

EDUCATION REPORT AND RECOMMENDATIONS

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

Location: Houston TX

Other USGS Attendees: Gary Nebeker, NMD - Salt Lake City
Joseph Broadus, WRD - Houston

Meeting Date(s): 9-13 February 1999

Purpose of Meeting: Conduct 1 workshop and operate USGS exhibit at Association for Educational Communications and Technology (AECT) conference

Background:

The AECT is a professional society comprised largely of university professors and technology coordinators for universities and K-12 school districts in the field of instructional technology. Instructional technology deals with the means and methods of teaching, and therefore, most members are concerned with improving existing instructional means, and discovering new ones. Most of the sessions at AECT conferences deal with the theory of innovation diffusion, and new and improved means of instruction, such as the Internet, multimedia, and computer languages. Approximately 25 exhibitors were at the conference. Exhibitors included private companies involved with library automation services, book publishers, microscopes, computer furniture, and cutting implements for schools. We were the only public agency represented.

Reasons for attending:

1) As the nation's largest scientific organization, the USGS can and has provided valuable data and training to the field of educational technology. We have CD-ROMs, WWW resources, and other educational tools and methods that educators can and have used at all levels. 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 educators--getting their input and working with them--we can understand how to best meet their needs.

3) As this professional society is comprised mainly of university educators, it is an excellent means of reaching the academic community. It is also a means of reaching a new segment of that community, one that we typically do not reach with traditional academic outreach events such as AAG and NCGE.

My Activities at the Conference:

1) I conducted 1 workshop, which was attended by over 60 people. An abstract follows:

Session Title: Mapping Your Future with GIS and the USGS

Description:

The USGS education program connects technology, science, geography, and other educators with the nation's largest scientific agency. This session will include a demonstration of how computerized data sets can be used in classroom geographic information systems (GIS). These data sets include computerized aerial photographs, satellite images, and 3D representations of the earth's surface. The session will also demonstrate real-time hydrologic and natural hazards information, interdisciplinary lesson modules, support from USGS scientists to the educational community, as well as 100,000 different maps, posters, research results, and other publications. Through this session, attendees will understand how USGS maps, publications, rocks, and computer data can be used to enhance technology and science education. Attendees will receive samples of USGS resources to use in their educational institutions upon completion of this workshop.

The exhibitors met with the AECT Executive Director, Stan Zenor, to discuss future exhibit choices. I have not experienced this in any prior outreach event, where the professional society director meets with the exhibitors, and it demonstrates their commitment to the future of this conference. This year marked the first year that the exhibitors were stationed in an area adjacent to the workshop rooms, instead of in a separate, large exhibit hall. I told Mr Zenor that I thought this worked well--it encouraged traffic at our exhibit, particularly after our workshop was conducted.

I also delivered instructional materials to a geography professor at Texas Southern University, and made a presentation to a geography class at Bellaire High School.

Comments and recommendations:

1) These are exciting times for educational technology. I believe that the USGS can play a role in this expansion of science and geography education, by continuing to conduct workshops and exhibits at conferences such as this. Despite attendance that was low at times in the exhibit area, the people who did visit our exhibit were most appreciative of our presence. Most of them remained in the exhibit for 20 minutes, sometimes over 30 minutes.

2) I recommend that the NMDOC and WMC pursue the AECT conference, scheduled in February 2000 in Long Beach, California.

3) This conference marked the first time where we used our newly-purchased lights for our pop-up exhibit. They greatly enhanced our exhibit's professional appearance, particularly since the exhibit hall's lighting was subdued.

4) Both Gary and I used our ISP Internet accounts to access the WWW at the exhibit. I used the Earthlink account, which worked well and without any problems. We had two computers which was essential at an educational technology conference, highlighting geospatial data (including DOQs and DRGs of downtown Houston), WWW resources, and the digital data series.

Acknowledgements:

I wish to acknowledge my excellent partner for this conference, Gary Nebeker, who brought professional and enjoyable working experience for me and for our customers at this conference. Gary's background and my background fit well together for this conference.

We shipped all materials for workshops to and from the Houston USGS WRD subdistrict office, where Cindy Billington and Joseph Broadus were extremely helpful. Subdistrict chief Mr Broadus met with us personally and visited the workshop and our exhibit at the conference. WRD serving as a shipping point, which avoided the freight cost associated with the convention center, and the loaning of a PC monitor, saved the USGS an estimated \$1500.

