

Basics of slides that communicate: a rubric for grading your briefing slides

- Readable font
- Minimal text
- Graphics labeled
- Titles meaningful
- Reinforcement, not distraction
- First slide*: title, names, pictures
- Last slide*: graph of learning

* see samples, below

Basics of slides that communicate

Slides are

not a memory aid,
not a version of a written report,
not the last part of your prep.

Doumont http://www.opnmagazine-digital.com/opn/201103/pg=14#article_id=53698

Basics of slides that communicate

Ineffective slides are:

worse than nothing—
because they distract from what you are saying.

Doumont http://www.opnmagazine-digital.com/opn/201103/pg=14#article_id=53698

Basics of slides that communicate

Effective slides are

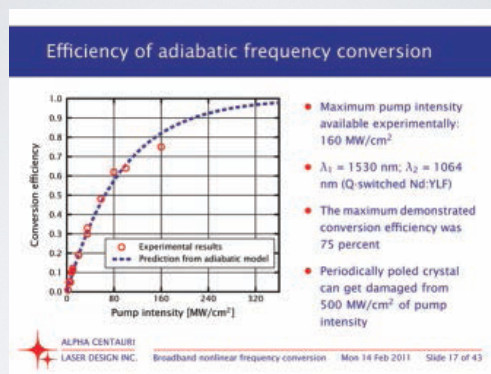
- unambiguous,
- easy to grasp,
- a second channel for the message.

Basics of slides that communicate

If audience members miss the presenter's spoken point for any reason, they should be able to get it by taking one look at the screen. Conversely, if they miss the point on a slide, they should be able to get it by listening to the presenter. This redundancy between the two channels is a solid strategy toward compensating for unavoidable transmission losses. For it to work well, the two channels should interfere constructively and not detract from one another: Looking at a slide should not prevent the audience from listening to the presenter at the same time.

Doumont http://www.opnmagazine-digital.com/opn/201103/pg=14#article_id=53698

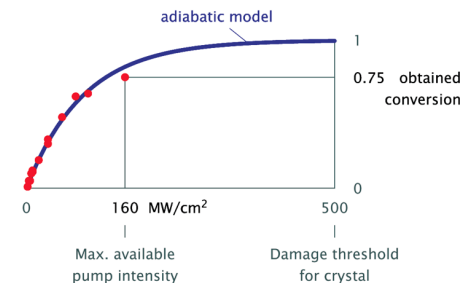
This slide is cluttered; it requires reading and thinking, which distract from listening.



Creating Effective Visual Presentations, Jean-Luc Doumont

How has this slide been improved?

The conversion approaches 100% for high enough pump intensity.

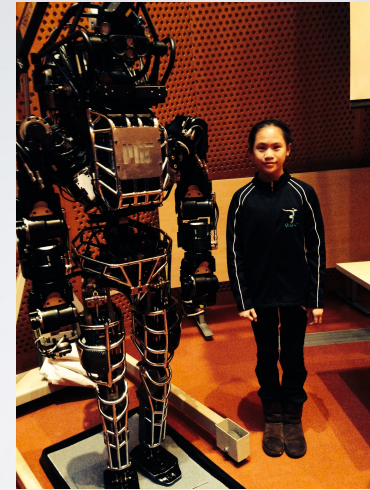


Creating Effective Visual Presentations, Jean-Luc Doumont

Font size is critical.

48 pt	Text should be
42 pt	readable from the back of the room
36 pt	readable from the back of the room
32 pt	readable from the back of the room
28 pt	readable from the back of the room
24 pt	without having to squint

Use of images is critical...



and their sources must be cited.

Jane Connor (C) 2013
MIT's DARPA Challenge Robot, and friend

Required first slide: names and photos

Lab X: Lorem ipsum dolor sit amet

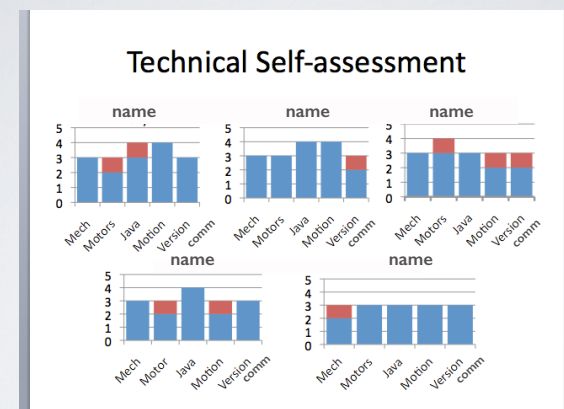
Team 9: The Nameless Nines



name name name name name

How does this slide fit the purpose of the briefing?

Required final slide: assess your individual learning
(format of your choice)



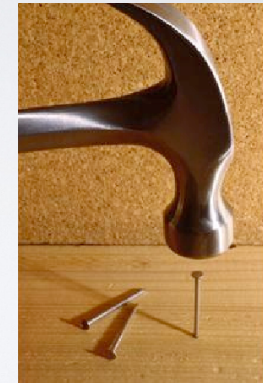
How does this slide fit the purpose of the briefing?

Assertion-evidence slides are a format that can be extremely effective; consider using them.

The following series of slides shows some effective ways to translate typical technical slides into more effective assertion-evidence slides.

For more information, see
Michael Alley,
*Speaking Guidelines for
Engineering and Science Students*
<http://www.writing.engrpsu.edu/csp.html>

Assertion-evidence slides put their main point in full-sentence headings, helping the audience grasp and retain it.



