2018 Evaluation Report for Bay Area Community Resources Marin Learning and Enrichment After School Program



University of California

Agriculture and Natural Resources 4-H Youth Development Program

In February and May 2018, BACR LEAP surveyed 4th, 5th, and 8th grade students (total 290; 55% boys and 43% girls) for their attitudes and self-perceptions around science, technology, engineering, and mathematics. Report compiled June 2018 by Steven Worker, PhD, 4-H Youth Development Advisor, smworker@ucanr.edu.

Science

77% like science.

80% believe science will be important in their future.

48% believe they are good at science.

Technology

83% get excited about new technology discoveries.

80% want to learn more about technology.

Engineering

70% like engineering.

86% like to see how things are made or invented.

71% like to build or construct things.

Mathematics

81% like math.

73% believe they are good at math.

Comparing STEM Side-by-Side

With 0% where a student selected "Strongly Disagree" and 100% where a student selected all "Strongly Agree" to all questions.

59% for science





engineering



68% for math



Skills

use data to create a graph for presentation to others. (56% can sometimes)

identify engineering problems.

(54% can sometimes)

32% can usually or always **32%** can usually or always create a display to communicate data and observations. (47% can sometimes)

28% can usually or always **34%** can usually or always generate ideas and possible solutions. (51% can sometimes)

Gender Bias

Girls can be as good in science careers as boys can. **68%** of boys agree **85%** of girls agree

Girls can make important scientific discoveries. **68%** of boys agree 85% of girls agree

Girls have less need to study math and science than boys do. 19% of boys agree 32% of girls agree

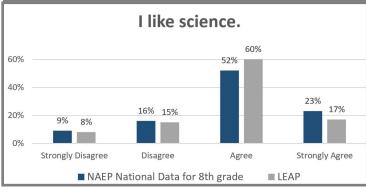


Behaviors

42% browse internet sites which deal with STEM.

46% talk to friends, parents, or other people about STEM.

Comparison to National Assessment of Educational Progress 2015 Science



I would like to have a job that involves using science in the future. 38% 40% 35% 27% 30% 22% 20% 15% 14% 12% 10% Strongly Disagree Disagree Agree Strongly Agree ■ NAEP National Data for 8th grade ■ I FAP