2024 State of Computer Science Education

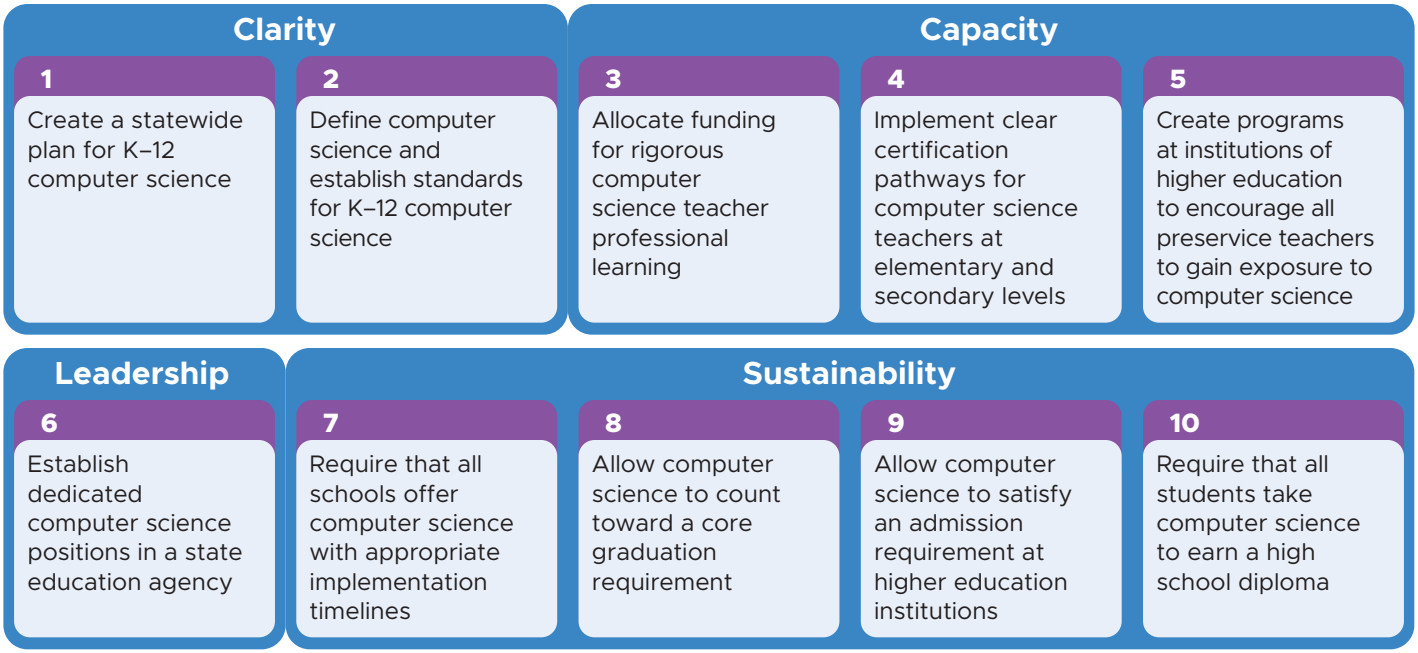
The United States is at a critical juncture in education policy: How do we prepare our students for a world increasingly driven by computing and generative artificial intelligence? Since the last edition of this report, there has been growing recognition among U.S. policymakers of the urgency of this issue, with 11 states now requiring students to earn credit in computer science to graduate from high school. The 2024 State of Computer Science Report urges policymakers to ensure that all students in every state learn computer science.

Over the last eight years, there has been significant progress, with more students than ever before taking computer science. Yet, millions of students still lack opportunities to engage in this essential subject. Only 60% of public high schools offer a foundational computer science course, and just 6.4% of high school students are enrolled annually. Young women, in particular, are far less likely to take computer science. This disparity underscores the urgent need for action.

The need for computer science education is understood worldwide. In 2023, the European Union called on all member countries to make computer science a required subject. Without decisive action, the United States risks falling behind on the global stage.

A recent University of Maryland study underscores the importance for all schools to invest in computer science education. The research reveals that offering just one computer science course in high school can increase students' earnings by at least 8% by age 24. The benefits are even more pronounced for low-income students, Black students, and young women.

The Code.org Advocacy Coalition recommends 10 policies to help build capacity and sustainability for K–12 computer science. When states take action and pass policies, students have more opportunities to benefit from computer science. This report provides updated policy, access, and participation data alongside examples and stories to guide policymakers and advocates in ensuring all students learn computer science.



