

EDUCATION EVENT REPORT AND RECOMMENDATIONS

89th Annual Conference, National Council for Geographic Education (NCGE)

Location: Kansas City, MO USA

Dates: 19-23 October 2004

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

Other USGS Attendees: Lawrence
Handley, USGS National Wetlands
Research Center



Views of Kansas City Missouri, site of the 2004 NCGE Conference.

The National Council for Geographic Education (NCGE)

For nearly 100 years (1915), the NCGE has been championing, promoting, and actively improving the effectiveness of geography education at all levels. Over 3,000 members belong to NCGE, including K-12 teachers, university and community college faculty, graduate students, representatives from government, private industry, and nonprofit organizations, and others who support geography education.

The NCGE publishes the *Journal of Geography* and a newsletter, *Perspective*. Their web site is www.ncge.org and their central office since 2002 has been at Jacksonville State University in Alabama. Dr Michal LeVasseur is the Executive Director, and Allison Newton is the Associate Director. The 2004 President is Dr Gwenda Rice from Western Oregon University.

My Participation in the NCGE Conference

1) NCGE Board Meetings. I am serving a 2002-2004 term on the Research and External Relations Committee.

- 2) Workshop: Hands-on, in the field (the urban field, that is) GPS and Geocaching.
- 3) Paper: Global GIS: GIS Data and Lessons for the World.
- 4) Paper with Anita Palmer: The Implementation of GIS in Education—A New Survey of 250 Educators.
- 5) Setting up and operating a USGS Information Exhibit.
- 6) Assisting with welcoming first-time NCGE conference attendees at the “First-Timers” gathering.
- 7) Attending NCGE papers and workshops as described in this report, and networking with conference attendees.
- 8) Taking the Geography Bee Qualifying Test and the Jeopardy Test, both of which I failed miserably.

Remarks and Acknowledgements

This was a special event for me, marking my 10th anniversary year in which I have been a member of the NCGE and have attended their annual conferences. The annual conference is an event to which many of us look forward, to meet new colleagues and to renew existing professional relationships and personal friendships. It truly is an honor and privilege to be working with such a professional, knowledgeable community that is passionate about geography education. I thank them for all that they have given me over the years, and I hope I have contributed a bit in return.

I consider NCGE to be the single most important event in my role as educational geographer of any of the approximately 20

conferences that I participate in during a typical year.

I thank Allison Newton, Michal LeVasseur, NCGE President Gwenda Rice, Ken Foote, and the rest of the NCGE board members and the local arrangements committee for their dedication and contribution to this year’s annual meeting. It was good to see many familiar colleagues who remain passionate about geography education and to meet new friends.

I also thank ESRI for the generous donation of part of their exhibit space to the USGS for the display and distribution of our maps, books, and guidelines.



Kansas City Marriott, site of the 89th NCGE annual meeting.

NCGE Board Meeting



NCGE Executive Director Michal LeVasseur from Jacksonville State University, Alabama.



2004 NCGE President Gwenda Rice from Western Oregon University.

We had a productive meeting of the entire NCGE board and its committees during the two days before the main conference began. My position is on the Research and External Relations Committee, headed by Dr Ken Foote of the University of Colorado. Other committees include finance, publications, administrative, and curriculum and instruction. Our goals are to:

1. Sustain the visibility of the NCGE and advance its mission in the professional, business, public, and political arenas.

2. Foster geography learning at all levels.
3. Promote professional development in geography at all levels.
4. Foster research on learning and teaching geography.
5. Build the NCGE membership.
6. Develop and sustain financial support for the NCGE.



NCGE Board members Osa Brand, left, NCGE liaison to Washington DC, and Larry Handley, right, USGS geographer from the National Wetlands Research Center.



Some of the NCGE board members can be seen in this photograph, 19 October 2004. We discussed partnerships with other

organizations, membership, finances, new research, awards, the NCGE web site, new publications, and the mission and future of the NCGE.

Conference Highlights



Some of the 2004 NCGE conference attendees, who came from nearly every state as well as from several other countries. One of the best things about this year's conference was the GeoLiteracy and GeoMath strands, which featured lessons that tied geography to reading, writing, and mathematics.



Local high school band plays for the conference attendees before the opening session. I spoke with the students and they were great fellows from the Kansas City area.



