Giving Effective Presentations

Kevin Leyton-Brown

Computer Science Department University of British Columbia

The Four Steps to Success

- 1. Decide what to say
- 2. Make **slides**
- 3. **Practice**
- 4. Give the talk

The Four Steps to Success

- 1. Decide what to say
- 2. Make **slides**
- 3. Practice
- 4. Give the talk

DECIDING WHAT TO SAY

First, understand your topic

- Read a secondary source (e.g., textbook) to figure out the key ideas, how they fit into the big picture
- Check another secondary source or two to get more clarity and a more balanced view
- Go back to original sources
- Look for more recent work that has built on or applied the concepts you'll present

Decide What to SayMake Slides

Practice

Give the Talk

Next, think about your audience

- What do you think the audience already knows, and what do they need to know?
 - don't talk over their heads, don't bore them
- How can you make your presentation interactive to help them connect to the topic?
 - examples
 - puzzles
 - games
 - polls

Organize all of this into a talk

- Decide which ideas are most important
 - structure the talk around these
 - don't confuse these with the technical details
- Create a high-level outline
 - decide which elements to emphasize, which to elide
 - decide how much time to allocate to each section. Then:
 - what should each section's main message be?
 - can you illustrate with an intuitive example, picture, etc?
 - are your most interesting ideas coming through?
 - are you avoiding extraneous details?

Example high-level outline

- Introduction: the big picture
 - what problem is solved?
 - why did this problem need to be solved?
 - how does the solution work?
- Formal description of the solution
- Evidence that the solution works (proof; experiments)
- Comparisons to other approaches [sometimes comes second]
- Summary

MAKING SLIDES

Outline!

- Make a slide-by-slide outline
- Refine it until it's perfect
 - much easier than changing polished slides later
- If a slide is getting too complex, split it in two
- Ensure the key points get delivered early
- Make sure the flow is logical

Context

- The most common mistake:
 - too much time on technical details
 - too little time on context
- Context:
 - what is the big idea?
 - what problem does it solve?
 - why is this problem important to solve?
 - how does it differ from other alternatives?

Slides: Organization

- Make the talk's structure easy to figure out
 - outline slides
 - verbal reminders and transitions
- One topic per slide
- Each slide organized like an outline:

main points

- sub points
- Keep text as brief as possible

Slides: Design

- Clarity is the most important thing
 - your slides don't need to be beautiful, just effective
- Legible
- Not too cluttered
 - while they're reading, they're not listening
- Visually interesting
 - colour
 - pictures (but make a point, don't distract)
- Usually 1-3 minutes per slide

Decide What to Say Make Slides Practice Give the Talk

PRACTICING

Practice!

- Memorize the first little bit (but not the rest)
- Actually practice out loud
 - don't just read it in your head
 - have a real audience (but not the first time)
 - have a friend make notes and critique afterwards
 - practice it at least 3 times
 - time yourself
- Change your talk based on what doesn't work when you practice

GIVING THE TALK

Getting started

- People will decide in the first 60 seconds whether or not to pay attention to your talk
- Help them answer the questions:
 - "Why should I listen to this?"
 - "Why does this matter?"
- A technical talk is not a mystery novel
 - Don't build to a suspenseful conclusion
 - Tell them the punchline as quickly as possible
 - The rest of the talk is delivering on this promise

Decide What to Say Make Slides Practice Give the Talk

Engage with the Audience

- Start from the assumption that people find talks **boring**, and strive to overcome that boredom
- You're allowed to interact with the audience
 - they're living, human beings, and you're not a recording
- Ask rhetorical questions (or real questions)
- Make eye contact
- Model their perspective and discuss it in the talk
 - explain why you're talking about your topic
 - anticipate places they'll get stuck
 - anticipate their intuitions (both correct and incorrect)

Speaking

- Speak up
- Speak slowly
- Be energetic and enthusiastic
- Use **emphasis**; avoid monotone
- Use natural, conversational language
- If you're not a native speaker, practice for one and have them point out mispronunciations
- If you say "um" (etc), try replacing with pauses
- Film yourself and find out how you look/sound

Overcoming Nervousness

- Be well practiced
- If you draw a blank, looking at your slides will help
- Take a deep breath when you need to calm down
 - take 7-10 seconds to breathe out
- Slow down
- Long pauses are OK
- If you must, bring (one page of) notes
- Think about questions in advance
 - ...but it's OK not to know the answer ("That's a great question")

Rhetoric

- Don't read your slides
- Repeat points that are important
 - this ensures they don't get missed
 - this communicates that they are important
- Walk the audience slowly through figures and graphs
 - explain what the axes mean
 - describe what each data series is
 - tell them what conclusion they should draw
- Welcome interruptions
- Know when to stop

How to Give an Effective Presentation

1. Decide What to Say

- Plan your material, taking the audience into account
- Make a high-level outline

2. Make Slides

- Make a lower-level outline, emphasizing big ideas
- Clarity is more important than being flashy

3. Practice!

At least three times, out loud

4. Give the Talk

- Start strong, letting the audience know why they care
- Be engaging, energetic, and easy to listen to

Sources

My own experience, plus:

- http://www.cs.swarthmore.edu/~newhall/presentation.html
- http://www.cs.ubc.ca/~harrison/PowerPoint/Scientific-Presentation-Planning.pdf
- http://www.matthewjmiller.net/ramblings/presentation-tips/
- http://www.physics.mun.ca/~cdeacon/labs/3900/presentation_tips.pdf