

CONNECTICUT SCIENCE CONNECTION

October 2018

THE CONNECTICUT BUILDING A PRESENCE FOR SCIENCE NETWORK IS SUSTAINED THROUGH THE ADVOCACY OF THE CCAT, CONNECTICUT SCIENCE SUPERVISORS ASSOCIATION, THE CONNECTICUT SCIENCE TEACHERS ASSOCIATION, AND THE CONNECTICUT ACADEMY OF SCIENCE AND ENGINEERING

State Coordinator.David Lopath lopath@comcast.net , List Moderator..Eloise Farmer eloise302@gmail.com

NAMES AND E-MAIL ADDRESSES OF OUR POINTS OF CONTACT AND KEY LEADERS ARE NOT SHARED WITH ANY OTHER ENTITY



Professional Development Opportunities! Are you interested in high quality, low cost, Teacher Professional Development opportunities? Visit the [CSTA website](http://csta.org) and click on Opportunities. You will not be disappointed. Contact us if you have questions.

Click on the link to learn more about JPSS! <https://scijinks.gov/subscribe/>

Green Teacher Green Teacher has recently launched a YouTube Channel. In time, we hope this will grow into a valuable resource for educators. <https://greenteacher.com/check-out-these-videos/>



Join the CSSA

Connecticut Science Teachers Association Sponsored Events
more information and registration links at <https://www.csta-us.org/events>

Think FALL for field trips!
Looking for your next field trip? Students LOVE to come learn at NESS. Get them out on the water kayaking, sailing and tidepooling! We're filling dates now for FALL...email Pam Gibbs at pgibbs@nessf.org.....

CIPWG SYMPOSIUM:

Invasive Plants in Uncertain Times: Achieving More with Less
Presented by the Connecticut Invasive Plant Working Group (CIPWG)
Thursday, October 4, 2018, 8:00 a.m. – 4:30 p.m.
Student Union, University of Connecticut, Storrs, CT

The following [Pesticide Recertification Credits](#) and Continuing Education Units (CEUs) are available at the CIPWG Invasive Plant Symposium:

- Connecticut Department of Energy and Environmental Protection (DEEP) Pesticide Applicator Recertification: **5 Credit Hours in the following categories: PA, ALL (available for New England states)**
- Certified Connecticut Forest Practitioners Continuing Education: **1.5 CEUs**
- Certified Master Gardeners can receive **2 Advanced Master Gardener (AMG) class Credits**.
- Connecticut Accredited Nursery Professional (CANP) [Connecticut Nursery and Landscape Association]: **1 Credit**
- Massachusetts Certified Horticulturist (MCH) [MA Nursery & Landscape Association, Inc.]: **1 Credit**
- Northeast Organic Farming Association (NOFA) Accredited Organic Land Care Professionals (AOLCP): **4 Credits**
- Rhode Island Certified Horticulturist (RICH) [RI Nursery and Landscape Association]: **1 Credit**
- Subject matter appropriate for **4.25 hours of continuing education** for Connecticut-licensed landscape architects.
- Tree Wardens Association of Connecticut: **5.00 CEUs**

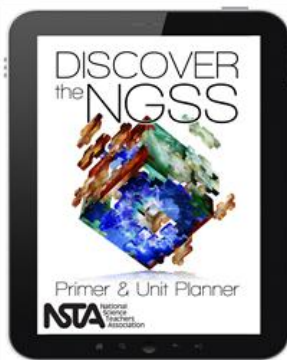
Online registration for the CIPWG symposium is available. Visit the [CIPWG website](#) or click [here](#) to register online. The symposium program and directions can be found on the CIPWG website.

This 9th biennial conference features national, regional, and local experts as well as citizen volunteers sharing practical solutions for invasive plant management and actions needed to promote native species and improve wildlife habitat. The symposium is open to the public and will include introductory information about invasive plants. People with all levels of interest and experience are invited to attend.

REGISTRATION FEE: \$65; \$25 – STUDENT (must bring current ID)

Attendees are advised to register early, as the last symposium had record attendance and sold out in advance with 500 attendees.

