



# CRS

COMMUNITY RESOURCES FOR SCIENCE  
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## Professional Development: With Specific Dates

### July 2021

- 7/29/2021 Elementary Science Learning and Literacy Integration Michigan Mathematics and Science Leadership Network**  
Grades: TK;K;1st;2nd;3rd;4th;5th  
<https://mmslnetwork.wordpress.com/2021/05/28/elementary-science-summer-learning-conversations/>  
**Cost:** free **Stipend:**  
Join the live conversations from 9:00-10:00 am Pacific on Zoom, [HTTPS://TINYURL.COM/ELEMSCILEARNING](https://tinyurl.com/elemscilearning) (ZOOM LINK) or access the recordings on The MMSLN or The Dana Center YouTube.  
The Michigan Mathematics and Science Leadership Network and The Charles A. Dana Center at UT-Austin are hosting several informal virtual conversations around different features of science and engineering education in elementary school.
- 7/26/2021 - NSTA STEM21: Virtual Event National Science Teaching Association**  
**7/30/2021**  
Grades: TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://www.nsta.org/stem21>  
**Cost:** Single Day \$57/107- All Days \$171/266 **Stipend:**  
NSTA's STEM21: Get ready for an exhilarating five days of innovation, inspiration, and connection at the NSTA STEM21 virtual conference. From thought-provoking presentations and sessions, to lively Marketplace partner workshops, to the latest teaching tools and techniques for an evolving educational landscape, NSTA STEM21 will provide YOU with the very best professional learning experience around!  
Each day of the four-day event will concentrate on a different grade level:  
July 26 - early childhood and upper elementary-level educators and administrators  
July 27 - middle-level educators and administrators  
July 28 - high school-level educators and administrators  
July 29 - postsecondary-level educators and administrators  
July 30 - STEM Ecosystems

### August 2021

- 8/3/2021 webinar: Play, Understand, and Build Your Own: How Can Bingo and Trivia American Museum of Natural History**  
Grades: 3rd;4th;5th;6th;7th;8th  
[https://docs.google.com/forms/d/e/1FAIpQLSeDeaWgpRCKfe1S1gatP\\_FMGAjLIGU6F2hT8BKtqCjObkqLxw/viewform?sc](https://docs.google.com/forms/d/e/1FAIpQLSeDeaWgpRCKfe1S1gatP_FMGAjLIGU6F2hT8BKtqCjObkqLxw/viewform?sc)  
**Cost:** free **Stipend:**  
(August 3-4)11:00am-1:00pm PT)) Play, Understand, and Build Your Own: How Can Bingo and Trivia Deepen Family Engagement? How can a simple activity such as trivia or bingo build school community and contribute to deeper, richer family engagement? Join us for "Play, Understand, and Build Your Own" where we will play a round of weather bingo or science trivia that we will unpack through the lens of The Dual Capacity-Building Framework for Family School Partnerships (<https://www.dualcapacity.org/>), and then you and a partner will (using the provided design skeleton) build your own bingo/trivia to use with your families. School-based teams of teachers and parent coordinators are encouraged to apply. Please note: This session includes collaborative learning activities in small groups. We ask that attendees come prepared to participate actively in these activities to the best of their ability.
- 8/3/2021 Webinar: Crosscutting Concepts: Book Study National Science Teaching Association**  
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://my.nsta.org/event/crosscutting-concepts-a-professional-book-study-for-k-12-educators>  
**Cost:** Member price: \$60 Nonmember price: \$75 **Stipend:**  
Tue Aug 3, Aug 10, Aug 17, Aug 24 -- 4:00 PM - 5:30 PM Pacific  
In this four-seminar series, participants explore the crosscutting concepts as one of the three dimensions described in the Framework and the Next Generation Science Standards, and their critical role for science teaching and learning. Particular attention will be given to how the crosscutting concepts can serve as tools to make sense of phenomena and design solutions to problems and how they can broaden access to science for all students.

