DEARBORN, Mich., CALERA, Ala., November 28, 2012

Society of Manufacturing Engineers

The SME Education Foundation has selected Calera High School, Calera, Alabama as an exemplary school for its PRIME (Partnership Response In Manufacturing Education) program, a comprehensive, community-based approach to manufacturing education.

DEARBORN, Mich., CALERA, Ala., November 28, 2012 More than 200 Alabama businesses, industry and local government partners are rallying their support of Calera High School, Calera, Ala., and its innovative approach to manufacturing education. The STEM pre-engineering program designed by Instructor, Brian Copes, has secured Calera High School exemplary school status and funding from the SME Education Foundation through its PRIME program (Partnership Response in Manufacturing Education), one of nine schools in eight states receiving the designation.

The Calera High School pre-engineering program has Copes students involved in projects ranging from building basic utility vehicles (BUV), prosthetics and a hydro-electric plant inspired by their trip to a Honduran village last summer, to redesigning and customizing a fuel-efficient hybrid car, which is introducing them to a green energy program. These and many other innovative approaches to manufacturing education have allowed students to learn how to function in a complex world and see first-hand how their knowledge of critical STEM technical skills is important to helping shape their lives, allowing them to help others. They are learning to innovate, lead and mentor.

The PRIME designation for Calera High School comes with a three-year commitment by the SME Education Foundation to provide assistance in creating and fostering strong partnerships with the local manufacturing base to provide job shadows, mentoring and internships. In addition, PRIME schools receive funds totaling $35,000 for three years to support equipment upgrades, continuing education for instructors and a STEM-based camp for middle-school students. The SME Education Foundation Scholarship Program provides students with access to scholarship funding.

Brian Copes has built an infrastructure of more than 200 industry partners anxious and willing to support them on multiple projects, not just one, says Bart A. Aslin, CEO, SME Education Foundation. Calera High School is fairly new, only six years old, and its students are inspired and totally involved and excited about working in pre-engineering classes that are motivating their future learning and capturing the support of business, industry, educators, state government. Were proud to include

them in our PRIME program.

, a community-based approach to manufacturing education, is part of a commitment by the SME Education Foundation to address the shortage of manufacturing and technical talent in the United States. Launched in 2011, with the selection of six schools in six different states, model schools funded through PRIME offer STEM-based curriculum (Science, Technology, Engineering and Mathematics) prepare young people for highly skilled jobs with lucrative potential. One of the richest sources of employment and economic growth will be jobs requiring a solid STEM education.

PRIME was developed as a response to the growing skills gap crisis in the United States along with its greater mission to inspire, prepare and support STEM-interested students. Upon graduation, they will leave school with the tools to further their education and become future innovators and contributors to industry.

In summer 2012, Copes and ten students traveled to a Honduran village to deliver basic utility vehicles made from Toyota Corolla parts and prosthetic legs they learned to design and manufacture for amputees in the village. This initiative provided the impetus and direction for additional similarly innovative engineering projects where students can learn skills such as teamwork, mechanics, engineering, design, manufacturing, Internet technology and research, CAD, and problem-solving.

PRIME funding will be used to update equipment including a 3-D printer, and software and a summer technology-based camp for fifth to seventh graders which will expand the program to include more students and build the pipeline of students interested in pre-engineering.

We have a two-year, long-term plan, says Brian Copes, My students are now redesigning the basic utility vehicle since some of the components to the basic utility vehicles are no longer available. Our other projects include refining the design and manufacture of a prosthetic that can be mass-produced and building a portable hydro-electric station for the Honduran village. We were fortunate enough to have engineer, William Hobbs from Alabama Power (a Southern Company), help us to ensure this projects success. Hes one of many offering their time and expertise.

Don Miller, a retired engineer from Alabama Power, is working with students and helping to build a custom hybrid car a 2004 Dodge Neon - to make it operable and fuel efficient. Copes students will then drive the car across the country by driving the length of I-65, linking the south at the Gulf of Mexico to north of Detroit, Mich. They start in Mobile, Ala., with the first stop in Leeds, Ala., where they will tour the Barbers Motorcycle Museum. They will also travel with a Bio-Diesel Lab, bringing further awareness to Green Fuel Technology, which will allow them to make their own fuel from cooking oil from fast food restaurants on the route. Scheduled stops include the Corvette Museum in Bowling Green, Ky., the Indianapolis Motor Speedway, Indianapolis, Ind., and finally the Henry Ford Museum in Dearborn, Mich.

In October 2012, People Magazine honored five teachers across the nation in its first Teacher of the Year competition which included Calera High School pre-engineering instructor, Brian Copes.

PRIME sites for 2013 include: **Alabama:** Calera High School, Calera, Ala., **California:** Esperanza High School, Anaheim, Calif.; Petaluma High School, Petaluma, Calif.; **Indiana:** McKenzie Center for Innovation and Technology, Indianapolis, Ind.; **Iowa:** Cedar Falls High School, Cedar Falls, Iowa; **Massachusetts**: Westfield Vocational Technical High School, Westfield, Mass.; **Michigan:** Jackson Area Community Center, Jackson, Mich.; **Ohio:** Centerville High School, Dayton, Ohio, and **Wisconsin**: Bradley Technical High School, Milwaukee, Wis.

To-date, the SME Education Foundation has provided funding of more than $285,000 through PRIME to model high schools to help manufacturing and its advanced technologies drive the economic vitality of local communities. This initiative builds on a five-year, $5.2 million investment in their STEM [1]-based manufacturing education workforce development programs.

About Industry Partners:
Community and industry partners supporting the Calera High School, Children Are Changing the World program include: A. C. Legg, Alabama Power; Alfa Insurance; Argos; American Foundry Society; Augusta Fiberglass; Birmingham Business Alliance; Britt Engineering; Central State Bank; City of Calera; Spencer Bachus; Dr. Baker Chambliss; Dole Foods, Magnolialand Entertainment; Martin-Marietta; Mass Communications; Scotts Jewelry and Pawn; Shelby County Office Manager, Alex Dudchock; Shelby Ridge Nursing Home; Project One Enterprise; Shelby Baptist Hospital; Skilled Knowledgeable Youth (SKY); SME Education Foundation; Tenn Chiropractic; The University of Montevallo; Toyota, Christy L. Travis; Unimin, and Watts Auto Diesel Service.

About Calera High School:
Calera High School, Calera, Alabama, provides an enrollment of approximately 900 students, grades 9-12, with a learning environment in which students can acquire skills to become productive and responsible citizens and enjoy successful careers. The school provides a positive learning experience through quality teaching, a safe environment, and curriculum that meets the diverse needs of all students. Their pre-engineering program offers opportunities for student scholastic achievement with science, technology, engineering and math (STEM) curriculum. Visit: Calera High School [2].

About SME Education Foundation:
The SME Education Foundation is committed to inspiring, preparing and supporting the next generation of manufacturing engineers and technologists for 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 SME Education Foundation at www.smeef.org [3]. Also visit www.CareerMe.org [4], for information

on advanced manufacturing careers and www.manufacturingiscool.com [5], our award-winning website for young people.

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