HARLEM CHILDREN'S ZONE

sphero

TAGLINE

Giving students hands-on programming experiences with Sphero robots from CodeFWD by Facebook made computer science real for 4th-5th grade students from Harlem Children's Zone.

KEY RESULTS

- Harlem Children's Zone was able to drive 24,000+ kid-minutes of coding across 5 of their locations over the course of less than 3 months.

- Students who had no prior experience with Computer Science were able to have a strong and encouraging first experience.

- Students were able to tie learnings from Computer Science to other subjects.

- Students now have a basic sense of programming and those who are interested feel empowered to pursue Computer Science in the future.

PREMISE

Schweitzer was working as a professional in the Computer Science field and felt a calling to help young students who were like him to help them find success in school, career and life. He wanted to do this without leaving his work in programming behind. He found a great opportunity to do that by teaching some of the fundamentals of computer programming by joining the team at one of Harlem Children's Zone's local after school clubs. In doing this he found great success with students with prior exposure to computer science but he needed a way to bring new students into the fold.

HARLEM CHILDREN'S ZONE GOALS

- Inspire interest and agency around computer programming in young students.

- Create opportunities for partnerships and scholarships for students in the future.

- Create more buy-in among teachers on the importance of Computer Science education.

MORE APPROACHABLE AND ACCESSIBLE COMPUTER SCIENCE EDUCATION FOR BOTH EDUCATORS AND LEARNERS.

Harlem Children's Zone worked with Facebook as one of the first groups to try CodeFWD with a select number of their clubs. In New York, Schweitzer was one of the facilitators who received educational resources for his club to introduce students to the idea of programming in a simple and friendly way and inspire more interest in the field. Even more powerful than reaching the students, he was able to share some of these resources with other educators, many of whom had no prior exposure to computer science to help them understand why bringing these concepts to students was so important. After completing the first exercises which consisted of prepackaged lessons and video resources as well as a quiz to do with his students, Schweitzer and his class were awarded a classroom set of programmable robots to continue their work along with classroom guides from our partners at Sphero. Giving these students hands-on experience with block coding in a way where they could see their work manifested in the real world right in front of them instantly made the lessons they worked through before feel more real and tangible. They were even more excited about what they could do. Capitalizing on this excitement Schweitzer was able to take things even further with his group by coming up with his own Sphero challenges including lessons on metric units and comprehending angles. What was even better though was when he was able to combine multiple concepts together in his "Ocean's 11*" activity where students commanded Sphero robots to stop a bank robbery in the maps he created on the classroom floor.

Schweitzer's club was just one of many clubs and the amazing stories we heard from groups that brought CodeFWD into their classrooms.

Across all the clubs that participated in the program they were able to create opportunities that resulted in:

24,000
KID-MINUTES OF CODING

1,000+
LINES OF REAL CODE
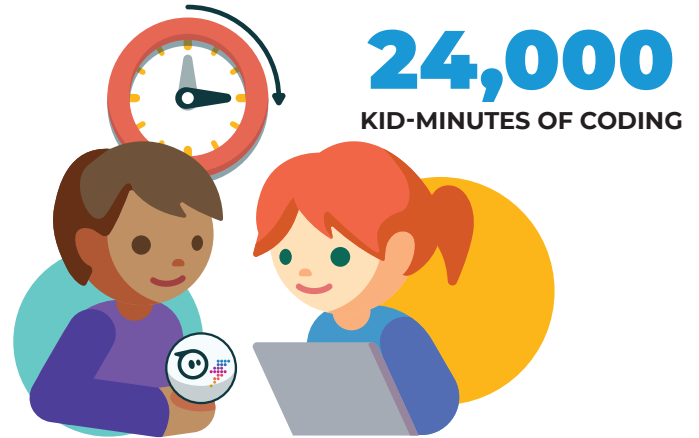
Even more important was how the students felt, it wasn't uncommon to hear direct quotes like these:

"I LOVE coding. I can't wait to come back next Friday."

"Wait! Wait! Can I just finish one more level before I have to go?"

"Can I keep this [packet] and do more at home?"

TACTICOMPUTER SCIENCE

TO DO THIS THEY LEVERAGED:

- Resources from CodeFWD by Facebook.

- Sphero robots and programming activities from Sphero.

- Original lessons created by teachers using Sphero robots from Facebook.

SUCCESS

- Harlem Children's Zone was able to drive 24,000+ kid-minutes of coding across 5 of their locations over the course of less than 3 months.

- Students who had no prior experience with Computer Science were able to have a strong and encouraging first experience.

- Students were able to tie learnings from Computer Science to other subjects.

- Students now have a basic sense of programming and some have expressed interest in pursuing Computer Science in the future.

NEXT STEPS

Schweitzer was working as a professional in the Computer Science field and felt a calling to help young students who were like him to help them find success in school, career and life. He wanted to do this without leaving his work in programming behind. He found a great opportunity to do that by teaching some of the fundamentals of computer programming by joining the team at one of Harlem Children's Zone's local after school clubs. In doing this he found great success with students with prior exposure to computer science but he needed a way to bring new students into the fold.

*Ocean's 11 is property of Warner Brothers and is not affiliated with CodeFWD, Facebook or Harlem Children's Zone.