

## EDUCATIONAL PARTNERSHIP EVENT REPORT AND RECOMMENDATIONS

National Institute for Technology in Liberal  
Education (NITLE) GIS Summit

Location: Atlanta, GA

Dates: 28 January 2005

Attendee's Name and Report Author:  
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### Summary

Upon the request of the NITLE organization, I participated in an education summit with a group of college and university professors, IT personnel, and librarians, where we discussed strategies of expanding the use of GIS in liberal arts colleges in the USA through the NITLE organization.

In 2001, the Andrew W. Mellon Foundation provided funding to create NITLE, an organization dedicated to promoting innovative and collaborative approaches to integrating technology at liberal arts colleges ([www.nitle.org](http://www.nitle.org)).



*Our GIS education summit was held at the Emory Conference Center, near Emory*

*University in Atlanta. Our next meeting is on 30 September 2005 in Washington DC.*



*Diana Stuart Sinton, organizer of the meeting, NITLE GIS coordinator, and committed to expanding the use of GIS and spatial thinking in different areas of the liberal arts curriculum at the university level. The home for the project is at [gis.nitle.org](http://gis.nitle.org); Diana Stuart Sinton works at Middlebury College, Vermont. One of NITLE's prime initiatives is to enhance teaching, learning, and research with GIS, and this meeting was with the GIS advisory group to discuss strategies to do just that. NITLE, through its three regional centers, serves 81 of the most academically rigorous liberal arts colleges in the USA.*





*The advisory group focuses on advising NITLE on its workshops, outreach efforts, curriculum, and partnerships.*



*The meeting attracted leaders in the field of GIS in education, such as Carol Gersmehl of Hunter College, above, Sarah Bednarz of Texas A&M University, John Krygier of Ohio Wesleyan University, and others. These were faculty from Library Science, Library Science, Geography, Education, and other disciplines.*

Why GIS in liberal arts? It's a natural fit. Much of the curriculum has a spatial component, and we can use GIS to analyze, organize, and display it. It is an excellent technology for projects that are interdisciplinary, multidisciplinary, and collaborative, which are core tenets of liberal education. GIS provides marketable

skills and is a perfect fit to the critical thinking that is promoted at these colleges.

We discussed innovative uses of GIS in liberal arts colleges, such as in languages, biology, environmental science, and even in a French class! Glenwood Ross, from Morehouse College, gave us an explanation of the creative use he is making of GIS to teach the geography of patents and technology flows in his economics course. We discussed challenges in GIS implementation at the college level and how to overcome them, and Diana's upcoming book *GIS in the Liberal Arts* by ESRI Press.

We also discussed strategies of starting with the interests of college departments to introduce GIS, instead of coming in with our own agenda. For example, one use of GIS was to create a map of the campus based on a survey of where students felt safe, where they exercise, where they congregate, and so on. Our starting point for discussion was the excellent articles that Diana sent us from Dr Bednarz, Dr Bjelland, and others. I believe that Diana Stuart Sinton has assembled some of the best people for her advisory team and it is enjoyable to work with them.



*In a bit of geographic irony, our meeting was held in Atlanta partly to avoid winter traveling difficulties. During our last day*

*there, an approaching ice storm made it difficult for all of us to leave.*

## **Recommendations**

1) The 21<sup>st</sup> Century is an exciting yet challenging time for education at the university level. Never before in the history of the world has our society demanded so much of a university education. At the same time, public universities and private colleges are facing difficult budgetary times. Students receive daily information in volumes unheard of in times past. We face complex problems of human health, natural hazards, security, biodiversity loss, urban growth, and others. Society needs people who can make critical decisions, and these decision-makers are shaped in our universities and colleges. I encourage all scientists to become involved with educational initiatives—to communicate what you do to educators, help them to use your research, and aid those who develop curriculum around your research.

2) 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 science education and GIS in education. The value added in our involvement with the education focus area of communications is that we work with educators to demonstrate *how* these data can be used and partner with educators to ensure that it *is* used.

It is not enough to tell educators about GIS, spatial thinking, and spatial data. When we get involved with educators—getting their input and working with them—we can better understand how to meet their needs. Workshops such as this one in Atlanta helped to do exactly that.

3) The applications of GIS in the Liberal Arts curriculum are numerous and are growing. Because of its involvement in systemic change, and because it is involved with over 80 colleges, the NITLE initiative is one of the best I have seen to expand the potential of GIS in liberal arts education over the long term. I support the NITLE project and encourage others to do so.

**\*\*End of NITLE Meeting Report\*\***