Judy Dollard addresses the attendees with a presentation about the historical and current geography of the Kansas City area. She and the rest of the local arrangements committee did an outstanding job of organizing the 2004 meeting.



It was excellent to see the winners of the student poster contest at this year's NCGE annual meeting (above) and to see their posters.



Kansas City Star reporter Charles Gusewelle spoke to us about his many world expeditions in conjunction with his job in the media. Above, he holds the new National Geographic Atlas of the World.



Osa Brand, who we are fortunate to have serving NCGE as liaison to organizations in Washington DC and beyond.



One of my personal highlights was meeting the 16TH Annual National Geographic Bee 2004 winner, Andrew Wojtanik, from Kansas, and his parents. He wrote a 450-page book on the Bee that NGS will soon publish.

Congressman Dennis Moore, US Representative from Kansas, introduced Hosue Legislation 815, recognizing Andrew Wojtanik, and stressing the importance of geography education in American Schools. I was impressed that Congressman Moore took the time to address the conference attendees.



Tim Magner, Deputy Director, Office of Education Technology, US Department of Education, in an excellent session I attended on Incorporating workforce skills into K12 geography education. Featured in the session was a description of the geography component that several of us participated in earlier in 2004—to ensure that geography was featured with concrete technology and workforce examples in the Partnership for 21st Century Skills.

I also attended sessions on the EMBARC (research) project, on students playing a key role in preserving a section of historic US 66, a map workshop, population

pyramids, and the NCGE GIS Special Interest Network.



Geographical Association Executive Director David Lambert. I have known David for several years after having attended 4 conferences of the Geographical Association and reading some of his books and articles on geography education. It was a pleasure to speak with him several times during the NCGE meeting and we were privileged to have him here.

We were also privileged to have Takao Shibata, Consul General of Japan, at the conference, speaking about the environmental challenge of climate change and the Kyoto Protocol.



Above, Alex Trebek moderates a Geography Bee session for the finalists of

the conference attendees who took the pretest. This was a fun and educational event for all.



The panel of NCGE finalists in the Geography Bee.



Members of the NCGE Board are asked to help meet and greet the first time NCGE attendees, but this is hardly a chore—it is excellent to welcome new members and find out what their interests are.



Folks at the NCGE First Timers Breakfast.



Teachers in the "field" searching for the points on the geocaching course that I laid out in downtown Kansas City before the workshop began.



The hands-on GPS geocaching course provided an opportunity for educators to use GPS and coordinate systems in an interesting way. Before going outside, we had a brief discussion of the merits of GPS in the curriculum, resources to support GPS in education, and how GPS works.



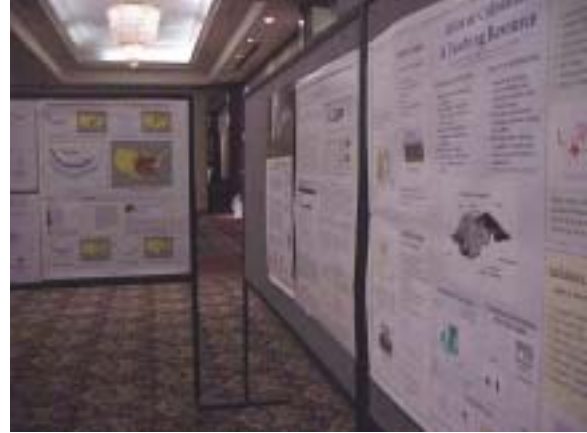
After my presentation for Anita Palmer on research in GIS education, we had one of the most valuable extended exchanges at the conference about the challenges of GIS in education and the need for research.

Exhibits

The exhibits at the NCGE conference include private map and textbook publishers (such as Rand McNally, Nystrom, Brooks Cole, and others), private software vendors (ESRI and others), nonprofit organizations (Wetlands Education Through Maps and Aerial Photographs—WETMAAP, the Grosvenor Center for Geographic Education, and others), and government organizations (such as the USGS).



Exhibit hall at the NCGE Annual Meeting.



Posters at the NCGE conference included a description of a new online atlas of Colorado.



I distributed maps, books, guidelines, and lessons at the USGS exhibit with a focus on the Midwest USA and geography education resources. Again, I thank ESRI for the donation of the exhibit space.

