

On The Threshold To The Future:
 Curricula, Advisory Council, Career Academies,
 and MSSC Assessment Centers

- By Edward Allen

The Banner Center has been a busy place for the past ten months with its partners throughout Florida hard at work building the foundation necessary for the Center to become a self-sustaining, statewide resource center of choice for the evolving training, education, and support needs of Florida's high-performance manufacturing workforce. That foundation—a key component to a five-year business development cycle—comprised several initiatives. These included the development of the "Manufacturing Fundamentals"—for entry-level workers—and "Manufacturing Essentials"—for incumbent workers—curricula, beta testing and delivering the Manufacturing Fundamentals curriculum, convening an Advisory Council, and supporting the creation of manufacturing programs in existing/future Career Academies. Thanks to the collaborative efforts of the Center's partner community colleges, workforce boards, manufacturers associations, economic development organizations, manufacturing companies, and its Advisory Council, the Center has placed itself "On the Threshold to the Future."

Curriculum. The initial curriculum development effort culminated in the delivery of the Manufacturing Fundamentals program to a cohort of 110 students. Individuals participating in the training came from the ranks of the unemployed, with the hopes of beginning an exciting career in manufacturing, to employed entry-level production technicians, seeking to advance their technical knowledge/skill set and sit for the Manufacturing Skill Standards Council (MSSC) Production Technician certification examination and earn that certification. At the Manatee Community College Campus graduation, Don Gugliuzza, lead instructor for the class and senior manager for organizational development at Tropicana, remarked, "Today's graduates are ready to join the ranks of Florida's manufacturing professionals and take on the exciting challenges of a globally competitive marketplace."

Don Gugliuzza, lead instructor at Manatee Community College's Fundamentals class, talks to graduates about joining the ranks of Florida's manufacturing professionals.

Advisory Council. Being able to address the diverse complexities inherent to finding solutions for Florida's manufacturing workforce issues meant convening a Center Advisory Council. The Council membership included leaders from business and industry, state and regional manufacturers associations, and economic development councils. During a July 2007 Council teleconference, Art Hoelke, vice president/general manager of Knight's Armament

Company and Council chairperson, urged the Council to join him in "beating the drum" in their efforts to get the word out to the manufacturing community. "The Banner Center has taken the lead to come forward with an impressive, cost-effective training solution for sustaining Florida's manufacturing workforce," Mr. Hoelke remarked. "As the Center's oversight body, we must support the Center, to include helping them market their certification-based training product to companies throughout the state."

Career Academies. Workforce Florida also contracted with the Okaloosa School District to form a Career Academy Banner Center. Dr. Frank Fuller, principal investigator for that Center, planned to establish over 20 new Career Academies throughout the state and to ensure that each new Academy had a certification-based curriculum. During their May 2007 Advisory Council meeting, he gave the Florida Advanced Technological Education (FLATE) Center high marks for already working successfully through the process of establishing an industry certification-based educational pathway with FLATE's new two-year degree in Engineering Technology. That degree plans to award up to 15 technical core credits for students who have earned the MSSC Production Technician certification. Dr. Fuller looked forward to integrating

Engineering Technology

A.A.S/A.S. Degree

Common Core Courses

Applied Mechanics	3 *
Intro to Electronics	3 *
Quality	3 *
Safety	3 *
Manufacturing Materials & Processes	3 *
Computer Aided Drafting	3

* MSSC Certification-based Articulation Topics

MSSC Certification

the Banner Center's Manufacturing Fundamentals curriculum into new Career Academies teaching a manufacturing track, since such a program would provide a dual path for students, allowing them to acquire the MSSC certification and an associate's degree. Marion Technical Institute in Ocala will be the first existing Career Academy to use the curriculum beginning with its integration into their Industrial Engineering Technology program's Fall 2007 Instructional Calendar.

MSSC Assessment Centers. Essential to building a statewide production technician certification culture, the Banner Center in 2007 created eight new MSSC assessment centers in Florida, bringing the statewide total to ten centers.

Florida's MSSC Assessment Centers

- Hillsborough Community College
- Florida Community College at Jacksonville
- Manatee Community College and Manatee Technical Institute
- Pasco-Hernando Community College
- Pinellas Technical Education Center
- Polk Community College
- Central Florida Community College
- Broward Community College
- Mid Florida Tech, Orange County Public Schools

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4th Annual Manufacturers' Summit Announcement
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From the Principal Investigator

In the April edition of *Manufacturing Connections* I remarked how the Center had taken its first major step to develop and sustain Florida’s manufacturing workforce by launching a host of initiatives. Now, as the front page of this edition connotes, the Center has taken additional steps, placing it literally “On the Threshold to the Future.”

