Science & Environmental Literacy

March 2022-Santa Clara County Office of Education

March is Women's History Month

The 2022 theme for <u>#WomensHistoryMonth</u> is "Providing Healing, Promoting Hope," as a tribute to the continuous work of caregivers and frontline workers during the ongoing pandemic. Thank you for your endless contributions to society!

For resources on Women in Science and STEM check out the following resources:

- Smithsonian: <u>If/Then Digital Exhibit Companion (ifthenexhibit.org)</u>
- I Am A Scientist Collection
- Women's History Month | Women Who Have Made Contributions in STEM and Skilled <u>Trades - Mid-Valley STEM-CTE Hub (midvalleystem.org)</u>
- Women's History Month (womenshistorymonth.gov)
- NSTA: Women's History Month | NSTA
- National Academy of Sciences: Women in Science, Engineering, & Medicine

Please join our upcoming mini-series that starts this month and focuses on equitable outcomes for ALL students:

Antiracism & Social Justice in the Science Classroom - Join us in creating a community of
science educators who are open to engaging in conversations about equity, antiracism,
and social justice. We'll explore what these terms mean/look like in the context of our
work and support each other in the next steps on our journey towards humanizing the
pursuit of science. We'd love to have you join us wherever you are in your equity work!

We also want to extend an invitation to join our new Community of Practice to support school garden initiatives:

• Growing Gardens Community of Practice (CoP) - Are you in charge of your school's garden but don't have a green thumb? Do you want to start a new garden or revive one from disrepair? Are you looking for ways to incorporate gardens into your curriculum? No problem, we have just the community for you! Join us in our launch of our newest CoP to

support sustainable school gardening initiatives. Our sessions are designed for collaboration & networking to support wherever you are in the process.

If any of these sessions sound interesting to you, see the next section for the registration link.

WHAT DOES THE SCCOE SCIENCE TEAM DO?

We are here to support ALL educators (teachers, TOSAs/Instructional Coaches, paraeducators, and administrators) in their implementation of NGSS, embedding environmental literacy and sustainability into content areas, and building and sustaining school garden initiatives through coaching, professional learning, strategic planning, and technical assistance.

HOW CAN THE SCCOE SCIENCE TEAM HELP OUR DISTRICT/SCHOOL?

Feel free to reach out to our team via email.

Jennifer Mutch at Jmutch@sccoe.org

Tara Sikorski at Tsikorski@sccoe.org

We are here to support your high quality science and environmental literacy instruction.

Upcoming Events

Join us Monday, March 7th 8:30 - 10am

For a Virtual Arbor Week
Celebration and Informational
Webinar:

Planting Trees Initiative Working Together for a Better
Environment







Planting Trees Initiative-Working Together for a Better Environment

Dear Colleagues,

Please join us for a special virtual event on Monday, March 7, 2022 from 8:30 to 10:00 a.m., *Planting Trees Initiative – Working Together for a Better Environment*.

The County of Santa Clara Office of Sustainability and Santa Clara County Office of Education are hosting a virtual Arbor Week event focused on the benefits of planting trees at schools and in the surrounding communities. Key insights will be shared on how trees play an important role in combating climate change and steps to actively engage students in environmental topics. Please join us to learn more about the benefits of trees, environmental youth engagement, planting opportunities, and more!

Please register at https://na.eventscloud.com/arborweek.

California Environmental Literacy Project (CELP) Regional Conference-Saturday, March 19th



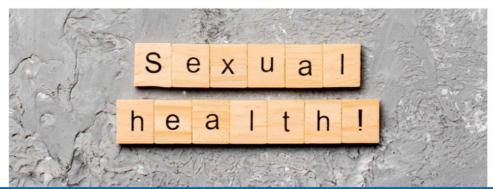
SAVE THE DATE: Environmental Literacy Summit by the Santa Clara County Office of Education



Comprehensive Sexual Health Educator Network







Comprehensive Sexual Health Educator Network

Join this Network to discuss:

- Best practices for implementing CHYA-compliant Sexual Health Education
- CA Health Education Framework
- · Updates from the State and community partners
- · District sharing and network opportunities

Purpose of CSE Network

The Comprehensive Sexual Health Educator Network brings together school districts, COE staff and community partners to discuss CSE implementation. The network provides content expertise and resources to support the development of educational programs and school policies that promote student health and well-being.

