

Some Hints on Oral Presentations

ENGR 125CS
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Outline

- Introduction
- Getting Started
- Preparing Visual Aids
- Time Limits
- Practice and Evaluation

Introduction

- Professional Oral Presentations
 - Need to convey technical content
 - Usually have a strict time limit
 - Expect a knowledgeable audience
 - Use a formal presentation style

Getting Started

- Organize your talk with an introduction, the outline, body, and summary or conclusion.
- Refer back to the outline frequently: let the audience know where you are in the talk
- Include only facts or concepts that can be explained adequately in the allotted time.
- Rehearse the presentation so you can confidently deliver it in the allotted time.

Getting Started (cont.)

- Consider:
 - What are the two or three key points I want the audience to remember?
 - What would most surprise the audience about this information?
 - What if visual aids don't work?
 - What if I find out I have less time than planned?
 - What if someone asks a complicated question right in the middle of the presentation?
 - Have a clear and professional conclusion: *not* “well, I guess that’s it.”

Visual Aids

- In general, do not just read from a prepared script. Use an outline or note cards as topic reminders
- Arrive early enough to familiarize yourself with the microphone, slide controls, laser pointer, A/V staff, etc.
- Do not read text from the screen

Visual Aids (cont.)

- Every time you display a slide the audience needs time to interpret it.
 - Describe the abscissa, ordinate, units, and the legend for each curve.
 - If the shape of a curve or some other feature is important, tell the audience what they should observe in order to grasp the point.
- Superfluous animation, display effects, sounds, blinking text, etc., should be avoided
- Use the pointer only when necessary

Visual Aids (cont.)

- Allow one minute of your talk for each slide, e.g., aim for 12 slides in 15 minutes
- Minimize the number of text lines and graph curves.
 - More than 12 lines of text or 5 curves are too many to be comprehended within one minute.
 - *Too little is better than too much.*

Visual Aids (cont.)

- Characters should have a height at least $\frac{1}{40}$ of the total frame height.
- Black lines or white lines on a solid background are more legible than colored lines: avoid using color to distinguish data.

Visual Aids (cont.)

- Verify that the presentation format matches the available projection equipment.
- Laptop, DVD, overhead slides, or VHS tape: make sure such a player will be on hand—and test it in advance!!

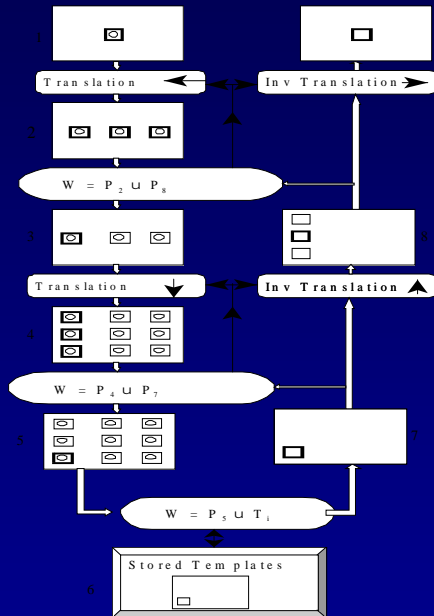
Time Limits

- Know how much time you have been allotted: never exceed the time limit, and avoid leaving lots of extra time
- **PRACTICE** in front of a critical audience with a stop watch
- Keep track of time during the presentation
- Never try to “fly through” the last set of slides if time has run out: **PREPARE** to “cut to the chase” if necessary

