

March 21, 2012, 1:01 PM

Banneker Students Are Robot Warriors

By MICHAEL RANDAZZO, Community Contributor



Michael RandazzoThe

Benjamin Banneker robotics team shows how it's done.

Who says that playing with toys won't get you into the Ivy League?

For Leslie Russell, a self-proclaimed "robo mom," her son Roddy's admission into Cornell University is proof that his obsession with toys — in this case the whiz-bang robotics kits sold by Lego — can pay off handsomely. Much like the "soccer moms" who are at the core of suburban parenting in America, Ms. Russell followed Roddy as he pursued his passion for robotics and engineering all over New York City.

"His interest became my interest," said Ms. Russell, who became cheerleader, pizza delivery person, sage confidant and, finally, an honorary member of Roddy's "First Tech Challenge" robotics team at Benjamin Banneker Academy during his high school years.

Visiting the <u>First Robotic Competition</u>, the annual robotic competition held this past weekend at the Jacob Javits Convention Center in Manhattan, Ms. Russell and Roddy — now a freshman majoring in civil engineering at the prestigious upstate university — came to lend moral support to Imani Fischer's after school robotics program that was competing in two First categories: First Lego League and First Tech Challenge.

For Roddy, the long nights and dedication devoted to the Banneker squad were essential in getting him into Cornell. A primary lesson was the value of teamwork, as he leaned that "multiple minds are key to solving complex problems."

For his mother, her son's involvement with First was a definite plus for college admissions counselors scrutinizing Roddy's application. "Schools want to know what you do in your spare time," Ms. Russell reasoned. "They don't care about the number of cartoons you watch."



Michael RandazzoThis is serious robot action.

Now in its 20th year, the First Robotic Competition is a tech Mecca that attracts nascent engineers from all over New York City. According to Ms. Fischer, the robotics coach at the Clinton Avenue academy for the past seven years, the event offers an ideal means to motivate her students to academic excellence.

Mastering the applied mathematics and engineering challenges inherent in First Tech competitions inspires many of her students at the Fort Greene high school to take Advanced Placement courses in math and physics. "The concepts learned in the tech challenge are applicable in the real world of mechanical physics," Ms. Fisher said.

For many, the initial motivation to sign up is "the opportunity to be creative with cool technology," according to Shakeen Wharton, a freshman member of Banneker's First Lego League squad that on Sunday placed 10th out of 48 teams. With a passion for computing, Mr. Wharton was drawn to Banneker's entry-level robotics program by the opportunity to learn, work as part of a team, and partake in the challenges inherent in designing a mechanical device that must run through a series of proscribed

tasks in a limited amount of time — all in a stadium-style atmosphere reminiscent of a WWE wrestling match.

Irina Igel, a Master's candidate in Mechanical Engineering at NYU/Polytechnic University who is the coach of Banneker First Tech Challenge squad, believes that all her young charges "deserve an award for perseverance. The amount of knowledge and ability [they] have gained in two to three months is incredible." On Saturday, her team's effort paid off with a stellar ranking of 22th place out of 72 local teams entered.

Ms. Igel is part of the <u>Central Brooklyn Robotics Initiative</u>, an innovative program that enlists graduate students from Poly's mechanical engineering department as after-school teachers in public schools. In seeking to eliminate her predominantly African-American students' achievement gap, Ms. Fischer has embraced all the resources that CBRI has to offer, including funding, educational expertise, and talented young minds like Ms. Igel's.

"These kids don't realize what kinds of doors this [robotics program] will open for them," said Ms. Fischer.

Leslie and Roddy Russell know exactly what she's talking about.