- 8/4/2021**      **webinar: Analyze and Interpret Data to Investigate How the Blue Whale, th**      **American Museum of Natural History**  
 Grades: 6th;7th;8th;9th;10th;11th;12th  
[https://docs.google.com/forms/d/e/1FAIpQLSf103\\_FAA2BKqyqNFUeM2h\\_96MZ2IzZofpzMBCZjdgfjb6fOg/viewform?source=edit](https://docs.google.com/forms/d/e/1FAIpQLSf103_FAA2BKqyqNFUeM2h_96MZ2IzZofpzMBCZjdgfjb6fOg/viewform?source=edit)  
**Cost:** free      **Stipend:**  
 (August 4 -5,6:30–9:30 am PT) Analyze and Interpret Data to Investigate How the Blue Whale, the Largest Animal to Ever Live, Survives. During this two-day session, we will use curriculum materials designed to facilitate student exploration of data on blue whale feeding behavior. Blue whales are the largest animals that have ever lived. They live by eating massive amounts of small shrimp called krill. Participants will use a set of essays and videos to follow the work of scientists from Stanford's Hopkins Marine Station in Monterey, California. A web-based graphing tool gives students the ability to analyze and interpret blue whale dive data to look for patterns that can help us understand how an organism so large can survive by eating something so small.
- 8/4/2021**      **Webinar: How to Succeed at Growing Plants in the Classroom**      **Carolina Biological**  
 Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://www.carolina.com/knowledge/2021/06/22/live-webinar-how-to-succeed-at-growing-plants-in-the-classroom>  
**Cost:** FREE      **Stipend:**  
 (12:00–1:00 PM PT) Have you thought about teaching with plants and using them in experiments in your classroom, but hesitated? Growing plants in the classroom is one of the easiest ways to introduce students to scientific practices, and Wisconsin Fast Plants® investigations align with 3-dimensional standards at every grade level. As students design robust, engaging experiments, they also build responsibility skills by caring for another living thing.
- 8/4/2021**      **Webinar: Inspire Learning with Student-Created Science Documentaries (**      **KQED**  
 Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
[https://kqed.zoom.us/meeting/register/tZAuc-6qpjstHdQsL1K\\_JaLLwLaG1L-AgJ0U](https://kqed.zoom.us/meeting/register/tZAuc-6qpjstHdQsL1K_JaLLwLaG1L-AgJ0U)  
**Cost:** Free      **Stipend:**  
 Part 1: August 4, 4-6pm PT  
 Part 2: August 5, 4-6pm PT  
 The Science Documentary Youth Media Challenge asks students to create a short video explaining a scientific observation, concept or issue that impacts their lives. Useful in all science subject areas, documentaries make science concepts visual and accessible.
- In this two-part workshop, you'll:
1. Create your own short science documentary.
  2. Hear from an educator who has used the science documentary challenge to drive student inquiry.
  3. Explore publishing opportunities through KQED's Science Documentary Youth Media Challenge that can connect students to an audience beyond the classroom.
- 8/4/2021**      **CLIMATE ACROSS THE CURRICULUM**      **The CLEO Institute**  
 Grades: PK;TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://cleoinstitute.org/event/cleo-teachers-climate-across-the-curriculum-workshop/>  
**Cost:** Free      **Stipend:**  
 Climate-Ready Classrooms will help K-12 teachers understand climate change, its impacts, and solutions to be able to incorporate climate into their curriculum. Attendees will receive a short climate overview presentation, including the latest data covering common areas of miscommunication. A series of lightning talks will highlight strategies and resources for teachers, as well as the intersection of climate issues, equity, and justice. Following this, CLEO staff will lead an interactive workshop to guide educators on creating an action plan for their classroom lessons. Educators will be asked to select the classroom units that they are most excited to teach in the upcoming school year and will complete activities to brainstorm ways to creatively incorporate climate science into these units.
- 8/6/2021**      **Webinar: 4Rs Fridays (reg by 8/5/21/0**      **StopWaste.org**  
 Grades: TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://forms.office.com/Pages/ResponsePage.aspx?id=2HwTd62DSUaIGt-8OLdWaOkhpnVVwKINj9TEINdqRw5UNEo1>  
**Cost:** free      **Stipend:**\$100 Action Project Stipends for Adult Stakehold  
 3:30-5:00pm Online via Zoom  
 Join StopWaste and fellow schools champions in dreaming an incredible year of (Re)Generation actions. We'll be reflecting on the challenges and celebrating the successes from last school year. Learn about updates to StopWaste programs including the roadmap for this year's (Re)Generation work and how we can co-create our dream school year calendar together.
- \$100 Action Project Stipends for Adult Stakeholder Attendees and Reusables Kits for Youth Stakeholder Attendees

- 8/8/2021** **Deadline: Approaches to Maker Education (August 23-26, 2021)** **Maker Ed**  
 Grades: TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://makered.org/professional-development/workshops/approaches-to-maker-education-online-2021/>  
**Cost:** sliding scale \$150 – \$500 **Stipend:** cost of workshop covers a kit of making supplies  
 (August 23-26, 2021) Deadline August 8 Join this four day hands-on, minds-on workshop where you will step into your learners' shoes and explore Maker Ed's foundational approaches to weaving maker-centered learning into your practice. You'll plan an activity for your learners in your setting while centering your work in liberatory and culturally responsive practices. You'll collaborate and connect with other maker educators. the work centers using maker education as a tool for equity and liberation. We will engage together in participatory and interactive experiences in order to:  
 \* experience how making centers learner agency  
 \* design more inclusive and equitable learning experiences  
 \* shift our practices to be more culturally relevant
- 8/10/2021** **Webinar: Putting Sound, Music and Student Voice at the Heart of Podcasts** **KQED**  
 Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
[https://kqed.zoom.us/meeting/register/tZUuce6prz8sGtVShUCHRIHV\\_Xwt5cCcoEEj](https://kqed.zoom.us/meeting/register/tZUuce6prz8sGtVShUCHRIHV_Xwt5cCcoEEj)  
**Cost:** Free **Stipend:**  
 Part 1: August 10, 4-6pm PT  
 Part 2: August 12, 4-6pm PT  
 This two-part online workshop series is perfect for middle and high school educators interested in doing sound-rich, journalistic or story-based podcasts with students. We'll explore what makes a strong podcast and then get hands-on with a media-making experience. In Part 1, you'll learn about the KQED Podcasting Youth Media Challenge, analyze mentor texts and write your script. In Part 2, you'll record your own short audio piece as a model to share with students. You'll also hear from experienced teachers about ways to implement the project in a range of learning environments.  
  
