

How to give a talk

What's involved?

- General Concerns
 - Who is your audience?
 - What kind of talk will it be?
- Preparing for the talk
 - Organizing material
 - Preparing the slides
- Giving the talk
 - What is the point of the talk
 - Timing your talk
 - Answering questions
- Advice from people who ought to know

Know your Audience

- Who 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
 - Most conference presentations are 15–30 minutes
 - Listener can take away at most one or two ideas.
 - Treat such a talk as an advertisement for your research—goal is to persuade listeners to look further
- Long Conference Talks (invited, special slot)
 - An hour talk needs to educate the audience on the research.
 - Listener can take away at most two or three ideas.
- Class presentation (usually shorter 10-15 minutes)
 - Directed at your peers and the instructor
 - Demonstrate mastery of class material
 - Audience has a common background and experience
 - Similar in many respects to a conference talk

Ogilvy on Advertising

- David Ogilvy (<http://www.ogilvy.com>) — Good advertising makes a promise.
 - 29 January 1996 Newsweek promises:
 - 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 assignment 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.
 - to replace formal definitions, for example.
 - examples *really* help: listeners have seconds to understand something in a talk, then it's gone forever!
- 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 results tables.
 - Avoid complex diagrams (anything that can't be digested in under a minute).
 - In a longer talk, they might be important.

Planning your slides

- Calculate the number of slides to use.
 - Usually 1.5–3 min./slide, except for:
 - title pages
 - contents pages
 - Dave Maier says “One minute per slide is impossible!!”
 - I say: it depends on your slides
 - Do a story board (a visual outline).
 - Try for at least $\frac{1}{3}$ slides with visually interesting feature: diagram, (simple) table, graph, photograph. (Unlike these slides, you should avoid page after page of text.)
- Draft slides on quarter pages.
 - Helps gauge size of slide.
 - A good rule of thumb: LESS THAN 12 LINES PER PAGE.

Slides are Prompting Notes

- Think of text on the slides as notes a reader might take during the talk.
 - Don't duplicate everything you say.
 - But 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 written material quickly—easier to follow)
 - Compare:
 - Next we consider the case where n is strictly between 0 and 1.
 - Case 2: $0 < n < 1$

Create the slides

- A presentation is a tool that helps you explain to others what you have done.
 - Most of the information is in your comments. The slides give you something to refer to, and remind you of important points.
- A 10-minute presentation will have between 5 and 10 slides.
 - Exception: a talk with pictures that are meant to be viewed for a few seconds with minimal discussion

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.
- Put keywords on poster to help you remember script.

Bad Slides

- 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 YOU 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.

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!

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Formatting

- Pointsize to use depends on font.
 - Courier: 32pt 24pt 18pt 16pt 12pt 8pt 6pt
 - Impact: 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

Landscape vs. Portrait Format

- Most overhead projectors will handle 10" x 10" or so
 - Transparencies are not used in conferences any longer
But good for local, informal talks
Quicker to build (especially with eqns and pictures) than computer slides.
- Video projectors are the modern standard — and tied to standard video formats.
- Don't assume more than 1024 x 768 pixels (landscape format).

Numbering

- Number your slides
 - Helps provide reference points for questions
 - Reminds you how far you have to go

Animation

- Having new items “appear” can help lead audience through material
- But:

dissolves

Fly-ins

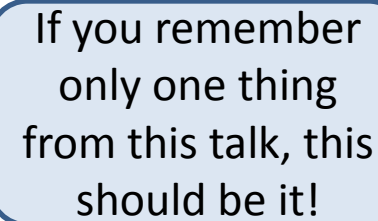
and blinds

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.
 - [Launchbury & Sheard 1995]
- If you want to refer back to a slide, duplicate it, or place buttons on PowerPoint slides to bounce you back and forth.

Practice the talk



If you remember
only one thing
from this talk, this
should be it!

- 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 seem to give an accurate time estimate
 - I sometimes stand in front of a mirror
 - If you go over the allotted time, I'll stop you abruptly and take away a lot of points

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.

Giving the talk

- What to do before you start
- Getting started
 - Grabbing your audience
- Good delivery
 - Directing attention
 - Using notes
 - Timing
- Answer questions

Before the Talk

1. Know your venue

- Visit the site before hand
- 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?

