CPS Announces First Schools to Implement District's Comprehensive K-12 Curriculum

Schools will Create Pipeline for Computer Science Education from Elementary through High School

CHICAGO — As part of the Mayor's and CPS' commitment to expanding access to a STEM education, Chicago Public Schools (CPS) today announced that 46 schools will pilot the District's new computer science curriculum beginning next fall, the most comprehensive K-12 computer science education program of any major school district in the country.

The curriculum, first announced in December, will equip students with skills necessary for the 21st Century, creating a pipeline for foundational computer science skills in elementary schools, expanding computer science classes to every high school, and elevating computer science to a core subject. By partnering with Code.org, Google, and other technology leaders, CPS will be able to increase the quality of and access to computer science and coding classes.

"By expanding access to computer science skills and coding in schools, we can help prepare Chicago's students with the skills and knowledge to succeed in a highly specialized, technical economy," said CPS CEO Barbara Byrd-Bennett. "Teaching our kids the foundational skills of computer science and coding will not only open up the door to success in virtually any job industry, but will position them as the next generation of innovators that will move our city forward."

Under the five-year Computer Science for All (CSA) plan, one in four CPS elementary schools will be able to offer computer science programming for students as early as Kindergarten. At least one computer science course will be offered at every District high school and become a requirement of graduation. The curriculum will be fully aligned with the framework of the Next Generation Science Standards, and the Common Core State Standards in elementary schools. Coding and computer science classes will also be available year round to students across through Chicago City of Learning, a connected learning initiative that incorporates hundreds of partner sites and organizations throughout the city to make Chicago a place of year-round learning inside and outside of the classroom.

Starting in School Year 2014-15, the initial group of 25 elementary schools will incorporate computer science lessons into their math and science coursework. An additional group of 21 high schools will offer the entry-level computer science course called Exploring Computer Science (ECS). This class has already been successfully implemented in more than 20 CPS schools via the Career and Technical Education (CTE) Information Technology (IT) programming pathway and the Early College STEM Schools.

Over time, a course based on the Computer Science Principles (CSP) curriculum will lay the foundation for the AP Computer Science exam of the same name. This course will follow and build upon the concepts taught in the ECS course for high school students.

This program builds off of CPS' current computer science course offerings, which have already served more than 9,000 high school students over the past 4 years. In 2010, when CPS was revamping the Career and Technical Education (CTE) program, Exploring Computer Science became a foundational course in the program. The course is also taught in all five of the Early College STEM schools.

This effort is part of CPS' plan to provide access to computer science at an earlier age to bridge the digital divide and gender gap. While computing occupations are among the highest-paying jobs for new graduates, fewer than 3 percent of college students across the nation will graduate with a degree in computer science – and of all students taking Advanced Placement Computer Science, fewer than 20 percent are women and fewer than 10 percent are African American or Latino.

Participating schools include:
Elementary schools: Ariel Community Academy (Pre-K-8); Armstrong International Studies (Pre-K-8); Azuela (Pre-K-8); Bateman (K-8); Daniel Boone (K-8); Carson (Pre-K-8); Chicago Academy (Pre-K-8); Coles Language Academy (K-8); Disney Magnet (Pre-K-8); Edison Regional Gifted Center (K-8); Gunsaulus Scholastic Academy (Pre-K-8); Hamilton (K-8); Henderson (Pre-K-8); Andrew Jackson Language Academy (K-8); Mahalia Jackson (Pre-K-8); Moos (Pre-K-8); Kwame Nkrumah Academy (K-5); Sauganash (K-8); Sayre Language Academy (K-8); Sheridan Math & Science Academy (K-8); STEM Magnet Academy (Pre-K-8); Tonti (K-5); Washington (K-8); Waters (Pre-K-8); Whitney (Pre-K-8).

High schools: Amundsen (9-12); Austin Business and Entrepreneurship Academy (9-12); Bogan (9-12); Corliss (9-12); Hancock College Prep (9-12); Julian(9-12); Kenwood Academy (7-12); Lake View (9-12); Lane Tech (7-12); Lindblom (7-12); Marine Math & Science Academy (9-12); Mather (9-12); Morgan Park (9-12); Solorio Academy (9-12); Urban Prep West (9-12); Urban Prep Bronzeville (9-12); Urban Prep Englewood (9-12); Wells Community Academy (9-12); Whitney Young (7-12); U of C Woodlawn (6-12); Young Woman's Leadership (7-12).

The program will also help address the skills gap, since approximately one-fourth of Chicago's jobs are in STEM-focused fields. According to the Bureau of Labor Statistics, by 2020, the U.S. can expect almost 1M new jobs to be created in computer and information technology, yet American universities are only estimated to award 360k bachelor degrees in computer science in the same time period.

To close the skills gap, the Mayor started five Early College STEM schools, which offer grades 9-14 coursework for students to have an opportunity to earn both a high school diploma and an associate's Degree at an accelerated pace in a highly specialized, technical field. The five corporate partners –Cisco, IBM, Microsoft, Motorola Solutions, and Verizon Wireless – provide mentors, internships, and feedback on the curriculum to teach skills that would be valuable at their company. The schools were chosen specifically to represent each geographic region of the city, so that every student would have equal access to receiving a quality education that will prepare them for success in the classroom and in life. City Colleges' revamped College to Careers program also aligns students with in-demand career paths to strengthen the city's local workforce and economy.

Chicago Public Schools serves 400,000 students in 658 schools. It is the nation's third-largest school district.

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