

How to give a technical presentation?

A Presentation on Presentation: ME6900

Dr. Narasimhan Swaminathan

Indian Institute of Technology Madras - Chennai 600 036

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1 Introduction

- Anatomy of a group presentation
- Why?
- Where?

2 Components of a Technical Presentation

- Introduction
- Title
- Contents slide
- Introduction
- Existing work
- Methods
- Results
- Conclusions
- References
- Answering questions



3 Planning, Practise and Timing

- Planning
- Practise
- Time

4 Things to Remember

What are people thinking?

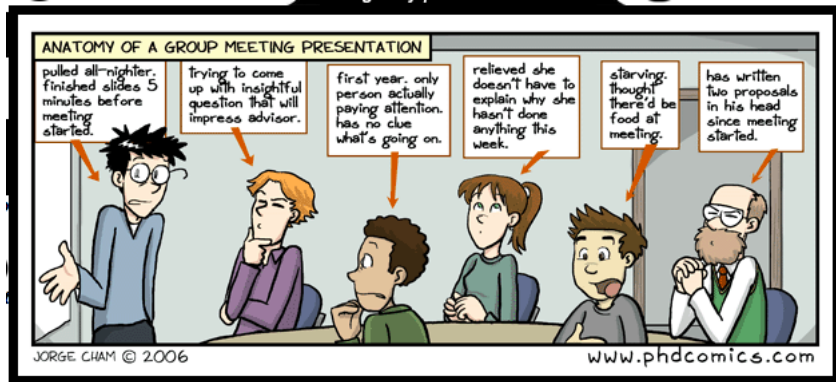


Figure 1 : What are people thinking?^a

^aPhd comics. Anatomy of a presentation. 2006. URL: <http://www.phdcomics.com/comics/archive.php?comid=719> (visited on 06/04/2006).

Why give a presentation?

- Convey your research findings
- May not be familiar to the audience
- Everyone has **one or two** take aways
- Audience must remember

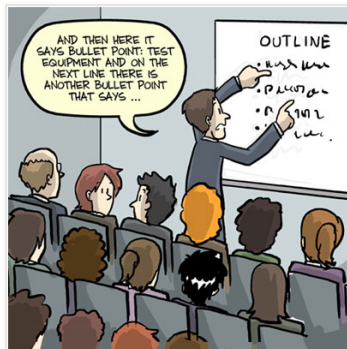


Figure 2 : Taken from^a

^aNature.com. Presentation. 2014. URL: <http://www.nature.com/scitable/ebooks/english-communication-for-scientists-14053993/giving-oral-presentations-14239332>.



Where will what I say today be applicable?

- Conferences - Audience plan to attend your talk.
- Technical seminars - Many places
- Ph.D. or M.S. final talk - To a committee at IITM
- Job talks - Faculty/Research Labs and Industry

The eight parts ...

- 1 Contents slide
- 2 Title
- 3 Introduction
- 4 Existing work
- 5 Methods
- 6 Results
- 7 Conclusions
- 8 References


Planning, Practice and Time

- 1 **Plan** and prepare
- 2 **Practise**
- 3 **Time**

The title slide



Contents


- Title
- *A subtitle* if needed
- Appropriate name(s) 
- Affiliations
- Date and occasion

Who are you?





Contents

- Title
- *A subtitle* if needed
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Who are you?

When this slide is up on the screen, **Wish the audience and introduce yourself, quickly.**



- Quickly summarise the contents ✨
- Can be absent if there is only **one** thing to convey
- Content slides can repeat with **appropriate highlights**, to remind people where you are in the presentation. It helps the **audience** structure the information you are providing.



- *Attention grabber* **MUST** have a picture related to your work and something that you can say to grab the attention of the audience
- *Need* A brief one-liner on why you had to do something
- *Preview* A brief one-liner on why you had to do something
- *Task* What did you do?
- *Main message* A **one-liner** on what you did and that you want all to remember you for it
- *Preview* A brief preview of the outcomes

Existing work: Placing your research



- *Don't* title it *Literature Survey*
- *Fit* - What have others said and how your work fits in?
- *Does it connect* to the previous speaker's work?
- What you are doing that others have not done or tried?
- Usually 1 - 2 slides only [2 - 3 minutes]
- *Don't tabulate literature work in word* and then cut and paste it on your slide
- Give due credit to others. **Put the reference in the slide that cites it**^a - *Can avoid, author list and give Journal information alone.*

^aAlbert Einstein, Boris Podolsky, and Nathan Rosen. "Can quantum-mechanical description of physical reality be considered complete?" *Physical review* 47:10 (1935), p. 777.

