CSforCA

WHY COMPUTER SCIENCE IN CALIFORNIA?

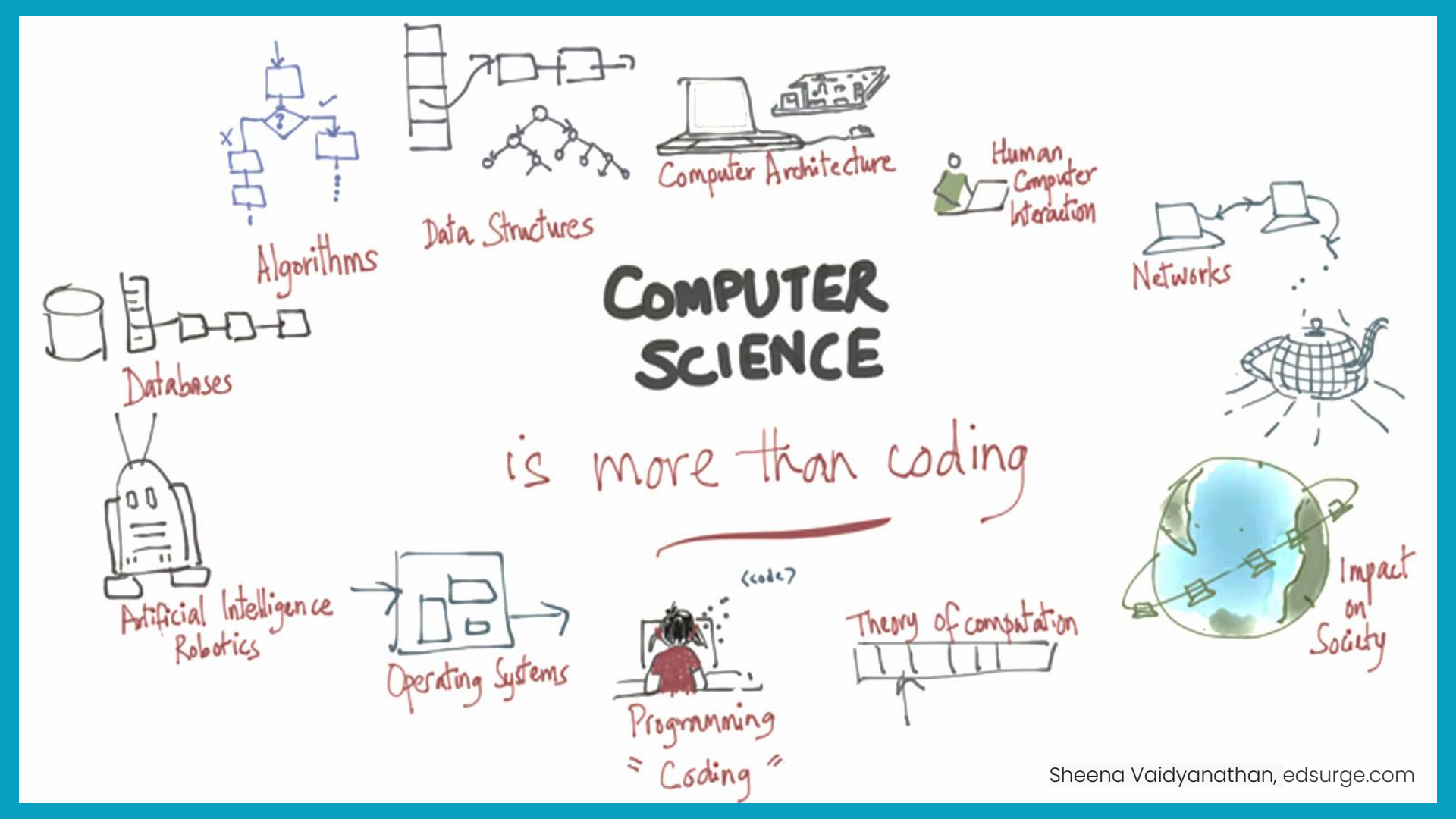
CSforCA Mission:

Lead the charge for equitable and accessible computer science education in California. Far too often, gender identity, ethnicity, income-level, or zip-code determine who is able to access and participate in computer science education.

CSforCA Goal:

To ensure all high schools in CA will provide all students with access to, and engagement in, high-quality computer science education that empowers them to thrive in college, careers, and community engagement.

WHAT IS COMPUTER SCIENCE?



Sheena Vaidyanathan, edsurge.com

WHAT IS COMPUTER SCIENCE?

