

## **Partner Spotlight - Technology-Based Learning Coming Soon**

Through a partnership with Hillsborough Community College, the Banner Center for Manufacturing is creating an exciting blended-learning course to prepare participants to pass the Manufacturing Skill Standards Council's (MSSC) Certified Production Technician (CPT) assessments. Using the Banner Center's "Manufacturing Essentials" training curriculum, the project team, based at the Hillsborough Community College's Brandon campus, is working closely with RWD Technologies, LabVolt, WiscOnline, and the Banner Center to create a course that uses distance learning, eLearning objects, lecture, and hands-on simulations to provide an additional option for CPT exam preparation.



The project is funded by an extremely competitive three-year, \$500,000 Federal Department of Labor grant to HCC that seeks to expand the role of technology-based learning, or TBL, in an effort to expand the growth and demand of Florida's advanced manufacturing industry. TBL is synonymous with the

term "blended learning," used frequently to describe the combination of face-to-face instruction with computer-aided instruction. Eric Roe, Ph.D., Director of the Banner Center for Manufacturing, is the grant's Principle Investigator and Glenn Goonis, from Hillsborough Community College, is the project manager.

Mr. Goonis and his project team of highly experienced subject matter experts (SMEs), expect to unveil their initial course pilot in February. After analyzing the pilot results, the development team will finalize the courseware and prepare it for official launch beginning in second quarter

*(Continued on page 3)*

## **Re-launch of the BC Advisory Council**

The Employ Florida Banner Center for Manufacturing Advisory Council held its first meeting since the Center relocated to the Corporate College at Polk State College (PSC) in Lakeland on November 19th via teleconference. Dr. Roe welcomed the new and returning members. Art Hoelke, Vice President and General Manager of Knight's Armament Company was unanimously affirmed to continue as Chair, and Don Gugliuzza, Chief Operating Officer of Mileo and Associates, was unanimously elected as Vice Chair.

Council members were reminded of the Banner Center's mission—to provide curriculum and training, as well as certification resources and support for the continuation and expansion of Florida's manufacturing industries, and to serve as a resource center for creating a unified workforce education and training system to meet the needs of Florida's advanced manufacturing industry. The council also discussed several items of business including the contract deliverables required by Workforce Florida (WFI) during this performance period.

The Banner Center's Advisory Council includes a wide array of talented individuals from all areas of manufacturing. We would like to spotlight them in a future issue of "Manufacturing Connections" and tell a little bit about each one. Current members include: Nancy Stephens, CAE, Executive Director of the Manufacturers Association of Florida (MAF); Gary Bowers, Director of Human Resources, Colomer USA; Gary Girard, Director of Manufacturing, Biomet Microfixation; Brian O'Connor, Director, Lockheed Martin Missiles and Fire Control; Art Hoelke (Council Chairperson), Vice President/General Manager, Knight's Armament Company; Chris Singleton,

*(Continued on page 5)*

## **In This Issue:**

- Page 1: Technology-Based Learning Coming Soon  
Re-launch of the Advisory Council  
Skills Certification Meeting on Jan. 29th
- Page 2: From the Director  
Florida Jobs Summit
- Page 3: TBL & Skills Meeting (continued)
- Page 4: Did You Know (Interesting Facts)?  
Global Logistics Associate Certification
- Page 5: STEM<sub>Florida</sub> Roundtables  
NAM-Endorsed Skills Certification System  
Upcoming MAF Events
- Page 6: Banner Center Curriculum Information  
Banner Center Contact Information

## **NAM Skills Certification System Meeting on January 29th**

An important meeting is scheduled for Friday morning, January 29th at ValPak Manufacturing Center in St. Petersburg. At this meeting, Emily DeRocco, the President of the Manufacturing Institute & Senior Vice President of the National Association of Manufacturers (NAM) will be meeting with the Florida Advanced Technology Education Center (FLATE) and state leaders in manufacturing education to review the NAM-Endorsed Manufacturing Skills Certification System and look at opportunities for Florida

