

Summer 2010 www.uccs.edu/coga

#### **Summer Institute: Capacity Building and Understanding Standards**



What could be more fun for educators than to gather in the middle of summer to think about geography! The group of people pictured above (plus Sally High from Pagosa Springs) spent four days in Leadville at Colorado Mountain College working to develop a variety of tools for teachers to become adept at using the newly adopted Colorado Academic Standards in geography. Those tools and additional ideas for introducing the standards are available on https://sites.google.com/site/cdeteachinglearning/resources-1/standards-implementation-resources and https://sites.google.com/site/cogainstitute2010/home/resources as well as the COGA website under http://www.uccs.edu/~coga/resources/standards.html. See page 7 for a participant's perspective. In addition to spending time on immediate needs of teachers and students, the core group of primary and secondary educators was joined by individuals from higher education and school administrators to think about the future of the Colorado Geographic Alliance. More on the strategic planning process is available in this newsletter on page 5. We were also fortunate to have Karen Gibbs, the National Geographic's Alliance Liaison, join us for the process of thinking about geography from a variety of angles. Additional photos from the time in Leadville are available at http://www.uccs.edu/~coga/documents/powerpoints/COGASummer2010\_SlideShow.mht.

#### Dan Snare, From Colorado to Svalbard

This past summer I was humbled and honored to have been selected as a Grosvenor Fellow (http://www.expeditions.com/Grosvenor\_Teacher\_Fe674.asp), which allowed me to travel aboard the National Geographic Explorer through the Svalbard archipelago. After being notified by phone of this honor in early June, the six recipients and several staff members from National Geographic and Lindblad Expeditions met via phone and email, exchanging information to prepare for the adventure. Personal summer plans were put on hold and a shopping list of some very specialized items was generated (though I must say that living in Colorado prepared me very well for the cold, wet weather we were expecting in Svalbard).

All travel was covered by the Fellowship. In Denver I boarded a flight to Philadelphia, then on to Oslo, and from Oslo to Longyearbyen, where we boarded the ship. The ship cruised the Svalbard archipelago for seven days (no nights) and the expected cold and wet weather was rather mild and dry - low 40's for the high and no measurable rain (a little damp fog one day but gorgeous sunshine for most of the trip). The visual feast was unbelievable. Fjords, icecaps and glaciers, delicate Arctic flowers. polar bears, many varieties of whales (some almost close enough to touch), walrus, seals, and birds by the millions.



Along with another teacher from Illinois, my task was to provide educational opportunities for the fifteen or so school-aged children along on the cruise. Often there would be several hours of "down time" between the locations where we would disembark and explore the environment in Zodiacs. During this time we would engage the school-aged passengers in lessons and activities that matched our surroundings, for example, how does the sun shine for 24 hours in a day? or how do cameras work? There was a healthy amount of physical geography mixed in with every activity.



Along with my teaching duties, I interviewed many of the ship's staff about their careers and the training required to perform their duties for a project that was part of my proposal when I applied for the Fellowship. I work at a career and technical school where this information will help students expand their knowledge of career options.

#### **Upcoming Workshops in Geospatial Technology**

During 2009-2010, teachers across the state learned about geographic information technologies. In addition to being a powerful tool for teaching and learning geography and spatial analysis, geotechnology is a key industry identified by the US Department of Labor for the 21<sup>st</sup> Century. Introducing students to the basics of geospatial technologies offers a variety of ways to explore geographic knowledge in the classroom and on field trips. COGA, in conjunction with ESRI, Inc., is offering two additional introductory workshops. Dates and locations are listed below. If your school or district is interested in hosting a geospatial technology workshop for a whole or a half-day, please contact the coordinators at coga@uccs.edu. Check the COGA website to see video of a recent workshop in Pagosa Springs, http://www.uccs.edu/~coga/curriculum/technology.html.

#### Introduction to Geospatial Technology

Saturday, November 20, 2010 Saturday, January 22, 2011 Pine Creek High School, Colorado Springs Lakewood High School, Jefferson County

Spaces are limited!

If you are interested in attending an introductory geospatial technology workshop, email coga@uccs.edu.

#### Interactive Workshops on Spatial Technologies for Career & Technical Education

Friday, September 17, 2010 Denver, Lowry Conference Center

Friday, November 5, 2010 Colorado Springs, Pikes Peak Community College

#### Purpose of the Interactive Workshop:

To inform participants about career opportunities and the growing need for geospatial technicians. To demonstrate, through hands-on activities, interactive lessons that can be used in the classroom. To frame opportunities to create new secondary-to-postsecondary programs in geospatial technologies and/or to infuse geospatial instruction into existing technical programs and STEM courses.

Who Should Attend? Secondary and post-secondary instructors and administrators as well as CTE administrators and secondary STEM coordinators and/or instructors.

For details on how to register for these free workshops, go to http://www.rsvpbook.com/event.php?436405 or http://www.uccs.edu/~coga/documents/pdfs/SpatialTechnologyFlyer\_2010.pdf.



## Mark your Calendar for November in Denver

In 2010, the National Council for the Social Studies conference is being held in Denver – the first time in forty years. Colorado presenters will include Laredo Middle School teacher Barb Superka talking about why "Timelines are so Yesterday" and Kelly Jones-Wagy, social studies teacher at Brighton High School, discussing "Lessons for Technology: Wikis, Blogging, and Glogster in the Classroom". Schedule your time now to be in Denver November 12<sup>th</sup> through 14<sup>th</sup>. For elementary teachers, there will be a special

strand of workshops on Saturday, November 13<sup>th</sup>. A reduced registration rate will be available to Colorado residents through a mail-in-only form available at http://www.uccs.edu/~coga/ideas.html. Check the Colorado Council for the Social Studies website for additional information: http://cosocialstudies.org/main.php.

## How COGA has helped me in the classroom, by Sue Leggiero, Social Studies Teacher, Pine Creek High School, Academy District 20

The Colorado Geographic Alliance (COGA) provides teachers with opportunities to broaden their geographic understanding, and to find new and creative ways to share their geographic passions with their students. Of course, not every geography teacher is necessarily passionate about the subject, or even comfortable with the subject matter; COGA offers workshops that help teachers to learn more about geography and the many elements that are a part of it. The facilitators in the workshops I have attended have introduced me to ideas I wouldn't have tried, or even known about, without their expertise. After a workshop on geospatial technology I returned to my classroom and taught my students how to create tours and embed media into Google Earth as a means to illustrate and suggest solutions for geographic problems. Following a workshop on climate change and its impact on Rocky Mountain National Park, I designed a unit on climate change during which students needed to identify evidence and assess the impact of climate change in a variety of geographic regions. COGA provides meaningful professional development that truly helps teachers improve their geographic knowledge and skills, and puts them in touch with other educators who share a desire to promote geographic literacy.

Visit the curriculum portion of the COGA website for more lesson plans by Colorado geography teachers. http://www.uccs.edu/~coga/curriculum/curriculum.html



#### Geography Awareness Week

Each year the National Geographic Society encourages the public to think intentionally about the importance of geography in their lives, often incorporating a theme or location to focus the discussions. This year the theme is "Freshwater!" – a key component of life in all areas of the world. For resources dedicated to this topic, please visit the Colorado Geographic Alliance website at

http://www.uccs.edu/~coga/nat\_geo.html where you will find a variety of lesson plans, resources, and organizations to augment your conversations in the classroom. If you are organizing a Geography Awareness Week event in your school or district, please let us know as soon as possible so we can add it to the list of activities on the COGA website. Here is a link to the National Geographic site on the environment - http://environment.nationalgeographic.com/environment/freshwater.

#### **National Geographic Bee Contest Results**

Isabella Contolini, a sixth grader at Red Rocks Elementary School in Morrison (Jefferson County) came in thirteenth at the National Geographic Bee in Washington DC on May 25<sup>th</sup> and 26<sup>th</sup>. If you are interested in registering your school to take part in the 2011 Geographic Bee or in checking out questions from the National Geographic Bee, visit http://www.nationalgeographic.com/geobee/. To join next year's contest (for fourth through eighth graders) you may contact Colorado's Geographic Bee Coordinator, Marianne Kenney, for more information at marianne\_kenney@dpsk12.org or http://coloradogeobee.wikispaces.com.



# **Geographic Alliances Undertake Strategic Planning Efforts**



A few years ago, under the direction of National Geographic's Vice President for Education, Danny Edelson, the geographic alliance network (http://www.ngsednet.org/community/about.cfm?community\_id=94) began a process of assessing how best to move geography education forward. Part of that effort involved review of the education foundation mission and incorporated requests for additional funding at the national level through the introduction of the "Teaching Geography is Fundamental" Act.

http://www.nationalgeographic.com/foundation/policy\_initiative.html#geography-is-fundamental However, with federal funding uncertain, and need for geography education at all levels of schooling growing throughout the country, geographic alliances have been asked to conduct their own comprehensive strategic planning processes over the next year. Together with the coordinators, State Social Studies Specialist Brenda Barr and geographer Molly Holmberg completed a twelve-week course on capacity building. They are prepared to shepherd a process which is intended to result in improvements in geography education across the state of Colorado. Your assistance will be needed in this work, so look for opportunities to join in conversations about important topics over the next several months.

#### **National Geographic Opportunities for Teachers**

Kudos to Martha Alvarez, biology teacher at William J. Palmer High School in Colorado Springs, and to Martha Morris, science teacher at Community Prep School in District 11 - who attended National Geographic's 2010 National Teacher Leadership Academy: Ocean in La Jolla, California.

Martha Alvarez writes, "The 2010 National Teacher Leadership Academy: Ocean sponsored by National Geographic and Oracle was not the usual sort of professional development. During lunch, a few of us spent swimming in sight of the Scripps Pier. On a boat ride, we saw two kinds of dolphins and a diversity of birds. Fascinating lectures by Scripps scientists about mid-water column waves, sustainable fisheries, and global warming were followed by dinner with a talk by Barton Seaver, the cook turned environmentalist. It was a gift to have ample time to talk to the National Geographic experts and scientists who were part of the program. The Ocean Curriculum that National Geographic has put together is grounded in relevancy and rigor, engages students, and has great support through video clips, large maps, DVDs, and books. I am excited to teach ecology using the oceans theme—I suspect that my students will be equally excited as they learn both ocean ecology and how ecological knowledge is applied to oceans."

Martha Morris writes, "It was with unexpected pleasure and excitement that I accepted the opportunity to attend this summer's Leadership Academy through National Geographic. The focus was on the ocean. Here I am, a teacher in Colorado and studying the importance of the ocean! Upon arriving in San Diego I was eager to learn as much as possible about this biome and find a way to make the information relevant to my high school students. Our group of 60 educators from around the country was treated to information, videos, and informal talks from a variety of experts from around the world. Our classroom was the beach for three days. Our time, experiential in nature, was one in which we were guided through a curriculum drafted for our use this upcoming school year. We, as a team, are to implement and use the draft, give the National Geographic Society's Education Foundation feedback, and attend another leadership training next summer to prepare us for giving workshops statewide the following year. Ms. Alvarez and I intend to collaborate on a unit this coming fall between our two schools, Palmer High School and Community Prep School."

#### **Even Llamas Benefit from Technology**

No matter how you are traveling, learning how to use a GPS unit can provide an efficient, enlightening, and fun opportunity to get from place to place. Families in the Gilpin County 4-H Club went exploring and learned that there are a variety of ways to incorporate GPS into hiking. Don't let the folks in Gilpin County have all the fun! Contact coga@uccs.edu with your request today for ten loaner GPS units. Go to the COGA website homepage for a link to the borrowing agreement form: <a href="http://www.uccs.edu/~coga/">http://www.uccs.edu/~coga/</a>.





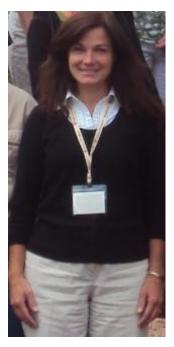


#### Link between Higher Education and Primary and Secondary Education

Part of the original charge of the geographic alliance system was to link higher education and precollegiate education. This continues to be a main goal of the Colorado Geographic Alliance and we will involve a variety of perspectives from all levels of our educational system in the strategic planning process. For one perspective on the importance of cooperation among educational institutions, check out a piece in *Inside Higher Ed* by Milton Greenberg, professor of government emeritus at American University, where he served as provost and interim president. "What would it take to mobilize higher education to assume more responsibility for the preparation of teachers?" See the whole article at http://www.insidehighered.com/views/2010/08/02/greenberg.

### Giant Maps Available for Your School or District!

If you are interested in reserving a giant map of North America, South America, Asia or Africa from National Geographic, please visit the website for details:www.nationalgeographic.com/giantmaps. Then check with the Colorado Geographic Alliance to see how we might help you finance this event. Email the coordinators at coga@uccs.edu. For more details about the map's visit in Colorado Springs, see a slide show at http://www.uccs.edu/~coga/news\_events.html.



# Observations about Tools for Implementing the New Academic Standards, from Deborah Pearce, Jefferson County School District

The work we conducted in Leadville with teachers and administrators was designed to help schools and districts across the state better understand and effectively implement the revised Colorado Academic Standards. Uncovering the progression of learning in the Grade Level Expectations, identifying content and skills that students should master at each grade level, helps educators consider how students might apply previous knowledge to new learning. One of the most exciting tools we created was a peer review protocol, adapted from Critical Friends, for critiquing classroom lessons to ensure they meet or exceed the standards. Suggestions were made to align the lessons more closely to the revised standards and increase levels of rigor. The emphasis on 21<sup>st</sup> Century skills marks a significant shift in instruction and learning. The revised standards incorporate critical thinking and reasoning, information literacy, collaboration, self-direction, and invention to help prepare students for postsecondary and workforce readiness.

We were grateful to be able to work with the state specialists for social studies and science who helped us understand what was possible and needed at the state level. We also enjoyed the opportunity to present our work to geography professors from across the state who provided meaningful feedback. All of the participants are eager to return to their schools and districts to help other teachers make the best possible use of the new standards. I have already met with other social studies content specialists in my district to share the work created during the summer COGA institute. Check out some of the tools we worked on at https://sites.google.com/site/cogainstitute2010/home/resources and https://sites.google.com/site/cdeteachinglearning/resources-1/standards-implementation-resources.

## ESRI launches GeoStimulus for Schools, a statewide GIS initiative for K-12 and youth education, 2010-2014

"K-12 education in the U.S. has been hit hard by economic stress, and the road ahead is rough. To help meet this challenge, ESRI is working with states to establish GIS licenses covering all their K-12 schools and recognized youth clubs. Under such a license, ESRI technology and online instruction can be available to all youth, formal and informal educators, and administrators and staff supporting them." ESRI Website

Educators in Colorado are working with ESRI to determine the best path to take advantage of this opportunity. For a full review of the ESRI program, visit their website at http://edcommunity.esri.com/geostim/.

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