County Partners

The SCCOE and SMCOE hosts the CSE Network in partnership with CARDEA Services and the Adolescent Pregnancy Prevention Network (APPN – a collaborative led by the Santa Clara County Public Health Department)

For more information, please contact:

Tara Sikorski • Science Coordinator • tsikorski@sccoe.org
Doron Markus • CTE & STEM Coordinator • dmarkus@smcoe.org

Dates:

October 20, 2021 February 16, 2022 April 27, 2022

Time: 9 to 10:30 a.m.

Location:

Zoom

Audience:

K-12 administrators, TOSAs, and teachers responsible for coordinating CSE implementation in Santa Clara or San Mateo County districts & schools

Grade Level(s): K – 12 Registration:

https://na.eventscloud.com/634682







Register Here: CSE Network

The next meeting is April 27, 2022

Growing Gardens Community of Practice (CoP)





Growing Gardens Community of Practice (CoP)

The Santa Clara County Office of Education invites all TK-12 educators, TOSAs (Teachers on Special Assignment), administrators, garden coordinators, maintenance and operations, and after school garden education providers/staff to the "Growing Gardens Community of Practice (CoP).

During this Community of Practice we will:

- Collaborate and network with colleagues who support school gardens and/or outdoor learning spaces
- Explore partnerships to create and maintain sustainable systems for school gardens and/or outdoor learning spaces
- Share resources and ideas about the creative use of school gardens and outdoor learning spaces for both academic instruction and social emotional learning
- Learn about the best practices for designing, developing and maintaining school gardens and/or outdoor learning spaces.

For more information, please contact:

Jennifer Mutch • Science Coordinator •

jmutch@sccoe.org

Tara Sikorski • Science Coordinator •

tsikorski@sccoe.org

Dates:

Monday, January 31, 2022 Monday, February 28, 2022 Monday, March 28, 2022

Monday, April 25, 2022

Monday, May 23, 2022

Time: 4 to 5:30 p.m.

Location: Virtual + 1 in-person field

trip on May 23, 2022

Audience:

TK-12 Educators, TOSAs, Administrators, Garden Coordinators, Maintenance and Operations, After School Garden Education Providers/Staff

Grade Level(s): TK - 12

Cost: FREE

Registration:

https://na.eventscloud.com/657647

Register Here: Growing Gardens Cop

The next meeting is March 28, 2022

Antiracism & Social Justice in the Science Classroom





Antiracism & Social Justice in the Science Classroom

Santa Clara County Office of Education invites all TK-12 Educators, TOSAs (Teachers on Special Assignment) and Administrators to the Antiracism & Social Justice in the Science Classroom Series in Spring 2022.

This series will explore the conditions of an antiracist science classroom along with the intentional integration of critical literacy and social justice based phenomenon into lesson sequences in order to humanize the pursuit of science and engage students in authentic sense-making.

Session Topics:

Session 1: Equity, Anti-racism, and Social Justice. Oh my!

Session 2: Identity & Intersectionality in Science Classrooms

Session 3: Classroom Culture, Student Status, & Discourse

Session 4: Humanizing the Pursuit of Science

For more information, please contact:

Tara Sikorski • Science Coordinator • tsikorski@sccoe.org



Dates:

Wednesday, March 23, 2022 Wednesday, March 30, 2022 Wednesday, April 6, 2022 Wednesday, April 13, 2022

Time: 4 to 5:30 p.m.

Location: Virtual

Audience:

TK-12 Educators, TOSA's, and

Administrators

Grade Level(s): TK - 12

Cost: \$160

Registration:

https://na.eventscloud.com/655609

Register Here: Antiracism & Social Justice

2021-2022 ENVIRONMENTAL LITERACY
LEADERSHIP COLLABORATIVE

Please join us for our next meeting on March 24th





2021-2022 Environmental Literacy Leadership Collaborative

The Environmental Literacy Leadership Network is a collaborative that will explore ways to infuse environmental literacy into classrooms and schools.

We will develop a vision for environmental literacy and sustainability, build partnerships, and connect formal and informal educators in Santa Clara County.

Dates:

Thursday, September 23, 2021

Thursday, October 21, 2021

Thursday, November 18, 2021

Thursday, January 20, 2022

Thursday, February 24, 2022

Thursday, March 24, 2022

Thursday, April 21, 2022

Thursday, May 19, 2022

Time: 3 to 5 p.m.

