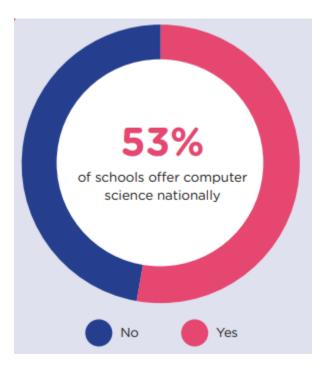
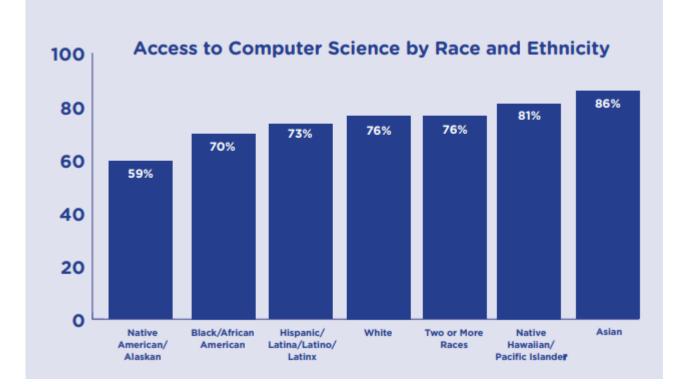
DEPARTMENT OF EDUCATION

State of Computer Science in Minnesota

Sarah Carter | STEM/Computer Science Integration Specialist

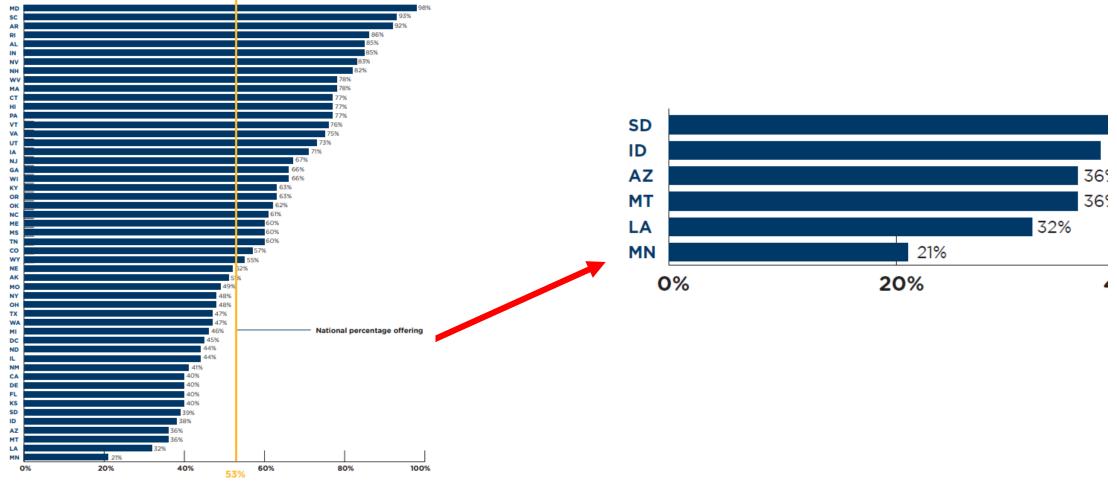
2022 National State of Computer Science Education





