

Nassau yeshiva teacher Ron Occhiogrosso (L) and Lennox Henry, a biology and Earth science teacher at Washington Irving High School in Manhattan, build a remote-controlled weather balloon in Polytechnic University science program.

Teachers go hi-tech

Taking Poly U science know-how back to HS

SCIENCE TEACHERS from across the city are headed back to the classroom this summer to learn innovative ways to teach up-to-the-minute technology.

The nearly dozen teachers from high schools such as Canarsie in Brooklyn and Aviation in Queens - learned how to build "smart" robots that do everything from wiping up spills to painting floors during the program at Polytechnic Uni-

versity in downtown Brooklyn. Funded by a \$450,000 grant from the National Science Foundation, the three-year program aims to expose teachers to cutting-edge technology so they can take the skills back to their classrooms.

"It's great," said Robert Winston, a biology and physics teacher at Canarsie who has been teaching for 26 years.

BY ELIZABETH HAYS

"Kids like to do things with things that move," he added as another teacher demonstrated a convoy of minirobots that use sensors to follow one another around a set course.

"You hear the term 'hands-on learning' all the time. This is literally hands-on and minds-on."

During the four-week program, which ends this week, the teachers first learned the basics of mechatronics, a mix of computer science and mechanical and electrical engineering that is used to build the robots.

They then paired off to design and create original projects using the mechanized technology that could be used to teach science, math and engineering.

Lennox Henry, a biology and Earth science teacher at Washington Irving in Manhattan, worked with his partner, Ron Occhiogrosso, from a yeshiva in Nassau County, to build a re-mote-controlled weather balloon that students can send into the sky for measurements and pilot back to the ground.

Henry, who hopes to use his newfound skills to launch a robotics program at his school, said other teachers could build the mechanized contraption with their students for less than \$150 in equipment costs.

Polytechnic will begin accepting applications for next summer's program this winter, said mechanical engineering Prof. Vikram Kapila, who started the program last year.

Kapila said the project aims

to ensure that city schools and teachers have access to cutting-edge technology so they can inspire new generations of stu-dents who are sometimes more technologically advanced than their school's aging labs.

"These teachers become our ambassadors about what it is that scientists do," said Kapila.

Polytechnic officials said the program is part of a broader campaign to open the university's high-level research and labs to public school students and teachers.

Polytechnic is gearing up to launch a \$1.5 million program this fall that will send a dozen graduate and advanced undergraduate students to three public high schools to help science teachers develop innovative lesson plans.

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