CSforCA FAQs

1. Where do we see computer science (CS) in our day-to-day lives?

CS is *everywhere*. It touches almost every aspect of our lives from education to entertainment, art to medicine, at work, school, and home.

2. Why is computer science education important?

Computer science teaches students how to meaningfully engage in an increasingly technology-driven world. We believe that part of developing a well-informed citizenry is helping young people understand and approach computing technology, while thinking critically about its potential and impacts.

3. What will students learn in computer science courses?

Computer science goes beyond computers, smart phones, and tablets. CS courses teach more than just coding, by offering creative design challenges that connect to a wide variety of youth interests. Non-CS classes — such as math, art, English language arts, and history — can also incorporate computational thinking skills and expand students' understanding of data and the impacts of computing. CS frequently gives students opportunities to collaborate with hands-on projects, reinforcing teamwork and communication skills on and off the screen. You can view sample projects from K-12 CS coursework **here.**

4. Are computer science skills relevant to careers outside of tech?

Yes! From abstract skills like collaboration and creative problem-solving, to technical skills like coding and data visualization, the competencies learned in computer science courses are useful across almost every career in the 21st century. Check out examples of non-tech careers that utilize computer science **here**.

5. Why is it important to have equity in computer science?

Access to and participation in computer science has implications for economic opportunities and how we are represented in the software we use everyday. Unfortunately, <u>CS education</u> is still inequitable along race, ethnicity, gender, and socioeconomic lines. CS should be made available to *all* students to provide young people pathways for college and career success that will ultimately lead to a more just, equitable, and productive society.

6. What does equity in computer science look like in K-12?

Equitable implementation may look different depending on the grade level, school, or district, but universal exposure at each grade band is important. Computer science can also be integrated into other subjects like science, math, history, and language arts to provide pathways for a wider range of students to experience CS. Our <u>CS Equity Guide</u> provides guidance for K-12 administrators on how to implement equitable CS.

7. How equitable is computer science in my school/district?

CS education equity varies across California. You can see the current state of access, participation, and success in your school or district by using the <u>CS Equity Dashboard</u>.

8. What is required for a teacher to successfully teach CS?

Requirements for CS teachers vary. For example, introductory level courses, such as CS Principles, Exploring Computer Science, or CS Discoveries are written with the assumption that a teacher has little to no experience with computer science. AP CS-A and other advanced CS courses at the secondary level may require familiarity with teaching technical programming languages, such as Python or Java. And, while some CS courses often require the use of devices, many lessons on problem-solving using computing are better served "unplugged," needing no computing equipment at all.

9. Is there a specific computer science curriculum that should be used?

We suggest considering curriculum providers who share these basic principles:

(1) Commitment to equity in their curriculum and professional learning experiences as outlined in the Kapor Center's <u>Culturally Responsive-Sustaining CS Education Framework;</u>

(2) Alignment with the <u>California K-12 Computer Science Standards</u> (and other content standards through the integration of CS standards); and

(3) A demonstrated history of success providing curriculum and professional learning in California that is aligned with <u>California's Quality Professional Learning Standards (QPLS)</u>.

11. Where can educators/administrators learn more about equitable CS?

Professional learning opportunities are offered in California through the Summer of CS week of professional learning. Find out more at <u>www.summerofcs.org</u>.

12. How can I get involved?

If you want to advocate for equitable computer science education in your community and get involved in the CSforCA coalition, please visit our <u>Take Action page</u>.