Presentations & Visualization of Data - Part One

It is important that you understand that there are different ways to deliver your message. These are in a talk, in a written paper, or in a poster that you present at a conference.

In a talk, the presenter is active, you are in control. The audience is passive. It is a one-way communication. In a paper, once you have written and submitted your paper, you have no control over how the audience handles your paper and how they access the information. The reader is active and in control here. It is a one-way communication. A poster, however, is different. In this scenario, the presenter is active and the recipient is also active. It's a two-way communication, making this a special way to deliver your message.

Here is a brief of checklist of what makes a good poster:

- First, your title should be short and draw interest.
- Your poster should include acknowledgements, including your name and institutional affiliation.
- It should have a consistent and clean layout.
- The most important information should be clearly and easily readable from about 10 feet away.
- The text must be clear and to the point with a word count of about 300 to 800 words.
- Use bullets, numbering, and headlines to make it easy to read.
- And finally, use graphics, colour and font effectively.

Which software to use:

There are different softwares that people typically use to make a poster.

- PowerPoint is a very popular and easy to use and easy to share option in the Microsoft package.
- Adobe programs such as Illustrator and Photoshop are feature rich professional software programs that are very good for posters, or if you have high resolution images. There are so many functions in these programs, you will probably need some training on how to use them. They're also more expensive.
- OpenOffice is very similar to the Microsoft Office suite.
- Inkscape and GIMP are great alternatives to the Adobe products.
- And if you need to make charts and diagrams, try Gliffy and Lovely Charts.

General poster layout

A good general layout may look like this. It is important that your poster is well-organized and that people can access the information easily, and also from far away. You start with your title. You have the names of all of the authors and their affiliations are very important. In this design particular, we have columns and rows and different boxes for the different topics, such as the

summary, background, your methods, results. As an example, membranes, your conclusions, your references, and your acknowledgements. You are welcome to change the size of these boxes and the order of these boxes, but this is a very clean and accessible template for you to start with for your poster.

Here are some examples of what makes a bad poster. The reasons this is not a good poster is because there is no clear layout. The information is not well structured with way too much text. There is also no effective use of graphics, colour, or fonts.

There's a lot going on in this poster and it feels slightly confusing. First, there are names, but it's not clear who is affiliated to the work or institution. The poster does not use bullets, numbering or headlines to structure the information. And the use of colours and fonts do not help communicate the information in an effective or accessible fashion.

This layout design and graphics on the poster look very nice. However, when you look at it, there's too much written information. So it is not really targeted to a poster presentation, it's more like a report. It's also not very well-organized. There are no sections to divide the information between introduction, methods, results and discussion, which makes it harder to access the different sections easily.

The layout of this poster appears better at first glance, but when you look closer, you realize that first of all, there's no acknowledgements. Second, the poster is not divided into the standard sections. There's only an introduction. But then it's not clear what the other areas correspond to. The text is short and in bullet points, so that's a good thing. But the font size is way too small and the text is in gray with very little contrast, making it very difficult to read, in particular from further away. Lastly, even if there is some design to the layout, it can still be confusing to access the important information easily and quickly.

What makes a good poster?

This poster follows the general layout suggestion. You start with the title, authors and affiliations, using distinct boxes for the different sections, including summary, background, methods, results, membranes, conclusions, and references. The text is easily readable and accessible with a very consistent and clean layout visible from further away. This poster also follows the general layout suggestion. It is clearly structured, using boxes for the different sections, which makes it very easy to access the information.

There is a lot of text on the poster, but it is properly organized using bullet points, numbering and headlines, which make it very easy to read and not overwhelming.

This is an example of a portrait style poster. You can see again, the use of the title, authors and affiliations, the use of boxes, with clear titles for each section.

This poster uses graphics, colour and fonts effectively, with the important information clearly readable even from further away.

Let's go back to the checklist for what makes a good poster. Can you identify the different elements that make this a good poster? If you want to assess the quality of your poster yourself, you can use the following checklist.

• Is your poster attracting your target audience?
• Is the title of the poster concise and in a larger font than the rest? Does it stand out?

- Does the title bar include the presenters' names and identify the institution or school?
- Is the poster's subject matter quickly discernible?
- And is the poster layout visually pleasing?
- Secondly, delivering the message.
- If you stopped to look at this poster, would you read the text on it?
- Is the subject matter presented clearly and concisely?
- Does the information presented flow logically?
- Is the text readable in terms of linguistic difficulty or scientific language?
- Is the text legible in terms of font choice, size, colour, and spacing.
- Have you properly referenced and cited images from the internet?
- And lastly, are you creating visual impact?
- Are the graphics large enough to be seen from a distance?
- Are the key points in bullets? Are the graphics attractive and relevant?
- Have legends or captions been used to guide the viewer?
- Are the sections clearly defined with adequate space around them?
- Have all the items been aligned?
- And do you have a concise summary and/or conclusions?