Research Skills

WORKSHOP 5

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This Week – Presenting

- Preparing research posters

- Defending the poster

- Giving oral presentations

Preparing Research Posters

- Preparing a research poster is a common task when undertaking academic research.

- Some conferences have poster displays where authors present their work not in the form of a presentation, but in the form of a research poster.

- Essentially the posters will be displayed in a common area where the conference delegates mingle amongst the posters and ask the authors questions about their work.

Research Posters - Guidelines

- The preparation of a poster and the subsequent display is also used by undergraduate students to show their work at the end of the semester.

- When preparing posters, there are a number of guidelines that you should be aware of.

- At a conference a poster will normally accompany a paper that is published in the conference proceedings although this is not always the case. What is very important though is that you do not see the poster as a "blown up" version of the paper.

- I have been at many conferences where posters have far too much text on them and they are normally the ones that people tend to bypass.

- A poster should be eye catching, with figures and graphics. It should use as many figures, diagrams and tables as possible to explain the work. These will not only help the readers but will also help you if you are asked to explain something.

- There will inevitably be some text required on a research poster but keep this short and too the point (bullets) and use big fonts.
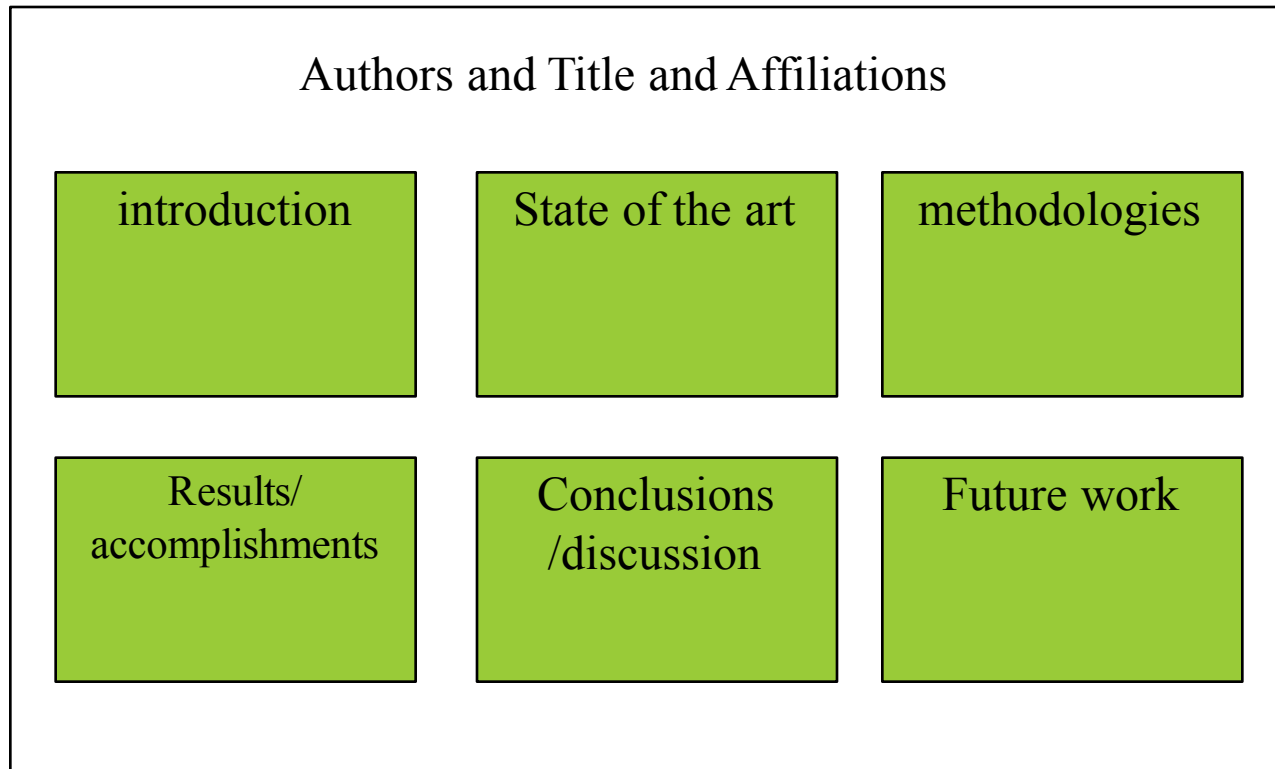
Research Posters - Structure

- Most research posters will be broken down into a number of segments. You will have the authors names and the poster title across the top and then the poster will be divided into 6 or more segments that deal with different parts of the work.

