

**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](mailto:lopath@comcast.net) , List Moderator..Eloise Farmer [eloisef302@gmail.com](mailto:eloisef302@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

some distance learning ideas? This may help you to get through the difficult times we are experiencing. Visit [CSTA.wildapricot.org](http://CSTA.wildapricot.org) and click on Opportunities. You will not be disappointed. Contact us if you have questions.

<https://csta.wildapricot.org/>



Join the CSSA!

[www.cssaonline.org](http://www.cssaonline.org)

All Teacher leaders

welcome You do not have to be in a formal Supervisor Position, but should be interested in helping keep your colleagues informed on the latest in science education. At this time, we hope to provide support to teachers in a leadership situation.

**BOOKMARK THIS SITE!**

The Connecticut State Department of Education wants to provide valuable resources to the field and is continually working to make these resources easy to find in one central location. Therefore, beginning January 1, 2020, the CTCoreStandards.org website will no longer be operational. All of these resources have been moved to the CSDE website at

<https://portal.ct.gov/SDE>. They can be accessed under K-12 Education, Academics, CT Core Standards. The direct link is

<https://portal.ct.gov/SDE/CT-Core-Standards>. Please bookmark this for future reference.

A special sad note: Bob Wisner has died. You may recall that Bob Wisner was a key participant with the Connecticut Science Fair for many years. Bob was an incredible voice for science and engineering, both through his career at the United Technologies Research Center and Otis, and in his leadership of the Connecticut Science and Engineering Fair for 40+ years.

Bob served on various Academy study committees and was honored by the Academy for his distinguished service. He was presently serving on the Academy's Governing Council. He will be missed.

**COV-Ed Website: A Partnership between Yale School of Medicine and CT State Department of Education**

*COVID-19 looms over us like a menacing force, and here you will find the tools to make a difference for yourselves, for your families, and for your communities. In this on-line learning tool, follow the story of 3 high school students as they encounter the pandemic. Learn how COVID-19 works, why it spreads, and what you can do to help contain it. Run the same simulation tools that experts in the field are using, learn to draw conclusions from data, and explore potential solutions even as you build the skills to help prevent pandemics in the future.*

**COV-Ed Website description**



Join us onsite or online for some STEM-themed activities and interactive discussions with some career professionals. STEM Family Week highlights the real-world applications of this important work through Mini Career Showcases, Lunch Bunch experiences spotlighting leaders from across the state, Down to a Science blog posts detailing at-home activities, and much more. All programs are free and registration is not required.

**Teach. Play. Win. Be a Climate Superstar This October!**

Think your students have what it takes to tackle the 2020 Climate Superstars Challenge? This 10-day online environmental challenge will get kids excited about the environment and teach them the value of collaboration. Plus, if your classroom completes at least 7 out of 10 tasks, you'll have the chance to win a Samsung Flip 2 digital flip chart !

#### **Who Can Enter?**

US middle school teachers (grades 6-8).\*

#### **How Does it Work?**

Register your class online and visit the Climate Superstars portal each school day during the contest period to discover your daily task and record your activities.

#### **What Are Tasks?**

Tasks are short learning activities, roughly 10-15 minutes each, and may include taking a quiz about energy use or answering questions about local climate.

#### **How Do I Win?**

You will earn one point for each completed task. Classrooms that earn at least 7 points by midnight on October 30 will be entered into a drawing for a Samsung Flip 2 digital flipchart, courtesy of Samsung.

#### **Why Should I Enter?**

Participation in the Climate Superstars Challenge is free! All tasks can be performed virtually or in-person, align with NGSS standards and many common science themes, and require no additional materials.

Sign up today to receive your free Educators Guide with suggestions of how to include tasks into lesson plans, tools to explore topics further, and more! Visit <https://www.neefusa.org/education/climate-superstars> to get started.

Earth@Home is your free online toolkit for learning about Earth and its 4.5-billion-year history.