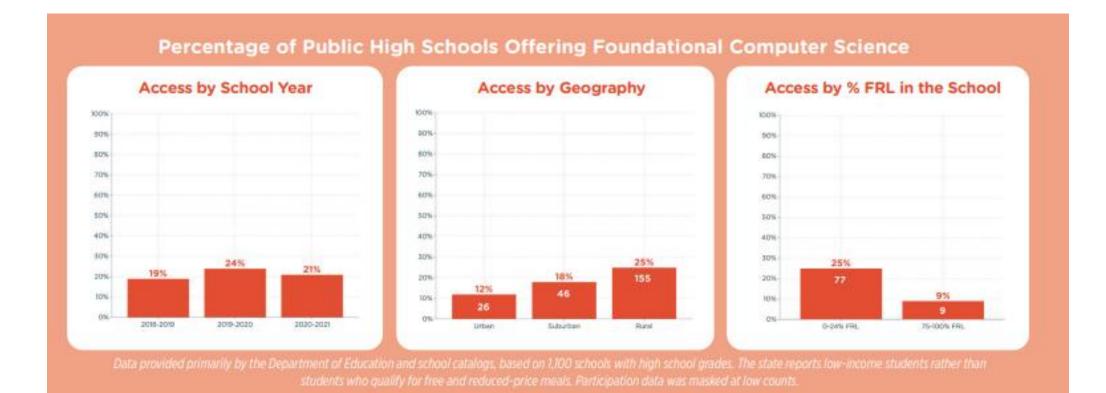
National Data

Percentage of High Schools Offering Computer Science, by State*



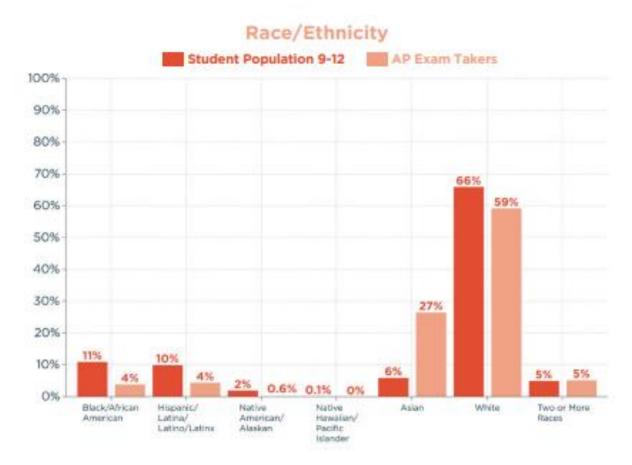
Minnesota Department of Education | education.mn.gov

Access to Foundational Computer Science in Minnesota



2/22/2023

Minnesota Computer Science AP Exam Takers



Where to find the data?

- 2022 State of Computer Science Education
- Minnesota only handout
- <u>Computer Science Access Report Data</u>

Computer Science in Minnesota

- Computer Science in all Computer science concepts, practices, and standards are being integrated as academic standards are revised.
- K-5 computer science education implementation varies across the state.
 - Stand-alone CS classes taught by specialists
 - Integrated into other subject areas
 - After school clubs/activities
- Secondary Implementation varies across the state.
 - Integration into other content areas, Foundational CS courses, AP classes, Robotics classes, CTE pathways, etc.

Governor Walz Signed CS Compact Summer 2022

- <u>National Governor's Association Computer Science Compact</u>
 - Increasing the number of high schools offering computer science courses
 - Allocating state or territory funding to K-12 computer science education
 - Creating pathways to postsecondary success in computing and related careers
 - Providing equitable access to computer science for all students

Governor's 2024-25 Biennial Budget Recommendations

Computer Science Education

- Computer Science Education Task Force
 - A group made up of statewide participants that will put together a set of recommendations for increasing access to K-12 computer science education across the state.
- Grants for LEAs (districts and public charter schools)
 - These grants would be to support schools in completing the recommendations set forth by the task force

Standards Review Process

 Beginning in 2017 computer science was identified as an important skill and each standard development committee has used the Minnesota Information and Technology Educators of Minnesota (ITEM) Standards, The K-12 Computer Science Framework, and the Computer Science Teachers Association K-12 Computer Science Standards to explore connections to their respective content area.







Minnesota Academic Standards

- <u>Arts</u> Implementation '23-'24
- <u>Physical Education</u> **Implementation '23-'24** (no CS integration)
- <u>Science</u> Implementation '24-'25
- <u>English Language Arts</u> In the rulemaking process likely implementation during '25-'26 school year.
- <u>Social Studies</u> Rulemaking process has begun.
- <u>Mathematics</u> Rulemaking process has begun.

Teacher Resources in Development

- Elementary Canvas course <u>Introduction to Computer Science Teaching and</u> <u>Integration</u>
- Secondary (6-12) Canvas course coming in 2023
- Integration Guides (in development)
 - By grade level (K-5)
 - By content area (6-12)
 - Contents: Overview of computer science, specific connections to MN Academic Standards



Questions?

Sarah Carter Sarah.carter@state.mn.us

Minnesota Department of Education | education.mn.gov