DEARBORN, Mich., OKLAHOMA CITY, Okla., November

Society of Manufacturing Engineers

SME Education Foundation selects Francis Tuttle Technology Center, Oklahoma City, Okla., as one of six in nation for community-based approach to manufacturing education. .

DEARBORN, Mich., OKLAHOMA CITY, Okla., November 22, 2011 — The SME Education Foundation [1] is taking a community-based approach to manufacturing education and creating strong partnerships between exemplary schools, businesses and organizations. Francis Tuttle Technology Center (FTTC [2]), Oklahoma City, Okla., is an acknowledged leader for providing exceptional career and technology education to high school students and adults, as well as customized training for business and industry. It is one of six exemplary schools in the nation selected for the first phase of a new initiative, PRIME [3] (Partnership Response in Manufacturing Education) launched in the fall of 2011.

Other PRIME exemplary schools include: Kettering Fairmont High School, Dayton, Ohio; Walker Career Center, Indianapolis, Ind.; Summit Technology Academy, Lee's Summit, Mo.; Hawthorne High School of Engineering, Los Angeles, Calif., and Wheeling High School, Wheeling, Ill.

The Francis Tuttle Technology Center was selected based on their exemplary, technology-based manufacturing education curriculum, including a course in Computer Integrated Manufacturing (CIM) developed by Project Lead The Way (PLTW); skilled and dedicated instructors; engaged and active students; strong collaborative and administrative support from the manufacturing community, and having SME member involvement, including SME Oklahoma [4] Student Chapter S143.

"The Francis Tuttle Technology Center has done an extraordinary job in paying attention to the needs of business and industry by using manufacturing disciplines in its delivery of customized training,' said Bart A. Aslin, chief executive officer, SME Education Foundation. "We need to double our response time in educating young people in advanced manufacturing —following Francis Tuttle's lead in how they provide "just-in-time" manufacturing education."

As an exemplary school, the Francis Tuttle Technology Center has been granted $26,000 by the SME Education Foundation which includes $10,000 to update equipment, software and/or professional development, $1,000 to support their involvement in competitions tied to organizations such as SkillsUSA and/or FIRST Robotics; $5,000 toward a Gateway Academy —a technology-based summer day camp, and $10,000 to support scholarships with provided connections.

PRIME builds on the SME Education Foundation's $5.2 million investment in STEM education which targets three critical issues: transforming manufacturing education, changing public perception of manufacturing, and addressing the shortage of manufacturing and technical talent in the United States.

"We pride ourselves on working closely with our business and education partners and work hard to customize our curriculum and deliver quality trained workers," says Danny King, assistant director, Francis Tuttle Technology Center. 'Being selected an exemplary school and having the SME Education Foundation's endorsement of our commitment to local workforce development, will definitely allow us to accelerate our efforts."

Reaching young people at an early age is critical to the future of advanced manufacturing. The Gateway Academy will be introduced at the Portland Campus of Francis Tuttle Technology Center in summer 2012. Middle-school students from several different school districts in Oklahoma City and surrounding cities will attend the summer day camp. As they learn about engineering and manufacturing they will use leading-edge technologies for hands-on learning projects including robotics, aeronautics and mechatronics. This experience will prepare students for either the Pre-Engineering Academy at Francis Tuttle which offers PLTW's pre-engineering curriculum or the Advanced Manufacturing/Instrumentation Program that leads to immediate employment in high skill/high wage jobs.

The Pre-Engineering Academy is a college preparatory program that prepares students for success in collegiate engineering pathways. A fully realized STEM (Science, Technology, Engineering and Math) curriculum allows students to complete mathematics courses through Advanced Placement (AP) Calculus BC and science courses that include Advanced Placement Chemistry and calculus-based (AP) Physics. Project Lead The Way engineering classes are taught as well. These classes allow for the integration of academics and add the very important component of relevance to advanced math and science.

The Advanced Manufacturing Career Training Programs at Francis Tuttle are specifically designed to deliver the knowledge and skills necessary for students to go directly from classroom and labs to a career. Equipment and facilities reflect the workplace, and curriculum is developed with advisory committee input from employers and business owners in each respective industry.

The Manufacturing Career Training Programs, led by highly qualified instructors, offer courses in Advanced Manufacturing, Computer-Aided Drafting and Design, Precision Machining/Computer Numerical Controlled (CNC) Machining and Welding.

Designed in cooperation with industry partners, these programs allow students to work on a state-of-the-art 3-D printer; and for rapid prototyping, HAAS CNC lathes and mills, CNC Plasma Cutter, CNC training stations, robotic work stations, and more. The facility provides students interested in engineering, architecture and manufacturing with hands-on design experience and a competitive edge for work or degree programs.