 Join KQED and PBS Newshour Student Reporting Labs for a workshop series dedicated to amplifying the voices of young people as they craft audio podcasts about topics that matter to them.
- 8/11/2021** **Webinar: The Art of Centering Student Voice with Political Cartooning** **KQED**  
 Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://kqed.zoom.us/meeting/register/tZUqdeGppz0sG9O6EUTyXC4CwwVq1GqXFU-2>  
**Cost:** Free **Stipend:**  
 (4:00-6:00 pm ) Learn how your students can create political cartoons to share views on important issues and develop their voice in a democratic society. Editorial cartooning has a long history in the United States and draws on a rich visual and symbolic vocabulary to communicate complex ideas in an accessible way. In this hands-on workshop, we'll unpack the "visual vocabulary" used in political cartoons and get started creating our own. We'll also talk about how your students can publish their work outside of the classroom through the KQED Youth Media Challenge: Political Cartooning With Mark Fiore.
- 8/12/2021** **Online: Elementary Science and Engineering for All** **Michigan Mathematics and Science Leadership Network**  
 Grades: TK;K;1st;2nd;3rd;4th;5th  
<https://mmslnetwork.wordpress.com/2021/05/28/elementary-science-summer-learning-conversations/>  
**Cost:** free **Stipend:**  
 Join the live conversations from 9:00-10:00 am Pacific on Zoom, [HTTPS://TINYURL.COM/ELEMSCILEARNING](https://tinyurl.com/elemscilearning) (ZOOM LINK) or access the recordings on The MMSLN or The Dana Center YouTube.  
 The Michigan Mathematics and Science Leadership Network and The Charles A. Dana Center at UT-Austin are hosting several informal virtual conversations around different features of science and engineering education in elementary school.
- 8/13/2021** **Reg Deadline: StopWaste Environmental Educator Training (SWEET)** **StopWaste.org**  
 Grades: PK;TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://www.stopwaste.org/at-home/reduce-and-reuse/reducing-wasted-food/stopwaste-environmental-educator-training>  
**Cost:** \$50 and waivers are available **Stipend:**  
 Deadline to apply is August 13, 2021  
 September 8 and November 10 in a virtual format.  
 This innovative program is designed to enhance the skills of community leaders, environmentalists, sustainability and food waste prevention advocates within Alameda County. Participants who complete the seven-week training program will become certified StopWaste Environmental Educators who will make a difference by giving back to their communities using their new found skills in teaching others to reduce wasted food and through the strong connections made within this course with other participants. Graduates are eligible to partner with StopWaste by offering technical assistance to residential communities interested in food waste reduction within Alameda County.

- 8/17/2021**      **Webinar: Exploring Bubbles Workshop**      **Exploratorium**  
 Grades:    K;1st;2nd;3rd;4th;5th  
<https://www.exploratorium.edu/education/professional-development-programs/free-educator-workshops/exploring-bubble>  
**Cost:** Free      **Stipend:**  
 (3:30–4:45 p.m. Pacific) Want your science experiences to pop? Come see how a simple, everyday phenomenon like soap bubbles can unlock opportunities for students to explore, observe, collect data, and look for patterns. In this workshop, we'll engage in explorations, investigations, and meaning-making conversations to model how to use these experiences in your K–5 classroom. We'll share a set of videos and classroom scaffolding that can be used with your students asynchronously or in person.
- 8/18/2021**      **Webinar: Getting the Facts Straight**      **EdWeb.net**  
 Grades:    K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://home.edweb.net/webinar/realworldliteracy20210818/>  
**Cost:** FREE      **Stipend:**  
 2:00 PM - 3:00 PM (Pacific Time) -A Teacher's Guide to Helping Students Avoid the Pitfalls of Misinformation: Getting the Facts Straight  
 If it feels like misinformation is everywhere...you're right. But there's something we can all do together. As educators, we can help students avoid the misinformation pitfalls of social media and fact check like professionals. In this interactive, educator-led edWebinar, you'll learn how to slow down and evaluate online sources, then practice with a fun quiz we call "Beware or Share." Then, you can share these techniques with your students. Hear from an educator who makes online evaluation a key part of her curriculum and leave with classroom-ready resources to get started.
- 8/18/2021**      **Webinar: Help Students Fight Misinformation One Click at a Time**      **KQED**  
 Grades:    K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://teach.kqed.org/course/analyzing-and-evaluating-media-for-the-classroom-august-2021>  
**Cost:** free      **Stipend:**  
 (4:00 pm Pacific) This professional development course is open to educators in all roles, subjects and grades who are looking for the skills and confidence to teach students how to effectively analyze and evaluate online news and information, and navigate the internet to find credible sources.  
  