For additional information, please contact Donna Ellis at 860-486-6448; donna.ellis@uconn.edu.



Want to Enhance Your Knowledge of the *Next Generation Science Standards*? Enroll in our [Shifting to the NGSS:](#)

[Professional Book Study](#) in October 2018! This four-week online book study will help you move towards classroom implementation with



insightful webinars, discussions, and resources. During the online book study, you'll participate in four webinars and moderated discussions with six hours of live exchange with experts and other educators. All of this learning occurs from the convenience of your own home or office without the hassle of conference travel. The accompanying e-book offers a comprehensive introduction to the *Next Generation Science Standards*. All told, the e-book offers up to 40 hours of interactive professional learning and covers background information, each of the three dimensions in depth, and steps to move teachers toward classroom implementation. By the end of the book study, you'll be able to:

- Communicate an understanding of the three-dimensions and 3D learning
- Begin to design NGSS lessons that work coherently within a storyline or unit of study
- Identify phenomena that can drive student learning

Register Yourself Today

Ensure the success of your Fall by [registering](#) for this online book study.

Learn More About Group Registrations

Please contact Flavio Mendez via [e-mail](#) or by phone at 703-312-9250 for a quote.

////////////////////////////////////

MARK YOUR CALENDARS FOR NSTA'S 2018 FALL CONFERENCES

October 11-13, 2018, Reno, Nevada, Reno-Sparks Convention Center

November 15-17, 2018, National Harbor, Maryland, Gaylord National Resort & Convention Center

November 29-Dec. 1, 2018, Charlotte Convention Center, Charlotte, North Carolina

.....
MORE PD for 2018: Check the link below:

The link is as follows: <https://ctsciencecenter.org/education/mandell/ngsx-info/>

Skills21 at EdAdvance is excited to announce an opportunity for teachers interested in the intersection between Science and Computer Science. With support from a new National Science Foundation grant, Skills21 is recruiting a cohort of teachers this year who want to engage their class in a CS challenge and present student team solutions at the 2019 Expo Fest on June 1, 2019 (expofest.skills21.org). Through the new Skills21 Science/CS challenge, student teams are compelled to develop a computer science product, service or solution leveraging a scientific discipline to meet a need, solve a problem or capture an opportunity. Student solutions might include mobile apps, wearable solutions or other innovative uses of computer science.

Participating teachers will receive:

- \$1000 stipend for planning, out-of-class time engagement and curricular review
- \$500 for project materials
- Onsite coaching and professional development

Participating teachers will need to:

- Pilot and/or provide feedback on Computer Science infused Science units including lesson plans and an end of unit performance assessment
- Bring a team of students to the 2019 Expo Fest to compete in the new Science/CS Challenge
- Allow Skills21 to conduct pre- and post-intervention surveys (September and June)

What's the time commitment?

- In and out of class time commitments for teachers will vary based on individual class settings. Experienced Skills21 staff will work with prospective teachers to help gauge the required time commitment and investment

Priority Eligibility:

- First priority in the early stages of this grant are for teachers that work with traditionally underserved student populations

How to Get Involved

Interested teachers should contact Liz Radday (radday@edadvance.org) or Susan Auchincloss (auchincloss@edadvance.org).

.....

Elementary Science opportunities.

1. NGSS Elementary Workshop
NGSS Elementary Workshop is Monday, October 15 from 9:00 until 3:00 at the Connecticut Science Center. This one day workshop provides hands-on experiences with elementary teachers/leaders who have begun implementing quality NGSS practices into their school culture/climate. Learn about the elements of NGSS, discuss the pedagogical shifts in Science, and overcoming the obstacles at the K-5 level. Registration:

<https://formstack.io/489AE>

2. Elementary Science Summit:
Preparing K-5 for a STEM Future
Join EDC and the Coalition for Elementary Science November 30, 2018 Education Development Center, Waltham, MA Registration here:
<https://elemscisummit2018.eventbrite.com>

3. DEEP Climate Change Workshops and Opportunities
Webinars on the first Wednesdays of the month at 4:00 pm include the following topics:

October- Moon, Earth, and Sea

November- General Resource Review

December- Understanding Environmental Footprints

January- Water Quality and Chemistry

February- What Color is your Air- Ozone, EPA Flag Program
Workshops planned to date:

October 23- Project Food Land People, FLP- Food, Energy and Carbon

November 14- Project WET- Water Science and Impacts

February 27- Environmental Literacy K-12 For more information go to the DEEP webpage at the following URL:

https://www.ct.gov/deep/cwp/view.asp?a=2691&q=322502&depNav_GL=1627

Science Safety and Liability for Science Teachers and other Employees like Special Education

Teachers/Paraprofessionals in the Science Lab

Under the OSHA Lab Standard, school employees working in science labs are required to receive appropriate safety training. The focus of this workshop is to address that need by providing information on legal safety standards and better professional practices.

Dates: October 16, 2018

Duration: 9:00am - 12:00pm

Location: Connecticut Science Center

Facilitator: Dr. Ken Roy

Cost: \$200 per person

Enrollment: Minimum of 12

Website for additional information and enrollment:

<https://ctsciencecenter.org/education/mandell/sciencesafetyworkshops/>

PHENOMENA, Anyone? Looking for meaningful phenomena based instruction? Then check out this amazing opportunity that happens right in your own home.
http://learningcenter.nsta.org/products/online_courses/vc_180728.aspx

STANYS ANNUAL CONFERENCE REGISTRATION IS OPEN

EARLY BIRD REGISTRATION RUNS THRU OCTOBER 14TH

NSTA PRESS AUTHORS

THIS YEAR'S CONFERENCE FEATURES THREE **NSTA PRESS** AUTHORS WHO WILL BE PRESENTING WORKSHOPS AND PARTICIPATING IN, ALONG WITH PAUL ANDERSEN, A BREAKFAST "ROUND TABLE" DISCUSSION.

Tricia	Dr. Victor	Dr. Jackie
Shelton	Sampson	Speake

Phenomena-Driven Instruction: Science Learning for ALL Students	Argument-Driven Inquiry	StEMTify Your Science Lessons!
---	-------------------------	--------------------------------

Session proposals for the 8th annual STEM forum and expo in San Francisco, are now being accepted. The dates are July 24-26 2019. The area conferences will be held in Salt Lake City October 24-26 2019, Cincinnati November 14-16 2019, and Seattle, December 12-13 2019. To submit a proposal, visit www.nsta.org/conferenceproposals

DIRECTIONS TO SACRED HEART UNIVERSITY for STEM TASTIC:

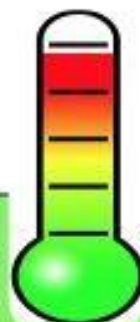
<https://www.sacredheart.edu/aboutshu/visiting/mapsdirections/>



Sacred Heart
UNIVERSITY

ISABELLE FAIRINGTON COLLEGE OF EDUCATION

Free!



STEMtastic: Elementary & Middle School Teacher Exposition



Saturday, October 13, 2018

Registration: 9:00 am

Doors open 9:30 to 11:30 am

Sacred Heart University

University Commons

5151 Park Ave, Fairfield, CT 06825

Fun!

Prizes!

Discover engaging and fun, content-specific science activities that you can use in your classroom.

Why attend?

*Obtain lesson ideas from master teachers to engage students in science & STEM

*Win Prizes

*Optional Activity: NGSS and STEM lessons, questions and concerns for exchange of ideas with colleagues.

STEMtastic: An Elementary and Middle School Teacher Exposition - Saturday, Oct. 13 Sacred Heart University, Fairfield - **Free!** Join many teachers to discover new NGSS resources, STEM activities, and ways to improve your elementary and middle school science classes.



The FunScienceNetwork...What is it?