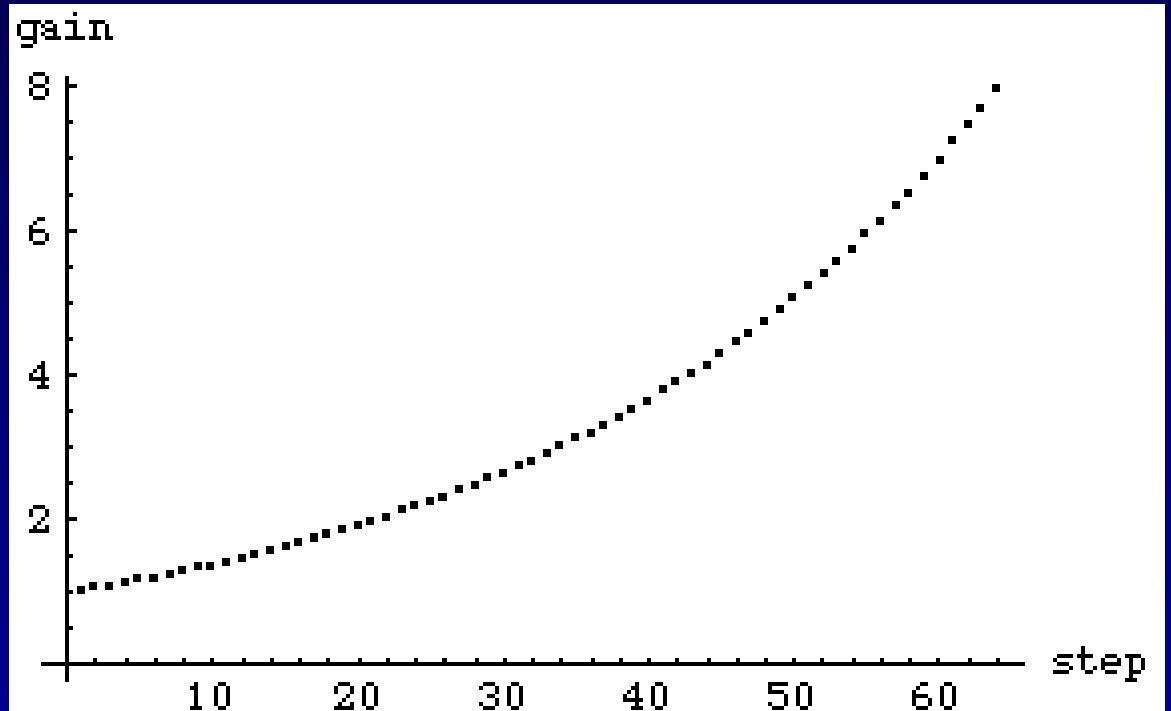
Practice and Evaluation

- Public speaking takes practice: you need to *do* it to get better at it
- Solicit critical feedback from others
- Practice good posture when facing the audience, pointing to slides, etc.
- Work on speaking clearly and evenly

Examples



Too small, and poor choice of line colors.



Crude text style, but conveys the point

Examples

- Anderson, S. E., Dave, A. S., and Margoliash, D. (1996), "Template based automatic recognition of birdsong syllables from continuous recordings," *J. Acoust. Soc. Am.* **100**, 1209-1219.
- Catchpole, C. K. and Slater, P. J. B. (1995), *Bird song: Biological themes and variations*, Cambridge University Press, Cambridge, UK.
- Duda, R. O., Hart, P. E., and Stork, D. G. (2001), *Pattern classification*, 2nd ed., Wiley & Sons, New York.
- Ellis, D.P.W. (2003), "Sinewave and sinusoid+noise analysis/synthesis in Matlab," Electronic document. URL:<<http://www.ee.columbia.edu/~dpwe/resources/matlab/sinemodel>>.
- Fagerlund, S. (2004), "Automatic recognition of bird species by their sounds," Masters Thesis, Helsinki Univ. Technology, Laboratory of Acoustics and Audio Signal Processing.
- Härmä, A. (2003), "Automatic recognition of bird species based on sinusoidal modeling of a syllable," *IEEE Int. Conf. Acoust. Speech and Signal Processing (ICASSP 2003)*, **5**, 545-548.
- Härmä, A. and Somervuo, P. (2004), "Classification of the harmonic structure in bird vocalization," *IEEE Int. Conf. Acoust. Speech, Signal Processing (ICASSP 2004)*, **5**, 701-704.
- Ito, K., Mori, K., and Iwasaki, S. (1996), "Application of dynamic programming matching to classification of budgerigar contact calls," *J. Acoust. Soc. Am.* **100**, 3947-3956.
- Kahrs, M. and Avanzini, F. (2001), "Computer synthesis of bird songs and calls," *Proc. Conf. Digital Audio Effects (DAFx-01)*, pp. 23-27.
- Kogan, J. A. and Margoliash, D. (1998), "Automated recognition of bird song elements from continuous recordings using dynamic time warping and hidden Markov models: A comparative study," *J. Acoust. Soc. Am.* **103**, 2185-2196.
- Krebs, J. R. and Kroodsma, D. E. (1980), "Repertoires and geographical variation in bird song," *Adv. Stud. Behavior*, **11**, 143-177.
- Kroodsma, D. E., and Miller, E. H., eds. (1996) *Ecology and evolution of acoustic communication in birds*, Comstock Publishers, Ithaca, N.Y.
- McAulay, R. J. and Quatieri, T. F. (1985), "Speech analysis/synthesis based on a sinusoidal representation," *IEEE Trans. ASSP*, **34**(4), 744-754.
- McIlraith, A. L. and Card, H. C. (1997), "Birdsong recognition using backpropagation and multivariable statistics," *IEEE Trans. Signal Processing*, **45**, 2740-2748.
- National Wind Coordinating Committee (NWCC) (2004), "Wind-turbine interactions with birds and bats: a summary of research results and remaining questions," RESOLVE, Washington, DC, USA.
- Nowicki, S. (1997), "Bird acoustics," in: M. J. Crocker (ed.) *Encyclopedia of Acoustics*, New York: John Wiley & Sons, Chapter 150, pp. 1813-1817.
- Pascarelle, S.M., Pinezich, J., Merritt, R.L., Kelly, T.A., Roman, B., and Maher, R.C. (2004), "Automated acoustic monitoring of bird strike hazards," 6th Annual Meeting of the Bird Strike Committee USA/Canada, Baltimore, MD, September, 2004.
- Rabiner, L. R., Rosenberg, A. E., and Levinson, S. E. (1978), "Considerations in Dynamic Time Warping Algorithms for Discrete Word Recognition," *IEEE Trans. ASSP*, **26**(6), 575-582.

Why show so many lines?
No one can read it!

Conclusion

- Decide upon two or three key points
- Anticipate problems and prepare contingency plans
- PRACTICE thoroughly and carefully
- Seek and use feedback from others