

CONNECTICUT SCIENCE CONNECTION

November 2016

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

State Coordinator.David Lopath List Moderator..Eloise Farmer lopath@comcast.net eloisef302@gmail.com

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

Resources

CSDE's science curriculum web site.

Visit the NGSS@NSTA Hub: The NGSS@NSTA Hub now offers a dynamic version of the Next Generation Science Standards..

SAVE THE DATE! CONNECTICUT SCIENCE SUPERVISORS

ASSOCIATION: All educators welcome! DATE: Wednesday, December 7, 5:30 - 8:30pm. It is at the Radisson in Cromwell, which last year was the Crowne Plaza Hotel. Social Time, meet w/ Sponsoring Exhibitor 4:30-5:30 PM,.
Buffet Dinner and CSSA Professional Development Meeting 5:30-7:30. To register and for more info, click on: http://www.cssaonline.org/dinnermeetings.html

Save the date for this year's CSTA/CSSA Connecticut Science Education Conference, Saturday, November 19.

This year's conference is packed with quality presentations for educators at all grade levels.. You can register now via the current website!

2016 Science Debate: 20 Answers

Three of the four major candidates for United States president have responded to America's Top 20 Presidential Science, Engineering, Technology, Health, and Environmental Questions. The nonprofit advocacy group ScienceDebate.org has posted their responses online, where you can read what they have to say about issues like biodiversity, climate change, and education.



CSTA's 2016 - 2017 Excellence In Science Teaching Awards Nominations due November 30, 2016

Please consider nominating a deserving colleague! The nominating process is easy - either email your nomination, including the Name, Address, and

Grade Level of the nominee, or send it in the mail to:

Ralph Yulo, Box 217, Eastford, CT 06242;

Nominations for CSTA's 2014 - 2015 Excellence In Science Teaching (EST) Awards must be postmarked no later than Monday, November 30, 2016; Please check the criteria for the EST awards before nominating.

NSTA TEACHER AWARDS: APPLY NOW

NSTA has issued a call for entries for its 2016–2017 awards program, which recognizes exceptional and innovative science educators. NSTA Awards and Recognitions were created to raise awareness of and gain exposure for the outstanding work being done in the science education field. More than a dozen awards are available, recognizing educators in varied science fields and at every career level. All entries must be received by 11:59 p.m. Eastern Time December 15, 2016, via online submission, with the exception of the Shell Science Teaching Award, for which applications must be completed by January 6, 2017. No entry fees are required for NSTA Teacher Awards.

ENVIRONMENTAL GRANT PROGRAM – APPLICATIONS NOW BEING ACCEPTED!

The Connecticut Chapter of the Society of Women Environmental Professionals (SWEP-CT) is now accepting applications for our 2016-2017 Environmental Grant Program. This grant program provides non-profit community based groups and educational organizations with up to \$2000 in funding for local projects that benefit the environment in Connecticut. Note that the grant application deadline is **November 15th, 2016**. For examples of groups and projects that have received funding in the past, please visit our website www.swep-ct.org. You can also download application forms on our website.

We encourage you to forward notice of the program and application process to groups and schools in your community. The SWEP Executive Committee will review each application and select Grantees in December. Awards will be made in January 2017. If you have any questions about SWEP-CT's Environmental Grant Program and application process, please contact Melody Christopher at melody.b.christopher@us.abb.com or 860-969-5306.

CONNECTICUT INVENTION CONVENTION

- C1. Go to our website www.ctinventionconvention.org
- 2. Click on the **TEACHERS** banner
- 3. Click on REGISTER YOUR SCHOOL
- 4. Click on the **Registration Link** on the right side Last year was great, but this year will be even better!

Register Your School NOW and Start Planning Your CIC Program

For complete information about the **School and Student Registration process** please click HERE

The school registration portal is now open! CLICK HERE

You can now register your school

Find Your Science Education Solutions

Join NSTA and Martian author Andy Weir for an out-of-this-world experience at the

2017 National Conference in Los Angeles March 30 to April 2. Registration is now open, and early bird pricing is in effect Learn more about the conference, and download a letter to bring to your principal detailing the reasons you need to attend and the professional development you will gain.

