

If the Long Island Regional FIRST Robotics Competition was a reality TV show, it could be called "American Techno Idol." The plot: Give high-school teams six weeks to transform a kit of materials into 130-pound robots that shoot 13-inch yellow balls into goals. For extra points, have the robots hang from pull-up bars.

The winners move on to a national competition and the chance to win thousands of dollars in scholarships.

In this version of "Idol," there's no Simon Cowell to ridicule teenagers back to their mothers' wombs, and the competitors are friendly. It's all about achievement, and corporate mentors, teachers, parents – even other teams – support one another, says Mike Bacogiannis, an 11th grader at Hicksville High School and president of his school's team.

"It's not about winning," he says. "It's about learning."

FIRST (For Inspiration and Recognition of Science and Technology) is a nationwide competition founded in 1988 by Rockville Centre inventor Dean Kamen of Segway scooter fame.

At the fifth annual Long Island regional competition March 18-20, more than 1,000 students from 36 schools will compete at the Suffolk County Community College in Brentwood for a chance to enter the national championship.

Fred Breithut, president of Melville-based School-Business Partnerships of Long Island, which sponsors the event, anticipates 10,000 spectators. Admission is free, and Breithut hopes the event prompts new teams – and donors – to sign on for next year.

The budget runs in the neighborhood of \$200,000, covering expenses such as AV, electricity, decorating and awards, Breithut said.

In the past, raising sufficient funds was a challenge, and he has had to scale back the event or dip into the SBPLI coffers, Breithut said. But this year, state Sen. Owen Johnson, R-Babylon, secured \$100,000 from the New York State Office of Science, Technology & Academic Research for the competition.

"NYSTAR views programs like this to be very important because they let young people see the value of science and technology," said NYSTAR spokesman Jim Denn.

Hauppauge-based Festo Corp., a sponsor since 1999, provided \$25,000. Other backers include defense contractor EDO Corp., Stony Brook University, Hofstra University,

and manufacturing support for robot building.

"[Our support] has to do with an effort toward more community involvement and the growth of the future work force," says Scott Schuler, Festo's marketing manager.

"This type of program brings out attributes that we look for in employees."

with many different students as a team with a coach. It's like a sports team," said Bacogiannis. "We work together to accomplish. Kids we don't normally hang out with all get together. People teach us how to work with motors, mechanics and circuits. It's a really, really good experience, and it's all new to us."

Hicksville High is a rookie team and hopes to win the competition's Rookie of the Year. "West Islip stops by, gives us pointers. They help us out. We're not looking to beat everyone but to learn and work," Bacogiannis added.

Aside from the science, students learn to become "gracious professionals," said Schineller. "In order to win, don't make your opponent weaker, but better." That philosophy follows that of Kamen, said Schineller, noting that society improves when we make ourselves stronger. In that vein, teams and mentors hold workshops, inviting other teams to share their expertise, though they may not divulge every secret.

The teams also learn business skills. "They're not just building a robot. They're building a company for six weeks – getting it up and running within six weeks," Schineller said. "In a short period of time, they're seeing if it succeeds."

Northrop Grumman invites teams to bring their robots to its offices for demonstrations. "The engineers who watch it are curious about it. It's rejuvenating for them," said John Vosilla, spokesperson for Northrop Grumman. "As I watch them, they enjoy talking with the kids. It stimulates them, and makes them enthusiastic in their own work."

Bacogiannis is eager to visit Northrop Grumman. "I was a little bit interested in technology, but after this I really got interested in the field," he said. "I'm going to go to Grumman and open up my eyes and really look and see what's what."



FIRST step

By ADINA GENN

TECHNO IDOLS: Gary Andrews of Northrop Grumman and Hicksville High School 11th grader Mike Bacogiannis, are preparing for next month's Long Island Regional FIRST Robotics Competition.

ty, School Construction Consultants and J.P. Morgan Chase.

In all, nearly 150 businesses subsidize the Long Island regional. Many of the funds are solicited by the individual teams, Breithut said. Though a number of supporters are engineering firms, others include local companies whose assistance enables teams to travel to other regionals or build a spare robot for practice purposes, said John Schineller, team leaders coordinator for SBPLI FIRST Robotics. Some companies offer more than financial support. Festo, for instance, provides training sessions with team mentors, on-site tours and meetings with students to discuss careers in engineering, storage services for the event, and engineering

Breithut notes that the program "leads to improving the guts of high-school programs, creating courses in pre-engineering and improving the quality of science" education.

Last year, Long Island students won more than \$400,000 in scholarship money at the national championship, and Breithut expects similar results this year.

To Bacogiannis, FIRST Robotics expands on what he learns in the classroom. He and his team spend 35 hours a week, plus Saturdays – including their February break – alongside their Northrop Grumman mentors assembling their robot.

"We're learning how to work