# 'Next Generation Academy' fuels technology learning

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**Hofstra University senior Joe Booth helped a student at the Progressive School of Long Island, in North Merrick, on Feb. 13. Booth is teaching at the school's Next Generation Computer Programming Academy this year.**
BRIAN RACOW/HERALD LIFE

**By Brian Racow**

At the Progressive School of Long Island, on Merrick Avenue in North Merrick, computer science is seen as an essential subject.

"Not knowing coding is kind of like putting kids in the library with books and not teaching them the alphabet," said Progressive School Principal Eric Jacobson. "We should always be doing more on this front."

The Next Generation Computer Programming Academy — a partnership between the Progressive School and the Frank G. Zarb School of Business at Hofstra University that is funded by a grant from OpenLink, a Uniondale financial software company — launched in 2013. Graduate students and upperclassmen in the Hofstra Information Technology Association teach elementary computer coding to third- to eighth-grade Progressive School

students under the supervision of Alex Pelaez, special assistant professor of information technology at Hofstra. OpenLink purchased 30 computer monitors for the school and funds stipends for the lead Hofstra student instructors.

In classes ranging from two to 16 students, children use inexpensive computers called Raspberry Pi's to practice and experiment with coding exercises. Parents buy the devices, which cost $35 each, according to Pelaez. Created by Britain's Raspberry Pi Foundation, the computers can do simple functions, connect to monitors and keyboards by wire or signal, and are small, lightweight and durable, Pelaez said. Progressive School students bring them to school and take them home.

Third- and fourth-grade students start with Scratch, an open-source programming language that allows them to drag and drop existing code to, for example, manipulate the movements of a cat's image on their screens. In fifth and sixth grade, they learn a more advanced programming language, Python, in which they can insert their own code. In seventh and eighth grades, lessons revolve around building and using databases and spreadsheets.

Leanna Pignataro, 10, used words like "fun" and "cool" to describe her lessons as she used Python to create a programming loop on Feb. 13. She also praised her teachers, Hofstra seniors Joe Booth and Nooshin Nejati. "They're really nice to us while we're learning," Leanna said.

Kristen Welte, a first-year Hofstra graduate student, teaches nine classes of third- and fourth-graders each week this academic year. She said she doesn't view it as a job, but rather as a learning experience as she learns to master technology in order to better answer her inquisitive students. She described basic computer science knowledge as part of "a new definition for a well-rounded student."

"This is a lifelong skill," Welte said. "You can always have this as a hobby."

Dominick Miserandino, father of one of Welte's third-grade students, Caterina, said his daughter excitedly reports what she learned in programming class when she comes home. Outside school, Caterina now takes part with friends in regional robotics competitions. Dominick said he was pleased to see his daughter's interest in technology grow.

"Technology is part of our lives," he said. "It's very important that she know this, like math or reading."

Rich Grossi, executive vice president of global operations and support at OpenLink, saw benefits to the Next Generation Computer Programming Academy beyond computer

proficiency. Young students and their collegiate teachers, he said, have opportunities to develop problem-solving, interpersonal and leadership skills. Grossi was so impressed with two Hofstra student teachers after observing them last year in Progressive School classrooms that he hired them at OpenLink.

"We were happy to jump on this program and fund technology for the future," he said.

The Progressive School of Long Island

The Progressive School of Long Island, at 1425 Merrick Ave. in North Merrick, is a private, non-sectarian, nonprofit school with 117 students in kindergarten to eighth grade. It was founded in 1985, based on "neo-humanist" educational principles. Its mission statement emphasizes "freedom of opportunity, depth and variety of subject matter, personal attention, moral leadership, collective spirit, and a guiding philosophy."