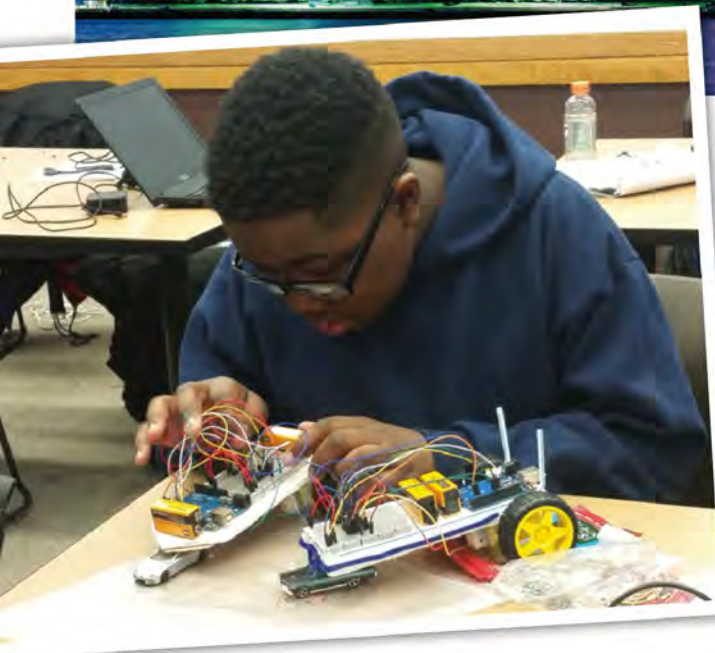


Project SYNCERE Reaches Out to Chicago Youth

The object is to build skills and get middle and high school students interested in STEM | BY KATE COLBORN



“We want to create opportunities for youth to become engaged and excited about engineering and the STEM fields in general. We can be change agents for our community,” says Jason Coleman, one of the co-founders of Project SYNCERE, an acronym for Supporting Youth’s Needs with Core Engineering Research Experiments.

Project SYNCERE is the brainchild of three young African-American men, two engineers and a finance expert. Coleman and Seun Phillips, both engineers, met while working at Motorola in Schaumburg, Illinois, and knew George Wilson, who also lives in the Chicago area and worked as a financial manager in the life sciences department of Northwestern University.

The three were unhappy with the lack of diversity in the technology workforce. Both Coleman and Phillips had volunteered with youth programs in science, technology, engineering and math, but they wanted to do more. So in 2009, they decided to leave their growing corporate careers and start SYNCERE. “We wanted to give the youth an early foundation so they can develop

◀ Hands-on projects and experiments introduce youth to the excitement of engineering at Project SYNCERE.

know-how and skills and the knowledge of STEM fields that's going to be required for them to succeed at the next level," Coleman says.

Coleman himself didn't become interested in engineering until after he started college. "I was always in the top of my class in math and science, and I did a lot of work outside of school, but I never really understood what engineering was all about," he says. When he headed to college, his plan was to become a pharmacist. "I knew they made a good living," he remembers. But as he got deeper into his studies, he found his engineering-major friends' work more exciting. His counselor helped him explore the world of engineering and all its variations, and he switched majors in his second year. "There many other students out there who aren't going into the field because they lack exposure at an early age."

Building the Program

Coleman and his co-founders started with one after-school program at a Chicago high school. "But when we were running the high school program we realized that the students' grasp of math wasn't where it needed to be." They dropped that program after a year and started to do in-school math and science enrichment with younger students.

"The studies say that the sixth-grade level is where kids get turned off, especially girls — we are really trying to target girls at that early age. Now we have sixth, seventh and eighth-grade kids doing amazing things in our program," Coleman says. In 2015, 48 percent of them were girls.

At first, Coleman and Phillips did all the teaching themselves. "We had a knack for connecting with the kids," Coleman says. "Principals and school admins saw that and saw what we were doing with the students, so they would recommend us to other schools." The program grew quickly, mostly by word of mouth.

The founders were happy with the program's success, but wanted an even wider reach. "We were contracted out and getting funding at select schools throughout the city, but we saw that there was a need beyond those schools and many other kids who would benefit from the program," he says. The next year, the founders went after additional funding to host summer camps and a Saturday engineering academy open to students from all over the city.

The current Project SYNCERE has four elements. For its in-school component, staff of mostly part-time instructors collaborates with elementary school classroom teachers. "We have class time during the school day and a lot of our work is done in conjunction with the classroom teachers. If we're implementing something in a science class, we'll partner with the teachers and align with what they're doing," Coleman says. The in-school program is designed to follow current science and math education standards, including the Common Core Standards. "We have been able to find that sweet spot to connect the projects that the kids are doing with us to the lessons they're learning in school," Coleman says.

At some schools, Project SYNCERE runs after-school programs that students can sign up for. All programs are project-based and aim to teach students how to analyze problems and design solutions.

The third component is the Saturday Emerging Engineers Academy. It's free but very selective, Coleman says: Students must fill out an application and come to an interview with Project SYNCERE staff.



Jason Coleman

"Once they're in, our mission is to keep them there year over year so they can grow within the program." Emerging Engineers typically has two middle school and two high school classes and runs during the academic year.

The program's fourth element, summer camps, takes several forms. Project SYNCERE runs one middle school and one high school summer camp of its own, and partners or contracts with other city agencies and organizations to implement the STEM portions of their camps. "Major universities like the University of Illinois and a lot of the community colleges put on summer programs for middle school and high school students," he says. "They'll run the program but hire us to implement the STEM portion of it." Project SYNCERE also works with Chicago Public Schools, the Chicago Public Library and other nonprofits throughout the city interested in providing their youth with engaging educational opportunities during the summer.

One of the biggest challenges is finding staff, Coleman says. "It's difficult finding the right people who can open the students' eyes to different opportunities. Moving forward, the staff will need even more specialization within engineering." He hopes to bring in more college students, as well as retired engineers, as the program expands. "We're still playing with the hiring process and the different types of employees we utilize, but right now we have a good base, a variety of different people that we work with."

Looking Ahead

So far, Project SYNCERE works only in Chicago. "A couple of years ago we did some experimenting and started up in Atlanta," Coleman says. "We did about a year's worth of programming there where we partnered with the city for after-school programming at local parks. But it was hard trying to run in both places and we didn't have a full-time staff in Atlanta so we pulled back."

Inquiries and requests for help have come from all over the country, though. The Project SYNCERE staff is working on an out-of-school-time program that could be packaged and replicated in other locations. "We are trying to nail down a different model that we've been working on that could expand to just about any market. Obviously we need the finances to make it work, but it's a pretty structurally sound model that has the foundation and proven concept that can work anywhere," he says.

Fees from schools and other organizations provide the largest revenue stream for Project SYNCERE. Corporations have stepped up, too. Motorola and ComEd were early supporters; the roster of supporting corporations has expanded to include Kraft Foods, PricewaterhouseCoopers, Turner, ExxonMobil, Walgreens, General Electric and more.

Why would three rising African-American professionals leave growing corporate and institutional careers to introduce young people to the excitement of STEM? "I believe in supporting community and supporting youth. Even when we were working at Motorola, Seun and I would go out and tutor kids. We would go talk to kids about the professional things we did. "It's always been about service and how we can help inspire the next generation. If not us, then who's going to go do it?" Coleman says. ■