*(Continued on page 3)*



**From The Director:**

CAPE, STEM, MAF, MSSC, GLA, WIA, NAM, TBL, WFI, DOE, EFM, FLATE, MEP and CPT... are just a few of the acronyms that you'll find in this issue of Manufacturing Connections. All of these topics, organizations, and certifications are essential to the unified system of education and training that we've been creating here in Florida over the past several years. Together we have taken educational programs, corporate training, certifications, and outreach initiatives from siloed initiatives to form a demand driven, accountable, unified system to develop the talent needed to grow and sustain Florida's diverse manufacturing sector.

What we (Banner, FLATE, MAF, Workforce Florida, FL-DOE, ...) have done in Florida is to link secondary education (high school career academies aligned with the CAPE legislation), post-secondary education (the community college "engineering technology" degree), training programs for the unemployed and underemployed, training for incumbent workers, and national industry certifications. We did this by:

- conducting statewide focus groups with industry to determine their needed skills and knowledge competencies and promote appropriate industry certifications
- promoting industry certification (the MSSC CPT) in high schools, technical centers, and community colleges
- making sure that the CAPE legislation had a provision for articulation pathways based on industry certification
- creating curricula to train unemployed and underemployed
- creating curricula to train incumbent workers
- establishing MSSC industry certification test centers throughout Florida
- Coordinating Florida's community colleges to update many old degree programs and create the new engineering technology degree
- writing and getting approved the first "statewide" articulation agreement that awards college credit for an industry certification
- promoting manufacturing through the "Made in Florida" outreach campaign as a viable, high-skill, high-wage career path
- creating a new program for high schools and technical centers (automation and production technology) that aligns with the MSSC CPT certification
- and many other related initiatives.

These initiatives were successful due to the investment in manufacturing education and workforce development by the National Science Foundation (NSF) through the funding of FLATE and by Workforce Florida (WFI) through the funding of the Banner Center. The funding of these two centers allowed us to work with MAF, the Legislature, industry, WFI, FL-DOE, MEP, ... to make it come together. As we start a new year, I look forward to future collaboration with all of you to build a world class workforce for manufacturing, grow our manufacturing sector, and provide the skills and knowledge necessary to help people find challenging and fulfilling careers in modern manufacturing.

Eric A. Roe, Ph.D.

**Florida Jobs Summit**

Florida's next Senate president (Sen. Mike Haridopolos) and House speaker (Rep. Dean Cannon) hosted a statewide-focused Florida Jobs Summit Jan. 15, 2010, at the Rosen Shingle Creek Hotel in Orlando to hear ideas from Florida employers, experts and citizens to help boost investment, economic growth and job creation in the Sunshine State.

The Summit sought input on suggested state strategies in three key action areas:

- Identifying and removing barriers to new jobs development,
- Developing appropriate financial and tax incentives to lure new jobs to Florida, and
- Enabling existing employers to create new jobs and retain existing jobs.

Speaking on behalf of the manufacturing sector, Al Stimac (President of MAF and Owner/President of Machining Solutions) presented the case for a state economic policy that favors manufacturing, from both a business retention and recruitment perspective. Additionally, on the same panel Eric Silagy (Vice president for Corporate Development at FPL) called for similar measures to attract alternative energy equipment manufacturing to Florida. Following the panel, the Banner Center for Manufacturing's director, Dr. Eric Roe, spoke of the need to invest in Career and Technical Education programs and incumbent worker training that support Florida's 14,181 manufacturers and over 320,000 employees.

Overall the Summit offered lawmakers the opportunity to hear from the State's most engaged citizens, business owners, and policy watchers. The Center offers its thanks to Senator Haridopolos and Representative Cannon for arranging this Summit and listening to the ideas to put Florida back to work.

