



Computer Science Education Coalition Fact Sheet

National

- Only one in four schools in the U.S. teach any computer science courses.¹
- 90% of parents want access to this critical subject for their children.²
- Computing occupations are the number 1 source of all new wages in the U.S. and make up two-thirds of all projected new jobs in STEM fields.³
- Twice as many Americans use computing in their jobs than previously reported, and half of those are in non-STEM fields. Outside of STEM fields, 40% of those doing complex computing work are women.⁴
- Industry projections estimate the funding could support as many as 52,500 classrooms, which can reach 3.6 million students in the coming year.⁵
- There are over 500,000 unfilled computing jobs in America.⁶
- Universities graduate only about 40,000 computer science students annually. Only 9% of whom are Hispanic and 8% of whom are black.⁷
- A report from the Center for Strategic and International Studies stated, "There are only about 1,000 security specialists in the United States who have the specialized skills to operate effectively in cyberspace; however, the United States needs about 10,000 to 30,000 such individuals."⁸
- More than half of computing jobs are outside of the tech sector.⁹

¹ https://services.google.com/fh/files/misc/searching-for-computer-science_report.pdf

² <https://services.google.com/fh/files/misc/images-of-computer-science-report.pdf>

³ [Code.org/promote](http://code.org/promote)

⁴ <http://changetheequation.org/blog/hidden-half>; <http://changetheequation.org/blog/grid-uncounted-women-computing>

⁵ <http://www2.ed.gov/about/overview/budget/budget17/justifications/f-ii.pdf> * FY17 U.S. Department of Education Justifications of Appropriation

Estimates to the Congress says that \$100 million will reach 400-600 schools. We multiplied that by 2.5 to get our estimate.

⁶ https://docs.google.com/document/d/1gySkItxiJn_vwb8HIIKNXqen184mRtzDX12cux0ZgZk/pub 1

⁷ https://docs.google.com/document/d/1gySkItxiJn_vwb8HIIKNXqen184mRtzDX12cux0ZgZk/pub

⁸ <https://www.csis.org/analysis/human-capital-crisis-cybersecurity>

⁹ https://docs.google.com/document/d/1gySkItxiJn_vwb8HIIKNXqen184mRtzDX12cux0ZgZk/pub 1

- Girls who take the Advanced Placement computer science course in high school are 10 times more likely to major in computer science in college. African-American and Latino students who take this course in high school are over seven times more likely to major in this field.¹⁰
- In a lifetime, a computer science major can earn 40% more than the average college graduate.¹¹
- 28 bipartisan Governors and 77 leading CEOs and educators from across the country asked Congress to fund K-12 computer science education.¹²
- Only 30 states (including D.C.) allow students to count computer science courses toward high school graduation.¹³

Missouri

- Missouri currently has 8,632 open computing jobs.¹⁴
- Missouri had only 852 computer science graduates in 2014; only 15% were female.¹⁵
- Only 333 high school students in Missouri took the AP Computer Science exam in 2015; only 14% were female; only 6 were Hispanic; only 9 were black.¹⁶
- Only 32 schools in MO (10% of MO schools with AP programs) offered the AP Computer Science course in 2014-2015.¹⁷

Oklahoma

- Oklahoma currently has 2,309 open computing jobs.¹⁸
- Oklahoma had only 411 computer science graduates in 2014; only 18% were female.¹⁹
- Only 206 high school students in Oklahoma took the AP Computer Science exam in 2015; only 24% were female; only 26 were Hispanic; only 15 were black.²⁰
- Only 25 schools in OK (8% of OK schools with AP programs) offered the AP Computer Science course in 2014-2015.²¹

¹⁰ <http://research.collegeboard.org/sites/default/files/publications/2012/7/researchreport-2007-4-ap-students-college-analysis-five-yearacademiccareers.pdf>

¹¹ <https://code.org/promote>

¹² <https://www.change.org/p/offer-computer-science-in-our-public-schools-csforall>

¹³ [Code.org/promote](https://code.org/promote)

¹⁴ <https://code.org/advocacy/state-facts/MO.pdf>

¹⁵ <https://code.org/advocacy/state-facts/MO.pdf>

¹⁶ <https://code.org/advocacy/state-facts/MO.pdf>

¹⁷ <https://code.org/advocacy/state-facts/MO.pdf>

¹⁸ <https://code.org/advocacy/state-facts/OK.pdf>

¹⁹ <https://code.org/advocacy/state-facts/OK.pdf>

²⁰ <https://code.org/advocacy/state-facts/OK.pdf>

²¹ <https://code.org/advocacy/state-facts/OK.pdf>