

**Partner Spotlight—Sun Hydraulics—
 Weathering The Storm**

Sun Hydraulics Corporation in Sarasota, Florida puts an enhanced focus on employee education and development during times of economic slowing. “We use this time to prepare for our next level of business growth by developing the flexibility, adaptability, and skills of our employees and maintain our workforce,” says Kirsten Regal of Sun Hydraulics.

Beginning January of 2009, Sun implemented an extensive training program that included the Florida Ready to Work program and the Employ Florida Banner Center for Manufacturing’s MSSC training curriculum. Sun applied for and received assistance through both Florida



Employed Worker Training and Incumbent Worker Training grants. The successful completion of the Florida Ready to Work

program was our prerequisite to entering the Banner Center’s MSSC program.

The Banner Center’s *Manufacturing Essentials* Curriculum is a 62-hour classroom program that teaches

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**NCCET Regional Program Award—PSC,
 Mosaic & Banner Center Win Award**

The National Council for Continuing Education and Training (NCCET) will present the Polk State Corporate College’s Advanced Manufacturing Institute an award at its annual conference in Miami next month. The Mosaic combined maintenance crafts (electrical & mechanical) Apprenticeship Programs, developed by Polk State College, the Banner Center, RWD Technologies, and The Mosaic Company, consist of 1,232 hours of instructional theory and “hands on” lab, advanced standing for work experience, and OJT over 18 to 24 months. Two program tracks are offered: electrical, instrumentation, and automation (EIA); and mechanic/millwright.



Mosaic funded the program, selected the trainees and paid them to attend school and complete their OJT portion of the program. Forty-seven apprentices have completed training so far, with another 25 in the two current cohorts. In January 2011, another group will start mechanical/millwright training and Precision Electric of Lakeland will initiate their own EIA cohort. Due to support from the local workforce board, Precision Electric will pay half the cost, with a Polk Works - Employed Worker Training grant paying the rest.

This combination crafts apprenticeship program is meeting the demands of modern maintenance technicians through competency-based learning and lifelong learning strategies that enable workers to advance their skills and remain competitive in the global economy. The 5-step

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**Dr. Roe to Deliver the Keynote Address at
 the NCCET Conference on October 10th**

Dr. Eric Roe, Director of the Employ Florida Banner Center for Advanced Manufacturing, is slated to address the 2010 NCCET (National Council for Continuing Education & Training) Annual Conference in Miami on October 10th. Dr. Roe will address the first General Session of the conference at 1:30 p.m. His topic will be “Developing Statewide Training and Education Strategies.” According to Rob Clancey, Director of Polk State Corporate College and board member of NCCET,

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From The Director:

New Name—Same Mission... With the Center's new performance-based contract from Workforce Florida for 2010-2011, the Center updated its name to align with Florida's strategic industry clusters. We are now officially the Employ Florida Banner Center for Advanced Manufacturing. This change in name reflects the nature of modern manufacturing and the reality of Florida's vibrant manufacturing sector—employing advanced skills, advanced automation, and advanced talent for global competitive advantage. This quarter I wanted to use this space to update you all on some of the partner projects we're involved in and some upcoming critical events you need to put on your calendar.

First, be sure to put the Manufacturers Association of Florida's (MAF) 7th Annual Manufacturers Summit and Global Marketplace on your calendar for November 3rd and 4th in Orlando, FL. MAF serves to guide state policy for manufacturing. This year the Summit will feature sessions on Workforce development, strategies to expand your top line with global business, sales tax exemptions and grant incentives, and best practices for saving time, money, and resources in your operations. Be sure to register soon at www.mafmfg.com.

Another important upcoming event is the Florida Chamber's 2010 Future of Florida Forum, which takes place in Orlando, October 11 - 13. This year's event will focus on further transitioning Florida to a new economy by creating high-paying jobs and accelerating the diversification of major industry clusters. Also there will be sessions dedicated to the Foundations's Six Pillars Caucus System. If you want to contribute your voice to conversations on Talent & Education; Innovation & Economic Development; Infrastructure & Growth Leadership; Business Climate & Competitiveness; Civic & Government Systems; and Quality of Life - you need to be there. Register at www.flfoundation.com.

