

Skill Workshop # 4: Poster Making

Speaker: Mrs. Andrea Burrows, Grant Coordinator, College of Engineering, University of Cincinnati

Date: July 7 & 20, 2009 (Session 1 & Session 2)

Time: 8:00 to 12:00 a.m. (4 hours) on July 7 & 10:00 to 12:00 a.m. (2 hours) on July 20

Prepared by

Mr. Brad Hunt, Norwood High School, Norwood, OH

Ms. Kate Kulesa, Pre-service teacher, Xavier University, Cincinnati, OH

This two session workshop was given by Ms. Andrea Burrows, Grant Coordinator, NSF Graduate K-12 Fellows Grant STEP (Science and Technology Enhancement Project), College of Engineering, University of Cincinnati on July 7 from 8:00 a.m. to noon (4 hours) and on July 20 from 10:00 a.m. to noon (2 hours). A gap of two weeks was given between the two sessions in order to give some time for the participants to develop a sample poster for their research to discuss at the second session. Ms. Burrows is a doctoral degree student in the College of Education, Criminal Justice, and Human Services (CECH), University of Cincinnati. She returned to do her doctoral degree after serving as a 6-12 science teacher for twelve years and a college adjunct instructor for one year.

This workshop was a combined workshop with participants from both RET and REU. The topics of discussion included the types of posters the participants will be making and presenting, UC branding, font size, general guidelines for poster making, references and acknowledgements, scanning procedures for putting the poster together, how to print the poster, and how to present it. Ms. Burrows also reviewed the brief discussion that Dr. Millard's presented during Workshop #1: "Communicating Science Effectively." In this brief review, a website was presented (<http://www.med.uc.edu/graded/posterprinting/>) that has different poster templates for use in poster making. These templates can be sized to fit the posters to be developed by the participants. Photographs taken during the workshop are presented below.



Participants During the Poster Workshop

The first topic of discussion was types of posters. The RET participants are required to make a "Lesson Plan Poster" in which they will include what they have been working on throughout this program. The RET participants will have a generalized poster including the project's abstract, their goals and objectives, standards, ACS, misconceptions, activity/activities, background knowledge, conclusion, modifications, references and acknowledgements. The REU participants will be required to make a more technical poster presentation that includes their project's abstract, an introduction, the research methods, the experimental procedure, results, conclusion, references and acknowledgements.

To properly represent the University of Cincinnati in the poster, a website (<http://www.uc.edu/ucomm/branding/>) was given that includes guidelines for representing UC and various templates that can be used in poster presentations. This website includes UC logos and graphics, templates for Word and PowerPoint, templates for the Web, and Web Policies. There are several reasons for using these templates, which include building long-term brand equity, increasing awareness of UC's quality, enhancing credibility, celebrating diversity, generating powerful value perception, and to ensure continued growth of the University of Cincinnati.

When making posters, it is extremely important to find a way to grab the attention of the audience and passer-bys. One way to draw attention of passer-bys is to make the font big enough for them to read. Passer-bys should be able to read the body of the poster from five feet away. By having a font size that they can see from a distance, they can decide whether they are interested enough to approach the poster presenter and look over the poster, ask questions, etc. The title of the project should be the biggest and should be something that sounds interesting. The font of the text of the body of the poster should not be any smaller than twenty-four size font. Text that is smaller than this will result in loss of interest of the audience. The only text that is allowed to be smaller than twenty-four size font is the reference section of the poster. The largest font size in the "Okay" range for poster making is fifty-four size font.

As previously stated, a strong title is necessary to grab passer-bys' attention. The title must be crisp, clean, and catching. It should not be too technical, as that could risk loss of interest. Along with the easy-to-read title, the participants' names, the name of the participants' institution where the research was performed and others involved in the research should be included as subheadings to the title. Contrary to thought, the conclusions should be stated at the beginning of the poster followed by supportive text in later segments of the body of the poster with a brief summary at the end. Remember to not include too much text in the poster body, as this will also result in loss of interest of the audience. Since no one likes to read a lot of text on a poster, it is always necessary to include enough pictures and graphs in the body of the poster (along with some text to describe these pictures and graphs) that will keep the audience interested and inform them of the necessary information of your project at the same time. The pictures and graphs should be spread evenly throughout the poster display to move the eye of the audience through the different sections of the poster.

It is important to keep the poster simple. The background should not be distracting; solid colors and picture graphics should be avoided. It is common to use white as the background, as this is not distracting and will allow the audience to focus on the details of the poster. The frame around the poster should be about a half-inch. There should also be open space left in the body of the poster, as this will allow it to look more ordered and organized. The graphs and pictures should be of varying sizes, as this is more interesting to the audience. These graphs and pictures should be bold and simple. The pictures should be large enough for the audience to see and should be self-explanatory with a small amount of text that describes each graph and each picture. Along with avoiding lengthy paragraphs, jargon should also be avoided as this could cause confusion to the audience. Instead, technical names for equipment, processes, etc. should be used in the poster.

To avoid plagiarism, referencing and acknowledgements are very important. All sources of information that appear on the poster should be cited as references. Everyone that is involved in the research project should also be cited as acknowledgements. It is better to be generous when citing references and acknowledgements than to forget to include someone in the reference section.

In general, audience members will stay interested in the poster for an average of three to five minutes. Therefore, the poster should be very simple and easily understood. When presenting the poster, the project participants must stand to the side of the poster to allow the audience to view the contents of the poster presentation. During the poster presentation, project participants must engage in conversation with the passer-bys, as well as the already interested audience to keep more people interested.

The seminar on the July 20th was like a peer review session of the posters prepared by the participants. Before this seminar the participants had to come up with a rough draft of their poster. At the beginning of the seminar each group was given a sheet of paper that had the following titles on it:

- What I like
- What I don't like
- What I Question

So this was the criteria for judging the posters. Most of it was based on people's opinions and the feedback received helped the participants understand better what their poster appears to other people. After this activity Ms. Andrea Burrows refreshed the topics covered in the first part of this seminar. The participants then had to go through the comments given by the various participants and make changes based on other people's opinion of their poster. The following were some of the things that some groups considered to make changes in their poster:

- Decided to change our title since it was too long
- Decided to add more text to better explain the pictures and graphs
- Questioned if the colors chosen for the layout were appropriate.

After the poster seminar the participants made some of the changes right away and the rest was under discussion among the group members.