A poster presentation is a relatively informal way of presenting technical data. You see it quite a bit in science, and it's often used to present a work-in-progress.

Even though it's relatively informal, it still requires planning and preparation in order to be effective.

The information presented in these slides was condensed from a seminar given to the 1998 NASA Academy students by Goddard Toastmasters member Jean Ryan. This is sort of the Cliff Notes version of that seminar and was first presented to the 1999 NASA Academy Class at GSFC.
This presentation will cover 2 main topics: How your poster will be evaluated and what design considerations should used, and how to best present your poster.
Poster Requirements

- Problem/Objective
- Background
- Procedure/Approach/Equipment
- PI’s solution and its Innovation
- Personal Contribution
- Technological Importance

For NASA Academy students, the poster will be evaluated based on a number of requirements. Posters should state the problem, or objective of the research, give the background of the problem and research, describe the procedure used and discuss the particular solution investigated.

It’s also important to indicate what work you, as the student, performed, in order to show the skills and knowledge you’ve added to the project.

Finally, since most of these projects are intended to be new technologies, it’s important to discuss the significance of the research, and how it will benefit, not only the project, but also GSFC, NASA, and beyond.
Judging Criteria

- Presentation
  - Layout, creativity, originality
- Knowledge
  - Science, engineering and/or technology involved
- Goals
  - Clearly stated w/focus on student contribution

Judging of the posters is broken into three categories: Presentation, Knowledge, and Goals.

Presentation is the visual impact of your presentation. How creative is it? Is the poster easy to read and understand?

Knowledge looks at the actual science and engineering involved in the research. How much have you learned and how well can you convey that?

Goals should be clearly and concisely stated. This is where the particular emphasis is on the student’s contribution to the project.
Now let’s talk about some points to take into consideration when designing your poster in order to most effectively and dramatically convey your information.

The four areas we’ll discuss are use of color, text, the layout of the poster, and your audience.
Poster Colors

Use colors to attract and contrast

- Warm: Red, yellow, orange, etc.
  - Advancing, accenting, highlight colors
- Cool: Violet, blue, green, etc.
  - Receding, background colors
- Opposite colors contrast well
  - Blue-Orange, Yellow-Red
- Don’t get carried away...

Your choice and use of colors can dramatically effect the visual impact of your poster. Colors can be used to attract or redirect attention.

Warm colors, such as reds, and yellows are advancing, or accenting colors. These are best for highlight colors, but can be too distracting in large areas.

Cool colors, such as blues and greens are better background colors and work well for large areas.

Colors that are opposites on the color wheel can be used effectively to contrast each other and add extra emphasis.

Finally, when considering your colors, don’t get carried away and use too many, or too distracting colors. Remember, you want to highlight and attract attention, not hurt people’s eyes.
Effective use of font sizes and characteristics is critical in order to make your poster easily readable. The font you use should be readable from at least 4 feet away.

You can use bolding, shading, etc, to add emphasis and to highlight portions of your poster. Don’t get too carried away with the use of different font sizes and characteristics. If you use too many different styles your poster may start to look like a ransom note.

Always remember, that the goal is to draw attention, not distract. Everything you do should help to make your poster easier to read.
How you layout the information on your poster is almost as important as the information itself. You want a poster that is easy to follow; one that flows well. You should arrange your information in a well organized manner. You might want to number your main blocks of information in order to help the reader follow your data.

Try to organize the data so that it’s easy for the eye to follow. Make a nice, flowing path for the reader. You might want to arrange things in columns, or a circle.

Use large areas of board for the major focus of the project, and use small sections for highlights.

The overall goal is to provide a simple roadmap for the reader to follow.
Since you have a limited space to present your information, it’s very important to narrow the focus of your presentation. Decide what main point you want to emphasize, and stick with that. The most difficult part is weeding out extraneous information and distilling your presentation down so that you only present the information you need to tell your story.

Keep in mind that, even though you’ll have a full poster panel to work with, parts of that area will not be usable. You want to keep everything relatively close to eye level, which means that the bottom 3rd or so of the board should probably be left blank. You want your reader to be able to comfortably follow your board without having to do deep knee bends in order to read everything.
Maybe this section should have been first. In any presentation, you need to consider your audience before you start putting things together. You want your poster to be attractive as well as informative. That means that it should be easy to read at 4-5 feet and also be attractive at 15-25 feet. You want passersby to be drawn to your presentation.

The composition of your audience will also dictate the way that you present your information. You need to strike a balance between the more and less knowledgeable of your audience and present your information so that it’s useful to these different knowledge levels.
This means that you want to remember the basics of the information you present so that you don’t alienate members of your audience while still presenting enough detail to keep the more knowledgeable interested.

You want your information to flow from more general information to the details. Like in a newspaper story, your reader should be able to grasp the general gist of story in the opening paragraph and get the details further down.

Keep your message clear. This goes back to keeping your focus narrow enough and explaining it concisely. Try to minimize jargon and acronyms, and if you do use acronyms, be sure to spell them out.
Presentation Skills

- Body Position
  - Face the Audience
  - Relax (smile)
  - Gestures
  - Don’t...
    - click pens
    - jingle coins
    - sway

Now that you have a brilliant, insightful and well organize poster, you still have to talk about it. The skills for presenting a poster are pretty much the same as presenting any speech. You want to be sure to face the audience. Try to resist the temptation to talk to the poster with your back to the audience. It’s a bit rude, and the poster doesn’t really care what you have to say.

Try to relax. It may seem easier to say than do, but try to smile. That not only relaxes your audience, but also relaxes you. Remember, your audience really does want you to succeed. They aren’t there to see if you mess up.

Consider using gestures to help you emphasize points in your presentation. They should be natural, though. You don’t want to look like you’re trying to land a 747.

Finally, there is a long list of things to avoid. Don’t click pens, jingle coins in your pocket, or sway. These are all manifestations of nerves. With practice you should be able to focus that nervous energy into enthusiasm.
Presentation Skills (Cont.)

- Responses to Questions
  - Succinct
  - Organized
  - Answer the Question
  - Eye Contact
  - Voice
  - Remember the Audience

You won’t be giving formal, prepared speeches during a poster session. Generally you will only be asked to respond to questions. In answering questions you want to be succinct (but more verbose than just “yup” or “nope”).

Your responses should be well organized. Consider them to be mini speeches with an introduction, body and conclusion. Your intro may be just a sentence or two with a paragraph for the body and another sentence for the conclusion. If you think of it this way, you’re forced to think a bit more before answering, and are less likely to ramble on and on and on…

Also, be sure to actually answer the question that was asked. Don’t try to BS your way around it. Remember, there’s nothing wrong with saying “I don’t know.”

Try to keep eye contact with your audience, and respond with a clear voice. Avoid mumbling responses to your shoes. Once again, your shoes won’t be able to hear you, and probably don’t care what you have to say. Your audience should be your focus.
Summary

- Use Colors and Fonts Effectively
- Keep Your Information Focused
- Use Logical and Flowing Layout
- Consider Your Audience
- Relax

In conclusion, remember to use color and fonts to attract but not distract, keep your information focused and logically displayed, and always keep your audience in mind. And most of all, relax and enjoy yourself. It’s not often that you get a chance to interact with a group of people that want to hear you brag about what you’ve done.