



# AAG GENIP Report

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## I. Project Updates

(1) AAG Guide to Careers in Geography and the Geographical Sciences. With support from the Geography Education National Implementation Project (GENIP), the AAG is developing an online Guide to Careers in Geography and the Geographical Sciences, with the aim of compiling and disseminating information on geography-related career trends, opportunities, and workforce development issues. The AAG Careers Guide will help students, guidance counselors, postsecondary faculty, policymakers, and professional development providers understand the value of geographical knowledge and skills in the contemporary workplace, what courses and educational experiences are required to attain those competencies, and why competency in geography and spatial thinking is important and worth knowing.

The following is a summary of progress since the last GENIP meeting in April 2005:

**CAREERS GUIDE WEBSITE:** The Beta page is currently hosted at:

<http://communicate.aag.org/eseries/careers/career.cfm>

We haven't spent much time on graphic design of the site, but will do so once the content is fully developed, and after the structure and organization of the site is reviewed and approved by GENIP and other project advisors.

- types, numbers, and categories of jobs in geography
  - Using the data compiled from the Bureau of Labor & Statistics, we have approximately 80 geography-related Standard Occupational Classification (SOC) categories (types), employment estimates, salary & wages, and expected growth (numbers) for a variety of occupations organized in four basic categories (Environmental, Social, Technical, and Educational). This initial list was compiled by Daryl Cohen (Census) and reviewed by the advisory committee. As we gather additional information from employers in upcoming surveys, we may add/delete job titles from this list.
  - Nik has compiled and consolidated the complete listing of all the Geography departments in North America. The page is searchable by both a map of North America and by a drop down box (which can be used on the education page). The page lists the school, location (by state), URL to the department, and highest degree offered.

## RESEARCH ON CAREER DEVELOPMENT

- Completed focus groups drawing 50 participants from different employment sectors (15 Federal Government, 8 for-profit private, 9 non-profit private, 18 Education) to address (a) employment trends and needs and (b) career development issues and methods (see attached interview protocol). This

information will be used to develop a list of geographical and generic competencies and other content for upcoming surveys with geography employers and alumni.

- Compiled a sample (N= 4,996) of individuals who have been employed at least 5 years in various business, government, and education fields, as follows:

N	SECTOR
358	federal government and military
339	state and local government
662	for profit businesses
144	non profit organizations
70	k-12 institutions
222	teaching institutions/community colleges
1859	research institutions
1342	unclassified college/university

These individuals will be surveyed beginning in October to assess the relative value of geographic and generic competencies in the relevant employment sector

- Compiled a sample (N= 3,153) of individuals who received an undergraduate degree (N= 1,233), master's degree (N= 1,125), or PhD (N= 796) in geography within the last 5 years. These individuals will be surveyed to assess the quality of career advising and preparation they received in their degree programs.

#### PRACTICAL RESOURCES (Web, Print, CD)

- Career planning and job search tips
  - Resume and cover letter samples
  - Interview strategies
  - Networking
- advising and outreach materials
  - Your Mother told you... Flyer
  - Without Geography, You are Nowhere - Flyer
  - Careers Brochure
  - Career Videos have been linked to each job type in the database
  - Geography Jobs – Occupation Outlook Quarterly - Publication
  - Mapping Opportunities – Nature Magazine
  - Next Wave article in Science Magazine

(2) A Teacher's Guide to Modern Geography (2004-2007). The AAG received a three-year, \$515,927 grant from FIPSE to produce, test, and prepare for dissemination a comprehensive suite of resources for teacher professional development in geography. In April 2005, Guilford Publications published a book, *Teaching Geography*, that is serving as the springboard for the print, electronic, and web materials we are developing under the FIPSE "Teacher's Guide to Modern Geography" grant.

Jongwon Lee, a PhD student at Texas A&M University, joined the AAG staff in May as a post-doctoral fellow under the project. Jongwon developed a spatial skills test that will be used as one method of assessing the project's impact on the abilities of teachers to "think spatially" (see attachment). We have also begun drafting a matrix that correlates spatial thinking skills with math and science standards (see attachment). Phil and Carol Gersmehl led two geography-

related sessions for math teachers at Howard University's Summer Mathematics Institute in June 2005. A two-day workshop for teachers and methods faculty is planned for the NCGE annual meeting in Birmingham, Alabama. PI: Phil Gersmehl (Hunter College). Co-PI: Michael Solem (AAG). Partners: National Council for Geographic Education, state Geographic Alliances, and several geography and education departments. Joseph Stoltman (Western Michigan University) is serving as the external evaluator.

(3) Online Center for Global Geography Education. Established with a two-year grant from the National Science Foundation's Course, Curriculum, and Laboratory Improvement program, the Online Center for Global Geography Education (CGGE) offers a set of undergraduate instructional modules examining geographic issues. The project promotes international collaborations using Internet discussion-board technology. Three modules, on *Nationalism*, *Population*, and *Global Economy*, are complete. In each CGGE lesson, four per module, students read background text explaining geographic perspectives on the issue, work with interactive illustrations showing case studies, and answer questions in collaborative exercises and international discussions. Each module is supported with an instructor's guide to help faculty plan an international collaboration.

The modules are available for download as a Blackboard course or website on the CGGE homepage ([www.aag.org/education/center](http://www.aag.org/education/center)). Future plans for the CGGE include faculty workshops, new modules, and collaborative research projects on ways to promote international collaboration and intercultural communication among college students.

