

CALIFORNIA STEM NETWORK™

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Advancing STEM Education in California: Insights from the California STEM

Network June Meeting

The California STEM Network recently convened to discuss the latest developments in STEM education across the state. Led by Jessica Sawko, the CA STEM Network's Statewide Director, the meeting discussed possible topics or goals for an in-person convening of the Network. They also covered regional initiatives, and the significance of incorporating student voice and emerging technologies.

Exploring Alternatives: Network Members Talk Convening Strategies

Jim Vanides emphasized the value of corporate partnerships within the STEM Ecosystem. Recognizing the need for broader conversations, it

was suggested to extend the network's scope to include representatives from school districts or similar stakeholders to help facilitate industry partnerships. While the CA STEM Network seemed to agree the group would like to meet, it became clear the first issue of order would be to map out why the STEM Network should convene. This way, the meeting would more strategically meet the Network's specific interests and objectives.

Vince Stewart of the Bay Area STEM Ecosystem shared the historical practice of meeting in October and November to determine the priorities for the STEM Network. These priorities traditionally revolved around legislation, funding, and the state budget. Stewart suggested the idea of potentially incorporating participants from the student leadership summit as a part of the prospective Network convening to explore avenues for incorporating student voice into the CA STEM Network's work. The inclusion of student perspectives could be a crucial step towards shaping a more inclusive and student-centric STEM education landscape.

Lastly, Darin Gray of the Los Angeles STEM Ecosystem emphasized the importance of selecting a venue accessible to all regional network folks for the statewide convening.

Regional Updates and Initiatives:

The launch of the Seasons of CS event was celebrated for their work bringing together partners to explore





CA STEM Network Meeting August 1, 2023 @ 2:00 pm <u>Register Here</u>



the opportunities and challenges within the computer science field. Yamileth Shimojyo of the Riverside STEM Network unveiled an exciting initiative known as STEM Summer Labs. With five high school STEM camps and three pilots, students will be partnered with industry partners to collaborate on real-world problem-solving projects. A similar middle school camp called FUNdamentals aimed to spark interest and introduce younger students to



STEM subjects. Denise Williams of the Silicon Valley Education Foundation announced their fourth annual <u>California Math Summit</u> event scheduled for August 2nd. This summit will feature six breakout groups focusing on topics such as computer science, data science, and equity. The event aims to provide valuable networking opportunities, resources, and meals for educators. The event will also include book signings by prominent speakers.

Justin Sewell from Krause Center for Innovation (KCI) and a member of the Bay Area STEM Ecosystem, invited participants to their <u>summer workshop and conference</u>. The workshop will aim to engage educators in effective strategies for reaching vulnerable learners and will have Dr. Allison Scott as the keynote speaker.

Monica Dennis, the Program Manager, STEAM & Expanded Learning Programs with Alameda County's Office of Education, shared their <u>Region 4 initiative</u> which includes multiple Bay Area counties and aims to enhance STEM education in after-school programs. The program focuses on training non-credentialed teachers to help alleviate anxiety around math and science instruction. By integrating programming and the use of robots, students can be exposed to hands-on STEM learning experiences.

A.I. in Education and Looking Ahead:

Katherine Goyette highlighted a report by the National Department of Education focused on Artificial Intelagence (A.I.) and education. The A.I. for CA initiative aims to explore the potential of building A.I. from a computer science perspective and understanding its impact on learning. The project also provided valuable resources to teachers as they navigate the evolving field of A.I. Participants also discussed policy implications for A.I. in education, concluding there is work to be done.



UPCOMING EVENTS



- August 2, 2023: SV(e)F Northern California Mathematics Summit
- October 19, 2023: PACE Pre-conference Event for district-level science coaches, science leaders, and TOSAs
- October 25-27: CS For All Summit 2023



Promoting Sustainable Development Goals (SDGs) through Community-Centered Learning

In order to prepare students for a global economy and foster well-being, it is crucial to establish a connection between local issues and global sustainability. The <u>United Nations' 17 SDGs</u> is set to provide practical opportunities for educators to engage students and address both local and global challenges. By incorporating STEM, economics, social behavior, and politics, students acquire interdisciplinary knowledge and skills that are valuable for their future careers and civic participation.

The 17 Sustainable Development Goals take into account students' concerns and relate them to relevant SDGs. The idea is to explore the actions undertaken by organizations and governments, and encourage students to propose their own solutions. The changing landscape of future careers indicates an increasing demand for skills centered around sustainability in various fields such as economics, social sciences, ecology, and technology.

Students will get to utilize resources from UNESCO and other organizations to design solutions for specific goals. They will also foster connections from local to global by utilizing curriculum materials that focus on global food challenges, energy sources, and other related topics. When teachers engage students in <u>community-centered learning</u>, they foster student civic education that encourages problem-solving in line with the SDGs.

