

SIRC has always been designed to deepen teachers' *understanding of science* and to provide *innovative ideas, lessons, and classroom strategies*. This year, more than ever, we want to re-dedicate ourselves to those principles.

Each night there will be 6+ different 90-minute workshops available to choose from. Topics will include science, pedagogy, social-emotional learning, and distance learning.



SIRC registration fees are being sponsored by a grant from the California Science Project



FAQs

- How is SIRC different this year?**
We will interact with each other on Zoom, workshops are now 90 minutes, no guest speaker, but we are including networking time to connect with each other.
- Is SIRC really free this year?**
Yes - A big thank you to the California Science Project for sponsoring!
- What will the workshop topics be?**
See the following pages or our website for full descriptions of each workshop.
- What is Community Networking time on the agenda?**
This is optional time for you to connect with fellow teachers from around the area.
- Will you still be offering spring workshops?**
Yes! Save the date for January 26th, February 23rd, and March 23rd

REGISTRATION IS NOW OPEN!



Register online at our website:
www.sasp-science.org



4:00p - 4:30p Community Networking
4:30p - 6:00p Workshops



October 27, 2020
November 17, 2020
December 8, 2020



0.6 Continuing Education Units are available for purchase. See website for more details.

Workshops for October 27

MANAGEABLE NGSS DISTANCE LEARNING FOR K-3 ELEMENTARY

Lisa Hegdahl and Deanna Mino, Galt Joint Union Elementary

In the Spring of 2020, I developed several brief elementary NGSS 5E Learning Sequences to encourage our K-6 teachers to continue teaching science while distance learning. The Sequences are based on phenomena and include Engage, Explore, and Explain from the 5E structure. Join us to see how, with a little imagination, you can keep science in the elementary school distance learning day.

Technology Used: Google Classroom
Designed for Grades: K-3

MAKING SENSE OF DISTANCE LEARNING DURING COVID

Corinne Lardy & Jenna Porter, Sacramento State, College of Education

In examining the question "Why can't we go to school?" participants will engage in making sense of the phenomenon of required distance learning while considering how to address the Social Emotional Learning/ wellbeing of students and evaluating competing sources of evidence.

Technology Used: Google Suite
Designed for Grades: K-12

PHENOMENA ARE ALL AROUND YOU, EVEN ON YOUTUBE

Scott Richardson, Davis Joint Unified

Want to engage your students with phenomena to figure out, but don't know where to find it? Good phenomena might be closer than you think. This workshop will explore (a) what counts as good phenomena, (b) how to use video such as YouTube as a source, and (c) how a few simple editing tools can help you tailor video to your curriculum.

Technology Used: Google Suite
Designed for Grades: K-12

KITCHEN CHEMISTRY!

Arlene Laurison, Elk Grove Unified

Learn how to increase student engagement with at-home labs using safe, household materials. Topics will include safety requirements, technology integration, and curricular resources. Participants will collaborate, brainstorm ideas, and develop experiments to be immediately implemented in a distance learning setting.

Technology Used: Google Suite, Flipgrid
Designed for Grades: K-12

SENSE-MAKING WITH AMPLIFY

Ingrid Salim, Davis Joint Unified

Participants will consider ways to leverage a few digital tools to implement Amplify for grades 4-8 and further sense-making for elementary and middle school students.

Technology Used: Google Slides, Slip in Slide, Padlet, and Jamboard
Designed for Grades: 4-8

SETTING YOUR INSTRUCTIONAL PRIORITIES DURING A PANDEMIC

Kelli Quan, Elk Grove Unified

We are all currently experiencing a different teaching experience right now--working from home or in empty classrooms, teaching to a screen of silent names, and trying to teach science in a way that lives up to our own high standards. Is it too much? How might we think about our instructional decisions differently and focus on what really matters? In this workshop, reflect on your goals for student learning, competing factors that influence classroom teaching, and how our decisions impact student engagement. Let's prioritize and reconsider how we approach teaching and planning during these unprecedented times.

Technology Used: Google Suite
Designed for Grades: K-12

Workshops for November 17

DEVELOPING ENVIRONMENTAL LITERACY AND CLASSROOM COMMUNITY BY ENGAGING YOUTH IN PARTICIPATORY SCIENCE

Peggy Harte, UCD Center for Community & Citizen Science

Participants will learn about the academic and social-emotional benefits of engaging students in outdoor participatory science projects in a distance learning setting. We will look at the direct connections to NGSS as well as how place-based inquiry can benefit students emotionally, and how teachers can use students' personal observations to build classroom communities and connections while focusing on environmental literacy.

Technology Used: Jamboard
Designed for Grades: K-5

RACIAL LITERACY & ANTIRACIST SCIENCE TEACHING: WHAT, WHY, & HOW.

Robert Brewer, Sacramento State

Students and communities are in pain and "bringing" that pain to school. How and why should science teachers promote racial justice? Are we ready to do this and what is our role? The session will define racial literacy, explain how antiracist teaching and science intersect, and (time permitting) provide model antiracist lessons.

Technology Used: Google Suite
Designed for Grades: 6-12

BUILDING A CLASS CULTURE OF STUDENT ENGAGEMENT AT A DISTANCE

Amy Burke, Elk Grove Unified

Do you wish students engaged with each other more during distance learning? Learn strategies for building class culture to encourage open collaboration and dialogue. Walk away with templates for community building, socioemotional connection, and student-to-student productive dialogue.

