

Effective Oral Presentations

Les Perelman

Figures removed due to copyright restrictions.

Agenda

- **Preparing and Presenting a Technical Talk**
- **Visual Aids**
- **The Perils of PowerPoint**

Steps

- **Preparing a Talk**
- **Presenting your Talk**
- **Supporting your Talk
with Visuals**

Preparing a Talk

- **Audience Analysis**
- **Time & Focus**
- **Organization**
- **Practice**

Audience Analysis



Audience

- **What is your purpose?**
 - ◆ **What change in the audience do you want to effect?**
- **What do they know?**
- **What some of them do not know?**
- **What do they want?**
- **What will interest them?**

**What will keep you audience
awake?**



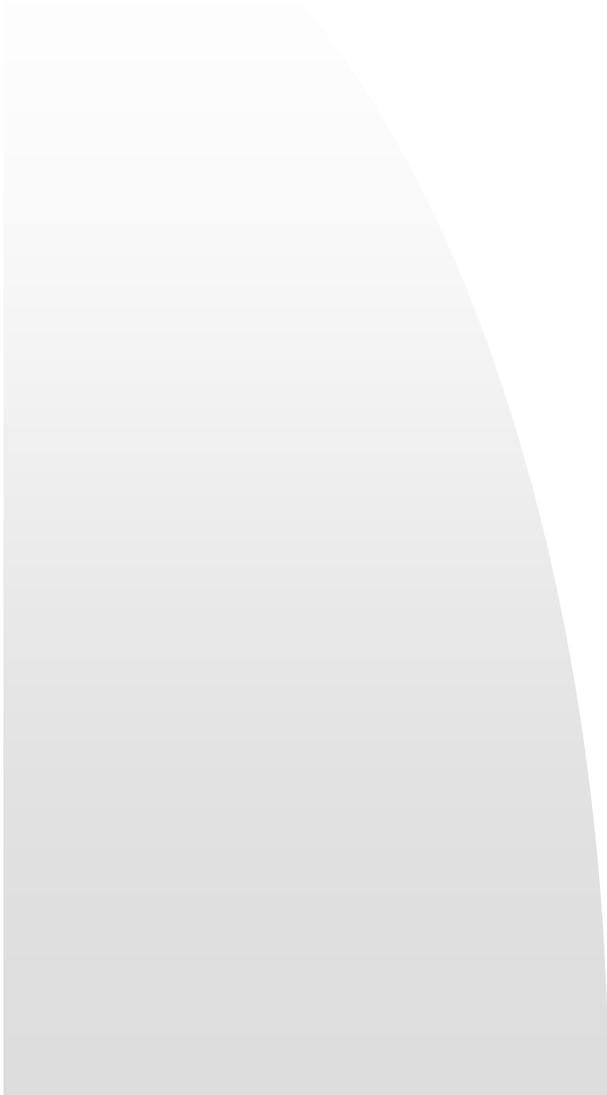
Time and Focus

- **Organize your talk to fit allotted time**
- **Talk as Verbal Abstract or Summary**
- **Cover only 3 or 4 important points**

Three-Part Organization

- **Tell them what you are going to say**
 - ◆ **Introduction**
- **Tell them**
 - ◆ **Body**
- **Tell them what you said**
 - ◆ **Conclusion**