A Few New Discoveries

The NCGE annual meetings always provide significant learning opportunities. This year, some of the highlights of what I learned include:

--The announcement of a reasonable price for K-12 schools to obtain the Image Analysis extension to ArcGIS from Leica Geosystems.

--An excellent new video about making sense of place in Phoenix Arizona, from the Lincoln Institute of Land Policy.

--The recent publishing of the 8th National Geographic Atlas of the World.

-- An article in *The Professional Geographer* by Gollege and Cutter entitled "Ten Big Issues in Geography."

--The new NCGE Pathways publication *The American Landscape from the Air*.

--The Newberry Library maps resource:
<http://www3.newberry.org/k12maps>

--The new magazine, *The Geography Teacher*, published by Ed Grode and the Mercyhurst College Institute for Geography Education.

NCGE Recommendations

1) The NCGE knows how to run a meaningful and worthwhile conference. My only disappointment is that the conference does not attract 1,000 people annually.

2) We need to increase our work with other geography professional societies in Mexico, with Canada, in the UK, Australia, and elsewhere. We have made progress, particularly with working with the Geographical Association in the UK and with the AAG in the USA.

3) We need to remain diligent about finding opportunities to promote geography at the national level, particularly in relation to No Child Left Behind. Including geography in the Partnership for 21st Century Skills during 2004 was a significant step in the right direction.

USGS Recommendations

1) The first decade of the 21st Century is an exciting yet challenging time for geography education. Never before in the history of the world has geography education been such a need for our society and for all people around the world. As a member of the NCGE board and after nearly a decade of attending the NCGE conferences and working with their membership, I must state that the NCGE is a world-class organization. Its people and mission are closely aligned with my own. As one of the nation's largest scientific organizations, the USGS can and has provided great input to publications, data sets, software, and other items related to geographic education. The NCGE

currently has two USGS scientists (Joseph Kerski and Lawrence Handley) on its board. The conference is our bridge to the social studies. Because of the entrenchment of geography in the K-12 social studies curriculum, the NCGE is the primary means by which social studies teachers can find out about the USGS. The relative small size of the NCGE conference compared to the NSTA (550 vs 19,000) shows how far that geography needs to go for equal footing in the curriculum as the sciences. Still, it has made much progress since 1985. I recommend that the USGS continue to participate in the NCGE each year.

2) The value added in our involvement with the education focus area of communications is that we work with educators to demonstrate *how* our products can be used in conjunction with national science, geography, and technology standards.

It is not enough to tell educators which products are available. When we get involved with teachers—getting their input and working with them—we can better understand how to meet their needs.

3) NCGE is working with many of our existing and potential USGS partners—the AAG, NGS, and NASA, to name three. I recommend that we increase our involvement with the NCGE. The NCGE holds tremendous potential for untapped partnership opportunities.

4) Again, I recommend that for all of the events in which we participate with an exhibit, that we conduct at least one workshop.

5) The amount of GIS in education at this and other educational conferences is increasing, and we need to remain active participants in these efforts—research,

curricular resources, and the production of data. The Global GIS project and lessons is a significant step in the right direction.



Kansas City was an excellent place for the NCGE conference. The next NCGE conference will be held during October 2005 in Birmingham, Alabama.



Joseph Kerski, conducting geographic fieldwork in a field of Kansas corn.

The Status of Geographic Education in the USA

The field of geography education in the USA experienced a resurgence beginning in 1984. Some would argue that the renaissance has not ended, but developments since 1999 have persuaded

me that we are now in a reassessment and regrouping phase.

The renaissance began with extensive media coverage of the lack of geographic knowledge by not only K-12 and college-level students, but also by the American public. A report entitled “*A Nation At Risk*” maintained that a lack of geography knowledge was hindering and harming the success of the country on multiple levels stemming far beyond the walls of schools and universities. During the 1980s, geography was included in one of the five core subjects in the President’s “Goals 2000—National Education Act.” Also during the 1980s, the National Geographic Society established a nationwide network of geography alliances in each state, through the efforts of Society Chairman Gilbert Grosvenor (I was finally able to meet him at the 2003 NCGE conference).