1. **FunScienceDemos** - A YouTube channel with over 150 science demonstrations by master teachers. Every important science ideas kids should know before high school. Over 50,000 subscribers so far!
<https://www.youtube.com/user/funsciencedemos>
2. **FunScienceSupport** - A website filled with free teacher resources for K-8 science education. Readings, writing prompts, math activities, poems and more!
<https://sites.google.com/temple.edu/funscience/home>
3. **FunScienceToons** - UNDER CONSTRUCTION - Science animation in which siblings help each other learn about science and the natural world. Watch our first animation. [Earth Spins and the Day Begins](#)
4. **LearningScience.org** - A dynamic and curated list of free, high quality, online resources from around the world for science education.
<http://new.learningscience.org/wp/>

On October 24, NSTA will hold a free Web Seminar on Developing a Competitive Teacher Award Application. The session runs from 6:30 to 8PM ET. To register, go to <http://goo.gl/PRmPR2> .

The Billy Michal Student Leadership Award

The National WWII Museum is currently taking nominations for The Billy Michal Student Leadership Award, given annually to one student from each state and the District of Columbia who demonstrates the values of leadership, teamwork, tolerance, creativity, and perseverance in their community. **For more information and to nominate a student, see [The Billy Michal Student Leadership Award website](#).**

Student Essay Contest Now Open!

“I was offering time and laughs—the men and women fighting the war were offering up their lives,” said Bob Hope of his experiences entertaining troops during World War II. “They taught me what sacrifice was all about.”

In celebration of the special exhibit [So Ready for Laughter: The Legacy of Bob Hope](#), The National WWII Museum is focusing its 2018 Student Essay Contest on the duty of art and artists during times of war and conflict. The contest, which asks entrants to consider the above quote by Hope in the context of the overall theme of the wartime role of entertainers and artists, is open to middle school (grades 5–8) and high school (grades 9–12) students. **For more information on the essay contest, please visit [The National WWII Museum 2018 Student Essay Contest website](#).**

CSSS] NSTA Position Statement on Teaching Climate Science.

[Want to make sure that you’ve all seen NSTA’s latest position paper!](#) Below is the press release issues last Friday and a link to the Statement.

NSTA Position Statement Confronts Challenges of Teaching Climate Change in Nation’s Science Classrooms

New Statement Calls for Greater Support for Science Educators to Teach Evidence-based Science

ARLINGTON, Va.—September 13, 2018— In the midst of increasing efforts to undermine science education and misinform the public about climate change, the National Science Teachers Association has issued a [position statement](#) calling for greater support for science educators in teaching evidence-based science, including climate science and climate change. The statement promotes the teaching of climate change as any other established field of science and calls on teachers to reject pressures to eliminate or de-emphasize climate-based science concepts in science instruction.

“Now more than ever, we need to give educators the support they need to stand up against pressures from special interests, parents, or their state leaders to teach ideas not based on scientific evidence,” said David Evans, NSTA Executive Director. “Teachers need ongoing professional learning opportunities to strengthen their content knowledge, enhance their teaching practices, and help build their confidence to address socially controversial topics in the classroom.”

The statement acknowledges the decades of research and overwhelming scientific consensus indicating with increasing certainty that Earth's climate is changing, largely due to human impacts. It also establishes that any controversies regarding climate change and its causes that are based on social, economic, or political arguments—and not scientific evidence—should not be part of a science curriculum.

The statement provides specific recommendations for the various stakeholders—school and district administrators, policy makers, parents, and others—to help educators succeed in teaching quality science in the classroom. A few of the recommendations include providing full support to teachers in the event of community-based conflict, ensuring that instructional materials considered for adoption are based on both recognized practices and contemporary, scientifically accurate data; ensuring the use of evidence-based scientific information when addressing climate science and climate change in all parts of the school curriculum, such as social studies, mathematics, and reading; and supporting student learning of science at home.

“Across the political spectrum we are seeing a significant anti science atmosphere and we need to change it,” said Evans. “It’s imperative that we equip the next generation of citizens to demand and use evidence and scientific reasoning about the physical world to enable them to make important social and political decisions about how they live in the world.”

The imperative for teaching climate change science can be seen in state science education standards based on the *Framework for K–12 Science Education* (NRC 2011), which recommends foundational climate

change science concepts be included as part of a high-quality K–12 science education. Many states have adopted the standards based on the *Framework* and are implementing them in classrooms around the country.

