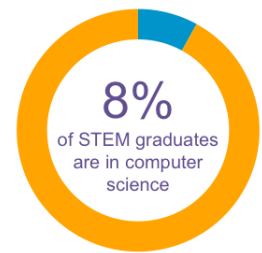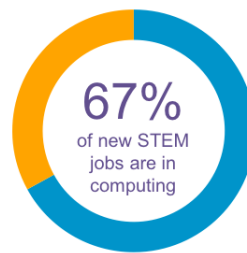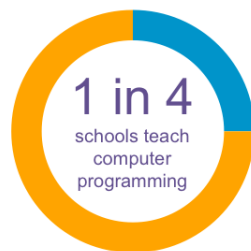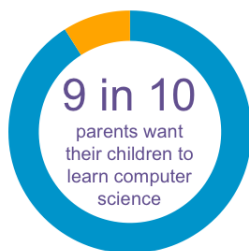# Support K-12 Computer Science Education in Florida

Computer science drives job growth and innovation throughout our economy and society. Computing occupations make up two-thirds 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. 75 percent of U.S. schools don't even offer computer science and only 8% of STEM graduates study it. We need to improve access for all students, including groups who have traditionally been underrepresented.

67% of new STEM jobs are in computing

8% of STEM graduates are in computer science

9 in 10 parents want their students to learn computer science, but only 1 in 4 schools teach it.

Computer science in Florida

- Florida currently has **23,972 open computing jobs** (3.8 times the average demand rate in Florida).
- The average salary for a computing occupation in FL is **$76,719,** which is significantly higher than the average salary in the state ($41,820).
- Florida had only **1,851 computer science graduates** in 2013; only **20**% were female.
- Only **2,528 high school students in** Florida took the AP Computer Science exam in 2015; only 20% were female; only 628 were Hispanic; only 144 were black.
- Only **115 schools** in FL (17% of FL schools with AP programs) offered the AP Computer Science course in 2013-2014. There are fewer AP exams taken in computer science than in any other STEM subject area.

9 in 10 parents want their children to learn computer science

1 in 4 schools teach computer programming

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/promote/FL** to learn more about supporting computer science in your state.

Code.org's Impact in Florida

There are 5,147 teacher accounts and 116,046 student accounts in Code Studio in Florida.

- Code.org has partnered with Broward County Schools, Miami-Dade Public Schools, One Clay County School District, and Riverview School District.
- 12 Code.org Affiliates, offering professional development for elementary teachers in Florida, have already trained **1,060 elementary teachers.**
- Code.org has trained **73 middle school teachers** and **172 high school teachers** in Florida to teach computer science.

> ## "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?

Here are 8 key policies that help to provide all students with access to computer science. Read more about these 8 policy ideas at **https://code.org/files/Making_CS_Fundamental.pdf**.

✘ Florida **does not yet** have rigorous computer science standards. Computer science has often been confused with broader technology education in schools. States should adopt discrete standards for computer science focused on both the creation and use of software and computing technologies at all levels of K-12 education. The Computer Science Teachers Association has model K-12 CS standards.

✘ Florida **does not yet** provide funding for rigorous computer science professional development and course support. States should provide professional development resources by creating matching fund opportunities to bring computer science to school districts.

✘ Florida **does not yet** have clear certification pathways for computer science teachers. The expansion of K-12 computer science education is hampered by the lack of qualified computer science teachers. We can grow their ranks by creating clear, navigable, and rewarding professional paths for computer science teachers.

✘ Florida **currently has no** incentives for institutions of higher education to offer computer science to pre-service teachers. The computer science teacher shortage can be addressed by exposing more pre-service teachers to computer science during their required coursework or by creating specific pathways for computer science teachers.

✘ Florida **does not yet** have dedicated computer science positions in state and local education authorities. Creating a statewide computer science leadership position within the state education authority will oversee state-level implementation of computer science education initiatives. Similar positions at the local level could support districts' expansion of course offerings and professional development.

✘ Florida **does not yet** require that all secondary schools offer computer science. States should adopt policies that require schools to offer a computer science course based on rigorous standards, with appropriate implementation timelines and allowing for remote and/or in-person courses.

✔ Florida allows computer science to count for a core mathematics or science graduation requirement.

✔ Florida allows computer science to count as a mathematics or science 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**, 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, the Bureau of Labor Statistics, the College Board, the National Science Foundation, the National Center for Education Statistics, and the Gallup research study Searching for Computer Science: Access and Barriers in K-12 Education.