Technology Used: Google Suite, Kahoot, Quizizz
Designed for Grades: 6-12

MAKING ENGAGING VIDEOS AND MONITORING STUDENT ENGAGEMENT IN REAL TIME

Jay Brennan, Elk Grove Unified

Learn simple, efficient, and helpful strategies to record videos, notes, and lectures on your iPad/iphone; make and edit videos in 5 mins, and also learn strategies to increase student engagement using those videos. If you have a iPhone or iPad you can make amazing videos with closed captioning, music, labels, etc... in minutes! All levels welcome!

Technology Used: Google Slides, Explain EDU, Apple Clips
Designed for Grades: 7-12

MAKING OBSERVATIONS AND ASKING QUESTIONS AT A DISTANCE

Steven Ramsay, Elk Grove Unified

How can we get students to engage in the process of asking questions and defining problems at a distance? How to choose a phenomenon to keep it relevant and engaging to start the sense making process. Workshop will include ideas on how to monitor questions and return to the phenomenon.

Technology Used: Google Slide, Seesaw, Quizizz
Designed for Grades: 6-12

ORGANIZING DIGITAL RESOURCES AND YOUR CURRICULUM

Dillon Brantley, Elk Grove Unified

Explore methods of how to organize your digital files, curriculum, and access to your online resources. We will cover basics from nested folders and integrating hyperlinks to quality-of-life improvements in your Google Drive. These will increase the efficiency of your in-class transitions, your PLC collaborations, and provide methods to improve student access to organized curriculum. Most importantly, however, these will decrease your stress when planning and implementing your lessons whether in-person or virtually.

Technology Used: Google Drive
Designed for Grades: K-12

CONSIDERING CALIFORNIA'S ENERGY FUTURE

Melissa Marcucci, Ceres Unified

Using the lenses of both Climate Justice and the Environmental Principles and Concepts, this distance learning sequence helps students examine their own air quality, causes of the poor air, effects on their health, and solutions for their future, including Governor Brown's Initiative to make California 100% renewable.

Technology Used: Google, Jamboard, Padlet
Designed for Grades: 9-12

Workshops for December 8

PRESERVING THE AHA! AT A DISTANCE

Megan White & Sarah Caves, Washington Unified

Student discovery, sense-making, and collaboration are cornerstones of NGSS. We will engage in each through a grade level mini lesson, demonstrating both strategies you can apply and a lesson you can take.

Technology Used: Google Suite

Designed for Grades: 3-5

KEEPING IT SIMPLE: ENGAGE STUDENTS WITH SENSE-MAKING WITHOUT OVERWHELMING THEM WITH MULTIPLE TECHNOLOGY PLATFORMS

Heather Parker, Sutter County Superintendent of Schools

Are you and your students overwhelmed with all the technology options out there? We want students to be able to focus on the sense-making process, not learning multiple technology platforms. Join us to discover how to engage your students in sense-making using only Google Slides. You will see how to present a phenomena to students and have them engage in the sense-making process through the features of Google Slides.

Technology Used: Google Suite

Designed for Grades: K-12

INCORPORATING STUDENT CHOICE INTO YOUR CLASSROOM

Corinne Rushing & Nick Bua, Sacramento-City Unified

Learn how to create a student-centered classroom by incorporating choice into your curriculum and why it improves student engagement. By allowing students to have choice in the modality of their assignments, students are more accountable for taking the lead in their learning. Students can choose to engage with material that is most interesting to them or in a way that they know they learn best. We will also discuss our vision for bringing choice back into the physical classroom.

Technology Used: Google Suite, EdPuzzle, Flipgrid, Peardeck, Podcasts, Quizizz

Designed for Grades: K-12

BEST PRACTICES FOR TRANSLATING TO NGSS REMOTE LEARNING

Lisa Hegdahl and Deanna Mino, Galt Joint Union Elementary

Learn how we adapted an in-person phenomena-based lesson sequence (related to whales & seasons) to a remote learning environment while using all 3 dimensions of NGSS. The lesson sequence includes best practices for journaling and engaging students. We will discuss which practices were most successful.

Technology Used: Google Classroom, Peardeck, Jamboard, Padlet

Designed for Grades: 8

DIGITAL SENSE-MAKING: ENGAGING IN THE SCIENCE PRACTICES ONLINE - THE PHYSICAL SCIENCE PERSPECTIVE

Julie Harr, San Juan Unified and Liz Johnson, Elk Grove Unified

How do I convert a lesson to a digital environment, while still allowing for sense-making? In this session, we will demonstrate successes and failures in converting Earth's Early History to an online environment. We will be addressing student collaboration, gathering and analyzing data, and arguing from evidence. Physics and Earth Science.

Technology Used: Google Suite, PhET

Designed for Grades: 7-12

STUDENT SELF-ACTUALIZATION

Mike Hotell, Sacramento-City Unified

One of our goals as teachers is to build self-actualized learners. This is a big challenge under normal circumstances. How do we accomplish this in a distance learning environment? Let's reflect upon current practice and explore ways to develop student self-actualization. Plan to connect and interact with other science educators in a collaborative evening workshop.

Technology Used: Google Suite

Designed for Grades: K-12