The statement was developed by a team of science educators, scientists, and other education experts, and adopted by the NSTA Board of Directors. According to Eric Pyle, a professor in the Department of Geology & Environmental Science at James Madison University and chair of the NSTA position statement panel, “teaching the science of climate and climate change in school lays a foundation for future citizens who will need to become resilient in the face of challenges posed by human impacts on environment in general and the climate in particular. It is our professional and moral obligation as educators to prepare them for these challenges.” The position statement and other climate science resources can be found at <http://www.nsta.org/climate/>.

TEACH CLIMATE SCIENCE IS AN INITIATIVE OF THE PALEONTOLOGICAL RESEARCH INSTITUTION (PRI, ITHACA NY, www.priweb.org).

In response to cuts in federal funding for climate science research and education, removal of scientists from federal environmental panels and agencies, and widespread dissemination of climate science denial propaganda, PRI has embarked on a campaign to distribute *The Teacher-Friendly Guide™ to Climate Change* to every public high school science teacher in the country.

The Teacher-Friendly Guide™ to Climate Change is the tenth book in PRI's *Teacher-Friendly Guide* series (www.teacherfriendlyguide.org). Following the Heartland Institute's national mailing of “*Why Scientists Disagree about Global Warming*,” PRI decided to step up and counter the dissemination of disinformation by providing teachers with access to peer-reviewed climate science and vetted strategies on teaching a potentially controversial topic. While all of the *Teacher-Friendly Guides* are available as free pdf downloads, PRI has embarked on a crowdfunding campaign in order to reach out to teachers and send each one their own copy of the climate change guide.

We are reaching out for help with both dissemination and fundraising. Buying the book supports both of these efforts. You can order the book and download the free pdf at <http://priweb.org/tfgcc>. While the book was written with teachers in mind, it's friendly to any reader.

As of summer 2018 50,000 teachers in 36 states will receive copies of *The Teacher-Friendly Guide™ to Climate Change*. You can help PRI achieve the goal of reaching 200,000 teachers. We are striving to identify a point person in each school who will be the addressee for the package, and help to insure that the books actually reach teachers. Sign up to be a point person here: <http://bit.ly/TFGCCcontact>.

Reach out to friends and social media networks to support the crowdfunding campaign (<http://bit.ly/TeachClimateScience>) and to get the word out about the Teach Climate Science Project.

Subject: \$1250 Scholarships for Amazon Rainforest PD Workshop

Educator Academy in the Amazon Rainforest

The July 1-11, 2019 Educator Academy in the Amazon Rainforest of Peru is a cross-curricular professional development workshop for K-12 formal and informal educators to learn and use:

- 21st Century Instruction: Inquiry-Based Exploration ~ NGSS ~ STEM ~ 5E

- Inquiry Protocols & Resources: Project Learning Tree ~ Cornell Lab of Ornithology ~ & More!
- Global and Cultural Perspectives: ~ Sustainability ~ Global Education ~ Indigenous Cultures

Join Al Stenstrup, Project Learning Tree; Dr. Nancy Trautmann, Cornell Lab of Ornithology; Kristie Reddick, The Bug Chicks; along with scientists Dr. Steve Madigosky, Widener University; and Randy Morgan, Curator/Entomologist, Cincinnati Zoo as you:

- Work side-by-side with scientists and researchers on citizen science projects and field studies on the ACTS Peru Rainforest Canopy Walkway in one of the world's most biologically diverse environments.
- Explore conservation and sustainability via hands-on workshops with indigenous communities.
- Spend a day in an Amazon village and explore the role of education in creating a sustainable future for Amazon children.
- Work in grade-level cohorts to develop strategies for using the Amazon as a vehicle for incorporating standards-based inquiry, STEM, and sustainability education into your classroom.

PLT Certification, BirdSleuth, and other resources included. Academic Credit and Machu Picchu Extension optional. \$1250 scholarship deadline February 1, 2019. With a scholarship, Academy Program fees are \$1345 (airfare not included). Space is limited to 30 educators - Register early to secure your spot!

