Most students are comfortable with computer technology, but they are not necessarily skillful in constructing successful arguments using slideware such as PowerPoint (PPT). Even though PPT is ubiquitous, Edward Tufte (Professor Emeritus at Yale University) contends, in *The Cognitive Style of PowerPoint*, that PPT is to blame for substandard presentations. However, empirical research and common sense contradict Tufte and suggest several factors that can increase both attention and learning.

Information chunks. Research about short-term memory shows that audiences can recall about seven chunks of oral or written information but only five chunks of visual information. As a result, slides should not have more than five main points.

Bullets. One of Tufte’s primary criticisms of PPT is the overuse of complex hierarchies of bullets (e.g., two or more levels of bullets in a single slide). To avoid hierarchies of bullets, consider using graphs, flow charts, diagrams, or other visual alternatives for complex information.

Master slides. Comprehension is increased with consistent transitions between points as well as verbal and visual cues to organization. A simple way to accomplish both tasks is to use the Master Slide template to select a consistent background, font and bullet style, slide layout, and animations.

Action buttons. First-time users invariably try to incorporate all the bells and whistles of PPT. Animation and audio should be used cautiously to emphasize key points.

Multimedia. Appropriately using multimedia—streaming video, Web links, audio files—can increase viewers’ attention during the presentation. Printed handouts distributed during or after the presentation provide a convenient reference long after the presentation.

Research...Applied

Powerful Presentation Visuals

The problem: Most of us have seen ineffective visuals more often than we’d like. PowerPoint slides filled with 10-point text. Handouts littered with clip art. Posters with rainbow-colored titles. The solution: Adhering to the following guidelines can help you and your students develop more effective visuals, including PowerPoint, posters, handouts, fact sheets, and brochures.

Maintain design consistency to increase coherence
Use typeface families, sizes, styles, and colors consistently. For example, use one legible font size and color for all headings and a second for body text. In PowerPoint, use the Slide Master template to designate characteristics for each level of text for all the slides.

Tell your students: “No matter what type of visual you create, using a simple, consistent design allows the audience to focus on your message. Using the Slide Master saves time by automatically formatting every text box you create.”

Use color judiciously for aesthetic appeal and legibility
Select high-contrast colors for fonts and backgrounds. A dark font on a light background, such as black on white, has high figure-ground contrast and high legibility. For presentations in a darkened room, a light font on a dark background is easier to see.

Tell your students: “Use color when it has a purpose. Using too many different colors in one document or presentation can be distracting.”

Select text characteristics for maximum legibility
When designing text, consider the complexity of the content as well as the ability of the audience to access and comprehend the text. Select a typeface, typesize, line length, and typestyle that are legible—given the room size, lighting, and distance of the audience from the text. For maximum impact, use small amounts of text without too many variations in size and style.

Tell your students: “Don’t crowd visuals with line after line of text. In PowerPoint, present one major point or a series of related points on each slide. Smaller font sizes are easier to read if the lines are spaced farther apart.”

Incorporate purposeful animation and graphics
All visuals should be purposeful, not simply decorative. They should focus attention or convey content. For example, in PowerPoint, the dimming option can focus attention, but animation should be used sparingly. Sound effects should also be purposeful. Audio clips can be valuable whereas “blips” or “clicks” distract.

Tell your students: “Just because you can doesn’t mean you should. Graphics and animation are not always appropriate.”

To get you started, we’ve provided examples of PowerPoint slides on pages 3 and 4 of this newsletter for you to use as a reference and teaching tool.

Upcoming Events

AgComm Workshop “Key to Great Presentations - Excellent Writing Skills”
Tuesday, November 16
noon - 1:30
Curtiss Hall
Room 142
Assignment Kernels
For Visual Displays of Information

Develop these assignment kernels into in-class activities or out-of-class assignments. Topics can be (a) relevant to the current unit in a course to reinforce concepts or (b) relevant to an upcoming unit to preview concepts. Students can work individually or in pairs. Follow up with a whole-class discussion to compare various versions and share comments on the strengths of each presentation.

Titles and captions. Give students a visual (e.g., table, graph, diagram)—minus title, caption, and labels. Have students create an appropriate title, caption, and (if needed) labels. As part of the follow-up discussion, show students the original title, captions, and labels.

