OUTREACH EVENT REPORT AND RECOMMENDATIONS

Attendee's Name: Joseph Kerski Title: Cartographer, PM

Event: National Council for Geographic Education

Other USGS Exhibitors: Elizabeth McCartney and Kathleen Kerns, MCMC

Event Date(s): 2-5 August 2000

My activities at conference:

1. Operate USGS exhibit with MCMC personnel.

2. Conduct 5 presentations.

3. Attend geography education meetings.

Background:

The field of geographic education has been experiencing a tremendous renaissance since 1985. It began with extensive media coverage of the lack of geographic knowledge by not only K-12 and college students in American schools, but by the American public. During the 1980s, geography was included in one of the five core subjects in the President's "Goals 2000: National Education Act." During the mid-1990s, the National Geography Standards were published in a document entitled *Geography for Life*. The most recent advancement in geography education was the addition of geography as one of the secondary subjects in which students may take "Advanced Placement" or A.P. courses. The development of the A.P. curriculum continues to be one of the main foci of the NCGE and its members.

Since 1915, the NCGE has been promoting and improving the effectiveness of education in geography. NCGE currently has over 6,500 members, including K-12 teachers, university faculty, students, government employees, representatives from private companies, and others interested in geographic education. The NCGE publishes the monthly *Journal of Geography*, and a newsletter entitled *Perspective*. Their web site is www.ncge.org and their headquarters are at the Indiana University of Pennsylvania, which I visited in July 2000 (see report on this event on nmdctl.er.usgs.gov). This headquarters will be moving sometime during the year 2001 or 2002 to another university.

Reasons for attending:

- 1) This is the 6th time I have attended the annual NCGE conference and I have been a member of NCGE since 1995. As the nation's largest scientific organization, the USGS can and has provided great input to publications, data sets, software, and other items related to geographic education. This is particularly true in the area of bringing GIS to the classroom: the USGS could be a leader in generating data sets that teachers can easily use at all grade levels. In so doing, the publicity generated from teachers and students across the country for the USGS could be enormous, particularly with the amount of media on the need for geographic knowledge.
- 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 which products are available. Teachers already know how to find resources and they have 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.

- 3) The USGS outreach program suffers from a chronic lack of funds and partnerships to assist us in our efforts. I believe the NCGE holds tremendous untapped potential for partnership opportunities with the USGS and I commend the work that Roger Barlow and others are doing to formalize this relationship. The NCGE has worked closely with the Association of American Geographers (AAG), the American Geographical Society, and the National Geographic Society. The USGS should not miss the opportunity to be another link in the cooperative efforts that have already been successful.
- 4) I wrote a second article in *Focus* magazine from the American Geographical Society (Spring 2000) on using USGS resources to teach about glaciers. This article was promoted at the conference in one of my workshops and it provided an excellent opportunity to work with the AGS.
- 5) The President of the NCGE (Dr James Petersen, Southwest Texas State University) invited me to a reception, during which I also met Michael Bradford, President of the Geographical Association (GA). The GA is the main counterpart organization to the NCGE in the United Kingdom. I discussed future possible collaboration between the USGS and the GA with Dr Bradford and the possibility of attending, presenting at, and exhibiting at the GA 2001 conference in the UK. Negotiations will be continuing as he is interested in this project. This indicates how well our organization is respected and viewed by professional societies. Our relationship with former NCGE President (Gail Hobbs) stems from our materials support of her college courses in California, illustrating that our outreach activities have far-reaching effects.

