PowerPoint Presentations

Content and Form

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Presentations Matter!

You finally have an audience

Now make something of it!
PowerPoint
a Framework for Communication

1) **Message** to the audience

   whatever you want to communicate
   must be well represented

2) **Support** for you as presenter

   - Order
   - Confidence
   - Demands that you communicate
The Structure of a Presentation

1. Tell them what you are going to tell them

2. Then tell them

3. Finally, tell them what you just told them
In Practice

Summary:

We did this and we found that.

1. Why should your audience care

2. Background/Context

3. What did we do

4. What did we find out

Summary:

We did this, we found that,

and isn’t it great
Details

- No talk is ever “too simple”
- There should be an easy to follow, logical progression
- What is the story line?
Keep things simple
Avoid transitions
sound (noise)
fancy fonts
canned graphics

Put yourself in the shoes of your audience. What do they see?
Before you start

- **Turn off** “auto” features
  - AutoFit
  - Automatic Bullets
  - Automatic Capitalization

- **Decide** on background and font(s)
Screen & Print versus Projection

- Brightness and contrast
  Low

- Resolution
  Poor

- Function
  Support
  not reading material
Implications

- Choice and use of fonts
- Use of colors
- Layout and format of graphs
- Use of tables
- Equations
### Fonts

<table>
<thead>
<tr>
<th>Sans serif</th>
<th>Serif</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arial</td>
<td>Times</td>
</tr>
<tr>
<td>Calibri</td>
<td>Cambria</td>
</tr>
<tr>
<td>Verdana</td>
<td>Century</td>
</tr>
<tr>
<td>Comic Sans</td>
<td>Garamond</td>
</tr>
</tbody>
</table>

Better presentations through better fonts.
Under conditions of low contrast or low resolution, the sans serif fonts are easier to read. If you don’t believe this, look at what fonts are chosen for traffic signs.

It is also known that fonts with a larger counter space are more readable under adverse conditions. Counter space is the completely enclosed space in the “e” the “A”, etc.
Can you read it on your monitor from 6 feet away?

ALL CAPS and ITALICS are harder to read

Do you notice much difference?

Or is this better
Contrast

Try to read this

Try to read this

Try to read this

Try to read this

Try to read this

Try to read this
In general a light background with dark text works best. It is much harder to get good results with a dark background and light text.

Red on blue or blue on red is very hard on the audience. The eye cannot simultaneously focus on colors that are far apart in the spectrum.

Avoid

yellow on white

bright green on white

This can be a major problem in graphics programs and spreadsheet software which have these colors set as default.
During the middle ages Cologne became a major religious center. Hundreds of churches were build, all lavishly furnished with the remains of saints of many flavors. This attracted large numbers of pilgrims which stimulated the economy and made possible the importation of more saintly remains for which more churches had to be built etc.
Cologne and Religion

Religious life

Economic prosperity

Head on/Head off
• Cluttered
• Small font
• Merges with background
Much better
Are you impressed? You audience won’t be unless you explain the equation in detail. What do the symbols stand for? What do the terms in the equation mean? Which ones are important etc.

It takes a lot of time to explain an equation, and for the audience “to get it”. Often something like this works much better:

\[
\frac{4\pi}{\omega_{pe}^2} \frac{dj}{dt} = E + \frac{1}{c} v \times B - \frac{1}{nec} j \times B + \frac{1}{ne} \nabla \cdot \vec{p} - \eta j
\]

The current changes mainly due to
- Electrostatic force \( \sim E \)
- The Lorentz force \( \sim v \times B \)
- Damping \( \sim \eta j \)
Tables can be very effective when you want to show a comparison between a very small set of numbers. For anything that contains more than about five numbers use a chart or graph.

It took only seconds to make this pie chart in PowerPoint 2009. Select it and check out how easy it is to make one yourself.
A very nice, but much longer, presentation on how to make power point presentations can be found at

http://revitalise.ncsa.illinois.edu/workshops/sess6/resources/Effective_presentation.ppt

And there are lots of web sites with advise on how to put power point presentations together. Such as

In Summary

1. Create a message

2. How does the PowerPoint presentation help your audience?

3. How does it help you?

4. Simplify, polish, simplify and polish again, and again