A Coming Crisis in Teaching?

The United States could be faced with a shortage of more than 100,000 teachers annually by 2025 says a new <u>report</u> from The Learning Policy Institute . Four main factors are driving the emerging teacher shortage: a decline in teacher preparation enrollments, district efforts to return to pre-recession pupil-teacher ratios, increasing student enrollment, and high teacher attrition . Check out the interactive state map to see if your state will have an adequate supply of qualified teachers.

SCIENCE TEACHERS!

HELP DETERMINE WHAT FACTORS CONTRIBUTE TO COASTAL LITERACY AMONG HIGH SCHOOL STUDENTS IN CT

WHAT IS REQUIRED:

- > Short 15-20 minute surveys for students and teachers; twice a year
- > Potential for enrollment in a fully funded marine science-based educational program

ENROLL NOW!

Please Contact:

- Dr. Michael Finiguerra, University of Connecticut, Ecology and Evolutionary Biology: Michael.Finiguerra@uconn.edu
- Dr. Rachael Gabriel, University of Connecticut, NEAG School of Education: Rachael.Gabriel@uconn.edu

The development of coastal literacy in the future generations is vital for the protection and conservation of Connecticut's coasts.

CT Sea Grant Project Program

UCONN

Planet Protecting Superheroes Presenter: Vanessa LeBourdais

Thursday, November 3 2016 7:30-8:30pm EST Register

Using story, arts and gamification to engage diverselearners in environmental education. Vanessa LeBourdais is the Executive Producer and Creative Director at DreamRider Productions a national Canadian environmental education charity. Over the past 18 years, Vanessa's and her team's arts-based and digital programs on zero waste, climate, water and littering have reached over 900,000 elementary school children in 900+ schools in five provinces. Their latest digital classroom resource, the Planet Protector Academy won the 2015 TELUS Innovation Award, is now in five Canadian provinces, and is launching in the US this fall. Not yet a Green LEAF School? Learn how to register.

Preference given registered CT Green LEAF Schools!!

Get involved! Teen Volunteer Open House Learn about our two award-winning teen volunteer programs: the Conservation Discovery Corps and Explorer Post Who: High School Teens with Parents/Guardians

When: 6:30-8 pm - come either Thursday, November 3rd or Thursday, December 1st Where: Hanson Exploration Station Connecticut's Beardsley Zoo, 1875 Noble Avenue in Bridgeport, CT For more information visit our website www.beardsleyzoo.org or call 203 394 6563



Open Access for Public School Educators & Students in Connecticut Through 2018!

www.jason.org

Register using your school email address for free instant access

Professional Development Schedule Connecticut 2016-17

Intended audience: Administrators, curriculum directors, science coaches, team leaders, and science teachers. See descriptions below for additional recommendations. 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.

Register: http://www.jason.org/ct \$25.00/person

JASON's Earth Science through an NGSS Lens (recommended for grades 5-9)

Tuesday, November 8, 2016 at East Hartford Middle School 8:30am – 3:00pm

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 and need support as to how to use these resources and lessons to support the transition to NGSS.

Redesigning Towards an NGSS Classroom (all grade levels)

Monday, December 5, 2016 at LEARN 8:30am – 3:00pm Thursday, December 15, 2016 at EastConn 9:00am – 3:30pm

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 re-design discourse.

Deconstructing Performance Expectations for an NGSS Classroom (all grade levels)

 Thursday, March 2, 2017 at LEARN
 8:30am – 3:00pm

 Tuesday, March 21, 2017 at EastConn
 9:00am – 3:30pm

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.

CRISP Presents:

Math & Science in the Elementary Classroom

Saturday, November 19, 2016 8:30 am – 12:00 pm Southern Connecticut State University, Jennings Hall 113

This workshop will focus on strategies to implement the Common Core State Standards for Mathematics and the Next Generation Science Standards in the elementary classroom. We will look specifically at hands-on math and science topics in grades three through five. Participants will leave with ready-to-use, field-tested STEM activities to engage and excite their students.

