



ILLINOIS

2023 State of Computer Science Education

The rapid pace of technological advancement, as seen with the widespread integration of generative artificial intelligence (AI), underscores the need for foundational knowledge in computer science for all students. This report calls upon advocates to embrace the urgency of this matter and revamp school curricula to align with the demands of the 21st century, including requiring that all students learn computer science.

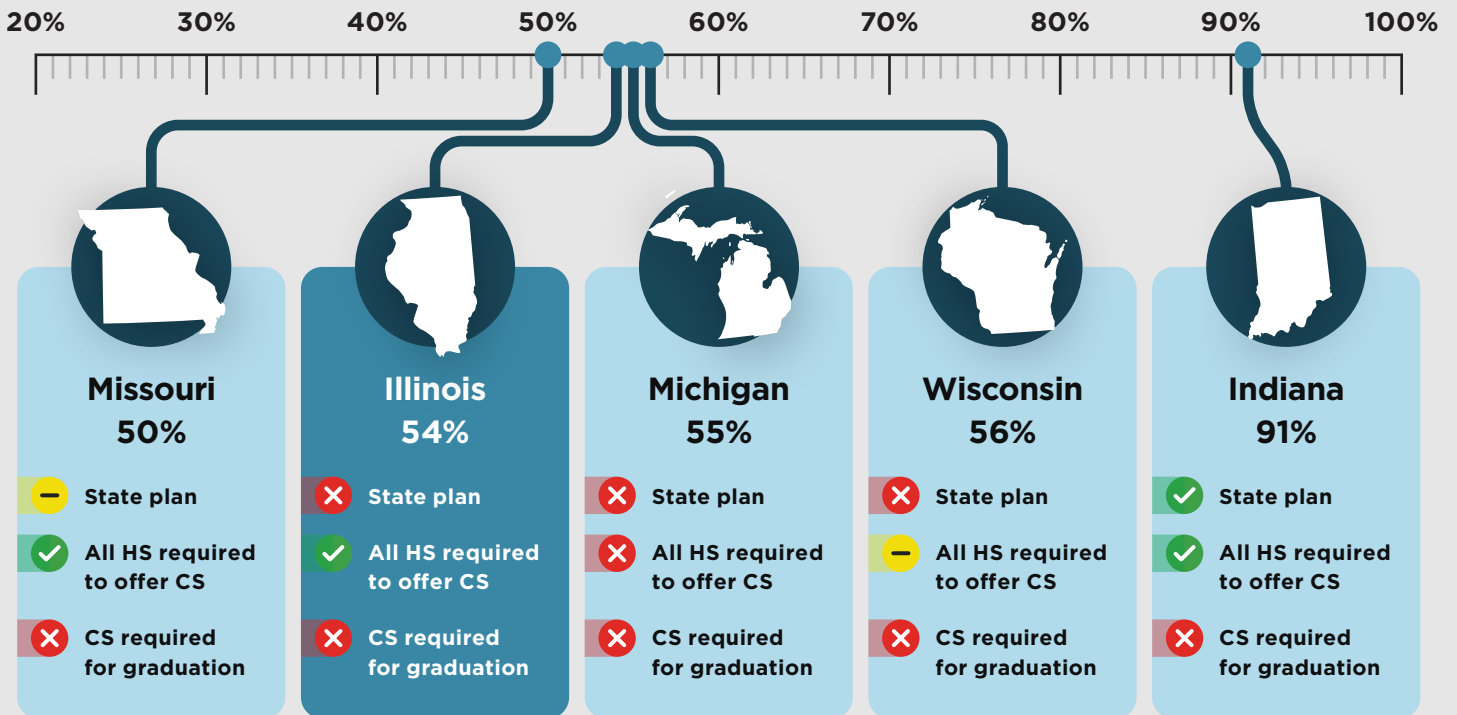
Currently, 57.5% of public high schools in the United States (U.S.) offer a foundational computer science class—an achievement marking the largest percentage growth in the last five years. Across the 35 states* where data is available, 5.8% of high school students are enrolled in foundational computer science. Even with growing access this growth, large disparities still exist, and we must continue to focus on eliminating participation gaps.

16,396
In 2023, IL averaged 16,396 open computing jobs each month

\$107,579
These jobs have an average salary of \$107,579

*AL, AR, AZ, CT, FL, GA, HI, IA, ID, IL, IN, KS, KY, LA, MA, MD, MS, NC, ND, NE, NJ, NM, NV, NY, OK, OR, PA, RI, TN, TX, UT, VA, VT, WV, WI

Comparative Access to Computer Science Courses (percentage of high schools offering)





ILLINOIS

Ten Policies to Make Computer Science Foundational

1.

Create a **statewide plan** for K-12 computer science



2.

Define computer science and establish standards for K-12 computer science



3.

Allocate funding for rigorous computer science teacher professional learning



4.

Implement **clear certification pathways** for computer science teachers at elementary and secondary levels



5.

Create university programs to **encourage all preservice teachers** to gain exposure to computer science



6.

Establish **dedicated computer science** positions in a state education agency



7.

Require that all schools offer computer science with appropriate implementation timelines



8.

Allow computer science to count toward a core graduation requirement



9.

Allow **computer science to satisfy an admission requirement** at higher education institutions



10.

Require that all students take computer science to earn a high school diploma



What Has Illinois Done to Advance Computer Science Education?

Illinois passed \$3M for computer science in 2023, the first fully dedicated funding for the subject in the state.

Illinois hired its first Statewide Computer Science Principal Consultant in 2022.

How Can Illinois Increase Opportunities for Students?

