Computer Science and STEM Education Across the U.S.

The U.S. Bureau of Labor Statistics predicts that the country will create nearly 3.5 million new jobs in computer science fields by 2026. Last year, only 42,969 computer science students graduated into the workforce—well below what’s needed to meet the nation’s current and future labor market demands.

Why AP?

To prepare students for jobs related to computer science and STEM, states must dramatically increase both the number of trained computer science educators and computer science courses available. The College Board’s Advanced Placement® (AP®) courses offer states a path to bring quality computer science courses to high schools.

The College Board offers two courses in computer science: AP Computer Science A and AP Computer Science Principles. AP Computer Science A focuses on computing skills related to programming in Java, and AP Computer Science Principles, launched in fall 2016, aims to broaden participation in the study of computer science by engaging students in real-world topics that interest them and by focusing on the creative and collaborative aspects of computer science.

AP computer science courses can address issues of equity, access, and how to expand participation in computing while providing a strong and engaging introduction to the fundamental areas of the discipline. With the launch of AP Computer Science Principles, from 2016 to 2017:

- The number of female, African-American, and Latino students taking an AP computer science exam has more than doubled
- The number of female students earning a 3 or higher on an AP computer science exam has more than doubled
- The number of African-American and Latino students earning a 3 or higher on an AP computer science exam almost tripled

### Projected Demand Growth for Computer Science Jobs

AP Computer Science Participation Jumps Among Underrepresented Students with the Addition of AP Computer Science Principles

Number of female students taking an AP Computer Science exam has doubled with the addition of CSP

Number of Hispanic or Latino students taking an AP Computer Science exam has more than doubled with the addition of CSP

Number of black or African American students taking an AP Computer Science exam has more than doubled with the addition of CSP