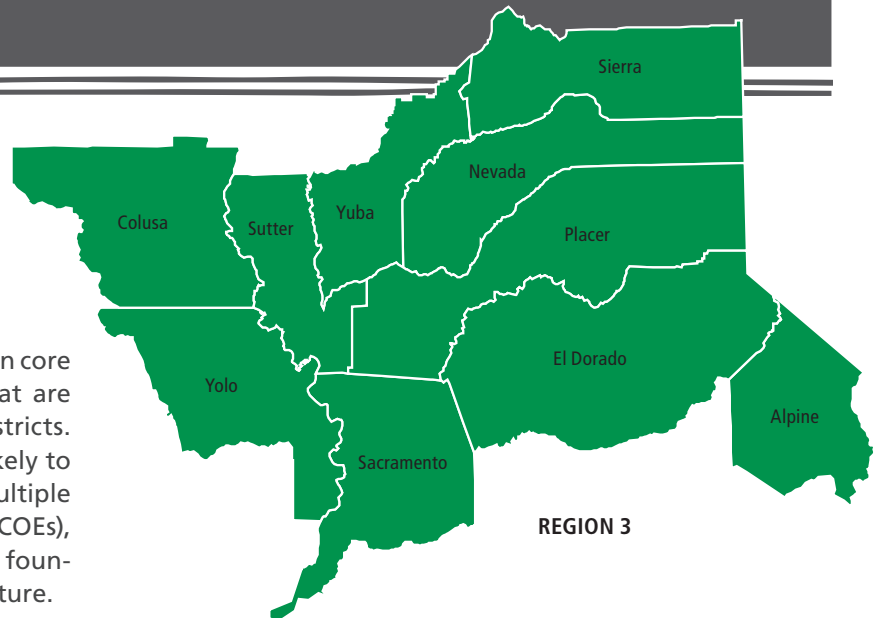# Putting STEAM into Summer

A Guide to Regional Partners and Resources:
Sacramento and Nearby Counties

Where to Start in Sacramento and Nearby Counties

In Sacramento and nearby counties, the urban core has centralized resources and programs that are typically operated by individual school districts. In outlying areas, the programs are more likely to depend on creative partnerships among multiple districts and county offices of education (COEs), and often tap into local industry groups and foundations with a specific focus, such as agriculture.

Sierra

Nevada

Colusa

Sutter

Yuba

Placer

Yolo

El Dorado

Alpine

Sacramento

REGION 3

Regional Networks and Resources

The Sacramento County Office of Education (SCOE) houses the regional lead appointed by the California Department of Education to support program implementation and build capacity for quality expanded learning programs (i.e. before, after, inter-session, and summer school) throughout Region 3 of the State's Expanded Learning Technical Assistance System. In addition to Sacramento, that includes Alpine, Colusa, El Dorado, Nevada, Placer, Sierra, Sutter, Yolo, and Yuba counties. Staff at the SCOE also help make connections between school districts and local organizations based on local needs and circumstances.

Contact Monica Gonzalez-Williams, 916-228-2644, Email: mgonzalez@scoe.net and Mark Drewes, 916-228-2518, Email: mdrewes@scoe.net.

School District Examples

Sacramento City Unified School District served about 4,000 students in its summer learning programs in 2016. The district contracts with several different program providers who hire staff and implement the program. These are typically, but not always, the same organizations that provide after-school programs at the sites. Two credentialed teachers are included in the staff of each program. The district has also used the summer learning programs to give teachers an opportunity to develop and pilot new lessons. The district's expanded learning office provides centralized support—from coordinating field trips to conducting program evaluations. A variety of STEAM topics and activities are integrated into the day.

Elk Grove Unified School District has added an enrichment piece to its traditional summer school model. Staff use resources from the STEM Learning Library at the SCOE Expanded Learning Office to engage K-8 students in hands-on STEM learning activities during the enrichment portion of the summer program.

Folsom Cordova Unified School District has created a Growing Together: STEM and Family Literacy Day Camp. In 2016, the theme was water. Students and parents alike learned about the importance of water and water conservation from local experts, took a field trip to SCOE's Outdoor Educational Day Site (River Bend Park), and participated in water-related STEM activities at their summer camp site.

Wheatland School District has added various STEM components to their summer learning programs, such as providing students with various materials and space to engineer their very own Cain's Arcade. If the students could imagine it, they could engineer it. Students used the engineering design process to create prototypes and final designs of their arcade games. Students were also engaged in a Farm-to-Fork pilot program with Bishop's Farm where they learned about soil, crops, and farm careers.

Local Support Organization Examples

The **Yolo County Office of Education** (YCOE) is adaptable in its approach to summer STEAM programming. It looks for partners with ideas, existing programs, and resources that can help create valuable programs for students in this rural area.

The YCOE offers a variety of different summer learning programs. School districts, post-secondary institutions, and industry organizations all combine their efforts to design the curriculum, staff the programs, and recruit the students. To date, much of the focus has been on high school students and giving them opportunities to learn while doing through internships and other hands-on experiences. One such program is Project SOLAR—Sustaining Our Local Alternative Energy Resources—an initiative that involves the County of Yolo and solar system supplier SunPower.

A **Regional STEM Learning Ecosystem** works in partnership with the SCOE Expanded Learning Office to connect summer program providers to local STEM experts. In Sacramento County alone, 169 after-school and summer program sites have STEM activities taking place. A blog provides the latest news at http://afterschoolregion3.blogspot.com.

Examples of Local STEM/STEAM Resources

Explorit is a nonprofit located in Davis that provides opportunities for hands-on science exploration through mobile and on-site programs that connect science to everyday life. A list of the kinds of programs they offer is available at www.explorit.org/about.

Project WILD is a wildlife-based conservation and environmental education program that provides professional development training and educational materials. General information about this national program is available at www.projectwild.org and contact information for the program coordinators in California is available at http://projectwild.org/CaliforniaCoordinator.htm.

Project WET has both national and international networks focused on water education. It provides water resource education materials and workshop trainings for educators at all levels. The project website is at www.projectwet.org. In California, the project is coordinated by the Water Education Foundation and more information is available at www.watereducation.org/project-wet.

UC Davis actively supports and or sponsors STEAM learning activities for children and youth, working in partnership with the YCOE among others.

The Center for Land-Based Learning, headquartered in Winters, is dedicated to teaching California's youth about the importance of agriculture and natural resource conservation. Their list of partners includes school districts and schools throughout the agricultural areas of California.

Other STEAM-oriented program providers in the region include:

- » **Effie Yeaw Nature Center** at www.sacnaturecenter.net/home.html
- » **Powerhouse Science Center** at http://powerhousesc.org
- » **Aerospace Museum of California** at https://aerospaceca.org
- » **Crocker Art Museum** at www.crockerart.org
- » **Food Literacy Center** at www.foodliteracycenter.org