Chapter 15

Poster presentation

15.1 Goals—informal poster presentation, library work

This assignment has several goals:

- To require students to learn to use the reference resources available to them. These resources will be discussed in detail in a guest lecture by a reference librarian.
- To teach you how to present material in a concise way, in a format becoming more popular for scientific presentations.
- To practice creation of visual aids.
- To get you started on your final project, deciding what are the most important aspects of it.

Posters are an informal means of presenting scientific and engineering results at conferences, where there is not enough time for everyone with interesting new results to present a full paper. For example, at ISMB 2000, there were about 40 oral presentations and 300 posters, and the number of posters has increased each year since, while the number of oral presentations has remained roughly constant.

There are also student poster competitions, run by AT&T and by ACM. (See http://www.research.att.com/academic/researchday/ and http://www1.acm.org/spost/call.html for more details.)

The purpose of a poster is to catch the eye of someone walking by, provide them with some information about your results, and leave them convinced that your work would be worth knowing about. It is standard at conferences to schedule a time for people to stand next to their posters for a couple of hours, to answer questions people might have. However, you cannot rely on this mechanism for any important information, as not everyone who sees the poster will have time to stop for an extended chat.

15.2 Textbook resources

There are no chapters in Huckin and Olsen specifically on poster presentation, but chapters 8 and 9 on visual aids are the most relevant.

15.3 Audience Assessment—fellow students

Audience assessment is not the main stress in this assignment. Your audience is other people like you—people who knew as much (or as little) as you, before you did this assignment. The more similar the audience is to you, the easier it is to write for—just think about what you would want to know.

The main principle to keep in mind here is always to assume that your audience can be counted on to know rather less than you think they ought to or wish they did.

Warning: in many cultures it is polite to pretend that your reader is highly intelligent, and you flatter them by giving them material that is difficult to understand. This is not true of American technical writing. Here, you
flatter people by taking the time to explain something in such a way that they can understand it. Watch out for unconscious cultural effects on your writing.

15.4 Preliminary Draft

I find it useful to prepare scaled versions of the poster that fit on a single 8.5”-by-11” piece of paper (about 1/4 scale). If text or graphics are unreadable at this scale, then they probably won’t work on the final poster.

Be sure that the essential information (title, author, affiliation [UCSC], source for additional information, . . . ) is prominently displayed.

Note that poster arrangements are two-dimensional, unlike the serial ordering of a paper. If there is a preferred serial order, then the natural flow for the poster is from the upper left corner, to the lower right, in much the same order as you would read text. (Note; languages with different writing schemes have different natural viewing orders—you may want to prepare a poster differently for an audience that primarily reads and writes Hebrew, Arabic, or Chinese, for example).

Check that the natural left-to-right, top-to-bottom scan will get the information in the order you want. Look for unbalanced graphics or text-heavy blocks.

15.4.1 Choosing the graphic elements

Since the purpose of the poster is to attract the attention of a busy conference attendee, it helps enormously to use color and graphics. If the graphics appear to be content-free, however, they will work against the final goal of getting the conference attendee to think that your research is worth knowing more about.

Generally the most effective graphics are graphs of the results of an experiment, but other forms of graphics can also work well (think of the pictures used for explaining quicksort, for example).

The graphics must have a clear, immediate connection to the point you are trying to make. If you want to show that method A is better than method B, for example, both methods should appear on the same graph, with clearly labeled axes, with a good separation between the plotted lines. People will look first at the graphical elements, before reading any of the text—the graphs must be comprehensible without wading through the entire text.

15.4.2 Preparing the poster

Before you prepare your poster, wander around Baskin Engineering and Sinsheimer Labs, looking at the research posters on the walls. Pick out some posters that work particularly well at attracting your attention and conveying information to you. Try to figure out what makes them work so well. Pick out some posters that seem to fail miserably—what went wrong with them? It may just be that you are outside the target audience, but there could be presentation errors that you could avoid in your own posters.

1. Poster size.

The size for posters varies a lot, depending on the space available at the conference. Generally, there are 12-32 square feet of space available. The height of posters is usually limited to 4 feet (approx 120 cm), and the width varies from 3 to 8 feet (90 to 240 cm).

For this class, make your posters no larger than 4’ high by 6’ wide, and no smaller than 3’ high by 3’ wide.

2. Poster materials.

A poster is made of paper, cardboard, or foam core. Although some posters are printed on 3’ wide paper on expensive color printers, many are constructed out of multiple 8.5” by 11” pieces of paper. The one-piece posters have the advantage of being easy to transport and put up (if they can be rolled up and put into poster tubes), but the multiple-page posters are easier to modify and cheaper to produce.

If you are limited to black-and-white printing, then using colored backdrops and (occasionally) colored paper can give a little more visual interest to your presentation.

If you do a multiple page poster, you can either pre-assemble the poster onto a piece of poster board, or attempt to assemble the poster on-site. On-site assembly allows for easier transport, but takes a long time to set up,
particularly since you don’t generally know in advance what sort of wall or display panel you will be attaching the poster to.

3. Type size.

The title and authors of a poster must be readable from some distance away, so should use letters at least 1/2” high (48-54 point fonts). The main body text can be smaller, 36-48 point fonts, with fine print (such as citations or figure labeling) as small as 18 points.

4. Text density.

There are many different styles of posters, from ones that are just a standard research paper stuck on the wall (very heavy on text, with no visual appeal) to advertisements that have no useful information.

The best posters have just enough text to get across the main points—usually around 200-500 words—together with pictures that make the main points even more quickly.

Some sections can be presented in outline format (not necessarily full sentences) to save space, as long as the ideas are completely clear to the reader.

15.5 Final draft

Make sure that your final draft is free of spelling, grammar, and punctuation errors. Nothing destroys people’s confidence in writing more than trivial errors.

On the poster day you will be expected to put up your poster at the very beginning of class, and answer questions about it during the class, you will also be expected to look at the other students’ posters and ask them questions.