

EDUCATION-COMMUNICATIONS REPORT AND RECOMMENDATIONS

Purpose of Travel:

“Spatial Thinking” Presentations at two University of Wisconsin campuses

Attendee's Name:

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

Locations: Appleton and Green Bay, WI

Event Date: 21-25 February 2003

Summary:

I was invited to speak about “Spatial Thinking” by the University of Wisconsin-Fox Valley’s Science Scholars Program. The Program brings scientists from across the country to the campus to engage students in thinking about the sciences, and their role in it, in a more participatory way. I am grateful to the University of Wisconsin for funding most of this trip.

UW—Fox Valley Activities



Joseph Kerski following his address, entitled “Spatial Thinking—Mapping Your Future With Geographic Information Systems.”



I gave presentations at two campuses—Fox Valley and Green Bay. I worked with Dr Brey during one of his GIS in education workshops in summer 2000. I also visited a geography professor at St Norbert College and made two presentations to Dr Brey’s geography and GIS classes (see below).



Thanks to the efforts of Continuing Education Director Cathy Paynter, my presentation at the University of Wisconsin-Fox Valley was held in the University Theatre and attracted over 200 attendees (above). In this presentation, I emphasized why spatial thinking and analysis are becoming increasingly important to society—not just to geographers, but to people in marketing, business management, sociology, communications, transportation, planning, and many other disciplines.



Students examine the maps, posters, and booklets that I brought to back up the presentation. I was thrilled to have a high speed Internet line at the podium so that I could access data on Internet Map Service sites. I also accessed ArcGIS and showed such things as Wisconsin population growth in 3D and my walking trip around the campus with GPS points on a USGS digital orthophotoquad.

campus is that GIS is incorporated in a variety of disciplines in science and business—not just in geography, thanks in large part to Dr Brey’s efforts. Even the assistant campus dean uses GIS in archaeology!



It was a privilege to speak to students in two of Dr Brey’s classes—a geography class and a GIS class. I was also very impressed that the president of the university, Dr James Perry, emailed me several times before I arrived. I visited him and delivered several USGS maps. He is a botanist by training and is familiar with what the USGS does.



Dr James Brey (above), geology, meteorology, geography, and GIS professor at the University of Wisconsin—Fox Valley.

Dr Brey is a wonderful supporter of the sciences and technology in the UW system, and a firm believer in GIS in education, having secured several grants to conduct teacher training. One of the most impressive things about the UW-Fox Valley



Since I was last on campus in 2000, the UW-Fox Valley campus has installed a large, very impressive earth science

museum. One does not see this type of quality often, not even in large universities. This museum included rocks, minerals, caves, natural hazards, the water cycle, glaciation, the geology of Wisconsin, and much more with explanations that make for an excellent learning experience. The museum curator attended my presentation. The museum staff is looking for a high-quality, relevant exhibit to occupy the one remaining corner of the museum. I recommended that they obtain and frame some of the USGS Earth As Art prints and create explanatory text under each print.

UW-Green Bay Activities



Dr Bill Niedzwiedz, left, and Joseph Kerski, pointing at the Green Bay area on one of the USGS maps that I brought to the campus. Dr Niedzwiedz teaches geography and GIS on campus. The group he gathered for my presentation was excellent-enthused, interdisciplinary, and engaged in exciting environmental studies projects.



The presentation at UW-Green Bay was held in Cofrin Hall (above), a new, impressive building that houses the GIS and cartography laboratories as well as the Center for Biodiversity.



On campus, I spoke about the increasing importance that GIS, geography, remote sensing, and online mapping is having in our society, bringing in examples of homeland security, space shuttle mapping, location-based services, urban growth, water quality, and others. I referred to an article in the Manitowoc, Wisconsin newspaper about two employees who are updating local data for MapQuest. Once again, I was able to access a high-speed Internet line during my presentation as well as ArcGIS.



The UW-Green Bay campus includes approximately 6,000 students. Green Bay, arm of Lake Michigan, lies in the distance beyond the trees. I hiked on the trail after talking with the attendees at the presentation that circles the campus, which was slushy but quite beautiful. The campus maintains restored prairie, wetland, and glaciated environments.



Students and faculty from the campus peruse the materials I brought. I had several excellent conversations with these individuals, including one with a professor of economics, and one with the student at right who is from Nepal.

St Norbert College Activities



I visited St Norbert College in De Pere, Wisconsin on my way to the UW-Green Bay campus. I delivered some USGS maps and materials and met with the geography professor there (below).



I visited Mark Bockenbauer (above) who teaches geography and education courses on campus. I met Dr Bockenbauer several years ago at a conference of the National Council for Geographic Education and he is a leader in geography education in the United States.



The frozen Fox River makes a picturesque setting for the St Norbert campus.



Not a sight you see everyday--Joseph Kerski triumphantly carries the USGS banner to Lambeau Field, home of the Green Bay Packers!



Wisconsin is one of the best places to work with spatial analysis and GIS, due to the long excellent tradition of graduating geographers and cartographers at the University of Wisconsin, and the efforts of state agencies such as the DNR for making spatial data available.

Recommendations

It was a privilege to work with the University of Wisconsin faculty and students. The university system there, as in most other states, is undergoing severe cutbacks. However, it has a longstanding tradition of excellence, particularly with geography and cartography.

I firmly believe that working with higher education through presentations and workshops like these leads to long-term partnerships and benefits to the USGS and to the universities involved. This is increasingly important during these stringent economic times to leverage resources from federal agencies and universities. And, as I mentioned in the presentations I gave on the campuses in this report, I believe that spatial thinking is needed throughout society to solve 21st Century problems.

Acknowledgements

I especially thank Cathy Paynter, Dean of Continuing Education at the UW Fox Valley campus, for paying for my trip to UW, and for her efficiency and help with the presentation and materials logistics. I thank Dr Jim Brey and Campus Dean Dr James Perry for meeting with me. I appreciate Dr Brey for his continued excellence in promoting science, GIS, and geography on campus and around the world. I thank William Niedzwiedz, Associate Dean Scott Furlong, and Lloyd Noppe for inviting me to the UW Green Bay campus and for their work there. I thank the students and faculty at both campuses for the discussions we had about geography and GIS following these presentations.

I thank the USGS Geographic Information Office (GIO) for providing me with the hardware key necessary for running the ArcGIS on the laptop, and to Jack Fordham and Mapping Center Chief Craig Skalet for approving my travel to these events.

*** End of 2003 University of Wisconsin
Education Report ***



*Ice along shore, Lake Michigan,
22 February 2003*