Improving Your Presentation Graphics

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Today’s Objectives - Default

- Presentation graphics
  - Selective
  - Intentional
- Fonts, Colors, Backgrounds, Bullets
- Initial learner comprehension
- Retention of concepts
- Reinforce relatedness
- Visual literacy
- Information literacy
Improving Your Presentation
Graphics

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Today’s Objectives

• **Graphics**
  – Selective
  – Intentional

• **Fonts, Colors, Backgrounds, BULLETS and Graphics**
Design for Learners

- Initial learner comprehension
- Retention of concepts
- Reinforce relatedness

Literacy

- Visual literacy
- Information literacy
Fonts

• Face and Type
  – Serif vs San serif
  – Serif vs San serif

• Size
  – Point size 24, 36, 44, 54, 60

• Color
  – Contrast Yellow vs Black

Colors

• Contrast
• Provoke emotions
  – Background
  – Text
  – Graphics

• Orange on Blue
• Blue on Orange
• Red on Blue
• Red on Green
• Orange on Green
• White on Black
• Black on White
• Yellow on Blue
• Blue on Blue
• Peach on Orange
• Ivory on Blue
Backgrounds

• **Content**
  – Don’t compete with content!

• **Readability**
  – Color
  – Contrast
  – Empty space

• **Visual anchors**

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**Poor Contrast**

- Solid
- Gradient
- Photograph
- Graphic

- Solid
- Gradient
- Photograph
- Graphic

- Solid
- Gradient
- Photograph
- Graphic

- Solid
- Gradient
- Photograph
- Graphic
Layout

- Location
- Margins and “white space”
- One concept per slide
- Bullets
  - Order
  - Number of lines
  - Number of words
  - Parallel construction

Bullets

- Order implies emphasis
- Use 5x5 or 7x7 rule
- Omit periods & commas
- Keep grammar parallel
- Run spell check
- AVOID all capitals
- Say more than you show
Background Images
Is it a background?
Know file location
Alignment & color

Image Import
Pie Chart

- 25%
- 33%
- 26%
- 16%

Text and Bar Chart

- $x^2 (2, 26) = 0.178, p = 0.9148$
Design for Learners

• Initial learner comprehension
• Retention of concepts
• Reinforce relatedness

Initial

• Doppler concept
• Existing illustration
• Simple diagram
Doppler Effect

- Relative motion (source & receiver)
- Change in wavelength
- Change in perceived frequency

Doppler Effect

- Relative motion (source & receiver)
- Change in pitch (ie. music note)
- Change in wavelength and frequency
Why does the Doppler Effect occur?

- As a sound source moves, the wavefronts in the forward direction get closer together, while the wavefronts on the far side get farther apart.
- Therefore a receiver on the forward side of the source will perceive the sound as having a shorter wavelength and higher frequency (pitch) than a stationary sound source.
- A receiver on the far side of the source will perceive the sound as having a longer wavelength and lower frequency (pitch) than a stationary sound source.

Retention

- Informal Quiz
- Diagram for reference
Retention

• Add Audio

Retention

• Practice at website

http://hyperphysics.phy-astr.gsu.edu/hbase/hph.html
Reinforcement

- Doppler of blood vessel

\[
V \text{ (m/sec)} = \frac{C \cdot \Delta f \text{ (Hz)}}{2 \cdot f_0 \text{ (Hz)} \cdot \cos \theta}
\]

- Doppler of blood vessel
- [http://hyperphysics.phy-astr.gsu.edu/hbase/sound/usound2.html#c1](http://hyperphysics.phy-astr.gsu.edu/hbase/sound/usound2.html#c1)
Animation

- Find graphic
- Ungroup
- Assemble parts
- Group to move
- Animate components
- Add audio
- Save and Test

Not reliable
Not valid
Both are reliable
But which is valid?

To understand
use
and create images
to intentionally
communicate with others

**Visual Literacy**
Visual Literacy

to think and learn in terms of images

– From H Napierkowski, Fostering Verbal and Visual Literacy in E-Learning, WCET Conference, November 2002

Visual Literacy

“We are coming to depend on visualization as a vital tool for conceptual thought in ways that were simply impossible before the digitization of information. If we want to prepare our students for the world out there, it must be a new kind of preparation for a transformed world.”

– From R Lanham, The Electronic Word, 1993
Information Literacy

“... the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand.”


Consider...

• Legible text
• Meaningful symbols
• Reinforcing repetition
• Pause for processing
• Summary for self-assessment
• Make intentional choices
• Design for learners
• Enjoy connecting

EGR Resources

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