

How To Give a Talk

10 Pieces of Advice Inspired by P. R. Halmos

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What is the purpose of a talk?

Goals of the Talk

1. **Inform** so the audience can absorb information
2. **Share** insights and (new) results
3. **Develop** your professional persona

“The question then becomes this: what is the best way to describe a subject (or that small part of a subject that has recently been the center of the lecturer’s attention) to an audience . . . most of whom are interested in something else?”

P. R. Halmos

Guiding Principle:

"Plan it, prepare it carefully,
and then deliver it impromptu."

P. R. Halmos

Principle #1: Start with a hook

- Start with a general subject likely of interest to the audience
- Tell a story or anecdote
- Pose a (thought-provoking) question
- Provide interesting background story and context
- Explain how the field developed and why the problem you consider matters



Principle #2: Dare to omit

- Focus on some essential aspect
- **Don't** show all the technical details, rules and definitions
- **Don't** cover everything that is in the paper

"Less is more [...] and if all lecturers remembered that adage, all audiences would be both wiser and happier."
P. R. Halmos

LESS
IS
MORE

Principle #3: Keep it simple

- Discuss a much simplified version of the real problem
- Use an example to illustrate the main issue and solution

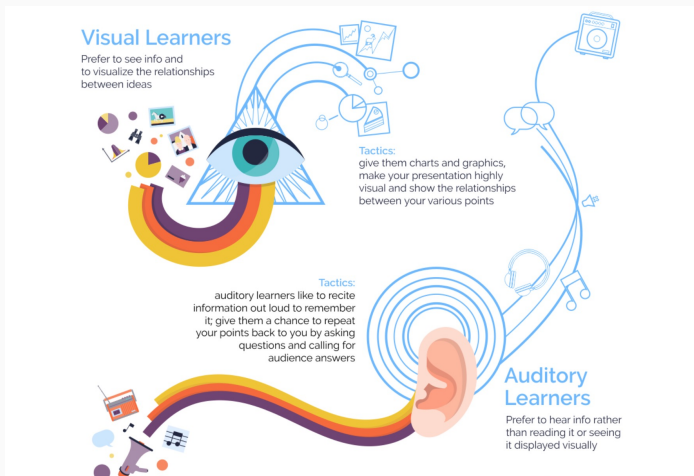


"Some lecturers defend complications and technicalities by saying that that's what their subject is like, and there is nothing they can do about it. I am skeptical, and I am willing to go so far as to say that such statements indicate incomplete understanding of the subject and of its place in mathematics."

P. R. Halmos

Principle #4: Teach something #TILT

- Include a simple fact
- Revisit pitfalls and missteps
- Have something for every level and learner



Principle #5: Structure of your talk

- At least half the talk should be devoted to your own work.
- Get to your own work as early as practical

“Don’t loose the audience! The whole audience should be able to follow at least half of the talk, and most of the audience should be able to follow most of the talk. Do not just address the experts in your area; save any comments meant for them until the last few minutes of the talk.”

P. R. Halmos

Principle #6: Practice, practice, practice

- Talk out loud
- Time it
- Listen carefully to yourself
- Listen to comments from others



"Frequently, people are surprised to find that what they thought would be easy to fit in 20 minutes really takes 45 minutes, or vice versa."

P. R. Halmos

Principle #7: Develop and use techniques and routine

- Get in the mood! Get pumped!
- Before the session / seminar begins: sit somewhere near the front; introduce yourself to the session chair; make sure your equipment works
- Memorize one or two sentences, the opener.
- Speak slowly and loudly
- Take time to explain technical definitions
- Use large fonts
- Do not write too much on the slides
- Use animation wisely and avoid laser pointers

Principle #8: Handling questions

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If there are not questions:

- Be patient
- A good session chair has some
- Thank the audience again

Principle #8: Handling questions

Q: Wouldn't it have been simpler to have done this instead?

Principle #8: Handling questions

Q: Wouldn't it have been simpler to have done this instead?

A: That's a very good point. No. I tried, and it is actually simpler to do that.

A: That's a very good point. Perhaps. It's worth a look. Maybe we can discuss it more after the talk?

Principle #8: Handling questions

Q: How is this related to the work by X?

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Q: How is this related to the work by X?

A: Thanks for raising this. It is different blah blah blah.

A: Thanks for bringing it up. I don't know about this line of work and we should definitely look into it.

Principle #8: Handling questions

Q: How is this related to the work by X?

A: Thanks for raising this. It is different blah blah blah.

A: Thanks for bringing it up. I don't know about this line of work and we should definitely look into it.

Rule of thumb: If the reviewers didn't know about this work, your advisor didn't know about it, and you didn't come across it earlier, the connection (if there is one) wasn't obvious. Don't feel embarrassed. Be gracious and open to learn.

Principle #9: Make yourself available after your talk

- Talk shop with people who stay on
- Post your slides on your webpage

Principle #10: Find your style ... it's a performance!

Develop your professional persona

- **Appearance:** your body language, clothing attire, posture
- **Personality:** your behavior, communication skills, attitudes
- **Competencies:** your special knowledge and skills
- **Differentiation:** what separates you from others



Last but not least ...

Keep in mind that you, the speaker, know more about your work than the audience does. So **relax and enjoy yourself**.