Computer science ≠ education technology
Computer science ≠ digital literacy
Computer science ≠ just coding

Computer science is:

"The study of computers and algorithmic processes, including their principles, their hardware and software designs, their applications, and their impact on society."

(Tucker et. al. 2006, p. 2, as seen in the California CS Standards Introduction, 2018, p. 10 & the California CS Strategic Implementation Report, 2019, p.6)

Riverside Unified School District

CS PREPARES STUDENTS FOR COLLEGE, CAREERS, & COMMUNITY ENGAGEMENT

CS teaches core 21st century skills and basic literacies for all fields of study:

+ **Problem Solving**
+ **Collaboration and Creativity**
+ **Computational Thinking**
+ **Technological Innovation**

CSforCA

SMASH Wayne State

COMPUTER SCIENCE IS FOUNDATIONAL FOR ALL CALIFORNIANS

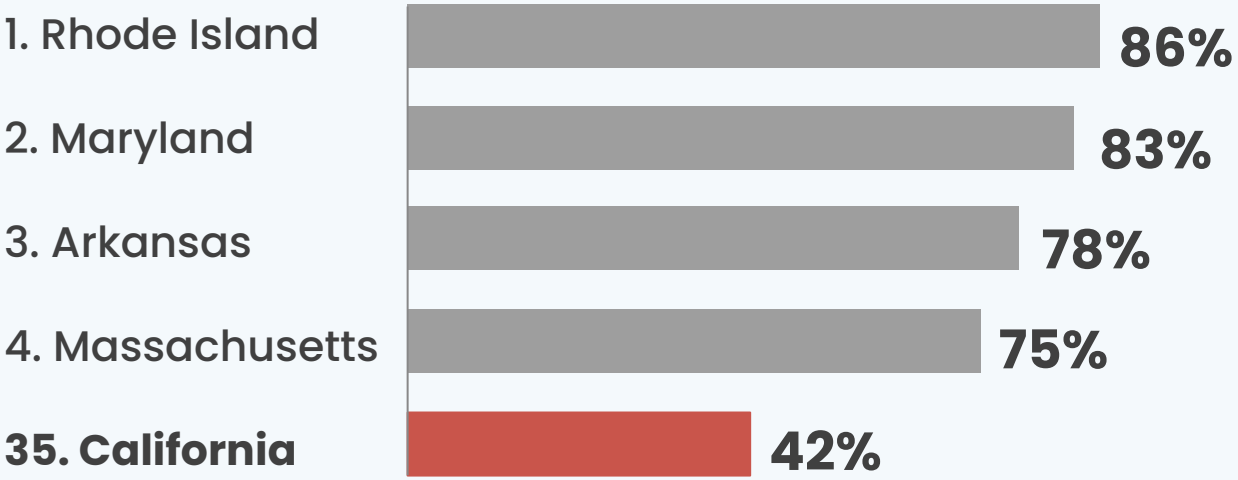
Computer Science education is critical to the success of:

+ **Our students**
+ **Our state**
+ **Our society**

CSforCA

California ranks 35th

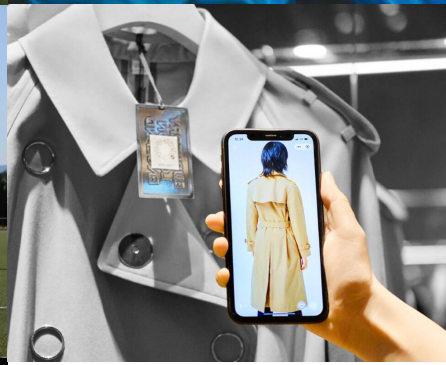
in states offering at least one high school CS course.

