



Poster Presentation of Research Work

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Preamble

Right, you are to present your research work as posters. What do you do? Panic? What the hell are posters? Surely you have posters of the **Spice Girls** or **Take That** (depending on your inclination of course)!. No, those are not the kind of posters we are referring to although the purpose is similar. We are concerned with the use of posters to present technical information, not images.

A poster is simply a static, visual medium (usually of the paper and board variety) that you use to communicate ideas and messages. The difference between **poster** and **oral** presentations is that you should let your poster do most of the 'talking'; that is, the material presented should convey the essence of your message. However, that does not mean that you can disappear to the pub or where ever you fancy. You have to 'stand-by-your-poster'! Your task as the presenter is to answer questions and provide further details; to bask in praises or suffer difficult questions; and to convince others that what you have done is excellent and worthwhile.

Easy or what? But wait ... first, stop and think!

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How much poster space are you allowed?

The purpose of poster presentations is not to have boards upon boards of information. Better to hand out a report in that case. If you are presenting your poster at a conference or convention, you would have limited space. The space you are allowed will determine the content of the poster. Find out how much space you are allowed!

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Is there a standard format?

Yes, there is! As with an oral presentation, there is normally:

- a **Title** page, telling others the title of the project, the people involved in the work and their affiliation.
- a **Summary** of the project stating what you have set out to do, how you have done it, the key findings and the main results.
- an **Introduction** that should include clear statements about the problem that you are trying to solve, the characteristics that you

are trying to discover or the proofs that you are trying to establish. These should then lead to declarations of project aims and objectives.

- a **Theory** or **Methodology** section that explains the basis of the technique that you are using or the procedure that you have adopted in your study. You should also state and justify any assumptions, so that your results could be viewed in the proper context.
- a **Results** section that you use to show illustrative examples of the main results of the work..
- a **Conclusion** section, listing the main findings of your investigation, and
- a **Further Work** section that should contain your recommendations and thoughts about how the work could be progressed; other tests that could be applied, etc.

You therefore have to present certain pieces of information but have limited space. So, before you rush away to put pen to paper or fingers to keyboard, spend a few moments or even hours to plan your presentation. This is very important. Unlike oral presentations, where some ultra-smooth talkers may be able to divert attention from a poorly planned presentation, with posters, poor planning is there for all to see.

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Planning

Planning is crucial if you do not want to be afflicted by the 'headless chicken' syndrome. There are several stages in planning a presentation.

Gathering the information

First, ask yourself the following questions.

- What is the objective of the investigation?
- Has someone done the work before?
- How have I gone about with the study?
- Why did I follow this particular route of investigation?
- What are the principles governing the technique that I am using?
- What assumptions did I make and what were my justifications?
- What problems did I encounter?
- What results did I obtain?
- Have I solved the problem?
- What have I found out?
- Are the analyses sound?

Although the above list is by no means exhaustive, you should get the gist. You have to stand back and think again about the **What's**, the **How's** and the **Why's** of the work that you have done. You have to examine critically, the approach that you have taken and the results that you have

got. Be ruthless in your assessment: better to be a masochist than the victim of a sadist 😊.

Ideally, you should have done this throughout your project anyway. In doing so, you will have a clearer idea of the objectives and the contributions that you have, or have not, been able to make. This means that you will know better, the information you have at your disposal for presentation.

Such brainstorming often yields loads of responses. Jot your answers on a BIG piece of paper, not necessarily in an ordered fashion. The intention is to note as many points as possible, so that you do not miss any important aspects. The ordering and pruning of the information come later. From your list, note the common areas, topics or pieces of information, and group them together. Use colour or number coding, or circles and lines to help you identify and categorise the information. This activity should help you focus further on the content you can use with confidence.

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Deciding on the content

If you follow the above [presentation format](#) guidelines, then the content is more or less determined for you. However, given that you have limited space, you now have to decide between what is important and what is not necessary. Your decision should be based on at least 2 factors, namely:

- **What are you trying to achieve by presenting the posters?** Is it to sell a product? Is it to tell people what you have done? Is it to tell people of a new discovery? Is it to convince people that one product or technique is better than another?
- **Who will be attending the presentation?** Are they technical people? What is the level of their knowledge of your subject area?

The answers to these questions define the **type of content** to include and set the **tone of the presentation**.

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Design

An advertising billboard is a poster. If well designed, it will be attractive and engender a lasting impression; earnest but not boring. Importantly, it should shout out to you - "**buy me!**" or you would think "**I want that!**" Similarly, in using posters to convey technical information, they should be designed such that readers think "**Yes!**" or "**I see!**" and leave with the impression that they have learnt something new.

