



A Monthly Newsletter of the
National Geospatial Technology
Center of Excellence

Innovation in Geospatial Science and Technology Education

Empowering Colleges: Expanding the Geospatial Workforce

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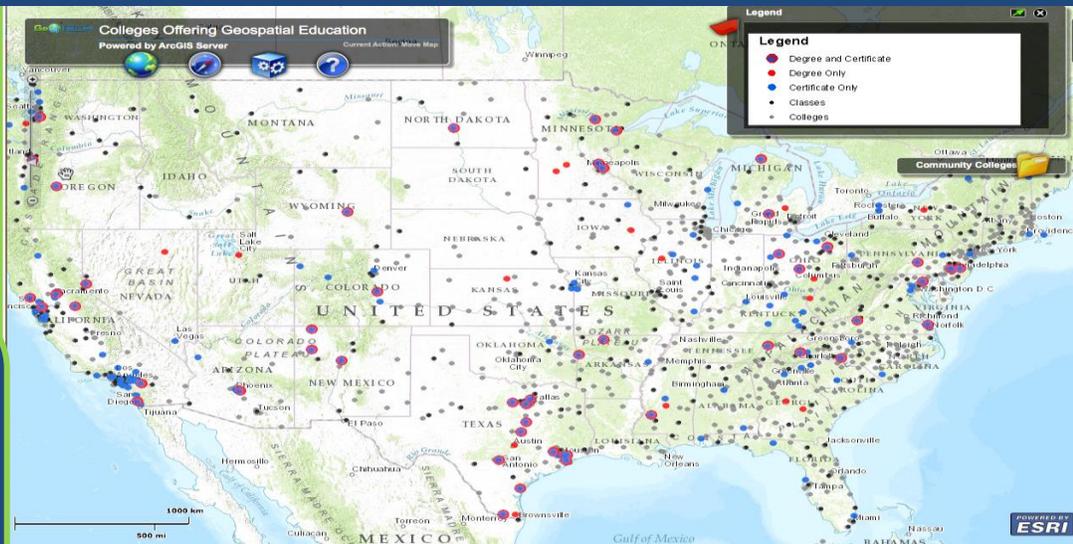
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The GeoTech Center is a virtual center comprised of a Director, three Associate Directors, and nine Assistant Directors from institutions across the nation. The central office is located at Jefferson Community and Technical College in Louisville, KY.

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"Wicked Problems": Spatial Plexus 2013, Nov 4-6 (Register Now!)

Conferences are unique opportunities for immersion in an area of interest, direct access to experts, contributions to a field, staying current in an industry, and networking. Generally speaking, the goals of industry conferences are to bring practitioners to problems (generally organized by subject or track) and highlight concepts and solutions.

The Spatial Plexus '13 International Conference takes a twist on this paradigm by **bringing problems to the practitioner and educator** through the reality of intricate and interdependent issues. "Wicked problems" are those difficult to solve because of incomplete, contradictory, and changing requirements. By "inspecting 'wicked problems' with geospatial goggles," complexities and interdependencies can be exposed, better defined, dissected, better managed through the geospatial approach and reassembled for overall improvements.

Spatial Plexus creates an environment for:

- Issue connectivity.
- Issue interconnectivity (*i.e.* Educational articulation, sustainable programs and spatial literacy for workforce readiness followed by GIS 4 domain of knowledge panels to include Health, Public Safety, Sustaining the Built Environment and many other issues).
- Dynamic interaction (*i.e.* Overview of issues by Keynote speakers and/or panelists, followed by audience discussion and the opportunity to further contribute to issues and issue interdependencies via Open Mike and Ignite sessions).

- Hands-On workshops.
- Information for federal GIS funding opportunities.

"Wicked problems," such as education and business intelligence, require a great number of people to change their mindsets. What better group to tackle such challenges than geospatial educators, technologists and experts who come from every rank and discipline with the ability to relate issues through geovisualization and analyses?

Spatial Plexus will take place from Nov 4-6, 2013 at the Georgia Tech Historic Academy of Medicine. For more information please visit www.spatialplexus.com. The GeoTech Center will **cover** registration fees for educators and will have some available stipend dollars. If you are interested in one of the free conference registrations, please email your request **directly** to Vince DiNoto at vince.dinoto@kctcs.edu. In your email, include whether or not you are interested in attending any of the following workshops:

On Monday there will be a one-day workshop about the Esri Community and Campus Mapping template. There will also be a half-day workshop on Cloud/ArcGIS Online and another half-day workshop on the Geospatial Technology Competency Model, DACUMs, and the Model Course Curriculum presently being developed by the GeoTech Center.

Spatial Plexus was a great conference last year. We expect the same this November.

