

RESEARCH REPORT:

2004 IPFW SUMMER GRANT FOR INSTRUCTIONAL DEVELOPMENT

Submitted by Glen Gendzel, Assistant Professor, Department of History, Nov. 2004

In the summer of 2004, I was fortunate to receive a Summer Grant for Instructional Development from the IPFW Center for Enhancement of Learning and Teaching. The grant was for the purpose of adopting PowerPoint technology for use in teaching HIST H106: America Since 1877. I teach two sections of HIST H106 every semester with a total enrollment of 80 to 90 students. This is an introductory-level survey of U.S. history that draws mostly freshmen and sophomores who are usually not history majors. Many H106 students are education majors who plan to teach social studies in primary or secondary schools of Indiana. HIST H106 fulfills the General Education Requirement for Area III and it will fulfill the diversity requirement as well. This course is often the only chance for IPFW students, including many future K-12 teachers, to learn about their nation's past. It is a popular and important lecture course that I have been teaching at IPFW for three years.

I teach H106 as a lecture course because class size is so large and there is so much material to cover. I have rewritten my H106 lectures every semester that I have been at IPFW. It is a constant struggle to engage and motivate a roomful of freshmen who, in many cases, come to class expecting the professor to entertain them in a *passive* manner. My approach has always been to encourage *active* learning in the form of note-taking during lectures and discussion afterwards. I encourage note-taking by allowing students to use their own hand-written notes during exams. I encourage discussion by requiring at least two questions or comments from the class before class is dismissed. These pedagogical strategies transform the *passive* experience of hearing a lecture into the *active* experience of taking notes and formulating questions or comments in response.

Despite my best efforts, I have found that it is still a challenge to engage and motivate many H106 students—especially those who, at this stage of their academic careers, do not yet know how to learn from a lecture. In particular, many students are unsure what to write down when taking notes. Some students look bewildered, bored,

or even hostile when inundated with an hour's worth of verbal information. For this reason, I decided to use PowerPoint as a tool for facilitating more learning by less well-prepared students. I had never used PowerPoint myself, but I had seen it used at conferences and I was intrigued by its capacity for combining images with text. This combination struck me as far superior to conventional classroom techniques like writing on a board (text alone) or projecting photographic slides (images alone). By combining images with text, PowerPoint can help students visualize the past at the same time that it guides their note-taking. Images can help students travel back in time, imaginatively speaking, and form pictures in their heads about what history was really like. Text can free students from the anxiety of trying to guess what the professor thinks they should be writing down while ensuring that students get all the dates right and the names properly spelled. PowerPoint slides, matching images and text, can help students fill their minds and their notebooks at the same time. I was eager to test my ideas about using PowerPoint in H106 and a CELT Summer Grant provided the incentive and opportunity to do so.

I began my quest by taking two PowerPoint seminars for IPFW faculty taught by Eric Vitz of IT Services and Samantha Birk of CELT. (Later I took another PowerPoint seminar offered by Darlene Miller of CELT.) When I was awarded the summer grant, I purchased the instructional book *How to Do EVERYTHING with PowerPoint* by Ellen Finkelstein (McGraw Hill/Osborne, 2003) which I would recommend to other PowerPoint novices. I also purchased two sets of U.S. history educational CD-ROMs from Fogware Publishing and I contacted publishers of U.S. history textbooks to obtain their free collections of U.S. history images on CD-ROMs. Then I spent many hours over the summer working through Finkelstein's instructional book to learn the basics of PowerPoint, followed by a great many more hours working through the CD-ROMs to explore the visual resources they contained. At that point I felt ready to begin composing full-scale presentations to match with my existing lectures for HIST H106.

The task took far longer than I expected because several different skills and activities were required. First, I wrote terse outlines to supply the text for 25 to 30 slides for each of my 26 lectures. Second, I searched far and wide for images to match every slide. This proved to be the most arduous task of all, because CD-ROMs ultimately

provided only about half of the images I used. The remainder came from the Internet, as I spent countless hours trawling the web with the “Image Search” function of Google looking for appropriate images. I devised and revised my search terms repeatedly, scrolling through many pages of irrelevant images before finding one or two usable ones. Third, I meshed together words and images on each slide, using PowerPoint’s various formatting controls for text and objects. Fourth, I devised statistical charts within PowerPoint to convey quantitative information when I could not find pre-existing charts or graphs anywhere else. Fifth, once the PowerPoint presentations were complete, I found that I had to rewrite all 26 lectures to match the accompanying visuals more closely. I had to turn my lecture notes into a PowerPoint “script” complete with animation prompts and references to particular images. By the time I was finished, I had composed over 700 text/image slides—each with multiple images and multiple lines of text—while completely rewriting all of my lectures. This represented an enormous investment of time and creative energy on my part; the project extended well past the summer and into the fall semester, though I did manage to stay ahead of my lecture schedule so that every class had a completed PowerPoint presentation ready in time.