Presenters:

Prof. Adam Goldberg, Elementary Education, mathematics Prof. Maria Diamantis, Mathematics

This is a repeat workshop to the Aug. 18th PD. Spaces are limited so register today!

Please register <u>HERE</u> by Nov. 1st. For more info please visit <u>crisp.southernct.edu</u> Participants will receive a \$50 stipend upon completion of pre and post professional development surveys, refreshments and lunch will be provided.

If you have any questions please feel free to contact Carol Jenkins at crisp.mrsec@gmail.com





Connecticut & Rhode Island Regional National Ocean Sciences Bowl

The 20th annual Quahog Bowl will be held: Saturday, February 4, 2017

at the University of Connecticut's Avery Point campus in Groton, Connecticut.

The National Ocean Sciences Bowl (NOSB) is an academic competition for high school students focusing on ocean-related topics. The competition combines rapid-fire question and answer with Team Challenge Questions, requiring analysis and synthesis of scientific data and/or concepts.

For more information about the competition, how to form a team, competition rules and much more, please go to http://www.nosb.org/

To indicate your interest in participating in the Quahog Bowl, **send an email** to Diana Payne, Regional Coordinator at diana.payne@uconn.edu. No phone calls, texts or walk-ups will be accepted. Space is limited, and teams are accepted on a first come, first served basis. Coaches will be notified that their inquiry has been received, although this is not a guarantee of a position in the competition. Final status will be determined in mid-October. Coaches must participate in a <a href="mailto:ma

The winning team from the Quahog Bowl will compete in the national finals April 20-23, 2017 in Corvallis, Oregon.



C.E.S. Presents Teaching and Learning in 3D: An Orientation for Next Generation Science Standards

This <u>three-part</u> workshop will orient science teachers and school leaders to the changes in the Next Generation Science Standards. The vision of the Next Generation Science Standards is to intertwine the three dimensions of the standards (disciplinary core ideas, crosscutting concepts, and science and engineering practices) in a way that engages students in science and allows them to transfer learning and problem solving skills to the real world.

Day 1 November 21, 2016	Participants will learn the history of science reform and about the events leading up to these reform efforts. In addition, participants will develop a deep understanding of the structure of the Next Generation Science Standards and learn about the implications of its revolutionary design on classroom practice. The format of the day involves group work, discussion, and application of ideas and content.	9:00 a.m. – 3:30 p.m.
Day 2 December 13, 2016	Participants will engage in science and engineering practices to use disciplinary core ideas and crosscutting concepts to explain phenomena or to solve problems; this is the essence of three dimensional learning. Participants will engage in a phenomena-driven a Next Generation Science Standards unit. This engagement will deepen understanding of a storyline-style curricular unit, and it will showcase instructional practices that align with the vision of the Next Generation Science Standards.	9:00 a.m. – 3:30 p.m.
Day 3 January 26, 2017	The integrated learning envisioned by the three dimensions of the Next Generation Science Standards requires new modes of assessment that measure student progress in terms of core ideas and the application of the science and engineering practices and crosscutting concepts. Workshop participants will engage in a variety of assessments that can be used to inform instructional practice, and they will assess student achievement and Next Generation Science Standards progression. Participants will develop lesson-based performance expectations and corresponding assessments that meet the three-dimensional vision of the Next Generation Science Standards.	9:00 a.m. – 3:30 p.m.

Presenter: Jaime Rechenberg, CREC Cost: \$ 295 Lunch Provided

Location C.E.S. 40 Lindeman Drive, Trumbull, CT

Register Online: www.ces.k12.ct.us/pdworkshops

[&]quot;It is the policy of C.E.S. that no person shall be excluded from participation in, denied the benefits of, or otherwise discriminated against under any service or program on account of race, color, religious creed, age, marital or civil union status, national origin, sex, sexual orientation, gender identity or expression, ancestry, residence, present or past history of mental disorder, mental retardation, learning disability or physical disability including, but not limited to, blindness, or pregnan-cy and provides equal access to the Boy Scouts and other designated youth groups. Inquiries regarding C.E.S. nondiscrimination policies should be directed to the Associate Executive Director's office, C.E.S., 40 Lindeman Dr., Trumbull, CT 06611, (203) 365-8831."



