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## FOUR POINTERS TO EFFECTIVE USE OF POWERPOINT IN TEACHING

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*Technology for Teaching ... is a regular feature of Perspectives, designed to introduce and describe the ways in which teachers of legal research and writing are using technology to enhance their teaching. Through Volume 9, this column was edited by Christopher Simoni, Associate Dean for Library & Information Services and Professor of Law, Northwestern University School of Law. Readers are invited to submit their own “technological solutions” to Mary A. Hotchkiss, Perspectives Editor, University of Washington School of Law, 1100 N.E. Campus Parkway, Seattle, WA 98105-6617, phone: (206) 616-9333; fax: (206) 616-3480, e-mail: hotchma@u.washington.edu.*

### Introduction

This article concerns the effective use of PowerPoint<sup>1</sup> as a technological enhancement to teaching in the modern law school classroom. I have taught in the Legal Practice Skills Program (LPS)<sup>2</sup> at Suffolk University Law School since the opening of our new high-tech facility in 1999. During that time I have used PowerPoint extensively and I have learned several ways to effectively use this technology in legal pedagogy.

When used effectively, PowerPoint offers benefits to both students and faculty. As modern law teachers, we are faced with the challenge of reaching a group of individuals who are accustomed to getting their information from multiple sources, such as a combination of television, newspapers, radio, and the Internet. Moreover, although law students tend to be a focused and committed group, they are also a captive audience required to take certain courses regardless of interest. The strength of PowerPoint lies in its ability to visually convey information,

in both text and images, and reach students with a variety of learning styles. Also, the use of PowerPoint requires a teacher to consider materials in a different way, to take a fresh new approach to the material, and to better organize and condense materials.

This article is not a technical “how to” guide to creating PowerPoint presentations. PowerPoint is user-friendly and easy to learn through basic instruction and experimentation.<sup>3</sup> The purpose of this article is to offer some guidance, beyond the technical composition of a presentation, for the effective use of presentation technology in legal pedagogy. This guidance is offered in four main “pointers.” First, PowerPoint should only be used with a specific purpose. Second, teachers should focus on keeping the atmosphere in the classroom conducive to learning because the use of technology can change the learning environment. Third, teachers should meaningfully limit the content of a PowerPoint presentation. And, fourth, teachers should carefully maintain context when using PowerPoint to enhance teaching.

### 1. Have a Specific Purpose

PowerPoint should be used only for a specific purpose. A teacher should consider the content of each class to determine whether there is a reason to use PowerPoint for that session. The following are examples of four good reasons to use PowerPoint as a technological teaching aid.

#### a. Incorporate images

PowerPoint is useful when images will aid student understanding. For example, to address the difficulty of teaching legal research outside of the library setting, at Suffolk we “bring the library into the classroom” using PowerPoint. We use

<sup>3</sup> Many technologies can be used in most law school classrooms by bringing in the necessary equipment. Suffolk University Law School’s high-tech facilities ease the use of technological enhancements such as PowerPoint. All of the classrooms have identical capabilities, including Pentium-based PCs, projectors, screens, digital document cameras, and state-of-the-art audio systems. By using a color LCD (liquid crystal display) touch-control panel based at the front of each classroom, teachers can control the classroom environment by doing such things as lowering the shades and the lighting, as well as control the classroom equipment, by operating the projectors and the cameras, for example.

<sup>1</sup> This article focuses on PowerPoint because it is the presentation technology with which I am most familiar, but the suggestions made in this article apply to other comparable presentation software.

<sup>2</sup> LPS is Suffolk’s legal writing, reasoning, and research course.

digital images of library resources,<sup>4</sup> in conjunction with corresponding handouts, to take students on a step-by-step trip through the research process.

For example, we use PowerPoint to teach students how to Shepardize®. Shepardizing™ is a hard process to explain without using multiple books as illustration, and students have difficulty understanding the concept without visualizing the steps. A PowerPoint presentation with digital images of the resource,<sup>5</sup> accompanied by a handout that details the steps to Shepardizing, helps students to better grasp the process.

PowerPoint eases the transmission of the visual information as it offers a convenient way to incorporate images into a lecture.



This technology-enhanced method of teaching legal research has some advantages. Teaching research to students in the library, for example, is complicated by the logistics of managing large numbers of students and the disruption to other library patrons. Carrying library resources into the classroom is cumbersome at best, and there are not enough copies of specific resources to teach the large number of first-year students. Photocopied images cannot show the entire resource. PowerPoint images can allow students to see the resource in its full context.

#### b. Use tools to focus attention

Any image, document, or text included in a presentation can be annotated to focus all students on the same thing at the same time. For example, in our sessions in which we talk about the research

<sup>4</sup> With help from Suffolk's library staff and their digital camera, we obtained digital images of specific resources and saved them on Suffolk's server for access by the LPS department.

