MISSISSIPPI

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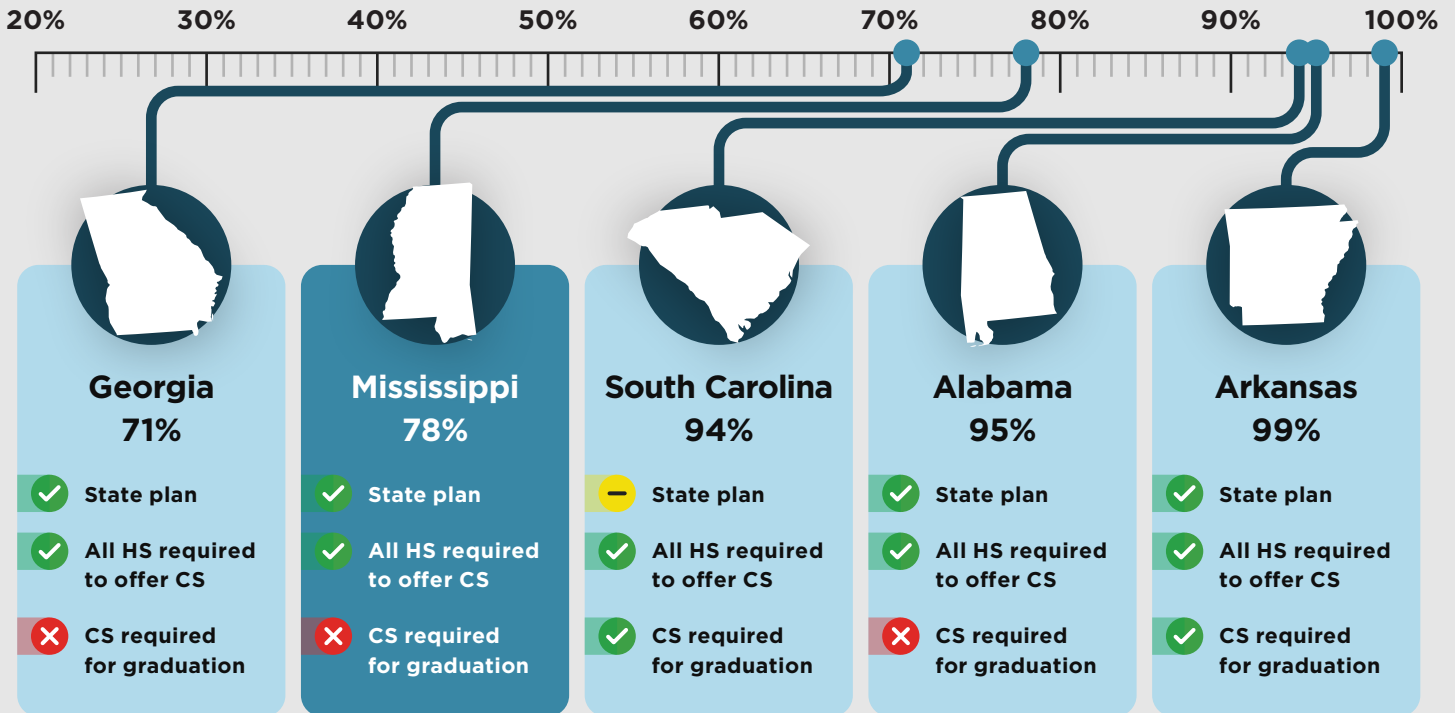
Currently, 57.5% of public high schools in the United States (U.S.) offer a foundational computer science class—an achievement marking the largest percentage growth in the last five years. Across the 35 states* where data is available, 5.8% of high school students are enrolled in foundational computer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

2,989
In 2023, MS averaged 2,989 open computing jobs each month

$78,898
These jobs have an average salary of $78,898

*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)

20%   30%   40%   50%   60%   70%   80%   90%   100%

Georgia 71%
- ✅ State plan
- ✅ All HS required to offer CS
- ❌ CS required for graduation

Mississippi 78%
- ✅ State plan
- ✅ All HS required to offer CS
- ❌ CS required for graduation

South Carolina 94%
- ➖ State plan
- ✅ All HS required to offer CS
- ✅ CS required for graduation

Alabama 95%
- ✅ State plan
- ✅ All HS required to offer CS
- ❌ CS required for graduation

Arkansas 99%
- ✅ State plan
- ✅ All HS required to offer CS
- ✅ CS required for graduation

MISSISSIPPI

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 Mississippi Done to Advance Computer Science Education?

Mississippi has funded computer science education annually since 2020, totaling over $3M after the 2023 legislative session.

Mississippi is requiring all elementary, middle, and high schools to offer computer science by the 2024–25 school year.

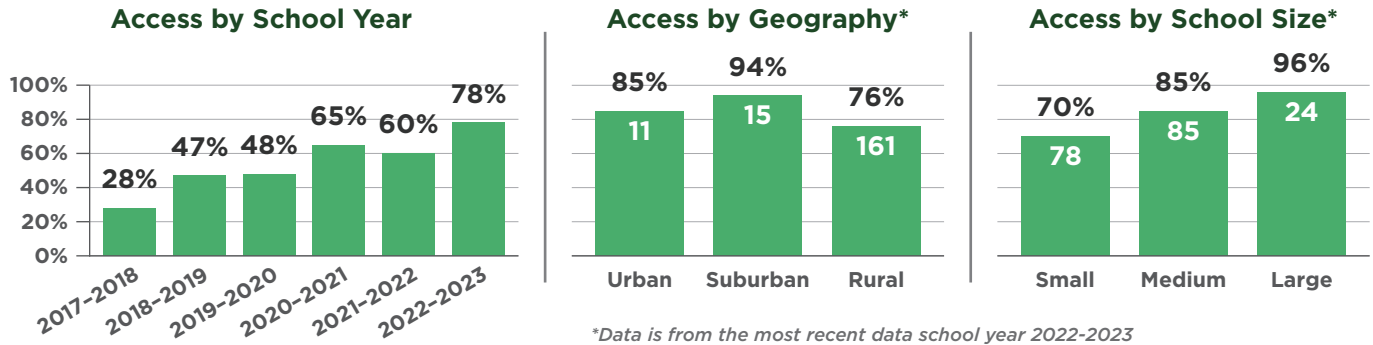## How Can Mississippi Increase Opportunities for Students?