Presentations

I conducted 5 presentations:

- (1) Teaching Geography for the 21st Century. In this session, in which I was invited to present by Ruth Shirey, Executive Director of NCGE, I spoke about how and why educators should consider using USGS materials in the curriculum. Other presenters included the Population Reference Bureau and the Finding a Way project, a curriculum to reach underrepresented groups in geography education.
- (2) 75,104 Ready-To-Go Lesson Plans: Teaching Cultural and Physical Geography with USGS Topographic and Thematic Maps. In this workshop, I illustrated how USGS maps can be used to teach cultural and physical geography, aligned with the national geography standards, by using a series of "map mysteries" built on topographic and thematic maps. Over 60 attendees were present.
- (3) How Effective is GIS in Practice? I presented research results of 86 experiments that I conducted in 3 high schools to illustrate the effectiveness of teaching geography using GIS. I illustrated lesson modules I developed with teachers for these experiments, described USGS digital data useful for education, and discussed challenges and benefits involved with implementing GIS in the classroom.
- (4) Population Drift: Examining State Centers of Population, 1900-1990. I presented results of my research project that I am working on with someone from ESRI, where we are examining the changing location of the center of population for states over the past century using GIS and spatial

statistics methods.

(5) The View of "Focus" from the USGS. In this workshop, organized by the American Geographical Society, the publishers of *Focus* magazine, I illustrated how USGS resources such as circulars, bulletins, web sites, photographs, maps, and professional papers could be used in conjunction with the magazine to enhance teaching and learning. Larry Handley from the USGS NWRC also made a presentation at this session.

I attended a "research in geography learning" meeting to network with other researchers. This is a special interest network (SI-Net) of the NCGE of which I have been a member since 1998, and we share ideas for current and future research in the field. I also attended a presentation from leading geography educators from the UK, Germany, and Canada about the status of the discipline in their countries.

Exhibit

Approximately 750 people attended the conference. The USGS exhibit was adjacent to NASA in a corner of the main exhibit hall, which afforded "overflow space" for our materials. Other exhibitors included ESRI, publishing companies, National Geographic, ThinkSpace, Rand McNally, and Intergraph. I assisted in the set up and operation of the USGS booth in the vendor exhibit area, which was staffed by Elizabeth McCartney, Kathy Kerns, and me.

Our exhibit featured a NAPP photo of downtown Chicago, the Tapestry in Time map, a NAPP photo quiz, teachers packets, fact sheets, map projection poster, and a variety of new circulars and professional papers on display, including the open skies Hurricane Mitch circular and CD. We also featured map products, DDS CDs, and GIS in education demos on our computer and monitor. We also ran an Earthlink Internet connection which worked excellently using a local Chicago telephone number, and displayed Earth Explorer and a wide variety of other USGS information.



Joseph Kerski and Elizabeth McCartney at the USGS exhibit.

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 could play a role in this expansion of geographic education, by producing a modular CD-ROM that includes base and thematic spatial data sets, with one module for each of the national geography standards, and for different grade levels (primary, middle, and high school). Teachers lack the time to find sites for spatial data, and reformat that data to use in a GIS. They need easy-to-use data that can be imported into a GIS such as Idrisi or ArcView.
- 2) The presentations worked well in tandem with the exhibit, where we could answer additional questions following the presentations as well as direct attendees toward the presentations from the exhibit. I recommend at least one USGS presentation at this and all other conferences that we attend.
- 3) I recommend we remain involved with the NCGE. This is an organization who is coming to us for guidance, telling us how appreciated we are, and wanting to increase its involvement with us. In 1998 they initiated an educational project with NASA which is bringing publicity to both organizations. I believe the USGS is equally suited for such collaboration.
- 4) Most of the fact sheets that we ordered for this conference did not arrive, and some of the GIPs did not arrive either. This was very disappointing for us and our customers. I concur with Kathy Kerns' recommendation that the exhibitors at conferences, if at all possible, receive a copy of the pull sheet from the USGS warehouse in Denver, so that the exhibitors will know ahead of time what was shipped. In this way, we can plan ahead, and at the very least, know if the material was OOS, not mailed, or lost during shipment.

The next conference of NCGE is in Vancouver BC Canada, August 2001.

Acknowledgements:

I appreciate the USGS' support of my attendance at this event. I consider NCGE to be the most important event to my outreach duties of any conference during the year. Elizabeth McCartney and Kathy Kerns were excellent and enjoyable to work with, and I commend them for their professionalism and knowledge.



Chicago Intercontinental Hotel (center) where the NCGE 2000 conference was held. Chicago Tribune building at right, Chicago River in foreground.

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