



January 2018 Newsletter Volume 4 Number 1

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TED President Column
By Suzanne Metlay

Dear TED Members,

NAGT is a strong partner of March for Science because so many pocketbook issues depend on geoscience literacy. What's going on with the price of water or gas? Are electric vehicles really ecofriendly? Why do natural disasters strike where and when they do? Where is it safe to (re)build?

The next questions are heard in our classrooms – How should we clean up the mess? How do we prevent the next disaster? How can I help?

If you teach high school or college, some of your students were part of the 13% of Americans too young to vote in 2016 (1). They paid attention to their millennial older siblings; of those who voted, 37% went for Donald Trump (2). Yet they read Bernie Sanders' *Guide to Political Revolution*, which stayed for weeks in August-September 2017 at position 2 on the *New York Times*' best-seller list for Young Adult Hardcovers (3). As *Business Insider* reported, "today's teens tend to sway socially liberal and moderate, but they're moderate to conservative financially. 'They want a balanced budget, but they want universal

healthcare — things that other generations have seen as opposing or a choice. They see them as one or want both,’ [according to researcher Corey] Seemiller” (1).

Teens on social media are also more global in their perspectives, even if they’ve never left their home town. It’s surprising how many know about the United Nation’s Sustainable Development Goals, many of which involve Earth Science topics (4). A growing number are joining March for Science offshoot, Students for Science (5). In a finding that tracks well with teen views of climate responsibility, Public Opinion Strategies (used by many legislators) recently polled “79 percent of self-described conservatives support the expansion of clean energy policies, and conservative voters are 36 percent more likely to vote for a candidate who also supports expansion of clean energy” (6).

March for Science has plans for 2018 that may engage you as well as your students. These plans provide opportunities for volunteering or service learning, something work-bound or college-bound teens may find helpful as they construct their first resumes.

Caroline Weinberg, March for Science Co-Chair in an email dated 4 January 2018 (7), lists March for Science 2018 goals as:

January	Basic Science Month (http://marchforscience.com/censorship & http://marchforscience.com/votescience)
February	Justice and Access Month (Potential ask: centered on environmental justice)
March	Food and Agriculture Month <i>Science Not Silence</i> book release
April	Environment Month - March for Science 2018 (Potential ask: elected officials to sign a statement acknowledging that climate change is real and that human activity is a contributing factor).
May	Health Month
June	Technology and Innovation Month Contact Your Rep Day of Action: Coordinate supporters across the country to contact their representatives to ask that they hold Town Halls when they are in their home offices in August (and ask that local reps do the same). This scripted push (via email and call in) will explicitly mention that we want answers on science issues, and include a list of those questions.
July	Space Month March for Science Summit in Chicago (July 6-8)
August	Energy Month Week of Action focused on local advocacy
September	Infrastructure & Institutions Month Check Your Registration Status: Deadline for registration in many states is 30 days prior to the election; in mid-September, we will encourage voters to check their registration and ensure that it is still valid (or register if they're not already).
October	Democracy Month
November	Get Out the Vote – Election Day: 6 Nov 2018
December	To be determined

Whether you have a teen at home (like I do) or in your classroom, whether they (or you) skew liberal or conservative, this is the year to get out of school and into your community.

Looking forward to a meaningful and productive 2018 with you!

Suzanne T. Metlay, President, Teacher Education Division, National Association of Geoscience Teachers

References:

- (1) Garfield, L. (2017). "Teens Across the U.S. Reveal What They Think About Trump". Retrieved from the Business Insider website at <http://www.businessinsider.com/what-teens-think-about-trump-2017-7>
- (2) Galston, W., and Hendrickson, C. (2016). "How Millennials Voted This Election". Retrieved from the Brookings Institution website at <https://www.brookings.edu/blog/fixgov/2016/11/21/how-millennials-voted/>
- (3) Graham, R. (2018). "Bernie Sanders, King of YA Lit". Retrieved from the Slate Book Review, Slate magazine website at http://www.slate.com/articles/arts/books/2017/10/bernie_sanders_guide_to_political_revolution_reviewed.html
- (4) World's Largest Lesson (2018). Homepage viewed on 22 January 2018 at <http://worldslargestlesson.globalgoals.org/>
- (5) Students for Science.org (2018). Homepage viewed on 22 January 2018 at <https://www.studentsforscience.org/>
- (6) RepublicEN.org (2018). "Climate Week En Review, January 19, 2018". Retrieved 22 January 2018 from Energy and Enterprise Initiative website at <http://www.republicen.org/alerts/climate-week-en-review-january-19-2018>
- (7) Weiberg, C. (2018). Personal communication, email dated 4 January 2018.

2. Geological Society of America Announces New K-12 Professional Development Field Workshops —Call for Geoscience Educators /Teachers and Subject Matter Experts

By Dean Moosavi, GSA



Ever wondered how YOU can make a difference helping communicate the value of geoscience to society? Sharing your knowledge with teachers can make that impact. It's free, it's fun, it's rewarding, and you will know that, through your association with GSA, you have helped support teachers working hard with limited resources.

