**Condition Change: UC ANR contributed to improved college readiness and access**

**Issue**

California requires a highly skilled workforce to remain competitive, prosperous, and an innovative global leader. California was ranked 42nd in the nation for 2016 performance and has a high school graduation rate of 83%, which is slightly lower than the national average of 85%. Improved college readiness and access can contribute to the development of a qualified workforce for California and a robust and thriving state economy.

**Methods**

UC ANR’s youth and community development programs equip the next generation for college and successful careers.

UC Cooperative Extension (UCCE) academics provide oversight, leadership, and guidance for the statewide implementation of UC 4-H Youth Development Program (UC 4-H), which reached over 155,000 youth and had almost 20,000 adult volunteers contributing over 1,700,000 hours (UC 4-H). Project Learning Tree, Youth Experiences in Science, and other programs trained teen teachers to deliver programs to younger children (Marianne Bird; Car Mun Kok; Claudia Diaz Carrasco; Fe Moncloa).

As a result of UC ANR research and extension efforts, participants learned skills and reported positive aspirations that can lead to increased college readiness. Outcomes with specific indicators follow.

**Outcomes**

**Participants had positive attitudes and learned information about preparing for college and careers.**

* Over 100 4-H youth statewide responded to the college & career readiness common measures survey and reported learning information to prepare them for college and a career as a result of what they may have learned at 4-H. (UC 4-H)
	+ 91% of youth reported when choosing a career, it is important to be passionate about the work they do
	+ 84% of youth report that for the type of career they want, it is important to go to college
* Over 700 4-H youth in grades 8-12 responded to the science common measures survey about positive attitudes and aspirations toward science they may have learned in the 4-H program. (UC 4-H)
	+ 91% of youth reported liking science
	+ 71% of youth reported liking a job that involves using science
	+ 73% of youth reported interest in studying science after high school

**Participants adopted science and teaching skills to prepare them for college and careers.**

* Over 700 4-H youth responded to the science common measures survey about what they may have learned in the 4-H program. Youth reported science skills and abilities such as asking questions about how things work (91%), trying new things to see how they will work (90%), looking at how things are the same or different (85%), and comparing how different things work (81%). (UC 4-H)
* Over 100 4-H youth statewide responded to the college & career readiness common measures survey and reported learning information to prepare them for college and a career as a result of what they may have learned at 4-H. Youth reported having intrapersonal professionalism skills such as it being important to arrive on time for work (100%), be trusted by an employer (100%), do their job well (100%), show respect for others (100%) and have a professional image on social media (91%). (UC 4-H)
* 4-H teen teachers (17) in Sacramento County reported an increase in their understanding of the science process in teaching youth (87%) and adopted and delivered the Youth Experiences in Science (YES) curricula to 334 children at 11 sites. (Marianne Bird)
* In one Mendocino County after school program, ten high school students who were trained as teen mentors for nine months reported that they understood the science activities and could teach them effectively. They then adopted best practices and curriculum in delivering science activities to younger youth starting in the 2018-2019 school year. They have since expressed additional interest in computer science activities, which will lead to the creation of a new computer science club. (Car Mun Kok)
* In Riverside County, 27 youth served as teen teachers and applied their science knowledge and skills to deliver the Project Learning Tree curriculum to 6000+ youth. Each team of teen teachers provided at least 6 hours of introductory environmental science to elementary and middle school youth. (Claudia Diaz Carrasco)
* Eight teen teachers that received 4-H training in delivering computer science programs to young children in Santa Clara County reported through interviews that their own grades improved as a result of their participation. The 92 teens and 10 school staff along with 4-H staff and volunteers adopted best practices and the curricula by delivering the program to 393 children from diverse backgrounds. Additionally, the teens reported that children they taught practiced important science process skills (e.g., observing, communicating, comparing, organizing) known to increase science literacy and critical thinking. (Fe Moncloa)

These measured outcomes demonstrated knowledge and skills learned and positive attitudes related to science, college, and careers, which are a pathway to entering the workforce. In this way, UC ANR contributes to the public value of developing a qualified workforce for California.