

4-H CYFAR: Youth grow through science programming

The Issue

A significant proportion of California youth are at substantial risk for poor health, substance abuse and academic underachievement due to family, community, social, political and economic conditions. One approach to reducing their risk is by enhancing youth scientific literacy.

What has ANR done?

The 4-H Children, Youth, and Families at Risk (CYFAR) project engages youth in science education to build the knowledge, skills, attitudes and positive behavior necessary for fulfilling lives. In Borrego Springs, high school teens engage 5th grade youth in afterschool gardening. In Winters, UC Davis undergraduate students act as mentors and facilitators of science education for K-8th grade youth. In Sacramento, 4-H teens work with elementary youth to hone their science skills through gardening and Youth Experiences in Science curricula.

In 2011-2012, 180 youth in grades K-6 participated once or twice per week. They were informally mentored by 22 teens who delivered curriculum activities. We recruited and trained the teens in inquiry-based science education, experiential education and specifically on gardening and the environment.

The Payoff

Youth and community benefit from programs

Program evaluation showed that participating youth had positive attitudes towards science, an understanding and appreciation for the environment, and positive relationships in the program. The evaluations showed 79% enjoyment and 61% believe they can make a difference in the world. The youth also gained skills by using scientific tools for gardening. Evaluation is ongoing to assess youth and teen outcomes resulting from program participation.

Communities also benefit from partnerships with local organizations and individuals developed to continue the activities. In Sacramento, parents of youth participants plan to charter a 4-H community club to meet after school to continue 4-H activities after CYFAR funding ends. In San Diego, two family resource centers were established in partnership with local service organizations. In Yolo County, parents and other adults were recruited to lead youth activities such as soccer. In addition, movement has begun to reform the County Youth Coalition, which could provide ongoing programs in underserved areas of the county.

Contact

Supporting Unit:

Youth, Families & Communities

Steven Worker, 4-H Science, Engineering, and Technology coordinator, smworker@ucanr.edu

Marcel Horowitz, 4-H Youth Development Advisor

Sue Manglallan, 4-H Youth Development Advisor

Megan Harns, 4-H Youth Coordinator

Joyce Gutstein, John Muir Institute of the Environment

Marianne Bird, 4-H Youth Development Advisor



Youth engaged in science, engineering and technology (SET) activities.