Introduction is Funnel

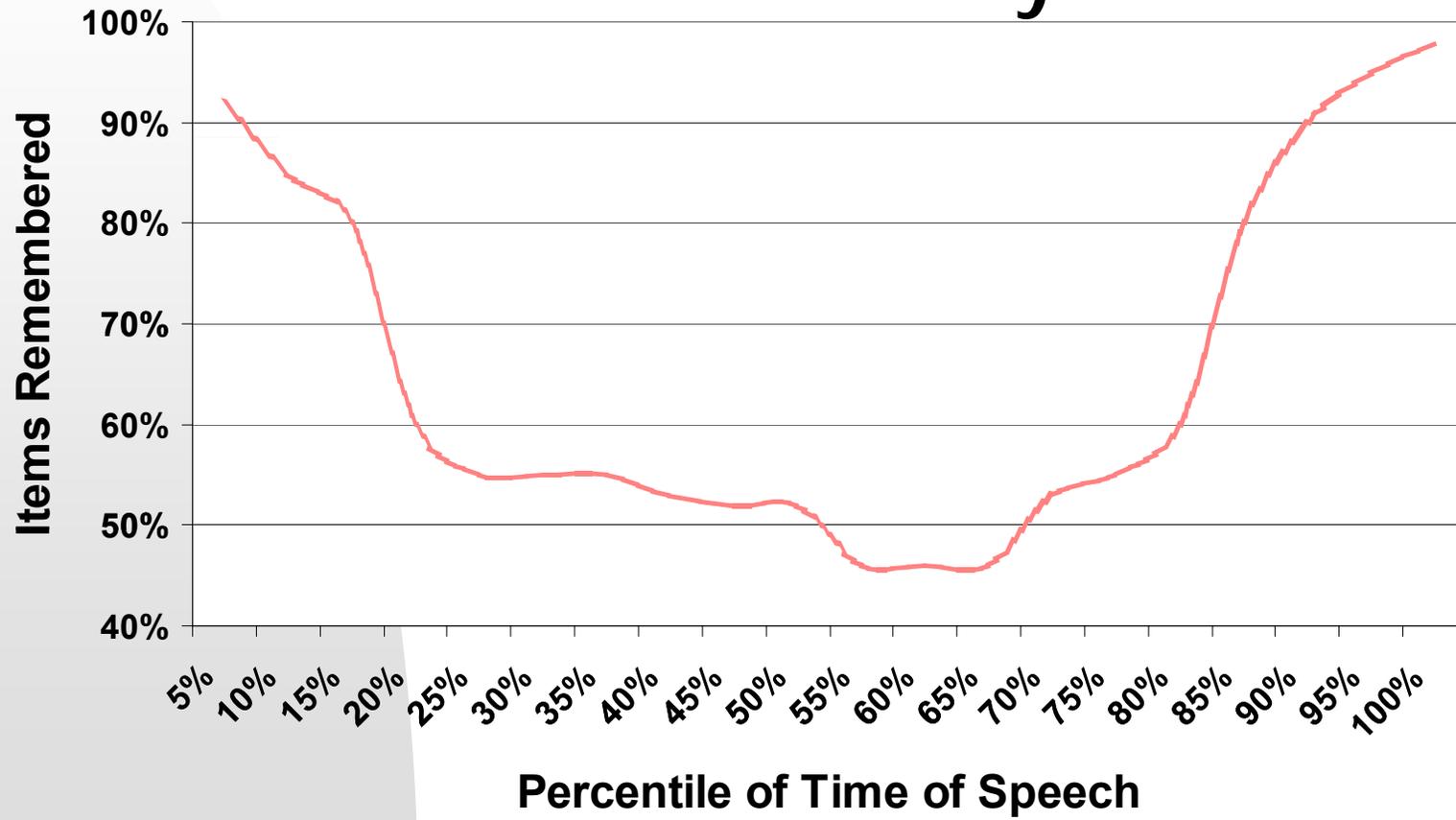


Introduction

- ◆ Gives background
- ◆ Prompts Interest
- ◆ Presents headlines
- ◆ Gives roadmap of talk

Place Important Information at Beginning and End

Audience Recall By Time



Body

- **Follow roadmap**
- **Provide clear “road signs” marking transitions**
- **Repeat important points before moving on to next topic**
- **Use visuals for emphasis and to increase comprehension**

