



# Wisconsin

## 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

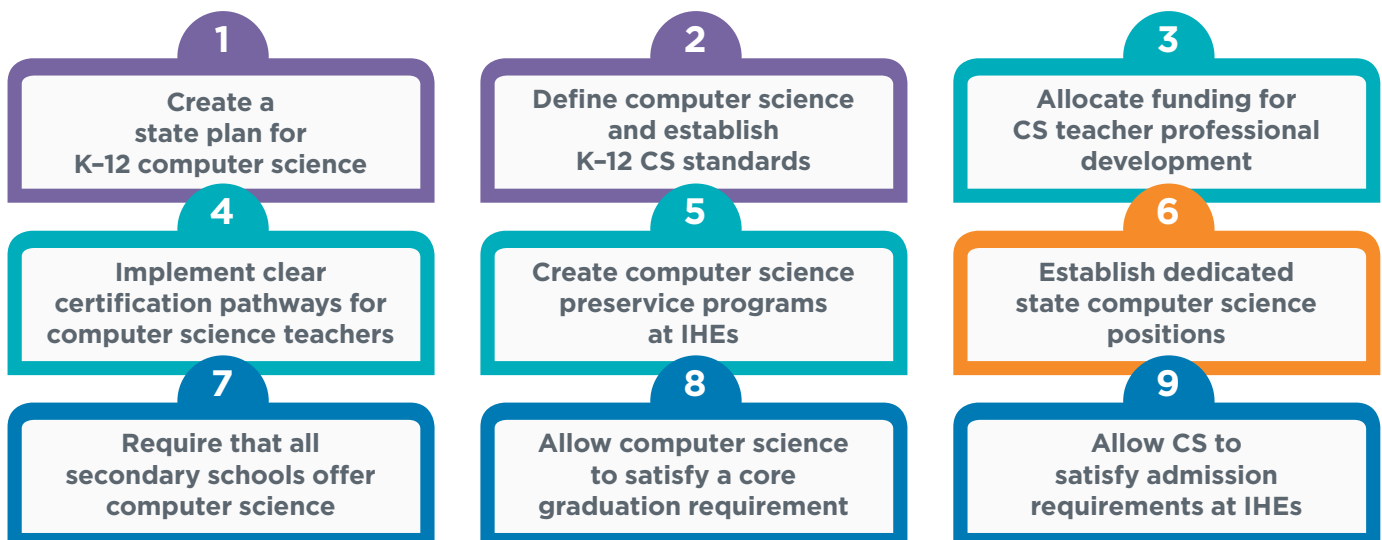
computer science education, supporting teachers and students, and providing leadership and guidance.

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





# Wisconsin Computer Science Policy

## State Plan

No

Wisconsin has not yet created a state plan for K-12 computer science. A plan that articulates the goals for computer science, strategies for accomplishing the goals, and timelines for carrying out the strategies is important for making computer science a fundamental part of a state's education system.

## Standards

Yes

Wisconsin adopted K-12 computer science standards in 2017. Standards within each grade band address concepts of equity, such as bias, accessible technology, and inclusivity.

## Funding

No

Wisconsin 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 Wisconsin, teachers with existing licensure can obtain a 4-12 supplementary license by passing the Praxis CS exam. An initial license in computer science requires completing a state-approved preparation program.

## Preservice

Yes

The Wisconsin Department of Public Instruction has approved teacher preparation programs leading to certification in computer science and lists these programs publicly.

## CS Supervisor

No

Wisconsin does not yet have dedicated computer science positions in state or local education agencies. Creating a statewide computer science leadership position within the state education agency can help expand state-level implementation of computer science education initiatives. Similar positions at the local level could support districts' expansion of course offerings and professional development.

## All HS Offer

No

Although Wisconsin does not yet require that all secondary schools offer computer science, state statute 118.01(2)(a)5 requires each school board to provide an instructional program designed to give students knowledge in computer science, including problem-solving, computer applications, and the social impact of computers.

## Grad Credit

Yes

In Wisconsin, computer science courses that meet the department's definition of computer science can count as a mathematics credit for graduation.

## IHE Admission

No

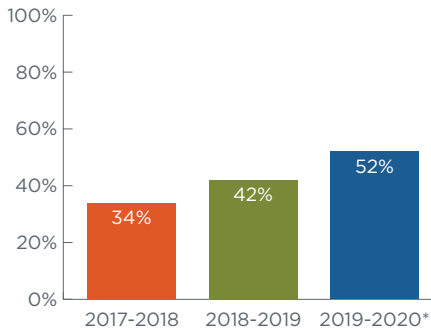
Wisconsin does not yet allow computer science to count as a core admission requirement at institutions of higher education. Admission policies that do not include rigorous computer science courses as meeting a core entrance requirement, such as in mathematics or science, discourage students from taking 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.

