Tips and Advice for Giving a Research Presentation

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Initial Thought Exercise

Please write down answers to these questions. I will not collect them.

- Quickly think of a **research** talk that you heard in the last several years that you thought was particularly good.
- Quickly write what you thought was good about the talk.
- Quickly write what scientific content you remember from the talk.

Introductory Comments

- This talk is about research presentations, not teaching presentations.
- There are exceptions to every “rule” I will present.
- Find a presentation style that suits your personality and strengths.
- I do not claim to be an expert on this topic.
- The single most important thing you can do to improve a presentation is to practice. Find trusted friends and colleagues who will give you honest feedback.
- Think of research presentation as communication, not performance.
- **Giving effective oral presentations is a skill that can be learned with practice.**

The Structure of Scientific Presentations I

- Think of a presentation as an introduction. Your goal is to get the audience to want to learn more about you and your research, by reading your papers or contacting you.
- The goal of a research talk is not to present a complete piece of research.
- Often, the only thing your audience will remember about your talk is one or two points, and the general impression you gave.
- Frequently ask yourself what the goal of your talk is. What are you really trying to get across?
- Then cut out everything that doesn’t help meet this goal.
- Try to learn as much as possible about your audience.

The Structure of Scientific Presentations II

- A good presentation usually tells a story.
- Think of a presentation as a paper or essay; it should have a beginning, middle, and end, and it should hold together as a logical whole.
- Begin with an introduction and overview of the questions you are trying to answer.
- Usually, good introductions start with very broad questions and then narrow the focus to the particular issue you will address in your talk.
- When presenting your results, refer to the questions from your introduction.
- Conclude by summarizing. You should try to restate your main points in just a few sentences.
- You may also want to include some thoughts about future work.
- Be extremely careful to not go over your allotted time.

Talk Mechanics and Delivery I: General

- Speak slowly. It is very easy to speak too fast without realizing it.
- Speak confidently and clearly. Don't mumble.
- Be enthusiastic! If you aren't excited about your work, no one else will be.
- Make eye contact with the audience. Shift your attention around the room.
- It can be helpful to find a few friendly faces in the audience and shift among them.
- Do not talk to the screen. And try not to talk to your notes.
- Don't fidget or twitch or do other distracting things.
- If possible, move around the room while you deliver your talk. But don't pace.
- Seek feedback from a trusted friend.

Talk Mechanics and Delivery II: Answering Questions

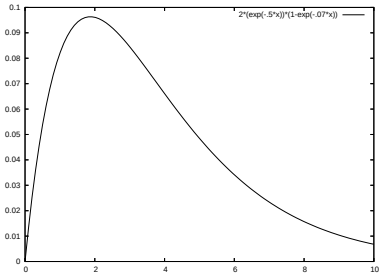
- You should almost always repeat the question before answering it.
- Be honest if you can't answer the question. Ask to discuss it further after the talk.
- If someone wants to pick a fight, decline and be polite. The audience will be on your side.
- Often you will want to take questions during the talk. But don't let questions disrupt the flow. Stay in control.

Slides I

- Use large, simple fonts.
- Do not use any fancy powerpoint features unless there is a compelling reason to do so.
- I much prefer to see an entire slide all at once than to see each line appear one at a time.
- Try to use very few equations.
- Explain all symbols in an equation before the equation appears.
- Never do algebra on a slide.
- Make sure your slides are self-contained. Someone who only reads your slides and doesn't listen to anything you say should still be able to understand the main points of the talk.

What could be improved on the following sample slide?

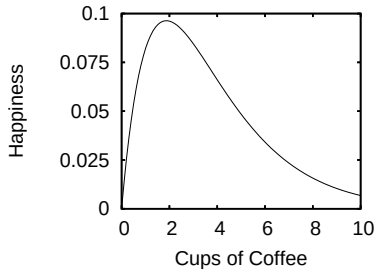
Results



- Plot of cups of coffee versus happiness

A better version:

Results: A clear maximum in happiness at two cups of coffee:



- The results clearly show that the average person is happier if he or she has had two cups of coffee.

Slides II

- There should be one or two main points to each figure that you show. State this point explicitly on the slide.
- Clearly label axes.
- Remember that many people are red-green color blind.
- If at all possible, remove extraneous data from the slide.
- It will often take your audience much longer to understand you plot than you expect.
- So you'll need to leave your figure on the screen for a little while.
- Resist the temptation to show too many slides with figures.

Conclusion

- Practice
- Speak slowly
- Be enthusiastic
- Be confident

Giving effective research talks is an extremely important skill.

With practice and care, anyone can learn to present research results effectively.