

Fellowship Brings Coding, Computer Science Skills to Teach for America Teachers

By [Michelle Davis](#) on January 16, 2015 5:06 PM

By guest blogger *Michelle R. Davis*

A partnership between a New York City computer science school and Teach for America aims to bring more opportunities for improved coding instruction to students in low-income districts.

The New York City-based Flatiron School and TFA have created a Computer Science Education Fellowship open to second-year TFA corps members and alumni to provide intensive computer science instruction to take back to their schools. The fellowship, open this year to about 20 TFA-affiliated teachers, will include online and in-person study and a summer co-teaching opportunity, said Lyel Resner, the head of K-12 and social impact at **The Flatiron School**, which offers web and mobile development instruction.

After that, the teachers will be expected to take what they've learned back to their schools, he said. "We'll give them access to all of our curriculum materials and online resource and then have them go spearhead computer science initiatives in their school, whether that's an elective, a required course, or an after-school program," he said.

While much attention has been given to the value of coding and computer science for students, few K-12 classes are offered and "there are virtually no teachers," Resner said. Many K-12 computer science teachers are "playing out of position a little bit," he said.

The coding advocacy organization Code.org **has estimated by 2020 there will be 1.4 million computing jobs, but only 400,000 computer science students to fill those slots**. The organization is advocating for more emphasis on computer science in K-12 to help prepare students for these generally high-paying jobs.

For Teach For America, the partnership serves a dual purpose. One is to provide an opportunity to "advance equity in the schools we work in that do not have access to computer science in the way that young people in more affluent communities do," said Charissa Fernandez, the executive director of Teach For America New York. The other is to help TFA teachers and alumni build new skills and inspire them to stay in the classroom longer.

Research indicates that within five years, all but 15 percent of TFA graduates have left their original school placements. The organization announced **new efforts this year to try to improve retention among its ranks of alumni**.

"This is a great opportunity for us to encourage more of our teachers to stay in the classroom longer and it's also a part of what we know teachers want: the opportunity to demonstrate a concrete impact in their schools," Fernandez said.

The idea for the fellowship arose after this past summer, when the Flatiron School offered about 100 high school students a course in computer science. It was so successful, Resner said, that the school wanted to extend its reach. This summer they will be running similar courses for high school students in cities including Boston, Chicago, Austin, and Miami, he said.

Teachers accepted into the fellowship will spend about 100 hours doing online study, then do about a week of in-person classwork, Resner said. After that, they will spend six to eight weeks co-teaching coding and computer science to high school students, along with a more experienced Flatiron School instructor. The teachers will be paid for their time during the summer, he said.

But will the TFA teachers and alumni be able to implement what they've learned when they go back to their home schools, which are typically low-income with few resources? "That's a valid concern," Fernandez said. "My hope is that the teachers applying are consulting with schools ... so they can work together to maximize the opportunity as much as possible."

Both Resner and Fernandez said they hope the fellowship will grow in the coming years to allow more TFA teachers and alums to participate.

"It's exciting for teachers to build a new skill," she said. "But we think the incentive is the opportunity to bring this back to their students. That brought our teachers into this work to begin with."

Teach for America second-year corps members or alumni interested in the Computer Science Education Fellowship Program **can get more information and the application here**. The deadline to apply for this program is March 1, 2015.

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