

Tech Valley High — the education model New York needs

BY JOHN C. CAVALIER
 FOR THE BUSINESS REVIEW

As GlobalFoundries, GE and other high-tech companies work to transform Tech Valley into a global powerhouse, we must ensure that these companies have access to the skilled workers needed for long-term success.

Our ability to develop and train these highly skilled workers could well be the key to continued economic growth in the Capital Region.

Consider these work force projections: Experts predict that seven in 10 new jobs created in New York between 2008 and 2018 will require some type of formal education beyond high school.

Science, technology, engineering and math (STEM) jobs will grow by 10 percent during that period, and 93 percent of these jobs will require post-secondary education by 2018.

Fourteen of the 25 fastest-growing occupations in New York will require post-secondary education.

On top of increased education requirements is an increased need for workers to master soft skills —communication,

collaboration and critical thinking.

In fact, three out of four executives surveyed in 2010 believe these skills will become even more important over the next three years because of global competition in a technology and knowledge-driven marketplace.

In light of these projections, the question remains: Can our education system meet this growing demand for skilled workers?

According to the business leaders organization America's Edge, 28 percent of New York high school students fail to graduate on time. Only 37 percent of New York public school students graduate "college and are career-ready."

Even more disturbing: 22 percent of New York residents 16 and older lack the literacy skills necessary to perform simple and everyday literacy activities.

Reading and understanding common-

place prose texts—like a pamphlet with new business security procedures—is difficult or impossible.

To address these issues, our high schools must work to identify strategies that can help students develop the increasingly important soft skills—communication, collaboration and critical thinking—while also teaching critically needed technical skills.

The good news is: Tech Valley High School in the Capital Region is doing just that. Created in 2007, the school was designed to prepare students to compete in a high-tech and global economy.

The curriculum follows a project-based learning environment that emphasizes math, science and technology, but also exposes students to language, arts and physical education.

Students are given work-based learning opportunities, allowing them to apply their education to the real world. By working in teams and getting real work experience, students begin to understand the importance of professionalism, reliability, teamwork and clear communications skills.

There is no simple fix for the problems facing our education system—whether in New York or across the country. Let's remember, though, that our country was forged on bold and innovative ideas.

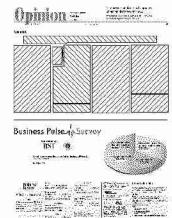
We must change our traditional views of how to educate our kids. With a new school year only a few months away, now is the time to start.

Education approaches like those being implemented at Tech Valley High School are what our businesses and economy need.

We should develop standards for college and career readiness that contain both rigorous academic content and the teaching of advanced skills such as critical thinking, communication, and the application of content knowledge.

We should also determine how to assess and measure the development of these skills in our students and provide reliable measures of student progress for accountability purposes.

I urge our policy makers and educators to work with the business community to



implement concrete education reforms that will help to create a skilled work force and sustained economic security for the Capital Region and the State of New York.

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