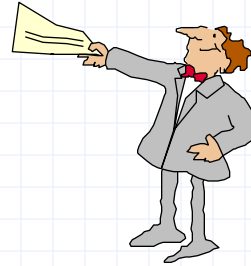


# Preparing Scientific Presentations

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# Motivation

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## ◆ Why are presentations important?

- people will learn about **your research**
- people will learn to know **you**
- make people adopt your **ideas**
- stimulate people to think about your problem and **share ideas**
- **attract funding** for your research
- **represent** your organization

There are so many publications out there, that it is virtually impossible to read every one of them. In some areas there are several papers competing for every reader! It is like a over-saturated market, where the only way to sell your product is to advertise it cleverly and professionally.

A conference presentation is like an advertisement of your research. It achieves several goals at the same time:

-- to familiarize the audience with your research -- to claim an idea, technique or simply "territory".

-- to help you make valuable contacts at the conference. After a successful presentation, people interested in your area are likely to come and talk with you, authorities in your area will notice you and keep in mind a thought about you when for example, looking for reviewers for a conference, or for a program committee of a workshop

-- you might be able to attract attention from industry representatives and be able to negotiate a cooperation (I.e. a source of funding for the research)

# Planning the Presentation

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## ◆ Assumption:

- paper was written (material is fixed already)
- reviewed and accepted at a conference

## ◆ Questions to start with:

- Is this a conference or a workshop?
- What are the potential audience's interests?
- What is your goal? What should they remember from your talk?
- How much time will you have? (plan for 17 min!)

# Planning

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- ◆ Write a 1-sentence message you want to get across (keep it in front of you while planning)
- ◆ Prepare carefully the introduction !! Motivation is crucial!
  - Why is the problem important?
  - Why should anyone listen to your talk?
  - Finish the introduction with a statement of purpose.
- ◆ Show the really important methods and results (related to the message) only!
- ◆ Conclude with one or two clear statements.



It is good to formulate for yourself a message that you want to get across with your presentation. You don't want, and have no time to present all the data from the paper; but your goal is to stimulate interest in the audience to read your paper, and possibly to refer to your work later. Your message has to be tailored to the audience you expect and to the type of venue (conference session or workshop). By formulating the message you will have a guideline about how to introduce your work, which data to select from the paper for the presentation and what to stress on in the conclusions.

The introduction is a vital component. It must set the context of your work for the audience, many of whom may not be experts in your field. They may also be suffering the aftereffects of the previous paper or of a dash from another concurrent session venue. You have no more than 2 minutes to excite the interest of the audience before they relapse into the mental torpor so prevalent at conferences. You must therefore give a considerable amount of thought to the introduction. It must be simple, precise and free of jargon. It must start from a broad base so that the audience can identify the point at which your research fits into the discipline and make them appreciate the vital importance of your contribution.

The statement of purpose should take you no more than a minute, but is also a vital component of the talk. In these few sentences you will need to convince the audience that what you set out to do was worthwhile. It should flow from the introduction so that it sounds like a logical outcome of previous research.

The description of methods and results will usually have to be abbreviated or even reduced to a mention ("the so-and-so technique was used to..."). If the development of a new method was an important part of your work then it must obviously be described in more detail, but you must decide whether the main message is to relate to the method or to the results subsequently obtained.

The results are usually the most important part of the paper. Do not fall in the trap of thinking that the tables, graphs or charts you have prepared for the paper are suitable to a live audience. How often have you, for example, sat in a meeting where someone has shown overheads of an incomprehensible or illegible table or a wall of prose taken straight from the paper?

The conclusions must flow naturally from the results of your work. You will be aiming to make one or two clear statements which you are able to conclude. It is advisable to be reasonably modest in your claims.

# Preparation

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- ◆ Plan of the talk → transparencies (slides)
- ◆ Each slide illustrates an important point you want to make
- ◆ Illustrations and pictures are very desirable
- ◆ Plan the time: 2-3 minutes per slide!

