

Clemson University Delivers Next Generation Technician Education. **By Kathlyn Swantko**

## Training for Tomorrow

**A**ccording to South Carolina labor statistics, the state's manufacturers had more than 7,000 job openings in 2013. Due to a lack of skills in the workforce, however, not all these jobs could be filled. With a history of helping grow businesses for decades, Clemson University, as a land grant college, started with farms and is now applying the same model to automotive engineering, advanced materials, bioengineering, health, energy, the environment and genetics through its Clemson University Center for Workforce Development (CUCWD) program. The Center's use of innovative technology and

its focus on workforce development have increased the ability of South Carolina's technical colleges to meet advanced technological workforce needs.

Dave Lee, marketing director for CUCWD, noted, "Clemson is the only four-year institution in the world to take an innovative approach to addressing regional workforce development issues."

The CUCWD was established from funding by the National Science Foundation's (NSF) Center for Advanced Technology (ATE), and the Center for Aviation and Automotive Technical Education using Virtual E-Schools (CA2VES).

The new programs also



CUCWD worker on site in one of South Carolina's manufacturing facilities.

complement the U.S. STEM (science, technology, engineering, and mathematics) initiative, established in 2006 by U.S. and state educational policymakers, to promote subjects that help U.S. students compete in the global marketplace. The CUCWD program is able to prepare a much larger and more diverse population of college students throughout South Carolina.

Lee explained, "CUCWD hopes to positively impact the perception of advanced manufacturing, encourage more students to pursue advanced manufacturing educational opportunities and equip educational institutions with authentic, industry-inspired curricula to develop a stronger, larger and more prepared advanced manufacturing workforce in the state."

Recognizing the value that two-year colleges provide, the CUCWD is also incorporating their role in contributing and improving the STEM education programs within South Carolina. CUCWD and its CA2VES programs, along with 16 South Carolina technical colleges are developing exciting digital learning resources that will better prepare students for the workforce and accelerate the time between the first day of college and the first day on the job.

CUCWD is also working with over 60 percent of the K-12 school districts throughout the state to implement advanced manufacturing les-

son plans, labs, and experiences to further develop STEM education and spur greater interest in these careers.

The K-12 programs are extremely important to the future in fulfilling the vision of CUCWD. Lee explained, "As manufacturing becomes more technologically complex, manufacturers have been caught in a 'squeeze' in the talent pipeline. The K-12 institutions are critical in identifying and adopting the best practices in developing a workforce capable of capturing ongoing talent in our state."

One of the key goals of the CUCWD and CA2VES programs is to support businesses, industries and other stakeholders in efforts to establish a STEM pipeline of critical thinkers, which will increase science literacy and enable the next generation of innovators. Lee said, "Our joint focus and mission is to provide our students with the best opportunities for their future success and to grow and strengthen South Carolina as an innovation state."

For more information on CUCWD and CA2VES contact Dave Lee, marketing director for CUCWD, [drlee@clemson.edu](mailto:drlee@clemson.edu) or 864-656-7089. ●

Kathlyn Swantko, president of the FabricLink Network, created [TheTechnicalCenter.com](http://TheTechnicalCenter.com) for industry networking and marketing of specialty textiles, and [FabricLink.com](http://FabricLink.com).

### The Networking Sites for the Textile Industry

**FabricLink**

FabricLink.com

Trade-to-Consumer

**The Technical Center**

theTechnicalCenter.com

Trade-to-Trade

Check out the opportunities to effectively get your message out!