Location:

Virtual via Zoom

Audience:

TK-12th Grade Teachers, History/ Social Science Teachers, Health Teachers, Science Teachers, TOSA's, Instructional Coaches, Informal Environmental Educators, and Community Based Partners

Grade Level(s): TK - 12

Registration:

https://na.eventscloud.com/618910

For more information, please contact:

Jennifer Mutch • Science Coordinator • (408) 453-6691 • jmutch@sccoe.org

REGISTER HERE: Environmental Literacy Collaborative

The next meeting is March 24, 2022

2021-2022 TOSA and Instructional Coaches Network Meeting





2021-2022 TOSA & Instructional Coaches Network Meeting

Santa Clara County Office of Education invites all Coaches, Mentors and TOSAs (Teachers on Special Assignment) to the: 2021-2022 TOSA & Instructional Coaches Network Meetings

- Develop your leadership skills as you learn more about supporting teachers with content, pedagogy, and technology.
- Network with other instructional leaders across Santa Clara County.
- Explore how to support teachers with Project Based Learning (PBL), Universal Design for Learning (UDL), integration of content areas, equity, and inclusion.

Dates:

October 19, 2021 November 16, 2021 January 18, 2022 February 22, 2022 March 22, 2022 April 19, 2022 May 17, 2022

September 21, 2021

Time: Noon to 2 p.m.

Location: Virtual via Zoom

Audience:

TOSA's, Mentors, Coaches

Grade Level(s): TK – 12

Registration:

https://na.eventscloud.com/618909

For more information, please contact:

Jennifer Mutch • Science Coordinator • (408) 453-6692 • jmutch@sccoe.org

REGISTER HERE: TOSA & Instructional Coaches Network

The next meeting is March 22, 2022

PLISD Catalog

2021-2022 Professional Learning and Instructional Support Dvision (PLISD) Catalog

Partner Workshops & Events

Environmental Literacy Think Tank





ENVIRONMENTAL LITERACY THINK TANK

BRING LEARNING ALIVE BY INTEGRATING ENVIRONMENTAL LITERACY STANDARDS IN YOUR CLASSROOM.

With the release of the Blueprint for Environmental Literacy, we are excited to support teachers in finding creative, innovative, simple ways to explore and celebrate their local ecosystems with their students.

SATURDAY, MARCH 26TH

We will be hosting a kickoff event on Saturday, March 26th to share some opportunities for students to get outdoors and celebrate Earth Day on April 22nd. Come explore some great activities and SEL practices, while enjoying some fresh air (and hopefully sunshine!). Light refreshments and coffee will be provided.

TIME: 10am (approx. 2.5 hours)

LOCATION: TBA COST: FREE

OPENTO: middle and high school educators APPLICATION: bit.ly/outdoorliteracy22

SUMMER 2022

A series of think tank sessions will be offered in Summer 2022 to create structure, time, and space for teachers to develop Environmental Literacy focused activities that expand/extend existing lesson plans. Teachers will be given time and coaching to develop activity(s) that focus on a central Environmental Literacy theme that will be woven throughout the year. Teachers will be able to participate in a design challenge, foster a phenomena-based mindset, collaborate across grade levels, and walk away with some great RAFT materials for their classroom. Teachers will also have two opportunities to connect during the 2022/2023 school year to celebrate successes, share lessons, and reflect on the implementation.

DATES & TIMES: sessions will run during the summer, 1x week for approximately 3 weeks (2-3 hours each)

LOCATION: RAFT @ 1355 Ridder Park Dr, San Jose, CA 95131

COST: FREE

OPEN TO: middle and high school educators

APPLICATION: available after the March 26th kickoff event

Register Here: Environmental Literacy Think Tank

City Nature Challenge 2022

April 29 -May 2

Taking pictures of wild plants and animals.

May 3 -May 8

dentifying what was found.







Take a Picture

Click Here for More Info. About City Nature Challenge

California Association of Science
Educators (CASE)



Call for Proposals!

California Science Education Conference
October 14-16, 2022 | Palm Springs, CA
CALL FOR PROPOSALS NOW OPEN!

Are you looking for an opportunity to share your knowledge and expertise in an area of science education? Are you eager for face to face interaction in a welcoming and friendly environment? Do you want to travel to sunny Palm Springs? If you answered yes to any of these questions, submit your proposal for the 2022 California Science Education Conference today! Choose from either of the following proposal options:

90-minute workshop

Short Course (choose between 3 or 6 hours)

PROPOSALS ARE DUE BY FRIDAY, APRIL 29, 2022

Submit a Proposal Here!

