

Presenting Your Research

In the course of your post graduate study you will be required to present your thesis proposal or current research project at a departmental seminar. You may also have to present papers at conferences or to present submissions for research funding. Being able to communicate technical or complex material clearly to an audience is an important aspect of your ongoing professional development, and the ability to talk about your research to a broader audience is an important graduate attribute. The following strategies will help you to prepare and deliver your research more professionally.

Consider your Purpose

What is your purpose in presenting? Are you introducing your area of research, explaining a particular term or a methodology, linking the relevance of your research to a practical application, or providing an overview of your thesis topic or research to date.

The main purpose of your presentation is to provide information which the audience will remember later. Avoid trying to cover every detail of your project, or overwhelming your audience with an extensive review of data which they are unlikely to remember later. Keep it simple. What does your audience need to know?

Consider:

- What is your key message?
- What do you want your audience to learn and remember from your talk?
- What is your key 'take home message'?

Consider your Audience

Although you may be presenting to your department, you should **not** assume that your audience knows about your topic – if you are studying for a PhD, for example, you are likely to be working in a very specialized field.

To address your audience's needs you should consider:



- Will your audience have prior knowledge of your field or be familiar with research in this area?
- Are they all at the same level of knowledge or will they vary?
- How much technical knowledge can you assume your audience will understand?
- Do all members of the audience share the first language of the speaker?

The answers to these questions have implications for the level at which you “pitch” your 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.

Introduce yourself to your audience to establish some rapport and to outline the main points that you will cover. They will be impressed if you simply and clearly communicate the focus and scope of the project, the relevance or importance of the study, the main research issues or questions, any obstacles or difficulties and a summary of progress to date.

Consider the Structure

The key consideration when planning and structuring your talk is the time frame for your presentation. It is difficult to estimate the content relative to the length of your talk but a short (10-20 minute) talk needs to be very clear and address the topic directly. Be selective about what you say. To present professionally it is important not to exceed your allotted time, or worse, not finish your talk. Allow yourself enough time to cover the key concepts, conclude with a summary of your key points and thank your audience.

The following may be a useful structure for your presentation:

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| <p>What I’m doing</p> <ul style="list-style-type: none"> • Introduce yourself, • introduce your topic and the broader context of your research • the main hypothesis, research questions • methods of data collection |
| <p>What I’ve found (or expect to find)</p> <ul style="list-style-type: none"> • Include key findings, new knowledge (but keep details to a minimum), trends in your data, or progress to date. • Were there any difficulties with the methodology? |
| <p>Why this is important/relevant</p> <ul style="list-style-type: none"> • Do your results confirm your hypothesis, cause you to rethink aspects of your methodology or the direction of your research over all? • What are the likely implications or possible applications , of your findings? |

Using PowerPoint slides

Well designed, professional looking PowerPoint slides can complement most presentations. They reinforce what is being said, help maintain interest and concentration, can illustrate concepts that are difficult to explain and can also be a guide for you as presenter to follow.

If you are planning to use a PowerPoint presentation, you need to consider the content and organization of your slides very carefully. Identify your major concepts and principle points you plan to make. Which of these will require a slide? Ensure the slides are not too cluttered, use large fonts (24 is recommended), and present one topic per slide. There is no point in simply reading your slides to an audience; rather, list the key points, which you can then expand upon verbally.

A PowerPoint slide must be discussed and integrated into your presentation so the audience knows exactly why it has been used. For example, if you are presenting pictures, diagrams, tables or graphs, then you need to point out their key features or trends in the data to your audience. This takes time. A good guideline is to spend two-three minutes to talk through the points on a slide. So, if you are presenting for 20 minutes and you need to allow a few minutes for questions at the end, you will only have time to present a title slide and seven or eight other slides.

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

PowerPoint slides can be a means of support for the speaker and audience; do not allow them to take over and detract from the whole presentation. Ensure that your slides are clear, easy to read, and relevant to your structure. Also, avoid unnecessary effects.

Presenting technical material visually

Visual presentations need to present information simply and clearly so keep the information on your slides to a minimum. If you overwhelm your audience with information they will then read rather than listen. A graph that you have prepared for your thesis, or screen snapshot copied from a web site, will likely be too detailed for your audience to see clearly or understand.

Quantitative information can be presented as a graph or a simple table. Graphs should have with bold lines with simple, clearly numbered axes and good contrast. Similarly, if you are presenting information in the form of bar charts with more than five categories which need differentiation, the tables will be very difficult for your audience to read. Reduce the amount of information in your slide or perhaps make two or more slides to indicate different trends in the data. Visuals containing maths equations can also be problematic for audiences. They should show ample white space, the figures must be both bold and large, and neat and accurate.

Animated chart 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 separate mouse click allowing you to speak about each set of data before displaying it. This technique will help to keep your audience engaged.

To simplify the data for your presentation you could prepare a sub set of slides containing additional information, which could be produced later, in response to questions. An alternative would be to include very complex or detailed technical information on a handout so your audience can examine the information more closely. Distribute the

handouts after your presentation or your audience will read them instead of listening to you.

DEALING WITH QUESTIONS

Many students fear 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 the aspects of your research on which you might be asked questions. Is your methodology unusual? Are there any aspects about your work which are problematic or controversial? What are the practical applications of your research? Generally, you should be able to predict about 75% of the questions asked, so prepare and practice some sample answers.

Listen attentively to your questioner. Paraphrasing, or repeating the question or comments aloud, as in the following examples "so what you are asking is..." "so, you want to know more about...", clarifies for you and the rest of the audience what has been asked and gives you some thinking time. It's acceptable to take a short pause to think before responding to a question.

If you don't know the answer to a question, simply acknowledge the question, 'thank you for asking that question' but add that you don't know or 'I can't answer that question at this point in my research ...' or even, 'I don't have that information with me". You may offer to find out the answer if you wish or refer to other sources where the information may be found, if that is appropriate. There is no shame in not being able to answer a question – consider yourself as a research apprentice. If you knew everything about your topic, you would not need to be undertaking research in the area. Treat your presentations as a chance for you to learn from others as much as for you to inform them.

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.

Van Emden, J & Eastell, J. (1996) *Technical writing and speaking: An Introduction*. London: McGraw Hill.

Walters, D., & Walters, G. (2002) *Scientists must speak*. New York: Routledge.

<http://www.kumc.edu/SAH/OTEd/jradel/effective.html>