The successful rollout of our “Manufacturing Fundamentals” program has had a significant impact on the state’s educational-manufacturing community. Our graduates—from the five partner counties—have taken their first steps in the pursuit of rewarding manufacturing careers; they do so with a cache of newly acquired high-tech, portable production knowledge and skills. Many are also well on their way to earning the MSSC Production Technician certification, helping the Center reach a goal of building a statewide production technician certification culture.

Moreover, manufacturing companies, school districts, and community colleges alike have approached us with their plans to integrate and/or adopt our Manufacturing Fundamentals curriculum into their existing and new programs. My sincere appreciation goes out to organizations like Ocala-based Lockheed Martin Missiles and Fire Control and Marion Technical Institute along with PGT Industries and the South Florida Manufacturers Association for taking the initiative of making use of our curriculum, and exploring MSSC certification further demonstrating both products’ value to Florida’s industry and economy.

Despite a successful curriculum rollout, which also established a “Pathway to Success” for the Center and its students, the Center’s future has several dynamic challenges ahead. Foremost among them is the unexpected change in the budget priorities resulting from the 2007 Florida Legislative Session. As a result, we have drastically altered our four-year strategic plan for sustainability.

Notably, this business-related course correction will delay the development and offering of a broad portfolio of manufacturing-related curricula and services to the community. However, it also provides the Center the opportunity to accelerate the implementation of a key strategic planning approach—incorporation of “out-of-the-box” planning mechanisms requisite to successfully responding to inevitable, high-stake demands on the educational-manufacturing horizon.

Specific elements of that approach include:

- Building investment-based partnerships with Florida’s educational-manufacturing community
- Having our Advisory Council act as a dynamic conduit for lobbying industry and state government for additional funding and marketing the Center’s products/ services
- Seeking complementary funding to round-out the Year 2 portion of our sustainability plan
- Switching our relationship with the founding academic partners from contractual to mutually supportive

On the surface, this unanticipated change in funding and Center timeline may seem overwhelming. In reality, it represents a realistic approach to an exciting challenge.

However, we cannot succeed in this challenge alone. Our working together through business partnerships is vital. In that regard, I welcome your comments, ideas, and financial and in-kind support in our effort to build the finest manufacturing workforce in the nation.

Finally, don’t forget to put on your November 2007 calendar the 4th Annual Manufacturers’ Summit to be held in Lake Mary. It’s a dynamic forum for learning about/discussing the premier issues surrounding manufacturing. It will also be an excellent opportunity for us to discuss in person training solutions for sustaining your manufacturing workforce.

Eric A. Roe, Ph.D.



Florida’s 4th Annual Manufacturers’ Summit

CREATING THE RIGHT ENVIRONMENT

November 5-6, 2007

Orlando Marriott Lake Mary

1501 International Parkway - Lake Mary, Florida 32746 - 800.380.7724 - Call before 10/22 to get special hotel rate of \$119

Why Should I Attend?

- Get updated on current events affecting your business
- Learn how to engage more resources to help you perform better
- Share your ideas for improving the business climate
- Make connections

This is THE best gathering of manufacturers in the state!

Who Should Attend?

- CEOs, Plant Managers, Human Relations, Government Relations and Business Managers, Purchasing Directors, Marketing Staff, Service Providers, Educators, Health and Safety Professionals

Sample Topics:

- Career Education for the Next Generation
- Training Tools for Your Employees
- Tax Tips for Keeping Your Money
- Improving Business Performance
- State and Federal Energy Proposals and Policies
- Supply Chain Fraud
- Green Manufacturing
- Manufacturing Certifications
- Best Practices

MAF will be naming three Manufacturers of the Year; be with us to celebrate!

For more information or to register online, go to: www.mafmfg.org

Manufacturing Fundamentals: A Pathway to Success - By Edward Allen

“You are about to go through three weeks of very intensive training,” Patti Gander, instructor for the Manufacturing Fundamentals class at the Hillsborough Community College (HCC) Brandon Campus, told her students. “Along with the high-tech knowledge and skills you’ll leave here with, you also have to remember something very important: Taking this class doesn’t guarantee that you’re going to get a job in the manufacturing industry, but it is a pathway to success. So after you graduate you must take charge of your career and prove yourself to the industry with your new knowledge and skills.”



Fundamentals class students inspecting an electric motor-pump assembly.

Echoing Ms. Gander’s comments while speaking to the program graduates at Manatee Community College, Peter Straw, executive director of the

Sarasota-Manatee Area Manufacturers Association, agreed, “Being successful means you have to commit yourself to education for the rest of your life. It doesn’t stop with this class.”