We Need Volunteers like YOU! Register Your Interest

Public geoscience literacy in the United States and the professional pipeline to the geosciences both fall short of their potential because the American K-12 education system under emphasizes the geosciences, with most teachers of Earth science content operating outside their primary area of certification. GSA is addressing this educator content gap by marshaling its members to offer K-12 professional development workshops for teachers in communities near you. GSA is revising its [GeoTeachers™](#) program to reach a broad spectrum of educators with affordable professional development workshops designed for teachers to:

- Focus on the local geology, geoscience processes, and hazards;
- Explore sites where geologic resource extraction, refining, and waste mitigation can be observed;
- Learn from geologists in academia, industry, and government providing career insights for classroom use;

- Participate in activities tied to classroom needs and local standards presented by master teachers;
- Obtain field guides, hand samples, and other resource materials for classroom use;
- Earn continuing education/graduate credit for professional development purposes;
- Join a community of practice with follow-up webinars and activities designed to assist classroom implementation.



[GeoTeachers™](#) field workshops are organized as annual events at the state level. Their success will depend on GSA members from academia, industry, and government sharing their knowledge, expertise, and contacts with teachers. Geoscience educators, scientists, and professional geologists interested in helping develop and implement these workshops should [register your interest here](#).

GeoTeachers Offerings for 2018

Geology of the Colorado Plateau – Flagstaff, Arizona, July 23 – 27

This workshop focuses on the geology of the Grand Canyon, Trail of Time, Petrified National Forest, Sunset Crater and Meteor Crater spanning the Paleozoic, Mesozoic and Cenozoic history of northern Arizona.

Geology of the Central Front Range – Colorado Springs, Colorado July 30 – August 3

This workshop examines the transition from the High Plains across the Garden of the Gods to the Front Range and mountain valleys centered on Colorado Springs.

Geology of Central Indiana – Indianapolis, Indiana, November 2 – 4

This mini-workshop will examine the geology of central Indiana and is tied to the GSA Annual Meeting

We also hope to offer another Mini-Workshop in association with the Society of Economic Geologists (SEG) Conference in Keystone, Colorado September 22 – 25.

K-12 Teachers interested in attending these workshops should [register your interest here](#).

For details on specific workshops and registration procedures please see the [GeoTeachers™](#) website or contact [Dean Moosavi](#) - GSA Education Programs Coordinator

PS. Catch up with Dean at the USA Science and Engineering Festival in Washington D.C. on April 6-8 and the Hoosier Science Teachers Association Conference in Indianapolis February 14-16. He will also be at the SC GSA section meeting March 10-13 in Little Rock and possibly at the SE Section meeting in Knoxville April 12-13. Chat him up about setting up workshops for next year.

3. Major events, activities, and deadlines of interest to all NAGT members, by Lara Palmquist, SERC and NAGT's Executive Office

a. 2018 Earth Educators' Rendezvous now accepting abstracts, teaching demo proposals, and working group applications

The [fourth annual Earth Educators' Rendezvous](#) will take place July 16-20, 2018 at the University of Kansas in Lawrence. Drawing across the work currently taking place in geoscience, environmental, and sustainability education, the conference provides a unique opportunity to present and discuss your work with an audience of Earth educators. All are invited to [submit abstracts](#) and [teaching demonstration proposals](#) to the conference's contributed program by **March 1**. Groups wishing to [conduct a concurrent working group session at the Rendezvous](#) should also submit an application by **March 1**. Learn more about the 2018 Earth Educators' Rendezvous by visiting the [conference website](#), [browsing the full program](#), and reviewing options to complete your [early bird registration](#) by **May 1**.

b. Early Career Geoscience faculty Workshop

The 2018 [Early Career Geoscience Faculty Workshop: Teaching, Research, and Managing Your Career](#) takes place July 22-26 (with optional trip to NSF on Friday, July 27) at the University of Maryland, College Park, MD. Do you have new faculty in your department just starting out in their academic career? Consider recommending this important multi-day workshop, where they will participate in sessions on topics including effective teaching strategies, course design, establishing a research program in a new setting, working with research students, balancing professional and personal responsibilities, and time management. [Applications for this workshop are due March 16](#).

c. Upcoming NAGT Award Deadlines

NAGT's [Outstanding Earth Science Teacher \(OEST\)](#) awards are given for exceptional contributions to the stimulation of interest in the Earth Sciences at the pre-college level. Any teacher or other K-12 educator who covers a significant amount of Earth science content with their students is eligible. Ten national finalists are selected, one from each NAGT regional section. Some sections also recognize state winners. Individuals may apply themselves or nominate a colleague for the award. The selection of award winners is conducted at the Section level and each Section sets its own deadline for nomination. A listing of the deadlines and contact people for each Section is listed on the [award website](#). The earliest Section deadline is March 31 for the Pacific Northwest Section, with other sections following until the middle of May. Check out your Section's deadline and [submit your nominations via the website](#).