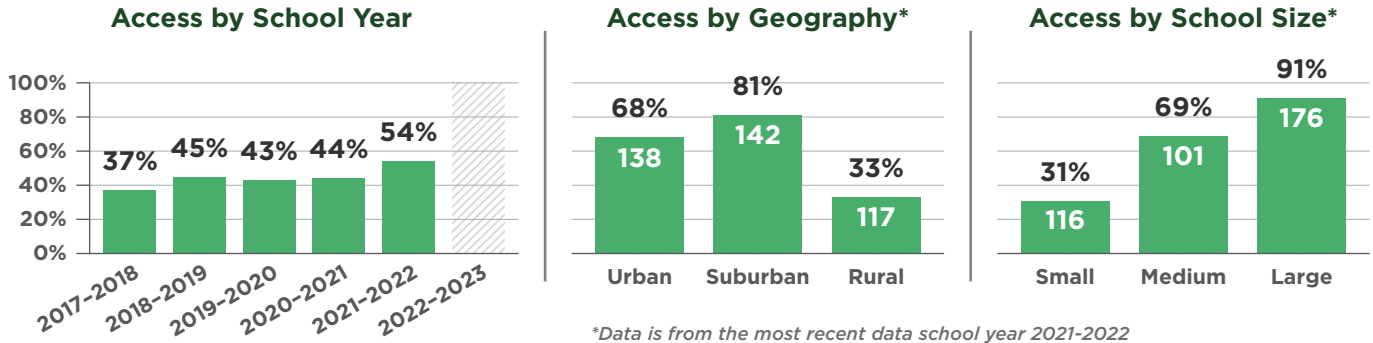
Illinois should create a state plan to establish strategies and goals for computer science education statewide.

Illinois should require all preservice teachers to receive instruction in computer science education to ensure there are enough teachers prepared to teach computer science in every school.

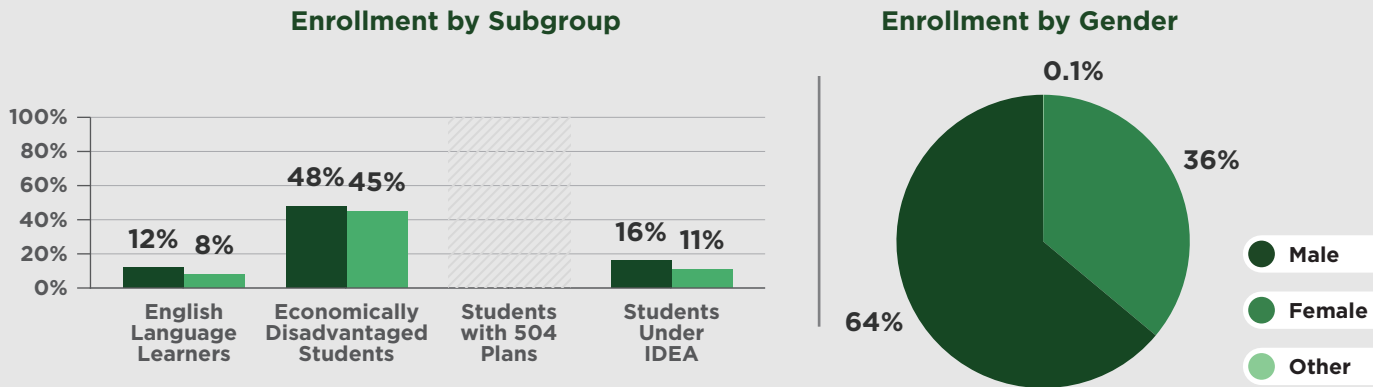


ILLINOIS

Percentage of Public High Schools Offering Foundational Computer Science



Participation in Foundational High School Computer Science by Student Demographics

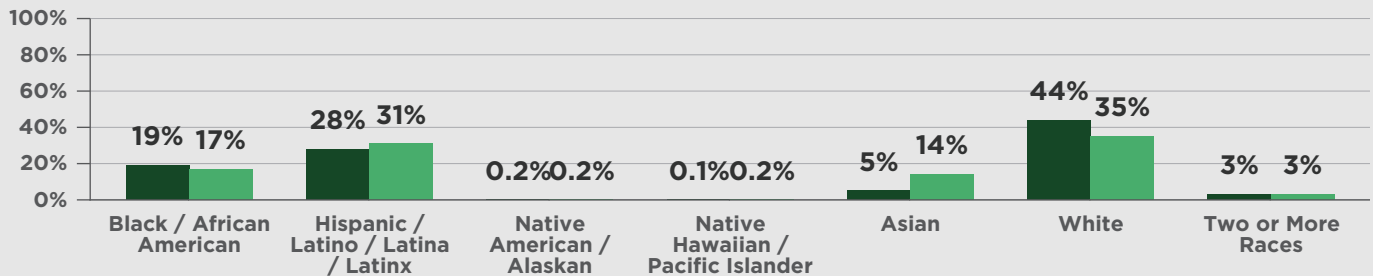


Student Demographics 9-12

Participation in Foundational Courses

6.2% of high school students took foundational computer science in 2021-2022

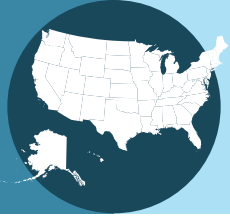
Enrollment by Race / Ethnicity



Students of all racial and ethnic groups are similarly likely to take foundational computer science

Student Demographics 9-12

Participation in Foundational Courses



UNITED STATES

Percentage of Public High Schools Offering Foundational Computer Science Nationally