(4) Where Faculty Live: Internationalizing the Disciplines. The AAG recently conducted a survey of its postsecondary membership to examine patterns of international collaboration and faculty support for global learning outcomes. Over 400 geographers completed the survey. Of this number, nearly 25% reported having at least one experience with an international collaboration focused on teaching or course development, whereas 57.3% participated in an international collaborative research project. Overall, geographers embraced the goals of global education in their teaching, yet their support varies considerably when considered by gender, research specialty, and institutional context. Human geographers, women, non-native English speakers, and liberal arts faculty were more inclined to support global learning outcomes, especially those outcomes with a strong affective-trait component. Faculty members who practice international collaboration and incorporate global perspectives in their courses are more likely to perceive internationalization as important for their professional growth and for student learning. Incentives and professional support from departments, institutions, and professional networks also proved to be important factors in faculty decisions to practice international collaboration. To obtain a copy of the full report, please visit the AAG website ([www.aag.org](http://www.aag.org)).

(5) Geography Faculty Development Alliance. (2002-2007). NSF, \$993,862. Ken Foote, PI. AAG Educational Affairs Director subcontract: \$8,500/yr. The Geography Faculty Development Alliance is a long-term, broad-based project to improve the learning and teaching of geography in higher education. The aim is to provide early career faculty and advanced doctoral students with the theoretical and practical knowledge needed to excel in the lecture hall, seminar room, and laboratory. Michael Solem is the project evaluator and is collaborating with Ken Foote on the project's research component. The first study examining the concerns, attitudes, and abilities of early career geography faculty was published in December 2004 issue of the *Annals of the Association of American Geographers*. Upcoming studies will focus on faculty mentoring, department environments, and balancing work and family.

For more information on these and other projects, visit the AAG website: [www.aag.org](http://www.aag.org)



**AAG Public Policy Update**  
**John Wertman, Director of Public Policy**

**September 2005**

I have been on the AAG staff for almost a year and a half now, and in that time I have made significant contacts within the geographic community and built on preexisting contacts in the wider science policy community to best represent the interests of the AAG and the geography discipline.

1) AAG Newsletter Column – the Washington Insider

- Continues to appear monthly in the newsletter. Issues focused upon in recent months include the Higher Education Act, the Geography Education Bill, research and related policies affected by Katrina and the tsunami, the recent climate change controversy involving Rep. Joe Barton (scientific freedom issues), key Federal appointments, the 2004 elections, federal funding for the key scientific agencies, and U.S. Census program continuity. (Several of these columns have been sent to GENIP members via e-mail).

2) Process is continuing to enhance Federal funding of geography education

- Have continued discussions with NGS staff regarding the recently-introduced geo education bill (S. 1376) and their public outreach efforts. We also sent a memo to AAG Council members and Geography Department Chairs about the bill.
- Have attended mark-ups and other hearings related to the reauthorization of the Higher Education Act. (S. 1614, H.R. 609)
- Organized 2005 annual meeting session on “Geography and the Congress” that focused primarily on geo education issues. Panelists include ESRI Policy Director and former Wyoming Governor Jim Geringer, Lanny Proffer of the NGS, Osa Brand of the NCGE, Doug Richardson, Michael Solem, and me.
- Was involved in discussions regarding and signed on to Intersociety Group for Education Research’s FY 2006 appropriations letter.
- Will continue tracking and outreach efforts as the Congress begins the reauthorization process for the Elementary and Secondary Education Act (No Child Left Behind), set for either 2006 or 2007.

3) Other activities:

- Wrote to Congressman Joe Barton, Chairman of the House Energy and Commerce Committee, regarding his assault on three NSF-funded climate change scientists. Urged Barton to follow time-honored methods of Congressional inquiry into peer-reviewed science.
- Monthly meetings of the White House Office of Science and Technology Policy’s Behavioral and Social Science working group
- Congressional Briefings by the Consortium of Social Science Associations, including a June event entitled *Building Geographic Management Systems: Tackling Critical Policy*

*Needs for the Nation's Future* that all GENIP members were invited to. We played a key role in organizing this session.

- Along with the American Psychological Association, the American Political Science Association, and the National Communication Association, organized a Congressional briefing for the 2005 Decade of Behavior Research Awards. UCLA Geographer William Clark spoke with other winners on the topic of Democracy. Congressmen Brian Baird and Daniel Lipinski, both Ph.D. social scientists by profession, attended the event and gave remarks.
- Monthly meetings of the U.S. Geological Survey Coalition. Presenters have included key staff at the USGS, including Acting Director Pat Leahy, Geography Director Barbara Ryan, and others. Signed onto the Coalition's statement regarding the FY 2006 Budget.
- Monthly meetings of the Coalition for National Science Funding (NSF). Also, signed onto CNSF's statement regarding the FY 2006 Budget.
- Have invited U.S. Secretary of Labor Elaine Chao to speak at the 2006 AAG Annual Meeting in Chicago. Also invited U.S. Senator Barack Obama, but he will unfortunately be unable to attend.
- Attended meetings of the National Academies' Geographical Sciences Committee
- Have continued discussions with members of Congress and their staffs regarding the need for coordination of GIS activities within the Federal executive branch. Also attended FGDC meetings to press this case.