Part 4: Speaking and Presentations

CA546/CA625: Research Skills

MSC in Software Engineering

European Masters in Business Informatics

MSC in Bioinformatics

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Introduction

Spoken and written communication are key skills for scientists.

Presentations of various forms are often required, e.g. internal departmental research seminars, updating your supervisor on progress, defending a thesis, technical sales, job interviews, media interviews.

People can be much more influenced by your 20-minute description of your research than the 20-page paper on the same topic or the 20-weeks you spent generating the results.

The effectiveness of these presentations can have a significant impact on the way they are perceived by their managers, colleagues and peers.

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people are often uncomfortable with speaking in public. fears and nervousness can largely be overcome, and the quality of presentations improved. various techniques can help to improve presentations, but largely speaking is something you learn by doing. you want to be better! the key to improving as a speaker is really simple: you must decide that you want to be better! reflection: – what could have been better about my last presentation? what went really well? – this is not something you learn once and then use. improving your presentation skills is an ongoing active process. the introduction

people are often uncomfortable with speaking in public.
One of the best sources for learning effective presentation skills is to observe other presentations.

- Has the speaker chosen clear language?
- Do the visual aids support the message?
- Is the material well organised?
- What could be improved?
- What is being done well?

Observation
Preparation

One of the key elements of delivering a successful presentation is the preparation beforehand.

This can help to direct your energies from worrying about yourself ("stage fright") and in the direction of giving something useful to the audience.

Visual aids.

Time available.

Audience.

Material to be covered.

One of the key elements of delivering a successful presentation is the preparation beforehand.
The Audience

- Who is your audience?
- What brings them together?
- How knowledgeable/technical is this audience?
- What does the audience want from this presentation?
What do you want to accomplish?

- Identify your objectives - aim to be able to summarize this in a single clear sentence.

- Avoid temptation to tell everything you know on the subject.

- Identify the key points and your take-home message. Concentrate on getting these across to the audience.

- If the point is not clear, audience will ask themselves: "What is the point of this talk?"

- Probably resulting in annoyance, boredom, or bewilderment.
Presentation Organization

Standard presentation structure:

introduction - body - conclusion.

"tell them what you're going to tell them, tell them, tell them what you've told them"
The Introduction

Grab the audience's attention!

• Know exactly what the first few sentences will be - introduce the exact topic of the presentation.

• Set the work in context - why are you doing x? what application might it have? what existing theory are you building on?

• Remember the audience - provide enough background so that they will be able to follow the talk - but don't bore them.

• Grab the audience's attention!
The Body

- Research experiments where you always know the results in advance.
- Developed based on these results.
- Discuss mistakes and surprising results. Explain how your thinking progressed of the story must be logical, but it is often effective to learn from them.
- Explain what experiments you did, why you choose them, what you learned from them.
- The story, but they are not the story.
- Experimental results (positive and negative) can illustrate and support.
- Tells a story about the purpose of your work.
- Usually takes the largest portion of the available time.

Explaining your experiments.
message of your talk. If appropriate invite questions. Then stop talking.

Complete the talk with a strong memorized sentence which captures the

may confuse the audience.

Do not introduce new material in the conclusion - looks disorganized and

condense material from the body of the talk.

If you find yourself short of time do NOT cut from the conclusion, omit or

has addressed these.

Recall the issues raised in the introduction and point out how your work

Cement the key points in the minds of the audience.

The Conclusion
Planning

Plan the structure: introduction, body, conclusion.

- List the points to be raised in each section.
- Assess them carefully: are they all required? is the order logical?
- Anything missing? (always think about the expected audience)
- Listing carefully: are they all required? is the order logical?
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Timing: Know how much time is available for the presentation. Find out how much time is expected to be reserved for questions. Plan to spend about 5% on the introduction, 5% on the conclusion, 90% on the Body.

DO NOT overrun on the time available.

For this talk (always think about the expected audience):

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Planning

Speak the presentation out loud. This tells you:

- how long you need to speak for to get through the material in this form.
- whether you can clearly express your ideas, understanding something isn't enough, you need to be able to explain it in clear language to an audience unfamiliar with the idea.

Revise, revise, revise until you are happy.

Speak the presentation out loud. This tells you:

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- whether you can clearly express your ideas, understanding something isn't enough, you need to be able to explain it in clear language to an audience unfamiliar with the idea.
The role of the visual aid is to illustrate or emphasize.

Good visual aids can increase the audience’s retention of what you say.

Poor visual aids are often worse than no visual aids.

Visual aids are not a script! Your talk should not be reading the slides!

Too much text will mean the audience reading instead of listening. You may be reading instead of looking at them. Overall contact between audience and speaker is lost.

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Use only **simple** tables of results; when possible use **simple** graphs.

- Use **italics** and **bold** for emphasis, but use sparingly otherwise they lack emphasis and can become annoying.
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Choose a plain sans serif font, e.g., Helvetica, **NOT** Times Roman. (Try it out and see which looks easier to read from the back of a room!)

Use **italics** and **bold** for emphasis, but use sparingly otherwise they lack emphasis and can become annoying.

Consider choice of colours carefully; consider issues of contrast between text and background, how well do your preferred colours project, possible colour blindness issues for members of the audience. Usually do your preferred colours project, though text and background issue is a bigger concern.

Keep slides simple.
Body Language and Gestures

- Reduce them - they can be distracting.
- Try to be aware of mannerisms (shaking keys, brushing hair, etc.) and be enthusiastic from the start.
- Make eye contact with members of the audience.
- Look at the audience, NOT the floor, your notes, your slides, the ceiling.
- Be aware of your appearance to the audience.
- Body language gives an impression of your talk, try to appear

Body Language and Gestures
Group Presentations

Who should speak when?

Try to ensure consistency in style of delivery. Prepare the slides together.

Try to make the progression between speakers smooth. Maybe one person can run the presentation while others invited to speak at suitable points, or maybe divide the time up and speak one after the other.

Try to balance the amount of time each person speaks for.

Try to ensure consistency in style of delivery. Prepare the slides together.

Group Presentations should follow all the preceding, but introduce further necessary background is introduced by somebody and that the technical level of the delivery is consistent, and check carefully that all
Further Reading

A good book if you want to read more about preparing good scientific presentations is:

Scientists Must Speak - Bringing Presentations to Life
D. Eric Walters and Gale Climenson Walters

Routledge, 2002.

18.45 euro