- There are variations on this design that look very well but what is shown below is a fairly safe bet.

Authors and Title and Affiliations
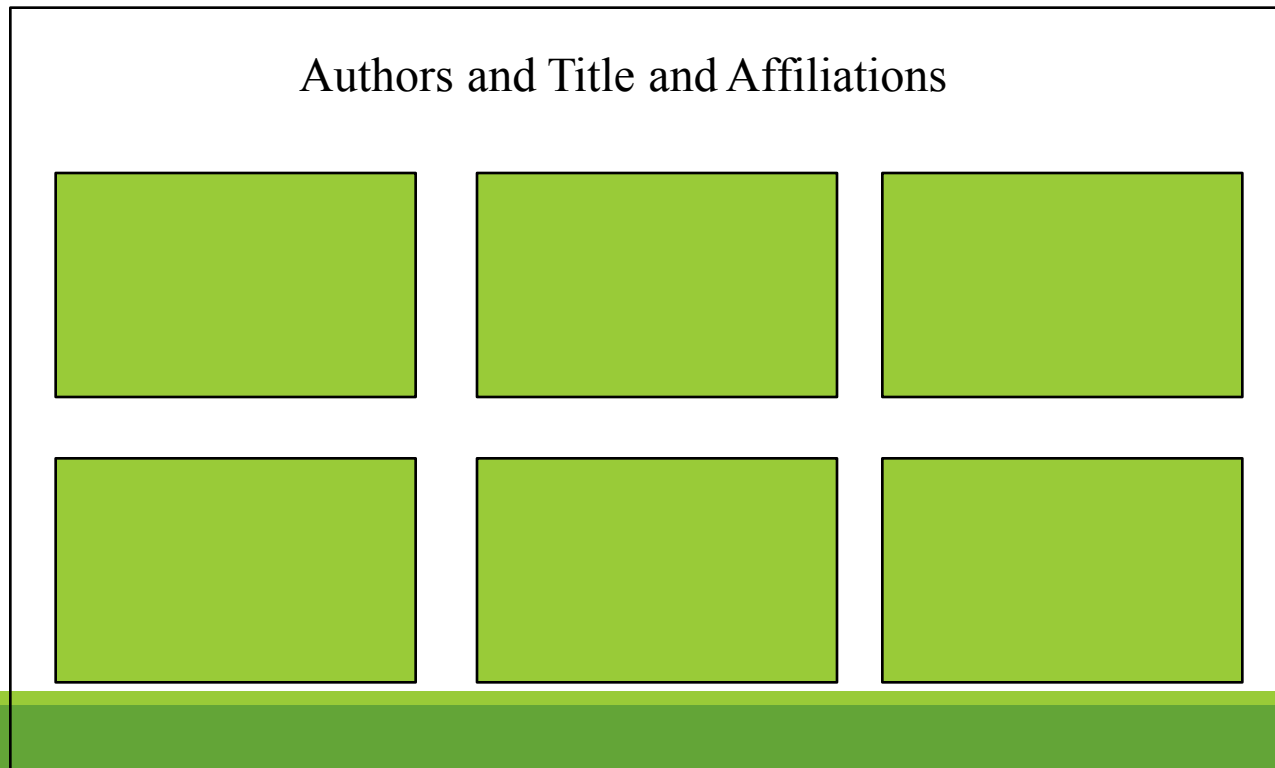
Research Posters - Structure

- What goes into the segments depends very much on the work being presented but a very generic poster might have:

Authors and Title and Affiliations

introduction	State of the art	methodologies
Results/ accomplishments	Conclusions /discussion	Future work

Research Posters – Structure and Content

- It can be useful to think of each segment as a slide in a presentation. Don't have too many segments though as the poster can look cluttered and difficult to view.

- The methodology/techniques and the results section may occupy a number of segments and this is ok as its normally the core part of the work.

- An upper limit of 8-9 segments should apply though otherwise things start to get too cluttered and disorganised or just too small for a comfortable viewing distance.

- Make sure the title is the largest text on the poster. This should be legible from a distance so that the viewer can decide whether it is of interest to them.

- The poster should quickly orient the viewer to the subject area and the contribution being made. Figures and images are good for accomplishing this.

- Make sure that the viewer can get the message quickly. The KISS principle applies here.

Research Posters – Content

- Introduction: The introduction for a poster will be short and be composed mostly of a hypothesis or research question. Background information for posters is usually at a minimum due to space limitations.

