



INTERNATIONAL

FOR IMMEDIATE RELEASE:

Contact: Eileen Pickett

eileen@epickettconsulting.com

502.693.5566

July 6, 2015

LIFT And LEAP Launch ASM Foundation's Materials Science Teacher Boot Camp Program

NASHVILLE, Tenn. – Lightweight Innovations for Tomorrow (LIFT) and Tennessee's Labor Education Alignment Program (LEAP) today announced expansion of the ASM Educational Foundation's Teacher Boot Camp program in the State. The training-intensive, week-long program is designed to prepare high school science teachers in Middle Tennessee with knowledge and content about new technologies and materials for their students. This program is new to the area and will be the first of its kind for teachers in Middle Tennessee.

"Demand in Tennessee for advanced manufacturing skills continues to be significant," said Larry Brown, executive director, LIFT. "It is important for us to help train educators so they can better prepare students for these in-demand jobs and the skills they require to help pave career pathways for tomorrow's workforce."

The ASM-LIFT Teacher Boot Camps will kick-off in July and August 2015, when at least 50 teachers in Middle Tennessee will participate in one of two scheduled camps. One Boot Camp will be hosted at the Northfield Workforce Development & Conference Center in Spring Hill, Tenn., and the other at Austin Peay State University in Clarksville, Tenn. The program aims to:

- Bring together academic and vocational materials science instructors with the shared goal of exciting students about science, technology, engineering and math (STEM) education
- Introduce lightweight materials and the evolving related technologies within current and future curricula
- Teach the teachers to attract more youth to manufacturing careers

"Teachers are an essential piece of the talent pipeline puzzle," said Emily Stover DeRocco, education and workforce director, LIFT. "Educators who participate in this program will be able to return to their classrooms and more knowledgeably share information and perspectives about materials science that will help

encourage students to enter rewarding careers in advanced manufacturing industries.”

South Central Tennessee Workforce Alliance will serve as project lead for the ASM-LIFT Teacher Boot Camp program. Partners include LEAP, Northfield Workforce Development & Conference Center, ASM Educational Foundation, Middle Tennessee Advanced Manufacturing Skills Panel, Tennessee STEM Innovation Network, Columbia State Community College and Tennessee College of Applied Technology – Pulaski.

“Raising awareness and understanding of in-demand lightweighting-related jobs in Tennessee is vital to our state’s future success in manufacturing,” said Jan McKeel, Executive Director, South Central Tennessee Workforce Alliance. “Collaborating with and training teachers on valuable lessons in STEM-related fields is sure to prove incredibly beneficial for instructors, students and employers alike.”

For more information on the ASM-LIFT Teacher Boot Camp program and other LIFT education and workforce development initiatives, please visit www.lift.technology or contact LIFT Workforce & Education Director Emily DeRocco at ederocco@lift.technology

###

ABOUT LIFT

Lightweight Innovations For Tomorrow (LIFT) is a public-private partnership that will develop and deploy advanced lightweight materials manufacturing technologies and programs to prepare the workforce. The LIFT region includes 5 states: Michigan, Ohio, Indiana, Kentucky and Tennessee.

ABOUT ASM

ASM International was founded in 1913 as the American Society for Metals. Today, ASM is the world's largest association of metals-centric materials scientists and engineers with over 30,000 members worldwide. ASM is dedicated to informing, educating and connecting the materials community to solve problems and stimulate innovation around the world.



BUILDING 21st CENTURY MANUFACTURING TALENT

Teacher Training in Tennessee: Materials Science Bootcamps

An Education & Workforce Development Initiative for LIFT...Lightweight Innovations for Tomorrow



THE PROBLEM

In the State of Tennessee, demand for lightweighting skills continues to be significant. Employer demand, as defined by online job postings, has grown consistently and those postings are dominated by jobs for skilled materials workers, logistics workers, production and operations supervisors, electrical and mechanical engineers, and CNC machinists.

In Middle Tennessee during 2014 over 2,100 jobs were posted for lightweight-related job opportunities. On top of this, over 30% of jobs posted online advertise an annual salary of over \$50,000 and nearly half are for jobs in skilled trade occupations. These are good jobs.

To add to employer needs, nearly 20% of lightweighting workers are over the age of 55 and will be retiring in the next 10 years. Only 21% of lightweighting workers are women, while women represent half of the total regional population. Not only are more workers needed right now to fill open positions but the pipeline of future workers must be strong in order to replace retiring workers. We must encourage more women and minorities to enter the field.