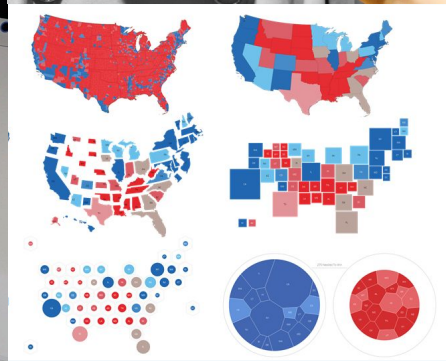


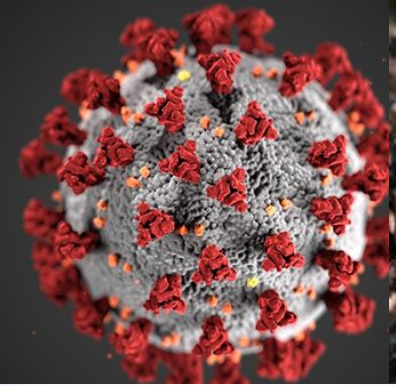
OUR STATE NEEDS CS

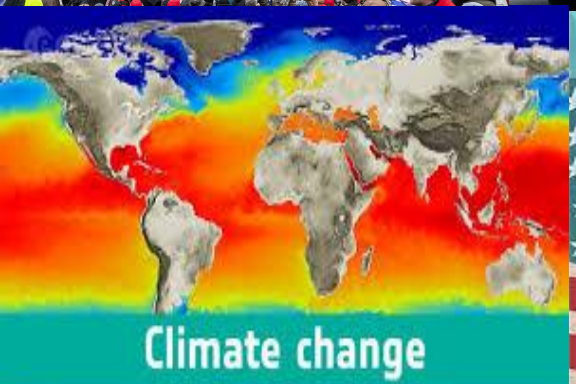
California is the 5th largest economy in the world and leads the nation in tech and employment across all fields.

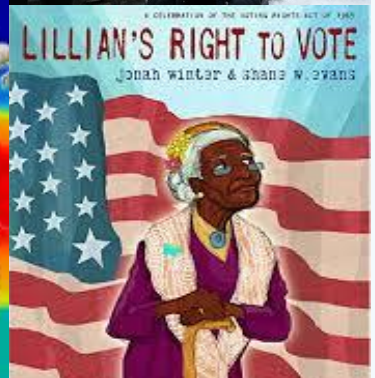
Technology affects **every** industry.









