How to give a talk

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Revised 3 February 2016
What’s involved?

• General Concerns
  – Who is your audience?
  – What kind of talk will it be?

• Preparing for the talk
  • Gathering and organizing material
  • Preparing the slides

• Giving the talk
  • What is the point of the talk?
  • Timing your talk
  • Answering questions
Know your Audience

• Whom will you talk to?

• What do they know?
  What knowledge can you depend upon every one having?
  What don’t you have to say.

• What do they expect?
Kinds of Talk

• Standard Conference Talks
  Treat such a talk as an *advertisement* for your research—goal is to persuade listeners to look further

• Long Conference Talks (invited, special slot)

• Class presentation (usually shorter, 10-15 minutes)
Ogilvy on Advertising

• David Ogilvy (http://www.ogilvy.com) — Good advertising makes a promise.

29 January 1996 Newsweek ads promise:
– A Ford Contour will make driving fun.
– Campbell’s Chunky soups give you a fast, square meal.
– Grand Marnier will add mystery to your life.

• What do you promise?

If they read my paper...
– My method will let you optimize large joins in a few seconds.
– Reading my paper will add mystery to your life.
Steps for giving a talk

• Gather material
• Create the slides
• Practice the talk
• Anticipate Questions
• Give the talk
Gather Material

- Find material you will need
- Pay attention to talk parameters
- Create lists of important ideas
- Find appropriate graphics and pictures
  - These are the *only* things that *need* to be projected.
Choosing Material From a Paper

- Mark examples and graphics to use (or adapt).
- Decide if you need additional examples.
  - for example, to replace formal definitions
- Tick off sections to emphasize, cross off ones to skip.
- Consider if another order is better for the talk—listener can’t jump around like a reader can.
  - Algorithm, Implementation Details, Performance Results

- Difficult sections—might omit if they are hard to explain quickly.
  - No proof or derivation details.
  - Avoid large tables of results. Remove any entries that you won’t talk about
  - Avoid complex diagrams (anything that can’t be digested in under a minute).
    - In a longer talk, consider presenting them piecemeal
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Planning your slides

• Calculate the number of slides to use.
  – Usually 1.5–3 min/slide, except for:
    • title pages
    • contents pages
  – Maier: “One minute per slide is impossible!!”
  – Black: it depends on your slides

• Do a story board (a visual outline): 16 per page

• Try for at least $\frac{1}{3}$ slides with visually interesting feature: diagram, (simple) table, graph, photograph.

• Draft slides on quarter pages (or 3" x 5" cards)
  Helps limit amount of material on slides.
Storyboard

Week 6: Give a Talk
Drafting Template

Week 6: Give a Talk
Slides are Prompting Notes

• Think of text on the slides as notes a reader might take during the talk.
  • *Don’t* duplicate everything you will say.
  • You should talk to *all* points on slides.
    If you’re not going to talk about it, **remove it**.
  • Abbreviations, sentence fragments okay
    • helps listener get through material **quickly**
  • Compare:
    • *Next we consider the case where* \( n \) *is strictly between* \( 0 \) *and* \( 1 \).

  • **Case 2:** \( 0 < n < 1 \)
Slide characteristics

• Keep visuals simple and uncluttered
• Restrict text to 4-8 lines per page.
• Use color and font changes to carry a message (e.g., related concepts or experimental results in the same colors)
• Use LARGE fonts.
• Use graphics rather than words where possible.
Formatting

• Pointsize to use depends on font.
  • Helvetica: 32pt 24pt 18pt 16pt 12pt 8pt 6pt
  • Impact: 32pt 24pt 18pt 16pt 12pt 8pt 6pt
  • Times: 32pt 24pt 18pt 16pt 12pt 8pt 6pt

• On text slides, use visual elements so audience can keep their place
  • bullets, indentation, highlight, different-length lines

• Titles are not always necessary.

• Number your slides – useful at question time
ONE WAY TO MAKE YOUR SLIDES NEARLY UNREADABLE IS TO USE ALL CAPITAL LETTERS IN A SANS-SERIF FONT. THIS GUARANTEES ALMOST A UNIFORM FIELD OF GRAY FROM ANYONE WATCHING FROM THE BACK OF THE ROOM. IT ALSO HELPS IF YOU RUN ITEMS TOGETHER, RATHER THAN STARTING EACH ON A NEW LINE. FILL UP THE SLIDE FROM TOP TO BOTTOM WHILE YOUR ARE AT IT. IF YOU PREPARE SLIDES IN THIS MANNER, THEN YOU SHOULD ALSO READ THEM WORD-FOR-WORD OFF THE SLIDE WHILE KEEPING YOUR BACK TO THE AUDIENCE. TRY TO MAKE YOUR VOICE AS MONOTONOUS AS THE SLIDES. SOMETIMES YOU CAN GET A PAYOFF FROM THE LOCAL OPTOMETRIST FOR THE EYE STRAIN IT CAUSES. ABOUT THE ONLY THING THAT WOULD MAKE THIS SLIDE ANY WORSE IS IF I COULD FIGURE OUT A WAY IN POWERPOINT TO JUSTIFY THE RIGHT MARGIN.
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Distracting the Audience

• You paid for all those fancy fonts and features in your text editor; you ought to get your money’s worth out of them.

