Succeeding in ‘flat world’ requires boosting Florida’s brainpower

BY DAVID WERNICK AND JERRY HAAR

In Thomas Friedman’s latest bestseller, “The World is Flat,” the New York Times columnist argues that America is entering a new era of global competition characterized by transformations in technology and geopolitics and the entry of millions of highly skilled knowledge workers from developing countries into the global economy.

Toward the end of the book, he shares his council to his teenage daughter: “Girls, when I was growing up, my parents used to say to me, ‘Tom, finish your dinner — people in China and India are starving.’ My advice to you is: Girls, finish your homework — people in China and India are starving for your jobs.”

Mr. Friedman’s advice to his daughters should be a clarion call for the state of Florida — act quickly and decisively to upgrade the state’s workforce skills, educational system and research and development capacity or fall behind in the race to attract and retain the type of advanced industries that will create the good-paying jobs of the future.

While tourism, international trade and retailing — pillars of the state’s economy — may be large generators of employment, most jobs in these sectors are low-skill, low-pay, high-turnover occupations.

For decades, Florida has been doing too little to upgrade its educational infrastructure to meet the new economic challenges. Our state presently ranks 42nd in expenditures per student. California, by contrast, spends more on schools than the entire operating budget of each of the other 49 states, including New York.

It is no surprise, then, that Florida’s high-school graduates rank near the bottom in math and science skills nationally and high-school dropout rates are among the highest in the country. The situation is so dire that Tropic Systems Inc. CEO Mark Templeton recently told a group of educators and business leaders that the Fort Lauderdale software developer would look to expand in states that place a priority on teaching math and science.

While improving the performance of our K-12 system in math and sciences (not mentioning a range of other subjects from English to social sciences) is essential, Florida’s policymakers should also be investing heavily in our state university system’s research and development capacity. Such investments pay huge long-term dividends.

Indeed, a new report commissioned by the Florida Board of Governors finds that for every dollar spent on research at Florida’s universities, the state reaps almost $11 in increased economic activity. One way in which these investments benefit Floridians is through the transfer and commercialization of technologies developed in university laboratories.

The University of Florida at Gainesville, for instance, calculates that companies and discoveries spawned from federally funded technologies — such as the glucose biosensor developed by researchers at the University of Florida — add billions of dollars annually to Florida’s economy and are responsible for nearly 2,000 direct and indirect jobs. Other universities such as the University of South Florida, Florida Atlantic University and Florida International University are also commercializing technology and inventions.

Recognizing the importance of R&D to the state’s economy, Gov. Jeb Bush signed the Technology Development Act into law in May 2002, laying the groundwork for the creation of a center of excellence in the state university system.

These centers mark an important step that is already paying dividends, launching six startup businesses, leveraging state funds on a one-to-one match ratio, retaining $30 million in out-of-state funds and raising $15 million in venture capital through the first half of 2004.

But much more needs to be done on the R&D front if Florida is to realize its vision of becoming a world-class technology center and a preferred destination for technology workers.

A good place to start would be to increase funding in the Technology Development Act to the $100 million originally requested by the Bush administration and expand its scope. Such a move would help foster innovation, create new partnerships, assist in the development of commercial applications. It would also level the playing field with other states vying for high-tech investments — such as Michigan, North Carolina, and New York, which recently endorsed a plan to make annual investments of more than $100 million in biotech R&D.

Unfortunately, a bill introduced in Tallahassee this year to commit $50 million to a second series of centers of excellence to promote technology research died on the vine.

Low taxes and warm weather are outdated incentives. To succeed in today’s competitive environment, Florida policymakers must jettison old thinking about economic development and embrace new ideas that bolster our state’s collective brainpower.