Times for <u>all</u> sessions:

Registration: 4:00pm Session: 4:30pm to 6:00pm Reception: 6:00pm to 7:00pm Hor d'oeuvres and beverages

Wednesday, November 9, 2016 Crowne Plaza Hotel Stamford 2701 Summer St, Stamford

Thursday, November 10, 2016 Holiday Inn Bridgeport 1070 Main Street, Bridgeport

Tuesday, November 15, 2016Courtyard New Haven at Yale
30 Whalley Ave, New Haven

Thursday, November 17, 2016 Holiday Inn Downtown Hartford 100 East River Drive, East Hartford

Please register by: October 21st

NGSS Awareness Sessions

Registration

Please contact Jenn Reid Strong with any registration questions: jenn.reid@schoolspecialty.com 800.338.5270 x3453

For more information about FOSS in CT, contact:
Jacob Kane
jacob.kane@schoolspecialty.com
585.354.6888

Meeting the Next Generation Science Standards in Connecticut

The FOSS Leadership Team at Delta Education is pleased to offer four Next Generation Science Standards (NGSS) Awareness workshops for elementary and middle school administrators, curriculum directors, science coordinators, specialists, and science lead teachers. Please come and explore how instructional materials designed for the Next Generation Science Standards can build understanding of the Disciplinary Core Ideas (DCI), engage in Science and Engineering Practices (SEP), and develop Crosscutting Concepts (CC). Choose one session that best fits your schedule and availability.

Topics that will be addressed:

- Implementing a successful program to meet the new Science Standards of the Next Generation
- Engaging with the three dimensions of NGSS to produce meaningful active learning experiences
- Exploring instructional designs and conceptual frameworks
- Experiencing effective implementation strategies for teachers
- Developing understanding of core ideas in science
- Teaching strategies, active investigations, using science notebooks, assessment, literacy components, and online activities will focus on the three dimensions of NGSS

FOSS Next Generation is designed to help your students, over years, develop more sophisticated ways to think about the core ideas of science. Modules are truly connected and build upon one another within and across each strand, progressively moving students toward the big idea of science.

Come see what the Next Generation Edition has to offer you!

Please join one of the <u>four</u> informational sessions that will be hosted in CT during the month of November. You will experience hands-on learning within the FOSS Next Generation program, a chance to network with science educators and leaders, and a chance to walk away with a FOSS Next Generation Test Drive kit.

The following notices were published in the October CSC, but are still current.

Imagine Nation

The CIC has teamed up with wonderful and very schedules, please click on: schools/curriculum-materials-

Imagine Nation – A Museum Early Learning Center located in Bristol, CT is committed to the development of inquisitive and imaginative life-long learners. Our unique environment inspires young children and families to investigate tangible, interactive learning experiences. The Imagine Nation community encourages and supports curiosity, critical thinking, creativity, confidence and citizenship. Learn more!



The PD session schedule

for this Fall.

CREC's Institute of Teaching and Learning to present two valuable types of PD sessions. For more information on http://www.ctinventionconvention.org/teachers-and-and-resources





Ted Willard, NSTA Keynote Speaker NGSS Resources



TJ McKenna Connecticut Science Center Using Phenomena

State Department of Education Assessment and Implementation

Here are samples of some of this year's 80 workshops that cross all disciplines!

Elementary

- STEM: Discovering Elementary
- Engineering
- NGSS in the Digital Classroom

Middle School

- NGSS: Exploring Waves and their Applications
- Car Crash Course in 3-D Learning

High School

- Newton's Laws: Not Just for Physics Anymore!
- Creative Clay Anatomy: Explore Structure of the Human Body

General Interest

- Implementing ESRI GIS Geoinquires in the Classroom
- Make Your Students NASA scientists with GAVRT

NGSS Learning

- PBL for NGSS Crosscutting and Engineering Practices
- Introducing Argumentation Sudoku & the Mystery Cube

Professional Development

- Learn from Scientists and Teachers Worldwide
- · NGSS Roundtable Discussion

Check out our full conference program and register at www.csta-us.org.





