

Albany High: 'Think like Larry'

Nanotechnology program encourages urban students to explore science

BY ROBIN K. COOPER
THE BUSINESS REVIEW

Robots and science fiction have intrigued Larry Bart since he was 10.

So it didn't take much prodding to convince the Albany High School junior to sign up for a nanotechnology course when the school introduced its NanoHigh program last fall.

Larry, now 16, enrolls in nearly every science course he can to help prepare for a career in nanotechnology and robotics.

The Albany City School District's quest to convince more students to think like Larry and pursue a career in science has prompted the urban district to design new hands-on programs.

A year after the urban district debuted its pioneering NanoHigh program for 20 students, the high school is preparing to create an advanced course for 20 to 40 students in the emerging field of nanotechnology this fall.

Albany High teamed up with the University at Albany's College of Nanoscale Science and Engineering last year to create one of the first nanotechnology programs in the country at a public school.

The goal is to convince

and prepare more students to pursue careers or college degrees in math, science and nanotechnology.

The effort comes at a time when the National Science Foundation has forecast a demand for 2 million nanotechnology workers worldwide in 15 years, including 800,000 to 1 million in the United States.

Up to \$2.6 trillion of the world's manufactured goods

are expected to involve some form of nanotechnology by 2014, according to a study by LuxResearch, a New York City research firm.

Nanotechnology, which grew out of the development of computer chips, involves the manipulation of materials that are 1 million times smaller than the head of a pin.

The NanoHigh program also is preparing sophomore Peter Swierzowski to follow in the footsteps of his brother and sister to major in science in college.

"I'm big on trying to save the planet," he said. "When you think

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Nano by the numbers

20 Albany NanoHigh enrollment in 2007-'08

20 to 40 Anticipated enrollment in 2008-2009

\$1.39 billion Fed spending on nano research in 2007

\$464 million Fed spending in 2001

Source: Albany City School District and The National Nanotechnology Initiative

Larry Bart, a 16-year old junior at Albany High School, works on a hydrogen fuel-cell miniature car. "It was a colossal failure, but it was fun."



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