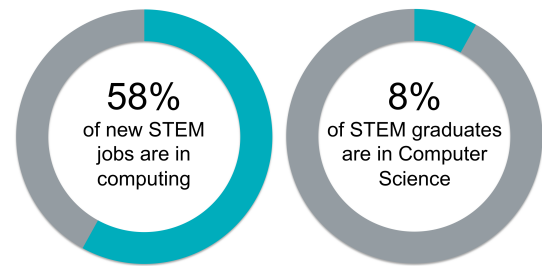


# Support K-12 Computer Science Education in Arkansas

Computer science drives job growth and innovation throughout our economy and society. Computing occupations are the **number 1 source of all new wages in the U.S.** and make up over half of all projected new jobs in STEM fields, making Computer Science one of the most in-demand college degrees. And computing is used all around us and in virtually every field. It's foundational knowledge that all students need. But computer science is marginalized throughout education. Fewer than half of U.S. schools offer any computer science courses and only 8% of STEM graduates study it. We need to improve access for all students, including groups who have traditionally been underrepresented.



93% of parents want their child's school to teach computer science, but only 40% of schools teach it.

75% of Americans believe computer science is cool in a way it wasn't 10 years ago.

67% of parents and 56% of teachers believe students should be required to learn computer science.

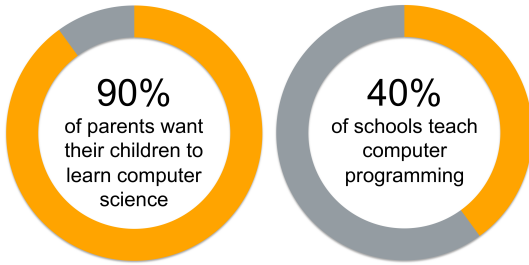
50% of Americans rank computer science as one of the two most important subjects of study after reading and writing.

Students who learn computer science in high school are 6 times more likely to major in it, and women are 10 times more likely.

## Computer science in Arkansas

- Arkansas currently has **2,405 open computing jobs** (4.3 times the average demand rate in Arkansas).
- The average salary for a computing occupation in AR is **\$70,458**, which is significantly higher than the average salary in the state (\$39,590). The existing open jobs alone represent a **\$169,451,490 opportunity** in terms of annual salaries.
- Arkansas had only **328 computer science graduates** in 2015; only **12%** were female.
- Only **870 exams were taken in AP Computer Science by high school students in Arkansas** in 2017 (378 took AP CS A and 492 took AP CSP).
- Only 26% were female (21% for AP CS A and 31% for AP CSP); only 121 exams were taken by Hispanic or Latino students (59 took AP CS A and 62 took AP CSP); only 90 exams were taken by Black students (41 took AP CS A and 49 took AP CSP); only 5 exams were taken by American Indian or Alaska Native students (1 took AP CS A and 4 took AP CSP); only 5 exams were taken by Native Hawaiian or Pacific Islander students (3 took AP CS A and 2 took AP CSP).
- Only **50 schools** in AR (16% of AR schools with AP programs) offered an AP Computer Science course in 2016-2017 (8% offered AP CS A and 12% offered AP CSP), which is 23 more than the previous year. There are fewer AP exams taken in computer science than in any other STEM subject area.
- Universities in Arkansas did not graduate a single new teacher prepared to teach computer science in 2016.

- According to a representative survey from Google/Gallup, school administrators in AR support expanding computer science education opportunities: 73% of principals surveyed think CS is just as or more important than required core classes.



## What can you do to improve K-12 CS education?

1. Call on your school to expand computer science offerings at every grade level.
2. Ask your local school district to allow computer science courses to satisfy a core math or science requirement.
3. Visit [www.code.org/educate/3rdparty](http://www.code.org/educate/3rdparty) to find out about courses and curriculum from a variety of third parties, including Code.org.
4. Visit [www.code.org/promote/AR](http://www.code.org/promote/AR) to learn more about supporting computer science in your state.
5. Sign the petition at [www.change.org/computerscience](http://www.change.org/computerscience) to join 100,000 Americans asking Congress to support computer science.

## Code.org's Impact in Arkansas

There are 5,651 teacher accounts and 261,673 student accounts on Code.org in Arkansas.

Code.org and 2 facilitators have provided professional learning for 2,331 teachers in CS Fundamentals (K-5) in Arkansas.

**“Computer Science is a liberal art: it’s something that everybody should be exposed to and everyone should have a mastery of to some extent.”**

— Steve Jobs

## What can your state do to improve computer science education?

States and local school districts need to adopt a broad policy framework to provide all students with access to computer science. The following nine recommendations are a menu of best practices that states can choose from to support and expand computer science. Not all states will be in a position to adopt all of the policies. Read more about these 9 policy ideas at [https://code.org/files/Making\\_CS\\_Fundamental.pdf](https://code.org/files/Making_CS_Fundamental.pdf) and see our rubric for describing state policies at <http://bit.ly/9policiesrubric>.

- Arkansas has created a state plan for K-12 computer science.

- ☑ Arkansas has established K-12 computer science standards.
- ☑ Arkansas has allocated funding for rigorous computer science professional development and course support.
- ☑ Arkansas has clear certification pathways for computer science teachers.
- ☑ Arkansas has established programs at institutions of higher education to offer computer science to preservice teachers.
- ☑ Arkansas has a dedicated computer science position in the state education agency.
- ☑ Arkansas requires that all secondary schools offer computer science.
- ☑ Arkansas allows computer science to count for a core graduation requirement. Find out how Arkansas allows computer science to count towards graduation at <http://bit.ly/9policies>.
- ☑ Arkansas allows computer science to count as a core admission requirement at institutions of higher education.

## Follow us!

Join our efforts to give every student in every school the opportunity to learn computer science. Learn more at [code.org](http://code.org), or follow us on [Facebook](#) and [Twitter](#).

Launched in 2013, Code.org® is a non-profit dedicated to expanding access to computer science, and increasing participation by women and underrepresented students of color. Our vision is that every student in every school should have the opportunity to learn computer science.

Data is from the Conference Board for job demand, the Bureau of Labor Statistics for state salary and national job projections data, the College Board for AP exam data, the National Center for Education Statistics for university graduate data, the Gallup and Google research study Education Trends in the State of Computer Science in U.S. K-12 Schools for schools that offer computer science and parent demand, and Code.org for its own courses, professional learning programs, and participation data.