Mississippi should establish a dedicated position within the Department of Education focused on computer science education.

Mississippi 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.
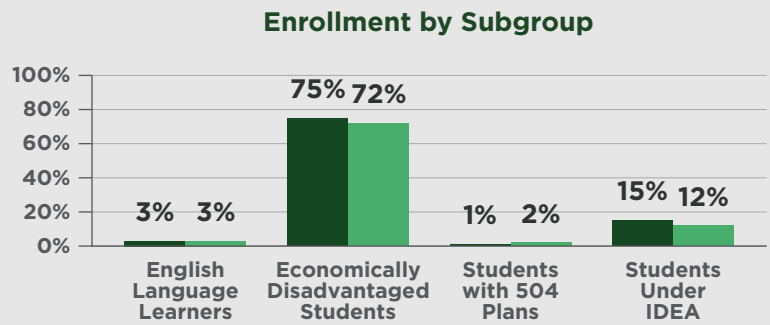
MISSISSIPPI

Percentage of Public High Schools Offering Foundational Computer Science

Access by School Year

School Year	Percentage
2017-2018	28%
2018-2019	47%
2019-2020	48%
2020-2021	65%
2021-2022	60%
2022-2023	78%

Access by Geography*

Geography	Percentage	Count
Urban	85%	11
Suburban	94%	15
Rural	76%	161

Access by School Size*

School Size	Percentage	Count
Small	70%	78
Medium	85%	85
Large	96%	24

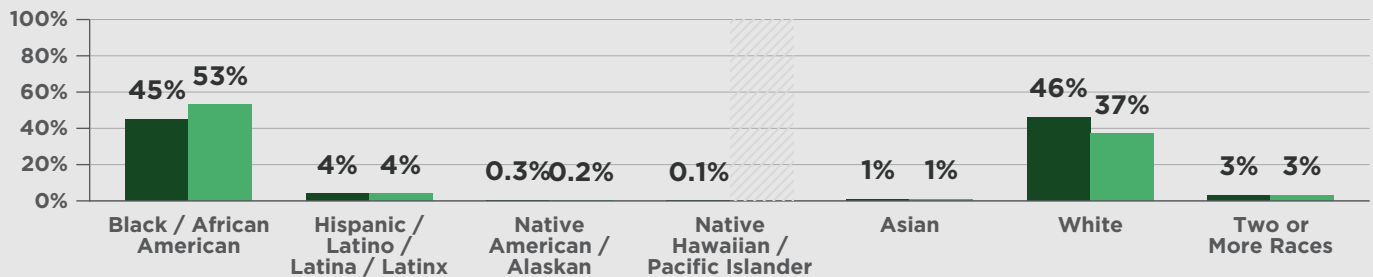*Data is from the most recent data school year 2022-2023*

Participation in Foundational High School Computer Science by Student Demographics

9.5% of high school students took foundational computer science in 2022-2023

48% of students who took foundational computer science were female

Enrollment by Subgroup

Subgroup	Student Demographics 9–12	Participation in Foundational Courses
English Language Learners	3%	3%
Economically Disadvantaged Students	75%	72%
Students with 504 Plans	1%	2%
Students Under IDEA	15%	12%

Enrollment by Race / Ethnicity

Race / Ethnicity	Student Demographics 9–12	Participation in Foundational Courses
Black / African American	45%	53%
Hispanic / Latino / Latina / Latinx	4%	4%
Native American / Alaskan	0.3%	0.2%
Native Hawaiian / Pacific Islander	0.1%	
Asian	1%	1%
White	46%	37%
Two or More Races	3%	3%

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

● Student Demographics 9–12
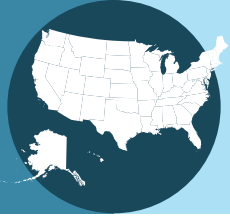● Participation in Foundational Courses

K-12 Access and Participation in Computer Science

52% of elementary schools** are teaching foundational computer science education, with an enrollment of 39,801 students.

**68% of elementary schools reported course offerings and among those schools 52% reported teaching foundational computer science

44% of middle schools*** are teaching foundational computer science education, with an enrollment of 9,611 students.

***93% of middle schools reported course offerings and among those schools 44% reported teaching foundational computer science

UNITED STATES

Percentage of Public High Schools Offering Foundational Computer Science Nationally

57.5% — National Percentage Offering

State	Percentage
AR	99%
MD	99%
NV	96%
AL	95%
SC	94%
IN	91%
CT	84%
IA	84%
MA	83%
NJ	82%
NH	81%
RI	80%
KY	79%
MS	78%
WV	78%
UT	77%
VT	76%
VA	74%
HI	72%
GA	71%
NC	71%
PA	71%
ME	66%
OK	64%
OR	64%
TN	64%
WY	63%
OH	62%
WI	56%
MI	55%
CO	54%
IL	54%
TX	54%
AK	51%
MO	50%
NE	50%
NM	50%
NY	48%
WA	48%
ND	47%
CA	45%
DC	45%
SD	44%
FL	41%
DE	40%
ID	38%
AZ	36%
KS	36%
LA	35%
MT	34%
MN	28%