Are you looking for \$500 to \$1500 to boost your school recycling program? This grant is open again. Apply by November 15, 2016

Note: there is also a \$2500 to \$10,000 Innovation Grant available, application due 1.20.17.



TRAINING! From our Guru of Safety Ken Roy! The annual calendar for the Science Safety Workshop Series is ready! I've attached the overview and more specific details about each workshop along with registration information can be found at

:http://www.wesleyan.edu/greenstreet/professionaldev/sciencesafety.html. This year we are excited to announce that each registration includes a copy of Dr. Ken Roy's latest

book – *Science Laboratory Safety Manual.* A \$99 value with over 450 pages of legal safety standards, best practices, and more for your reference!

October 13, 2016 – Developing and Updating a Chemical Hygiene Plan

October 27, 2016 – Training for Chemical Hygiene Officers

November 10, 2016 – Chemical Management Safety

December 1, 2016 – Safety in Technology Education and Engineering Labs

February 16, 2017 – Safety in the Art Classroom/Studio

March 9, 2017 – Safety in the Next Generation Science Standards (NGSS)

March 23, 2017 – Science Lab Safety and Liability for Administrators

Please share the 2016-2017 Science Safety Workshop Series with your colleagues and be in touch if you have any questions about registration.

- Connecticut Green LEAF Schools has been awarded a Teacher Quality Partnership Grant through the CT Office of Higher Education. . More information about Connecticut Green LEAF Schools can be found at www.ctgreenleaf.org
- NEW MATERIALS AND PROJECTS FROM NASA! https://www.nasa.gov/audience/foreducators/index.html

UConn's Nature & The Environment: The Edwin Way Teale Lecture Series

2016-2017 Lecture Series



The Edwin Way Teale Lecture Series developed as a joint effort of a number of departments, out of discussions initiated in 1995 by faculty members and graduate students with common interests in the many facets of environmental issues. The Lecture Series is designed to bring a variety of distinguished speakers to the University to speak on various aspects of nature and the environment.

All lectures are free, open to the public and, unless otherwise noted, held at 4:00 pm in the Konover Auditorium at the Thomas J. Dodd Research Center

Downloadable PDF.pdf poster for the lecture series.

The UConn Museum and Archeology Center has much to offer this fall. From Poultry to Penguins! What Came After UConn, Mystic Aquarium Saturday, November 12, 3 pm – Biology/Physics Building, Room 130, UConn. Mystic The Botany of Thanksgiving

Dr. Pamela Diggle, Ecology and Evolutionary Biology, UConn

Saturday, November 19, 1 pm - Biology/Physics Building, Room 130, UConn

In the eyes of a botanist, the year's biggest meal is a celebration of the plants in our lives: the potatoes, carrots, cloves, lettuce, celery and sage, and of all the holiday foods that people savor, from stuffing to cranberry sauce to pumpkin pie. Turkey may be the star of the day, but the plants on the menu give it that extra oomph. Thanksgiving's plants are just doing what we all do: making a living, setting something aside for a rainy day, and looking for love. It's the strategies that particular plants employ in those pursuits that make them delectable. Explore the biology of the plants we eat, what makes them so delicious, and role of that deliciousness in the lives of those familiar plants



Subject: \$1000 Scholarships for Amazon Rainforest PD Workshop Educator Academy in the Amazon Rainforest + Machu Picchu The July 1-11, 2017 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: 5E Lesson Design ~ Inquiry-Based Exploration ~ STEM

Inquiry Protocols & Resources: Project Learning Tree ~ Cornell Lab of Ornithology ~ & More!

Global and Cultural Perspectives: Service Learning ~ Sustainability ~ Global Education

Join Al Stenstrup, Project Learning Tree; Dr. Nancy Trautmann, Cornell Lab of Ornithology; Dr. David Pearson,

Wildlife Travellers' Guide to Peru; along with scientists Dr. Steve Madigosky, Widener University; and Randy Morgan,

Curator/Entomologist, Cincinnati Zoo as you:

Participate in citizen science projects and inquiry based field studies on a 1/4-mile Rainforest Canopy Walkway in one of the most biologically diverse environments on the planet.