The results of my extended foray into PowerPoint have been enormously satisfying for my professional development. I developed new skills while exploring a whole new side of my creative and pedagogical instincts that I didn’t know was there. As a history teacher, I had already spent years thinking about how to make history interesting as an *intellectual topic*, but now I had to think about making it interesting as a *visual presentation* as well. Similarly, as an experienced note-taker, I knew how to take notes on what other people said, but now I had to think about helping others take notes on what I would say. It was a wholly unfamiliar task to fuse words and images in ways that would catch the attention of students, help them learn the material better, and help them take better notes—all at the same time. But it was a very exciting task for me because of its novelty and its potential power for improving student outcomes. I took to PowerPoint with great eagerness, trying to develop an effective style that would avoid the familiar PowerPoint pitfalls and clichés. Of course, I realize that I am still using only a fraction of PowerPoint’s capabilities—for example, I have yet to integrate audio and

video into my presentations—but I look forward to incorporating multimedia in the future as I become more proficient with the program.

I developed an identifiable and consistent style for my PowerPoint presentations. I begin each lecture with a title slide that lists the important terms for the day against an abstract background, superimposed over a darkened historical image, that previews the lecture to follow. I tell students that all lecture-based exam questions are restricted to listed terms only, so they know the title slide is important. This slide projects on screen as students file into class, sit down, take out their notebooks, and start taking notes. I realize that late-arriving students might not have enough time to write down all the listed terms before the lecture begins. For that reason, I also provide the same list of important terms at the end of each lecture as the last slide for the day. It remains on screen as students ask questions and make comments, and even after I dismiss the class and students leave the room. Thus, all students have ample time to write down the list of important terms regardless of when they enter the room or how fast they can write. In addition, I freely provide (via e-mail) the list of important terms for any particular lecture to any student who requests it. Students are very grateful for this service and often avail themselves of it when they miss class. However, I do not make my actual PowerPoint slides available to students outside of class. This policy creates a powerful incentive to attend class because there is a great deal more information in the full presentation than in the list of terms. I also don't provide students with printed copies of text for my presentations because I expect them to take their own notes, which requires them to process the information more fully and actively.

After the title slide, each of the following slides has a prominent title that conveys the overall theme for each individual lecture segment. Beneath the title appears one to four bulleted sentences, written as tersely as possible, that capture the barest essence of what I hope to convey. I use the "appear" animation effect for each sentence and I click them onscreen *in seriatim* as I speak. I use one font style and size for all 700 or so slides because I think mixing fonts gets confusing. I use boldface font to emphasize key words and phrases—usually important names, events, organizations, or concepts that appear in the list of terms for that lecture. In general, I keep text to a minimum because I try to use as much screen space as possible for images instead.

When adding images to slides, I usually form a kind of “frame” around the text with images below and/or to one side of a row of bulleted sentences. I use cropping, overlapping, and reformatted aspect ratios to make images fit together symmetrically on a slide. Particular images are rarely the subject of my lecture; instead, a variety of images are merged into a kind of impressionistic collage that sets the tone for what I’m discussing while the slide is on the screen. When I can’t find appropriate photographs, maps, or charts, I use images of historical artifacts like statues, paintings, documents, advertising, monuments, propaganda posters, campaign buttons, postage stamps, magazine and book covers, newspaper headlines, and political cartoons. Images of such items are readily available online. In the future, I plan to expand my collection of visual materials by scanning hard-to-find images from textbooks and from my existing collection of conventional photographic slides (which I now consider obsolete).

Preparing PowerPoint slides for each lecture was only part of my task for this project. I also had to rewrite each lecture to match the images that I was able to find and the on-screen text that I had composed. I want to avoid simply *reading* slides aloud to students; we have all attended tedious PowerPoint presentations of that nature. Instead, I try to use text as a springboard to note-taking: what I actually say in class adds subtler meanings, fuller elaboration, and more detailed specifics to what appears on the screen. I tell students that they are expected to write down more than just what appears on screen, but anything on screen is worth writing down. I also plan the match-up between each slide and the accompanying lecture material very carefully so that I spend a good deal of time talking after the last line of text has appeared but before I move on to the next slide. This practice gives extra time for the slowest note-takers to catch up. Likewise, I usually wait until all the text has appeared on a slide before I start explaining the specific images that accompany it. Identifying people and places, drawing attention to details on maps and charts, and interpreting cartoons, photographs, or paintings takes time that allows slower note-takers to finish their task. In addition, it gives all students a chance to savor the images and to practice taking fuller, more detailed notes beyond the minimum that I provide. In any case, I watch students closely as I talk so that I can see that they are done writing before I move on to the next slide.

