

Putting STEAM into Summer

A Guide to Regional Partners and Resources:
San Diego and Imperial Counties

Where to Start in San Diego and Imperial Counties

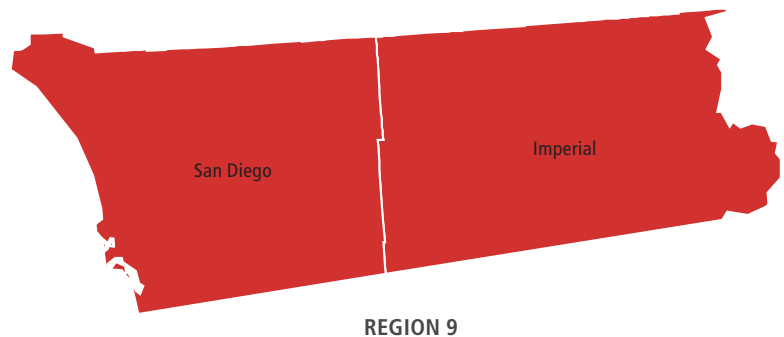
In California's two southern-most counties, the county offices of education (COEs) are the first stops for finding out about summer learning programs with a STEAM focus. In heavily populated San Diego County, universities and other local organizations have put a particular focus on science and STEM in informal settings.

Regional Networks and Resources

San Diego and Imperial counties are part of Region 9 of the state's Expanded Learning Technical Assistance System, and each houses a local lead appointed by the California Department of Education.

- » For the Imperial COE lead, contact Brenda San Ramon, 760-312-6538, Email: bc44@icoe.org.
- » For the San Diego COE (SDCOE) lead, contact Liza Flowers, 858-569-3140, Email: liza.flowers@sdcoe.net.

The SDCOE also is the home for two STEAM specific efforts, the Power of Discovery: STEM Hub Initiative and the San Diego STEM EcoSystem Initiative.



School District and County Office of Education Examples

Many school districts in San Diego County have expanded learning time staff who have participated in targeted professional development provided by the SDCOE. The SDCOE supports a community of practice dedicated to increasing the quantity and quality of STEAM learning in after-school and summer programs. That work began in 2012 and has included both annual events and regular professional development sessions.

In 2015-16, the focus of those monthly gatherings was the creation of nearly a year's worth of STEM units that the participating teams shared and took back to their programs. The sessions combine content and pedagogy, so participants learn how to set up inquiries and ask good questions, but also get the science and math understanding that underpins the units they create. The goal is to increase both the confidence and competence of program staff so they can deliver fun and rigorous STEAM experiences to their students. In recruiting participants for this program, the SDCOE first targets programs that operate both after school and during the summer.



In San Diego County, school districts that have both summer programs and have regularly participated in the Power of Discovery: STEM Hub Initiative include:

- » Santee School District
- » Escondido Union School District
- » South Bay Union School District
- » Oceanside Unified School District
- » National School District
- » Chula Vista Elementary School District

In **Imperial County**, Holtville Unified, and Westmorland Union School District both run summer learning programs with a STEM focus.

Local Support Organization Examples

In both Imperial and San Diego Counties, the **YMCA and Boys and Girls Clubs** often partner with school districts to offer both after-school and summer programs.

In the San Diego area in particular, some of these community-based organizations play the role of connectors, helping develop partnerships between their local school districts and STEAM experts. Examples include:

- » **Boys & Girls Clubs of Oceanside**, which partners with Oceanside Unified School District, corporations such as Genetech, Cox Communications, and San Diego Gas and Electric, and organizations such as Sally Ride Science at UC San Diego.
- » **The South Bay Family YMCA** partners with National and Chula Vista Elementary School Districts, along with organizations like the San Diego Zoo and San Diego Gas and Electric.

Examples of Local STEM/STEAM Resources

In Imperial County, a number of organizations work with school districts on STEM-focused programs. Examples include:

- » **The Imperial Irrigation District** (IID) offers a speakers bureau and other education programs.
- » **CAL FRESH** offers presentations on physical activity, healthy eating, and the creation of Cal Fresh youth clubs.
- » **The Calexico High School ASSETS** program partners with UC Irvine and San Diego State University.

The SDCOE maintains an online directory of local organizations that offer programs such as assemblies, field trips, professional development, on-site opportunities, and curriculum related to STEAM education. Information and the directory can be found at <https://steam.sdcoe.net>.

The Education Office at NASA's Jet Propulsion Laboratory (JPL) taps into the knowledge base at NASA to provide educators in both formal and informal settings with STEM-based lessons, projects, activities, resources, and professional development. JPL serves Los Angeles, Riverside, San Bernardino, Orange, and San Diego counties. A summary of what they can provide is found at www.nasa.gov/centers/jpl/education/index.html.

STEM Next, which operates out of the University of San Diego, is a national leader in increasing opportunities in STEM learning for youth both in and out of school. Their work includes identifying and supporting cross-sector collaborations. For more information about what they do, and contacts in the informal STEM field, visit <https://stemnext.org/about-stem-next>.