You can start preparing the presentation by putting the plan of your talk on transparencies. Each transparency should illustrate (an) important point(s) you want to make. Go through the plan as if you are telling it to your friend, who doesn't know anything about the area, imagine talking to him/her and write down brief notes about what you are going to say to illustrate each point. Add pictures as needed to illustrate concepts. Sometimes a picture evoking an analogy with something familiar can be more useful than many words and can save you time. Be careful, however, since pictures can also lure you into explaining things that you won't otherwise (not related to the message you want to communicate) and may eat up your time. Avoid complex tables (better use charts) or simple graphs. It is rarely useful to show masses of data, you can always refer to the paper "The data presented in figure .. on page ... in the conference proceedings shows that...".

Don't prepare too many slides. Audiences become frustrated if bombarded with too much visual information too quickly.

Keep track of the time! Plan to "deliver" for only half of the total time of your slot (however, have some additional things you can say should there be a long silence when you ask for questions).

As a rough orientation, plan for talking 2-3 minutes for each slide. So for a 20 minutes presentation, you should have no more than 10 slides.

# Preparation

- ◆ Resist the temptation to put everything you will say on the slides! There is nothing worse than showing a slide full of dense text and reading it aloud to the audience; it appears that you are patronizing, assuming that they are not able to read the text themselves. If there is too much text on the slide and you are talking something different, or explaining it, the attention of the audience will be split between listening to you and reading the text on the slide, and you will lose them.
- ◆ If you are afraid that you may forget to say something, make detailed notes and have them handy during the presentation.
- ◆ Avoid placing print on busy backgrounds and avoid distracting movement or jazzy slides that undercut the speaker. Don't make slides that will compete with you for attention: the slides will win!
- ◆ Prepare your talk so that it can, if necessary, be presented without the slides.

# Preparation

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- ◆ Don't use a slide to present information that is primarily verbal
  - Never, ever put every word of your talk on a slide!
  - Use visuals to communicate visual information
- ◆ Make sure each slide is large and clear enough to read from the back of the room
  - Don't put too much text on the slide
  - Avoid light print on dark background
  - Avoid too jazzy slides

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# Preparation



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## ◆ Rehearse!

- Read aloud the draft using the slides -  
Keep an eye on the time!
- Present the paper to a colleague
- Decide if you are going to read the paper  
(or notes) or not
- Dress – rehearsal in front of an audience  
e.g. group of colleagues, department.

Rehearsal is essential! Without rehearsing the talk aloud for yourself (in front of the mirror, and recorded on a tape-recorder) you have no idea of the time that the talk is going to take. During the rehearsal you will discover logical gaps in the presentation, things that need to be explained, other things that lure you into fuzzy explanations not directly related to the message you want to convey. You will have to add slides, modify existing slides, perhaps even re-plan your presentation.

The next stage is presenting the talk to an honest and critical colleague. Often the feedback received is extremely valuable, since things that you consider obvious might not be so obvious for someone else, and may need explanation.

You must now decide whether you will read the paper or not. Most authorities consider that you should be well enough rehearsed to speak only with the aid of cue cards or the cues provided by your slides. If you have a highly visual presentation most of the audience will be looking at the screen so the fact that you are reading is less critical. Providing the text is written in conversational style, and you are able to look up from your text at frequent intervals, then reading is not a major sin. The chief risk of speaking without a text in a very short presentation is going over time, which at best, will irritate the chairman and the audience, and at worst will result in your being cut-off in mid-sentence.

A dress rehearsal in front of an audience a week or two before the event is invaluable. Not only will you receive comments on the presentation but you will also be subject to questions, the answering of which, in a precise manner, is just as important as the talk itself.

# Presentation

Before the presentation:

- ◆ Check your slides to see that they are in the correct order
- ◆ Check the room and make sure the equipment works (projector, computer, microphone)
- ◆ Check with the session chair about how s/he will introduce you and signal the time

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However good your preparation have been, there is still plenty that can happen to ruin your carefully laid plans. Fortunately, many such problems can be prevented or anticipated.

Make sure your slides are in the correct order early in advance. This is especially important when presenting from a computer (Powerpoint), since you may not be able to check your slides when you arrive at the conference site.

Make sure the system is working properly; delays to tinker with faulty slides or equipment can compromise your authority and credibility. If it is not working, deliver the talk without the slides.