CANGSS STATEWIDE IMPLEMENATION



CA NGSS Statewide Implementation

Online Professional Learning
Building Student Sensemaking Through Disciplinary Literacy

REGISTER AT CANGSS.ORG

REGISTER HERE: CA NGSS Statewide Implementation

Online Professional Learning-Building Student Sensemaking Through Disciplinary Literacy

Youth Science Institute Upcoming Events



Science Safaris



Join us for upcoming Science Safaris at our Vasona and Sanborn locations! Our science safaris are educational programs that not only bring you and your family into nature, but we will also teach you facts about your surroundings that you may not have known! These guided Science Safaris will be led completely outdoors by a YSI staff member. YSI's Science Safari programs are designed for families, so please register each attending member.

Insect and Salamander Scavenger Hunts at Sanborn Park

Time: 11:30am-1:00pm

Cost: \$25

Did you know that the breeding season for salamanders in California is November to March? This year, we are hosting several of these events between **January and March** for the chance to see these amazing creatures. Because we find other creatures in the same areas, why not learn about them as well! Each 90-minute science safari will allow you to search the areas around Sanborn with our experienced Instructors to learn about what you see. Remember, these animals love cool moist areas, so this event is rain or shine! Put on your mud boots and dress warm!

Register Here:

March 5, 2022 March 19, 2022 March 26, 2022

Story Time: What Do You Do With A Tail Like This?

Date: March 12, 2022 **Time:** 1:00pm-1:30pm

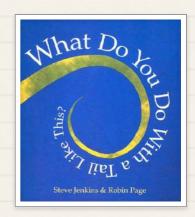
Location: Vasona Lake County Park

333 Blossom Hill Road Los Gatos, CA 95032

Cost: Free!

After we read the book, we will meet a couple of animals with

tails!



Register Here: What Do You Do With A Tail Like This?

CALIFORNIA ACADEMY OF SCIENCE TEACHER WORKSHOPS



Thriving California (Grades 4-8)

By exploring the world around us, we can find clues that will tell us about California's past and present. What we learn can help us to shape solutions that will ensure a thriving California for the future.



Ecology and ecosystems are big concepts. In this workshop you will engage with some strategies that make them both accessible and relatable. These strategies will involve direct interactions with both the natural and the built environment around us.

You will be supported to figure out how the strategies we practice in this workshop might be translated for successful implementation in your unique teaching & learning context.

This workshop is designed for people who work with grades 4-8, but is not limited to that range and all educators are welcome.

Saturday, March 12, 2022 9:00am - 12:00pm (Pacific Time)

Cost: \$35

Registration will close on or before Friday, March 11.

Register Here: Thriving California Workshop

Exploring Your Environment with Math and Science (Grades 3-5)



What do scientists and mathematicians have in common, and how do they work together? Experience model activities that bring

together math practices and science practices and support students to succeed at both. These activities will also get students outside and exploring their local environment. Workshop participants will reflect on the experience and discuss ways to apply these pedagogical strategies in your own context.

This three-hour online learning experience will be highly interactive and will engage you in small-group discussions and individual exploration.

This workshop is designed for teachers of grades 3 - 5. All educators are welcome.

Saturday, March 19, 2022 9:00am - 12:00pm (Pacific Time)

Cost: \$35

Registration will close on or before Friday, March 18.

Register Here: Exploring your Environment Workshop

Swamp in a Bottle



Buses and Biofuels: Sustainable Transportation



Grade level: 6-10 **Length**: 4 minutes

NGSS Disciplinary Core Ideas: MS-ESS3.A, MS-ESS3.C, MS-ESS3.D, MS-ETS1.1

For Video Discussion Questions and Accompanying Activity, please visit https://www.calacademy.org/educators/buses-and-biofuels-sustainable-transportation? https://www.calacademy.org/educators/buses-and-biofuels-sustainable-transportation? https://www.calacademy.org/educators/buses-and-biofuels-sustainable-transportation https://www.calacademy.org/educators/buses-and-biofuels-sustainable-transportation https://www.calacademy.org/educators/buses-and-biofuels-sustainable