Ultimately, poster design is a personal matter and different individuals will have different views on how best to present certain information. Nevertheless, here are some 'rules-of-tham' TM 🤖 to guide you:

1. **Plan, plan and plan!**
2. **Keep the material simple**
 - make full use of the space, but do not cramp a page full of information as the result can often appear messy
 - be concise and do not waffle. Use only pertinent information to convey your message
 - be selective when showing results. Present only those that illustrate the main findings of the project. However, do keep other results handy so that you may refer to them when asked
3. **Use colours sparingly and with taste**
 - colours should be used only to **emphasise**, **differentiate** and to **add interest**. Do not use colours just to impress!
 - try to avoid using large swathes of bright garish colours like bright green, pink, orange or lilac. Yuck!!
 - pastel shades convey feelings of serenity and calm while dark bright colours conjure images of conflict and disharmony.
 - choose background and foreground colour combinations that have high contrast and complement each other - black or dark blue on white or very light grey is good.
 - it is better to keep the background light as people are used to it (for example newspapers and books)
 - if you insist on having a dark background, use coloured paper so that you would not have to spray white paper with ink. Not only is this cheaper, you would also not face the problem of a soaked and distorted page.
 - avoid the use of gradient fills. They may look great on a computer display, but unless you have access to a high resolution printer, the paper version can look really tatty.
4. **Do not use more than 2 font types**
 - too many font types distracts, especially when they appear on the same sentence
 - fonts that are easy on the eyes are Times-Roman and Arial.

This is Times-Roman

This is Arial

5. **Titles and headings** should appear larger than other text, but not too large. The text should also be legible from a distance, say from 1.5m to 2m.
6. **Do not use all UPPER CASE type in your posters.** It can make the material difficult to read. Just compare the two sentences below:

WHAT DO YOU THINK OF THIS LINE WHERE ALL THE
CHARACTERS ARE IN UPPER CASE?

What do you think of this line, where only the first character of the first word is in upper case?

7. **Do not use a different font type to highlight important points**

- otherwise the fluency and flow of your sentence can appear disrupted. For example,

In this sentence, I want to **emphasise** the word 'emphasise'.

In this sentence, I want to **emphasise** the word 'emphasise'.

- use underlined text, the **bold face** or *italics* or **combinations** to emphasise words and phrases.
- if you use **bold italicised print** for emphasis, then underlining is not necessary - overkill!

8. **Equations**

- should be kept to a minimum
- present only the necessary and important equations
- should be large enough (see [point 5](#))
- should be accompanied by nomenclature to explain the significance of each variable

9. **A picture is worth a thousand words** ... (but only if it is drawn properly and used appropriately)

- **graphs**
 - choose graphs types that are appropriate to the information that you want to display
 - annotations should be large enough, and the lines of line-graphs should be thick enough so that they may be viewed from a distance (see [point 5](#))
 - do not attempt to have more than six line-graphs on a single plot
 - instead of using lines of different thickness, use contrasting **coloured lines** or **different line styles** to distinguish between different lines in multi-line graphs.
 - multi-line plots or plots with more than one variable should have a legend relating the plotted variable to the colour or style of the line.
- **diagrams and drawings,**
 - should be labelled
 - drawings and labels should be large and clear enough so that they are still legible from a distance
 - do not try to cramp labelling to fit into components of a drawing or diagram. Use 'arrows' and 'callouts'
- **clipart**
 - should only be used if they add interest to the display **and** complement the subject matter. Otherwise, all they do is to distract attention from the focus of the presentation.
 - can also be 'dangerous' as you may spend more time fiddling about with images and choosing appropriate cartoons than concentrating on the content.

10. **Check your spelling**

- there is nothing more amusing or annoying than spelling mistakes on public display, especially if they are on the title page.
- spelling mistakes give the impression that you have not put in the effort; careless; not bothered; not worthy of high assessment scores.

11. **Maintain a consistent style**

- inconsistent styles give the impression of disharmony and can interrupt the fluency and flow of your messages.
- headings on the different pages of the poster should appear in the same position on all pages.
- graphs should be of the same size and scale especially if they are to be compared.
- if bold lettering is used for emphasis on one page, then do not use italics on others.
- captions for graphs, drawings and tables should either be positioned at the top or at the bottom of the figure.

12. **Arrangement of poster components should appear smooth**

- you would probably be preparing sections of the poster on A4 sized paper before sticking them onto mounting boards or display stands.
- remember that you are using posters to tell a story about what you have done and achieved. As in report writing, the way you arrange the sections should follow the 'storyline'.
- sometimes it is helpful if you provide cutouts of arrows to direct attention to the sequence of the presentation
- use a new page to start off a new section (see [format](#))

13. **Review, review and review**

- make draft versions of your poster sections and check them for
 - mistakes
 - legibility and
 - [inconsistency in style](#)
- try different layout arrangements
- ask your partner, friends, colleagues or supervisor for their 'honest' opinions
- be critical

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