**Technology-Based Learning**

*(Continued from page 1)*



2010. “The existing Banner classroom materials are really top-notch,” says Glenn Goonis, project manager. “However, learners may not be able to be in a classroom at a particular time, so delivering this training in a virtual environment makes learning possible for many who could not otherwise gain access to the information.”

The new course will cover much of the same ground as the current Banner curricula but deliver it in a mixture of traditional classroom training and computer-based training, or eLearning. “eLearning is quickly becoming the new normal by students of all age groups, but especially with Generation Y or ‘Millennials,’” said Goonis, a member of Generation X who has supported the learning needs of manufacturing employees of all ages for over a decade.

“Many people are comfortable with sitting at a computer and learning something new, whether it’s from a website or a college course,” said the Michigan native. “The laptop is the new textbook, and being able to learn remotely is considered a must have for many people in all age groups.”

Dr. Roe added, “In addition to using a virtual classroom environment, we are incorporating eLearning objects from our partners LabVolt and WiscOnline. Studies show that many learners have increased retention when they use materials from more than one medium, so we expect to see an increase in assessment pass rates for learners who use this approach to prepare for the MSSC CPT assessments.”

“We will be using complex eLearning segments, complete with audio and video, as well as opportunities for learner interaction, in addition to some simpler learning objects,” added Goonis. “Learners can be present in a computer lab, or be at their home or office and be able to participate in the course remotely. All that will be required is a reasonable computer, high-speed internet access, and speakers. Students will be able to hear the instructor and see what’s happening in class in real time, in addition to being able to access the eLearning objects and other courseware.”

In addition to the clout that the MSSC certificates

*(Continued on page 5)*

**NAM Skills certification System meeting on January 29th**

*(Continued from page 1)*

to become a national model for System deployment.

The NAM-Endorsed Manufacturing Skills Certification System was launched last year. It was designed to educate and prepare the manufacturing workforce through a “system of nationally portable, industry-recognized skills credentials.” Since Florida has been a national leader in developing competency-based education and training for manufacturing, it is only natural for Florida to become a national model in deploying the entire NAM Skills Certification System.

Some of the interesting points released by The Manufacturing Institute in their briefing summary sheet include the following:

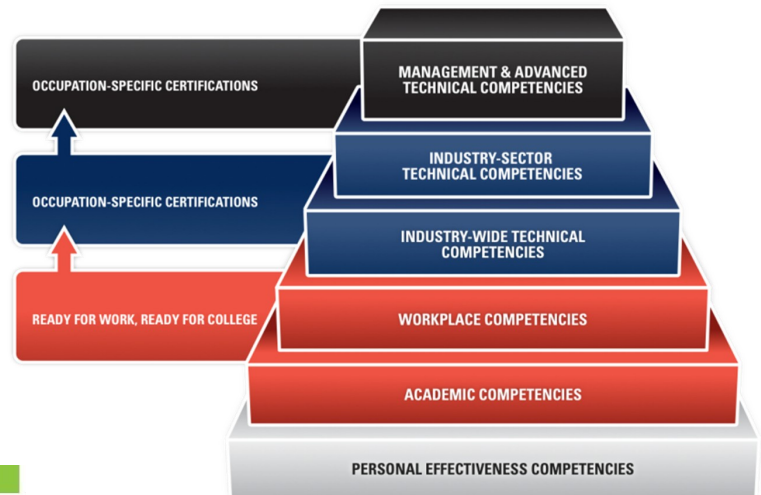
- Research confirms that an educated and skilled workforce is the single most critical factor in maintaining U.S. leadership in innovation and productivity—keys to our success in the global marketplace.
- There is no longer any doubt than an educated and skilled workforce is the critical asset companies look for when deciding if and where to locate new business facilities and operations.
- Individual manufacturers look to two balance sheets to determine their strength and resilience in this volatile economy: their fiscal balance sheet and their human capital balance sheet.
- 21st Century human capital, or talent, strategies are critical to manufacturers’ success, as exemplified by the sentiments of Denis Rohrs, Human Resource Manager at Fort Wayne Metals, Inc., “I advise each of my staff that every worker hired is a million-dollar investment for this company. I’m calculating that most hires are under 45 years old; we intend to keep them for at least 20 years, and our average annual salary/benefits package is \$55,000. In other words, we can’t afford to make a mistake—to hire someone without the right skills. Verifiable skills certification programs can make the difference between a good investment and a high-risk.”