1. Have crib notes for yourself

- points to emphasize
- words to say in difficult parts
- where to slow down if you rushed in practice

Getting Started

- Be prepared
 - mike on, cord untangled
 - projector cord out of way
 - pointer — a stick or computer cursor, not laser pointer
 - have a clock in sight (bring a watch or travel clock)
 - Know where the time prompter is seated
 - Water — if 1 hr talk
- Lights
 - Is screen washed out by outside light or overhead light? AV person or session chair is responsible, but you may have to remind them.
 - Beware of total darkness — Z z z z z...

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.
 - I'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
- Avoid “upspeak”.
 - where everything you say is a question
- If you tend to fidget, hold a pen
- Make eye contact, find some responsive faces (imaginary if necessary).
 - Need to notice questions when they happen.

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 on second screen of your projection software
- 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
 - whats 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 – don’t do lazy evaluation)
 - Restate if necessary (better than answering a different question.)
 - Ask if you’ve answer the question adequately, but don’t engage in a dialog (“perhaps we can discuss this further after the session”)

Don't get rattled

- Questioner may be speaking to show off knowledge (still convincing their 3rd grade teacher they're the smartest in the class).
- Take a little time to think, if needed.
- Question may be off the mark—does it reveal a misperception?
- Did the audience hear the question? (May have to routinely repeat for audience – watch what's done in session previous to yours)

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.
- Consider a “contents” slide, but not at the beginning of the talk. A good place is after introductory problem statement.
- Your talk title need not match the title of your paper.
- Don’t forget a slide with name, affiliation, co-investigators, sponsors— (typically the title page)
 - if only to mark your arrival & introduce yourself

Advice 2

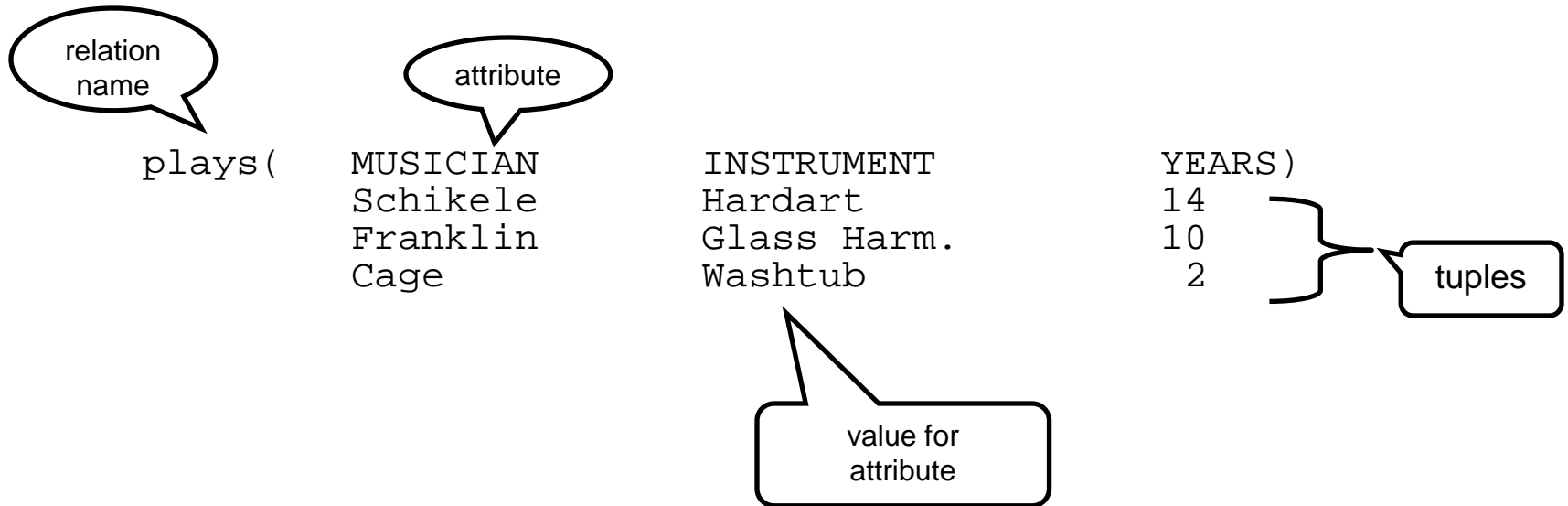
- Include acknowledgments, references.
 - Best to put these at the start!
 - Why? So that your *conclusions* remain on the screen while answering questions.
 - Talking about the acknowledgements allows audience to become accustomed to your accent
- Alternative: put up final slide with references while you're answering questions.
 - Is this the best use of screen-time?
- Plan some flexibility into the talk.
 - Slides you can omit if your are running long or the audience looks bored.

