Four out of five students who pursue careers in tech decide to do so in high school, but young people growing up in low-income circumstances have less access to computer science courses, workplace experiences, and role models that are often crucial when launching careers in tech. Emily Shapiro, the Bay Area Director of Programs for Code Nation, said her organization is working to change this situation.

Code Nation (formerly known as ScriptEd) was founded in 2012, with a mission to create access to career opportunities in the tech industry for students at under-resourced high schools. Over the years, Code Nation has grown to serve students in San Francisco, Oakland, New York City, and soon in Chicago. Starting in 10th grade, students take a year-long web development course at their school taught by highly-trained software engineers.

“The professional internship experience makes the most transformational change and can truly change the career trajectories of our youth.”

In the second year, students take a course hosted at a partner company to continue to hone their technical knowledge and begin to develop their professional skills. And as seniors, students get hands-on, real-world experience through a
technical internship at a tech company to further develop their technical and professional skills. Following the internship, Code Nation tracks students for 6 years and provides alumni support to help as they continue on their pathways to careers in tech.

“Growth is getting companies to say ‘yes’ to having a 16-year-old on the team.”

With the help of PropelNext, Code Nation is reexamining what’s working to deepen and expand its programs, focusing specifically on its unique workplace programming. “We found that the professional internship experience makes the most transformational change and can truly change the career trajectories of our youth,” Shapiro said. The 180-hour experience takes place the summer after the two years of courses, and the intern works on a technical team at a tech company. “Most 16-year-olds in internships are getting coffee or making copies; our interns are writing code and contributing to real projects for longstanding companies and up and coming startups across the country,” continued Shapiro.

Code Nation has always focused on developing and refining the curriculum for its courses and training the instructors so students leave the second-year course with the technical skill, professional skill and relationships, and a sense of confidence and self-belonging that will guarantee their success as tech leaders. Through PropelNext, Code Nation is working to develop a similar structure around the internship program to deepen the impact of the program.

“As a secondary service provider, we want to ensure an appropriate manger for a 16-year-old,” Shapiro explained. "We want the internship engineers trained like the coding course engineers are trained, which entails providing management and culturally responsive pedagogy training.”

Looking to the future, Code Nation’s aim is to strengthen and grow its workplace programming. With the support of PropelNext, Code Nation has been able to take a step back and reexamine what’s working and what can be improved. The team is focusing on becoming exceptionally clear about which inputs move the needle on student outcomes.

According to Shapiro, “Finding companies to partner with is the biggest hurdle for placing more students in internships; growth is getting companies to say ‘yes’ to having a 16-year-old on the team.”

PropelNext is a program of the Edna McConnell Clark Foundation that helps promising nonprofits convert their passion for serving disadvantaged youth into data-driven insights and practices that increase their impact on young people’s lives. This is a look into Code Nation, a PropelNext grantee in their Northern California 2021 cohort, and the organization’s experience thus far in the program. William & Flora Hewlett Foundation is the co-investor for Code Nation.