We at the USGS have been supporting the geography alliances for years; and I personally have participated in alliance activities in Texas, Iowa, Colorado, Tennessee, New York, Wyoming, Arizona, and Nebraska (see some of my reports of these events).

In 1994, the National Geography Standards were published in a book entitled *Geography for Life*. A more recent advancement for geography education was the addition of geography as one of the subjects in which secondary students may take “Advanced Placement” or A.P. courses. The development of the A.P. curriculum and national standards are two later in a nearly century-long list of accomplishments by NCGE members.

Recently, geography has been cut from some statewide educational programs due to increased emphasis on standardized,

high-stakes testing in math, reading, and science. Subjects not rigorously tested tend to be crowded out of the curriculum as school districts seek to meet test requirements. Furthermore, NCGE has restructured some of its funding support for the alliances, signaling a change in how these alliances will go forward to meet new challenges. However, the inclusion of geography in recent projects such as the Partnerships for 21st Century Skills is a step in the right direction.

Therefore, geography education has seen some “ups and downs,” but the field has always been led by bright, knowledgeable, and enthusiastic individuals who realize how important the discipline is for our society. This is especially true in the 21st Century, as we grapple with political, social, and environmental change, development pressure, and globalization—these topics have always been central to geography. It is up to all of us to spread this message to the wider community, to the media, to boards of education, and to Congress.

The Five Themes of Geography

To specifically serve the teacher population, the publication *Guidelines for Geographic Education* was published by NCGE in 1984. Its contents became known as the “Five Themes of Geography”, and include:

1. Location: Absolute and Relative
2. Place: Human characteristics, and physical characteristics.
3. Human-Environmental Interactions, including humans adapt to the environment, humans modify the environment, and humans depend on the environment.
4. Movement: People, Goods, and Ideas.

5. Regions: Formal, Functional, and Vernacular (Perceptual).

The five themes served as a framework upon which the content of geography can be taught, as did a 1964 article by Pattison entitled “The Four Traditions of Geography.”

The six elements in the national geography standards (1994) embrace the five themes, and therefore, the themes remain a valuable tool for students to use in developing a geographic perspective.

The 18 National Geography Standards

The geography content standards, published in 1994, indicate what the geographically informed person should know and understand.

The World in Spatial Terms

Geography studies the relationships between people, places, and environments by mapping information about them into a spatial context. The geographically informed person knows and understands:

1. How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information.
2. How to use mental maps (a person’s internalized picture of a part of the Earth’s surface) to organize information about people, places, and environments.
3. How to analyze the spatial organization of people, places, and environments on Earth’s surface.

Places and Regions

The identities and lives of individuals and peoples are rooted in particular places and

in those human constructs called regions. The geographically informed person knows and understands:

4. The physical and human characteristics of places.
5. That people create regions to interpret Earth's complexity.
6. How culture and experience influence people's perceptions of places and regions.

Physical Systems

Physical processes shape Earth's surface and interact with plant and animal life to create, sustain, and modify the ecosystems. The geographically informed person knows and understands:

7. The physical processes that shape the patterns of Earth's surface.
8. The characteristics and distribution of ecosystems on Earth's surface.

Human Systems

People are central to geography in that human activities help shape Earth's surface, human settlements and structures are part of Earth's surface, and humans compete for control of Earth's surface. The geographically informed person knows and understands:

9. The characteristics, distribution, and migration of human populations.
10. The characteristics, distribution, and complexity of Earth's cultural mosaics.
11. The patterns and networks of economic interdependence.

12. The processes, patterns, and functions of human settlement.

13. How the forces of cooperation and conflict among people influence the division and control of Earth's surface.

Environment and Society

The physical environment is modified by human activities largely as a consequence of the ways in which human societies value and use Earth's natural resources and human activities are also influenced by Earth's physical features and processes. The geographically informed person knows and understands:

14. How human actions modify the physical environment.
15. How physical systems affect human systems.
16. The changes that occur in the meaning, use, distribution, and importance of resources.

The Uses of Geography

Knowing geography enables people to understand the relationships between people, places, and environments over time.

The geographically informed person knows and understands:

17. How to apply geography to interpret the past.
18. How to apply geography to interpret the present and plan for the future.

****End of 2004 NCGE Report****