

Summer of CS 2024 Survey Findings



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In summer 2024, the Educator Workforce Investment Grant in Computer Science (EWIG: CS) supported a series of workshops known collectively as “Summer of CS.” Offered through 44 different opportunities across the state of California, these learning events sought to build the capacity of K–12 educators to deliver high-quality instruction in computer science. Registration data and surveys administered before and after each workshop offer key findings about the Summer of CS experience.

Findings About Workshop Participation

Key Finding #1: A total of 733 educators participated in a Summer of CS workshop in summer 2024, more than half of whom had no prior experience with teaching computer science. The gender and racial representation of these participants closely matched the overall California K–12 workforce. Workshops included a mix of educators serving elementary, middle, and high school grades.

Findings About Overall Workshop Quality

One key measure of success for Summer of CS is participants’ perspectives about the quality of their workshop experiences.

Key Finding #2: Across eight different survey items, survey respondents reported very positive impressions about content, format, and usefulness. For example, 98% of respondents agreed or strongly agreed that the workshop made them feel included in a community of computer science educators and advocates.

Findings About Changes in Participant Perspectives

Although it is instructive to learn about workshop attendees’ perceptions of quality, a positive experience alone is insufficient for gauging success. An effective professional development effort supported by EWIG: CS should help participants grow in their knowledge, understanding, and skills to effectively meet students’ computer science learning needs.

EWIG: CS External Evaluation

The American Institutes for Research® (AIR®) serves as the evaluation partner for California’s EWIG: CS investment. This overview is the first in the series of reports and summaries of findings about the EWIG: CS grant.



Key Finding #3: Survey responses reveal a positive and statistically significant change in confidence in teaching computer science between the beginning and the end of Summer of CS workshops. The largest change observed among survey items related to participant confidence was for teaching in alignment with California computer science standards.

Key Finding #4: Positive changes in confidence are more pronounced among survey respondents who identify as women, belong to underrepresented racial groups, and who have no prior experience with teaching computer science. These findings suggest that Summer of CS was especially effective at building the confidence of educators who have been traditionally underrepresented in computer science education.

Key Finding #5: The study team found a positive and statistically significant change in confidence to recruit and retain students in computer science, for all students and historically underrepresented students. We did not find statistically significant differences for these items based on respondent characteristics.

Key Finding #6: Survey responses reveal a positive and statistically significant change in beliefs about who can and should do well in computer science. These changes were smaller in magnitude than changes for educator confidence, but the pre-workshop values were also higher, suggesting that educators who chose to participate in Summer of CS workshops already had strong beliefs about the importance of computer science and the ability of all students to succeed.

Looking Forward

Taken together, these findings provide encouraging evidence about the quality of the Summer of CS experience and its potential for improving computer science opportunities in California. We emphasize that this evidence is correlational; our study design does not enable us to make statements of causality with our conclusions. Moreover, self-reported data about participant confidence and beliefs may or may not translate to actual changes in educator behavior, learning opportunities, and student experience. A follow-up survey planned for fall 2025 will enable the research team to explore the degree to which workshop experiences are associated with subsequent classroom practices.



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