

Title:Death by PowerPoint?(POINT OF VIEW).  
Author(s):Robert L. Eves and Larry E. Davis.  
Source:***Journal of College Science Teaching*** 37.5 (May-June 2008): p8. (1012 words)  
Document Type:Magazine/Journal  
Bookmark:[Bookmark this Document](#)  
Library Links:

**Full Text** :COPYRIGHT 2008 National Science Teachers Association

From our first exposure, presentation software (PowerPoint, Keynote, Corel Presentations, etc.) was exciting and very appealing and we have been using it regularly for almost 15 years. We have recently come full circle and are very reluctant to subject our students to computer-generated presentations on a regular basis. When used incorrectly, or to excess, we find that computer-generated presentations severely limit our ability to engage students in classroom discussion. However, presentation software is here to stay and, rather than avoid it, we recommend its judicious use, particularly for what it does best--provide a simple platform for projecting a rich assortment of images.

Proponents of presentation software point out the ease of preparing presentations, the quantity of material that can be covered, and the innate organization that the tool provides. Supporters also point out the ease of transmitting a tangible study guide to students by posting their presentations on course web pages. Add to these observations the therapeutic power of a canned electronic presentation, and the popularity of this approach is even more obvious.

In his publication *The Cognitive Style of PowerPoint: Pitching Out Corrupts Within*, Tufte (2006) supplies data that suggest presentation software, such as PowerPoint, when compared to other common presentation tools (e.g., overhead transparencies), reduces the analytical quality of serious presentations of evidence. He also suggests that presentation software is presenter-oriented, not content- or audience-oriented, and creates a preoccupation with format at the expense of content. Tufte further states that space limitations on presentation slides lead to overgeneralizations, imprecise statements, insubstantial evidence, and weakly argued claims.

Although the authors do not consider themselves experts on the use of presentation software, based on their teaching experience and observing hundreds of electronic presentations at conferences, some things work better than others. What follows is a list of suggestions.

Match the method to the message

An important consideration is flexibility and variability in presentation format, or to follow Aristotle's advice in *Ars Rhetorica*, to use "all the available means of persuasion" (1959). Presentation software may not be the presenter's best means of persuasion. There are many forms of visual aids; use the one most appropriate for the situation.

You are the show The audience has come for a lecture, not a slideshow. Face the audience, connect with them, and give them an incentive to listen. Avoid the temptation to stand with your back to the audience, tracking progress through the presentation.

Create slides that enhance the message

Good presentations stimulate the learner by offering text or imagery to support key points. It is best to keep the number of slides to a minimum. We try to avoid bulleted lists; however, if one is presented, try to use no more than three lines of text, with no more than six words per line.

Keep it simple

In *The Laws of Simplicity* (2006), John Maeda offers Ten Laws of Simplicity for electronic presentations, but he asserts, "if you can't remember the first nine, they are encapsulated in the tenth," which states, "simplicity is about subtracting the obvious and adding the meaningful." The best visuals are often ones designed with an eye toward simplicity.

## Stay in touch

With overhead transparencies, presenters are able to annotate images with a pen, but with presentation software it is difficult and time consuming to modify and annotate slides during class. One of our colleagues in chemistry has solved this problem by projecting images onto a whiteboard and annotating them in real time. His students have also noted that this eliminates the distraction of continually raising and lowering the screen.

## Concentrate on content

Don't worry too much about how the presentation is going to look. Design is important, but it cannot replace content. Consider a tattoo: "Content Is King!"

## Use appropriate images

Presentation software works best for materials presented visually, not verbally. Clear, vivid images make visual connections to, or between, abstract concepts and assist in retention of material. Use a few graphics that convey explicitly visual information or that stand as metaphors for ideas.

## Effects can distract

Because they can, some presenters like to experiment with font type and color until their slide content gets lost in the effect. We call this syndrome the "ransom note." Avoid it in your presentation. Similarly, because they are easy to use, canned effects may intrigue presenters as they prepare a presentation, but be extremely judicious in using them. They are generally distracting.

## Minimize file sizes

If you plan to post presentations on the web for students to download, use solid backgrounds and minimal clipart. These precautions minimize file size and make it possible for students to download the files from anywhere.

## Be prepared

Murphy's Law definitely applies to electronic presentations. Do everything possible to minimize its effect. Take a backup of your presentation into the classroom. Be prepared to go "unplugged" if necessary. You might even be prepared with overheads or 35 mm slides, depending on the importance of visualization in your presentation.

## The Golden Rule

When preparing a presentation, follow the "Golden Rule": Do unto your students as you like to be done to. Develop presentations that are engaging and easy to understand. Don't get caught up in the technology.

The authors realize that this list of suggestions is not exhaustive, and we welcome the opportunity to benefit from the experiences of readers. Feel free to contact us and share your good, bad, or indifferent ideas about the use of presentation software.

Controversy aside, there is a place for presentation software in the science classroom. Consider our suggestions and adapt them to your situation. Use presentation software effectively and with discretion.

## References

Aristotle. 1959. *Ars rhetorica*. New York: Oxford University Press.

Maeda, J. 2006. *The laws of simplicity*. Cambridge, MA: MIT Press.

Tufte, E.R. 2006. The cognitive style of PowerPoint: Pitching out corrupts within. Cheshire, CT: Graphic Press.

Robert L. Eves (eves@suu.edu) is a professor of geology/chemistry in the Department of Physical Science at Southern Utah University in Cedar City, Utah. Larry E. Davis (ldavis@csbsju.edu) is a professor of geology/environmental science at College of St. Benedict-St. John's University, Collegeville, Minnesota.

Source Citation:Eves, Robert L., and Larry E. Davis. "Death by PowerPoint?(POINT OF VIEW)." Journal of College Science Teaching 37.5 (May-June 2008): 8. Expanded Academic ASAP. Gale. Weymouth Public Libraries. 13 Aug. 2008  
<<http://find.galegroup.com/itx/start.do?prodId=EAIM>>.

Gale Document Number:A182531060