STEAM Resources – Sacramento County

California State PTA District: 3

“STEM” stands for Science, Technology, Engineering and Mathematics education. Add Art, and you have “STEAM.”

Young people with competency in the STEAM disciplines are more likely to prosper in their lives and their careers.

Building the capacity of young people in science, technology, engineering, and math – and doing so within the humanistic frame that the arts help provide – is essential. They will need a high level of STEAM literacy to make decisions about their daily lives and to fulfill their role as informed citizens. Our schools need to make sure our kids are prepared. Families also play an essential role.

In every community in California, you will find organizations like museums, after-school programs, and other community groups focused on helping kids access STEAM information.

Where to Start in Your Area:

In Sacramento and nearby counties, the urban core has centralized STEAM resources and programs that are often 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, and often tap into local industry groups and foundations with a specific focus, such as agriculture.

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 Yolo County Office of Education 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: www.sacnaturecenter.net/home.html
  - Powerhouse Science Center: http://powerhousesc.org
  - Aerospace Museum of California: https://aerospaceca.org
  - Crocker Art Museum: www.crockerart.org
  - Food Literacy Center: www.foodliteracycenter.org
  - Soil Born Farm Youth Education: https://soilborn.org/learn-grow/youth-ed/
  - Sacramento Splash: https://www.sacsplash.org/about-us

**Online Resources:**

- NASA Jet Propulsion Lab: https://www.jpl.nasa.gov/edu/learn/
- STEMworks: http://stem-works.com/
- California STEM Network: https://www.childrennow.org/castemnetwork/
- California Department of Education
  - STEM Resources: https://www.cde.ca.gov/pd/ca/sc/stemintrod.asp
  - Visual and Performing Arts Resources: https://www.cde.ca.gov/pd/ca/vp/vaparesources.asp
- Information about the annual California STEAM Symposium: https://www.stemcalifornia.org/Page/1
- California Department of Water Resources: https://water.ca.gov/What-We-Do/Education
- Mad Science for kids from K-6: https://www.madscience.org/
- California Foundation for Agriculture in the Classroom: https://learnaboutag.org/about/index.cfm
California State PTA Tips and Resources

- Arts Education webpage: https://capta.org/focus-areas/education/curriculum/arts-education/
- Next Generation Science Standards webpage: https://capta.org/focus-areas/education/curriculum/next-gen-science/
- Ideas for STEAM activities to do at home and at PTA events: https://capta.org/focus-areas/education/curriculum/stem/