The opportunity to raise levels of awareness and understanding of these jobs and careers among students, parents, teachers and counselors is critical. As employer needs for this workforce increases - through business growth or through the need to replace an aging workforce - we must have a ready pipeline of individuals with the skills and interest to fill those jobs.

ALIGNMENT TO LIFT WORKFORCE & EDUCATION GOALS



Ensure students gain STEM foundational skills



Attract more young people to manufacturing careers



Teach the teachers



Expand work-and-learn opportunities

THE SOLUTION

With support from LIFT, the Tennessee State LIFT Workforce & Education Team will leverage significant state investment from Tennessee's Labor Education Alignment Program ("LEAP") to develop and implement teacher training opportunities in those LEAP areas that are focused on Advanced Manufacturing. LIFT and LEAP will bring in the ASM Educational Foundation's teacher bootcamp program to Middle Tennessee to train teachers in materials sciences. The ASM camps have been a successful model of teacher training across the U.S. Expanding the program in Tennessee will allow many educators in the area to have access to this training for the first time.

The teachers who participate in the bootcamps will be able to return to their classrooms to share knowledge about materials science and help encourage students to pursue careers in the field.

PROJECT LEAD

South Central Tennessee Workforce Alliance

PARTNERS

LEAP - Closing Gaps Through Partnerships

Northfield Workforce Development & Conference Center

ASM Educational Foundation

Middle Tennessee Advanced Manufacturing Skills Panel

Tennessee STEM Innovation Network

Columbia State Community College

Tennessee College of Applied Technology - Pulaski

Austin Peay State University

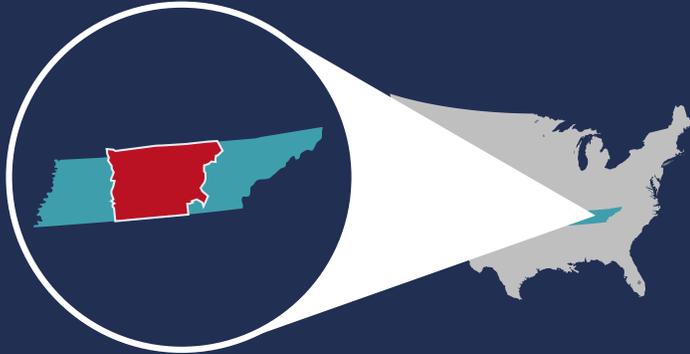
Tennessee College of Applied Technology - Hohenwald

THE PROGRAM

Teacher Bootcamps: Materials Science Education for Tennessee's Teachers

During July and August 2015, at least 50 teachers in Middle Tennessee will participate in one of two scheduled bootcamps at the Northfield Workforce Development & Conference Center and Austin Peay State University in Clarksville.

Geography



Projected Result

Minimum of 50 teachers complete camp requirements



Projected Result

Evaluation of the bootcamps will show success if the program meets or exceeds the 98% benchmark on participant evaluations. Of respondents, 98%:

- feel prepared to implement new labs/demos learned at camp
- feel they gained new ideas and approaches to instruction
- indicated they will use material science technology concepts in their classroom

98%

Expected Outcomes

With this training in-hand, teachers can bring their knowledge back to the classroom to encourage more students to enter fields related to materials science and lightweighting. Middle Tennessee's students will now have more access to knowledge about careers in manufacturing and access to the basic learning required to move into manufacturing-related post-secondary programs. More students entering the field over time means that employers will have a robust pool of workers from which to hire.

About ASM-LIFT Bootcamps

The ASM-LIFT Materials Camp for Teachers is based on past experiences in the areas of curriculum development, teacher training and student programs in Materials Science developed at the University of Washington and Edmonds Community College and supported by the National Science Foundation's Advanced Technology Education program. These programs have demonstrated that Materials Science is an excellent tool to bring together academic and vocational instructors in a common goal of exciting students about science, technology and engineering. The ASM-LIFT Camp curriculum now includes a focus on lightweight materials and the evolving related technologies.

About LEAP

Passed into law in 2013, Tennessee's Labor Education Alignment Program ("LEAP") created a statewide, comprehensive structure enabling students in Tennessee Colleges of Applied Technology and community colleges to participate in technical training developed with input from area employers. The LEAP Grant Competition continued this effort by encouraging and facilitating local workforce and education alignment through a \$10 million competitive grant process, led by the Governor's Office and the Workforce Subcabinet.

Grants were made available to eligible entities to facilitate development and implementation of employer-driven career pathways through specifically defined approaches. In November of 2014, twelve LEAP grants were awarded, eight of which are focused on Advanced Manufacturing.