Congratulations are due to Polk State College and Tallahassee Community College for investments they are making in talent development for manufacturing. Polk State College in Winter Haven has received a \$2.91 million Community-Based Job Training Grant from the U.S. Department of Labor (USDOL) to implement the Engineering Technology and Advanced Manufacturing (ETAM) Initiative that will build program capacity, create cutting-edge curricula for academic and training programs, and provide training for unemployed, dislocated, and incumbent workers requiring up-skills training to remain employed and competitive in the marketplace through a partnership of 3 colleges, their regional Workforce Board partners, and the Employ Florida Banner Center for Manufacturing. The other college partners working with PSC in this project are State College of Florida and Tallahassee Community

College.

In addition to the partnership on the new ETAM grant, Tallahassee Community College just opened their new Advanced Manufacturing Training Center (AMTC) in August, 2010. The Center is equipped with state of the art equipment, training labs and classrooms, conference space, and incubator space for local companies and entrepreneurs. For more information on the Center and current courses, contact Bruce Batton at battonb@tcc.fl.edu, or visit workforce.tcc.fl.edu.

Eric A. Roe, Ph.D.

Check Out Our Website:

If you haven't been to the Employ Florida Banner Center for Advanced Manufacturing lately, check it out at your earliest opportunity. We've made several changes



and hopefully you'll like what you see. We've updated a lot of the information and tried to make it all more user friendly.

We have added Facebook and Twitter accounts for those who are especially savvy with the web and social media. We are also utilizing online tracking tools to help us continue to improve the website and better understand the needs of our clients. Stop by and see us soon at www.banner-mfg.org.

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employees applied manufacturing skills through five separate modules including Employability Skills, Production and Processes, Maintenance Awareness, Quality Assurance, and Safety Awareness. This class was taught at Sun Hydraulics four days per week while applying the skills immediately through on the job projects. Employees successfully completing



this program earn college credit. These credits satisfy several class requirements for the degree in Manufacturing Operations at State College of Florida.

One hundred nine Sun employees successfully completed the two-part employee development curriculum, earning the Florida Ready to Work certification and the MSSC Certified Production Technician (CPT) credential. The average of the MSSC tests scores was in the eighties, with a median score of 81% and a mean of 83%. This solution is a win-win for the employee, the company, and the community.



**Dr. Roe to Speak at NCCET Conference on
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“No one is more qualified to speak on this topic than Eric Roe with his extensive research and practical experience developing educational and training strategies.”



Besides his responsibilities with the Banner Center, Dr. Roe is the program director of Engineering Technology at Polk State College and principal investigator and director of two U.S. Department of Labor grants to support Advanced Manufacturing talent development. The first applies technology-based learning (TBL) to advanced manufacturing training; the second to create the Engineering Technology and Advanced Manufacturing (ETAM) Initiative to build program capacity, create cutting-edge curricula, and provide training for unemployed and dislocated workers as well as incumbent workers requiring up-skills training.

Prior to becoming the full-time director of the Banner Center, Dr. Roe was the founding director of FLATE, the Florida Advanced Technological Education Center. This National Science Foundation regional center of excellence is focused on reforming the state’s educational system to increase the number of skilled technicians entering the manufacturing workforce of Florida.

These three initiatives have created a unified educational system in Florida that provides the curriculum, educational articulation pathways, and certifications needed to deliver required workplace competencies. Says Howard Johnson, Banner Center Manager, “With his Ph.D. in Chemical Engineering, his professional background in manufacturing, citrus, and education, and his extensive experience as a keynote speaker and technical lecturer at conferences all over the world, it’s no wonder that he is in constant demand. I just hope that the leadership from all the schools represented at the conference will glean and utilize as much valuable information as possible from Dr. Roe.”