- If you use enough distracting elements on your slides, the audience will be so pre-occupied they won’t even notice you don’t know what you are saying.

☞ & don’t forget the dingbats!
Animation

• Having new items “appear” can help lead audience through material

• But:
Animation

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• But:

  dissolves
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  are distracting and will make your audience groan.
Other Considerations

• Can be confusing to combine topics on a slide
  – Ok not to fill up a slide.
  – Blank space is your friend.

• Authors & date usually good enough for a citation.
  example: [Launchbury & Sheard 1995]

• If you want to refer back to a slide, repeat it.
  – it can help to put a miniature of a previous slide in a corner
Practice the talk

• If you have not given the talk before, rehearse it **out loud**.
  
  – try it out for length: you'll be surprised!
  
  – running through a talk silently doesn’t give an accurate time estimate
  
  – I sometimes stand in front of a mirror; video recording is even better
  
  – If you go over the allotted time, we’ll take away a lot of points
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Anticipate Questions

• When you give the talk you’ll be expected to answer questions. Prepare for this!
  
  – Know what to expect
  
  – Prepare and practice strategies for effective question answering
  
  – Prepare extra slides for questions you might get.
Before the Talk

1. Know your venue
   • Visit the site beforehand
   • Know where it is, how to get there, don’t be late

2. Stage fright? Try to relax
   • What is the real consequence of messing up?

3. Have crib notes for yourself
   • points to emphasize
   • words to say in difficult parts
   • slides to drop, where to slow down
Grab your audience

• Try to set the tone of a conversation with the audience.
  Try to make audience contact on title slide

• Try to say something intriguing in first two minutes (and in last minute)
  – personal anecdote—how work or interest came about (takes time)
  – appropriate joke
  – question to audience
  – interesting statistic or relevant prop
Delivery

- Don’t stand rooted to one spot. (Unless you’re talking to 500 people in a completely darkened room.)
- Talk to, and look as far as, the back row.
  - We've NEVER heard a talk where the speaker was too loud.
- Regulate your rate of speaking – use crib notes to remind yourself to slow down
  Don’t be afraid of silence: use it to separate ideas, emphasize key points
- Avoid “upspeak” (where everything you say is a question)
- If you tend to fidget, hold a pen
- Make eye contact, find some responsive faces.
  Need to notice questions when they happen.
Directing Attention

• How to get the audience to pay attention to the right part of your slides?
  – Verbally
    • “Notice that the curve has two bumps ...”
  – Gesturing
    • Pointers, computer cursor, your finger, laser pointer
    • Best: if screen is low, walk up and point there
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Using Notes

• Can be okay, but make sure they are notes, rather than full text. **(Don’t read your talk.)**
  – 3" x 5" cards
  – Speaker’s notes on second screen of your projection software
    • don't work for me, because I walk around.

• In case you lose the thread when switching slides: consider just one line for each slide with the first thing to say.
Timing

• Have time targets for certain slides.
  Have slides to omit

• If someone tells you “5 minutes left”, maybe the best thing to do is stop and think:
  – How can I recover?
  – What should I omit?
  – What’s the best use of the time left?

• Know that your conclusion will take $x$ seconds
  Jump to conclusion $x$ seconds before the end of your time-slot

• Don’t refer to lack of time— it makes you look unprepared.
Answering Questions

“I was gratified to be able to answer promptly. I said I didn’t know.”

Mark Twain

Be sure you understand the question.

– Listen to the ENTIRE question.

– Restate
  + if you are not sure you understand
  + if the audience might not have heard

– Ask if you’ve answered the question adequately, but don’t engage in an extended dialog.
Don’t get rattled

• Questioner may be speaking to show off knowledge.

• Take a little time to think, if needed.

• Question may be off the mark — does it reveal a misperception?
  – “you don’t understand” vs.
  – “I didn’t explain that very clearly”
Advice from Many Sources

• Emphasize results and interpretations over minutiae of techniques. (Even if technique is the contribution, emphasize basics and results obtained.)

• Expect to use a non-uniform level of detail.

• Don’t forget a slide with name, affiliation, co-investigators, sponsors — typically the title page

• Plan some flexibility into the talk. Slides you can omit if you are running long, or the audience looks bored.
• Tell your audience what to remember
  – *Interpret* a graph or equation in the text.
  – *Tell* people what they’re supposed to see in a figure

• Don’t feel compelled to put a title on every slide.

• Involve the audience — e.g., ask a rhetorical question, relate a concept or question to common experience

• Build in “re-entry points”—places where a listener can pick up the thread again
  – That was an outline of the correctness proof of the algorithm, but you don’t need to master it to understand our performance experiment...
Explanation and definition via example

plays( MUSICIAN, Schikele, Franklin, Cage, INSTRUMENT, Hardart, Glass Harm., Washtub, YEARS, 14, 10, 2)
Simplify Charts and Graphs

Fewer significant digits, remove or minimize non-data distractions, align columns

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<th>CPU</th>
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**Explanation and Definition via Example**

- Schikele: Hardart: 14
- Franklin: Glass Harm: 10
- Cage: Washtub: 2

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Week 6: Give a Talk

Transaction-processing benchmarks

- Disk IO
- CPU
- %Idle

Bar chart showing performance metrics for TPC-A, TPC-B, TPC-C, and TPC-D.
Class Activity

List ten things that are wrong with these slides