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Technology

Speakers Tout Alliances Between Business, Government, Academia for Job Creation

Collaboration between government, academic institutions, and private industry can yield significant job creation and economic benefits in the high-technology sector, a panel of speakers said March 3.

At a discussion on “Education, Technology, and the Workforce” held at the annual policy conference of the National Association for Business Economics, representatives of the College of Nanoscale Science and Engineering of the University at Albany-State University of New York (CNSE) as well as an engineer from IBM Corp., discussed what they touted as a unique partnership between the university and some 250 technology companies to both create jobs in New York State's capital region and to train the next generation of high-tech workers.

CNSE is a research and educational facility which its founders claim is unique in the nation and the world. Research focuses on nanotechnology and microchip manufacturing.

Carl Hayden, chairman of the board of trustees of the 64-college SUNY system, said that in the past, communities such as upstate New York, which has faced a sluggish economy, have had trouble attracting business investment not only because of the low-skill level of the available workforce, but because of the number of workers available.

In order to attract industry, Hayden said, the interests of the business community should be aligned with those of academia and government who want to drive economic development. Where academia and industry previously had been separate, with academia feeding graduates into private industry jobs, Hayden said that a “new model” relationship was emerging where academia and industry were much more interconnected and interdependent.

Technology Campus to Employ up to 3,000.

Hayden said CNSE was formed in 2004 and currently has a total of $4.5 billion in assets. The nanotechnology center on the SUNY campus, Hayden said, employs some 2,200 employees, and will employ between 2,500 and 3,000 by mid-year. Not only does the college’s workforce impact the local economy, but the facility trains future high-tech workers as well, Hayden said.

Hayden described the private sector investment in the college as “unprecedented” because companies that compete with each other in the marketplace have come together to collaborate on research projects and “share intellectual property.”
“There are some scientific frontiers so important that we must pool resources to reach them,” Hayden said. After completion of the research, Hayden said, the university’s corporate partners can then commercialize what they’ve found and compete with each other globally.

The 250 companies with operations at the Albany campus saw an “overarching need to control the cost of research,” Hayden said. By collaborating with the university and other companies, Hayden said, the college’s corporate partners save money and mitigate risks.

In addition, Hayden said, as more people are asked to raise their skill levels on an ad hoc basis at the college, community colleges will have a more important role in training workers for certain positions.

IBM Shares R&D Costs.

Meanwhile, Scottie Ginn, a vice president in IBM’s Systems and Technology Group, said the company benefitted from its partnership with SUNY because it shared research and development (R&D) resources and expenses with other entities. Ginn said the company had created some 6,200 jobs since 2002 by investing in nanotechnology research in Albany. IBM also manufactures microchips at a facility in Fishkill, N.Y., which benefits from the research performed in Albany.

Edward Cupoli, an economist and a professor at CNSE, said the college helped develop the region’s workforce not only by creating new technical jobs, but also by creating jobs at suppliers of the facility. He also mentioned a training program implemented by one of the technology companies working on the campus for laborers for clean-room facilities, potentially creating lower-wage jobs in addition to higher-paying technical positions.

Cupoli also asserted that despite the relatively small percentage of the Albany-area labor force that worked at the nanotechnology center, the region was already benefitting economically from it. Home prices in the area have grown faster than the state or national averages, he said.

By Michael Rose

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