and age, I prefer primitive rather than expensive for this class exercise. We all can imagine what your poster would look like if it were professionally printed, so we'll just use our imaginations. The main point is to give you practice communicating your research visually, by creating a layout and design that clearly conveys an interesting message and supports that message with graphics and other visuals. (At the same time, however, your poster should still look professional, not like an elementary school bake sale poster with dried glue everywhere.)

How you will be graded:

The last page of this document gives the evaluation sheet that will be used to grade this poster project. You do not have to do anything with this sheet. It is just provided to you so that you know the kinds of things you'll be graded on. Be sure to read it before you prepare your poster, so that you won't be surprised on what is expected.

At the appointed time for the poster session (i.e., May 4 at 7:15PM), you should arrive promptly in the Claxton commons area to set up your poster. Easels and tables will be provided for you to use to display your poster. Where specifically you set up will just be first-come-first-served. Then, once we've gotten organized (probably around 7:30PM), we'll begin our poster session. Different subgroups of students will take turns looking at other student posters and talking to each other about the research. Then we'll rotate. At least when the instructor happens to come by your poster, you will be partially graded on your short (1-3 minutes) description of your poster. This little speech is just a brief recap of what your poster shows. For this exercise, you should speak about your poster as if your audience knows nothing about your project – just like at a conference (although you can assume you would be speaking to a technically knowledgeable audience). The instructor and the TA will grade everyone's poster during the session, using the provided evaluation form.

If you are so inclined, you are welcome to invite anyone you like to join us. Typical poster sessions have lots of people milling about, with lots of parallel conversations going on, so visitors can easily blend in. If the stars are properly aligned, I may even bring refreshments ☺.

Once we're done, please take your poster with you. Maybe you want to hang it on your dorm/apartment/house wall, prominently displayed so all that enter will be amazed at your intellect and artistic skills. Maybe you can sell it on e-bay. Maybe your Mom (or Dad) would like it, so that they can brag about their Einstein offspring. Maybe your kids (if you have them) can take it to school for show and tell. In any case, the bottom line is that I don't need/want your poster after the session is over, so please take it with you.

How to Prepare a Poster

(borrowed largely from Society of Industrial and Applied Mathematics (SIAM) web site:

<http://www.siam.org/siamnews/general/poster.htm>, by Sven Hammarling and Nicholas Higham)

What is a Poster?

Poster sessions are an increasingly important part of scientific conferences. A poster is very different from a paper or a talk, and so different techniques need to be used in its preparation. In particular, a poster is not a conference (or project) paper, and simply pinning a paper to a poster board usually makes a very poor poster. A conference poster board is typically 4 feet high and 6 feet wide (our project posters will be smaller), but the reverse orientation (tall and thin) is also seen. A poster itself is a visual presentation comprising whatever the contributor wishes to display on the poster board.

The purpose of a poster is to outline a piece of work in a form that is easily assimilated and stimulates interest and discussion. The ultimate aim is a fruitful exchange of ideas between the presenter and the people reading the poster.

A Poster Tells a Story

In preparing a poster, simplicity is the key. A typical reader may spend only a few minutes looking at the poster, so there should be a minimum of clutter and a maximum of pithy, informative statements and attractive, enlightening graphics. A poster should tell a story. As always in a scientific presentation, the broad outline includes a statement of the problem, a description of the method of attack, a presentation of results, and then a summary of the work. But within that format, there is much scope for ingenuity. A question-and-answer format, for example, may be appropriate for part of the poster.

A poster should not contain a lot of details—the presenter can always communicate the fine points to interested participants. Keep in mind that the poster will be one of many in the exhibition area: You need to make sure that it will capture and hold the reader's attention.

The poster should begin with a definition of the problem, together with a concise statement of the motivation for the work. It is not necessary to write in complete sentences; sentence fragments may be easier to comprehend. Bulleted lists are effective. An alternative is to break the text into chunks—small units that are not necessarily paragraphs in the usual sense. For presenting results, graphs and figures—easier to scan than columns of data in a table—are even more appropriate than in a paper. Legends should be minimal. A brief description of the implications of a graphic, placed just above or below it, is helpful. Conclusions, again, should be brief, and they should leave the reader with a clear message to take away.

