



## Connecting the Dots: Advancing STEM Education through Collaboration

At the August meeting of the California STEM Network, we had the privilege of hearing from various Network members and partners, each sharing their valuable insights and ideas to propel our mission forward. You can review the past [agenda here](#), and read on for a brief overview of some key points discussed:

- 1. Finding Common Ground:** Jessica Sawko, the CA STEM Network Director, emphasized the importance of understanding the needs of Network members. To achieve this, she suggested spending time in our first meeting discussing each organization's mission and finding common ground. By aligning our objectives, we can foster a more cohesive and impactful approach to advancing STEM education.
- 2. Engaging Industry Partners and Community Colleges:** Darin Gray, of the Los Angeles STEM Ecosystem, highlighted the potential of engaging industry partners, community colleges, and the Career Technical Education (CTE) program of study. Together, these groups could collaborate to explore ideas that could get them involved and will not only benefit students but also bridge the gap between education and industry needs.
- 3. Nurturing Informal STEM Pathways:** Eric Meyer, of the San Diego STEM Ecosystem, brought attention to the significance of informal pathways, such as internships and job shadowing, as on-ramps to formal STEM careers. Creating a clearer framework for informal STEM opportunities will help students explore their interests and passions.
- 4. Empowering Students through STEAM Hubs:** Chris Breazeale, from the California Department of Education, shared the success of STEAM Hubs, which provide high-need and high-risk students with after-school environments to explore STEM subjects beyond the classroom. These communities of practice support expanded learning providers and offer programs that enable students to discover their interests and potential in a supportive setting.
- 5. Strengthening the Student Voice:** Jessica Sawko also mentioned plans to incorporate more student voice through [a virtual leadership summit](#) being hosted by Children Now. Connecting with student leaders across the state will help ensure that our initiatives resonate with the students we serve.
- 6. Collaborative Efforts:** Tasha Castañeda from [Green Scholars](#) seeks to connect with out-of-school programs that share a focus on STEM culture, promoting collaborative efforts to support students' STEM aspirations.



**PLEASE  
JOIN US**

CA STEM Network  
Meeting September  
5, 2023 @ 2:00 pm  
[Register Here](#)

7. Bridging Generational Gaps: Darin Grey acknowledged the need to bridge generational gaps in communication within the STEM world. He notes that by both adapting our language and understanding the perspectives of younger generations, this will help us effectively engage with students and create meaningful connections.



8. Promoting STEM through Events: Several members shared exciting upcoming events and activities related to STEM. Justin Sewell, a member of the Bay Area STEM

Ecosystem, shared information around the [road trip streaming event](#) at The Krause Center for Innovation. Additionally, Stephen Callahan, from the North Central Valley STEM Network, shared info about the UC Davis' [chip manufacturing event](#). Each of these are excellent opportunities for educators and students to learn and get involved.

10. Expanding Math Pathways: Shari Staub, from CA Mathematics Education Collaborative (CMEC), highlighted the ongoing efforts to expand math pathways for students, a crucial step in promoting a strong foundation for STEM education.

As we continue our collective journey to enhance STEM education across California, it's inspiring to witness the dedication and passion of each member of the CA STEM Network. Our next meeting is scheduled for September 5th, and we look forward to building on these discussions and exploring new opportunities to advance STEM education.



**Student  
Leadership  
Summit**

Virtual Summit: Evening of October 6th and Full Day of October 7th

[Register Here](#)

## UPCOMING EVENTS

- [August 9, 2023](#): CASE Teacher Collab: New Beginnings
- [August 23, 2023](#): Creating Time for Science
- [August 23, 2023](#): Networking for Science
- [October 3, 2023](#): CA STEM Network Meeting - Virtual
- [October 05, 2023](#): The Early Math Fall Forum
- [October 19, 2023](#): CASE Pre-conference Event for district-level science coaches, science leaders, and TOSAs
- [October 20 – 22](#): California Science Education Conference – Palm Springs
- [October 21 - 22, 2023](#): Fall CUE - Stockton
- [October 25-27](#): CS For All Summit 2023
- [October 26](#): Lights On Afterschool - Nationwide
- [November 3 – 4](#): 64th CMC-South Annual Mathematics Conference



