Oral Presentation Advice

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April 1992; Revised January 1997

Things to Think About

1. **Oral Communication is different from written communication**

   Listeners have one chance to hear your talk and can't "re-read" when they get confused. In many situations, they have or will hear several talks on the same day. Being clear is particularly important if the audience can't ask questions during the talk. There are two well-know ways to communicate your points effectively. The first is to K.I.S.S. (keep it simple stupid). Focus on getting one to three key points across. Think about how much you remember from a talk last week. Second, repeat key insights: tell them what you're going to tell them (Forecast), tell them, and tell them what you told them (Summary).

2. **Think about your audience**

   Most audiences should be addressed in layers: some are experts in your sub-area, some are experts in the general area, and others know little or nothing. Who is most important to you? Can you still leave others with something? For example, pitch the body to experts, but make the forecast and summary accessible to all.

3. **Think about your rhetorical goals**

   For conference talks, for example, I recommend two rhetorical goals: leave your audience with a clear picture of the gist of your contribution, and make them want to read your paper. Your presentation should not replace your paper, but rather whet the audience appetite for it. Thus, it is commonly useful to allude to information in the paper that can't be covered adequately in the presentation. Below I consider goals for academic interview talks and class presentations.

4. **Practice in public**

   It is hard distilling work down to 20 or 30 minutes.

5. **Prepare**

   See David Patterson's How to Give a Bad Talk

A Generic Conference Talk Outline

This conference talk outline is a starting point, not a rigid template. Most good speakers average two minutes per slide (not counting title and outline slides), and thus use about a dozen slides for a twenty minute presentation.

- **Title/author/affiliation** (1 slide)
- **Forecast** (1 slide)
  Give gist of problem attacked and insight found (What is the one idea you want people to leave with? This is the "abstract" of an oral presentation.)
- **Outline** (1 slide)
  Give talk structure. Some speakers prefer to put this at the bottom of their title slide. (Audiences like predictability.)
- **Background**
  - **Motivation and Problem Statement** (1-2 slides)
    (Why should anyone care? Most researchers overestimate how much the audience knows about the problem they are attacking.)
  - **Related Work** (0-1 slides)
    Cover superficially or omit; refer people to your paper.
  - **Methods** (1 slide)
    Cover quickly in short talks; refer people to your paper.
- **Results** (4-6 slides)
  Present key results and key insights. This is main body of the talk. Its internal structure varies greatly as a function of the researcher's contribution. (Do not superficially cover all results; cover key result well. Do not just present numbers; interpret them to give insights. Do not put up large tables of numbers.)
- **Summary** (1 slide)
- **Future Work** (0-1 slides)
  Optionally give problems this research opens up.
- **Backup Slides** (0-3 slides)
  Optionally have a few slides ready (not counted in your talk total) to answer expected questions. (Likely question areas: ideas glossed over, shortcomings of methods or results, and future work.)

Academic Interview Talks

The rhetorical goal for any interview talk is very different than a conference talk. The goal of a conference talk is to get people interested in your paper and your work. The goal of an interview talk is to get a job, for which interest in your work is one part.

There are two key audiences for an academic interview talk, and you have to reach both. One is the people in your sub-area, who you must impress with the depth of your contribution. The other is the rest of the department, who you must get to understand your problem, why it is important, and a hand-wave at what you did. Both audiences will evaluate how well you speak as an approximation of how well you can teach.

An algorithm:

- Take a 20-minute conference talk.
- Expand the 5 minute introduction to 20 minutes to drive home the problem, why it's important, and the gist of what you've done.

- Do the rest of the conference talk, minus the summary and future work.
- Add 10 minutes of deeper stuff from your thesis (to show your depth). It is okay lose people outside of your sub-area (as long as you get them back in the next bullet).
- Do the summary and future work from the conference talk in a manner accessible to all.
- Add 10 ten minutes to survey all the other stuff you have done (to show your breadth).
- Save 5 minutes for questions (to show that you are organized).

Other Talks

Other talks should be prepared using the same principles of considering audience and rhetorical purpose. A presentation on a project in a graduate class, for example, seeks to reach the professor first and fellow students second. Its purpose is to get a good grade by impressing people that a quality project was done. Thus, methods should be described in must more detail than for a conference talk.

Acknowledgments

Thanks to Jim Goodman, Jim Larus, and David Patterson for their useful comments. The current on-line version of this document appears at URL "`http://www.cs.wisc.edu/~markhill/conference-talk.html` ".

How to Give a Bad Talk

David A. Patterson

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Circa 1983

Ten commandments (with annotations gleaned from Patterson's talk by Mark D. Hill):

I. **Thou shalt not be neat**

Why waste research time preparing slides? Ignore spelling, grammar and legibility. Who cares what 50 people think?

II. **Thou shalt not waste space**

Transparencies are expensive. If you can save five slides in each of four talks per year, you save $7.00/year!

III. **Thou shalt not covet brevity**

Do you want to continue the stereotype that engineers can't write? Always use complete sentences, never just key words. If possible, use whole paragraphs and read every word.

IV. **Thou shalt cover thy naked slides**

You need the suspense! Overlays are too flashy.

V. **Thou shalt not write large**

Be humble -- use a small font. Important people sit in front. Who cares about the riff-raff?

VI. **Thou shalt not use color**

Flagrant use of color indicates uncareful research. It's also unfair to emphasize some words over others.

VII. **Thou shalt not illustrate**

Confucius says ``*A picture = 10K words*,'' but Dijkstra says ``*Pictures are for weak minds.*'' Who are you going to believe? Wisdom from the ages or the person who first counted goto's?

VIII. **Thou shalt not make eye contact**

You should avert eyes to show respect. Blocking screen can also add mystery.

IX. **Thou shalt not skip slides in a long talk**

You prepared the slides; people came for your whole talk; so just talk faster. Skip your summary and conclusions if necessary.

X. **Thou shalt not practice**

Why waste research time practicing a talk? It could take several hours out of your two years of research. How can you appear spontaneous if you practice? If you do practice, argue with any suggestions you get and make sure your talk is longer than the time you have to present it.

Commandment X is most important. *Even if you break the other nine, this one can save you.*