I am pleased to report that the end result of my efforts has been a rather dramatic transformation of the classroom atmosphere in HIST H106. No longer do students appear bored or restless, because now they have vivid images to occupy their attention. No longer do students appear bewildered or frustrated by the challenge of taking notes because now they have specific textual cues provided for them in outline format, complete with topic titles and bulleted sub-heads, to provide a template for note-taking. It is my impression that students who were formerly at a loss for how to take notes in my lectures now regard it as a more straightforward task in which, at a bare minimum, they should write down what appears on the screen. Most students write down a good deal more than that because the text on each slide serves only as a mini-outline which they can fill in on their own. No longer does an hour-plus of history talk overwhelm and mystify the less well-prepared students. The result has been a marked improvement in student attendance and in how students feel about the class, not to mention how they feel about their instructor. Almost all of the students respond quite positively to my use of PowerPoint and believe that it helps them learn better. I can make this assertion with some confidence, because halfway through the semester, I asked the students to write anonymous evaluations of my use of PowerPoint. Here is a representative sampling of their comments (I have corrected spelling and grammar, but the original evaluations are in my possession and available for independent verification):

"The PowerPoint is extremely helpful in outlining the major points of the lecture. I wish all professors would have some sort of guide because it makes it much easier to get the most out of the lecture."

"I think the PowerPoint is a great teaching aid. I enjoy being able to see the pictures along with learning the material. PowerPoint makes the lecture much more interesting."

"I really think that the PowerPoint presentations are great. I am a real visual person so seeing it, hearing it and then writing it down seems to help me a lot. It also helps that you care so much."

"The PowerPoint is very helpful because it brings history to life. The pictures and editorials [cartoons] help put faces and feelings on history. The terms also help guide in which direction the lecture is going. The slides are a very helpful learning tool."

"I love the PowerPoints! The pictures are wonderful and the cartoons really help! I really enjoy your lectures and the class in general."

"PowerPoint presentations are great. I love being able to see as well as hear what is being discussed in class."

"I like the PowerPoint because I do not have to try and rush to write down everything you say. I can at least get the main points if not more."

"Personally I really like the PowerPoint presentations. I'm a pretty visual learner and in my H.S. history classes all we had for a visual was a lame overhead full of notes. Keep the comics and pics coming! Good class!"

"I believe that the PowerPoint presentations are very well organized and full of colorful appropriate images pertaining to the current subject. It links things together more effectively."

"I like the PowerPoints. I think they're better than other classes because you put in pictures that help keep it more interesting."

"I think your lectures are very interesting! ... I like how you say more about the topic rather than what is just on the slides. Your lecture is very easy to follow. Keep it up."

"I think the PowerPoint is really good. It helps keep my attention and gives me a list of important terms. Keep it!!"

"I like the PowerPoint, especially the pictures. It makes it a little more interesting. And it's nice to have main points laid out."

"PowerPoint is much better than writing on the chalkboard. The illustrations and political cartoons really help out the learning process."

"I really like how you bring the main points of each topic on the PowerPoints with pictures. I think in my classes with PowerPoints that don't use pictures, they seem to go too fast and I lose interest."

"The presentations are very helpful! I don't believe they need improvement, because I understand everything and with you explaining the political cartoons, maps, etc., it gives me a better idea. Thanks for all of the time you spend working on them."

"I really like your PowerPoints, they are really good. I think more lecture classes should be like this. I think it's easier to learn from because you can write down what is on the PowerPoint. I also like your method of not reading off of it. Great job. It's a wonderful idea."

"I think you are doing a good job. The pictures are great, and hold my attention. Keep up the good work!"

"The PowerPoint is excellent. The class as well is one of my favorites. I am learning a lot more about history and enjoying far more than I have in a long time. You are doing an excellent job and I really appreciate the PowerPoints due to the clarity and way in which it helps me to understand the subject matter. Thanks!"

"I enjoy the pictures and it keeps me interested. If there was no PowerPoint I would have to drop!"

On a final note, I wish that I could report that my use of PowerPoint has resulted in dramatically improved test scores. So far, I don't believe that it has changed test scores appreciably. I will have to wait until the end of the semester for a definitive assessment. However, I know from experience that H106 students do far worse on the half of each exam dealing with the readings than the half dealing with the lectures. My

H106 students have always done reasonably well on lecture-based exam questions, even before I adopted PowerPoint, so it would be difficult for PowerPoint to improve student performance in this area. Nor is PowerPoint designed to make students do the assigned reading outside of class. Nonetheless, I am certain that PowerPoint has improved student satisfaction for two reasons. First, attendance is up and fewer students have dropped the course, which would seem to indicate that PowerPoint makes time spent in class more enjoyable. Second, the overall atmosphere in the classroom is much better now because in-class expectations, especially for note-taking, are much more clear. PowerPoint eliminates the guesswork by guiding note-taking while keeping students visually engaged at the same time. It also stimulates their imagination, which is the only way for anyone to access the past. I am grateful to CELT and IPFW for the opportunity to enhance my teaching with technology.