Watch *Manufacturing Connections* for follow-up from this meeting and to learn more about how manufacturing is utilizing credentialing, how we can better align educational and training programs with national standards, and, how you can get involved to build the knowledge-based workforce for Florida’s manufacturing sector.

## Manufacturing Connections

### NAM-Endorsed Skills Certification System

Founded on ACT's National Career Readiness Certificate (the "Ready to Work" certification is Florida) to address Workplace Competencies, followed by Industry-wide and Industry-sector competencies (MSSC's Certified Production Technician, AWS's Certified Welder, and NIMS' Machining and Metalforming certifications), and finally capped by SME's Engineering Technologist certification for advanced technical competencies - these "stackable" industry-recognized skills certifications prepare workers with the manufacturing technical skills that enable them to swiftly enter careers in sectors ranging from aerospace to computers, metal fabrication to food processing, and pharmaceuticals to transportation and logistics.



### Did You Know?

Here are some facts about Manufacturing according to MAF (Manufacturers Association of Florida).

#### Manufacturing In the United States:

- 13 million Americans work in Manufacturing,
- Manufacturing represents 9.9% of U.S. employment,
- Manufacturing represents 2/3 of U.S. exports,
- U.S. is still the world's largest manufacturing economy (21% of the world's goods) - China is #2,
- NAM predicts 1 million new jobs in manufacturing by 2014.

#### Manufacturing in Florida:

- Manufacturing is the #1 industry sector,
- There are 329,000 employees in manufacturing,
- There are 14,000 manufacturing establishments,
- Manufacturing represents 4.8% of Florida's employment,
- Manufacturing represents 93% of Florida's exports.

Here are some additional facts about Florida compiled by Enterprise Florida:

- Florida is the 4th most populous state,
- Florida has the 4th largest labor force,
- 4th highest number of business establishments,
- 4th largest GDP (8th largest economy in the Western Hemisphere; 20th largest in the world),
- 4th in total employment in high-tech industries,
- 5th largest exporter of goods,

(Note—These numbers were released in 2009 and do not necessarily reflect recent economic conditions, but they are a good indicator of how Florida and the U.S. compare to other states and countries.)

### New GLA Certification

The Banner Center for Manufacturing is partnering with the Banner Center for Logistics & Distribution to co-develop curricula for a new Global Logistics Associate (GLA) certification. This exciting new certification is being developed under the auspices of American Society of Transportation and Logistics (AST&L).

The GLA certification is an entry-level certification for supply chain/logistics jobs both within and outside of the manufacturing sector. The curricula will be industry-defined and nationally validated. The certification and training will support Florida's career academies and entry-level workforce training.

AST&L is a nationally recognized organization representing the Transportation Logistics Industry for 60 years. It's mission is to facilitate education and certification in the fields of transportation, logistics, and supply chain management.

As part of the curricula development process, the Banner Center for Manufacturing and the Banner Center for Logistics & Distribution will host a focus group meeting February 3<sup>rd</sup> at Polk State College with industry representatives to begin work on this exciting new initiative. For more information on the GLA certification or the focus group, contact Elaine Puri at [epuri@lakecitycc.edu](mailto:epuri@lakecitycc.edu)

## Manufacturing Connections

### Technology-Based Learning Coming Soon

(Continued from page 3)

and CPT certification provides to the participant, obtaining the certification also enables individuals to obtain 15 credit hours towards an associate in science degree in “Engineering Technology” at many community and state colleges in Florida.