Different audiences. Ask students to select a critical concept and create two visuals that define and explain the concept—one for middle-school students, the second for majors in the discipline. Students should include titles and captions appropriate to the audiences.

PPT in brief. Ask students to define and explain a concept to a specific audience. Have the students create a PowerPoint presentation with a maximum of five slides (excluding the title and works cited slides.) Encourage minimum words and maximum visuals. Require use of a Master Slide to establish visual unity and coherence.

Transformation. Provide students with a dense paragraph full of numeric information. Ask students to transform the paragraph into a visual display (e.g., table, graph, chart, diagram) with a title, caption, and labels appropriate for a particular audience.

Thumbnail sketches. Ask students to imagine they have been invited to prepare a poster for an upcoming conference. Have them (a) create three thumbnail sketches of possible poster designs, (b) rank order their sketches, and (c) provide a brief rationale for the advantages of their top choice.

Three Questions With...
Jerry Harrington
Sales & Marketing Public Relations Manager
Pioneer Hi-Bred International, Inc.

Jerry Harrington’s responsibilities include managing the public relations efforts for Pioneer Sales & Marketing and editorial content for GrowingPoint magazine, which is mailed to all Pioneer customers in North America. He also manages the ProAction newsletter for Pioneer sales reps and dealers and keeps Pioneer field sales staff updated on current issues. Here are Jerry’s responses to three questions about visual communication.

What are the professional benefits of having strong visual communication skills for people in agriculture-related careers?
One of the major benefits is being able to evaluate — if not create — layouts and designs for communication documents so they best convey the editorial message. With strong visual skills, the communication professional is better able to make sure the message is easily read. The visual image should guide the eye of the reader. It should call the reader to the page. The worst possible scenario is when the layout and design stand as obstacles and make a document difficult to read. Those who know the difference between good and bad layout and design are a step ahead in good communication.

What visual communication skills do you look for when hiring new employees or interns?
When I evaluate a new employee candidate or intern, the central focus is on writing and using that writing in marketing communication. We have others here in Pioneer who can design pieces. However, if candidates show me a layout or design that they’ve done — whether it be a newsletter, brochure or ad — that’s an added asset, a plus. It’s important to be able to evaluate the designs of others to make sure they are directed toward the communication objective. Another prime skill is to give direction to designers so the project meets the communication objective, to know what general design is needed for a particular project.

At the end of each summer, Pioneer interns give a PowerPoint presentation about their experiences to supervisors, co-workers, and family members. What makes an effective, professional presentation?
If the Pioneer interns tell a compelling story about what they have learned — and didn’t know before — that is a successful presentation. This means combining an interesting visual PowerPoint presentation with a strong oral discussion of the summer. The presentation should have a structure that flows logically from one slide to the next, with a beginning and an end. The slides should be easily understood so they don’t impede the oral discussion, and presenters should speak clearly. In other words, the visual message should be simple so the audience doesn’t spend time reading it and missing presenters’ points. Presenters should also be prepared to respond to several questions at the end of the presentation and be able to think on their feet.

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What Not To Do

Preparation of Powerful Visuals

- MAINTAIN DESIGN CONSISTENCY
  - Use one size and color for headings.
  - Use a second size and color for body text.
  - Use a template if appropriate.
  - Use legible text on a simple background.

- USE COLOR JUDICIOUSLY
  - Select high-contrast colors
  - Use color when it has a purpose
  - Too many colors are distracting

- Decorative bullets draw attention away from the message.
- Clip art draws attention away from the message.
- Slide numbers or footer information is missing; it’s needed to orient viewers.
- Too many variations in typeface, size, and style are distracting and hard to read.
- Small font sizes are illegible from a distance.
- A busy template with many colors is distracting.
- Insufficient figure-ground contrast makes text hard to see.
What To Do

Preparing Powerful Visuals

Maintain design consistency

- Use one size and color for headings.
- Use a second size and color for body text.
- Use a template if appropriate.
- Use legible text on a simple background.

- A simple template with legible text creates visual coherence.

- The typeface, size, and style are visually consistent from slide to slide—in the headings and in the text.

- Textural density is reduced by presenting only one major point on a slide.

- Slide numbers orient viewers.

- Bullets coordinate with the text and are visually consistent from slide to slide.