Visuals hammer the point home

(c) The Survivor Woman

Sample assertion-evidence slides.

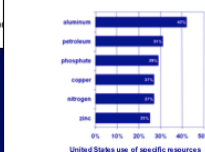
This presentation shows transformations of slides from the traditional to the assertion-evidence design

Before

U.S. Resource Use

- The United States uses:
 - 42% of all the aluminum produced worldwide
 - 31% of all the petroleum
 - 29% of all the phosphate
 - 27% of all the copper
 - 27% of the nitrogen
 - 25% of the zinc.
- Approximately 30% of all resources

Although the U.S. has 5% of the world's population, we use an average of 30% of all resources



After

Michael Alley, Penn State University, <http://www.writing.engrpsu.edu/research.html>

Sample assertion-evidence slides.

The Core of This Talk

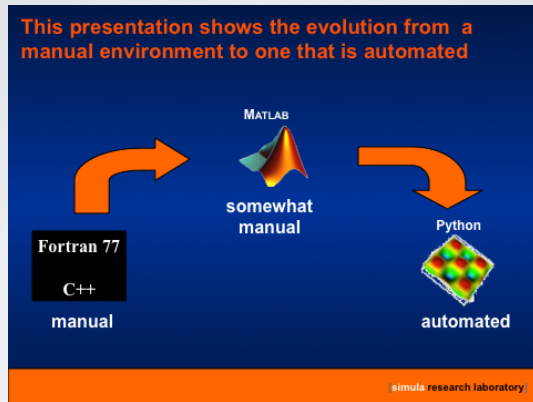
- Scientists are on the move from programming compiled languages (Fortran, C/C++) to environments like Matlab
- Why? Matlab is easier to use and feels more productive
- We can extend the Matlab way of working* far beyond M

Before

High-Level Scientific Programming with Python - p. 11

Michael Alley, Penn State University, <http://www.writing.engrpsu.edu/research.html>

Sample assertion-evidence slides.



Michael Alley, Penn State University, <http://www.writing.engrpsu.edu/research.html>

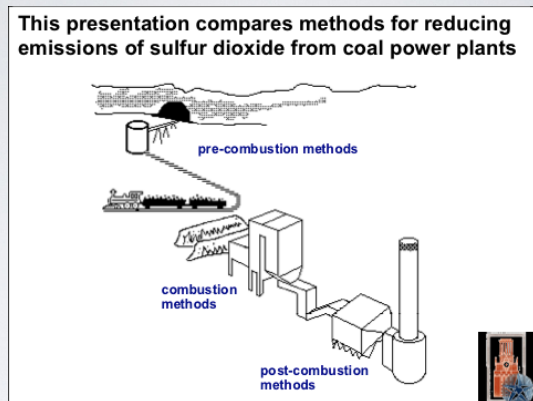
Sample assertion-evidence slides.

Outline

- Introduction
- Background
- Pre-Combustion methods
 - Coal switching
 - Coal cleaning
- Combustion methods
 - Atmospheric
- Post-Combustion methods
 - Absorption
 - Adsorption
- Conclusions
- Acknowledgments
- Questions

Michael Alley, Penn State University, <http://www.writing.engrpsu.edu/research.html>

Sample assertion-evidence slides.



Michael Alley, Penn State University, <http://www.writing.engrpsu.edu/research.html>

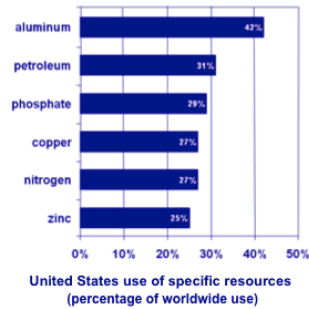
Sample assertion-evidence slides.

- U.S. Resource Use
- The United States uses:
 - 42% of all the aluminum produced worldwide
 - 31% of all the petroleum
 - 29% of all the phosphate
 - 27% of all the copper
 - 27% of the nitrogen
 - 25% of the zinc
 - Approximately 30% of all resources worldwide

Michael Alley, Penn State University, <http://www.writing.engrpsu.edu/research.html>

Sample assertion-evidence slides.

Although the U.S. has 5% of the world's population, we use an average of 30% of all resources



Michael Alley, Penn State University, <http://www.writing.engr.psu.edu/research.html>

Sample assertion-evidence slides.

Iron

- An abundant metal, makes up 5.6% of earth's crust
- Properties:
 - shaped, sharpened, welded
 - strong, durable
- Accounts for >95% of metals used
- Iron ores discovered in 1844 in Michigan's Upper Peninsula
- Soon found other ores in upper Wisconsin and Minnesota

Iron Ore Distribution

Kesler 1994

Michael Alley, Penn State University, <http://www.writing.engr.psu.edu/research.html>

Sample assertion-evidence slides.

Iron ores make up 5.6% of the earth's crust and account for 95% of the metals used

Iron ore

Iron

Is strong and durable

Can be shaped, sharpened, and welded

Iron Ore Distribution

[Kesler 1994]

Michael Alley, Penn State University, <http://www.writing.engr.psu.edu/research.html>

Assertion-evidence slides are neither the best nor the only way to configure slides.

But they are an option that can be highly effective when used thoughtfully.

Michael Alley, Penn State University, <http://www.writing.engr.psu.edu/research.html>