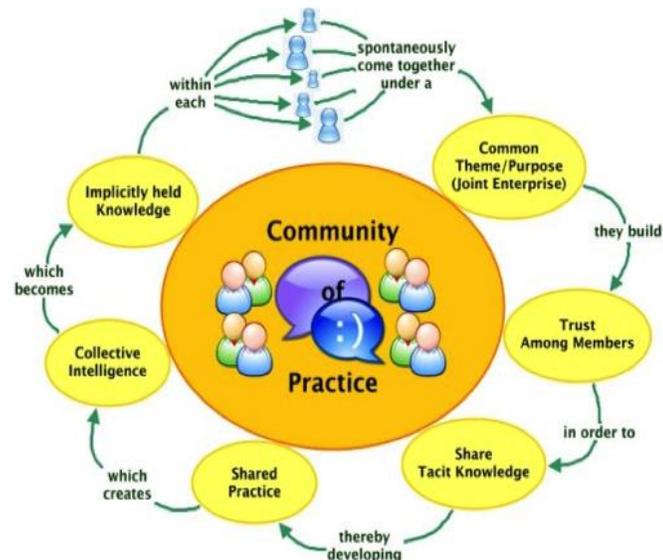
Articulation Information Request

Two GeoTech Center senior researchers, Tom Mueller (GIS Professor, California University of Pennsylvania) and Ming Tsou (Professor of Geography, San Diego State University) are gathering course articulation agreements for: 1) High schools to colleges (community or 4 year university) or 2) Community colleges to 4 year colleges/university. In the future, the GeoTech Center will establish a national database for GIS course articulation that will be accessible to everyone to query and search for related information. If your institution has an articulation agreement, please send that information to Tom Mueller at Mueller@calu.edu with the subject heading "Articulation Agreement Information."

Building a Community of Practice

Building a Community of Practice (COP) focused on GIST education at two-year colleges will be a key component in the sustainability of the GeoTech Center. A COP is defined as a *group of people who share a common concern, a set of problems, or an interest in a topic and who come together to fulfill both individual and group goals*. Professional development and mentoring will be key components of the COP plan. The COP, through the leadership of a national advisory council and input from a national visiting committee, will help foster relationships between the GIST industry, government, and educators to create a GIST professional society that will support and advance GIST education at two-year colleges. We encourage ALL geospatial educators (primary or ancillary) and geospatial professionals to join the Community.

In order to become a member of the GeoTech Center COP, please visit www.geotechcenter.org/Partners/Become-a-Member-of-GeoTech-s-Community-of-Practice.



From community.mis.temple.edu

Model Course Development

In 2010, the GeoTech Center, in collaboration with the Department of Labor (DOL) Employment and Training Administration (ETA), worked to develop the Geospatial Technology Competency Model (GTCM) (www.dol.gov/opa/media/press/eta/eta20100950.htm). The GeoTech Center, in the next 1-2 years, will work with DOLETA to update the GTCM standards in GIST. Once the GTCM update is completed, two DACUMs will be held to update skills so that appropriate content can be included in a series of model courses presently under development by the GeoTech Center. Up to this point, the Center has created model course *outlines* which have proven to be extremely useful guidelines for educators to use in order to create or expand their GIST programs. The GeoTech Center is now developing a suite of full *courses* which will include teaching resources such as pedagogical methods, video lectures, ebooks/ibooks, case studies, and hands-on learning modules. The courses presently under development include: 1) Digital Earth (GE awareness course); 2) Intro to Geospatial Technology (gateway course); 3) Spatial Analysis; 4) Data Acquisition and Management; 5) Cartography; 6) Intro to Remote Sensing; 7) Geospatial Programming; 8) Web Applications; 9) Capstone; 10) Open Source GIS; and 11) E-Portfolio. In collaboration with other ATE Centers and Projects, the GeoTech Center will also create geospatial-integrated STEM specific course modules in subjects such as Environmental Management, Logistics, Security and First Responders, and other courses.

For more information regarding the model courses presently under development, contact Rich Schultz at richs@elmhurst.edu

Outstanding Geospatial Educator Awards

Geospatial educators and partner organizations focused on two-year colleges have largely gone unrecognized for their hard work in creating programs and supporting student success. The GeoTech Center's National Excellence in Geospatial Education Awards program will recognize them, but we need your help! Three Awards have been created that will provide recognition for Excellence in Geospatial Education or support for Geospatial Education focused on two-year college programs. The three Award categories are: (1) Lifetime Achievement In Geospatial Two-year College Education; (2) Distinguished Geospatial Educator Award; and (3) Distinguished Geospatial Education Partner Award. Awardees will be announced at the GeoEd conference in June in Kentucky and at the Esri Educators Conference in July in San Diego. Please nominate educators or organizations that you feel have made a significant contribution to geospatial education. Your nominations are due by January 15, 2014.

For more details on each Award category and how to submit nominations please contact Ann Johnson at ann@baremt.com.