Wisconsin has a CSTA chapter.



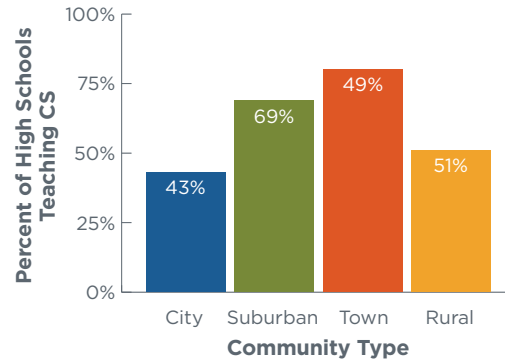
# Computer Science Access and Participation in Wisconsin

## High Schools Teaching CS



\*2019 data includes Robotics courses that were not included in prior years

## Percent of High Schools Teaching CS by Community Type

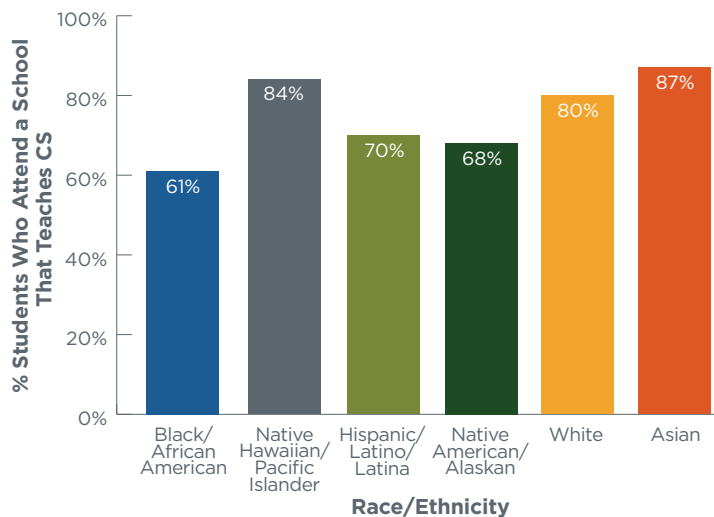


Wisconsin has averaged  
**8,839**  
open computing jobs  
each month\*

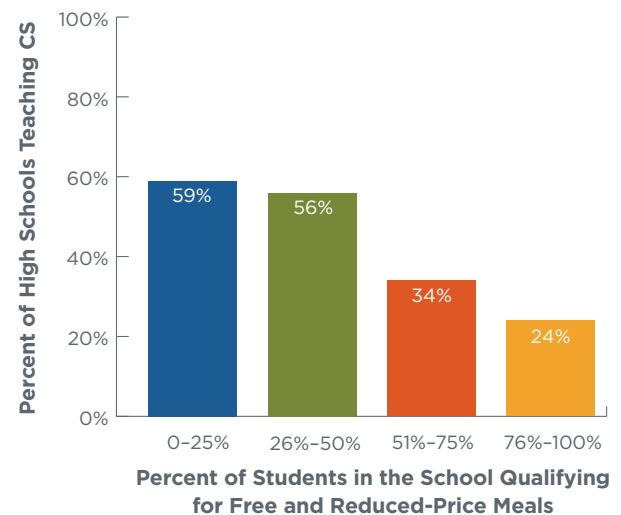
**1,261**  
Bachelor's degree in 2018  
in Wisconsin\*

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

## Race/Ethnicity and Access to Computer Science

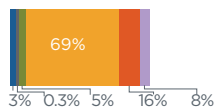


## Income Level and Access to CS

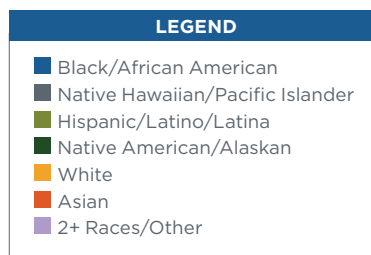
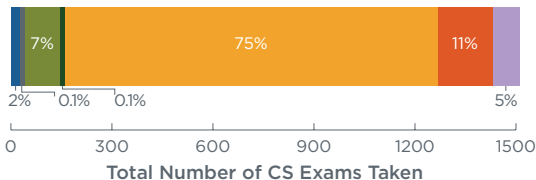