- Methodology: This section will explain how you arrived at your contribution. Techniques/Technologies used, experimental work, algorithms etc go here. Flow diagrams can work well rather than written text.

- Results: The results section will normally take up a couple of segments as this shows what you have accomplished, i.e. the outputs of the methodology. Figures and tables go well here.

- Discussion/Conclusion: In a poster session, the last section is usually more a conclusion with discussion left for the publication. Recap the results by assigning importance to each result and how it fits the hypothesis.

- Future work: Posters are commonly presented in the middle of a body of research so there will frequently be a section where future research directions are outlined

- References: Include some major references if you feel the need to delimit your work from other work described.

Poster Creation Tools

- There are a number of desktop publishing tools available for poster production e.g. Microsoft Publisher, Adobe Illustrator etc.

- Microsoft Powerpoint can also be used to create a poster as one oversized slide. This has the advantage of a popular user interface and most have experience using the application. The open office equivalent is capable of the same.

- Another option in powerpoint is to create a number of slides for each section of the poster and then stick them together onto a board or pin them up together in some cohesive fashion. This method tends to be visually less effective than have one big slide but is easier to manage the content.

- There are a number of good tutorials already available on the internet about how to create a powerpoint poster so I will not post another one.

- see Moodle

Oral Presentations

- Giving a oral presentation is very different to a poster presentation. It is a more formal and structured event where all eyes and ears are focused on you.

- Essentially you will stand at the top of a room and speak to an audience for a duration of 15-40 minutes (depending on the event).

- Everybody will have their own presentation style. Some will be similar, but there are some general guidelines to follow and pitfalls to avoid.

Oral Presentations - Guidelines

- The golden rule for oral presentations is to:

  - Tell then what your going to tell them
  - Tell them it
  - Tell them what you told them

- This can happen through an introduction, description of methodologies, discussion of results and then conclusion.

- The structure of an oral presentation (of the research variety) will resemble the structure of the research poster (introduction, state of the art, methodologies, results, conclusions, future work).

- The main difference is that you are expected to talk about each of these in a formal, structured way.

- Make sure that the talk "flows" well. There should be a logical progression and it should not be fragmented.

Oral Presentations - Guidelines

- As soon as you know you are going to give a presentation you should find out what the time limit is. This will determine the amount of material you can use.

- If you are using visual aids (e.g. slides) then you should have allow approx. 1-2 minutes per slide. e.g. a fifteen minute talk might have 10 slides. Too many slides can lead to a rushed finish. It is always better to finish a little early then go over time.

- Keep the message of your talk simple. They are always the best ones as the audience may be sitting through a number of talks. Focus on the main points of your research.

- Know your audience. In particular have some idea of their level of knowledge about what you are presenting. If the they are experts in the field avoid going over the basics.

- Basically they want to know what you have done and why they should care and they want this information conveyed to them in a clear and concise way.

Oral Presentations - Slides

- Make sure your slides are legible from the back of the room.

- Use colour (not too much variety) and figures/illustrations where possible.

- White is nearly always the best background colour.

- Choose a format for your slides and stick to it – be consistent.

- Use the minimum amount of text necessary.

- When using text, use bullet points.

- Avoid too much animation in a slide show. It can be confusing for you and the audience.

- If you are unsure if something should be on a slide or not, take it out. Make sure every slide has meaningful information on it.

Oral Presentations – Good practice

- Do be prepared for your presentation. Do at least one dry run.

- Plan for introduction, methodologies, results, conclusions.

- Speak slowly and clearly, don't be afraid to pause.

- Speak to the people in the back of the room, that way everybody can hear you.

- Make eye contact with the audience, try not to look at the floor.

- At the beginning be sure to explain problem well and justify the research.

- At the end thank the audience for their attention and ask if anybody has questions.

- Its ok to skip the odd slide if you feel the clock is against you and you want to get on to the main points.

Oral Presentations – Bad practice

- Don't just read the content of the slides. If you have practiced enough you will know what is on every slide anyway. If you don't its ok to look at a slide to remind yourself what is on it.

- Don't go overtime.

- Don't use too many colours. Stick to 3 or 4.

- Don't say that's it at the end.

- Don't fixate on someone you know in the audience. Look around at everybody.

- Don't put jokes into a research talk. If they happen naturally then fine.

- Don't feel the need to say everything on a slide. The audience can see for themselves. Emphasise the main points.