california Science project



The mission of the **California Science Project (CSP)** is to develop and enhance teachers' science content knowledge and pedagogical practices in order to support high-quality science education for all pre-kindergarten (PK) to high school students throughout the state. To this end, the following goals are central to each CSP program:

- Deepening teachers' knowledge of science content, in alignment with the California Next Generation Science Standards, Common Core State Standards and English Language Development (ELD) Standards and associated frameworks
- Enhancing teachers' instructional and differentiation strategies to improve learning for all students
- Creating professional learning communities, centered in action and reflection practices, for science teachers
- Supporting the development of teacher leaders with the experience or potential to mentor colleagues
- Offering technical assistance, evaluation and assessment to partner schools and districts that advance science programs through research-informed practices
- Providing access to and expansion of current research in science education that is linked to improved student learning

"As university faculty, we benefit from our experience with CSP by integrating these same techniques in our own teaching at the college level. By transforming the way we teach, we expose undergraduates (many of whom are in teacher prep programs) and graduate/credential students to innovative tools for learning science."

PROFESSOR OF SCIENCE EDUCATION AND CSP REGIONAL DIRECTOR, CSU NORTHRIDGE

LEADERSHIP

Through workshops, institutes and events, CSP provides teachers with avenues for deepening and sharing their science practices. Research-based programs link universities with schools, creating grade-level approaches to better learning and achievement for all students. These programs focus on helping science teachers increase content knowledge, grasp signature pedagogies and acquire in-depth practices for developing students' language skills and literacy. CSP assists teacher leadership teams in creating lesson-study programs and developing professional learning communities. At several CSP regional sites, new efforts are afoot to build STEM leadership teams in schools and districts so that teachers can deepen their understanding of interdisciplinary science while being supported by their school administration in these collaborations.

PROGRAM OFFERINGS

CSP provides schools and districts with an extensive network of expert PK–12 and university educators who are well versed in California's latest grade-level science requirements. These partners are knowledgeable about state-adopted materials, standards and assessments, ongoing professional development opportunities, and ELD resources.

Professional learning communities bring educators together from different grade levels, subject areas and backgrounds to talk about teaching. Here, the focus is on enhancing lessons to support student success. Many CSP sites offer training in lesson study to help teachers plan better lessons that focus on science content, student goals and using student work to inform instruction. Because student learning also takes place outside the classroom, several regional sites offer field experiences that allow teachers to reconnect with the natural world. In the process, they are encouraged to develop ways to pursue outdoor learning with their students.

IMPACT

CSP continues to be a consistent advocate for improving access to high-quality science instruction in PK–12 education. This advocacy includes:

- Maintaining a statewide network of regional sites that seek to strengthen teachers' subject knowledge and instructional skills in the sciences
- Providing stability for regional sites through their integration into the institutional fabric of sponsoring universities
- Building strong professional learning communities that contribute to teacher retention and stability, especially in underserved schools and districts

All CSP regional sites are past or current recipients of grants from the National Science Foundation, California Department of Education and other foundations, and have strong, long-term partnerships with schools and districts.

REGIONAL SITES

Bay Area Science Project California Science Project: Statewide Office Central Coast Science Project Delta Sierra Science Project East Bay Science Project Inland Northern Science Project Sacramento Area Science Project San Diego Science Project San Fernando Valley Science Project Science and Health Education Partnership (UCSF) South Coast Science Project UC Irvine Science Project

CONTACT

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Facebook: facebook.com/ CaliforniaScienceProject 1,122 Number of educators served (2023-24)

352 Number of schools served (2023-24)

"To reform education, to make a bold move toward closing the achievement gap, we have to come together as one mind and develop reading, writing and thinking skills within each subject area. Imagine the power of students experiencing the same high expectations in every subject!"

CSP PARTICIPANT, HAYWARD UNIFIED SCHOOL DISTRICT



CSP is a member of the **California Subject Matter Project (CSMP)**, a network of nine discipline-specific projects administered by the University of California Office of the President (UCOP) that provide high-quality professional learning for PK–12 teachers throughout California. Each project is represented statewide by regional sites on the campuses of UC, California State University and independent colleges and universities. For more information about CSMP, please visit **csmp.online**.