

## EDUCATION-COMMUNICATIONS REPORT AND RECOMMENDATIONS

### Event Name:

Peter H. Martorella Colloquium, GIS Workshop, and Dissertation Committee, North Carolina State University, Presentation at USGS North Carolina State Office

### Attendee's Name:

Joseph J. Kerski, Geographer:  
Education/GIS, Denver

Location: Raleigh, North Carolina

Event Dates: 28 April – 1 May 2004

### Summary

1. I was invited by the Dean and Faculty of the School of Education, North Carolina State University, to give the 2004 Peter H. Martorella Colloquium. This was a great honor and I appreciate all that the faculty at the University did to make me feel welcome and for funding my travel. The university has been successful in distributing GIS technology and methods throughout the campus in a way that I have not seen at any other university in the country.

2. I serve on Education Doctoral Student Shannon White's Dissertation Committee, and met with the committee and Ms. White for her oral and written comprehensive examination for her Ph.D. degree. Ms. White is doing some innovative work in GIS in education and has taught extensively in this field at the university and in area schools.

3. Jerry McMahon, USGS Geographer, invited me to conduct a presentation at the USGS North Carolina State Office in Raleigh. This presentation was attended by

USGS staff as well as those in private industry, other federal agencies, and state government, and provided some important contacts with whom I have already begun to follow up.

4. I conducted a hands-on GIS workshop on the North Carolina State University campus. The attendees included undergraduate and graduate students from several departments, the former Education Dean, faculty members, and faculty members. I admired the way these individuals dove right in and worked with online mapping and hands-on spatial analysis with GIS.



*North Carolina State University is the largest university in the state, with over 26,000 students, just west of downtown Raleigh. Other universities in the area include Duke, University of North Carolina-Chapel Hill, and Shaw. The area is one of the high-tech centers of the USA. This is the beautiful North Carolina piedmont, which unfortunately is subjected to increasing urban sprawl.*



*Joseph Kerski at Poe Hall, home of the School of Education, North Carolina State University.*



*The NCSU Campus Bell Tower.*



*Dr Marsha Alibrandi, a long time leader in technology in social studies education and geography. I have read and written a review of Dr Alibrandi's recent book on GIS in the Social Studies. We have worked together on grants and other activity related to spatial technologies in education. I thank Dr Alibrandi for her leadership and her kindness to me while on the campus.*



*The campus quadrangle (above) as well as thousands of azaleas (below) made the trip to NCSU a true pleasure.*







*My presentation defined spatial thinking, discussed why it is important to 21<sup>st</sup> Century society, challenges and benefits of using GIS in the classroom, and recommendations for the spatial thinkers of tomorrow.*



*School of Natural Resources at NCSU, where Professor Hugh Devine works. He was largely responsible for the successful diffusion of GIS throughout the NCSU campus so that it is used by education, sociology, business, mathematics, economics, natural resources, and others. Typically, GIS is used and taught in only one or two departments on campus, and therefore I commend Dr Devine for his leadership and vision. His idea of housing GIS data in the campus library won an international ESRI award in 2001.*



*The NCSU folks really gave me the royal treatment with a reception before the presentation, and they paid for my airfare and hotel. I don't take it lightly and do appreciate all of their efforts.*

I handed out many supporting USGS materials—GIS-based lessons that I have written, sample thematic maps, books on spatial data and applications, pamphlets and posters on map projections and other topics, and topographic maps of the Raleigh area.



*The Dean of the School of Education (Kay Moore, at far end of table), Mary and Chris Martorella, Dr Alibrandi, Dr Hugh Devine, Eugenia Leggett, and Department Head Ellen Vasu took me to lunch at the Raleigh*

*Art Museum. This was very kind and we had an excellent conversation about education and technology.*



*The first thing I noticed about the School of Education's building was this nifty raised relief globe.*



*The Colloquium was established three years ago to commemorate Peter H Martorella's 15-year service to NCSU's School of Education as part of his long teaching career. The Martorella Family sponsors this annual colloquium and an annual doctoral scholarship. I appreciate their generosity and it was excellent to meet Mary and Chris Martorella.*

## **USGS Presentation**



*Joseph Kerski at the USGS North Carolina State Office that features a cool rock sign. This office employs information technology specialists, hydrologists, geographers, and others. I was very impressed at the North Carolina National Map portal that they are building, entitled NCONEMAP.*

My USGS presentation focused on spatial thinking, the benefits of tying education to research, and that education and communications are fundamental to the USGS Mission. Included among the participants were professionals from the USGS, private industry, and state government. I made some important contacts regarding Native American education, K-12 GIS education, and New Zealand.





*USGS Geographer Gerard McMahon, who invited me to speak at his office. Dr McMahon serves on the USGS science planning team. I am grateful to Jerry for the opportunity to speak at the USGS. I met the USGS state representative and the mapping representative.*

## **GIS Workshop**



*The workshop focused on practical applications of GIS, beginning with online map services such as the National Atlas, Terraserver, and Duke County Assessors, and ending with ArcView GIS.*



*"These people are excellent," says Joseph Kerski, working with Barbaree Duke (left) and Shannon White. They both helped with the GIS workshop and have worked hard to*

*bring geospatial technologies to schools and teachers in North Carolina and elsewhere.*



*It was a thrill to have Dr. Barbara Parramore as one of the participants in our workshop. She was one of the first female Department Heads at NCSU.*



*Above, making maps with the National Atlas web-based service. Jeff Essic, NCSU GIS Librarian, spoke to the group about the GIS training and resources available on campus.*

*We also had a high school student in the workshop that once again illustrated the fact that secondary school students can do spatial analysis, are excited by it, and excel at it.*



*Several graduate students had just defended their dissertation research and presented their results during the day of the colloquium. Above, Dr Maria Droujkova discusses her educational research. Dr Judy Lanier Lambert won the 2004 Martorella Dissertation award. It was a pleasure to meet these other new doctors in education.*



*This was one of the first thing that I noticed on the campus. I took this photograph to show during my presentation, because it so well illustrated the idea of spatial thinking and the “whys of where.” Here, a stadium and bleachers faces the parking lot. Why? Because the parking lot was formerly the football field, and the bleacher seats were left.*

## Recommendations

I recommend that we absolutely must continue to expand our relationships with the academic community. As this event so aptly demonstrated, we have the opportunity to give something to academia, and we receive much in return. The NCSU faculty and I discussed expanding our partnership efforts for the future. A group of us will meet at the ESRI User Conference in August.

## Field Trips



*Dr Alibrandi gave me a brief tour of Raleigh from a sociological and geographic perspective. Above, North Carolina State Capitol monument and Civil War Statue.*



*Some of the first educators I met during the*

*1990s worked at Ligon Middle School in Raleigh. They created a wonderful history project where they interviewed and documented the African American community in Raleigh, including the history of Ligon, which formerly was a segregated high school.*



*Who are geographers without field work?  
We discussed education, geography, and  
technology en route to Latitude 36 North,  
Longitude 78 West, in a North Carolina  
wheat field.*

\*\*\* End of 2004 North Carolina State  
University Report \*\*\*