Mr. Goonis concluded, “Being able to make the learning even more engaging than it already is has been a challenge; a challenge that we firmly believe will ultimately benefit learners and the manufacturing community as a whole. HCC is proud to partner with the Banner Center in service to Florida manufacturers.”

Mr. Goonis has worked as a designer, developer, manager, and consultant for corporate learning in various sectors including manufacturing, financial services, legal, and health care. He is based at HCC’s Brandon Campus and holds a bachelor’s in journalism from Eastern Michigan Univ., and a Juris Doctor from Wayne State University in Detroit. He can be reached at [ggoonis@hccfl.edu](mailto:ggoonis@hccfl.edu).

### Business Input needed to shape Florida’s STEM agenda

#### Science-Technology-Engineering-Mathematics (STEM)

A fundamental component of the overall **STEM-florida** initiative involves securing input from the business community – the demand side of the workforce equation. In order to do this, a series of four business roundtables have been scheduled to gather stakeholder input from the business community.

- January 29 - Jacksonville; The Haskell Company; 9—11AM
- February 18 - Orlando; Lockheed Martin; 9—11AM
- February 22 - Juno Beach; Florida Power & Light; 10AM—Noon
- March 1, Pensacola; Gulf Power; 9:30AM—Noon

It is essential that **STEMflorida** hear from manufacturers as to how modern manufacturing careers are STEM careers. Please try to attend and comment at one of the upcoming roundtables. Note that seating is limited, so please RSVP at [www.STEMflorida.net](http://www.STEMflorida.net) if you plan to attend.

### Upcoming MAF Events

- Manufacturers Days at the Capital will be held on February 1-2, 2010.
- MAF and FMCC will combine forces this year to bring you the popular Safety Conference on April 13-14, 2010.

For more information on these events please visit the MAF website ([www.mafmfg.com](http://www.mafmfg.com))

### Re-launch of the BC Advisory Council

(Continued from page 1)

Director of Manufacturing Engineering, Jabil Circuits; Don Gugliuzza (Vice Chairperson), Chief Operating Officer, Mileo and Associates; Ruly Lopez, Area Manager—Services, Rockwell Automation; Gary Sparks, V.P. - Precast, Duratek Precast Technologies; Rich Hunter, Ph.D., CEO, FTSl; Steve Kullberg, Director of Operations, Florida’s Natural Growers; George Harder, Ph.D., P.E., V.P.—Operations, IsoAid; Lad Daniels, President, First Coast Manufacturers Association; Sherri Mitchell, Program Coordinator, First Coast Manufacturers Association; Susan Black, Executive Director, Polk Manufacturing Association; June Wolf, President, South Florida Manufacturers Association; Dennis Battistella, Training Coordinator, South Florida Manufacturers Association; Peter Straw, Executive Director, Sarasota-Manatee Area Manufacturers Association; Ernie Friend, Director of Engineering Technology, Florida State College at Jacksonville; Jim Simpson, Associate V.P. of Workforce Development, Florida State College at Jacksonville; Ted Norman, Manufacturing Academy Instructor, Treasure Coast High School; Mary Crew, Dean of Workforce Development, Pasco-Hernando Community College; Ernie Helms, Manufacturing Training Coordinator, Polk State College-Corporate College; Idelia Phillips, Ed.D., Director of Career and Technical Education, State College of Florida; Bruce Ferguson, President and CEO, First Coast Workforce Development; Stacy Campbell-Domineck, President, Polk Works; Kirk Kinsey, Business Development Consultant, Tampa Bay Workforce Alliance; Kenneth Russ, Interim President and CEO, Pasco-Hernando Jobs and Education Partnership; Mary Helen Kress, Executive Director, Suncoast Workforce Board; Rob Sitterley, Manufacturing Project Manager, Enterprise Florida; and Denise Green, Workforce Development Manager, Jacksonville Regional Chamber of Commerce.

Thanks to the Banner Center Advisory Council for all you do to keep the Banner Center moving forward. If you would like to nominate yourself or someone for our Advisory Council, please contact Howard Johnson either by phone or e-mail (see contact information on page 6).

