

4-H Science, Technology, Engineering, and Mathematics Education Advisory Committee

Contact Information

Chair: Steven Worker, 4-H Youth Development Advisor; Email: smworker@ucanr.edu

Co-Chair: Evelyn Rumsby, 4-H Community Education Specialist; Email: erumsby@ucanr.edu

Purpose

The 4-H Science, Technology, Engineering, and Mathematics (STEM) Education Advisory Committee is comprised of a diverse group that implements new and strengthens existing STEM and computer science programming to support 4-H youth in developing their scientific literacy and computational thinking while also building organizational commitment and capacity for STEM and computer science. Work is aligned with the [UC 4-H Strategic Plan 2018-2028](#); the committee collaborates with the UC ANR [Science Education Workgroup](#). The 4-H STEM Education Advisory Committee promotes a youth-adult partnership approach in its work.

Scope; an annual work plan to be developed by the committee and may include the following:

- STEM and computer science needs assessment at local, county, and state programs.
- Identification and dissemination of 4-H STEM and computer science programming, grounded in youth development and educational practices (see [STEM Checklist](#)) that uses high-quality curricula.
- Professional and volunteer development efforts that promote effective science and engineering pedagogy including experiential and inquiry-based learning. Explore and implement ongoing professional development opportunities that are learner-centered (e.g., communities of practice).
- Identification of high-quality STEM and computer science curricula; and distribution to local 4-H programs (targeted within the definitions of [scientific literacy](#) and [curriculum development](#)).
- STEM and computer science marketing, communication, and outreach activities; help update the public [4-H STEM website](#) and the [Youth Science Education Resource Hub](#).
- Link to and support county 4-H STEM and computer science group/committee efforts
- Promote California 4-H representation in multi-state and national STEM and computer science efforts.
- As needed to support the previous goals, aid in fund and resource development for 4-H STEM programs and/or explore partnerships with STEM organizations.

Committee Member Responsibilities

- Gather input on agenda items before meetings; attend scheduled meetings and express ideas of constituents
- Assist in the development and delivery of group goals
- Complete action items assigned at meetings
- Join one or more teams:
 - 4-H STEM Challenge (previously the 4-H National Youth Science Day)
 - Technology & Computer Science
 - Robotics
 - Volunteer Development
 - Program Adaptation for Culturally Relevancy for Diverse Youth
 - Evaluation

Committee Membership

The California 4-H STEM Education Advisory Committee has 9-16 participants:

- 4-8 Youth (ages 14 to 19)
- 3-5 4-H Adult Volunteers, Recent 4-H Alumni, and Program Partners
- 2-4 County 4-H Youth Development Program Staff and Advisors
- Cooperative Extension Specialist for Youth Scientific Literacy

Meetings

Four full-day meetings per year, held at the State 4-H Office in Davis, CA or online, scheduled based on member availability. Monthly virtual meetings. Teams may require attending additional meetings. All travel and related costs will be reimbursed by the State 4-H Office in accordance with University policies.