- *How long?* - Depends
 - *15 minute conference talk* 1 - 2 slides and 2 - 3 minutes
 - *45 minute research talk* 5 - 6 slides and may be 8 minutes
- *Don't* say things, if it is known well. State the method (*with citation*) and proceed *Depends on audience*
- *Resist the tendency* to explain this in detail, audience will generally not follow and you will lose them.
- *Back up slides* can contain details



- *Climax* of your presentation
- *How long?* - Depends
 - *15 minute conference talk* 4 - 5 slides and 8 minutes
 - *45 minute research talk* 8 - 9 slides and may be 15- 20 minutes
- *Effectively* convince the audience of what you promised in the *Preview* while introducing
- *Plots and figures* must be clearly visible
- *Explain* the axes at least once per plot type
- *Don't* be lazy and use screen shots of graphs and equations
- *Think* through the results for logical flaws
- *Talk* to your advisor before presenting results



- *How long?* - Does not depend on anything (**only one slide**)
- *Not more than 3 punch lines* even for a **PhD** presentation
- *Missed* audience should follow at least the conclusion, so pitch it like a *tamil, hindi Soap opera*
- *Say “thank you”* and expect claps. Usually there will a few who do.....
- *Then take questions*



There is **no need** to list all papers you have read at the end.



- *Allow* time to take questions, about 1 - 2 in a conference
- *Don't get defensive* in case you get a critical comment. Assume that you are playing a role, take it sportively and then think about it after the presentation.
- *Willingly try to answer questions politely*. Don't behave as if you hate the person who asked you a question. Choice of words are important.
- *Don't lose cool* if your ego was hurt a bit. Most people, actually dislike the person who put you down than think that you are dumb.
- *Listen and answer* to the question, don't just say something you know
- *If it's a good question, say so*. Even if you don't know the answer, it tells others that you at least **respect** the audience

Presentation needs Planning I



- What is take away message?
- Do you really have 10 new findings with punch lines?
- What details should you give and what can you leave out?
- Can you extend the presentation or shorten it when needed, with appropriate changes easily?
- Do you know your audience?
- Do you know in what room and at what time your presentation is?
- Do you know if the presentation hall will be well equipped?
Remember, even if it is the organisers fault, you will be the one who will get flustered when your laptop does not connect or if your USB is not read or if equations don't show up.
- PDF presentations are safe
- Carry all cables with you.

Presentation needs Planning II



- Do you know who talks before you?
- Check a few minutes before the session begins, if your slides open up
- If you are using MAC OS X or LINUX, make sure, your presentation will open up on a WINDOWS machine. It is unlikely that they will have MAC OS X or LINUX OS
- Are you going to look your best?

Presentation needs Practise I



- Do you know what slide comes after what?
- Did you present it **aloud** at least 3 times to your friend?
- Before this, did you practise at least **twice** before the mirror?
- Did you insist on a critical feed back from your advisor on your presentation?
- Are you conveying the material in a short and crisp manner or are you beating around the bush?

Maintain time....



- Do you think 5 minutes past the given time is alright? No. Audience hate it and the next person in line is going to want to kill you for it.
- Audience lose interest in 15 minutes. Maintaining time is being courteous.

Things to Remember



- Slides are **NOT** to aid your talk. Make notes
- Audience cannot read slides **and** listen
- Audience like pictures
- Audience like to be respected
- Revise slides and avoid spelling and grammar mistakes
- Follow **MPS** rule (**M**inute **P**er **S**lide)
- Don't use weird colour combinations in a presentation.
Black background with yellow/blue/red text looks horrible.
- Nobody likes this combination **Orange on orange**
- People **cannot follow** a slide full of equations.
- A pointer is not a **lightsaber**. Don't wave it around and be responsible for blinding the audience with it....
- Clap for others and then expect claps for your presentation