We are excited to share that PRI has developed a free new online learning platform designed to help anyone in the United States learn about the Earth where they live. [Earth@Home™](#) is rich with interactive content about Earth and its life, with a focus on geology, paleontology, climate, and the connections of Earth's different systems.

The major components of this new online platform include regionally-based guides to Earth science, an online, open-access Earth science textbook, and virtual fieldwork experiences that will bring Earth science to the online classroom. We encourage you to use the regional guides to learn about local geology and the landscape right outside your backdoor!

[Earth@Home™](#) aims to teach everyone about the natural environment where they live. The open-access Earth science textbook and virtual fieldwork experiences, which are accessible to all learners, will also help educators create robust Earth science lesson plans and offer free learning resources for their students to utilize.

This website will continue to grow considerably over the next several years and we can't wait to share updates with you! Be sure to sign up with your email address on [Earth@Home™](#) to receive updates and notifications whenever new resources are added.

From Bob Riddle: To sign up for ISS sightings: <https://spotthestation.nasa.gov/>

General article - [How to Reopen Schools: What Science and Other Countries Teach Us](#) - New York Times, July 11, 2020. What concerns to you have about reopening your science class? Let us know at [ctsciteachers@gmail.com](mailto:ctsciteachers@gmail.com)



[CT Envirothon](#) is a natural resource based education program that was started in 1992 by the state's Soil and Water Conservation Districts. High School Students work in teams led by a teacher/advisor. During the school year, teams receive curriculum materials and are invited to a series of training workshops in the Envirothon Study Areas of Soils, Aquatics, Wildlife, Forestry and a Current Environmental Issue. These workshops are presented by foresters, soil scientists, aquatic ecologists, wildlife biologists, and many others. Students really benefit from meeting people working in a broad range of environmental careers. Teachers also benefit and find the program a wonderful source of networking and professional growth for their own careers. Envirothon Team members may come from a Science Class, a Vocational Agricultural program or an after school club. Teams are also encouraged to get involved in some kind of environmental service project in their local communities such as building trails, planting trees or river buffers or restoring wildlife habitats. In May, teams meet for a fun filled all day field competition at a park, camp or nature preserve. They are challenged to work together to answer questions and conduct hands-on investigations. Each team also prepares a short oral presentation on a real life environmental problem that is presented to the teams each year as a Current Issue. The winning team earns the chance to represent Connecticut at the North American Envirothon, a

weeklong event held at a college campus in the summer. They compete with about 60 teams from across the USA and Canada for scholarships and other prizes. Many Envirothon Alumni go on to further study leading to environmental careers and are eligible for special scholarships. We hope they become environmentally aware adults with a real dedication to stewardship of our precious natural resources. This year the workshops and activities will be virtual. Mindy Gosselin Connecticut Envirothon Program Assistant, [mgosselin@conservect.org](mailto:mgosselin@conservect.org)

The [Maritime Aquarium in Norwalk](#) is currently open. Visitors do have to [reserve times ahead of their visit](#) to ensure crowd control. The [research vessel Revolution](#) is also cruising Long Island Sound.

#### About Young Women in Bio



Young Women In Bio (YWIB) gives girls the

inspiration and support they need to become tomorrow's leaders in science, technology, engineering and math (STEM). As a nonprofit with 13 chapters across the U.S. and Canada, we partner with leading companies, universities, hospitals and organizations to develop engaging, educational and motivational programs. We aspire to be the "go to" organization for girls looking to shape and change the world through STEM, providing them with the tools and resources they need to build successful careers.

To learn more about YWIB, local chapters events or Spring into STEM, please visit: <http://www.womeninbio.org/ywib>

## Teaching Science During a Pandemic A National Study of K–12 Science Instruction

Science teachers, from Kindergarten to 12<sup>th</sup> grade, are critical for providing accurate and timely information about urgent health-related issues like coronavirus/COVID-19. But how do teachers respond when important and urgent issues like these emerge? How do they decide whether to address these issues in their teaching? What types of resources do they draw on to design instruction?

