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.

READING, *WRITING* & ROBOTS

Two Brooklyn institutions announced an expanded partnership to help encourage the borough's young people to explore careers in the fields of science, technology, engineering and mathematics (STEM).

Brooklyn Community Foundation's $500,000 grant to NYU-Poly could triple the number of underresourced 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.

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 underrepresented in the STEM disciplines and careers.

CBSI has had 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 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 JPMorgan Chase Foundation. Since then, the Brooklyn Community Foundation has contributed $800,000 to this educational program, including the $500,000 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.

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—Marilyn Gelber
President,
Brooklyn Community Foundation

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