A major strength of the PRIME initiative is the connection it creates between schools, local manufacturers, the Society of Manufacturing Engineers and local SME Chapters. The PRIME initiative helps students by providing access to www.CareerMe.org [5]. Introduced in 2009 by the SME Education Foundation, in partnership with the National Center for Manufacturing Education (NCME), the website encourages and provides young people in grades 11-14 with information they need on advanced manufacturing careers, regional and local access to companies, industry professionals, technologies and colleges and universities.

The involvement of SME Oklahoma Student Chapter S143 with the Francis Tuttle Technology Center has provided several opportunities for students including plant tours, mentoring and job shadowing.

Shivakumar Raman, PhD, University of Oklahoma and Faculty Advisor to SME Student Chapter S143, says, “It is very exciting that the local technology centers for whom I have been a very strong supporter, have been receiving such prestigious grants and contracts. The new PRIME program will improve the quality of manufacturing professionals who will be instrumental in job creation and revenue generation in our state. Our own partnership with Moore-Norman Technology Center for the past 15 years has helped fortify the “hands-on” contextual education of our sophomores and juniors in Engineering at OU. It is expected that the FTTC program will provide us another avenue in creating partnerships towards advanced manufacturing education. These educational partnerships, in very good measure, will lead to a revitalization of manufacturing in the U.S.”

Dr. Raman, a David Ross Boyd Professor; John A. Myers Professor in Engineering; Fellow, SME; Fellow ASME; and Fellow IIE, is also director of Shape Engineering and Advanced Manufacturing (SEAM) at the University of Oklahoma, and a manufacturing educator for 25 years.

About Francis Tuttle Technology Center:
Francis Tuttle Technology Center, established in 1979, is named in honor of the founder of the Oklahoma CareerTech system, the late Dr. Francis Tuttle. The Center encompasses six public school districts serving 11,780 students who may attend Francis Tuttle tuition-free while in high school. Adult students are served by Adult & Career Development, Business and Industry Services, and daytime and evening Career Training Programs. The Center works closely with business and education partners with specific focus on workforce needs of the marketplace with the delivery of on-time, just-in-time, customized training. Visit www.francistuttle.edu [2]

About Community Partnerships:
Francis Tuttle fosters mutually beneficial partnerships with many educational, business and community organizations to determine the best long-term strategies to meet current and future demands. Some of these include: Program advisory committees (approximately 700 members representing various industries), Center for Municipal Excellence; Central Oklahoma Workforce Investment Board, Edmond Downtown Community Center; Edmond Economic Development Authority; Oklahoma Blood Institute; Oklahoma Energy Resources Board; The Oklahoma Academy; The Oklahoma City Community Foundation; Oklahoma Department of

Commerce, and Workforce Oklahoma.

Among the higher education partners who work closely with Francis Tuttle are: Oklahoma City Community College, Oklahoma State University (Oklahoma City and Okmulgee); The University of Central Oklahoma, The University of Oklahoma – College of Engineering; Oklahoma State University – College of Engineering, and Oklahoma Christian University – College of Engineering.

Several local Chambers of Commerce working with Francis Tuttle include: Deer Creek Chamber of Commerce, Edmond Chamber of Commerce, Greater Oklahoma City Chamber of Commerce; Hispanic Chamber of Commerce; Northwest Chamber of Commerce; South Oklahoma City Chamber of Commerce, and the State Chamber of Commerce.

About the SME Education Foundation:
The SME Education Foundation is committed to inspiring, supporting and preparing the next generation of manufacturing engineers and technologists in the advancement of manufacturing education. Created by the Society of Manufacturing Engineers in 1979, the SME Education Foundation has provided more than $31 million since 1980 in grants, scholarships and awards through its partnerships with corporations, organizations, foundations, and individual donors. Visit the SME Education Foundation at www.smeef.org [6]. Also visit our award-winning website for young people at www.ManufacturingisCool.com [7], and for information on advanced manufacturing careers, visit www.CareerMe.org [5]

Media Contacts:

SME Education Foundation, 313.425-3300, foundation@sme.org [8]

SOURCE [9]

Source URL (retrieved on *03/09/2014 - 12:48pm*):
http://www.chem.info/news/2011/11/dearborn-mich-oklahoma-city-okla-november?qt-recent_content=0

Links:
[1] http://smeef.org/
[2] http://www.francistuttle.edu/
[3] http://www.smeef.org/sme_education_foundation_launches_prime.php
[4] http://www.sme.org/cgi-bin/getsmepg.pl?/memb/oklahoma.htm&&&SME&
[5] http://www.careerme.org/
[6] http://www.smeef.org/
[7] http://www.manufacturingiscool.com/
[8] http://feedproxy.google.com/~r/sme/~3/EbAy_elcrDE/mailto:baslin@sme.org
[9] http://feedproxy.google.com/~r/sme/~3/EbAy_elcrDE/get-press.pl