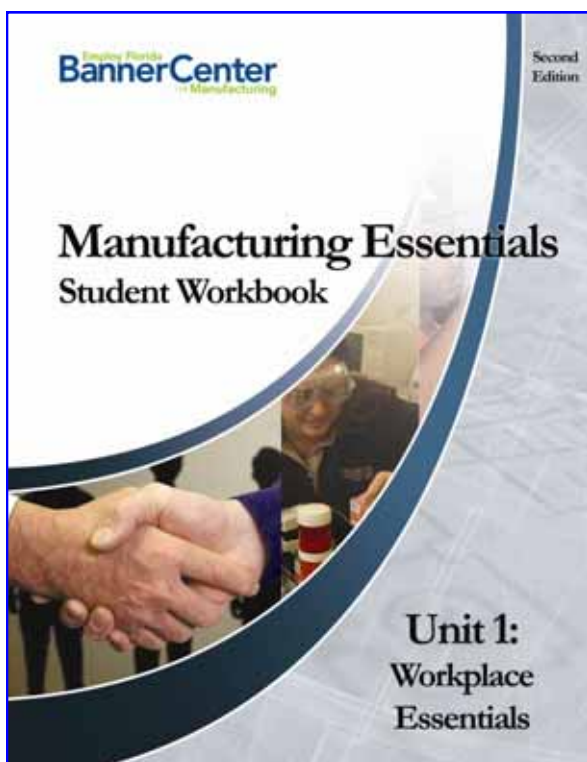
Polk State College’s president, Dr. Eileen Holden, will also participate at the conference as moderator of a Presidents’ Panel on October 11th at 8:30 a.m.



Manufacturing Connections

Manufacturing Essentials Curriculum Update

The **Manufacturing Essentials** curriculum was completely updated/revised in 2010 to more accurately align with the MSSC (Manufacturing Skill Standards Council) CPT (Certified Production Technician) credential and the OSHA-10 standards. We also utilized feedback from training partners and the TBL (Technology-Based Learning) Initiative pilot test at Hillsborough community College to update both the Student Workbooks and Instructor Guides.



The Center partnered with the US DOL-funded Advanced Manufacturing TBL Initiative at HCC to enhance the Second Edition of the **Manufacturing Essentials** course and also create a TBL version. The curriculum is a 80-contact hour, 5-unit program for the incumbent or displaced production worker. It is designed not only to align with the MSSC CPT Certification, but to provide the fundamental skills and knowledge needed for Florida's diverse manufacturing sector. The training prepares the participants to take and pass the MSSC CPT exams.

The 80-hour TBL (Technology-Based Learning) version uses "blended learning" (face-to-face instruction combined with computer-based or eLearning).

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program provides the skills and knowledge needed for both Mechanics and Millwrights, as well as Electrical, Instrumentation, and Automation Technicians.

The Apprenticeship Program incorporates the Banner Center's *Manufacturing Essentials* curriculum which prepares participants for the MSSC CPT exams and certification. Participants who earn their CPT (Certified Production Technician) credential are offered 15 credit hours toward a two-year degree in Engineering Technology (or 9 credit hours toward Manufacturing Technology or 6 hours toward Electronics Engineering Technology). After completing the entire Apprenticeship Program, an additional 16 credit hours are articulated toward the ET degree at Polk State College. This really gets the attention of some of the apprentices when they realize they have completed half of a 2-year Engineering Technology degree. It's a great motivation to go ahead and complete the degree.

The Banner Center is proud to have a hand in developing this worthwhile training program and we applaud Ernie Helms and the Advanced Manufacturing Institute at Polk State Corporate College for their outstanding efforts. The NCCET Award is just one of several recognitions which have been received by the Apprenticeship Program. Contact Dr. Roe if you'd like to implement the Apprenticeship Program at your location. A complete feature article about the Apprenticeship Program appeared in [Manufacturing Connections, Volume 3, Issue 1 \(November 2009\)](#).



**Become a fan
and join the
conversation.**

One of our goals at the Employ Florida Banner Center for Advanced Manufacturing is to bring industry, education, and workforce & economic development together to build the talent necessary to grow and sustain Manufacturing.

The more voices we have in the conversation will serve to better inform lessons from the past and chart the course to the future.

Facebook.com/Banner-Center-for-Manufacturing
Twitter.com/BannerCenterMfg

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 80-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. **Manufacturing Essentials** was completely revised/updated in 2010 to more closely align with changes in MSSC testing and OSHA 10 revisions. There is also an 80-hour TBL (Technology-Based Learning) version available that uses "blended learning" (face-to-face instruction combined with computer-based or eLearning). Call for more information.

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 PowerPoint instructional slides, along with self-study assignments and examinations.

For Prices & To Order Materials, contact:

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Founding Partners:

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