

New Hampshire

2020 State of Computer Science Education: Illuminating Disparities

Computer science education is more important than ever. The COVID-19 pandemic has highlighted our society's reliance on computing and its power to help businesses innovate and adapt, yet at the same time has surfaced greater disparities for students studying computer science. Computing is the number one source of all new wages in our economy, and there are currently 400,000 open computing jobs across the United States. Yet the U.S. education system does not provide widespread access to this critical subject.

Although access to computer science is key to addressing the equity issues in society, only 47% of our nation's high schools teach foundational computer science. In addition, students from marginalized racial and ethnic groups, students in Title I schools, and students from rural areas are less likely to attend a school that provides access to this critical subject.

States are working to broaden participation in computer science by passing policies to make computer science a fundamental part of the K-12 education system. In addition to adopting more policies, state education leaders extend and innovate on previously adopted policies: continuing to fund

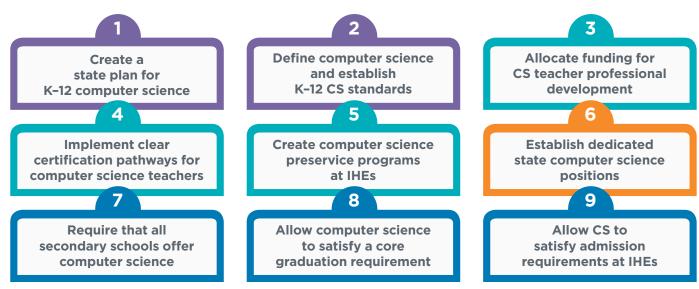
computer science education, supporting teachers and students, and providing leadership and guidance.

States that have adopted more of these nine policies have a larger percentage of high schools teaching computer science. States that have funded K-12 computer science professional learning have higher implementation rates than states that have not provided direct funding.



Pursuing an access agenda to K-12 computer science provides policymakers a rare opportunity to address equity, workforce, and education issues on a bipartisan basis. States should enact or expand on all nine of these education policies in order to provide opportunities for all students regardless of where they live, their race/ethnicity, gender, or socioeconomic status.

Nine Policies to Make Computer Science Fundamental





New Hampshire Computer Science Policy

State Plan

New Hampshire developed a plan for expanding computer science in 2018.

Yes

Standards

Yes

New Hampshire adopted K-12 computer science standards based on the CSTA standards in 2018. Standards within each grade band address concepts of equity, such as bias, accessible technology, and inclusivity.

Funding

No

New Hampshire does not yet provide dedicated funding for rigorous computer science professional development and course support. Although funds may be available via broader programs, the state can strengthen its computer science programs by creating specific opportunities to bring computer science to school districts, such as matching fund programs.

Certification

Yes

In New Hampshire, teachers with or without existing licensure can obtain certification by passing a national exam, holding a computer science teaching assignment prior to June 2019, or submitting evidence of skills, knowledge, and competencies in computer science content. Evidence could include coursework, professional experience, letters of recommendation, professional development, or other artifacts.

Preservice

Yes

The New Hampshire Department of Education has approved teacher preparation programs leading to certification in computer science and lists these programs publicly.

CS Supervisor

Yes

The New Hampshire Department of Education has a STEM Integration and Computer Science Administrator.

All HS Offer

Yes

HB 1674 (2018) required all schools to create and implement computer science programs with a target goal of 2020 for full implementation.

Grad Credit

District Decision

New Hampshire passed a permissive and encouraging policy to allow computer science to count as a mathematics or technology credit for graduation, but it is a district decision.

IHE Admission

No

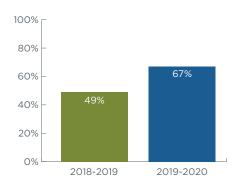
New Hampshire does not yet allow computer science to count as a core admission requirement at institutions of higher education. Admission policies that do not include rigorous computer science courses as meeting a core entrance requirement, such as in mathematics or science, discourage students from taking such courses in secondary education. State leaders can work with institutions of higher education to ensure credit and articulation policies align with secondary school graduation requirements.

New Hampshire is a member of the ECEP Alliance and has a CSTA chapter.