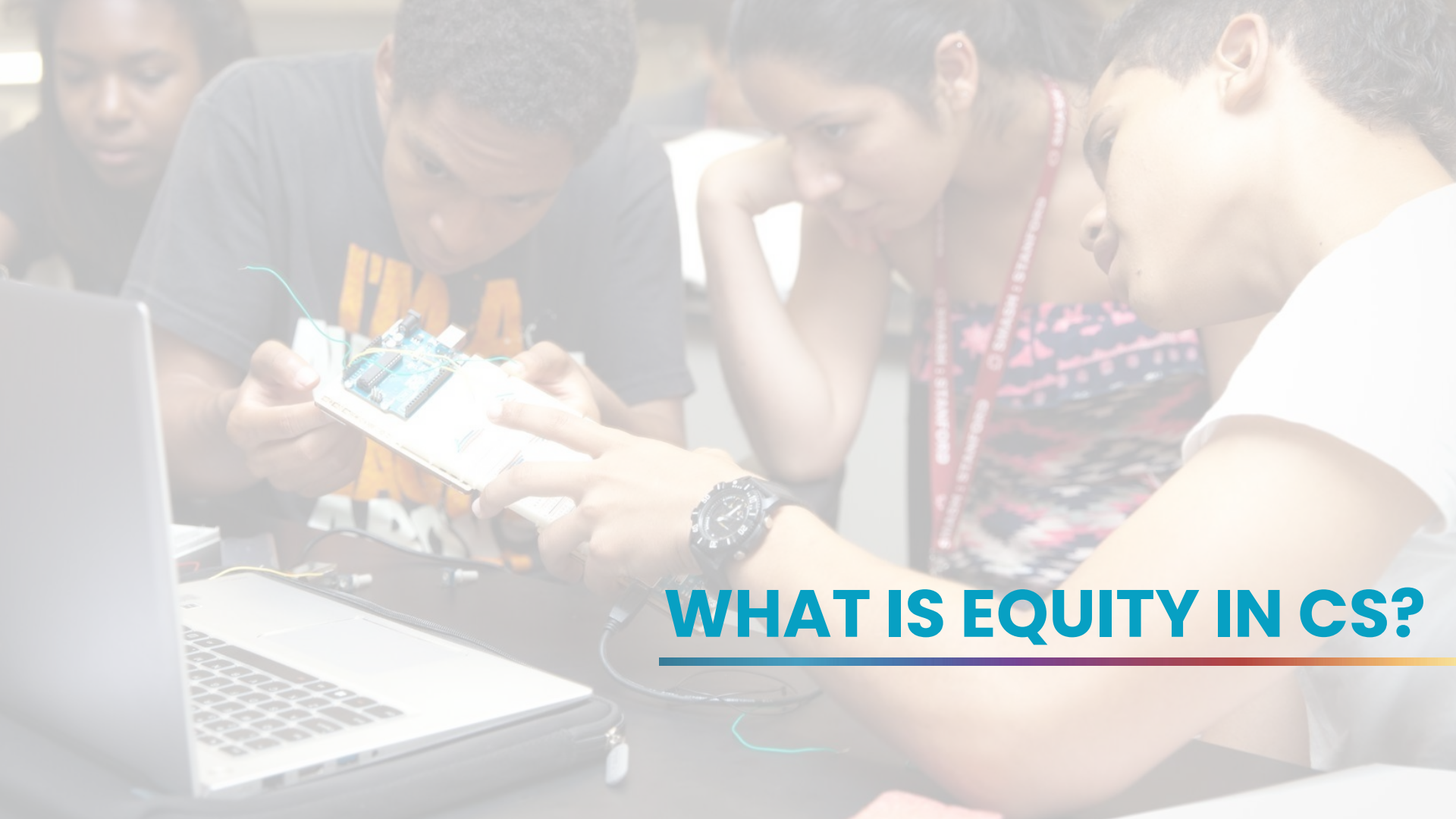


OUR SOCIETY NEEDS CS

CS education encourages youth to create innovations for the world's toughest challenges and helps students understand and think critically about the impact of technology through topics such as:

+ **Ethics**
+ **Data**
+ **Cybersecurity**
+ **Artificial Intelligence**

CSforCA



WHAT IS EQUITY IN CS?

EQUITY IN CS

Without equity in computer science, we see problems like:

+ **Unequal Opportunities**
+ **Algorithmic Bias**
+ **Income Inequality**
+ **Lack of Diversity and Inclusion**

Riverside Unified School District

SMASH Berkeley

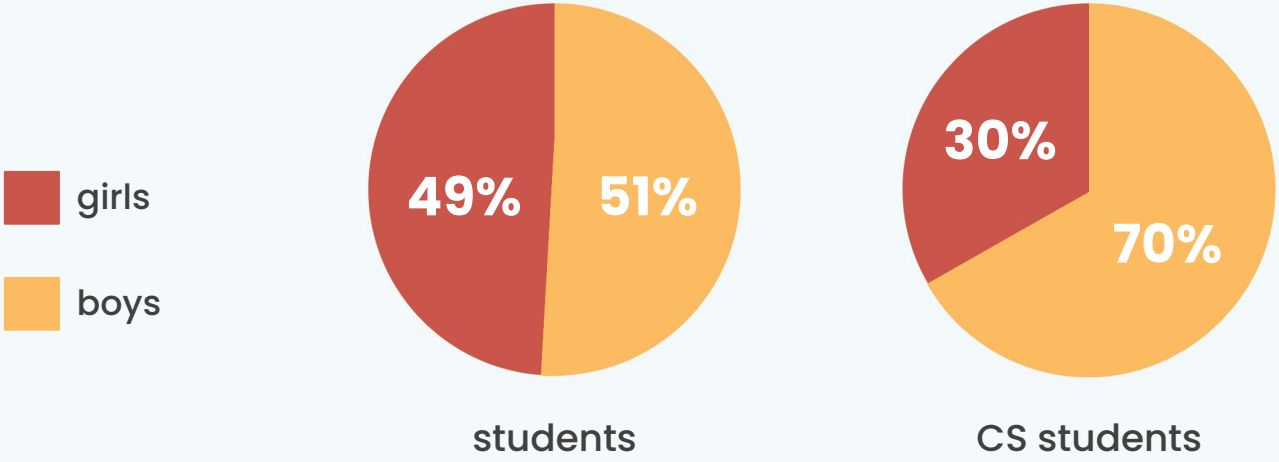
CS EDUCATION DOES NOT REFLECT CALIFORNIA'S DIVERSITY

Girls, students in low-income schools, Black and Brown students, & rural communities do not have access to the same high-quality computer science education as their peers.