 In this "learn-by-doing" course you will:  
  
 Evaluate online sources like a professional fact checker  
 Practice lateral reading and other fact-checking methods  
 Explore common missteps of student researchers and how to address them  
 Practice critically examining how media is made and how choices made by the creators contribute to the way it is understood and acted upon  
 Create an instructional plan to support students in effectively analyzing and evaluating online sources as it relates to your content area
- 8/23/2021**      **Webinar: Bring the World of Research into Your Classroom**      **EdWeb.net**  
 Grades:    K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://home.edweb.net/webinar/research20210823/>  
**Cost:** FREE      **Stipend:**  
 12:00 PM - 1:00 PM (Pacific Time) -Skype a Scientist creates a database of thousands of scientists and helps them connect with teachers, classrooms, groups, and the public all over the globe. Through the volunteer efforts of a few, Skype a Scientist wants to give students the opportunity to get to know a real scientist and get the answers to their questions straight from the source. Take the opportunity to meet the leader behind the screen, Sarah McNulty, Ph.D., Executive Director and Squid Biologist, to talk about this amazing journey and what's next on the horizon.
- 8/23/2021**      **Webinar: Approaches to Maker Education - deadline August 8**      **Maker Ed**  
 Grades:    TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://makered.org/professional-development/workshops/approaches-to-maker-education-online-2021/>  
**Cost:** sliding scale \$150 – \$500      **Stipend:**cost of workshop covers a kit of making supplies  
 (August 23-26, 2021 ) Deadline August 8 Join this four day hands-on, minds-on workshop where you will step into your learners' shoes and explore Maker Ed's foundational approaches to weaving maker-centered learning into your practice. You'll plan an activity for your learners in your setting while centering your work in liberatory and culturally responsive practices. You'll collaborate and connect with other maker educators. the work centers using maker education as a tool for equity and liberation. We will engage together in participatory and interactive experiences in order to:  
 \* experience how making centers learner agency  
 \* design more inclusive and equitable learning experiences  
 \* shift our practices to be more culturally relevant

- 8/26/2021**      **Webinar: Using Games to Transform K-5 Mathematics Education**      **EdWeb.net**  
 Grades:    K;1st;2nd;3rd;4th;5th  
<https://home.edweb.net/webinar/math20210826/>  
**Cost:** FREE      **Stipend:**  
 (Noon - 1:00 PM Pacific) - This edWebinar focuses on the challenges and opportunities that games, mobile devices, and online learning present to high-quality mathematics education. Is it possible to teach and learn mathematics effectively outside the traditional classroom? What is the role of the teacher in such settings? What is the role of the parents? We'll discuss these questions and share some of the lessons we have learned from building and supporting a leading online math learning platform around the world
- 8/26/2021**      **Elementary Science and Math Integration**      **Michigan Mathematics and Science Leadership Network**  
 Grades:    TK;K;1st;2nd;3rd;4th;5th  
<https://mmslnetwork.wordpress.com/2021/05/28/elementary-science-summer-learning-conversations/>  
**Cost:** free      **Stipend:**  
 Join the live conversations from 9:00-10:00 am Pacific on Zoom, [HTTPS://TINYURL.COM/ELEMSCILEARNING](https://tinyurl.com/elemscilearning) (ZOOM LINK) or access the recordings on The MMSLN or The Dana Center YouTube.  
 The Michigan Mathematics and Science Leadership Network and The Charles A. Dana Center at UT-Austin are hosting several informal virtual conversations around different features of science and engineering education in elementary school.
- 8/30/2021**      **Webinar: Evaluating and Analyzing Media Content for the Classroom**      **KQED**  
 Grades:    K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://teach.kqed.org/media-academy-for-educators>  
**Cost:** Free      **Stipend:**  
 August 30-September 19, 2021  
 Misinformation is a constant in our lives, especially in the current global reality. This course will help you empower students to effectively assess the accuracy and quality of information across media formats and understand the techniques content creators use to shape their messages.
- 8/31/2021**      **Webinar: Explore the World with Virtual Field Trips**      **EdWeb.net**  
 Grades:    K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://home.edweb.net/webinar/learning20210831/>  
**Cost:** FREE      **Stipend:**  
 1:00 PM - 2:00 PM (Pacific Time) - Focused on an array of diverse topics, virtual field trips connect learning to the real world through relevant and timely digital content that supports learning wherever it takes place. Discovery Education, the global leader in standards-aligned digital curriculum resources, offers a portfolio of new and on-demand virtual field trips to engage students.  
  
 Available at no cost, these unique experiences take students to amazing places and give them remarkable opportunities to explore places unknown and learn new skills, without ever leaving their desks. Developed with a number of corporate and community partners, educators will find opportunities to create comprehensive connections to the real world. Each virtual field trip also includes an educator guide and instructional supports for turnkey lesson development. Join this edWebinar for an overview of virtual field trips available on demand and a sneak peek of new offerings coming this fall.
- 8/31/2021**      **Webinar: Phenomenal Science Activities Workshop**      **Exploratorium**  
 Grades:    6th;7th;8th;9th;10th;11th;12th  
<https://www.exploratorium.edu/education/professional-development-programs/phenomenal-science-workshop>  
**Cost:** Free      **Stipend:**  
 Our senses are the most important tools in our scientist's toolkit! Join us as we use our senses to notice, wonder, and explore using teacher-tested activities for the science classroom. We'll use phenomena-based experiences to explore our senses through both physical and life science lenses and engage as learners in a variety of activities while working together in a scientific learning community. These activities were selected to increase student engagement for both in-person and online settings through hands-on, inquiry-based learning.

## September 2021

- 9/1/2021**      **Virtual #CASTEAM20 Back-To-School Pre-Conference**      **CDE Foundation**  
 Grades:    PK;TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://web.cvent.com/event/d4865dc7-c884-458a-b52b-776b799d6ad0/summary>  
**Cost:** \$75      **Stipend:**

*We're here to help you find the science resources you're looking for. Email us at [CRS@crscience.org](mailto:CRS@crscience.org)*

As a companion to the California STEAM Symposium on October 21-23, 2021, this event will bring together passionate people seeking inspiration, energizing engagements, and the opportunity to collaborate with STEAM education experts to expand STEAM learning opportunities for every student.

