EDUCATION EVENT REPORT AND RECOMMENDATIONS

Attendee's Name and Report Writer: Joseph Kerski, Geographer: Education/GIS, USGS, Denver, Colorado.

Location: University of Arizona, Tucson, Arizona.

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

Date: October 2001



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 longtime supporters of education at the University of Arizona, their son set up a tenyear 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 8 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 third year I have been invited to participate in the Sherrill Scholar program. Other presenters at this year's program included Gail Hobbs, NCGE President during 1999, 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 outreach event.



Teachers work through exercises with USGS topographic maps at workshop.

My workshop included the following topics:

What is the USGS
USGS in education
Topography
Scale
Symbols
Projections
Coordinate Systems
Datums

Benchmarks GPS Contours

Map Mysteries--analyzing the physical and cultural environment with USGS topographic and thematic maps.

Topo Bingo - activity written by Leslie Gordon, educational specialist and geologist, Western Region. This was **very** interesting to the teachers. Thanks Leslie!



We collected GPS coordinates and brought them on top of a DOQ from Terraserver within GIS.

I shipped and distributed teachers packets, GIPs, sample maps, fact sheets, circulars, posters, and map indexes. We did handson work with the Digital Landforms map of the USA, Tucson topographic maps, Callaway Nebraska and New Orleans topographic maps, Arizona satellite image map, and the Bay Area Earthquakes map.



Teachers participate in "Map Mysteries" exercise.

Reasons for attending

- 1) The USGS provides great input to publications, data sets, software, and other items related to social studies education. Our main educational emphasis is on science, but I believe that the social studies provide a good bridge for the USGS to help teachers of geography, history, economics, and government use our resources.
- 2) 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.



Joseph Kerski works with the teachers at the institute.

3) 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.
- 2) I recommend we continue to be involved in the Sherrill Scholar program, expand the publicity generated from the program, and seek other high-profile opportunities like these where other organizations are paying for us to conduct educational outreach. One of the reasons we should seek this type of program 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.

4) 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.



The USGS satellite image maps of Arizona were excellent resources for this institute.

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 also thank the faculty and staff at the University of Arizona's School of Education for their kindness and support of geography education, particularly Leiticia Escobar and Cristina Polsgrove, and Barb Soto of the Arizona Geographic Alliance.

I thank Leslie Gordon for creating the "Topo Bingo" activity. I appreciated the USGS staffpersons Laura Brady and Jim Monical for meeting with me.

Other Activities

I took the opportunity to visit Michelle Hall-

Wallace of the Department of Geosciences, who is one of the leaders in education outreach and technology. I also visited the USGS state office on campus, and spoke with Laura Brady, Jim Monical, and I also said hello to Arizona state representative Nick Melcher.



USGS building on the University of Arizona campus, home of Arizona USGS state office, shared with other agencies.

^{**}end of report**