The [Neil Miner Award](#) is presented each year by NAGT to an individual for exceptional contributions to the stimulation of interest in the Earth sciences. [Nominations](#), including a letter of nomination and letters of support, are due **April 1**.

The [James H. Shea Award](#) is presented each year by NAGT to an individual 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. [Nominations](#), including a letter describing the nominee's writing and/or editing contributions and the reasons why the contributions should be judged as exceptional, are due **April 1**.

In honor of Dottie Stout's outstanding work and lifelong dedication to Earth science education, NAGT awards [Dorothy Lalonde Stout Professional Development Grants](#) that support Earth science professional development in three categories: Community College Faculty, Community College Student, and K-12 Educator. The deadline for [applications](#), which include a proposal describing how applicants will use the award to support their professional growth, is **April 15**.

The [Robert Christman Distinguished Service Award](#) was established to recognize individuals who have provided long, distinguished service to NAGT at the national and/or section level. [Nominations](#) are accepted on an ongoing basis.

d. JGE Theme Issue Call for Papers: New Developments in Diversity and Inclusiveness in Geosciences

In an upcoming edition centered on New Developments in Diversity and Inclusiveness in Geosciences, the *Journal of Geoscience Education (JGE)* will explore issues on pipeline development, recruitment and retention, graduate education and special topics such as minority serving institutions and non-traditional opportunities in both case studies and broad research investigations. Potential authors should submit a letter of intent by **April 1, 2018**.

For more information, including the objective of the issue, background to the theme, the types of papers solicited for the issue, and instructions for manuscript preparation and submission, please see the [full announcement](#) regarding this call for papers.

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4. TED & NESTA at GSA-Indianapolis

Suzanne Metlay, TED President

GSA-Indianapolis will take place during 4-7 November 2018, with K-12 teacher workshops starting on 2 November: http://www.geosociety.org/GSA/Events/Annual_Meeting/GSA/Events/gsa2018.aspx
Technical session proposals were due 1 Feb, with at least 2 sessions proposed by NESTA with NAGT-TED involvement. Please contact the session co-chairs for more info. ***We look forward to your active participation in these sessions! Abstracts are due 14 August.***

Collaborative Partnerships between K-12 Teachers/Informal Educators and Scientists

Session ID#: 45539

Advocates: Susan Meabh Kelly (susankelly.ct@gmail.com), Carla McAuliffe (carla_mcauliffe@terc.edu), Suzanne Metlay (suzanne.metlay@wgu.edu), Peggy McNeal (peggy.m.mcneal@wmich.edu), Michael Passow (michael@earth2class.org)

Sponsor(s): National Earth Science Teachers Association; National Association of Geoscience Teachers - Teacher Education Division

Description:

This session is dedicated to sharing education/outreach efforts that are the product of scientists collaborating with K-12 teachers and/or informal educators.

Rationale:

K-12 outreach is a common avenue for scientists to demonstrate broader impact. In recent years, parallel initiatives to strengthen and sustain the STEM "pipeline" have provided additional impetus for scientists to connect with local schools. The purpose of this session is to share experiences to inform future partnerships. This session highlights education/outreach efforts that possess all of the following characteristics: (1) involve K-12 classroom teachers/informal educators and scientists; (2) are the result of a two-way exchange of professional expertise; (3) support opportunities for authentic K-12 student research and/or classroom integration of recent science research. Activities that address pressing initiatives (e.g. NSF broader impact criteria, Next Generation Science Standards, inclusive/diverse geoscience workforce) and provide examples of student research are especially encouraged.

Possible Speaker List:

Dean Moosavi, Michael Passow

Exploring the ART in E(ART)h Science

Session ID#: 45550

Advocates: Michael Passow (michael@earth2class.org), Belinda E. Jacobs (bjrockgirl11@gmail.com), Carla McAuliffe (carla_mcauliffe@terc.edu)

Sponsor(s): National Earth Science Teachers Association

Description:

How important were contributions of artists traveling with scientists or recording landscapes far beyond the experience of the general public in establishing Earth Science? Perhaps without Art, there might not have been Earth Science?

Rationale:

Almost from its beginnings, artists have accompanied scientists in such pioneering expeditions as Hutton's visit to Siccar Point, Darwin on the "Beagle," Colvin's Adirondack explorations, and many others. What was the impact of William Smith's geologic maps, which are a form of art? The "Hudson River School of Painting" greatly expanded public awareness of distant locations and enhanced their value as part of national assets. In the early 20th Century, collecting expeditions by the American Museum of Natural History and others included artists who captured the scenery where animals were bagged, and then created the dioramas in the exhibit halls that still fascinate museum-goers. Given the proliferation of electronic imaging today, it is worth pausing and looking back at the importance of drawing and painting in establishing the Science of Earth.

Possible Speaker List:

Michael Passow, David Mogk, Kathy Ellins