Advice 3

- Indicate what to remember
 - Interpret a graph or equation in the text.
 - *Tell people what they're supposed to see.*
- 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...*

Advice 4

- Explanation and definition via example



Powerpoint is not portable

- It might look different on another machine

Benchmark	Disk I/O	CPU	Idle
TPC-A	141.3	554.23	53.4%
TPC-B	3559.4	1255.83	22.3%
TPC-C	1298.0	988.65	61.1%
TPC-D	1904.4	1667.56	44.2%

Simplify Charts and Graphs

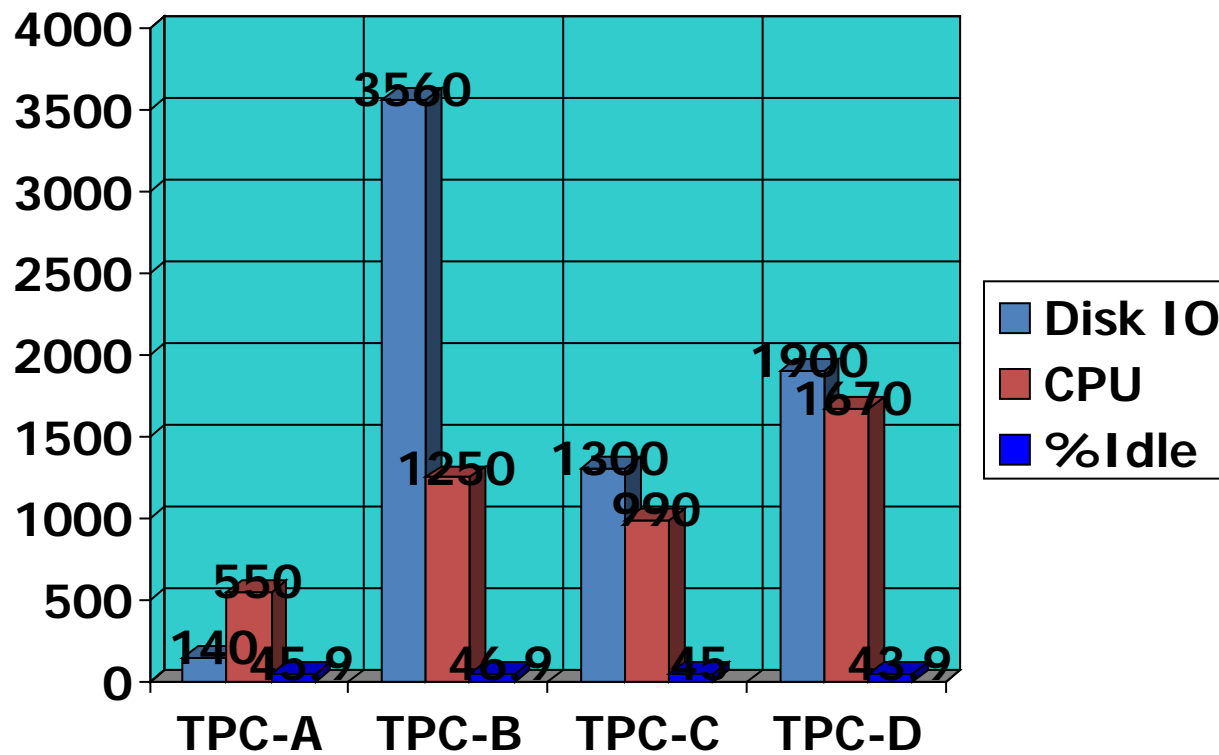
- Fewer significant digits, minimize non-data graphics distractions, align columns

Benchmark	Disk I/O	CPU	Idle
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Simplify Charts and Graphs 2