Get the details and download a syllabus and scholarship application at: www.amazonworkshops.com/educator-academy. Contact Educator Academy Director, Christa Dillabaugh, for more information: Email: christa@amazonworkshops.com // phone: 1-800-431-2624.

LOVE THE SEA TURTLES? Want to help in their conservation? Join the SEE Turtles Costa Rica Leatherback Turtle Volunteer trip. You will help collect eggs and move them to hatcheries, and work with the baby turtles once they hatch. The trip is June 9-15 2019. Individuals and groups up to 12 can apply. Visit <https://www.seeturtles.org/costa-rica-leatherback-turtle-volunteer-trip> for more info.

The Cornell Lab of Ornithology's free webinar series launches soon! These engaging monthly webinars provide background information and K-12 activities related to scientific observations, inquiry, NGSS, citizen science, and outdoor learning. Educators can also opt to receive one Continuing Education Unit (CEU) from Cornell University. Learn more and register at: <http://www.birdsleuth.org/free-webinars/>. Feel free to reach out if you have any questions

JASON PROJECT Professional Development Opportunities Connecticut 2018-19

**NGSS Series for 2018-19! More
Topics, Dates, and Locations
Coming! Check Back Often.**

Resources and Tools for an NGSS Classroom

Getting ready to or already designing your NGSS units of instruction?

Or just need a little more support in understanding and practicing the NGSS shifts?

We Can Help.

Our 2018-19 Workshop Series provides one and two-day PD to help: educators build their capacity to understand and implement NGSS pedagogy; be introduced to resources, tools, and strategies that can be included in NGSS units of instruction; and offer an opportunity to share challenges, successes, and teaching tips with a network of peers. JASON's award-winning educational resources are routed in real-world application & phenomena, and address three dimensional teaching and learning (www.jason.org/ngss).

Audience:

- Administrators, curriculum directors, curriculum developers, science coaches, team leaders, and science teachers.
 - World of Waves Best Suited for Grades 4-12
 - Living Well Best Suited for Grades 6-12

Prerequisites: Although not required, we highly recommend that educators participate in the Next-Gen Science CT Short Course (visit ngss.ccat.us for details)

prior to attending a JASON workshop. Other prior PD focused on NGSS, and familiarity with the EQuIP rubric is also helpful. Participants are also encouraged to attend as a team of 2 or more from the same school or district.

Workshop Listings

Two-Day Workshops

World of Waves – NEW Curriculum built in partnership with ONR!

Program Cost: FREE! Sponsored Through Office of Naval Research

Build a deep, working understanding of the physics of waves and their importance in our world. Meet STEM role models ranging from Navy officers to robotics engineers & rock musicians that apply the physics of waves in their work.

Visit <https://jason.org/world-of-waves> for more information.

Participants are eligible to receive a BOSEBuild Speaker Cube Kit of their own to pilot selected activities to explore

- How sound works
- How speakers work
- Frequency and Waveforms

LEARN – Old Lyme, CT 8:30am-3:00pm

Part 1: Wednesday, November 28, 2018

Part 2: Friday, March 1, 2019

EASTCONN – Hampton, CT 9:00am – 3:30pm

Dates TBD!

One-Day Workshops – – MORE TOPICS, DATES AND LOCATIONS COMING!

NEW Biology Curriculum! Living Well

Program Cost: \$40.00

Explore the wonders of human biology from the molecular building blocks of life, to cells, organs and

organ systems, to the human body as an interconnected whole, and even the behavior of populations—through the prism of human health and disease.

Visit <https://jason.org/living-well> for more information.

LEARN – Old Lyme, CT 8:30am-3:00pm

April 5, 2019

JASON Basics – One Hour Live Webinars for Connecticut 3:30 – 4:30p.m. Choose one:

Wednesday, October 3, 2018

Register: <https://register.gotowebinar.com/register/7584758156615435523>

Monday, November 5, 2018

Register: <https://register.gotowebinar.com/register/6181042447759422467>

Are you unsure of how to take full advantage of the free resources provided by JASON Learning? We understand the challenges of learning and implementing new lessons, especially when time is a limiting factor. Come join us for a one hour *live* webinar, customized for educators and administrators in Connecticut to walk-through the “basics” of the JASON site navigation, key teacher tools, and tips on how to find what you’re looking for to support instruction. This includes a 10-15 Q & A so educators can get the help they need to get started or continue using these resources.