Designing Your Poster

Suggestions on the physical design of a poster range from the obvious to the not so obvious. First, as we mentioned earlier, it is definitely unacceptable to post a copy of a paper! An effective poster uses a different, visual grammar. It shows, not tells. It expresses your points in graphical terms. It avoids visual chaos, with many jagged edges or various-sized boards that distract the viewer. Instead, it guides the viewer by using a visual logic, with a hierarchical structure that emphasizes the main points. It displays the essential content – the messages – in the title, main headings and graphics. It indicates the relative importance of elements graphically: each main point is stated in large type-face headings; details are subordinated visually, using smaller type-face. The main headings explain the points, rather than merely stating “results” and letting the viewer hunt for – or even worse, invent – the message.

The typeface chosen for the text in your poster should be considerably larger than standard. All elements, even the figure legends, should be visible from 3-5 feet away. If it is not convenient to print directly at the desired typesize, pages can be magnified on a photocopier. Good use can be made of color, both to provide a more interesting image and for color coding of the text. A colored backing card for each sheet can be effective. For added interest, try including an appropriate cartoon, photograph, or quotation. There is plenty of scope for creativity.

The ordering of the content typically follows one of two primary layouts: horizontal (reading across the rows) and vertical (reading down the columns). While the horizontal ordering is perhaps more natural, it has the major

disadvantage of requiring the reader to move to and fro along the poster; if there are many readers, congestion can result. A vertical ordering is therefore preferable, although other possibilities should be considered as well. If you are comparing three methods, for example, you could display them in parallel form, in three rows or columns, perhaps as a “display within a display.” Consider the possibility of arranging the poster to represent some feature of the problem. If there is any doubt about the order in which the sheets should be read, guide the reader by numbering the sheets clearly or linking them with arrows. Think carefully about the use of the poster board.

During the Poster Session

Once the poster session starts, you should stand near the poster but not in a position that obscures it from view. Be prepared to answer the questions that a good poster will inevitably generate. But keep in mind the advice of one expert: “A presenting author at a poster session should behave like a waiter in a first-class restaurant, who is there when needed but does not aggravate the guests by interrupting conversation every ten minutes to inquire whether they are enjoying the food”.

Summary:

Here’s a link to lots of resources on making a good poster: http://www.hbv2003.slu.edu/poster_links.html

Here’s a link on how to prepare visually appealing (i.e., simple and clean) graphics:
<http://www.ncsu.edu/project/posters/GoodGraphs/>

Here’s a link that gives you several visual examples of what TO do and what NOT to do in making your poster:
<http://www.biology.lsa.umich.edu/research/labs/ktosney/file/PostersHome.html>.

Here’s the link to the Powerpoint layout that you may find helpful in designing your poster (designed for a 36” x 56” poster, but you can modify it in any way you like, or not use it at all):
<http://www.swarthmore.edu/NatSci/cpurri1/postertemplate.ppt>.

The major points relevant to this project are:

- Use visual grammar – that is, SHOW, don’t TELL. Graphics should be simple, and should dominate the poster visually
- Identify important information in large type.
- Emphasize the message, not the section of the paper (e.g., rather than just say “RESULTS”, also state the message of your results)
- Emphasize important material visually
- Avoid visual distraction (i.e., create a visually pleasing layout)
- Make text readable
- Differentiate data, summaries, and conclusions
- Keep it simple
- Practice giving a 1-3 minute talk that gets your message over effectively and efficiently.

**Evaluation Sheet for CS494/CS594
Project #5 Poster**

May 4, 2006

Content	5 is “strongly agree”
Content is clear and easy to understand.	1 2 3 4 5
Poster clearly defines sections with labels (e.g., objective, methods, results, conclusions, etc.)	1 2 3 4 5
Poster conveys a clear message.	1 2 3 4 5
The purpose of learning is stated clearly.	1 2 3 4 5
There is a clear flow of ideas from one section to the next.	
It is easy to understand why someone might be interested in the results.	1 2 3 4 5
There is sufficient detail about the methods to understand the learning approach and results.	1 2 3 4 5
Poster is free of unnecessary detail.	1 2 3 4 5
Conclusions are stated clearly.	1 2 3 4 5
Conclusions are supported by results shown.	1 2 3 4 5
Presentation	
Student’s response to questions demonstrates knowledge of subject matter.	1 2 3 4 5
Student is professional in presenting poster.	1 2 3 4 5
Student was on time in getting poster set up.	1 2 3 4 5
Appearance	
Poster attracts viewer’s attention.	1 2 3 4 5
Words are easy to read from 3-5 feet away.	1 2 3 4 5
Poster is well organized and easy to follow.	1 2 3 4 5
Graphics and other visuals enhance presentation.	1 2 3 4 5
The poster is neat and appealing to look at.	1 2 3 4 5

Overall Evaluation: _____

Additional Comments: