EXCITING CONTENTS!

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Presidential remarks

Dear colleagues,

Greetings friends. As usual, I'm a little late in getting this letter out. Also as usual, it seems I'm busier than I should be. Despite historical precedent, I intend to be successful this year in my annual resolution to work less. Wish me luck! I'll let you know how things go.

As I sit watching the chickadees outside my window and writing this letter on the Martin Luther King Jr holiday, I have many fond recollections of 2013. I'm pleased to say that it was another great year for NAGT-Southwest! As part of our work, NAGT-SW teachers travelled the globe. Some of us attended GSA, AGU, and other meetings to give presentations (see page 5). We had a fun and educational field conference in Utah last May (see page 7). The leaders of the Southwest and Far Western sections of NAGT have decided to hold a joint meeting this year. We're excited about our next field conference, which will be held in Arizona at the Grand Canyon, May 30 to June 1, 2014 (see page 9). I hope you can join us!

I encourage my fellow NAGT-Southwest members to participate in our organization and in the activities we offer. Please contact us if you wish to become involved with the leadership. NAGT-SW officers are elected every year at our field meeting, so nominate a friend or yourself today! In fact, right now, we're in need of someone to take over the Treasurer duties from Dr Steve Semken, who has served us so well for so long -- thank you, Steve, for your years of service!

My best wishes to you all for a healthy, happy, and safe 2014 and a fun and productive field season!

Cheers,
Dan

In the V.P. Zone

NAGT-SW Vice President, Dr Meredith Wilson, has informed me that she is really excited about the upcoming field conference in her adopted home state of Arizona. VP Wilson is a seasoned professional, having put together numerous previous Grand Canyon trips, so we can look forward to another flawless performance this time round. The date has been set for May 30 to June 1, 2014. You can get more information about the trip and how to register by contacting her at: merry.wilson@sccmail.maricopa.edu

The Secretary's Corner

NAGT-SW Secretary, Ms Laura Lukes, reports that she and OESTA Captain Kraft are helping coordinate the upcoming field conference in their beloved Arizona. Thus, we can expect the trip to grow even better from the deft touch of these brilliant ladies.

Tales from the Vault

We're still looking for a new NAGT-SW Treasurer. Dr Steven Semken, has stepped down after many years of outstanding service to the section. Please contact us if you would like to nominate yourself or someone you know to fill this very important position.
CONGRATULATIONS to CHERYL L. B. MANNING, winner of the NAGT-Southwest 2013 Outstanding Earth Science Teacher Award! Here's the official announcement from NAGT headquarters:

Cheryl Manning attended Montana State University from 1984 to 1993, earning her BS and MS in Geology. She moved to Utah to pursue a PhD in Geology. During graduate school, she instructed laboratories for several courses and volunteered as a Math/Science tutor for underprivileged students at local high schools. She loved teaching and earned her Secondary Science Certification at the University of Utah in 1996. She taught middle school science in Utah for six years and was awarded the Utah Earth Science Teacher of the Year in 2000. She has spent the last eleven years teaching high school in Evergreen, Colorado, becoming GLOBE-certified, participating in programs like Cires-Earthworks, URI's Armada Program and became Nationally Board Certified.

Cheryl maintains contact with scientists in the Earth and Environmental Science communities and works with amazing teachers from around the country. All of these people help her craft her teaching practice. For her, teaching is about building positive relationships where students feel comfortable tackling challenging material, asking hard questions, and developing new skills. Students should know that hard work can overcome ignorance so she encourages them to start with what they think they already know, understand their misconceptions and rebuild from a more sound foundation of knowledge and skills. Students have the opportunity to choose their own learning path using new technologies with problem-based learning strategies.

To keep her teaching practice fresh and innovative, Cheryl maintains membership in AAAS, GSA, NSTA, and AGU. Membership in these organizations exposes her to new ideas in journals and at meetings. Cheryl takes advantage of opportunities to work with other teachers in both online and face-to-face courses. Through workshops and committees, she works with scientists and science-educators from around the world to learn about current science and education practices.

2013 NAGT OEST State Award for Arizona

Jeremy Williams has been teaching at Desert Vista High School for eleven years. He received the 2008 Tempe Diablos Teacher of the Year award. His degrees include a Bachelor of Science in Education and a Master of Arts in Educational Leadership, both from Northern Arizona University. His teaching philosophy and approach to his profession is centered around serving and exciting students about science. He tries to accomplish this by providing dynamic and challenging courses. His most innovative and effective teaching practices include using collaboration, incorporating authentic research experiences, computer applications and current technologies. Jeremy travels to Kodiak Island, AK, where he was born, as well as many other places and infusing these experiences into his lessons enhances his teaching practice.
Call for nominations for the 2014 OESTA

Do you know or work with an outstanding earth science teacher? If so, please nominate him/her for the prestigious NAGT-SW Outstanding Earth Science Teacher Award. The nomination process is easy and can be filled out online: [http://nagt.org/nagt/awards/oest-nom.html](http://nagt.org/nagt/awards/oest-nom.html). If you have any questions, please contact our OESTA Coordinator, Dr Kaatje Kraft at: katrien.kraft@mesacc.edu. **Nomination deadline is May 15th, 2014.**

**** here's a tasty tip from Kaatje: tell your teacher you'd like to nominate him/her and have them help you with some of the items on the nomination form ****

mystery pic!

The location of the previous mystery pic was the lovely Tule Valley of west-central Utah.

Congrats to G.W. Hayduke for his sharp eye and keen wit! -- hope you're enjoying your really cool prize! Correctly identify the location of this photograph and you'll be entered in a drawing to win a really cool prize!

© Dan Stephen, 2005
Recent work by NAGT-SW members

a sampling of presentations from the 2013 GSA annual meeting held last October in Denver:

- **INNOVATION ONLINE: INVERTING THE LECTURE-LAB PARADIGM IN SCIENCE EDUCATION**
  -- ANBAR, Ariel D., HORODYSKYJ, Lev, BEN-NAIM, Dror, and SEMKEN, Steven

- **EFFECTIVE USE OF SOCIAL MEDIA FOR GEOSCIENCE EDUCATION AND OUTREACH: THE EARTHSCOPE BLUEPRINT**
  -- BOHON, Wendy, ROBINSON, Sarah, ARROWSMITH, J. Ramón, SEMKEN, Steven, PETTIS, Leah, BAUMBACK, Devon, SCHWAB, Patrick, and GARNERO, Edward

- **VIRTUAL FIELD EXPLORATION OF GRAND CANYON GEOLOGY AND GEOLOGIC HISTORY**
  -- BRUCE, Geoffrey, SEMKEN, Steven, ANBAR, Ariel D., KARLSTROM, Karl E., and CROSSEY, Laura

- **ETHNOGEOLOGY APPLIED TO MAPPING AND WATER RESOURCE MANAGEMENT IN THE NW AMAZON BASIN, COLOMBIA**
  -- LONDONO, S. Carolina, GARZON, Cristina, SEMKEN, Steven, and BRANDT, Elizabeth

- **WHAT MOTIVATES INTRODUCTORY GEOLOGY STUDENTS? A QUALITATIVE ANALYSIS OF STUDENT INTERVIEWS FROM MULTIPLE INSTITUTIONS ACROSS THE U.S.**
  -- LUKES, Laura A., and MCCONNELL, David A.

- **GIGAPANS AND GIGAPAN GALLERIES**
  -- LUKES, Laura A., PIATEK, Jennifer L., and SCHOTT, Ronald C.

- **STALKING THE SECOND TIER: STRATEGIES TO ATTRACT AND RETAIN MORE MAJORS AND IMPROVE STUDENT LEARNING**
• ATTRIBUTES, BENEFITS, AND CHALLENGES OF PLACE-BASED GEOSCIENCE TEACHING
  -- SEMKEN, Steven

• PLACE, SACRED PLACES, AND SENSE OF PLACE IN RELATION TO GEOLOGIC HERITAGE
  -- SEMKEN, Steven

• DEFINING PATTERNS OF STUDENT AFFECT IN INTRODUCTORY GEOLOGY COURSES ACROSS 4,000 STUDENTS, 130 CLASSES, 36 INSTRUCTORS, AND 13 INSTITUTIONS
  -- STEMPIEN, Jennifer A., BUDD, David, HILPERT, Jonathan, KRAFT, Katrien J., MCCONNELL, David A., PERKINS, Dexter, and WIRTH, Karl R.

• GEOSCIENCE ACROSS CULTURES AND COMMUNITIES: BENEFITS AND CHALLENGES OF DIVERSITY
  -- SUITER, Marilyn J., BERG, Richard C., and SEMKEN, Steven

• HOW SIMPLE OBSERVATIONS CAN LEAD TO AN UNDERGRADUATE RESEARCH PROJECT CURRICULUM AT A COMMUNITY COLLEGE
  -- VAN DER HOEVEN KRAFT, Katrien J.

• THE INTERPLAY BETWEEN STUDENT, INSTRUCTOR, MOTIVATION AND PERFORMANCE: HOW DOES IT ALL RELATE?

• THE “NOT SO FLAT SURFACE” PROJECT
  -- WILLIAMS, Jennifer Lovin, HARDY, Justin, and VAN DER HOEVEN KRAFT, Katrien J.

• EARLY TRIASSIC METAZOAN REEFS FROM THE WESTERN USA
  -- STEPHEN, Daniel A., BRAYARD, Arnaud, OLIVIER, Nicolas, VENNIN, Emmanuelle, BYLUND, Kevin G., JENKS, James, ESCARGUEL, Gilles, FARA, Emmanuel, SNYDER, Dawn, and STANLEY, George D. Jr.
We held our annual field conference in May this past year. Expectations were high following the wildly successful previous gatherings. For 2013, we headed to the exotic and beautiful landscapes of southern Utah, and of course we were not disappointed...
Our group was small, but what we lacked in numbers we more than made up for in enthusiasm. We visited some great localities during a relaxing and educational multi-day field trip. Stops were made near the towns of Virgin and Beaver, as well as at Capitol Reef National Park.

The natural beauty was inspiring, including the remarkable modern flora and fauna.

Of course, the extraordinary Mesozoic section was the star of the show, and some participants even took home a few choice cephalopod fossils (which, I emphasize, were not collected in the national park).

We regaled one another with fun stories of intrepid field adventures of yesteryear while sitting round the campfire in the evenings under the gorgeous starlit skies. I hope you can join us on our next excursion...
**NAGT-SW annual field conference 2014**

We're excited to announce the NAGT-SW annual field conference for 2014: please make plans to join us in the Copper State this year! Yes, we'll be visiting some spectacular spots in a special multi-day trip in Arizona. Highlights will include a pilgrimage to that world-famous geological mecca: The Grand Canyon! During the trip, participants can look forward to a fun and educational experience on the South Rim, and rumor has it that a few of the more adventurous in the group may enjoy a hike down into the canyon. A campsite will be reserved at the South Rim for our group. As usual, registration fees for the trip will be very low. The dates have been set for **May 30 to June 1**, and you can find out more details about the trip by contacting us at: merry.wilson@sccmail.maricopa.edu

Past field trips have been tremendously successful, and we want more of our members to experience the joy of geologizing with Merry and the Mancos Mafia. We'd especially like to see more of our K-12 teachers participate; in fact, we feel so strongly about it that we're offering free geology postcards (while supplies last) and a limited number of free teaching materials to the first ten K-12 teachers to sign up for the field conference. Of course, we always welcome NAGT members of other sections to join us as well.

**To reserve your space on the trip, please contact us at:**

merry.wilson@sccmail.maricopa.edu

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**Student opportunities**

**NAGT Student Scholarships for Field Study**

Each year, NAGT makes several $500 awards to undergraduate students to facilitate their study of field geoscience. These awards, previously given to students who attend a traditional summer field camp, are now available for students attending field-based courses at any time of year. The intent of the awards is to support students' participation in intensive field courses in any aspects of geoscience (including geophysics, soil science, hydrology, etc.) that focus on students practicing skills of field observation, data collection, analysis and synthesis. Awardees are selected based on the importance of the field experience in meeting their educational and career goals, the quality of the field aspects of the course, and the importance of the financial award in allowing them to participate in the program. In addition, the committee endeavors to select awardees that expand the diversity of people studying geosciences in the field and a collaboration with the Association of Women Geoscientists (AWG) funds two additional awards specifically for women.

**Scholarship Application:**

Students must have a GPA of 3.0 or higher to apply. To do so, please complete the Application Form.

You will be asked to provide:

- A 250-word essay explaining how the field-camp experience fits into your long-term academic and career goals.
- A transcript of all your college work (an unofficial transcript is acceptable).
- Names and contact information for two instructors who are acquainted with your work and are willing to write letters of recommendation for you (noting your ethnic origin, if applicable).

We will contact them directly and ask them to submit their recommendations.

**The deadline for receipt of applications is February 14th.**

Please, take a moment to check out the NAGT Field Scholarship website, and download the publicity flyer.

If you're a student, then you should definitely look into it; and, if you're a faculty member, please encourage your students to check it out!
Field Opportunities for Earth Science Teachers

When was the last time you were in the field studying geology? Last summer? 5 years ago? Never? The Geological Society of America has several opportunities for Earth Science teachers to study geology in the field this summer. These trips will help you to use your observations and new-found knowledge so you can effectively communicate geologic concepts with our peers, students, teachers and the general public.

Trips for this summer include:

**Explore Australia’s Geology (June 15- July 6, 2014)**
This is an amazing GeoVenture experience to get a 12 day slice of the very best geosciences of Australia. Registration is due on April 30, 2014.

**Illinois Basin Field Camp (June 15-19, 2014)**
Join GSA on this 4-day field camp to discover the hidden geological gems of the Illinois Basin in La Salle County. Registration is due on January 10, 2014.

**Rocky Mountain Field Camp (June 21-27, 2014)**
This five-day field camp will take you around Central Colorado and will allow you to investigate some of the amazing geology that Colorado has to offer. Registration is due on January 10, 2014.

**Mammoth Cave Field Camp (July 14-19, 2014)**
This field camp will focus on geology, karst, groundwater, biology, ecology, environmental science and a bit of archeology. Come explore the world’s longest cave with GSA! Registration is due on February 10, 2014.

**Explore Hawaiian Volcanoes (Aug. 6-13, 2014)**
This seven-day field trip on the Big Island of Hawaii will introduce you to plate tectonics, hot spot volcanism and the geologic features and hazards associated with living on an active volcano. Registration is due on May 15, 2014.

Visit [www.geoventures.org](http://www.geoventures.org) to view the itineraries.

Contact **Davida Buehler** at [dbuehler@geosociety.org](mailto:dbuehler@geosociety.org) if you have questions.

“Because the best geologists have seen the most rocks!”
GSA Rocky Mountain & Cordilleran Sections joint meeting

Please consider submitting an abstract to one of the four education sessions at the forthcoming joint meeting of the Rocky Mountain and Cordilleran Sections of the Geological Society of America. Many faculty teach geology using the iconic sites in the western United States and we welcome contributions with examples at all instructional levels. Place-based instruction is also a demonstrated instructional practice to help recruit students from underrepresented groups. We are also convening sessions on Field-Based Research Experiences for Undergraduates and Education and Outreach activities related to the EarthScope Program. Authors can submit abstracts for an education session in addition to another theme session.

The Rocky Mountain/Cordilleran Section meeting will be held on May 19-21, 2014, at Montana State University, Bozeman, Montana. There is also an extensive pre- and post-meeting field trip program.

Abstract deadline is February 11, 2014. More details about this meeting can be found at: http://www.geosociety.org/Sections/rm/2014mtg/

We look forward to seeing you at springtime in the Rockies.

Education Session Conveners: Dave Mogk, Cathy Manduca, Basil Tickoff, Emily Geraghty Ward, Derek Sjostrom, Kim Hannula, Steve Semken

T25. Teaching the Geology of Western North America.  
*Cosponsored by National Association of Geoscience Teachers.*  
David Mogk, Montana State University; Basil Tikoff, University of Wisconsin; Cathy Manduca, SERC at Carleton College

T27. Field-Based Research Experiences for Undergraduates.  
*Cosponsored by Council for Undergraduate Research (CUR); National Association of Geoscience Teachers.*  
Emily Geraghty Ward, Rocky Mountain College; Derek Sjostrom, Rocky Mountain College; David Mogk, Montana State University; Kim Hannula, Fort Lewis College

T28. Teaching Geoscience in the Context of Place and Culture for Sustainability and Diversity.  
Steven Semken, Arizona State University; David Mogk, Montana State University

Steven Semken, Arizona State University

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upcoming "On the Cutting Edge" and "InTeGrate" workshops

Heather Macdonald wants to draw your attention to a round of impending deadlines for workshops. Below you will find workshops from On the Cutting Edge and its partner InTeGrate organized in order of the application deadline from most immediate to slightly further out. The workshops take place in winter, spring and summer -- so there is something for every schedule.

Note: the *Getting the Most out of Your Introductory Courses* virtual workshop is accepting late applications.

Find more details on all the upcoming workshops below, listed in order of application/registration deadline.

**Teaching GeoEthics Across the Curriculum**  
June 10-13, 2014  
[http://serc.carleton.edu/geoethics/index.html](http://serc.carleton.edu/geoethics/index.html)  
Application Deadline: February 3, 2014
Teaching at Scale - Virtual Workshop
April 9-11 and April 14-15
(http://serc.carleton.edu/NAGTWorkshops/teaching_at_scale/workshop2014/index.html)
Application Deadline: February 15, 2014

Innovative Approaches to Teaching Sedimentary Geology, Geomorphology, and Paleontology
June 16-20, 2014
(http://serc.carleton.edu/NAGTWorkshops/sedimentary/SGP2014/index.html)
Application Deadline: February 17, 2014

Teaching about Risk and Resilience: Sea Level Rise, Flooding, and Earthquakes
May 14-16, 2014
(http://serc.carleton.edu/integrate/workshops/risk_resilience/index.html)
Application deadline: March 1, 2014

Undergraduate Research in Earth Science Classes: Engaging Students in the First Two Years
August 10-13, 2014
(http://serc.carleton.edu/NAGTWorkshops/undergraduate_research/workshop_2014/index.html)
Application deadline: March 1, 2014

Early Career Geoscience Faculty: Teaching, Research, and Managing Your Career
June 22-26, 2014
(http://serc.carleton.edu/NAGTWorkshops/earlycareer2014/index.html)
Application deadline: March 1, 2014

Preparing for an Academic Career in the Geosciences
June 30-July 3, 2014
(http://serc.carleton.edu/NAGTWorkshops/careerprep2014/index.html)
Application deadline: March 3, 2014

Getting the Most out of Your Introductory Courses Virtual Workshop
March 10-12 and March 17-18, 2014
(http://serc.carleton.edu/NAGTWorkshops/intro/virtual2014/index.html)
Accepting late applications!

InTeGrate has an open call for proposals for Implementation Programs. Institutions, or clusters of institutions, are invited to apply for grants of up to $50,000 to develop and evaluate programs that model innovative ways of 1) increasing the number and diversity of students developing Earth literacy and/or 2) preparing a diverse workforce equipped to bring geosciences to bear in addressing societal issues. More details at: http://serc.carleton.edu/integrate/participate/ip_call.html

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General announcements

On the Cutting Edge is engaged in an observation study of undergraduate geoscience teaching across the country. We are looking for faculty who would like to have their undergraduate-level classes observed AND for faculty who would like to apply to undergo training to become certified observers.

We will run the next training session for observers starting in February and we ask that you complete the interest form by **February 5** if you are interested in participating in this year's training session.

Learn more below or visit the website: [http://serc.carleton.edu/NAGTWorkshops/certop/participate_project.html](http://serc.carleton.edu/NAGTWorkshops/certop/participate_project.html)

As part of On the Cutting Edge Professional Development program for Geoscience Faculty the Classroom Observation Project ([http://serc.carleton.edu/NAGTWorkshops/certop/](http://serc.carleton.edu/NAGTWorkshops/certop/)) has been collecting observations of teaching in a cross section of college geoscience courses across the U.S.

With your help, this project can become the most extensive direct observation program of college and university teaching in any STEM discipline. We invite you to participate in this exciting project. There are two ways that you can be involved, one entails little more than doing what you do already, while the other provides training in a new skill that can inform your own teaching.

1) **Willing to be observed?**
   We are seeking geoscience faculty willing to be observed directly or video-recorded in a range of geoscience courses across the country. In most cases, the faculty observer will travel to your institution to observe your class. Each participating instructor is asked to complete a brief four-question interview with the observer and a short online survey that helps compare the observation data with the results of the national geoscience faculty survey.

2) **Willing to be trained as an observer?**
   We are also seeking college and university faculty to apply to be trained as observers. Faculty selected as Observers are expected to complete an online training tutorial, which will begin in mid-late February and will require approximately 10-15 hours of work, spread over two weeks. After training, certified observers are expected to make approximately 10 paid observations of geoscience classes using a standard protocol. Observers will receive a $200 stipend for each completed observation that contributes to the needed demographics in our data set. Certified observers will have the option of participating in data analysis meetings and dissemination of research results.

   In return for your participation, you will receive a description of how different components of your teaching fall on a spectrum ranging from traditional lecture to student-centered instruction. You will also receive information about the range of scores in the pool of classrooms we observe. We hope that it is an opportunity for you to learn more about your teaching style and that these insights may help you in achieve your personal teaching goals and, where appropriate, support efforts to meet or surpass institutional teaching standards.

   If you are interested in either being trained as observer or in having your class observed, please go to [http://serc.carleton.edu/NAGTWorkshops/certop/participate_project.html](http://serc.carleton.edu/NAGTWorkshops/certop/participate_project.html) and complete the short participation form.

   **February 5:** application deadline for the training session.

Thank you,
Heather Macdonald
SAGE 2YC web resources

It's the beginning of a new year and many of us are starting new academic terms so now is a great time to think about ways to showcase geoscience careers in our classrooms and programs. The SAGE 2YC (Supporting and Advancing Geoscience Education in Two-year Colleges) project (http://serc.carleton.edu/sage2yc/) has worked to develop web resources to help you do just that.

The SAGE 2YC website provides information on Workforce, Transfer, and Careers
http://serc.carleton.edu/sage2yc/workforce/index.html

Here are some highlights of the kinds of resources available regarding careers:

Geoscience Careers
This section provides an overview of what geoscience jobs look like, pathways to reach particular careers, as well as trends in hiring and demographics that are shaping the workforce.
http://serc.carleton.edu/sage2yc/workforce/careers.html

Employer Perspectives and Presentations
Geoscience employers at SAGE 2YC workshops have shared information about geoscience careers in their fields, the knowledge, skills, abilities, and attitudes that they are looking for in employees, and advice and suggestions for potential employees.
http://serc.carleton.edu/sage2yc/workforce/employers.html

Professional Society Career Resources
This page provides a list of pointers to the career information available through professional societies from across the geosciences. Almost all of these pages have information about what types of careers are available in particular disciplines, profiles of people who are doing those kinds of jobs, job placement opportunities and more. A handy collection and one you might forward to your students.
http://serc.carleton.edu/sage2yc/workforce/career_resources.html

The InTeGrate project has been working on various aspects of strengthening the geoscience workforce and increasing the diversity of students learning about the Earth and have developed these resources.

Here are links to some of their pages:

Understand Workforce Needs:
http://serc.carleton.edu/integrate/programs/workforce.html

Strengthen Workforce Preparation in your Program:
http://serc.carleton.edu/integrate/programs/program_wf.html

Increase the Diversity of your Graduates
http://serc.carleton.edu/integrate/programs/diversity.html
Using HHMI’s “Changing Planet” Educational Resources

*a note from Suzanne Metlay, Western Governors University:*

On the last day of the GSA Annual Meeting in October 2013, I had the pleasure of staffing the NAGT booth for several hours. Not only did I get to know several NAGT luminaries who were previously just names to me but I met SERC personnel and countless other dedicated geoscience educators who visited to chat. And the last delightful perk was the booth next door – Howard Hughes Medical Institute (HHMI) BioInteractive, staffed by Mark Neilsen plugging the EarthViewer App… which was running on my iPad because I had spent the past two days showing it to everyone I could and talking up the merits of HHMI’s “Changing Planet” Educational Resources.

The downsides: The EarthViewer App ([http://www.hhmi.org/biointeractive/earthviewer](http://www.hhmi.org/biointeractive/earthviewer)) does not run on smartphones or small devices like iPad minis. And since the 2013 HHMI holiday lectures are the hot new thing on the BioInteractive website, you may not find the videos, interactives, and classroom activities unless you know exactly where to go.

The upsides: Nearly everything on this website is useful if you are trying to teach about climate change, the geologic time scale, or the simultaneous evolution of biological and geological processes on Earth. To see what I mean, please go to: [http://www.hhmi.org/biointeractive/changing-planet-past-present-future](http://www.hhmi.org/biointeractive/changing-planet-past-present-future)

Five videos (scroll down below the fold) by Andrew Knoll, Daniel Schrag, and Naomi Oreskes are from the 2012 Holiday Lectures to high school students. Each lecture has a menu on the right-hand side that allows you to select easily quotable sections. Want a 2-minute clip on why volcanoes alone do not cause climate change? Go straight to section 19 of [http://media.hhmi.org/hl/12Lect4.html](http://media.hhmi.org/hl/12Lect4.html) -- HHMI has already granted you permission to use these materials in your classroom (traditional or online) so go ahead, use it in your own lecture or posted class notes.

