

Outline

Oral Communication: Giving Effective Oral Presentations



- ⑥ Purpose of an oral presentation
- ⑥ How to structure an oral presentation
- ⑥ Giving good oral presentations

Purpose of an oral presentation

Main goals: Same as written communication

- ⑥ Communicate the results of research, data analysis
- ⑥ Inform, convince
- ⑥ Instruction

Main principles: Same as written communication

- ⑥ Accessibility
- ⑥ Logical organization
- ⑥ Clarity
- ⑥ “Tell a story”

Purpose of an oral presentation

Only harder!

- ⑥ Time restriction
- ⑥ Attention span, concentration of audience
- ⑥ No chance to revise

Purpose of an oral presentation

Differences from a paper:

- ⦿ Audience does not have luxury of reading references beforehand (or stopping you while they read them!)
- ⦿ Audience wants to be informed about main points – do they want to know more?
- ⦿ Interested audience members can get the full story from your paper later!

How to structure an oral presentation

A basic “recipe:” For statistical research presentations

- ⦿ Abstract
- ⦿ Title slide
- 1. Outline
- 2. Motivating example
- 3. Statistical framework
- 4. Main results
- 5. Simulation results
- 6. Example, revisited
- 7. Discussion

How to structure an oral presentation

Abstract: Same as for journal articles

- ⦿ A **brief** summary of the scope of what is to be presented, without details
- ⦿ Should give potential audience enough information to determine whether the content is of interest

Required for:

- ⦿ Presentations in academia, industry, and government, e.g. seminars, meetings with administration, public forum
- ⦿ Presentations at statistical meetings – will appear in the meeting **program**

How to structure an oral presentation

Title slide:

- ⦿ Short title, to the point
- ⦿ Your name, affiliation, e-mail/web address

1. Outline: Road map

- ⦿ Tell your audience what to expect
- ⦿ Bullets, numbers

How to structure an oral presentation

2. Motivating example:

- ⑥ Puts the work to come in context
- ⑥ Defines the problem
- ⑥ Makes the problem accessible
- ⑥ Warning – give only relevant details, use only a subset of a large dataset to reduce complexity
- ⑥ Plots, graphs vs. tables of observations

How to structure an oral presentation

3. Statistical framework:

- ⑥ Necessary background – but don't just quote papers
- ⑥ Set up formal models, notation
- ⑥ As few symbols as possible! (Your audience will not be able to remember a lot of notation)
- ⑥ Relate notation to motivating example

How to structure an oral presentation

4. Main results:

- ⑥ Outline key steps; lead your audience through your reasoning
- ⑥ But leave out technicalities, mathematical derivations; focus on the main points
- ⑥ No proofs, unless the point of your presentation is to demonstrate a proof
- ⑥ Highlight and interpret the important results

How to structure an oral presentation

5. Simulation results: If you show these

- ⑥ Avoid tables of zillions of numbers
- ⑥ Only show an “interesting” subset of all results you have
- ⑥ Highlight key columns, entries with color or special type to draw attention
- ⑥ Graphical display of results may be easier to digest

How to structure an oral presentation

6. Example, revisited:

- ⦿ Remind your audience of the objective of analysis
- ⦿ Pictures!
- ⦿ Tables containing only most important results that make your point
- ⦿ Explain what the results mean in terms of the subject matter

How to structure an oral presentation

7. Discussion:

- ⦿ Restate the purpose of your presentation
- ⦿ Review the key findings
- ⦿ Discuss aspects that need further study
- ⦿ Software, paper availability

Giving good oral presentations

Similar to written work: But with some differences

- ⦿ Organization and logical flow!
- ⦿ Content and accessibility
 - △ Keep things at a level your audience will be able to follow
 - △ Do not try to include everything you would in a paper

Giving good oral presentations

Delivery and clarity

- ⦿ Speak clearly, audibly
- ⦿ Pace – not too fast/slow, pause slightly after “hard” parts to allow audience chance to think
- ⦿ Repeat difficult points more than once

Giving good oral presentations

Visual aids (e.g. slides):

- ⦿ Large characters, visible from afar
- ⦿ Avoid cluttered slides
- ⦿ Avoid need to define excessive notation
- ⦿ Sparse slides (e.g. containing just a key result or equation) may be most effective
- ⦿ Lots of figures, plots!
- ⦿ Use color or other highlighting to draw attention
- ⦿ Go easy on cutesy special effects

Giving good oral presentations

Timing:

- ⦿ How much you present depends on how much time you've got
- ⦿ 15 minute contributed talk at a statistical meeting
- ⦿ 45-50 minute seminar
- ⦿ Keep within the time limit!
- ⦿ If you have to rush, you're trying to say too much!
- ⦿ *Practice!*

Giving good oral presentations

Handouts:

- ⦿ Often a good idea (especially at preliminary oral, small research seminar, job interview)
- ⦿ Can be distracting with a big crowds (paper rustling)
- ⦿ Slides should be small but readable (e.g., 6-up) to minimize amount of paper (and hence rustling)

Giving good oral presentations

Concluding remarks:

- ⦿ A good speaking style can be **learned** – **practice!**
- ⦿ Good visual aids are essential!
- ⦿ Remember, you know more about the subject of your talk than your audience (so no need to be nervous)!