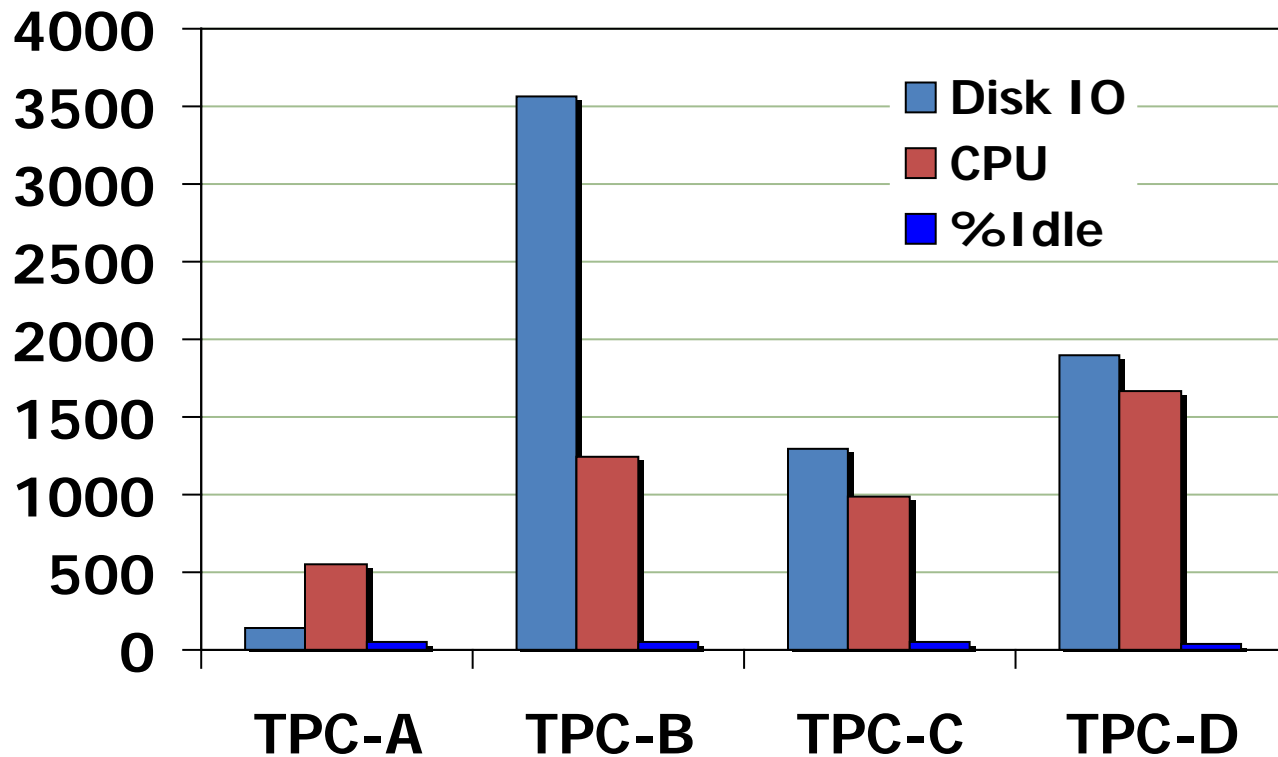
Benchmark	Disk I/O	CPU	Idle
TPC-A	140	550	55%
TPC-B	3560	1250	20%
TPC-C	1300	990	60%
TPC-D	1900	1670	45%

Simplify Charts and Graphs 3



Simplify Charts and Graphs

Transaction-processing benchmarks



Just for fun!

The 10 Commandments for giving a bad talk

How to Give a Bad Talk
by David A. Patterson
Computer Science Division
University of California-Berkeley
Circa 1983

- (with annotations gleaned from Patterson's talk by Mark D. Hill):
- <http://www.cs.wisc.edu/~markhill/conference-talk.html#badtalk>

1. Thou shalt not be neat. Why waste research time preparing slides? Ignore spelling, grammar and legibility. Who cares what 50 people think?
2. Thou shalt not waste space. Transparencies are expensive. If you can save five slides in each of four talks per year, you save \$7.00/year!
3. Thou shalt not covet brevity. Do you want to continue the stereotype that students can't write? Always use complete sentences, never just key words. If possible, use whole paragraphs and read every word.

4. Thou shalt cover thy naked slides You need the suspense! Overlays are too flashy.
5. Thou shalt not write large. Be humble — use a small font. Important people sit in front. Who cares about the riff-raff?
6. Thou shalt not use color. Flagrant use of color indicates uncareful research. It's also unfair to emphasize some words over others.

7. Thou shalt not illustrate. Confucius says “*A picture = 10K words,*” but Simon says “*Pictures are for weak minds.*”
Who are you going to believe? Wisdom from the ages or the person who developed American Idol?
8. Thou shalt not make eye contact. You should avert eyes to show respect. Blocking screen can also add mystery.
9. Thou shalt not skip slides in a long talk. You prepared the slides; people came for your whole talk; so just talk faster. Skip your summary and conclusions if necessary.

10. Thou shalt not practice. Why waste research time practicing a talk? It could take several hours out of your life. How can you appear spontaneous if you practice? If you do practice, argue with any suggestions you get and make sure your talk is longer than the time you have to present it.

Commandment 10 is most important.
Even if you break the other nine, this one can save you.

Class Exercise

- List ten things that are wrong with these slides