# White House focuses on computer science in schools

December 8 2014, byJosh Lederman And Kimberly Hefling



President Barack Obama does a "fist bump" with a Adrianna Mitchell during an "Hour of Code" event in the Eisenhower Executive Office Building on the White House complex in Washington, Monday, Dec. 8, 2014, attended by middle-school students from Newark, N.J. (AP Photo/Jacquelyn Martin)

Smartphones and laptops have become essential tools for today's teenagers. But learning how these devices work has often taken a backseat to other priorities in U.S. schools.

The White House wants to help change that direction. It announced Monday that the seven largest school districts in the U.S. are joining more than 50 others to start offering introductory computer science to all their students.

A big focus? Getting girls and minority boys into these classes. Computer-related jobs are projected to expand for years to come, but only a small percentage of college graduates obtain a degree in the field.

The school districts encompassing New York, Los Angeles, Chicago, Miami, Las Vegas, Houston and Fort Lauderdale, Florida, are committing to offer the course in high school or middle school. While some large districts already have computer electives at limited campuses, all are now pledging to make computer science a standard offering district-wide.

The College Board, which runs the Advanced Placement program that allow high school students to obtain college credit for coursework, also introduced a new course called AP Computer Science Principles to start in fall 2016. Multidisciplinary and focused on real-world applications, a key aim of the new course is to encourage females and underrepresented minorities to start training for careers in computers.

It already offers AP Computer Science A focused on programming skills. Eighty-two percent of the students who take the class are white or Asian, and only 20 percent are female—although the College Board said it has been seeing some increases in enrollment among females and underrepresented minorities.

President Barack Obama talks with students during an "Hour of Code" event in the Eisenhower Executive Office Building on the White House complex in Washington, Monday, Dec. 8, 2014, attended by middle-school students from Newark, N.J. (AP Photo/Jacquelyn Martin)

"While no one is born a computer scientist, becoming a computer scientist isn't as scary as it sounds," President Barack Obama said in a video message. "With hard work and a little math and science, anyone can do it."

In an effort to highlight the importance of high-tech education, Obama and Vice President Joe Biden also met with about 20 middle school students from Newark, N.J., for an "hour of code" computing event.

One girl showed the president how to make shapes using JavaScript, with a design program using characters from the movie "Frozen." "This is the future right here," Obama said.

The president said students, especially girls and minorities, need to learn sooner "not just how to use a smartphone but to create the apps for a smartphone."

About one in five students in 2009 graduated with a computer science credit, according to a National Assessment of Educational Progress study.



ADDS NAME - President Barack Obama puts a hat that says "code" on Adrianna Mitchell, during an "Hour of Code" event in the Eisenhower Executive Office Building on the White House complex in Washington, Monday, Dec. 8, 2014, attended by middle-school students from Newark, N.J. (AP Photo/Jacquelyn Martin)

A 2013 report by the Computer Science Teachers Association says that because computer science isn't deemed a core academic subject in

federal education policy, states discount it and that trickles down to the district level.

"Because non-required courses are less likely to be offered in schools, administrators are less likely to hire teachers who are specifically prepared to teach them," the report said.

It said only 14 states allow a computer science course to be counted toward graduation requirements in math, science or computer science.



President Barack Obama greets students during an "Hour of Code" event in the Eisenhower Executive Office Building on the White House complex in Washington, Monday, Dec. 8, 2014, attended by middle-school students from Newark, N.J. (AP Photo/Jacquelyn Martin)

Obama's efforts to reshape education policy have often been thwarted by

Congress. Seeking to sidestep lawmakers, Obama has sought to use his convening power to get communities and companies to pitch in, with generally modest results.

To meet the teaching demand, charitable groups are pledging $20 million to train more teachers in computer science by the start of the 2015 school year. Google, Microsoft and philanthropists Bill Gates and Mark Zuckerberg are among those contributing.

Citation: White House focuses on computer science in schools (2014, December 8) retrieved 6 May 2024 from https://phys.org/news/2014-12-white-house-focuses-science-schools.html