Effective Oral Presentations

1. Why being able to give a good talk is important.

You need to give talks

a) to communicate what you have discovered
b) to obtain feedback
c) to advertise yourself
d) and to better understand things by trying to explain them to others. Being able to give a good talk is possibly the most important of the survival skills you can learn in graduate school.

2. Steps to preparing a talk:

A. Know your audience:

Make sure you have a clear picture in your mind of who your audience is. Consider:

- their level of background knowledge,
- their interests and
- their number (talks to a handful of people should be much more informal).

When talking to a mixed audience, address your talk to the ones with the least background. It makes no sense to direct your talk to a few fellow experts and waste everyone else's time. Your objective should be to educate this audience, about the topic, about yourself and to obtain feedback.

B. Outline your talk:

- Decide what is it that you have discovered. What is the main question and what is the answer in terms your audience can understand?
- A good way to outline a talk is to work backwards. Outline the conclusion slide first, then decide what essential data must be presented to support this conclusion, and finally what minimum introduction and methods you need to make the data understandable.

C. Write out your talk word for word: (But do not READ your talk) Use short sentences and simple words.

D. Rehearse!

- "How to get to Carnegie Hall? Practice! Practice! Practice!"
- Practice alone (don't worry that it makes you feel silly. It's the same for everyone).
- Practice with a small audience (with people outside the field to check that you have provided sufficient background & with people in the field to check the facts).
- Practice explaining and pointing to each element of the figure, clearly and in the correct order.
- Ask your test audience to take notes during your talk and then go through these notes slide by slide.

3. Things to keep in mind when preparing a talk:

A. “Anything worth doing is worth doing slowly”. Time is short. This does not mean you must hurry through your talk. Instead prune your material to the essentials.

B. Keep things simple. Do not expect your audience to remember more than 2 to 4 take home messages. Avoid jargon and abbreviations particular to your sub-field. Even if you define these in a previous slide, you will be surprised how many listeners will have missed or forgotten them.

C. Each slide should tell a unified story. Avoid long lists of text. Avoid separate slides of text and figures. Instead combine them. Put the theme on the top, a short list of facts to one side, and the figure on the other. This short list will help guide you during your talk. It will also help those in your audience who may not have heard or understood what you said. This is particularly useful if English is not your first language or that of some of your audience.

D. There is no time in a talk for an extensive methods section. Mention only the essentials that you need to make the data understandable. You will be surprised how quickly a methods section is forgotten. In a paper the reader can flip back to be reminded. In a talk the listener cannot. A good way of avoid this is to intersperse the essentials methods just before the related data.

E. Repeat without seeming to repeat. A talk is like a string of Christmas tree lights. If someone misses one, the effect of the rest is lost. Repeat the essential facts throughout your talk. Remind the listener what the essential terms mean.

F. Being nervous is normal. Not being nervous is trouble.

G. Be honest. If something in the data puzzles you say so (but pethaps not too often). There are three types of people in the world. 1. Those who know (a very rare breed). 2. Those who know they don’t know. 3. Those who don’t know they don’t know. At the very least, you will be moving up to category 2.

4. The 4 parts of a talk

A. Opening:
   Thank your host.
   Explain the question and why it may be interesting (hypothesis and background).
   Acknowledge those who helped.

B. Body: This is a series of short stories each consisting of
   a specific hypothesis
   specific methods
   results
   a recapitulation
   and implications.

The number of short stories depends on the length of your talk; one for a ten minute talk, two for a 20 minute, talk, etc.

C. Closing: Include
   a grand summary
   broad implications
   and future directions.

D. Answering questions:
   This is very important so try to anticipate some questions.
   When asked a question, restate the question so that everyone can hear it (and if need be rephrase it to make it clearer).
   In your answer, be brief and to the point.
   If you don't know the answer, say so (and give an answer to a related question if pertinent).

5. Things to do just before and during your talk.

Before your talk:

- check your slides/overheads and equipment.
- Check the mom lights.
- Find the pointer.
- Go to the bathroom.

During your talk:

- Show enthusiasm!
- Adopt a comfortable poise.
- Make eye contact with your audience. If possible, look at particular people when making points particularly relevant to them.
- Point slowly and steadily to each element of the slide as you explain them. In figures, point to and explain each axis and each data element. If there are elements that you do not refer to, they should not be in the slide.
- Stop before your time is up.

6. Tips on making good slides/overheads

A. What Font size should you use?

- You can estimate how your slide will appear by looking at your computer screen from the right distance. Use the equation: Distance from the computer screen = (distance
- to the back row/ auditorium screen height)x(computer screen height). An average auditorium screen is 6 feet high. The distance to the last row of seats 36 feet. Suppose your computer screen is 8 inches high. In this case Distance from the computer screen = (36/6)*8 =48 inches =4 feet.
- The minimum font size is about 24 (about 42 characters across and 14 lines down) and the minimum line thickness is about .01 to .02 inches.

Mark and Number your slides.

Hold the side so you can read it correctly. Then write the number on the lower left hand corner. This number should appear in the top right corner when placed in a projector tray.

7. Things to avoid

- Avoid tables of numbers. Use graphs instead.
- Avoid complicated slides designed for another purpose (e.g. a paper). Strip these to the essentials that you will consider in this talk. For example, in a paper you may use a figure with nine parts (a to i) because of space limitations. For a talk break this up into several slides. Extra slides are inexpensive and help the audience follow the flow of thought. For example, the first slide could be just one of the nine parts. The second slide could illustrate a horizontal row. Finally the third slide could show all nine parts.
- Avoid paragraphs of text. If you must use text, use a very brief point form.
- Avoid long lists of text in a single slide/overhead.
- Avoid going back and forth. If you want to refer to a point shown a few slides back, make a duplicate slide.
- Avoid jargon (terms specific to your field).