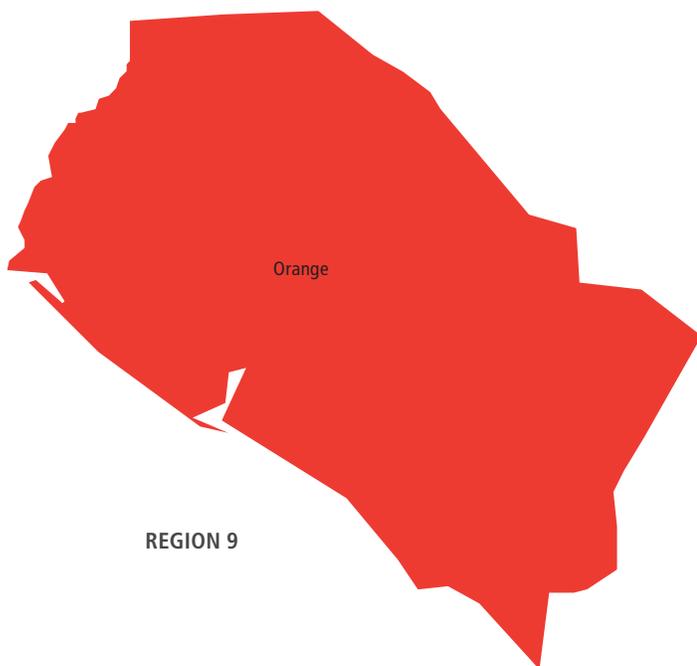# Putting STEAM into Summer

A Guide to Regional Partners and Resources:
Orange County

Where to Start in Orange County

In Orange County there is a vigorous effort to provide informal STEAM learning opportunities. For school districts, the Orange County Office of Education can act as a central clearing house for learning about community partners and what local districts are doing to create strong summer programs.

Orange

REGION 9

Regional Networks and Resources

Orange County is part of Region 9 of the state's Expanded Learning Technical Assistance System.

The Orange County Office of Education houses the local lead appointed by the California Department of Education to support program implementation and build regional capacity for effective after-school and summer programs. Contact: Jeanne Awrey, 714-966-4093, Email: jawrey@ocde.us.

School District Examples

Two local districts with a STEM focus during the regular school-year created summer programs that were aligned with that focus. In the process the districts worked with various local STEM partners.

Ocean View School District offered its students three different summer camp options in the summer of 2016, all of which were fee-based. Two of the programs operated for 10 weeks and offered full day care. Pricing depended on whether or not students participated in field trip opportunities. Neither of these programs was explicitly STEM focused, but both offered a strong component of science instruction.

The third program was a five-week STEAM summer camp program that was new in 2016. For this program, the district worked with Discovery Cube in Orange County and a variety of other local partners to provide students with activities as well as high-quality instruction based on a different theme each week. The grade levels served in the program were from TK to 5th grade.

At all of the camps, the district established learning objectives for students each week. For example, during the space week, the objectives included being able to identify the difference between planets, meteors, and stars.

At Ocean View, summer and after-school programs are operated by the school district itself and the staff are district employees. The school year staff compete to be able to lead the summer programs.

Orange Unified School District runs a similar summer program using district staff. They spent a year developing a STEAM curriculum for use during summer. Providing professional development to their non-credentialed staff during the school year helped prepare them to facilitate activities that involved inquiry and project-based learning.

Other Orange County districts with summer programs that incorporate STEAM include:

» Anaheim Union High School District

» Magnolia School District

» Anaheim Elementary School District

Local Support Organization Examples

The Orange County STEM Initiative serves as a key connection point for STEAM initiatives in the area. Districts interested in knowing more about local programs and partnership opportunities in the county can start with this nonprofit organization. Its goal is to create effective partnerships between community stakeholders, including but not limited to families, education, business, government, and philanthropy. Their website is at www.ocstem.org.

Imagine Science is a partnership among the Boys & Girls Clubs of Garden Grove, Girls Inc. of Orange County, the Orange County 4-H Council, and the Anaheim Family YMCA. The partnership engages youth in Orange County with STEM learning activities. More information about the partnership is available at www.imaginesci.org.

The Anaheim Family YMCA has multiple STEM programs, including a partnership with CSU Fullerton. For information about their summer STEM programs go to www.anaheimymca.org.

Examples of Local STEM/STEAM Resources

Partners of the OC Stem Initiative include a large group of philanthropic, post-secondary, industry, and education partners. The Initiative has members such as the Tiger Woods Foundation, Kaiser Permanente, and the Children and Families Commission of Orange County. The full list is at www.ocstem.org/members.

Science@OC works with schools and districts in Orange County to improve science education, with a particular focus on middle school students. It is a fiscally sponsored project of OneOC, a local nonprofit. Events and descriptions of their work are at www.scienceoc.org.

Discovery Cube has a variety of education initiatives that involve both having school groups visit them on site, and sharing their STEM expertise with educators. Information is available at www.discoverycube.org/oc.

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.