The current registration for both events is only \$185! If you can only join us for one, individual event rates start at \$75 for the Pre-Conference and \$145 for the California STEAM Symposium

- 9/8/2021**      **StopWaste Environmental Educator Training (SWEET)**      **StopWaste.org**  
Grades: PK;TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://www.stopwaste.org/at-home/reduce-and-reuse/reducing-wasted-food/stopwaste-environmental-educator-training>  
**Cost:** \$50 and waivers are available      **Stipend:**  
Deadline to apply is August 13, 2021  
September 8 and November 10 in a virtual format.  
This innovative program is designed to enhance the skills of community leaders, environmentalists, sustainability and food waste prevention advocates within Alameda County. Participants who complete the seven-week training program will become certified StopWaste Environmental Educators who will make a difference by giving back to their communities using their new found skills in teaching others to reduce wasted food and through the strong connections made within this course with other participants. Graduates are eligible to partner with StopWaste by offering technical assistance to residential communities interested in food waste reduction within Alameda County.
- 9/13/2021**      **Webinar: Fall 2021 Online Courses (September 13–October 24)**      **American Museum of Natural History**  
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<http://learn.amnh.org/>  
**Cost:** \$549      **Stipend:**  
(September 13–October 24, 2021) 6-week online courses provide access to cutting-edge research, world-class scientists, and powerful classroom resources and are designed around your busy schedule with 6 sessions offered per year. The fee for each Seminars on Science course is \$549. All courses are available for graduate credit at an additional cost.
- 9/13/2021**      **Webinar: Book Club: Hoot**      **National Oceanic and Atmosphere Administration**  
Grades: PK;TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://oceanservice.noaa.gov/education/planet-stewards/upcoming.html>  
**Cost:** FREE      **Stipend:**  
(5:00 PM PT) The NOAA Planet Stewards book club has a great line-up of books slated for discussion for this academic year. Discussion Questions will be posted approximately one week before each meeting.  
  
Hoot by Carl Hiaasen  
In this 2003 Newberry award winning book we're introduced to Roy, and his first acquaintance in Florida, Dana Matherson, a well-known bully. Then again, if Dana hadn't been sinking his thumbs into Roy's temples and mashing his face against the school-bus window, Roy might never have spotted the running boy. And the running boy is intriguing: he was running away from the school bus, carried no books, and here's the odd part - wore no shoes. Sensing a mystery, Roy sets himself on the boy's trail. The chase introduces him to potty-trained alligators, a fake-fart champion, some burrowing owls, a renegade eco-avenger, and several extremely poisonous snakes with unnaturally sparkling tails. Roy has most definitely arrived in Carl Hiaasen's Florida, where the creatures are wild and the people are wilder!
- 9/16/2021**      **Webinar: Exploring Bubbles Workshop**      **Exploratorium**  
Grades: K;1st;2nd;3rd;4th;5th  
<https://www.exploratorium.edu/education/professional-development-programs/free-educator-workshops/exploring-bubble>  
**Cost:** Free      **Stipend:**  
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**Cost:** Free      **Stipend:**

Our senses are the most important tools in our scientist's toolkit! Join us as we use our senses to notice, wonder, and explore using teacher-tested activities for the science classroom. We'll use phenomena-based experiences to explore our senses through both physical and life science lenses and engage as learners in a variety of activities while working together in a scientific learning community. These activities were selected to increase student engagement for both in-person and online settings through hands-on, inquiry-based learning.

**9/22/2021**      **Webinar: Solutions-focused climate change education**      **Green Teacher**

Grades: 5th;6th;7th;8th;9th;10th;11th;12th

<https://greenteacher.com/pd/>

**Cost:** \$282.50

**Stipend:**

Session 1: Wednesday, September 22nd, 2021 (4:00-6:00 PT)

Session 2: Wednesday, October 20th, 2021 (4:00-6:00 PT)

Session 3: Wednesday, November 17th, 2021 (4:00-6:00 PT)

Session 4: Wednesday, December 8th, 2021 (4:00-6:00 PT)

Solutions-focused climate change education through Natural Curiosity's four-branch framework

Natural Curiosity and Green Teacher are excited to launch a 4-Part climate-focused virtual professional learning series this fall. This series is for educators of intermediate and senior grades who wish to deepen their own inquiry into the ecology of natural curiosity — growing a learning environment where educators and students experience themselves in relationship with the Land and each other in community — and how this pedagogical approach can be applied to climate change education. Over the course of four months, educators will explore the four-branch framework of environmental inquiry and the associated Indigenous lenses, that present tangible entry points towards a reciprocal relationship with the Land participating as a co-teacher. This framework will be applied to a solutions-focused approach to climate change education that leaves students both informed and empowered about the challenges and opportunities of anthropogenic climate change. Strategies to overcome barriers will be discussed in a safe and collegial online environment where educators may process their experiences, ask questions, and share stories. A Slack communication channel will be created to allow for conversation and mutual support between sessions.