## AP CS Participation by Race/Ethnicity and Gender

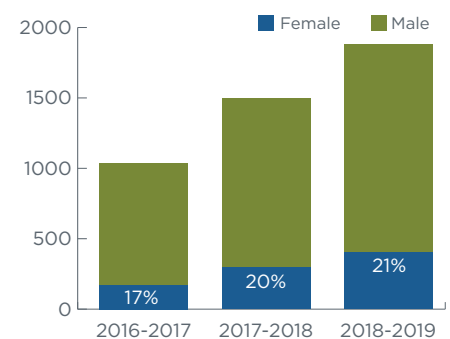
### Female Students



### Male Students



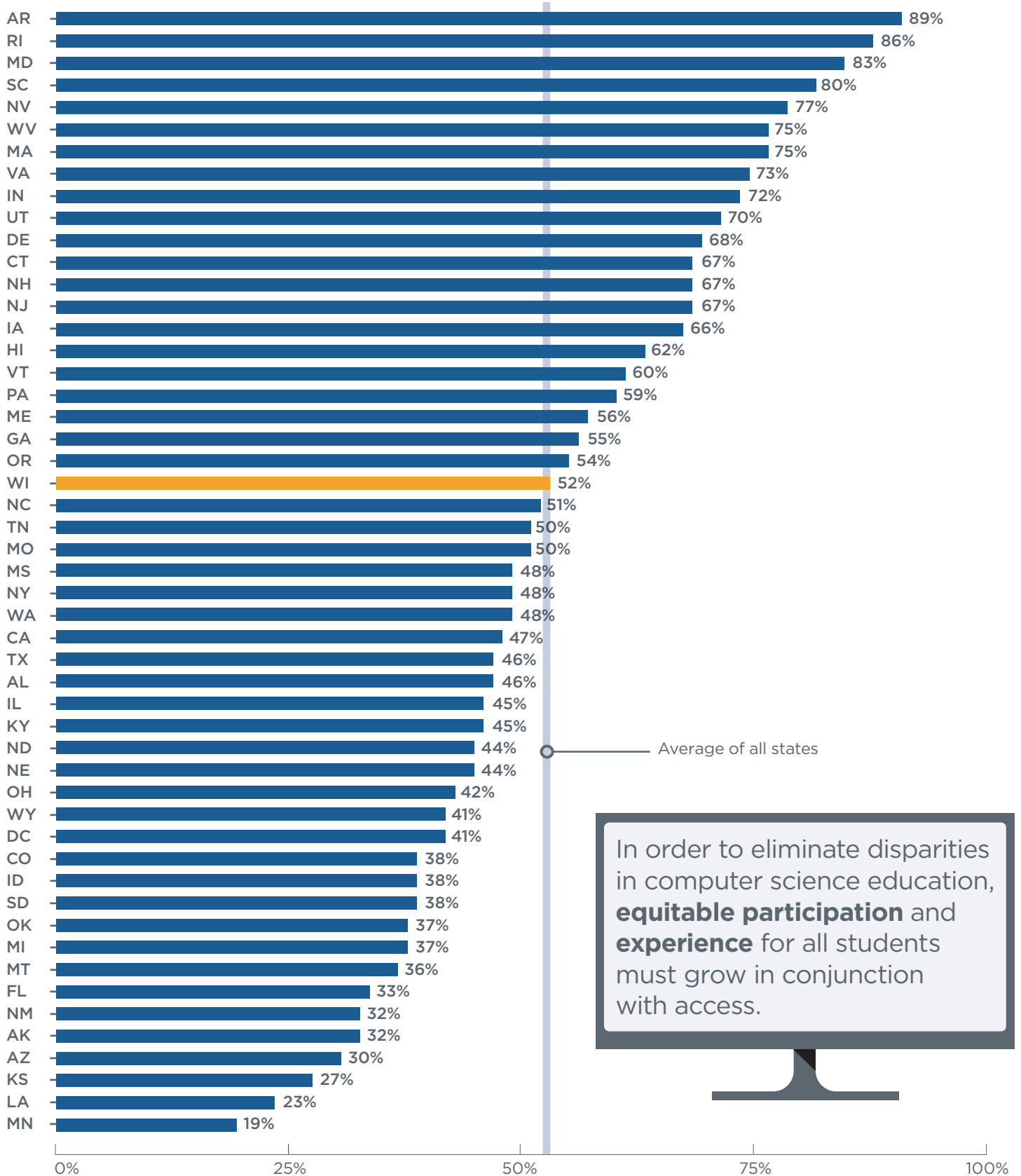
## AP CS Student Participation



Hispanic/Latino/Latina students are 2 times less likely, Black/African American students are 4 times less likely, and Native American/Alaskan students are 9 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](https://advocacy.code.org/stateofcs)

