



## Robots Teach; More Brooklyn Kids Learn

### Brooklyn Community Foundation Grant Expands Highly Successful NYU-Poly Robotics Outreach Program

Two Brooklyn institutions today announced an expanded partnership to help encourage Brooklyn’s young people to explore careers in the fields of science, technology, engineering and mathematics (STEM). Brooklyn Community Foundation’s \$500,000 grant to Polytechnic Institute of New York University (NYU-Poly) could triple the number of under-resourced Central Brooklyn elementary, middle and high schools that employ students’ fascination with robots to engage their interest in STEM subjects.

Founded in 2007 with the Foundation’s support, NYU-Poly’s [Central Brooklyn STEM Initiative](#) (CBSI) pairs teachers from economically disadvantaged Brooklyn schools with graduate fellows from NYU-Poly’s engineering programs to design dynamic, hands-on classroom lessons, thereby also helping to develop both teachers and graduate fellows.

Beginning in fall 2010, CBSI expanded from 12 to 18 Brooklyn elementary, middle and high schools. The three-year gift from the Brooklyn Community Foundation aims to expand the program even further, to 36 schools. More than 80 percent of students served are minorities, and half are females. Both groups are historically under-represented in the STEM disciplines and careers.

CBSI has a profound and measurable impact on students: A recent outside evaluation reported that 74 percent of the 810 participating students increased their overall grades one-half or one full letter grade, and 80 percent saw their science and math grades improve one-half or one full letter grade. More than three-quarters of the students said the program increased their interest in STEM subjects and careers.

“One of the greatest strengths of NYU-Poly – and America – lies in our diversity,” said Jerry M. Hultin, NYU-Poly president. “The Brooklyn Community Foundation’s long and deep commitment to CBSI has encouraged some of Brooklyn’s best young, diverse students in STEM studies and set them on a path to pursue higher education and rewarding technical careers.”

The CBSI pilot was created in 2007 through grants from the Independence Community Foundation (ICF) – now the Brooklyn Community Foundation – and the [J.P. Morgan Chase Foundation](#). Since then, the Brooklyn Community Foundation has contributed \$800,000 to this educational program, including today’s announced gift. Its cornerstone contribution also allowed NYU-Poly to obtain funding from the [National Science Foundation](#)’s GK-12 Fellows Program to support the graduate fellows.

"We believe all of Brooklyn's young people should have the opportunity to join the advancing fields of technology, engineering, math and science," said Marilyn Gelber, president of the Brooklyn Community Foundation. "Our partnership with NYU-Poly creates those opportunities by pairing graduate engineering fellows with teachers in Central Brooklyn schools so students can stay engaged by participating in robotics competitions and learning more about cutting edge developments in the field. The Foundation and its Board of Trustees – particularly New York State Regent Dr. Lester Young, Jr., whose leadership in education inspired the project – is thrilled to join with NYU-Poly and other foundations and supporters in our goal to triple the number of schools participating in the program. We view this as just the beginning, and are excited about the future."

The CBSI program allows NYU-Poly fellows to connect their academic and research skills with societal needs, while summer research and training programs advance teachers’ knowledge. NYU-Poly fellows spend summer recess training in mechatronics and robotics, using LEGOs to develop grade-appropriate, hands-on science and math lessons. They then pair with Central Brooklyn teachers, who are often under-resourced and unprepared to create engaging, real-world projects in science and technology. Over the course of a summer, teachers work in tandem with fellows to research and design projects for the classroom. When school resumes, the fellows and teachers continue their partnership, bringing robotics projects to life with students and exposing them to tools and techniques used by scientists and engineers.

The results of the robotics initiative can be seen in the success of the CBSI-mentored teams of students who participated in the recent FIRST LEGO League robotics challenge: Of the 16 CBSI-mentored teams competing in the rigorous Brooklyn Qualifier, 13 advanced to the citywide finals.

The CBSI is also supported by grants from [The Black Male Donor Collaborative](#), [Motorola Foundation](#), [NY Space Grant Consortium](#), White Cedar Fund and [XEROX Foundation](#).

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## About Polytechnic Institute of New York University

Polytechnic Institute of New York University (formerly Polytechnic University), an affiliate of New York University, is a comprehensive school of engineering, applied sciences, technology and research, and is rooted in a 157-year tradition of invention, innovation and entrepreneurship: i2e. The institution, founded in 1854, is the nation's second-oldest private engineering school. In addition to its main campus in New York City at MetroTech Center in downtown Brooklyn, it also offers programs at sites throughout the region and around the globe. Globally, NYU-Poly has programs in Israel, China and is an integral part of NYU's campus in Abu Dhabi.

## About Brooklyn Community Foundation

Brooklyn Community Foundation's mission is to improve the lives of people in Brooklyn by strengthening communities through local giving, grantmaking and community service. The first and only one of its kind in Brooklyn, the Foundation was founded in 2009 to support the borough's most effective nonprofits in five Fields of Interest: Art for All, Caring Neighbors, Community Development, Education and Youth Achievement, and Green Communities. Since 1998, operating as the Independence Community Foundation, the Foundation distributed over \$75 million in grants throughout New York Metro area, more than half of which was in Brooklyn. Learn more at: [BrooklynCommunityFoundation.org](http://BrooklynCommunityFoundation.org); Follow on Twitter @DoGoodBklyn.

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