**9/22/2021**      **A Tinkering World Tour**      **Wonderful Idea Company**

Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<https://www.indiegogo.com/projects/wico-presents-a-tinkering-world-tour-season-two/#/>

**Cost:** Live - \$125 MOOC= \$25

**Stipend:**

We are offering two different ways to join in on season two of the tinkering world tour!

\* The first and most engaging way to join the workshop is live over zoom! Each week you will get a link to the zoom call and you can log in and interact with presenters and participants, build hands-on projects together, ask questions and share experiences. The two-hour workshops will take place on five Wednesdays beginning from September 22nd, 2021. The exact times for each session will differ slightly depending on the location but they will all start between 7:00am - 9:00am PST.

\* You can also decide to join the course on your own time, in a MOOC-style, asynchronous format. This means you will receive video recordings of the workshop on a weekly basis along with an email with extra links, resources and inspiring examples. As well, you can still participate in our online message board to share ideas, projects and questions.

## October 2021

**10/13/2021**      **Webinar: Picture-Perfect Science Online Course**      **National Science Teaching Association**

Grades: PK;TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th

<https://www.eventbrite.com/o/picture-perfect-stem-8574134731>

**Cost:** \$199

**Stipend:**

(October 13, 20, 27 4:00 PM – 6:00 PM)

Learn how to integrate STEM and reading with high-quality, STEM-related picture books

Receive 2 e-books containing 30 model lessons that integrate STEM and literacy

See lessons in action through modeling and video

Experience the 5E Instructional Model

**10/13/2021 - 10/15/2021**      **Webinar: Picture-Perfect Science Online Course**      **National Science Teaching Association**

Grades: PK;TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th

<https://www.eventbrite.com/o/picture-perfect-stem-8574134731>

**Cost:** \$199

**Stipend:**

(October 13, 20, 27, 4:00-6:00 PM each day)

Learn how to integrate STEM and reading with high-quality, STEM-related picture books

Receive 2 e-books containing 30 model lessons that integrate STEM and literacy

See lessons in action through modeling and video

Experience the 5E Instructional Model

- 10/18/2021 Webinar: Book Club: How to Avoid a Climate Disaster** **National Oceanic and Atmosphere Administration**  
 Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://oceanservice.noaa.gov/education/planet-stewards/upcoming.html>  
**Cost:** FREE **Stipend:**  
 (5 pm Pacific) How to Avoid a Climate Disaster by Bill Gates  
 Bill Gates has spent a decade investigating the causes and effects of climate change. With the help of experts in the fields of physics, chemistry, biology, engineering, political science, and finance, he has focused on what must be done in order to stop the planet's slide toward certain environmental disaster. In this book, he not only explains why we need to work toward net-zero emissions of greenhouse gases, but also details what we need to do to achieve this profoundly important goal.
- He gives us a clear-eyed description of the challenges we face. Drawing on his understanding of innovation and what it takes to get new ideas into the market, he describes the areas in which technology is already helping to reduce emissions, where and how the current technology can be made to function more effectively, where breakthrough technologies are needed, and who is working on these essential innovations. Finally, he lays out a concrete, practical plan for achieving the goal of zero emissions—suggesting not only policies that governments should adopt, but what we as individuals can do to keep our government, our employers, and ourselves accountable in this crucial enterprise.
- As Bill Gates makes clear, achieving zero emissions will not be simple or easy to do, but if we follow the plan he sets out here, it is a goal firmly within our reach.
- 10/20/2021 Webinar: Phenomenal Science Activities Workshop** **Exploratorium**  
 Grades: 6th;7th;8th;9th;10th;11th;12th  
<https://www.exploratorium.edu/education/professional-development-programs/phenomenal-science-workshop>  
**Cost:** Free **Stipend:**  
 Our senses are the most important tools in our scientist's toolkit! Join us as we use our senses to notice, wonder, and explore using teacher-tested activities for the science classroom. We'll use phenomena-based experiences to explore our senses through both physical and life science lenses and engage as learners in a variety of activities while working together in a scientific learning community. These activities were selected to increase student engagement for both in-person and online settings through hands-on, inquiry-based learning.
- 10/21/2021 Webinar: Exploring Bubbles Workshop** **Exploratorium**  
 Grades: K;1st;2nd;3rd;4th;5th  
<https://www.exploratorium.edu/education/professional-development-programs/free-educator-workshops/exploring-bubble>  
**Cost:** Free **Stipend:**  
 (3:30–4:45 p.m. Pacific) Want your science experiences to pop? Come see how a simple, everyday phenomenon like soap bubbles can unlock opportunities for students to explore, observe, collect data, and look for patterns. In this workshop, we'll engage in explorations, investigations, and meaning-making conversations to model how to use these experiences in your K–5 classroom. We'll share a set of videos and classroom scaffolding that can be used with your students asynchronously or in person.
- 10/21/2021 - Virtual California STEAM Symposium 2021** **CDE Foundation**  
**10/23/2021** Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
<https://web.cvent.com/event/1ab355f7-247f-40e9-8124-5c3e4105731d/summary>  
**Cost:** \$185 **Stipend:** Includes August 3 pre-conference  
 (October 21-23) Join us as we bring together passionate people seeking inspiration, energizing engagements, and the opportunity to collaborate with STEAM education experts to expand STEAM learning opportunities for everyone in California and beyond.