<sup>5</sup> Images incorporated into our PowerPoint slides include images of the full set of the relevant Shepard's® volumes and of the relevant books being pulled off the shelves.

process, we include digital images of maps of the library in PowerPoint presentations so that the students understand the layout of the library while still sitting in the classroom. PowerPoint offers tools to annotate the images to focus attention on a particular area in the image. For example, a teacher can "draw" a circle around a point in a digitized document or he or she can draw an arrow or a line to an area of a diagram.



This annotation of images is not limited to pictures or diagrams. Any document can be scanned into digital form, included in a PowerPoint slide, and annotated by drawing shapes around important information.

Another teaching tool made easier by PowerPoint is the use of color, which can communicate both ideas and meanings. The use of color visuals often increases comprehension and retention. To emphasize certain points, a teacher should use colored text to diagram parts of sentences or paragraphs or to identify parts of a paradigm used to convey legal analysis. While creating meaningful PowerPoint slides requires significant preparation time before class, it can save valuable in-class time by reducing the amount of writing on the board during class.

#### c. Facilitate use of multimedia

PowerPoint can facilitate the use of multimedia, such as the Internet, video clips, and sound files. A hyperlink to a relevant Web site within a PowerPoint slide permits a teacher to jump online and explore the relevant source without disrupting the flow of the class. For classes on research methods, I have included hyperlinks to Web-based research guides created by the Suffolk law librarians.<sup>6</sup> The value of these guides is

<sup>6</sup> The Web address of these research guides is <[www.law.suffolk.edu/library/pubs/pubs.html](http://www.law.suffolk.edu/library/pubs/pubs.html)>.

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reinforced by their exploration during the classroom lecture. Video clips and sound files can similarly be included in a PowerPoint presentation for easy access.

#### d. Outline complex lectures

PowerPoint is a helpful tool for outlining complex lectures. Students can more easily follow along when a visual aid conveying the organization of the lecture accompanies the discussion. This “roadmap” helps students maintain context and take notes more easily.

## 2. Consider Atmosphere

When using PowerPoint, a teacher should keep the atmosphere in the classroom conducive to learning by taking steps to avoid discouraging interactivity.

#### a. Lighting

The goal is to keep the room as bright as possible while still allowing the students to clearly see the screen on which the presentation is projected. The most obvious reason for bright lighting is that students need to take notes. A less obvious, but perhaps more important, reason to keep the room brightly lit is that brighter lighting will stimulate interaction and keep the students engaged. A dimly lit room encourages passive observation, similar to watching a movie in a theater where the learned response is to merely observe. To keep students engaged, a teacher should maintain eye contact with them. Dim lighting discourages eye contact and prevents the teacher from getting valuable feedback from observing facial expressions and gauging the comprehension of the class.

Teachers should take advantage of all lighting in the classroom. One tip is to use natural lighting along with artificial lighting, taking care not to compromise slide clarity.<sup>7</sup> Be sure to take advantage of ambient light by choosing a PowerPoint background color scheme or a background template that is light in color. Many templates that come as preset backgrounds for presentations are composed of darker colors that restrict ambient light.<sup>8</sup> Dark backgrounds darken

<sup>7</sup> This works well when the teacher has a dimmer option in the classroom.

<sup>8</sup> Darker templates also tend to contain designs that distract students and limit the usable area of the slide.

the front of the room and can disconnect the teacher from the class—this removal is perceived by the students. Ambient light stimulates both the teacher’s connection with the students and the students’ involvement in the class by keeping the front of the room brightly lit without interfering with slide clarity.

Consider toggling between full class lighting and presentation lighting. During times when the students do not need to see the slide, a teacher can “blank out”<sup>9</sup> the presentation and bring the class to full lighting, and then switch back to presentation lighting to show a slide that may help prompt discussion or thought.

#### b. Consider color psychology

Teachers should consider the effect of color psychology<sup>10</sup> on the atmosphere in the classroom when using PowerPoint. As certain colors are known to suggest certain moods, a teacher should consciously choose color. Red connotes danger or warning. Blue is calming. Green is known to stimulate interaction and suggests encouragement. Color can be introduced in a PowerPoint presentation in the background of slides, in text, in charts, and in accents.

#### c. Avoid glitz

When using PowerPoint, a teacher should have students focus on what is being said and not on how it is being said. Do not lose the message in the technology. PowerPoint has many special effects, such as a variety of creative ways to transition between slides and between each point on an individual slide, and a myriad of sounds, including chimes, bells, and whistles, to accompany the transitions. A teacher can cause his or her words to come spiraling from the center of the slide, and make the students dizzy in the process. Each point can literally “shoot” onto the screen with the sound of a laser. These effects can be distracting. Moreover, PowerPoint effects when overused will be perceived by students as flash or

<sup>9</sup> Pressing the “B” key on the keyboard during a PowerPoint presentation will “blank out” the screen and pressing the “B” key again will “bring it back.”

