



# STUDENTS AND TECHNOLOGY

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**Want to work in high tech?** That goal may be more attainable than you think, according to Marla Byrd, Technology Integration Specialist for East St. Louis School District 189.

Byrd works in the Technology Department at the district, training teachers and students to most effectively integrate technology into the classroom.

"I'm passionate about technology," says Byrd.

Her drive comes from her experience studying computer science, which led her to complete a master's degree in educational technology, higher education, and adult learning.

"I love helping people, young and old, feel more comfortable using the latest tech tools and exposing them to careers that will make them 21<sup>st</sup>-century learners," she says.

School District 189's vision of a college- and career-ready student body is clear from the improved graduation rate and number of scholarships awarded to graduating seniors. The state-funded Career and Technical Education (CTE) program is part of the district's success.

CTE helps high school students explore trades and job opportunities in fields ranging from construction and electrical trades to culinary arts. Currently, it is working to build a computer science pathway for students from kindergarten through high school.

CTE recently joined the Computer Science (CS) For All Consortium, President Barack Obama's initiative that helps "all American students from kindergarten through high school . . . to be creators in a digital economy, not just consumers, and to be active citizens in our technology-driven world."

"It has been such a rewarding experience for me working with the district's Technology Leader program and CTE," Byrd says.

Over the summer, representatives from the Computer Science Teachers Association invited School District 189 to participate in the Ten80 Education STEM Challenge tour to expose East St. Louis students to computer science and STEM (science, technology, engi-

neering, and mathematics) related careers.

On September 14, 2016, 43 East St. Louis high school students traveled to St. Louis University's Chaifetz Arena with an interdisciplinary team of teachers as their chaperones.

"Students worked in teams and received training on the computer science, engineering, enterprise, and innovation frameworks of Ten80 Education's national competition," Byrd says. "Teams then designed innovations that solved problems they identified."

The teams researched the U.S. patents and trademarks database to ensure their ideas were new inventions, created 30-second pitches, and presented them to more than 500 students, teachers, industry leaders, and administrators.

"As a result, the high school qualified to receive free curriculum in computer science and engineering that will be used in the after-school technology clubs at the high school," Byrd adds.

Meanwhile, K-12 teachers will be getting East St. Louis kids ready to learn keyboarding, coding, and robotics, starting with the district-wide Hour of Code initiative.

"In today's economy, a lot of job growth is in technology-related professions like computer coding and cyber-security. You don't always need a four-year degree to get those jobs," Byrd says. "Often, all you need are the specific certifications."

But providing the skills is only the first step. Students then need ways to connect with potential employers.

"In the past six months, we have been shifting into identifying high tech options for students," Byrd says. "The district will be part of the Illinois Science and Technology Institute's Mentor Matching Engine, which matches high school students with mentors working in STEM fields."

Byrd believes the future of high tech is bright in East St. Louis.

"There is a lot for our students to get excited about," she says. "With the right mix of education and opportunity, we can help a lot of kids get exposed to this growing field."