Past workshops:

Redesigning Towards an NGSS Classroom

All grade levels

Monday, December 5, 2016 8:30am – 3:00pm

at LEARN, Old Lyme, CT [Register]

Thursday, December 15, 2016 9:00am – 3:30pm

at EastConn, Windham, CT [Register]

Thursday, February 22, 2017 8:30am – 3:00pm

at Southington Public Schools [Register]

Don’t throw those lessons out with the bathwater! “Tried and true” lessons that have created meaningful experiences for your students for years do not need to be discarded with the advent of new standards. Join us as we share how JASON Learning is redesigning labs to support the transition to an NGSS classroom. Educators will experience two versions of a JASON lab, one created pre-NGSS, and the other a newly designed NGSS version. We will examine specific modifications and the strategies and tools used to make the adaptations through hands-on experience, discussion, and the use of the EQuIP rubric. Toward the end of the session, educators are invited to examine a “tried and true” lesson of their own and apply these new strategies and tools to make future modifications. Come prepared to share ideas and engage in this deconstruct and redesign discourse.

Deconstructing Performance Expectations for an NGSS Classroom

All grade levels

Thursday, March 2, 2017 8:30am – 3:00pm at LEARN, Old Lyme, CT [Register]

Tuesday, March 21, 2017 9:00am – 3:30pm at EastConn, Windham, CT [Register]

Participants will explore the Next Generation Science Standards in more depth and participate in discussions and analyses of how educators can begin to implement 3-dimensional learning. Participants will be introduced to new lesson planning tools and strategies to begin embracing NGSS pedagogy whether it’s with existing lessons or with new materials and resources. Using activities from JASON’s Climate: Seas of Change, participants will unpack a performance expectation (MS- ESS2-6), specifically looking at how climate is created, climate modifiers, and the relationship between wind patterns and ocean circulation. While using JASON

resources to explore what 3-dimensional learning looks like, this experience is intended to empower educators to apply and adapt these tools and strategies to meet the needs of their school's curricula and classroom settings.

JASON's Earth Science through an NGSS Lens

Recommended for grades 5-9

Tuesday, November 8, 2016 8:30am

– 3:00pm [\[Register \]](#)

East Hartford Middle School

Experience Tectonic Fury, JASON's earth science curriculum, as we explore the slow and fast processes that have shaped the earth. We will examine both the CT Science Frameworks and NGSS and share newly developed tools and strategies for identifying central phenomena and incorporating 3-dimensional elements. This session is especially helpful for teachers already using Tectonic Fury or other JASON modules in their classrooms who need support as to how to use these resources and lessons to support the transition to NGSS.



What Is Science Matters? Science Matters is an initiative by the National Science Teachers Association (NSTA) to bring content, news, and information that supports quality science education to parents and teachers nationwide. Science Matters builds on the success of the Building a Presence for Science program, first launched in 1997 as an e-networking initiative to assist teachers of science with professional development opportunities. Building a Presence for Science—now Science Matters—reaches readers in 34 states and the District of Columbia. Why does Science Matter? Science is critical to understanding the world around us. Most Americans feel that they received a good education and that their children will as well. Unfortunately, not many are aware that international tests show that American students are simply not performing well in science when compared to students in other countries. Many students (and their parents!) believe that science is irrelevant to their lives. Innovation leads to new products and processes that sustain our economy, and this innovation depends on a solid knowledge base in science, math, and engineering. All jobs of the future will require a basic understanding of math and science. The most recent ten year employment projections by the U.S. Labor Department show that of the 20 fastest growing occupations projected for 2014, 15 of them require significant mathematics or science preparation to successfully compete for a job. This is why Science Matters. Quality learning experiences in the sciences—starting at an early age—are critical to science literacy and our future workforce. Feel free to publish this information in school newsletters and bulletins, and share it with other parents, teachers, and administrators.