With a grant from the National Science Foundation, researchers are trying to answer these questions about coronavirus/COVID-19. *Whether or not you taught about coronavirus/COVID-19, we need your help.* The goal is to have over 3,000 science teachers across the country complete an online questionnaire. The results will inform how science teachers respond to coronavirus/COVID-19, as well as future urgent and emerging health issues. All teachers who complete a survey will be entered into a drawing for 1 of 50 \$100 cash awards. To read more and register for the study, please follow [this link](#).

### [NSTA's Daily Do](#)

Check out three Daily Dos, featured below, from the NSTA collection. Share your photos of your class and/or students with their families completing these Daily Dos with us on Twitter @NSTA #DailyDo and explore our entire [collection](#) of Daily Do sensemaking tasks.

- Elementary: [How Do We Find Patterns in Weather?](#)
- Middle: [What's in an Egg?](#)
- High School: [Why Is Water Sphere-Shaped in Space?](#)

### [Quality Examples of Science Lessons and Units](#)

Achieve's EQuIP Peer Review Panel for Science (PRP) uses the EQuIP Rubric for Science to evaluate instructional materials and identify [lessons and units that best illustrate the cognitive demands of the NGSS](#). Explore this featured resource for [high school: Interactions Unit 2 – How Does a Small Spark Trigger a Huge Explosion?](#)

### [Science Learning Activities for Families](#)

Learning in Places has created [activities](#) for K–3 students and their families to engage in science in the places they live. Learn about and explore socio-ecological systems in your neighborhood by taking wondering walks, making observations, asking "should we" questions, modeling data and relationships, conducting investigations, analyzing data, and offering explanations. Explore this featured resource: [LE 1.B Family Learning Across Places](#).



Skills21 at EdAdvance is excited to announce the second year of an opportunity for high school teachers interested in the intersection between STEM subjects and Augmented Reality.

With support from the National Science Foundation, Skills21 is recruiting a cohort of biology high school teachers this year who want to engage their class in using Augmented Reality (AR). Biology teachers will pilot a curriculum unit that incorporates AR apps and design and can be completed in the classroom or as

part of remote learning. Through the Skills21 AR challenge, students in teams or individually will be compelled to develop a product, service or solution to meet a need, solve a problem or capture an opportunity to present at our online Expo Fest in the spring of 2021. These solutions should have a physical prototype and then must be enhanced by creating an augmented reality app to deepen a person's understanding of the solution. Skills21 provides student and teacher coaching and These solutions should have a physical prototype and then must be enhanced by creating an augmented reality app to deepen a person's understanding of the solution. Skills21 provides student and teacher coaching and AR support to guide your students through the process either remotely or in person.

Participating teachers will receive:

- \$1000 stipend for planning, out-of-class time engagement and curricular review

- \$500 for project materials
- Onsite or remote coaching and professional development

Participating teachers will need to:

- Pilot and/or provide feedback on one Augmented Reality unit that teaches

students how to use and create AR apps.

- Facilitate a team or group of students to participate in the 2021 Virtual Expo

Fest to compete in either the NGSS Challenge or Personal Interest Project category that include an AR app

- Allow Skills21 to conduct pre- and post-intervention online surveys with their

students (Fall-early winter 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 is for high school biology teachers that work with traditionally underserved student populations but all should apply. How to Get Involved

Interested teachers should [complete this form](#) or contact Liz Radday (

[radday@edadvance.org](mailto:radday@edadvance.org)) or Matt Mervis (

[mervis@edadvance.org](mailto:mervis@edadvance.org)).

**A link to the CDC recommendations for schools...the 9 page document you have read about in the news can be found here:**

**<https://www.cdc.gov/coronavirus/2019-ncov/downloads/community/School-Admin-K12-readiness-and-planning-tool.pdf>**

CEA's Safe Learning Plan

Delayed openings, staggered schedules, distance learning, and guaranteed funding are among the six specific actions outlined in CEA's Safe Learning Plan that must be taken to ensure safety for all, before schools reopen.