CSforCA

Gender Gap

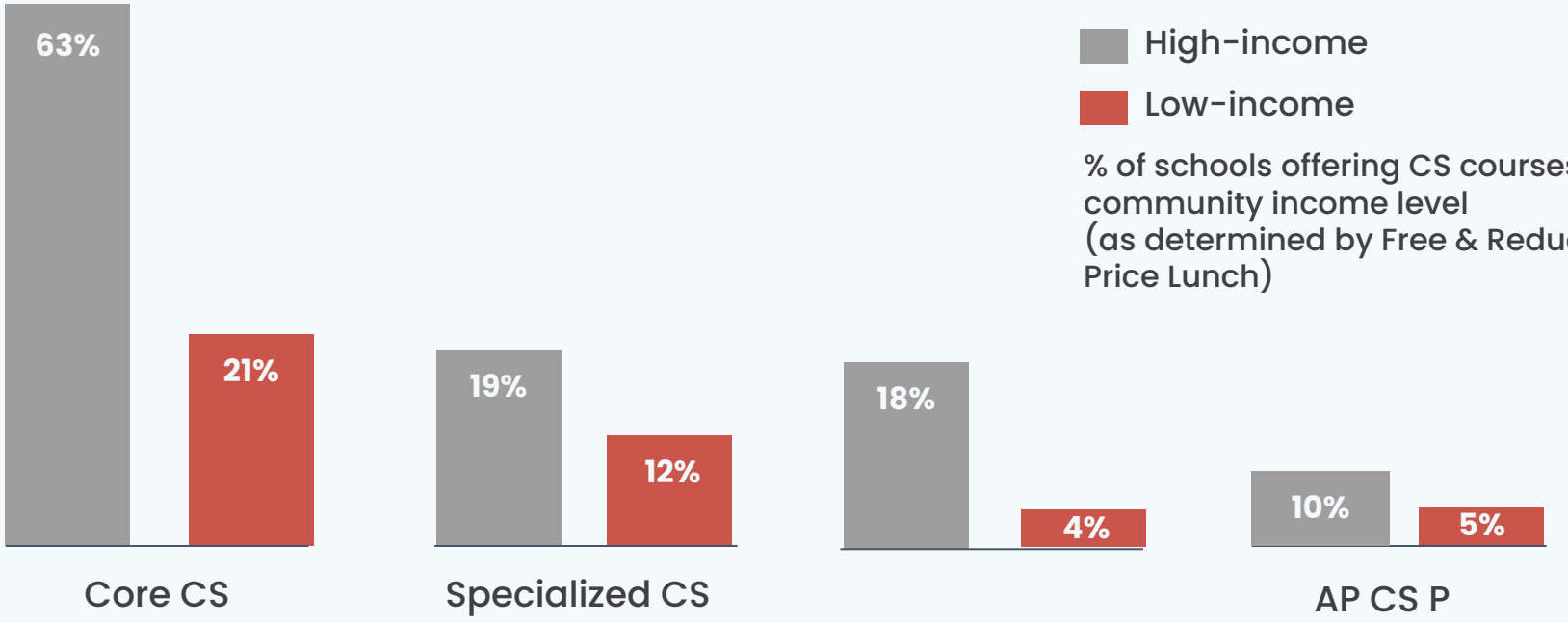
In California, **49%** of students who identify as girls, but only **30%** of CS students identify as girls.*



*Based on self-reported data collected by the California Department of Education

Low-Income Schools

are **half** as likely to offer CS than high-income schools.



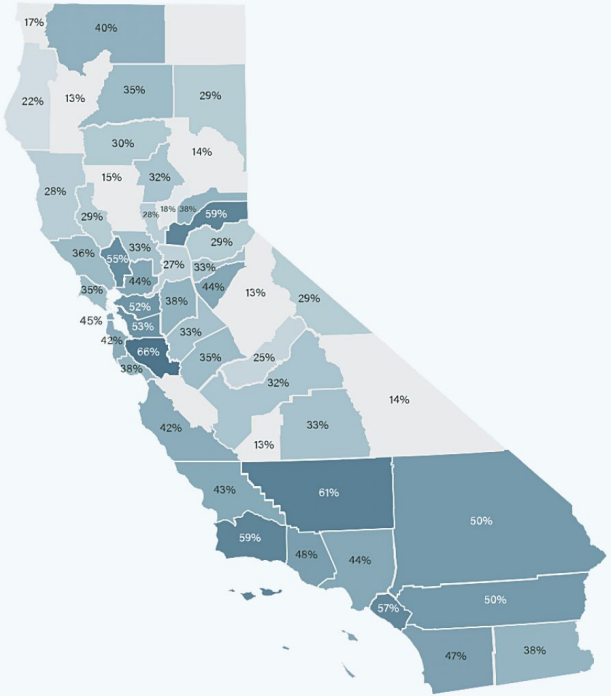
kaporcenter.org/csinschools

Rural Schools

are **half** as likely to offer CS courses than urban schools.

% of high schools offering CS courses by county

- 51-66%
- 41-50%
- 31-40%
- 21-30%
- 0-20%



kaporcenter.org/csinschools

WHAT CAN WE DO?

WHAT CAN WE DO?

GROW THE POOL OF QUALITY CS TEACHERS

Bring professional learning and support to teachers, counselors, and administrators.

LEARN THE DATA

Analyze CS education equity gaps across the state.

ADVOCATE FOR CS

Advocate to the school board, instructional leaders, and elected officials to offer CS.

CONNECT WITH COMMUNITY

Connect with parents, families, and community to build demand and encourage students to take CS.

JOIN CSforCA

Stay informed about California's CS education and equity in CS.

CSforCA

CSforCA

THANK YOU!

www.csforca.org