Educational resources are listed on the right-hand side of the “Changing Planet” webpage. You may need to click on “show more” to see the full list. *<Insert image of screenshot- see below and attached image.>*

I use two of the “Click and Learn” interactives with my own online students. Clicking through every single graphic on [http://media.hhmi.org/biointeractive/click/deeptime/](http://media.hhmi.org/biointeractive/click/deeptime/) reveals either a text box or video with nuggets of useful information on portions of the geologic time scale. Engaging with [http://www.hhmi.org/biointeractive/geological-history-oxygen](http://www.hhmi.org/biointeractive/geological-history-oxygen) forces my students to consider how biology affects geology as well as the other way around. Make sure your students click on every number at the top (1-6) and each tab on the right (environment, life) as well as on Howie, the lizard that reveals more slides and videos.

If you use the EarthViewer App, plan on group activities with no more than 4 students to a screen. Students can work in teams to discuss paleoclimates as the continents shift positions or investigate O₂ levels along the geologic time scale, among other possibilities.
Lastly, look at some of the older materials HHMI has, such as http://www.hhmi.org/biointeractive/classroom-activities-day-mesozoic-died.

Again, here are lots of good classroom resources as well as a quiz and a film guide to http://www.hhmi.org/biointeractive/day-mesozoic-died.

I’ve now bookmarked HHMI as a source for interesting and innovative information to share with colleagues and students. Consider returning to this site every few months to see what new resources they make available.

NAGT member Myra Keep named Western Australian Science Ambassador of the Year

Dr Myra Keep is a NAGT member and a professor of structural geology and tectonics at the University of Western Australia in Perth. Myra spent a lot of time in the southwestern USA, mostly in Arizona and New Mexico, while studying at SMU, where she earned her PhD. Her primary field area was southeastern Arizona, where she focussed her efforts on the Pinal Schist.

This past November Dr Keep was honored at the Western Australia Science Awards. Myra was named Western Australian Science Ambassador of the Year for her research, outreach and training activities in East Timor over the past 11 years. Congratulations to Myra for winning this prestigious award!

Please nominate a deserving colleague for the James H. Shea Award

My name is Andy Buddington and I am the chair of the NAGT James H. Shea Award committee. The committee would greatly appreciate if you would consider someone for nomination of this award. If you’re not familiar with the Shea Award, please take a moment to look at the website and note what it represents (and see the list of past recipients). In essence, the Shea Award honors individuals “for exceptional contributions in the form of writing and/or editing of Earth science materials (broadly construed) that are of interest to the general public and/or teachers of Earth science”.

I’m sure that you or someone in your section knows of someone deserving of nomination. The process is simple and easy, and nominees will be considered for three years. The deadline for nominations is April 1st and all the necessary information for nomination (including the online form) can be viewed at: http://www.nagt.org/nagt/awards/shea.html

Please help us get the word out and thank you for your attention.

Andy Buddington <Andy.Buddington@scc.spokane.edu>

something interesting from our neighboring section:

from NAGT Pacific Northwest:

The 2014 NAGT-PNW Annual Summer Conference will be in central Washington, at Wenatchee Valley College. Looks like our friends in sasquatch country have a great slate of activities planned. Details can be found through their section website and: http://www.wvc.edu/directory/departments/earthsciences/default.asp
Our special guest contribution is provided by Dr Christy Wall, a Postdoctoral Researcher in the Department of Atmospheric Sciences at the University of Utah. Christy is working with the "River Class", a group of gifted 4th-6th graders from the Espanola, New Mexico area. She says it's been a very rewarding project, and data collected by the students will be used in a wetland restoration project on the Rio Chama.

In the photo at left, three students from Espanola, NM, discuss the best way to measure water depth in the Rio Chama. These data will be used to create a bathymetric map of the river adjacent to a proposed wetland area.

Thank you, Christy, for sharing your interesting work!

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The teacher who is indeed wise does not bid you to enter the house of wisdom but rather leads you to the threshold of your mind...

-- Kahlil Gibran