

# Of Time Travel and Faculty Development Grants: Or What I Did on My Summer Vacation

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*The following essay represents my reflections on the way in which a faculty development grant has impacts, sometimes unexpected, in many areas related to teaching and learning. Most importantly, it reflects upon how that influence may be experienced continually over time both in interaction with students and colleagues.*

In the summer of 1994 I utilized a CETL Faculty Development Grant to attend a Chautauqua Short Course in Santa Fe, New Mexico entitled "Indians of the Southwestern United States." I spent a fascinating three days learning about the field of historical archaeology. I learned the methods used in "a dig" (at a site reached by driving a rutted road fast enough to outrun the guard dogs at a deserted oil camp), the recent laws affecting museum holdings of Native American sacred objects, and about the prehistoric and present day cultures of the Pueblo Indians. Fellow students came from states stretched from the East Coast to California.

Following that seminar I drove 1100 miles north to attend two ten day seminars on "Women in the West" and "Representations of the West in Wild West Shows and Historical Museums" at the Buffalo Bill Historical Center in Cody, Wyoming. In addition to taking courses from professors who had actually written the texts, "extras" included attending a modern day Indian Pow Wow, visiting the ruins of the largest Japanese internment camp in the U.S., doing after hours research in the Buffalo Bill Letters Collection, and hiking to a 10,000 foot high prehistoric Medicine Wheel in the Big Horn Mountains.

Upon my return to Kennesaw I shared my experiences during the next year through incorporating the historical content in a Special Topics course on the American West and conducting a slide presentation for the History honor society. I presented a paper at the Georgia Association of Historians' Annual Meeting, the annual History newsletter, and cornered any faculty member on campus, including Dr. Siegel, our college president, who seemed interested in knowing anything about anything I had learned. While realizing that I would never again teach Western History as I had before that summer, I did not realize until later that the beauty of a faculty development grant experience such as I had was that it never seems to stop enriching one's professional growth in unexpected ways. How did I learn that lesson?

The saga began in the summer of 1995, when I was asked to give a presentation on Western Women to a group of high school English and history teachers enrolled in a NEH Summer Seminar entitled "Domesticating the Cannon." The class centered on the

works of nineteenth century women writers. Preparation for my talk began with reviewing some of the reading done by the class. Suddenly a light went on in my brain. While reading literary criticism of a novel written by Caroline Kirkland about her experiences in a Michigan frontier village in 1836, I was suddenly reading Turner's thesis, a thesis rejected by many of the best known writers of recent western history. I found myself fascinated by the thought of seeking support in the novels written by women in the Trans Mississippi west for the new approach to western history. If that West was truly so different from Turner's frontier, would that difference be seen in those novels? That interest in turn led to acceptance of a paper proposal on the topic, a presentation which will not occur until next September. Time travel had begun.

As it developed, that summer of 1995 experience was just the beginning. In Fall quarter I was asked to give a presentation to the Cobb county social studies teachers on the current state of "the field." That was an opportunity to share the contrasting interpretations of western history in general and the images of western women in particular with high school history teachers using texts which often omitted African American cowboys, single women homesteaders, and successful San Francisco Chinese businessmen. I even was able to suggest that the history teachers consider working with English teachers to contrast literary depictions and historical interpretations.

But the saga did not end there. Winter quarter I taught Current Trends and Issues in Social Studies to a class of practicing teachers pursuing master's degrees in Middle School Education with a concentration in Social Studies. During the portion of the class devoted to utilizing community resources we visited the Atlanta History Center. While touring the exhibit on African Americans in the Cotton States Exhibition of 1905, I found myself first remembering and then explaining to my students Gramsky's theory of hegemonic control through the use of spectacular public events. Where had this approach to Southern history originated? It came from the professor's lecture in the "Representations of the West" on World Fairs and Exhibitions. I figuratively had returned to Cody, Wyoming.

During this quarter I experienced time travel once again. In April I addressed several groups of high school students at North Cobb High about the profession of college teaching during Career Day. I explained the required training and duties of the college professor, but also mentioned my summer course work. One stu-

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for now, we should use chalk for teaching mathematics analytically in the classroom. However computers and professional mathematics software can significantly help us to teach mathematics geometrically and numerically. They can cut tedious, time consuming and repetitive steps between mathematical principles and results. Geometric figures, human beings—even well trained artists and mathematicians—have difficulty drawing geometric graphs on the blackboard accurately. Don't even talk about making three dimensional graphs move around on the board. We should take advantage of high technology and use computers extensively in our classrooms to make our teaching more effective. We should teach students to use computers creatively and positively. We must teach students more than just how to punch keys of calculators and computers or follow software menus. Otherwise, the ability of students will never be beyond the ceiling of existing technology. I believe this is one of the reasons that our institutions of higher learning are very different from job training centers.

I chose a powerful mathematics software, Matlab (matrix laboratory), to design my project. Matlab is a technical computing environment for high-performance numerical computation and visualization. Matlab features a family of application-specific solutions.

A software package that utilizes computer notebooks has been developed. The package consists of two major parts:

1. A software package of computer notebooks shows the general view and properties of elementary functions such as polynomial, rational, exponential, logarithmic, trigonometric and inverse trigonometric functions. It will illustrate the domains, ranges, asymptotes, periods and other important properties of elementary functions so that students are able to review, compare and visualize them in a more intuitive way.
2. Computer graphics programs are used to show the applications of these elementary functions in the natural sciences and engineering. These computer notebooks demonstrate many examples of application of these functions in mathematics, physics, computer science, optics, wave propagation, electrical engineering and music. They provide good supplemental materials for mathematics teaching at the university and college level. These materials will give undergraduate students motivation and inspiration to study mathematics.

The distinguishing feature of this project is the graphic visualization of some abstract concepts. The presenter can use the package to demonstrate how it can animate mathematics and make teaching intuitive and efficient. The audience will see how computer technology affects our classroom teaching.

If our students learn Matlab here at our campus then they can use its toolboxes in their future professions (almost all science and engineering fields, finance and others.) This will help students to succeed in the job market driven by high technology and to pursue their professional development in graduate schools of the future.

Anybody who is interested in my software package should contact me for details. •

dent exclaimed, "You mean you still have to take courses?" "Have to" was answered by "get to" and questions about "Who paid for the trip" and even "How do you use it" ensued. Spring also brought another opportunity to teach a more developed Western history course. Students now produce video clip presentations exploring movie images of Native Americans, the Overland Trail experience, and mining in the West, complete with analysis of whether the images match Turner or the new Western historians and why.

But the saga was not over. Just recently as I listened to a speaker in "The Year of the Olympics" series describe the Nazi orchestration of the 1936 Olympics my mind once again returned to the lecture in "Representations of the West" and Gramsky's theory of hegemonic control through the use of public events. From Wild West Shows to World Fairs, from the Atlanta History exhibit on African Americans at the Cotton States Exhibition to the Olympics, my experiences in New Mexico and Wyoming keep renewing a new and more scholarly interest in western and non-western areas of history alike.

So where did I go on my Faculty Development grant funded vacation, and who has accompanied me? From Santa Fe and Cody I have gone to the KSC classroom, to a NEH Summer Institute, to a Cobb County Faculty Development Day, to the Atlanta History Center, to a Cobb County high school classroom, and via Library 470, to the 1936 Olympics. Who has gone with me? KSC students in and out of the classroom. Cobb County teachers. Cobb County students. And perhaps most enriching of all, my mind and its growth. Thank you CETL for my 1994 "summer vacation." I hope I never stop traveling on the learning experience you provided me. (P.S., next stop Topeka, Kansas—unless I'm surprised again.). •