How to Give a Scientific Presentation

Modified after Stephanie Pfirman

Audience

Structure

- Intro/overview
- Research question(s)
- Methods
Esopus Creek

<table>
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<tr>
<th>Date</th>
<th>Discharge (cfs)</th>
<th>Precipitation (in/day)</th>
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Discharge of the Esopus Creek (Coldbrook, NY) and precipitation at Slide Mountain, NY (source: USGS/NCDC)
Figures

- Keep ‘em simple
- Use logical colors
  - Blue = cold, red = warm, dark = little, bright = a lot
  - Invisible color
  - Meaning attached to colors
- Explain axes and variables
- Include reference (info and images)


Structure

- Intro/overview
- Research question(s)
- Methods
- Results
  - Greatest hits
  - Figures
- Discussion
  - Expected results?
  - Put in context
  - What went wrong/how improve?
  - Future directions
- Summary/Conclusions
- References

Preparing the Presentation

- Average 1 slide per minute
- No sounds! Judicious use of animations
- Use 3-5 bullets per page
- Consistent appearance
- Speelcheck
Fonts

Type size should be 20 points or larger*:

- 18 point
- 20 point
- 24 point
- 28 point
- 36 point

AVOID USING ALL CAPITAL LETTERS UNLESS YOU WANT TO SHOUT AT YOUR AUDIENCE

* References can be in 12-14 point font


Fonts (cont.)

- Sans-serif:
  - better for powerpoint presentations

- Serif:
  - better for large blocks of text (e.g., written presentations)

Color

Dark letters against a light background work best when the lights are on.

But mama likes light colors against a dark background
Be prepared

- Set up early
- Backups
- Dress snappily

Notes

www.com.msu.edu/_/powerpoint/printing.htm

Rehearsing

- Practice out loud
  - You discover what you don’t understand
  - You come up with better phrasings and ways to describe things
  - Stay within the time limit
  - The more rehearsing, the better!
  - Uptalking

Starting out is the hardest part

To get going, memorize the first few lines

Experienced speakers:
- Speak freely and look directly at audience

Inexperienced speakers:
- Put outline and key points of your presentation on your slides
Look at people, not slides, during presentation
- Stand where the figures can be seen
- Be enthusiastic
- Don’t worry about stopping to think
- Don’t rush
  - Figure out which slide is your half-way mark and use that to check your time

Don’t apologize
- Pointer etiquette

Announce the ending
- Come back to the big picture
- Future directions

Identifies parts the audience did not understand
- Helps you see something from a new perspective
- You can repeat the question
- Keep answers short
- Anticipate and prepare for potential questions
  - Have extra slides ready (e.g., methods, instrumentation)

Giving the Presentation (cont.)

Questions and Answers