DELAWARE

Ten Policies to Make Computer Science Foundational

State Plan	Standards	Funding	Certification	Preservice
✗	✓	✗	✗	✗

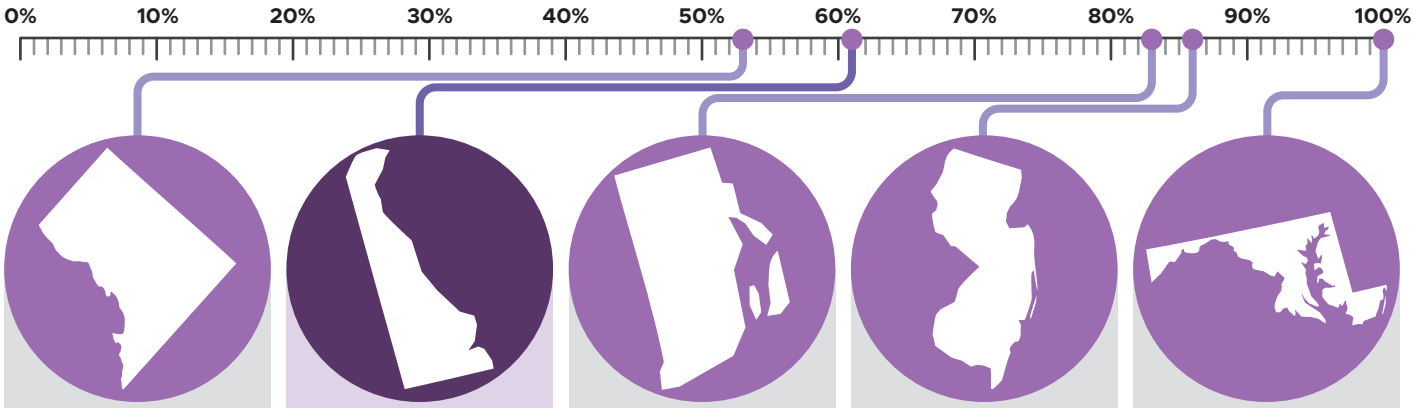
State CS Position	Require HS to Offer	Can Count	Admissions	Graduation Requirement
✗	✓	✓	✗	✗

Policy Implementation

We are not aware of any updates in statewide computer science education policies.

We encourage the state to renew their focus on this crucial subject; creating a statewide plan and hiring a computer science supervisor in the Department of Education will help to guide this work.

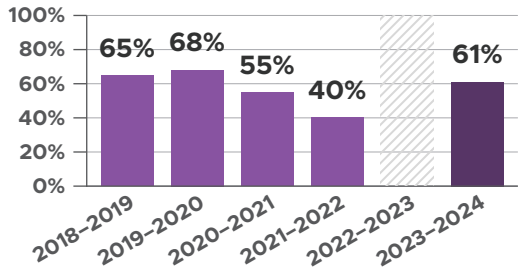
Comparative Access to Computer Science Courses (% of HS offering)



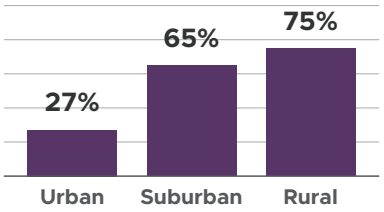
District of Columbia	Delaware	Rhode Island	New Jersey	Maryland
53%	**61%**	**83%**	**86%**	**100%**
✗ State plan	✗ State plan	✓ State plan	✓ State plan	✓ State plan
✗ Funding	✗ Funding	✓ Funding	✓ Funding	✓ Funding
✗ CS required for graduation	✗ CS required for graduation	✓ CS required for graduation	✗ CS required for graduation	– CS required for graduation

Percentage of Public High Schools Offering Foundational Computer Science

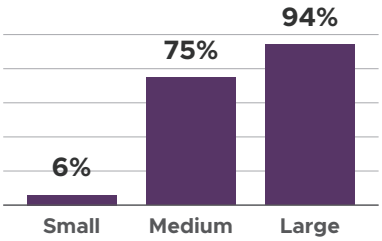
Access by School Year



Access by Geography*



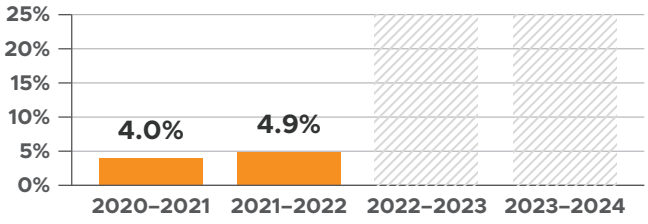
Access by School Size*



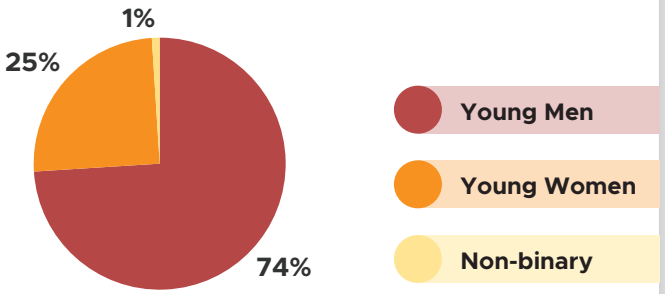
Data is from the most recent data school year 2023–2024

Participation in Foundational High School Computer Science

Participation by School Year



Participation by Gender



Student Groups That Reached or Neared Parity

We do not have data that indicates there are student groups that have reached parity.

Student Groups That Are Underrepresented

Young women, Black students, Hispanic/Latino students

We lack enough data on Native American students, students with disabilities, English language learners, and economically disadvantaged students to determine representation.

Computer Science Prior to High School

Elementary School Computer Science

Through survey data we know that 23%* of elementary schools offer computer science.

Middle School Computer Science

Through survey data we know that 33%** of middle schools offer computer science.

*This percentage is based on data received from 43% of elementary schools in the state, therefore the actual number of schools teaching may be higher.

**This percentage is based on data received from 61% of middle schools in the state, therefore the actual number of schools teaching may be higher.

States ranked by their percentage of offering