Conclusion

- **Two or Three Major Points**
- **“Take away” message**

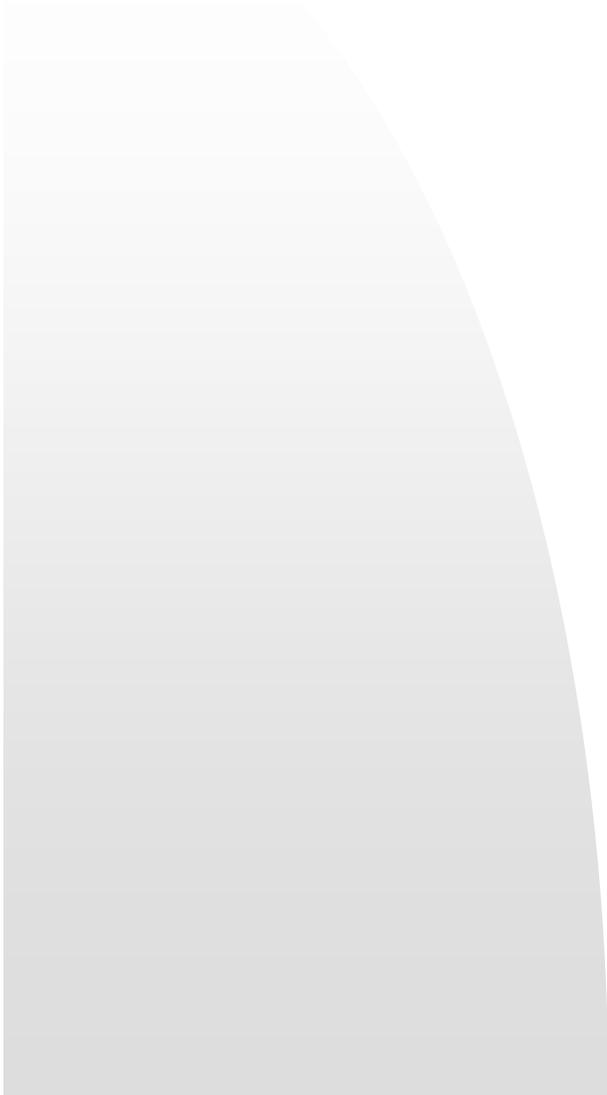
Practice

- **By yourself**
- **In front of friends**
- **In actual space**
 - ◆ **Know thy space**

Prepare backups

- **Overheads**
- **Backup computers**

Delivering the Presentation



Physical Presence

- **Don't fidget**
- **Look at your audience**
- **Avoid clicking and clanging objects**
- **Don't read your talk**

Become Comfortable

- **It's about the content, not about you**
- **Decide how much you want to move**
- **Figure out hand placement**
- **Find friendly faces in audience**
 - ◆ **Have conversation**

Vocal Presence

- **Speak clearly**
- **Slow down**
- **Emphasize key word – avoid monotone**
- **Practice to avoid *um's*, *ah's*, & *like's***
- **Avoid dropping at end of sentence**

Take Breaths



HANDLE QUESTIONS AND ANSWERS

- **Listen Patiently**
- **Repeat the Question**
- **Answer the Question, No More, No Less**
- **Make Transition Back to Presentation**
- **Don't Be Defensive or Bluff: If You Don't Know, Say So**
- **Offer to Fill in Blanks Later**
- **Handle "Problem" Questioners**

WORK WITH VISUAL AIDS

- **Establish Verbal Transition**
- **Reveal the Visual**
- **Point to Specifics**
- **Develop "So What"**
- **Remove Visual**
- **Turn Off Projector When Not Needed**

Effective Visual Aids



Design effective graphics



Keep it simple



Don't be fancy



Don't Be Overly Complex

From “Jean C. Krausea and Louis D. Braida, “Investigating alternative forms of clear speech: The effects of speaking rate and speaking mode on intelligibility”