[Read the CEA Safe Learning Plan.](#)

Science Teaching During Coronavirus School Closures—NSTA Is Here to Help

As tens of thousands of schools across the country close their doors in the wake of the coronavirus outbreak, teachers are scrambling to find materials and resources.

To support all educators during this difficult time, NSTA is offering a free 30-day membership, providing you with access to more than 12,000 digital professional learning resources and tools. Simply [create an account here](#) and start developing your own personalized digital learning experience.

Check out the [online resources](#) we have available, including our [Interactive eBooks+](#), [web seminars](#), and [free book chapters](#). Or take advantage of our new lesson plans on the coronavirus for [secondary](#) and [elementary](#) students.

Check out the [NSTA website](#) daily for featured content and tips on how to use these resources.



The following are from the CSTA:

Many thanks to the many teachers who are putting together Distance Learning Activities during this unprecedented event. A page of possible resources -

<https://csta.wildapricot.org/Distance-Learning-Resources/> - that we are continually updating with your

input. Thanks for your contributions. Let us know about any resource that is working for you!

[Join CSTA](#) - New membership plan

*Regular membership - \$20.00*

*Retired teacher membership - \$10.0*

*Pre-service teacher/education student membership - \$10.00*

*First Year Teachers(one time trial membership) - \$10*



As an affiliate of the National Science Teachers Association we recommend membership in NSTA. You can now use the code NSTA20PROF to save \$15 on a [Professional Membership](#). This includes a print copy of the journal of your choice. You can also become and [Associate Member](#) for free. This will enable you to register for the web seminar below and 3 other resources each month.

We are beginning to receive information on student activities, competitions and scholarships. They will be listed on our [website](#). Below are some of the recent ones:

The [Maritime Aquarium in Norwalk](#) is currently open. Visitors do have to [reserve times ahead of their visit](#) to ensure crowd control. The [research vessel Revolution](#) is also cruising Long Island Sound.

In case you have not seen this website, take a look!  
<https://blog.google/products/earth/tips-to-learn-at-home-with-google-earth/>

A spin around the earth with an “I’m Feeling Lucky” button and activities to measure the earth are on this interesting interactive site.  
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[In response to the school's new hybrid learning environments, the New England Science & Sailing Foundation is here to help!](#)

NESS is launching its Shore Support Program—designed to provide in-person support to students grades K-8 for their virtual school days. The program provides a safe learning environment for your students while providing academics with additional science, sailing, and adventure sports enrichment classes.



Every day at NESS students will be provided mentorship and homework help—keeping students engaged in their schools’ online learning. NESS will also provide STEM enrichment classes that are designed to promote socio-emotional benefits and a love of learning.

The Shore Support Program educators will work with parents to determine student's individual needs and create a Shore Support Plan that assists each student in online learning world with the support of NESS educators and NESS SEA AmeriCorps members.

Information on scheduling and sign-ups is coming soon, but we wanted to reach out to tell you about this exciting new program at NESS!

Not every student excels in online learning. Regardless of their challenges, NESS is prepared to support all students by providing the opportunity to utilize NESS resources to actively engage in learning.



Welcome back!

**We invite you to show your love for science and the Connecticut Science Center at Green Gala: ♥ Science on Saturday, October 3. [PURCHASE TICKETS & LEARN MORE](#)**

Join us at the Connecticut Science Center's virtual Green Gala on Saturday, October 3, and support inspiring programs to meet the current and future Science, Technology, Engineering, and Math (STEM) workforce needs of our region. Stay tuned for more event announcements coming soon. Virtual Table Host and Sponsorship opportunities are now available.

Presenting Sponsors: **Harvest Investments and Travelers**



***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.***