COMMUNITY RESOURCES FOR SCIENCE  
*practical support for great science teaching*

ESTABLISHED  
**1997**

1611 San Pablo Avenue, Suite 10 B  
Berkeley, CA 94702

(510) 527-5212 | [www.crscience.org](http://www.crscience.org)

## Professional Development

### By Arrangement at Your School or Available Ongoing on Your Own

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Community Resource for Science provides customized science & engineering professional development at your school. Examples of the workshops we can bring to you are at <http://www.crscience.org/educators/workshops>

#### By Arrangement

##### Professional Development for your School, District, or Organization

Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<http://www.calacademy.org/custompd>

The Cal Academy team can customize a professional learning sequence based on the goals of your school or district. Example topics include: Making the Most of Science Notebooks; Inquiry/Student Investigations; Science Discourse; Best Practices for virtual and/or in-person PD.

California Academy of  
Sciences

##### Whole School Science Professional Development

Grades: K;1st;2nd;3rd;4th;5th

<http://www.crscience.org/educators/workshops>

CRS workshops are designed to help build knowledge, skills and confidence in science teaching. Our workshops provide teachers with techniques, resource connections, tools, and planning time. Workshops are offered to both teacher groups of ten or more and whole faculties. Whole-school workshops are offered on-site to let faculties work together as a school community to accomplish their science goals and understand student learning. We support the development of teachers who are able to plan, teach, and refine strong, subject-integrated science lessons using an inquiry-based approach to their teaching and their own professional development.

Community Resources for  
Science

##### STEMCorps

Grades: TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th

<https://stemcorps.curiodyssey.org/educators/>

CuriOdyssey STEMCorps Teacher Professional Development programs are designed to deepen educators' comfort, competence and capacity in integrating and delivering outstanding STEM learning experiences for their BIPOC students.

CuriOdyssey

Learn and apply CuriOdyssey's award-winning education methodology of creating robust student experiences that are inquiry- and project-based, learner-driven, and inherently aligned with the Next Generation Science Standards.

Online ongoing support: The learning continues through a virtual community of practice. This educator centric forum provides for ongoing learning, networking and access to lessons and curriculum developed by CuriOdyssey and fellow educators.

For more information email [stemcorps@curiodyssey.org](mailto:stemcorps@curiodyssey.org)

##### Teacher Workshops - Nature Journaling

Grades: PK;TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<http://www.johnmuirlaws.com/school-programs>

Presentation focuses on the most important aspects of using nature journals to integrate science, language arts, and art. Sessions include:

- \* Conceptual framework for nature journaling including links to NGSS, and CCSS.
- \* Field demonstrations of activities.
- \* Strategies for giving feedback and evaluating student work.
- \* Site evaluation to highlight resources for nature journaling activities.

John Muir Laws

### **Science and Math Professional Development**

Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th

[https://www.lawrencehallofscience.org/programs\\_for\\_schools/professional\\_development](https://www.lawrencehallofscience.org/programs_for_schools/professional_development)

For 50 years, the Lawrence Hall of Science has designed, led, developed, and supported high-quality science and math professional learning experiences, PreK-16, in the San Francisco Bay Area, nationally, and internationally. We offer a variety of outstanding professional learning options for educators and leaders that help districts, schools, afterschool programs, outdoor/environmental education programs, science centers, educators, parents, and youth realize the potential of activating science and math learning, and STEM literacy for all.

**Lawrence Hall of Science**

### **Customized Workshop**

Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<http://www.lifelab.org>

Life Lab trainers will work with you to develop a customized workshop to meet your specific needs. Resolving issues with your garden site, working effectively with the special needs of your student population, and facilitating parent/community involvement are some of the many topics on which to focus your workshop.

**Life Lab Science Program**

### **Discovery Voyage on the Bay**

Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<http://www.sfbaymsi.org>

The day begins aboard the Institute's research vessel, the ROBERT G. BROWNLEE, participating in hands-on activities that examine the fish, plankton, benthic invertebrates, and physical oceanography of an estuarine ecosystem. The afternoon is spent in our Discovery Classroom, exploring curriculum ideas and activities while developing lesson plans that bring science to your curriculum.

**Marine Science Institute**

### **Custom Professional Development**

Grades: 4th;5th;6th;7th;8th;9th;10th;11th;12th

<https://www.thetech.org/content/bowers-institute/custom-professional-development>

We've expanded The Tech's highly rated professional development programs and are now able to bring topics like Demystifying the new NGSS standards, Embracing the E of STEM, and Using your makerspace directly to your faculty on-site. Contact us to find out how you can integrate Design Challenge Learning across your entire curriculum with PD that's customized to your school's unique needs. Half-day, full-day and after-school sessions available.

**The Tech Interactive**

### **School Site Specific Trainings**

Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th

<http://botanicalgarden.berkeley.edu/education/k12.shtml#etpdanchor>

Our Education staff offer unique tools and support for diverse school communities to transform gardens into enriched educational resources. Teachers, parents, garden educators and community members can all be a part of the process in accomplishing learning goals for children through garden-based education. Our fee-based workshops can be customized to meet your needs. Past topics include:

- \* Botany on Your Plate curriculum
- \* Math in the Garden curriculum
- \* Using the Garden Environment for Afterschool Programs
- \* School Garden Planning and How-To's
- \* Integrating Academics into the Garden
- \* Nutrition from Fruits and Vegetables
- \* Linking Garden Activities to State Standards

For more information, contact the Education Program Coordinator

**UC Botanical Garden**

## **Ongoing**

### **Seminars on Science - Online Courses for Educators**

Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<http://learn.amnh.org/>

These six-week courses developed by Museum scientists and educators incorporate the Museum's rich resources including three-dimensional virtual specimens, videos from the field, and interactive simulations. Teachers participate in discussions and activities with the Museum's scientists and educators. Continuing education units and graduate credits are available. For more information go to <http://learn.amnh.org>.