Contact the session chair. His/her role is to ensure that the session runs smoothly and in time. Inform him/her if you will need set-up time, so that s/he can plan accordingly the time slot (let you start your setup during the discussion time for the previous speaker). Your chairperson would appreciate if you provide him/her with a brief info about yourself, so that he/she can introduce you to the audience. Check with the session chair how s/he is going to signal you the time during your talk.

# Presentation

During the presentation:

## ◆ Make a confident start

- take your time to arrange your slides, microphone, make sure everyone can see and hear you
- commence your talk with an appropriate opening (eg "Ladies and Gentlemen")
- present the opening few sentences without reference to any notes, looking around without fixing on any particular individual

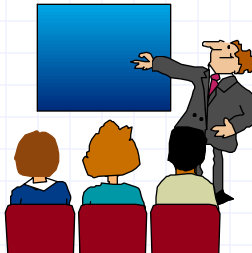
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# Presentation

during the presentation

- ◆ Speak at a rate that sounds slow to you
- ◆ Maintain eye contact with the audience
- ◆ Never ever read from the slide
- ◆ Talk about each slide as you display it
- ◆ Nothing wrong with a little silence
- ◆ Be enthusiastic!!
- ◆ Keep to time!!!
- ◆ Come to a conclusion!



If you turn to the screen to point something, make sure you don't move away from microphone.

Look at your audience, respond to body language, take notice of expressions and disagreement on faces. Look at them, not at the slide.

Don't let the medium dominate your talk; never read from the slide. The audience should see and connect with you first, not the slide.

Don't refer to slides that you are going to present later or slides that you have presented already. If you need to do this, better include one additional copy of the slide at the point where you need it again, instead of searching for it and not finding it.

There is nothing wrong with a little silence now and then. Your audience needs time to ponder and reflect. Don't be embarrassed to say "think about this for a minute".

Keep to time - that means (say) a maximum of 20 minutes in a 30 minute slot. It is dangerously easy to overrun - but if you rob the people of the chance to ask questions, they feel cheated. It is often the question time that clarifies the paper (more than the presentation itself). Surprisingly, most people are delighted in the event of a session finishing before it was due to finish!

Come to a conclusion - don't just stop when time is up. "The rest of the developments are described on pages 7-10 of the paper is far better than trying to rush through all of the rest of what you would liked to have said. Then review the main points, ready to hand over for questions.

# Handling Questions

- ◆ This is one of the most important parts!
  - Talk without questions == a failure
- ◆ Types of questions
  - clarification questions
  - questions with the purpose to show off
  - questions to test you
  - aggressive questions
- ◆ You can safely assume that most questions will be clarification questions

## Handling Questions

- ◆ The dress rehearsal helps
- ◆ Repeat / restate the question
- ◆ Answer briefly and precisely
- ◆ Handling show-off or aggressive questions

The dress rehearsal before your colleagues will help you prepare arguments without weaknesses.

Repeat / restate the question clearly for all the audience to hear & understand; this gives you some time to think.

Answer briefly and precisely, sometimes a simple “yes” or “no” will do. Avoid the danger of using the question to give what amounts to a second paper presentation.

Be alert to questions that are deliberately trying to trick you or to use the occasion to display their own knowledge. It is the job of the session chair to recognize and cut-off such questions, but many session chairs are not doing it. You can turn to the chairperson and show him/her that the question is wasting time.

If the question is particularly awkward or aggressive try to deflect it as best as you can. Strategies include agreeing with as much of what was said as possible, acknowledging legitimate differences of opinion or interpretation, or suggesting you meet the questioner afterwards to clarify your position. At all costs avoid a heated head-on clash in front of your audience. However, do not be afraid to politely disagree with any questions, however eminent, when you are sure of your ground. Remember, they may only be testing you out!

# Posters

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## ◆ Advantages:

- allowing readers to consider material at their own rate
- being available for viewing over an extended period of time
- enabling more detailed discussion

# Posters

- ◆ What could be included:
  - a title, an abstract, text & figures, names of authors, addresses and where they may be contacted during the conference
  - demos, videotapes, objects
  - take-away handouts
  - a blank pad for people to leave comments or contact address for follow up



# Posters

## ◆ Preparing the poster

- check with the organizers about the space available and facilities (electricity, computer, table, chairs etc.)
- plan the layout accordingly
- organize the text so that several people can view it without disturbing each other

# Posters

Possible layout

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