<sup>10</sup> Many books have been written on the effect of color psychology in general. For an article addressing the impact of color in the use of PowerPoint, see Gary Guthrie and Ian T. Ramsey, *Pushing PowerPoint Above Idle: Speech Is Abstract; Pictures Are Real*, 16 No. 10 Legal Tech News. 1 (1999).

gimmicks. Like the use of PowerPoint itself, the effects should be used only if they serve a purpose. When using these effects, consider how viewers process information. For instance, the English language is read from left to right, so opt for transitions that cause a point to “fly” from left to right, or to simply “appear,” as these movements are easier to follow than a spiral or a flash.

### 3. Limit Content

Teachers should meaningfully limit the content of their presentations. When considering content, first-time users of PowerPoint often fall into the trap of including as much detail as possible. Giving too much detail, however, may be counterproductive. My first use of PowerPoint was to digitize and project my lecture notes to my students. Instead of teaching, I found myself reading aloud from the slides, and my students would feverishly write down every piece of displayed text. I quickly noticed that during those classes my students were too focused on note taking. My solution was to distribute a printed version of the slides to supplement the class session. I then found that students did not take many notes, presumably because they had the information in writing before them. I perceived that this lack of note taking caused them to process less in class. The goal is to hit the happy medium that will best help the student and the teacher. Each slide should contain only one key point. Think of the slides as a talking outline that helps students follow along, take good notes, think about what is being said, and participate. The following are suggestions to accomplish meaningful limitation of content:

#### a. Less is more

A few well-chosen words can speak volumes. Experts suggest limiting slides to 40 words. When there is an overabundance of information, students will be unable to see the primary points. They will be unable to distinguish which words are important, since text-heavy slides lack the signals, visual or otherwise, to distinguish the key points. Students will attempt to write down everything that they see because they fear that they may otherwise miss something. As a result, they do not listen and they miss the points made in the

narrative. Use only key words to avoid this outcome.

Also, including too much detail on one slide will result in a small text font. Fonts should be kept large for ease of reading. Sit in the back of the classroom and run the presentation: are the words hard to read? If so, perhaps some detail should be omitted from the slide, or perhaps the slide should be reorganized into two slides, as there may be multiple points on the one slide.

#### b. Be concise

Each point should be kept as concise as possible. Choose short words over long words. Use words, not phrases or sentences. Omit pronouns, articles, and repetitive words. A good rule of thumb to follow is the 6 x 6 rule.<sup>11</sup> Use no more than six words per line and six lines per slide. This rule forces a teacher to organize and condense the information.

#### c. Use notes pages for teaching notes

PowerPoint has a feature that allows a teacher to annotate the presentation in a “notes section” of each slide. These annotations, which are not viewed by the students, permit the teacher to preserve lecture notes alongside the slide text and print them for use during the presentation.

#### d. Make it interactive

Slides are a good place to include written questions. Seeing the questions in text may help some students to process information more easily. Questions on the slides also reinforce past lectures and make students think about the context of the topic of that class in relationship to past sessions. This reinforcement builds students’ confidence in their acquired knowledge and creates an environment that encourages them to consider and absorb new concepts.

### 4. Maintain Context

A teacher should maintain context when using PowerPoint as a teaching enhancement. Law students are notorious for not seeing the forest for the trees—if not used with care, each PowerPoint slide can be like one tree. The key is to keep

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<sup>11</sup> The name of the rule was coined by a faculty member at Mount Mercy College in Cedar Rapids, Iowa, in an Internet article titled “Top 10 PowerPoint Tips” <[www.mtmercy.edu/comp/toptenp.htm](http://www.mtmercy.edu/comp/toptenp.htm)>.

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students aware of where the particular concept being discussed fits into the larger context.

**a. Outline**

To maintain context, a teacher should outline the class discussion. Use an introduction slide to outline the large points and break those points down in a way that is obvious to the students. Refresh that outline format as the class progresses. Outlining with numbers works particularly well in helping students remember where the individual point fits into the bigger picture.

**b. Transition between ideas**

To maintain context, carefully develop the transitions between ideas and not slides. The slide technology can lead to compartmentalization of ideas. Keep good notes of the next topic and how it fits into the big picture,<sup>12</sup> and introduce the next idea, and its placement in the overall topic, while moving to the next slide. Although each slide should cover one point, that point should clearly fit into a bigger picture; the ideas presented on each slide should be clearly connected to one another.

**Conclusion**

As a teaching tool, PowerPoint technology can be phenomenal to help teachers illustrate points in a compelling way. Visual aids can improve classroom interest levels and retention of information. Effective use of PowerPoint and related technologies, however, requires teachers to carefully analyze the material to be presented and the various techniques for delivering that material. The successful integration of technology in teaching always places purpose and content above the bells and whistles.

<sup>12</sup> A good suggestion is to make note of what is “next” in the notes section of the previous slide.