Materials

Outreach Plan for 1999 AECT / INCITE Conference

Location: Brown Convention Center, Houston Texas
Type of Event: Technology in Education conference

The USGS will be represented by 1 10-foot exhibit.

Description of exhibit:

The USGS, the nation's largest science agency, will demonstrate computerized data that educators can use with geographic information systems technology in their classrooms, real-time USGS data on the Internet, and educational CD-ROMs. This will include digital aerial photography and satellite imagery, 3D representations of the earth's surface, animations of geologic events, and real-time earthquake and streamflow data.

WWW site: www.aect.org

Staffing:

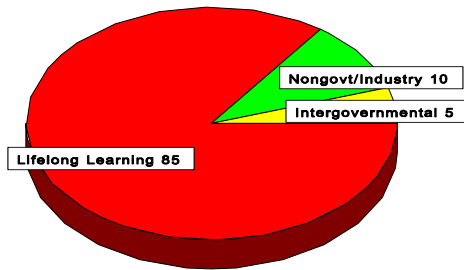
1 from RMMC: Joseph Kerski
1 from IS: Gary Nebeker

Other activities: Educational Workshop - Joseph Kerski.

Final Schedule.

Tue 9 Feb	Wed 10 Feb	Thu 11 Feb	Fri 12 Feb	Sat 13 Feb 1999
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Outreach Focus Areas



1999	1999	1999	1999	
3 to 5pm	8am - Noon	8am - 6pm	8am - 6pm	8am - 2pm
Fly to Houston and pick up materials at USGS.	Set up exhibit	Staff exhibit	Staff Exhibit	Staff exhibit
	Noon - 6pm		Conduct workshop.	
	Staff exhibit.			2pm - 5pm Tear down exhibit.

Audience:

Non-Core Customers: Educators.

Personnel required: Experience working with the public, and knowledgeable about:

- (1) Digital data availability, ordering information, scales,
- (2) Digital data formats, including satellite imagery, photography, DOQs, DEMs, NHD, DRGs, and DLGs.
- (3) Use of USGS digital data with GIS and remote sensing software in all applications, including government, business, and particularly education.

Action items:

Joseph

- Arrange for transport of backdrop
- Submit proposed materials list
- Plot posters, signs, and other materials
- Process digital data
- Arrange workshop: digital presentation

Ship publications rack to conf site - Planned
 Ship materials to USGS or conf site - Planned
 Make DOQ and DEM status graphics for USA

Item	Plan
Exhibit Themes	Mapping Your Future with Educational Technology from the USGS
Computers	Laptop #1: Joseph Kerski: For PowerPoint demos, BRD info, remote sensing and other animation videos, and MapInfo digital availability; Digital data uses and applications; El Paso-Ciudad Juarez with USGS and INEGI data; Imperial Beach DOQ-DRG-DEM-DLG, Las Vegas LULC data with DOQ/DRG/DEM/DLG, Golden CO: floodplain, addresses, zoning, habita; Austin W TX: 5 vs 30m DEM, DRG, DLG, DOQ; Idaho Springs CO: DLG with OMO zoning, LULC, infrastructure (water lines, parcels, curbs, etc); Transboundary data: Imperial Beach, Progreso, El Paso; DDS--3D model of Powder River Basin; DDS--Great Basin Geosciences Database Internet.
Monitors	borrow from WRD Houston
Publications Rack	Joseph - ship from Denver
Backdrop	Mt St Helens plot DOQ status graphics for USA DEM status graphics for USA Transboundary poster Print from DOQ - Imperial Beach Using DOQs in Arc/Info poster

Materials to Order:

 Circulars (1 each):

Water Quality in the Trinity River Basin, Texas

C1162 Water quality in the Rio Grande Valley, Colorado, New Mexico, and Texas, 1992-95. 1998*

C1126 Dams and rivers; a primer on the downstream effects of dams. 1996

Fact/Information Sheets:

Digital Elevation Models	(Joseph has 50)	200
Digital Line Graphs	(Joseph has 50)	200
Digital Orthophotoquads	(Joseph has 100)	200

