EDUCATION MATTERS

AMAZING MINDS AND INTELLECTUAL HAPPENINGS

SCENE continues its community-centered focus by presenting some of the most exciting intellectual happenings taking place in our community. Education Matters focuses on higher education, with an emphasis on difference-making programs, professors and students. This month, we proudly feature State College of Florida, Manatee-Sarasota.

Through the generosity of Ringling College of Art + Design president Dr. Larry Thompson, who personally buys a few extra tickets to every Town Hall event at the Van Wezel for the faculty to use, I’ve been able to hear a lot of terrific speakers first-hand. Bill Clinton and Laura Bush come quickly to mind. But on February 1, I had the pleasure of hearing Dr. Roland Fryer speak and to put it frankly, I was wowed. Not because he was the youngest African-American to ever get tenure at Harvard. Not because he was named a “rising star” by Esquire Magazine. Not because he was recently given a MacArthur Genius Award. But because this economist’s passion for wanting to drastically improve the quality of education for every American was infectious.

As the son of a teacher who married a teacher and spent more than 15 years himself teaching in various colleges and universities around the country, this man was speaking my language. We’re talking about massive and last-

ing positive changes to the state of education in America. Wow indeed!

And after speaking with some of the intellectual movers and shakers at State College of Florida, Manatee-Sarasota about what’s going on at their school these days, it seems like they’ve subscribed to the Roland Fryer mission of making a profound difference in the lives of every student. Here are just three areas where it’s evident that SCF is making a difference in encouraging students to pursue Science Technology Engineering Mathematics (STEM) fields.

Manufacturing

In August 2010, SCF’s Board of Trustees gave approval to partner with Tallahassee Community College and Polk State College for a three-year ETAM (Engineering Technology, and Advanced Manufacturing) grant. The goal? Reach out to more than 350 unemployed and underem-
ployed persons over the next two years to provide them with workforce training for high-growth/high-demand industries.

SCF courses that support this outcome range from one to train workers in the basic skills of advanced manufacturing—maintenance, safety, quality, production and basic employability skills—to others designed to train workers in quality and what is called “lean,” a manufacturing practice that aims to identify and eliminate wastes—like excess motion, inventory and defects—from the plant floor. Many of the courses delivered under this grant lead to nationally recognized credentials and through articulation agreements, academic college credits.

Glenn Goonis, SCF manufacturing education grants coordinator and ETAM project manager, says, “We have been training a number of learners in our Manufacturing Essentials curriculum both here at Lakewood Ranch, and through our partnership with the Suncoast Workforce Board—also at the Goodwill Jobs Connection office in Sarasota.” The courses are a blended learning experience, meaning that learners can join in from anywhere via the Internet. Real-time software allows two-way communication with instructors, so SCF can have one instructor in Lakewood Ranch, but learners attending live from Lakeland, Tallahassee, and other locations in Florida. “Because some of our students travel with work,” Goonis adds, “we even had students join us live from Washington, South Carolina, Georgia, and California.”

**Associate and Bachelor Programs**

Among the high need technical field programs SCF offers is their Construction Management Technology Program, which trains students in energy efficient building construction and solar energy systems. It, quite practically, prepares them to sit for the Florida General Contractors license. Students graduating from the program are also able to become energy auditors, construction managers, architectural and civil drafters, which are job areas of growing interest in Florida.

Another popular high need program is the two-year A.S. in Engineering Technology Degree Program, where students learn mechanics, electronics, pneumatics and hydraulics on equipment used by technicians and engineers in the modern workforce. Aligned with the nationwide Manufacturing Skills Standards Council, this program connects the pipeline of manufacturing education from certification to the new Bachelor of Applied Science in Engineering Technology Management (ETM) Program.

SCF’s Associate in Science in Biotechnology Degree Program also provides students with an opportunity to learn on sophisticated biotechnology equipment. New Natural Sciences Assistant Professor Dr. Matt Thomas explains the value of this type of training. “When I was a lab manager, I had a hard time finding employees that I didn’t have to spend 3-6 months training. If someone has one of these degrees, I could’ve hired them and put them to work within weeks versus months. It’s a true competitive edge versus someone with a four-year bachelor degree who doesn’t have these hands-on experiences.”

Equally important are the inroads SCF has made with local businesses. They’ve already put in place at area companies a half-dozen internships for students in the A.S. in Biotechnology Degree Program, and they’re expanding that network constantly. In short, SCF students are quite likely to have a job when they graduate.

Clockwise: Teak Decking Systems was one of the first companies to take advantage of training offered by State College of Florida, Manatee-Sarasota (SCF) through the Engineering, Technology and Advanced Manufacturing (ETAM) grant project. Peter Straw, Mike Havey, Lars Lewander and Glenn Goonis at Teak Decking’s Sarasota headquarters.

SCF Professor Jane Pfellsticker and SCF Assistant Professor Matt Thomas in the biotechnology lab at SCF Bradenton.

Adrienne Gould-Choquette leads training on hydraulics equipment in the manufacturing laboratory where students learn to operate industry standard equipment as part of the core A.S. in Engineering Technology Program at SCF.
High School Biotechnology Program

In partnership with Manatee and Sarasota school districts, SCF has announced a prestigious $187,084 grant from the National Science Foundation’s Advanced Technological Education (NSF-ATE) Program to fund the Biotechnology Alliance for Suncoast Biology Educators (BASBE) project. Developed and conducted by SCF faculty, BASBE integrates high school teacher training with the use of sophisticated biotechnology tools into high school classrooms. The intention is to increase student interest in biotechnology and other 21st century technical careers. “The equipment used in our biotechnology program is superior to equipment found in many universities,” explains Dr. Thomas. Many students do not have an opportunity to work on sophisticated equipment until they begin careers in the biotechnology field. But high school students in SCF’s BASBE project and college students enrolled in the A.S. Biotechnology Degree Program have an edge. Students have the opportunity as undergraduates to purify proteins, produce reagents and experience cell culture techniques. Even more exciting is the list of good-paying biotechnology jobs in laboratories specializing in food safety; environmental quality control; the production of new medicines; forensics; alternative fuels; bio-manufacturing; and industry, academic, and government research.

Roland Fryer says that when we find something that works in our educational system, we should examine it, and then replicate it in other schools to share those benefits with an even wider population of students. If he took a good look at what SCF was up to, he’d have one more success story to share in his mission for making America #1 again when it comes to education. To apply to SCF, visit www.scf.edu/admissions.