Focus on information



Not Cuteness



Don't Make Slides Too Heavy

- The results of this study show that (1) at low rates, neither of the additional modes examined provided an intelligibility benefit over clear speech. At higher rates, training of talkers, the benefits of clear speech were reduced to intermediate levels as reported. Specifically, a form of clear speech was developed at low (roughly 100 wpm) rates. Because the intelligibility of clear/slow over normal/slow was not significantly greater than clear/normal over conv/normal, talkers can benefit from the use of clear speech at low speaking rates (slow rates, 100 wpm), but not at higher rates. The benefits of clear speech are independent of rate, talker, and listener.
- While the intelligibility of clear speech was not significantly greater than normal speech at high rates, as a result of the fact that $m2clear$ was not used for talkers, it could still be a useful form of clear speech. The physiological constraints on the intelligibility of clear speech at high rates must decrease more rapidly than the intelligibility of clear speech at low rates. Therefore, clear speech must be used at lower rates to compensate for the higher intelligibility. Considerable research can be done to determine the intelligibility advantages of clear speech at certain "cutoff" speaking rates. You should examine only a lower bound (normal rates of roughly 100 wpm) of clear speech. At least for the talkers (T1 and T3) appear likely to have elicited clear speech, clear speech could be more intelligible than conversational speech. Such conversational speech had been elicited. Moreover, since the training procedure emphasized the use of clear speech, it is possible that additional training could push the cutoff rate further.
- Subjective comments during the training procedure indicated that the listener feedback provided during the training procedure was helpful for developing clear speech. In particular, one talker noted that trends in listener feedback were helpful for identifying common phoneme confusions. He reported that this information was used to emphasize certain phonemes to emphasize. Other talkers expressed interest in listening to speech in order to gain information on how to speak more clearly. This request was granted. The talkers believe they have natural strategies for speaking clearly in difficult communication situations. Moreover, these strategies may differ depending on the nature of the distortion.

Typography

- **≥ 20 pt**
- **Use bold sans serif typeface**
- Do not use serif fonts such a Times New Roman
 - ◆ **Microsoft's default font**
- **AVOID USING ALL CAPITAL LETTERS**

Layout

- **Landscape
(Horizontal) Format**
- **Try to use a picture
with every slide**
- **Be generous with
white space**

