Need for tech-savvy workforce grows in South Florida. Critics fear Florida education system lagging. By Jaime Hernandez

Every day Joyce Elam strolls through Florida International University’s main campus and sees evidence of how technology is shaping South Florida’s future workforce. Surrounding the College of Business Administration, where she is the executive dean, are dozens of students typing away on laptops connected wirelessly to the college’s network and to the Internet.

“Every one of our students, from the time they enter the business school, they work in a technology-enabled environment,” Elam says. “It is very important that our students be prepared for the environment they are going to get into.”

The demand for a tech-savvy workforce is increasing in South Florida and education leaders are responding by increasing their ties to businesses region-wide in order to develop better curricula.

Many local schools have set up advisory boards of company executives who in turn are boosting the number of internships that their companies offer. Despite those moves, some experts suggest that more needs to be done, and done quickly.

“We see ourselves as being very market-driven,” Elam says. “What we see is that the employers want students that are tech savvy. We don’t have a huge demand for [information science] majors. We have a big demand for accountants who understand the use of information systems in accounting.”

FIU’s business school, for instance, not only works closely with Miami-Dade County-based companies such as Ryder System Inc. and Carnival Cruise Lines, but also with Broward firms, including DHL Worldwide Express and American Express Co., she says.

Broward Community College president Larry Calderon says his school’s Division of Community and Resource Development is dedicated to corporate partnerships, with between 2,000 and 3,000 students participating in its programs each semester. “We’re always looking at needs from a regional workforce perspective,” Calderon says.

BCC has an enrollment of about 60,000 students, he says, making it the second largest community college in Florida, behind Miami-Dade College, which has 163,000 students. Like other institutions around South Florida, MDC and BCC have a large number of students who cross county lines to attend classes, officials at both schools say.

Local universities such as FIU, Florida Atlantic University and Nova Southeastern University have set up satellite campuses and learning centers that allow students to take courses closer to home. FIU has campuses in west Miami-Dade, North Miami and Pembroke Pines; FAU has campuses from Fort Lauderdale up to St. Lucie County; Davie-based NSU has a 70,000-square-foot learning center in south Miami-Dade’s Kendall area.

“That is our mission — to bring education at times and places convenient to students,” NSU President Ray Ferraro says. Nova’s statewide partnerships include ties with BCC, and Ferraro working with MDC to use some of its facilities in Miami.

FAU President Frank T. Brogan says that through a partnership between his school and NSU, the United States Geological Survey will station scientists in Broward to study environmental science in the Everglades. He also says FAU and other local institutions are placing more emphasis on courses involving data information systems, bioengineering and bioscience.

“There’s no question that … high-tech curricula will be the way of the world,” Brogan says.

Still, several education observers say Florida is not putting enough emphasis on developing a tech-savvy workforce. In February, officials from the education, government and business sectors held the Florida Summit on Mathematics and Science in Tampa to discuss workforce education in technology-based fields. Among other things, the summit concluded that Florida schools are not producing graduates who are sufficiently knowledgeable in science and math to fill even low-level positions in high-tech firms, even as businesses require more college graduates in science- and math-based areas.

Gerry G. Meisels, a University of South Florida professor who is also chairman of the Statewide Coalition for Improving Mathematics and Science Literacy in Florida, says state legislators have allocated millions of dollars a year for reading programs, and that a similar investment is needed for science and math. He says that if the legislature acted now, it could be at least five years before anyone would see any changes in the quality of college graduates.

“I see a disaster down the road,” Meisels says. “We’re on a rapidly moving train to the edge of a cliff. ... There are no quick fixes in that.”

Mark Templeton, CEO of Fort Lauderdale-based software developer Citrix Systems Inc., echoed those sentiments in April. According to a recent Miami Herald article, Templeton told a group of educators and business leaders that Citrix would look to expand in states that place a priority on teaching math and science.

Some local business leaders have begun programs that they hope will spur student participation in subjects including math and science. In October, the Broward Alliance started a program in which business executives work with high school principals to formulate curriculums aimed at increasing student interest in business. At least two dozen business executives — at companies such as Citrix, EPS Group and City Furniture — have joined the program.

“We are trying to align the stars to make sure that the issues in business are aligned with what is being developed in primary education,” says Broward Alliance CEO James “J.T.” Tarlton, who as part of the program is partnered with Fort Lauderdale High School. “To me, that’s a critical element of the future of Broward County and the future of our economy.”