By incorporating the 17 SDGs into curriculum, teachers begin to promote equity by showcasing diverse cultural practices and linking the SDGs to students' interests and community needs. As a result, learning opportunities will extend well beyond the confines of the classroom by partnering with youth organizations and leveraging diverse locations for sustainability education. In other words, by embracing community-centered learning and incorporating the SDGs, educators empower students to become global citizens who actively contribute to a sustainable future.

To learn more, you can explore Next Generation Science Standard's (NGSS) <u>6 Things to Know in June</u> <u>2023</u>.



Join the 4th Annual SV(e)F Northern California Mathematics Summit!

Date: August 2, 2023 Time: Wednesday, 8:00 AM - 2:30 PM PST Location: MetroED, 760 Hillsdale Ave, San Jose, CA 95136

Revolutionize Mathematical Pathways and Make a Difference

Wednesday August 2nd will mark the 4th Annual SV(e)F Northern California Mathematics Summit. This event aims to ignite a communitywide commitment to revolutionize mathematical pathways in alignment with the California Mathematics Framework. By supporting this event, you're providing bold and innovative professional learning opportunities for STEM educators, and ultimately benefiting students who face barriers to access and opportunity.

Attend In-Person for an Immersive Experience

Virtual and in-person tickets are available for free, but we highly encourage attending in person for the most valuable experience. Inperson attendees will enjoy a complimentary breakfast and lunch, along with the opportunity to engage in book-signings by prominent speakers.

A Day of Shared Resources and Breakout Sessions

The Mathematics Summit offers a wealth of resources and an array of breakout sessions, both in-person and virtual. This allows attendees to dive deep into relevant topics, exchange ideas, and collaborate with peers in the field. It is an ideal platform to gain insights, expand professional networks, and explore innovative strategies for teaching mathematics.

Register Now!

Don't miss out on this exciting opportunity to be part of the movement to transform mathematical pathways. Register for the 4th Annual SV(e)F Northern California Mathematics Summit today by <u>clicking here</u>.

BROAD-BAND FOR ALL

In May, the <u>California</u> <u>Department of Technology</u>

launched the Digital Equity Online Survey. The survey is an effort to better understand the digital equity barriers and needs of Californians living in unserved and underserved communities. If the state receives enough engagement, they will be able to have an informed **Digital Equity Plan that** shows how to allocate funding to ensure every Californian has access to Broadband Internet services, skills and tools. The department wants to collect 10,000 responses by the time the survey closes on June 30th and they still need more signatures to meet their goal. We call out to the members of the CA STEM Network asking you to complete the survey and share it with your networks to help hit the 10,000 goal. Click Here's for a link to the survey.



Unlocking the Power of Science Leadership - Join the Tailored Pre-Conference Event

The California Association of Science Education (CASE) is hosting a Pre-Conference Event designed exclusively for district-level science coaches, science leaders, and TOSAs (Teachers on Special Assignment) on Thursday, October 19, 2023. This event will aim to provide participants with the support and resources needed to enhance leadership skills and build a robust science network for professional learning.

When it comes to leadership in education, numerous roles contribute to the collective growth of teachers and students. Whether you hold a positional or experiential leadership position, serve as an instructional coach, a county leader, or occupy another significant role, this event is tailored to meet each person's specific needs.

The pre-conference is set up to help build a strong foundation for professional development within certain districts and sites. By leveraging community's existing strengths and skills, while addressing crucial areas that require attention. The event will focus on the following key aspects:

- Developing a course sequence model: Explore effective strategies for structuring and implementing a comprehensive science curriculum that aligns with educational standards.
- Collaborating with administrators: Learn how to foster productive partnerships with administrators to create a supportive environment for science education.
- Fostering department cohesiveness and creating a library of best practices: Discover methods for promoting collaboration among science educators, including classroom visits and educator films, to create a shared repository of effective teaching techniques.
- Establishing or maintaining an NGSS Implementation Team: Gain insights into forming and sustaining a team dedicated to implementing the Next Generation Science Standards (NGSS) or fostering collaboration around NGSS.
- Implementing strategies to support instructional material adoption and coaching practices: Acquire practical tools and approaches to aid the adoption of instructional materials and effectively support teachers through in-class instructional coaching.

For those who have already made progress in implementing science education reforms, the event will also explore how science teams can be utilized to introduce and facilitate further positive change. The registration fee includes a continental breakfast and lunch. The options for registration are as follows:

Pre-Conference Event (Conference Registration Required): \$150 Pre-Conference Event Only: \$215

Please note that registration is limited to county office of education, district, school, charter, and private school employees. Due to the high demand for this event, you're encouraged to secure your spot as soon as possible. <u>Click here to register or learn more</u>.