### **Banner Center Materials Available for Order Today:**

**Manufacturing Fundamentals** - This curriculum is a 94-contact hour, 5-unit program for the entry-level production worker or career academy student. It is aligned with the Manufacturing Skill Standards Council (MSSC) Certified Production Technician (CPT) Certification to provide the fundamental skills and knowledge for Florida's diverse manufacturing sector. The training prepares the participants to take and pass the MSSC CPT exams.

**Manufacturing Essentials** - This curriculum is a 62-contact hour, 5-unit program for the incumbent or displaced production worker. It is also aligned with the MSSC CPT Certification to provide the fundamental skills and knowledge for Florida's diverse manufacturing sector. The training prepares the participants to take and pass the MSSC CPT exams.

**Instructor Certification Course (ICC)** - This course covers the knowledge and skills required to become a certified instructor for the Employ Florida Banner Center for Manufacturing's curriculum and to earn the MSSC CPT Certification. This is a 2-day training course designed for high school faculty, career academy instructors, and corporate trainers. Upon completion of the training, participants will receive a hard copy of all five **Manufacturing Essentials** or **Manufacturing Fundamentals** Instructional Guides (whichever is appropriate) and Power Points instructional slides, along with self-study assignments and examinations.

#### For Prices & To Order Materials, Call:

Howard Johnson, BC Coordinator  
johnson@banner-mfg.org  
863.297.1010, ext. 4079

Toni Lauters, BC EFM Coordinator  
tlauters@polk.edu  
863.297.1010, ext. 4081

### **New Format for Manufacturing Connections**

You may have noticed that our newsletter format was changed this issue to more closely match the state-wide Banner Center model. Let us know what you think by e-mailing [contact@banner-mfg.org](mailto:contact@banner-mfg.org)

#### **Employ Florida Banner Center For Manufacturing**

Polk State College / PSC Corporate College  
999 Avenue H, NE — Station 100  
Winter Haven, FL 33881

Eric A. Roe, Ph.D.  
PI/Director  
T: 863-669-2838  
F: 863-669-2330  
roe@banner-mfg.org



Visit the Employ Florida Banner Center for Manufacturing at:  
[www.banner-mfg.org](http://www.banner-mfg.org)

#### **Founding Partners:**

Hillsborough Community College • Bay Area Manufacturers Association • Tampa Bay Workforce Alliance • Florida State College at Jacksonville • First Coast Manufacturers Association • WorkSource • State College of Florida • Sarasota-Manatee Area Manufacturers Association • Suncoast Workforce Board • Pasco-Hernando Community College • Hernando County Economic Development Council • Pasco-Hernando Jobs & Educ. Regional Partnership Board • Polk State College • Polk Manufacturing Association • Polk Works • Workforce Florida, Inc.

#### **Advisory Council:**

Manufacturers Association of Florida  
Biomet Microfixation  
Colomer USA  
Duratek Precast Technologies  
Florida's Natural Growers  
FTSI  
IsoAid  
Jabil Circuits  
Knight's Armament Company  
Lockheed Martin Missiles & Fire Control  
Mileo & Associates  
PGT Industries  
Rockwell Automation  
First Coast Manufacturers Association  
Polk Manufacturing Association  
South Florida Manufacturers Association  
Sarasota-Manatee Area Manufacturers Association  
Florida State College at Jacksonville  
Pasco-Hernando Community College  
Polk State College—PSC Corporate College  
St. Lucie County Schools  
State College of Florida  
First Coast Workforce Development  
Pasco-Hernando Jobs & Education Partnership  
Polk Works  
Suncoast Workforce Board  
Tampa Bay Workforce Alliance  
Enterprise Florida  
Jacksonville Regional Chamber of Commerce  
Tampa Chamber of Commerce

**MANUFACTURING CONNECTIONS** is an Employ Florida Banner Center for Manufacturing publication. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect those of Workforce Florida.