THE UNIVERSITY OF
MELBOURNE

terminology
literature
organisation
critical thinking
Problem solving
review
balan

Presenting your research

Developing confidence to communicate

Research higher degree students are often invited or required to give presentations on their current or proposed research at a departmental seminar, a conference, or a similar forum.

Clear communication of technical or complex material is a key aspect of professional development.

But students are often understandably nervous when faced with the challenge of presenting. So it's important to think carefully and calmly about how successful presentations come about.

Consider your purpose

Why are you presenting? Are you outlining a particular method or approach? Are you emphasising the practical application of your research? Are you providing an overview of your work-in-progress?

You need to provide information that your audience will remember later. But avoid trying to cover every small detail. Keep in mind your reason for presenting.

Consider your audience

Even when presenting to your department, make a realistic appraisal beforehand of how much relevant knowledge or understanding your audience already has.

Ask yourself:

- *What kind of prior knowledge of my field does my audience probably have?*

- *How familiar are they with recent research in this area?*

- *How much technical knowledge do they possess?*

- *Do any of them use English as a second language? If so, will this affect my presentation?*

- *Are there any technical terms that you need to define for your listeners?*

You need to be able to present your research in a way that will engage and inform all of your audience, not just your supervisor.

Think carefully about all these points as you compose your slides and decide how to pace your talk.

Consider the structure

The timeframe of your talk is a key consideration. A short talk (10-20 minutes) needs to address the topic clearly and directly. It is very important not to exceed your allotted time or, even worse, to have to leave your talk unfinished. So **be selective** about what you say.

Consider adopting the following structure:

What you're doing - Introduce:

- yourself;

- your topic and the broader context of your research;

- the main hypothesis or research question;

- methods of data collection; and

- the key points your talk will cover.

What you've found (or expect to find) - Include:

- key findings, trends in your data, progress to date;

- any difficulties with your method.

Why this is important /relevant - Specify:

- whether your results confirm your hypotheses;

- whether you may need to redesign any aspect of the research;

- likely implications, or possible applications

Using PowerPoint slides

Well-designed, professional-looking PowerPoint slides can complement most presentations. They can reinforce key statements, help maintain interest and concentration, illustrate concepts that are difficult to explain, and serve as a guide for you, the presenter.

However: if you're planning to use a PowerPoint, you need to consider the content and organisation of your slides carefully.

To start with, identify your **major concepts** and **principal points**. Which ones will require a slide?

Ensure the slides are not too cluttered (no more than 8-10 lines of text); use large font size (24 pt is recommended) and present one topic per slide.

Don't simply read out your slides verbatim! The slides should just list key points for you to expand on as you talk.

Slides must be discussed and integrated into the flow of your presentation. Your audience should know exactly why the slides have been used. So, if you're presenting pictures, diagrams, tables or graphs, you need to point out their significant features.

This takes time. A good guideline is to spend two to three minutes to talk through the points on a slide. If you're presenting for 20 minutes – and you need to allow a few minutes at the end for questions – you may only have time to present a title slide and seven or eight other slides.

Practice your presentation with a friend or sympathetic peer, to help you gauge if you have the right amount of material for the time allowed. Also practice your conclusion – to provide a summary for your audience and end your presentation on a strong note.

PowerPoint slides can be a means of support, both for the speaker and audience. Don't allow them to take over and detract from the whole presentation. Ensure that your slides are clear, easy to read, and relevant. Avoid unnecessary "special effects"!

Presenting technical material visually

Visual presentations need to present information simply and clearly. If you overwhelm your audience with information, they will be tempted to read rather than listen. A graph that you've prepared for your thesis, or a screen snapshot copied from a website, may be too detailed for your audience to see clearly or understand.

Quantitative information *can* be presented as a graph or simple table. However, graphs should have bold lines with simple, clearly numbered axes, and strong contrast. Similarly, if you're presenting information in the form of a bar chart with more than five categories that need to be differentiated, the chart will be difficult to read. In this case, reduce the amount of information in your slide; perhaps you can make two or more slides to indicate different trends in the data.

Visuals containing mathematical equations can also be problematic for audiences. They should have ample white space; figures must be bold and large, as well as neat and accurate.

Animated effects in PowerPoint can be useful for presenting data. You can set up your slide show so that each set of data appears with a mouse click, allowing you to speak about each data set before, or while, displaying it. This helps to keep your audience engaged.

To simplify the data for your presentation you could prepare a subset of slides containing additional information, which could be shown later in response to questions. An alternative would be to include complex or detailed technical information on a handout that your audience can examine more closely afterwards. But distribute these handouts **after** the presentation or your audience will read them during your talk, instead of listening to you!

Dealing with questions

Many students feel nervous at the prospect of being asked questions about their research. However, a good presentation will naturally encourage discussion and interesting questions.

Always spend some time before your presentation to consider those aspects of your research on which you might be questioned. Is your method or approach unusual? Are there any aspects of your work that are problematic or controversial? What are its practical applications, if any?

Generally, you should be able to predict about 75% of the questions you may be asked. You can prepare and practice possible responses.

Listen attentively to your questioner. Paraphrase, or repeat, the question or comments, as in the following examples:

"So, what you are asking is …"

"So, you'd like to know more about …"

This clarifies what has been asked. It also gives you some thinking time. It's perfectly acceptable to take a short pause to think before responding to a question.

If you can't provide an answer, first acknowledge the question and say you don't know, **or**:

"Thank you for asking that question. I can't answer that question at this point in my research." **or**:

"Unfortunately, I don't have that information with me."

You can perhaps offer to find out the answer, or to refer to other sources where the information may be found.

There is no shame in not being able to answer every question. Consider yourself a research apprentice. If you knew everything about your topic, you wouldn't need to be undertaking research in the area.

To sum up: think of your presentation as an opportunity for you to learn from others, while informing them at the same time. Enjoy the occasion!

Further resources

Mablekos, C. (1991). *Presentations that work* New York: The Institute of Electrical and Electronic Engineers, Inc. IEEE Engineers Guide to Business series.

Platow, M. (2002) *Giving professional presentations in the behavioural sciences and related fields.* New York: Psychology Press.

Storz, C. et al. (2002). *Oral presentation skills, a practical guide.* Retrieved 28 July 2011, from http://people.engr.ncsu.edu/txie/publications/oral_presentation_skills.pdf

University of Tasmania (2010). *Effective Presentations.* Retrieved 28 July 2011, from http://www.teaching-learning.utas.edu.au/planning/effective-presentations