Photo and Video Projects: Allowing Students to Express Research in Multiple Formats

By Dave Reedy

Using visual imagery to express concepts without written words is nothing new. From the cave drawings of our distant ancestors to the Sistine Chapel to pictures of your first birthday; images capture more than a moment in time. They can capture the subtleties of a situation, the facial expressions that define a moment and details about the location that we could never fully record in our field notebooks. Let’s face it; pictures really are worth a thousand words. Who among us hasn’t watched a documentary and wished that we could be as concise in a classroom as a brief clip on a given topic, with its eloquent scripting, impeccable timing and ideally placed photo and/or video. However, imagery as a potential for learning goes beyond a good documentary. It is an ideal learning tool and research project delivery method for many students and researchers.

We are taught that different students learn in different ways. Some are more visually oriented than others. Some learn by reading, others learn by participating and doing things hands on. While others can completely comprehend a subject just by having it described to them. If this is true about learning, it seems equally true that the same would hold for teaching and dissemination of information. Some students write a very eloquent term paper, full of illustrative language and insightful theories. While other, seemingly brilliant students write a final semester project that seems like a rough, rough draft, and reads as though English is their third or fourth language. For these students and researchers, and others who desire to express their creativity through their research, a non-written or perhaps multi-media paper might be an ideal solution.

Broadcast quality video documentary of a term project might be a little out of most students’ league. Realistically most students would take longer than a semester to learn how to make a documentary video. Even more important, most departments do not have the facilities to make such videos. The good news is, that’s okay! The goal is to get students to deliver their research in a way that shows they comprehend the course content or information being presented to them. Students can express this with a video, photo or multi-media project using many of the different software programs that come pre-installed on their computers or several of the freeware programs available online.

For example, in our Introductory Ethnobotany course here in Hawai‘i students are taught the fundamentals of ethnobotany and ethnobotanical research. They are assigned a semester project that is designed to show their comprehension of this knowledge. The project involves them conducting research into their own families interaction with plants. Students interview family members about how and why they use plants and what role these plants play in their family. The project gives them a chance to demonstrate to the instructor their understandings of the fundamentals being covered in class. A long standing custom of this class is to allow student projects to be delivered in a variety of media.

In the Fall 2007 semester a student chose to document his family’s knowledge of healing broken bones with native plants. To do this, the student recorded interviews with family members using a digital audio recorder. He then proceeded to collect the plants needed for the treatment and applied them to his own wrist and recorded the entire process. This could have been an interesting written paper, with many descriptions of each step. Instead the student used a video
camera to capture the entire process from beginning to end, including a running, on camera, personal diary of the treatment. He discusses how he did it, how it felt to apply and to wear it, the smells, the itchiness, and the day to day realities of this application. The student edited this together with the audio interviews of his relatives and delivered at the end of the semester a very fun, interesting and insightful video presentation. He did this entire project with low tech equipment and software.

Video is not the only option for student projects in this manner. Photos can be an even better delivery medium to capture an idea or interaction. Most departments have a few digital cameras around to loan out to students, and these days most students have their own. A simple point and shoot 5-megapixel camera is all you really need for most projects. These can also be mounted with a little PVC piping and a coupler to almost any microscope, for laboratory projects. Using the same software and the computer’s built-in audio recorder with a microphone, these can be assembled into a narrative photo essay of the research. Other, relatively inexpensive, software can be used to make a higher quality project, with zooms, fades and pans, etc.

Sometimes less is more. A few years ago, an Introductory Ethnobotany student printed out photos taken with a film camera and glued them onto paper with written descriptions of what was happening as a storyboard. He decided to make a Hawaiian octopus lure, using native plant and marine resources. The photos documented him gathering the material, twisting the fiber into cordage and assembling the lure. He then used the lure in the ocean to catch octopus, having photos taken of the entire process. In just a handful of photos with descriptions he was able to demonstrate his knowledge of the concepts and put out a very interesting and creative project that the student and the instructors will not soon forget. This project continues to inspire new students to do similar projects each semester.

These projects can be assessed by their own merit. Quality of the research and demonstration of course content comprehension is still the focus of any project, written or otherwise. Projects that are sloppy or just plain poorly put together should be treated as such, and assessed the same as though it were poor grammar and spelling. If the photo does not capture what the project is trying to express, this is the same as a badly worded or incoherent thought in a written paper. It is important to allow project delivery to be creative, but also be fair and consistent in assessment.

If student reaction is positive to these other project formats, consider teaching a workshop for students on digital photography, video production, and multi-media project assembly and delivery. A good place to get training for yourself and your students is a digital media center at your institution. If your institution does not have such facilities or is unable to provide you with training, your local public access television station is another option. These facilities are open to the public, and require very little financial investment from you. They provide a wide range of production classes and instruction, and some have the option of sending a trainer to your institution to conduct training workshops there.

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