Spend a day in an Amazon village as you explore the complexities of sustainability and the role of education in creating a sustainable future for Amazon children.

Work with fellow educators to explore strategies for using the Amazon as a vehicle for incorporating STEM education, inquiry-based learning, and sustainability science education into your classroom.

PLT Certification, BirdSleuth resources and 50 Arizona State University PD Hours included. Academic credit and Machu Picchu extension optional. \$1000 scholarship deadline February 1, 2017. With a scholarship, program fees are \$1375 + air. Space is limited to 30 educators! Register early to secure your spot!

Get the details and download a syllabus and scholarship application at: http://www.amazonworkshops.com/educator-academy.html Contact christa@amazonworkshop s.com or 1-800-431-2624 for more information.

Travel the world affordably, earn professional development credit, and bring global understanding into your classroom! Founded in 2007, Global Exploration for Educators Organization (GEEO) is a 501c3 non-profit organization that has sent over 1600 teachers abroad on adventurous travel programs. With GEEO educators can earn professional development credits and optional graduate credit while seeing the world. GEEO's trips are 7 to 21 days in length and are designed and discounted to be interesting and affordable for teachers. In addition to amazing tour leaders, many of the programs are accompanied by university faculty that are experts on the destination. The deposit is \$250 for each program and then the final payment is due 60 days before departure.

GEEO also provides teachers educational materials and the structure to help them bring their experiences into the classroom. The trips are open to all nationalities of K-12 and university educators, administrators, retired educators, as well as educators' guests. GEEO is offering the following travel programs for 2016: Bali/Lombok, Bangkok to Hanoi, China, Costa Rica, Eastern Europe, The Galapagos Islands, Greece, Iceland, India/Nepal, Bhutan, Ireland, Armenia/Georgia, Italy, Multi-Stan, Antarctica, Morocco, Myanmar (Burma), Peruvian Amazon, Peruvian Andes, Southern Africa, Vietnam/Cambodia, Balkans and, a Mt. Kilimanjaro climb. The registration deadline is June 1st, but space is limited and many programs will be full well before the deadline.

Detailed information about each trip, including itineraries, costs, travel dates, and more can be found at www.geeo.org. GEEO can be reached 7 days a week, toll-free at 1-877-600-0105 between 9 AM-9 PM EST.



Population Education's *World of 7* Billion student video contest is back for the 2016-2017 school year. Would you consider helping us spread the word to Connecticut environmental educators? The contest is open to all high school and middle school students and the deadline for submissions is February 23th, 2017. We're hoping that

by giving teachers enough lead time, they'll be able to incorporate the contest into their syllabi. Participating teachers can receive free curriculum resources and the student winners receive cash prizes.

This year's challenge:

Students will create a short video (up to 60 seconds) about human population growth that highlights one of the following global challenges:

- Climate Change
- Ocean Health
- Rapid Urbanization

*All videos must include a) how population growth impacts the issue, and b) at least one idea for a sustainable solution. We are happy to send copies of our <u>contest flyer</u> for you to share with environmental education teachers.

Below you'll also find a short blurb to include in your newsletter, sent out on your ListServ, or included in any other NAAEE outreach. We are looking forward to the videos students from Connecticut create. Please don't hesitate to contact us if you have any questions.

World of 7 Billion: www.Worldof7Billion.org Population Education: www.PopulationEducation.org



Earthwatch Teach Earth USA Fellowships:

Extraordinary Teachers, Inspiration in the Classroom

Teach Earth is built upon the principle that every individual can contribute to a sustainable planet, regardless of scientific background or skill. Each year, we select talented teachers from all subject areas to work side by side with world-class scientists

on field research expeditions around the world. From the edge of the Arctic to the coast of Maine, these teachers collect data on climate change, ecology, wildlife, and more. Teachers have the opportunity to learn the scientific process first hand and help to solve some of the world's most pressing environmental challenges. Teachers return to the classroom with new perspectives and knowledge, invigorated and inspired to share the experience of real discovery with their students.. Interested in learning more? Click on http://earthwatch.org/education/teacher-fellowships/teach-earth-united-states

In response to concerns about the date, we have moved the date and location of the

Eastern Regional Event Sunday, April 9 at Goodwin College, East Hartford

The dates and locations of all the other Regional Events will remain the same.