The Banner Center partners reiterated these words repeatedly between April and June 2007, when the Center delivered, at its five partner community college campuses, the entry-level production worker curriculum to the first cohort of 110 students. As a result, the 80 students that graduated from the Banner Center training joined Florida’s team of high-paid/skilled and high-performance manufacturing production professionals. They also represented the first wave of production technicians in the state that underwent a competency-based training program that prepared them to earn the new Manufacturing Skill Standards Council (MSSC) “Production Technician” certification. The training comprises five comprehensive modules, which include, Employability Skills; Manufacturing Production and Process; Quality Assurance; Safety; and Maintenance Awareness.

Prior to the delivery to the first cohort, the Banner Center program underwent extensive beta testing. Hillsborough, Manatee, Pasco-Hernando, and Polk Community Colleges, Florida Community College at Jacksonville, and Marion Technical Institute (MTI) in Ocala provided real-time feedback and assessment of the curriculum performance. Surprisingly, despite the diverse technical content of the beta version of the curriculum, the instructors determined that there was minimal need for substantive changes.



Beta test students analyzing a process using a fishbone diagram.

Moreover, instructors and beta test students alike were impressed with the delivery of the curriculum. For example, Cindy Hollon, a student and production technician from Aqua Cal, said, “I thought I knew a great deal about quality methods, but the Quality Assurance modules showed me better ways to collect and analyze data associated with manufacturing processes. This is definitely a time saver for me when I’m working on the production floor.”

These same impressions of the Manufacturing Fundamentals course continued throughout the delivery to the first cohort. Tervis Tumbler, Colomer USA, and Mosaic Fertilizer were among several companies that sent their entry-level workers



Fundamentals class students working through a production process using the “Toothpick Factory ©” simulation.

through the statewide courses. Monica Schulz, human resources manager at Mosaic Fertilizer in Bartow, said, “We sent two of our most valued employees to the training to improve their skills and prepare them for promotions. Afterwards, I spoke to them and learned that the training was very comprehensive in terms of teaching process operations but also the safety and quality aspects of a good operation. I feel that the training is going to pay off.”

During the graduation ceremony at HCC, Shawn Hopper, production manager at DRS Technologies, remarked, “As a defense contractor, we’re building mission critical components for the Army and their operations in Iraq. So we’re looking for qualified people who take their careers seriously, and these new technicians fit the bill.”

“The manufacturing companies and educational partners who are members of the Banner Center consortium have supported us in the development and delivery of this new training program. Now, they will be able to reap the benefits of this effort,” said Dr. Carlos Soto, President of HCC’s Brandon Campus.

Companies Who Sent Employees to Attend and/or Teach the Manufacturing Fundamentals Beta Test and Training Classes

Advanced Handling Systems	Mosaic Fertilizer
Aqua Cal	Pall Aeropower
Biomet Microfixation	Pepperidge Farm
Colomer USA	Smithfield
Duratel	STC
Florida Natural Growers	Swisher International
FTSI	Tervis Tumbler
Hardie Industries	The Florida MEP
Lumedyne	Tropicana
	VLOC

MTI was the first Career Academy in Florida to keep the initial momentum of the curriculum rollout in motion. While addressing the Business Advising Council members for MTI’s Industrial Engineering Technology program, Mark Vianello, MTI’s principal, said, “The Banner Center has clearly demonstrated the value to industry of the ‘Manufacturing Fundamentals’ course. We’re now finishing up the incorporation of the Banner curriculum into our Fall 2007 Instructional Calendar.”

Mirroring MTI’s initiative, Brian O’Connor, director of Lockheed Martin Missiles and Fire Control in Ocala, also took interest in the curriculum. “Beginning on August 13, we will deliver the training to 60 of our production technicians,” he said.

The rollout of the curriculum has set the stage for serving Florida’s manufacturing production workforce and the diversity of its manufacturing industries. Dr. Eric Roe, principal investigator of the Banner Center, said, “We created a curriculum aligned with MSSC’s Production Technician certification for a purpose. Each new industry-recognized certification represents a major breakthrough in workforce productivity. Our curriculum is going to have a vast impact on the state’s educational-manufacturing community, manufacturing workforce, and the economy.”

Founding Partners:

Hillsborough Community College

Bay Area Manufacturers Association
Tampa Bay Workforce Alliance

Florida Community College at Jacksonville

First Coast Manufacturers Association
WorkSource

Manatee Community College

Sarasota-Manatee Area Mfrs. Assoc.
Suncoast Workforce Board

Pasco-Hernando Community College

Pasco County EDC
Hernando County EDC
Pasco-Hernando Jobs and Education
Regional Partnership Board

Polk Community College

Polk Manufacturing Council
Polk Works

Workforce Florida, Inc.

MANUFACTURING CONNECTIONS

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