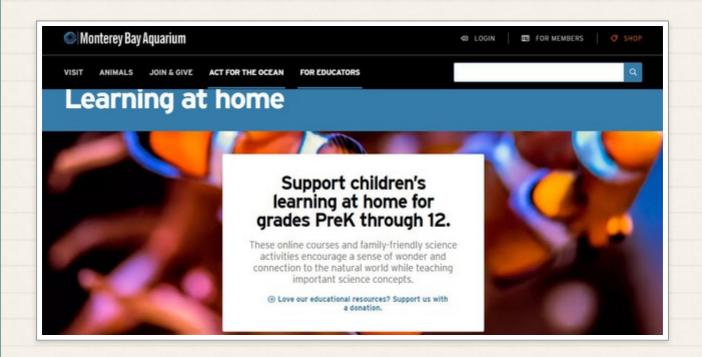
The Tech Interactive



Partner Resources



Exploratorium-Learning Toolbox



Monterey Bay Aquarium Learning at

Home Resources





Acterra Presents the

Spring 2022 Acterra Lecture Series: Climate, Drought, and Fire

Environmental and Social Justice Awareness Days

Earth Calendar or Eco Calendar

SJSU Universal Design for Learning

Universal Design for Learning

Session Descriptions:

- 1. Engagement- Building and Sustaining Student Buy In & Community
- 2. Engagement- Cultivating Expert Learners
- 3. Multiple Means of Representation-Eliminating Barriers
- 4. Multiple Means of Representation- Effectively using Instructional Technology
- 5. Multiple Means of Action and Expression- Authentic Assessment
- 6. Multiple Means of Action and Expression- Supporting Inquiry Based Learning
- 7. Becoming UDL Site Leaders

Why Participate?

Experience informational sessions, practical teaching, and guided reflections focused on Universal Design for Learning (UDL)

Who can participate:

Teachers of primarily 11th and 12th grade currently teaching in the East Side Union High School District

Days & Time:

Tentative: February 7 March 7 March 21 April 4 April 18 May 9 May 23

(4:00 - 5:30 pm)

Lead Facilitator:

Matthew Love, PhD SJSU Faculty in Special Education

Program delivery:

- Online
- Classroom implementation
- Asynchronous work

*Participate in all or some sessions!

*Earn up to 7 CEUs for full program participation

Contact:

Vanessa Vitug vitugv@esuhsd.org

Virginia Lehmkuhl-Dakhwe virginia.lehmkuhldakhwe@sjsu.edu

Complete the interest form



Universal Design for Learning

Program Description:

Teachers can earn **one** CEU for each of the seven sessions completed, up to a maximum of 7 CEUs.

Session activities are meant to be embedded in teachers' practice. Each session will require about 10 hours of time to complete (70 hours for full program completion).

For each session:

- **Four hours will be spent in synchronous meetings, conducting readings and reviewing case studies.
- **Six hours will be spent creating lesson plans, conducting a pre-implementation meeting with a course facilitator, implementing and recording lessons, and engaging in reflection and debrief activities.

Requesting CEU:

- -Teachers complete a Survey with name, contact information, and SJSU course history.
- -At the end of the 7 sessions, facilitators will report for each teacher CEUs earned and will complete CEU purchase orders. Teachers can earn between 1-7 CEUs across the sessions. Facilitators will keep track of the number of CEUs earned for each teacher.
- -Teachers will receive transcript ordering information via email after completing the sessions and receiving notification from a facilitator that CEUs were earned.



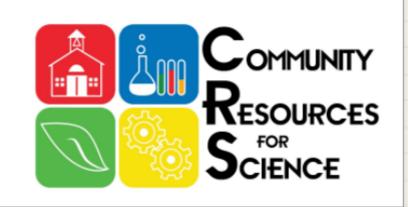
Complete Interest Form Here: SJSU UDL



Community Resources for Scien...

crscience.org

Early science education is crucial for children's academic success, yet is too often missing from California schools. CRS empowers teachers and scientists to bring science and engineering learning to life for children. Children build understanding of their world through exploration, while discovering their own talents and interests.



CRS- ARC-GIS Educator Resources

There is also an ARC-GIS webinar series for Educators (3rd-12th Grade): https://docs.google.com/forms/d/1ap_jzkOQSMxTl6fit8RQ3JeROu18jC4P3tEEmLuculM/edit

New Journal on Climate Change from CASE



Click Here to Read the California Journal of Science Ed

Navigating the Political Dimensions of Climate Change Teaching and Learning from STEM Teaching Tools

STEM TEACHING TOOLS CLICK HERE TO READ

CLICK HERE TO VIEW - STEM TEACHING TOOLS - Navigating the Political Dimensions of Climate Change Teaching and Learning

SCIENCE CURRICULA NEW RESOURCE

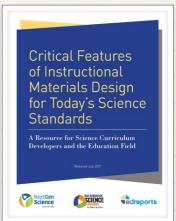
for success in school and beyond.