CLICK HERE for a CLEAR, SHARP PDF file of this information

Regional Events Info After competing in a Local Invention Convention, selected students must then be registered for the Regional Event DATE REGIONAL LOCATION SCHOOLS IN THESE COUNTIES REGISTER BY 3/25 Southern Quinnipiac Univ, Hamden New Haven & Middlesex 3/18 4/1 Western Western CT S.U., Danbury Fairfield & Litchfield 3/25 4/8 Central Goodwin College, E Hartford Hartford 4/1 4/9 Eastern Goodwin College, E Hartford Tolland, Windham & New London 4/1 *NEW DATE & LOCATION a. Student must be registered in the Regional Event for your school before the Register By date. b. Your students must attend the Regional Event of the counties where your school is located. You cannot change the Regional Event they attend. c. Students must participate in a Regional Event before they can be invited to the CIC Finals on April 29, 2017. d. Teachers or parents must register students and pay \$20 per student, paid by Credit Card. e. If school is paying by invoice, then teachers must register the student, and forward the invoice to their billing office for prompt payment. Student registration fees must be paid before students can attend the Regional Event. f. Unpaid entrants will not be allowed to participate. Please plan for this expense and the payment process in advance. g. At the Regional Events, inventors will receive CIC Regional shirt, Certificate of Participation and other goodies, and will participate in Judging Circles just like they will at the CIC Finals. h. More detailed information about the location, schedule and activities at the Regionals will be sent later.

Understanding Ebola Virus Disease

This free, digital learning resource for teachers, students, and the general public lets the user explore important factors that contribute to the spread of Ebola and discover how these factors can interact to produce an epidemic.

The *Understanding Ebola Virus Disease* resource is composed of the following sections and includes an optional knowledge survey.

Introduction

Modeling Disease

Ebola Virus Characteristics

Medical Response to the Ebola Outbreak

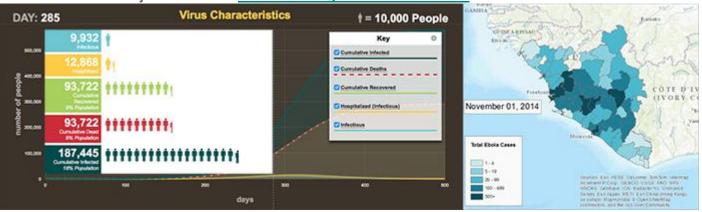
Putting the Virus Model Together

Mapping Disease

Ebola and Population Density

Locating Treatment Centers

About the ProjectAccess the Understanding Ebola Virus Disease resource



NGSS K-8 Evidence Statements Now Available
The NGSS Evidence Statements for elementary grades (K-5) and middle grades (6-8) are now available. These statements were developed and reviewed by educators and scientists, including many members of the NGSS writing team. The evidence statements are intended to identify clear, measurable components that, if met, fully satisfy each performance expectation (PE) described within the NGSS. Given that each PE is three-dimensional, the statements describe how students can use the practices, crosscutting concepts, and disciplinary core ideas together to demonstrate proficiency on the PEs by the end of instruction. They are not meant to limit or dictate instruction and were

written to allow for multiple methods and contexts of performance, including students' performance on multiple related PEs together at the same time.

For more information, see the Introduction and Overview, which applies to the evidence statements for all grade levels. Additional materials, including appendices for K-2, 3-5, and middle school are coming soon.

AN IMPORTANT LINK FOR EDUCATORS TO VISIT FOR INFORMATION ON THE STATUS OF SCIENCE STANDARDS IN CONNECTICUT: http://www.sde.ct.gov/sde/cwp/view.asp?a=2683&Q=333862



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.