Color

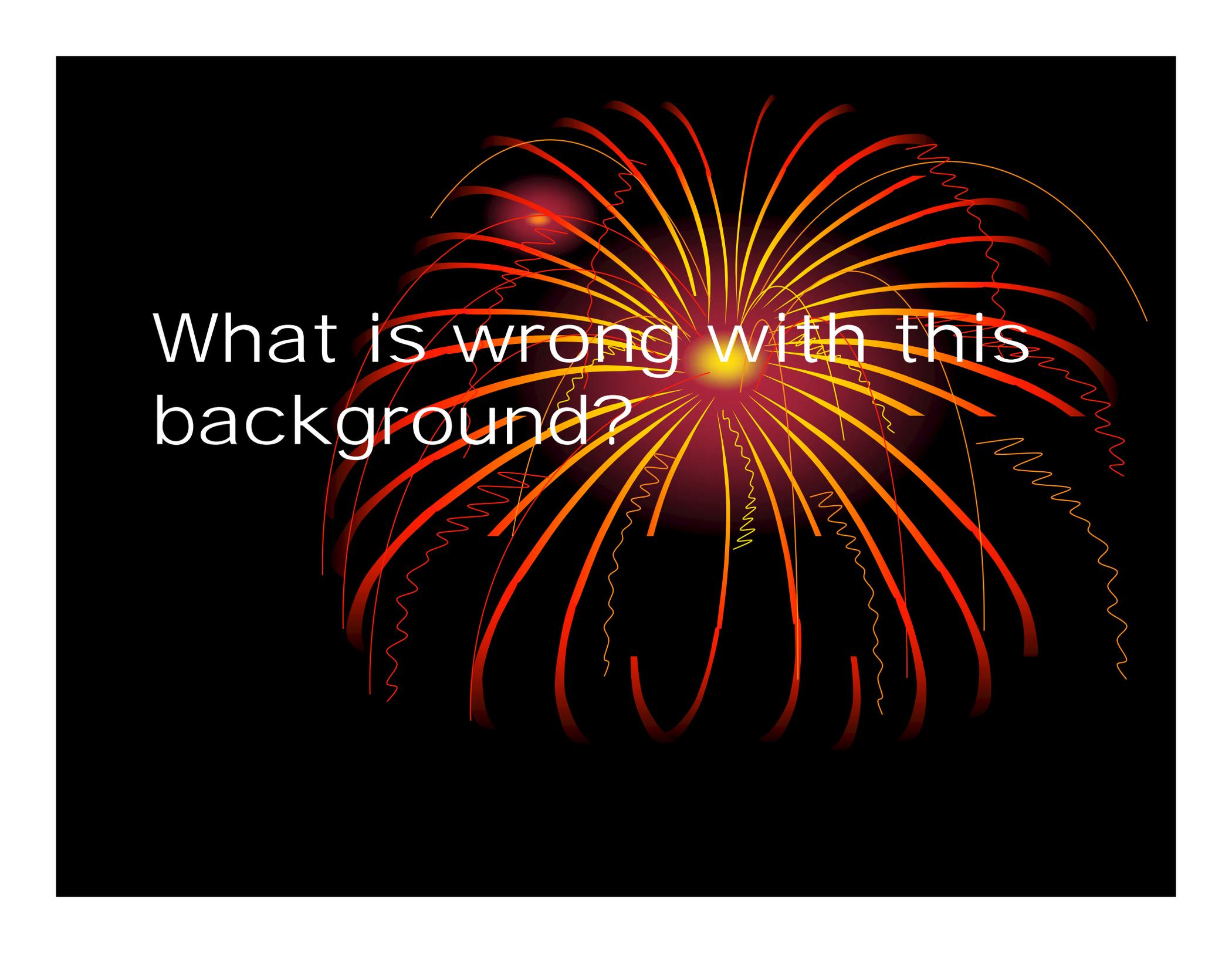
- **Use**
 - ◆ **dark type on light background or**
 - ◆ **light type on dark background**
- **Avoid red – green combinations**

Avoid Using Red and Green Combinations

What is wrong

 With this slide?





What is wrong with this background?

Text

- **Begin with Headline**
 - ◆ **Short for most presentations**
 - ◆ **Whole sentences for scientific presentations**
- **Limit bullets to**
 - ◆ **2-4 items**
 - ◆ **not more than two levels**
- **Keep text block to no more than two lines**

The Perils of Power Point

- **Do Not Use Design Wizard**
- **Do**
- **Not**
- **Use**
- **Fancy**
- **Animation**

Do Not Use MS™ AutoContent or Design Wizards

- **Microsoft™ is always wrong**
- **Some fun with AutoContent Wizard**

A New Approach to Slide Design From Michael Alley

Rethinking the Design of Presentation Slides

Michael Alley
Virginia Tech

Source: Chapter 4 in *The Craft of Scientific Presentations*

**The audience remembers more when you
use well-designed slides**



For a technical presentation, you should set high goals for the presentation slides

Slides should help the audience during the talk

Slides should serve as notes for the audience after the talk

Slides should serve colleagues having to make the same talk



More effective than using PowerPoint's defaults is using a sentence headline supported by images

**Sentence
Headline**

**Support
in Body**



Our goal is to test a fillet design for turbine vanes downstream of the combustor

Combustor

Turbine vanes

[Pratt&Whitney, 2000]

The goal of the fillet design is to reduce vortices that disrupt the film cooling of the vanes

Our goal is to test a fillet design for turbine blades and vanes downstream of the combustor

Combustor

[Pratt&Whitney, 2000]

The purpose of the fillet design is to reduce vortices that disrupt the film cooling of the blades and vanes

In Summary

- **Plan**
- **Pictures**
- **Practice, practice, practice &**

Always leave them laughing



MIT OpenCourseWare
<http://ocw.mit.edu>

21W.747 Classical Rhetoric and Modern Political Discourse
Fall 2009

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.