

## EDUCATION EVENT REPORT AND RECOMMENDATIONS

Attendee's Name and Report Writer:

Joseph Kerski, Geographer:  
Education/GIS, USGS, Denver, Colorado.

Location/Date: University of Arizona,  
Tucson, Arizona. 2 October 2002

Event: **Conduct Workshop for Sherrill Scholar Program, School of Education.**



*The Arizona flag flying on the campus of the University of Arizona, Tucson.*



*Education Building at the University of Arizona, location of the workshop.*

### ***Turning Tragedy Into Teaching***

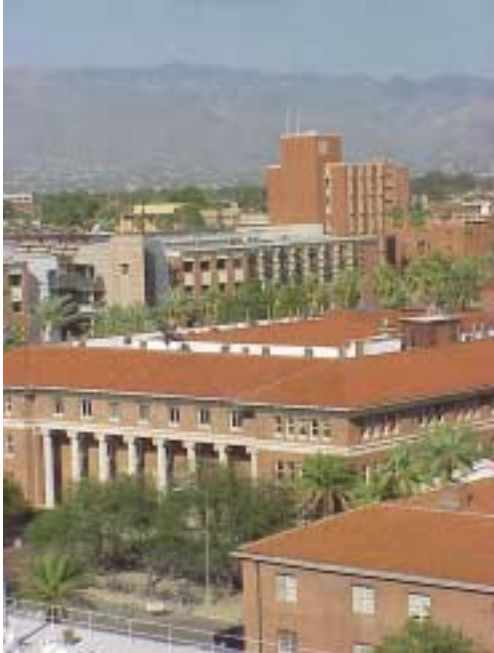
[Note - These facts are as reported to me, and my apologies if I am misrepresenting them].

During the early 1990s, Mr. and Mrs. Sherrill were murdered in their home in Tucson, Arizona. Because they were long-time supporters of education at the University of Arizona, their son set up an 11-year endowment that would bring in experts in geography education from across the country to train Arizona geography teachers. The Sherrill Scholar Program was born.

Each year, geography educators at all levels from across the state apply for the program. The selectees attend a workshop once a week for 9 weeks, participate in field trips, and are required to submit a curricular project using the materials and methods they learned in the program. From this tragedy, a decade-long program began that has impacted hundreds of teachers and thousands of students teachers across the state.

This is the fourth consecutive year I have been invited to participate in the Sherrill Scholar program. Other presenters at this year's program included Gail Hobbs, 1999 NCGE President, and Dr. Teresa Bulman from Portland State University. I therefore was in excellent company and the expectations were high that I conduct a workshop of the utmost quality.

The University of Arizona paid for my lodging and travel for this education event.



*The workshop was held in the School of Education, the tall building in the background of this image.*

*USGS near-real time earthquakes, and an online mapping interface hosted by the City of Tucson and featuring sub-meter DOQs, parcels, streets, and over 40 other layers.*



*Teachers make maps on the web at the workshop from the National Atlas.*



*In the past, I have conducted workshops for the Sherrill Scholar program on mapping, GPS, GIS, and physical and cultural geography. I wanted to do something different this year. Therefore, we moved my workshop to the computer lab, where we emphasized Web-Based Mapping. The sites we investigated included the National Atlas, Terraserver, GeoMac, Geography Network, USGS Real-time hydrographs,*

Following the web mapping section, I led the participants through a brief introduction to GIS using ArcVoyager software. We explored USA county demographics from 1900 to 2000 and the University of Arizona campus digital maps and aerial photographs. It was a pleasure to work with these teachers, largely from geography, but also from science.



*Before the workshop, I collected GPS coordinates and the participants in the course viewed them on top of a DOQ from Terraserver within ArcVoyager GIS.*

### **Materials**

I shipped and distributed teachers packets, GIPs, sample maps, fact sheets, circulars, posters, and map indexes, as well as information sheets and guidelines that I have written, and a sheet indicating all of the web sites that we were investigating during the workshop.

This year, I handed out the surface water map of the USA, excellent for teaching about watersheds, a USGS satellite image map of Arizona, and a new shaded relief map of the Grand Canyon by Digital Data Services (DDS) made with USGS data. They all were immensely popular, particularly the Grand Canyon map.

### **Reasons for attending**

1) As the University of Arizona paid for our travel, and because the program provides much information to educators across the state, it was worthwhile for the USGS to be a part of the selected group of people to present during the Sherrill Scholar program.

2) Web-based mapping tools are powerful, easy-to-use, standards-based, and provide much enrichment to the curriculum. Again, this is the first time I have used them in a Sherrill workshop, and the teachers were very engaged with them.

3) The USGS provides much input to publications, data sets, software, and other items related to social studies education. While our main educational emphasis is on science, I believe that the social studies provide an excellent bridge for the USGS to help teachers of geography, history, economics, and government use our resources.

4) The value-added in our involvement with the lifelong learning focus area of educational outreach is that we work with educators to demonstrate **how** our products can be used in conjunction with national science and geography standards. It is not enough to tell **what** products are available.

Teachers already know how to find most resources and they have access to a great deal of material. When we get involved with teachers--getting their input and working with them--we can understand how to best meet their needs.

5) The field of geography education continues to expand, with ever-increasing attention to interdisciplinary linkages (particularly to math and science, because the connection to history has always been

strong), the national geography standards (*Geography for Life*) and state standards. USGS research has excellent ties to human-environment connections, and we can therefore demonstrate how to bridge cultural and physical geography, and how to bridge geography and science.

### **Recommendations:**

1) These are exciting times for geographic education, with the resurgence of public interest in the subject, and the new national K-12 standards in geography. I believe that the USGS should play a role in this expansion of geographic education. One of the reasons we should seek types of programs like Sherrill is that the teachers are *required* to make presentations to other teachers about what they have learned, ensuring that our efforts will not remain solely with the workshop participants, but expand to many others.

2) With increasing USGS activities on the University of Arizona campus, this workshop is a good opportunity for us to increase our visibility there and to forge new partnerships with others on campus.

3) Educators should take advantage of the new Grand Canyon map and order copies from DDS, Inc.

### **Acknowledgements**

I appreciated the USGS' support of the time for my attendance at this event. I know that the attendees were appreciative of USGS support as well.

I thank Scott Carter and the staff at Digital Data Services (DDS) for the new maps of the Grand Canyon.

I also thank the faculty and staff at the

University of Arizona's School of Education for their support of geography education, particularly Leticia Escobar and Cristina Polsgrove, and Barb Soto of the Arizona Geographic Alliance. I thank Michael McVey, Instructional Technology faculty in the College of Education, at the University, for helping make the workshop a success.

### ***Geosciences, USGS, and Geography Program Visits***

I also took the opportunity to visit Michelle Hall-Wallace of the Department of Geosciences, one of the leaders in education outreach and technology.

I visited the USGS state office on campus, and left some materials for Elaine Padovani's upcoming GIS for Native Americans workshops. I also said hello to and left some maps with USGS Arizona state representative Nick Melcher.



*The USGS occupies part of the Natural Resources building on the University of Arizona campus.*



*I visited and left maps with the Department of Geography on campus in this building. In the elevator at the Geosciences Building, I was very pleased to unexpectedly see and chat with Dr Janice Monk, 2001 President of the Association of American Geographers.*



*Each year, I am amazed at the results of new construction on campus.*

**\*\*end of report\*\***



*West-central part of the University of Arizona campus.*