**American Museum of Natural History**

## School of Professional Studies

Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<http://ce.fresno.edu/cpd/courses/>

Courses are delivered through a combination of modalities to better serve the school community's needs: printed materials and texts, audiotapes, videotapes, CD-ROM, and online distance learning. These are not on-campus courses. They may be taken any place and any time. Over 20 course offerings including: "Science for the Elementary School," "Physical Science Activities for the Primary Grades," "Astronomy: For All Ages."

Fresno Pacific School of  
Professional Studies

## Expand Your Media Literacy Skills

Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<https://teach.kqed.org/>

KQED Teach offers a collection of free, hands-on professional learning opportunities focused on Digital Media. Educators can build skills in digital storytelling, data visualization, and critical media use to support all curriculum areas. These skills allow teachers to facilitate learning environments where their students can create digital content, develop their communications and technology skills, and engage in deeper learning that encourages critical thinking.

KQED

## Maker Educator Meetup

Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<https://www.eventbrite.com/o/bay-area-maker-educator-meetups-7302573677>

Bay Area Maker Educator Meetups are gatherings of educators who are focused on hands-on, learner-driven, maker-centered education. Making provides a context for students to become independent & collaborative thinkers, for building maker-mindsets, and for deep conceptual learning. The organizers of this series of events are volunteers; the series is not associated with an individual institution.

Maker Ed

## Free Webinars - one almost every day!

Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<https://www.txstate-epdc.net/events/>

The NASA Educator's Online Network offers webinars for teachers on a variety of science topics and how to bring these concepts into your classroom.

NASA Education

## Online Courses for Educators in the Sciences

Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

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

Educators can access electronic teacher resources, discuss issues with other educators online, and participate in high-quality graduate courses all from convenient home or work locations via the Internet. An average of 15 online graduate level science and science education courses are available each semester. NTEN courses are designed to help teachers improve and enhance their understanding of science content. Courses can be taken for professional development or as part of a graduate degree program.

National Teacher  
Enhancement Network

## Webinar: Professional Development Workshops On Demand

Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<https://www.pbslearningmedia.org/collection/virtual-professional-learning-series-collection/>

PBS Learning Media Virtual Professional Learning Series is created for teachers - by teachers - to bring together content experts and educators from all backgrounds. With topics ranging from history to digital engagement, educators will find something they need to enhance their practice and perspective.

PBS Learning Media

## Online Webinar Classes on a variety of topics

Grades: K;1st;2nd;3rd;4th

<http://www.pbs.org/teacherline/>

PBS TeacherLine's facilitated and self-paced PD courses are designed to benefit both beginning and experienced teachers. Topics include science, reading, social studies, math, instructional strategies, and instructional technology. Innovative: Acquire new strategies and tools you can use right away to enhance classroom instruction. Engaging: Interact with peers and experts in a virtual learning environment. Flexible: Discover anytime, anywhere learning that fits into your busy schedule. Choose from 15, 30, or 45-hour facilitated courses or enroll in a 1.5 or 3-hour self-paced course.

PBS TeacherLine

## Online Environmental Education for PreK-8

Project Learning Tree

Grades: PK;TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th

<http://shop.plt.org/prek-8-environmental-education/>

Lesson plans are flexible and can be easily incorporated into existing curriculum or non-formal education programs. The activities are correlated to state and national academic standards, including Common Core, and have an emphasis on STEM. Join the 650,000 educators across the country who use PLT's award-winning materials with their students. Independent evaluators determined PLT increases students' knowledge, reasoning, and academic skills.

1. Self-paced online workshop (approximately 4 hours)
2. PLT's PreK-8 Environmental Education Activity e-Guide

## Webcast: Science How - Monthly programs

Smithsonian

Grades: 6th;7th;8th;9th;10th;11th;12th

<https://naturalhistory.si.edu/education/distance-learning>

Video Webcasts (8AM and 11AM Pacific Time.) These free, interactive, TV-style webcast programs will introduce your middle school students to core science concepts through the lens of Smithsonian research and experts, providing students with positive STEM role models and a connection to science in their lives. The shows air live twice each day, and provide opportunities for your students to interact via live polls and Q&A with the scientist. Explore the topics in the schedule by watching a webcast and using the classroom activities, lessons, readings, and other teaching resources that support each webcast program.

Online Text Chats: These free, interactive, text-based web chats feature scientists who have previously appeared on a Smithsonian Science How live webcast. The text chats do not have a live video component. The chats take place twice each day, and allow students to have conversations via text with scientists about their career pathways and research at the Museum. Supplement each live chat by watching the Smithsonian Science How video of the featured scientist and using the available teaching resources before and after the chat.

## Berkeley Professional Development for Educators Calendar

University of California  
Berkeley

Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<https://events.berkeley.edu/index.php/calendar/sn/pded.html>

Calendar of professional Development opportunities for teachers offered by different departments on the UC Berkeley campus.