## Empowering the Next Generation: Making Computer Science Count in California Schools

There have been some exciting developments in the world of education, particularly regarding computer science (CS) and its integration into California schools. The Computer Science for California (CSforCA) initiative is reshaping the way computer science is taught in our schools. CSforCA has recently published three case studies outlining the efforts and impact of this transformative initiative, striving to equip the next generation with essential digital skills and prepare them for the future. We recapped one case study covering efforts to make CS count in CA below, and you can [access all three case studies here](#).

CSforCA believes that all students in California should have access to high-quality computer science education. This education is important as it helps develop critical thinking, problem-solving, and collaboration skills. To incentivize students to take CS, it should count towards high school graduation and college eligibility. CS can be categorized as a math, science, Career Technical Education (CTE) course, or an elective. Many schools choose to classify CS courses in the CTE pathway to be eligible for Perkins Funding, which supports a teacher with CTE/ICT authorization.

CS can also be considered a "g" elective, which counts towards the core admissions requirements for University of California (UC) eligibility. While this classification aims to make CS accessible to all students, irrespective of their math or science inclination, it raises a significant equity issue for English Learners. Their equitable access to CS is hindered by the struggle to incorporate it into their schedules, primarily because their elective slots are often occupied by EL coursework, highlighting the urgent need for addressing this disparity.

### How does computer science help students prepare for life after high school?

By offering and diversifying computer science education, students are given the chance to develop critical thinking, problem-solving, and collaboration skills through various aspects of the discipline. Here are some ways in which computer science education fosters these skills:



**Critical Thinking:** Computer science requires students to analyze problems, break them down into smaller components, and develop logical solutions. This process involves evaluating different approaches, considering potential outcomes, and making informed decisions. By engaging in computational thinking, students develop critical thinking skills that can be applied to various real-world situations.

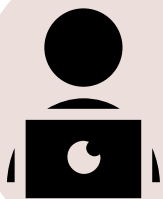


**Problem-Solving:** Computer science education emphasizes problem-solving skills by presenting students with complex challenges and encouraging them to find innovative solutions. Students learn to approach problems systematically, identify patterns, and apply algorithms and logical reasoning to develop efficient solutions. This iterative problem-solving process helps students develop resilience, adaptability, and creativity in tackling new and unfamiliar problems.

**Collaboration:** Computer science often involves collaborative projects and teamwork. Students work together to design and develop software, analyze data, or solve complex computational problems. Through collaboration, students learn to communicate effectively, share ideas, listen to others' perspectives, and contribute to a collective goal. Collaborative projects in computer science also promote skills such as leadership, negotiation, and compromise.

These skills are essential in the digital age, where technology is integrated into various aspects of our lives. Computer science is a foundational part of K-12 curriculum and should be accessible for all students. To learn more about this particular case study, [click here](#).

### STEM Students! AP Chemistry is now open for fall enrollment at UC Scout



UC Scout offers 65+ online high school courses, including 27 AP® options. Enroll now at [ucscout.org](https://ucscout.org) or email [ucscoutoutreach@ucsc.edu](mailto:ucscoutoutreach@ucsc.edu) to learn more.  
#APChemistry #OnlineLearning #UCScout

## SUMMER STEM stravaganza

**AUG 19TH**  
10:30 A.M. - 1:30 P.M.

**WOMEN IN STEM EVENT**

**FREE**  
@Santa Clara

**GIRLS IN GRADES  
5-10**

**LOCATION: CENTRAL  
PARK LIBRARY**

**REGISTER BELOW**  
SPOTS LIMITED TO 85 GIRLS!

## STEM ACTIVITIES + SPEAKERS and more!

Join to:

- Learn more about STEM fields
- Hear from women in STEM
- Make new friends!



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