



**Note:** Please see below for an initial draft of a Governors' Compact on expanding K-12 Computer Science Education in line with <u>Governor Hutchinson's Chairman's Initiative</u>. NGA and Governor Hutchinson ask that you and your staff review the draft. To add your name to the Compact, please contact Seth Gerson, Program Director for K-12 Education at <u>sgerson@nga.org</u> and Catherine Van Ness, Senior K-12 Policy Analyst, at <u>cvanness@nga.org</u>. NGA will be accepting signatures until the Summer Meeting in Portland, Maine July 13-15, 2022.

#### A Compact to Expand K-12 Computer Science Education

Educating the next generation of civic leaders, business entrepreneurs and community members has long been a priority of the nation's Governors. In the 21st century, it is more important than ever that all students have the opportunity to learn computer science to inform them as global citizens, to prepare them for the future of work, and to protect them from cybersecurity threats.

Governors have worked with business leaders throughout the pandemic to close the digital divide and expand broadband, devices, internet access and connectivity for millions of students, teachers and families. Ninety percent of middle and high school students now have devices. This change provides a springboard for expanding computer science education, laying a strong foundation for increasing students' overall digital literacy, and giving young people even greater opportunities to succeed in a rapidly changing workforce.

Computing jobs are the largest source of new wages in the United States. Currently, there are more than 600,000 computing job openings nationwide. These jobs are in every industry and every state and territory, and they're projected to grow at twice the rate of all other jobs. In fact, 91% of open software jobs are outside of Silicon Valley, and with remote work taking on a larger share of the U.S. workforce, computing jobs can more and more frequently be done from any location.

Despite this economic opportunity for current K–12 students, only 51% of public high schools in the United States offer any computer science courses. As the capacity to provide these courses in schools continues to grow, it is important that youth also have access to these learning opportunities outside of school. This can aid in equitably providing computer science skills to all students, regardlessof ability, geography, race, gender and socioeconomic status. It is also critical that K-12 computer science education is connected to postsecondary and other workforce pathways to improve digital literacy among learners of all ages, including adult learners.

Six different studies show that learning computer science helps students perform in school or college. Studying computer science in elementary school is correlated with higher test scores in math, science and English. Students who learned to code also demonstrated better executive, planning and problem-solving skills. That's why 90% of parents report they want their child to learn computer science in school.

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As a crucial component of our nation's security, workforce and economy, computerscience education is more important than ever and as a result, it requires high-level executive leadership and engagement. In recent years, many Governors have joined the <u>Governors' Partnership for K-12 Computer Science</u> and championed efforts to expand access to K-12 computer science education.

**With this compact**, the undersigned commit to expand K-12 computer science education for students in their states and territories, which may include the following strategies:

# Increasing the number of high schools offering computer science courses, which may be supported by:

- Requiring all high schools in the state or territory to offer at least one computer science course.
- Establishing rigorous K-12 computer science standards.
- Creating a state or territory plan for K-12 computer science.
- Implementing clear and flexible certification pathways for computer science teachers.
- Creating programs to provide computer science to preservice teachers.

# Allocating state or territory funding to K-12 computer science education, which may be supported by:

- Establishing positions dedicated to computer science in state and local education agencies.
- Allocating funding for rigorous computer science teacher professional learning.

#### Creating pathways to postsecondary success in computing and related careers, which may be supported by:

- Allowing computer science to satisfy a core graduation requirement.
- Requiring a computer science credit for high school graduation.
- Allowing computer science to satisfy an admissions requirement at institutions of higher education.
- Developing sequenced high school course pathways that support industry needs through skills and recognized certifications.

# Providing equitable access to computer science for all students, which may be supported by:

- Improving state data collection, reporting and analysis of student participation in computer science.
- Offering computer science in elementary and middle schools to build student interest and confidence before traditionally underserved populations begin to self-select out of the subject.