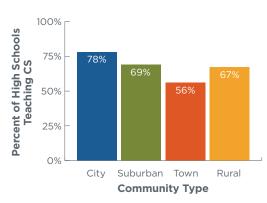


Computer Science Access and Participation in New Hampshire

High Schools Teaching CS



Percent of High Schools Teaching CS by Community Type

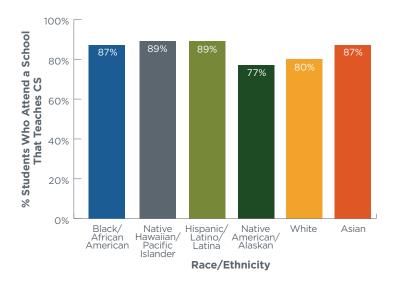




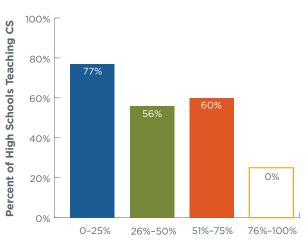


*Sources: The Conference Board and the National Center for Education Statistics

Race/Ethnicity and Access to Computer Science

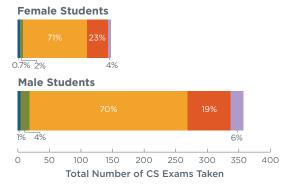


Income Level and Access to CS



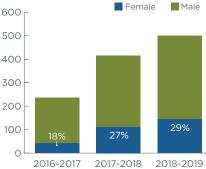
Percent of Students in the School Qualifying for Free and Reduced-Price Meals

AP CS Participation by Race/Ethnicity and Gender





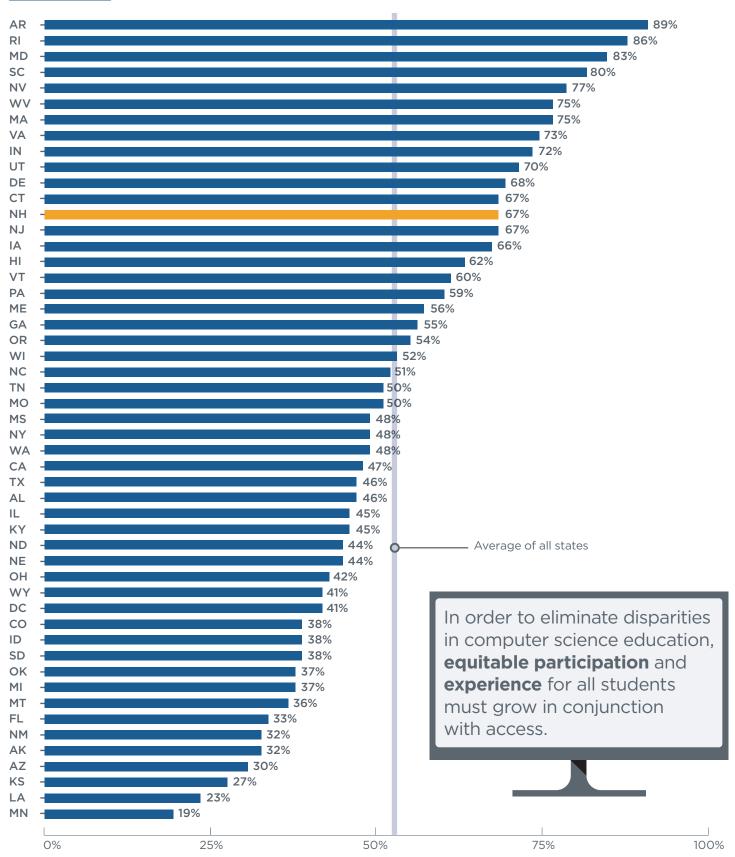
AP CS Student Participation



Hispanic/Latino/Latina students are 2 times less likely and Black/African American students are 4 times less likely than their white and Asian peers to take an AP CS exam when they attend a school that offers it.



Percent of High Schools Teaching Computer Science by State



For more details on policy, access, and participation, see the full 2020 State of Computer Science Education report at advocacy.code.org/stateofcs