Critical Features of Instructional Materials Design for Today's Science Standards:

A Resource for Science Curriculum Developers and the Education Field

Today's science standards have initiated a significant shift in all parts of the science education system. As a result, science instructional materials are also changing. Educators, school and district administrators, and developers of instructional materials need to be able to develop a common vision of high-quality curricula that will prepare students

This resource is jointly authored by EdReports and NextGenScience to illustrate critical design features of science instructional materials and provide common language for describing highquality materials.





CLICK HERE TO READ THE RESOURCE

The National Academies of SCIENCES - ENGINEERING - MEDICINE

CONSENSUS STUDY REPORT

Call to Action for Science Education

BUILDING OPPORTUNITY FOR THE FUTURE



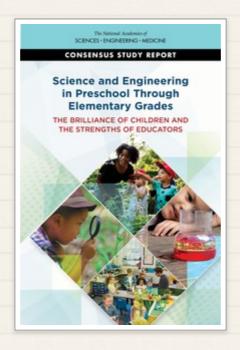
Click Here to Read the NASEM Call to Action

This report sets a bold vision for the future of high quality science education looking across all of grades
K-16 and puts equity and opportunity at the center. It also explores role of science education for
participation in democracy and daily life

Science and Engineering Education Needs to Be Prioritized Through Fifth Grade, Says New Report

Starting in early childhood, children are capable of learning sophisticated science and engineering concepts and engage in disciplinary practices. They are deeply curious about the world around them and eager to investigate the many questions they have about their environment. Educators can develop learning environments that support the development and demonstration of proficiencies in science and engineering, including making connections across the contexts of learning, which can help children see their ideas, interests, and

practices as meaningful not just for school, but also in their lives. Unfortunately, in many preschool and elementary schools science gets relatively little attention compared to English language arts and mathematics. In addition, many early childhood and elementary teachers do not have extensive grounding in science and engineering content.



Click Here to read the NASEM Elementary
Science Report

Environmental Literacy Community Based Partner Hub

Environmental Literacy Community Based
Partner Hub

A new website that features Community Based Partners that provide environmental education based experiences.

Lawrence Hall of Science Releases Updated Outdoor Learning Guidance When the National COVID-19 Outdoor Learning Initiative was launched in the summer of 2020, as a joint effort between founding partners Ten Strands, the Lawrence Hall of Science, Green Schoolyards America, and San Mateo County Office of Education, it was done to disrupt the educational inequities that were exacerbated by COVID-19. Since then, the intersection of new learning models and funding has created an opportunity to redefine the educational experience and better serve students, families, and communities. Read more here: The Lawrence Hall of Science Releases New Guidance For Implementing Outdoor Learning - Ten Strands







SCCOE

https://www.scc-enviro-ed.org/

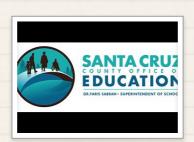
Walden West

http://www.waldenwest.org/

CAELI

https://ca-eli.org/







SMCOE

https://eeproviders.smcoe.org

Santa Cruz COE

https://sites.google.com/view/environmental-literacy-for-all/professional-learning

SJCOE

https://www.sjcoescience.org/ environmental-literacy.html







Valley Water

https://www.valleywater.org/ Distance Learning Resources: **Distance Learning NEW FOR** 2020 | Santa Clara Valley Water

EVOLS

https://www.evols.org/ Distance Learning and COVID Modified Resources: 2020/21 Programs (COVID Modified) | Environmental Volunteers - Environmental Volunteers (evols.org)

Living Classroom

https://www.livingclassroom.org/

More Environmental Literacy Resources and Partners Featured on the SCCOE and SMCOE **Environmental Literacy websites above.**



isteam-science & Environmental Literacy



The mission of the Science Department is to provide service and support for all educational stakeholders. We offer workshops, conferences, and student events that promote the Next Generation Science Standards (NGSS).

Science explores and explains phenomena around us. It is a way of gaining, organizing, applying, and conveying knowledge of that phenomena. Having science as one of the core contents in K-12 education is vital as it influences our culture and has allowed society to flourish.



1290 Ridder Park Drive, San Jo...



7 4084536587

🚮 sccoe.org/isteam/science/Pag...

SCCOE Science Google Webpage

For even more resources, workshops and upcoming conferences, please visit our webpage. We are updating this weekly. Please also let us know if you have any events or workshops that you would like to