Digital Products Online	(Joseph has all)	0
Digital Raster Graphics	(Joseph has 100)	200
Earth Science Information Sources	FS-125-95	200
Educational Materials from the USGS	FS-225-96	250
Fact Sheet List	(Joseph has 5)	0
GeoData Order Form		50
GIP list	(Joseph has 100)	0
GLIS		150
GNIS		25
How to Obtain Aerial Photographs		50
Land Cover Characterization Program		30
Map and Product Information Sheet	(Joseph has 50)	0
Map Dealer List for Texas		10
NAPP brochure and ordering info		20
National Atlas		20
National Digital Orthophoto Program		25
TX Fact Sheet		25
US Geodata Available through the Internet		100
UTM		20
USGS Maps and Books order form		50

Index to Topographic and Other Published Maps for

CA	5
CO	5
LA	10
TX:	40
FL	5

WWW Information Sheet FS 121-96 (Joseph has 100) 100

GIPs:

96-0011 Aerial Photographs and Satellite Images	250
96-0201 Map Projections -	200
93-0122 GIS	300
TUS Topographic Map Symbols Sheets (Joseph has)	0
USGS: Green brochure - Unbiased Science - (Joseph has 1)	0
93-0581 USGS Maps	300

Maps -- 1 each:

Landslide Potential Map of the USA (Joseph order from NEIC)

MF2034 Seismicity map of the State of Texas. 1988 1:1,000,000*

Digital Data - on CD: - 1 each

Houston West DRG all DRGs in 1 degree block 29 N Lat, 95 W long (1)

- DOQs for Houston or any part (preferably downtown) (1)
- DDS 2 - Geology of Nevada: A Digital Representation of the 1978 Geologic Map of Nevada. (1991)
- DDS 8 - Photographs from the U.S. Geological Survey Photographic Library (Earthquakes, Volcanoes, Geologic Hazards, and other Phenomenon) (1992).
- DDS 11 - (Release 2) Geology of the Conterminous United States at 1:2,500,000 Scale - A Digital Representation of the 1974 P.B. King and H.M. Beikman Map. (1998)
- DDS 12 - Photographs of Historical Mining Operations in Colorado and Utah from the U.S. Geological Survey Library (1994).
- DDS 24 - Images of Kilauea East Rift Zone Eruption, 1983-1993. (1995)
- DDS 30 - 1995 National Assessment of United States Oil and Gas Resources--Results, Methodology, and Supporting Data. (Release 2 - 1996; supersedes release 1 - 1995) Macintosh or PC Windows only. "FREE"
- DDS 35 - Digital Map Data, Text, and Graphical Images in Support of the 1995 National Assessment of the United States Oil and Gas Resources. "FREE"
- DDS-36 - Tabular Data, Text, and Graphical Images in Support of the 1995 National Assessment of the United States Oil and Gas Resources. FREE
- DDS 37 - Data from Selected U.S. Geological Survey National Stream Water-Quality Monitoring Networks (WQN). 2 CD set - \$42.00
- DDS 38 - Digital Representation of a Map Showing the Thickness and Character of Quaternary Sediments in the Glaciated United States East of the Rocky Mountains.
- DDS 39 - Volcanoes of the Wrangell Mountains and Cook Inlet Region, Alaska - Selected Photographs. Macintosh and IBM P/C compatible.
- DDS 40 - Volcanoes of the Alaska Peninsula and Aleutian Islands, Alaska - Selected Photographs. Macintosh and Windows compatible. (1997)
- DDS 41 - Great Basin Geoscience Data Base
- DDS 43 - Status of the Sierra Nevada: The Sierra Nevada Ecosystem Project.
- DDS 50 - Teaching Earth Science.

Teachers Packets:

Exploring Maps

50

Global Change		50
Map Adventures		50
People and Land: Finding A Balance	50	
Volcanoes		50
What Do Maps Show	50	

Other:

Earthquake GIS lesson (Joseph has)	0	
Fits and Starts GIS implementation paper (Joseph has)		0
USGS GeoData in ArcView info sheets (Joseph has)		0
USGS bags		300
New digital price sheet (for notebook)(Joseph has 1)		0
NHD fact sheet (Joseph has)		0
Partnerships signs (Joseph has)		0
Postcards of I-2206 map		10
Postcards of Natural Hazards (Joseph has)	0	
NBII packet (Joseph has)		0
1 page handouts of DOQ--Arc/Info info sheet (Joseph has)	0	
Post for holding bags (Joseph has)	0	

Also: Bring business cards, velcro, tape, rubber bands, scissors, knife, FedEx labels.

end of report