Made in America Will Go Away without Investment in STEM-based Education

Society of Manufacturing Engineers

The Andersen Corporate Foundation, Bayport, Minn., has funded $25,000 to the SME Education Foundation for their Gateway Academy, a national, technology-based program for 6th-8th graders offering science, technology, engineering, mathematics (STEM) education.

Andersen Corporate Foundation receives annual contributions from the Andersen Corporation. General operating, capital and program funding is allocated to qualified nonprofit organizations that provide community, social and support services to better people's lives and strengthen communities, focusing primarily where Andersen employees live and work. Visit https://www.srinc.biz/bp/ [1].

DEARBORN, Mich., August 23, 2010 — The tagline "Made in America" will go away without increasing investment in STEM-based education. As skilled labor shortages continue to hold back various sectors of U.S. manufacturing, national organizations are looking at their investment strategies and realizing they have to include the funding of STEM-based education programs to protect their longevity.

An example of the importance of STEM, and maintaining our competitive position as a research and development and technical powerhouse leader, is China. According to economists, China has supplanted Japan as the world's second-largest economy. To maintain its position, China needs our research and development and resultant advanced technology. In a recent article, published in the Wall Street Journal (August 16) [2], "China dangles rare-earth resources to lure investment," a "technology-for resources" strategy would invite electronics manufacturers and automakers to set up rare-earth processing plants in China giving them access to low labor costs and access to fast-growing markets. This is a just one of the growing examples of why it is not just important, but mandatory, that technology-based education in this country accelerate.

The Andersen Corporate Foundation [1], Bayport, Minn., a supporter of organizations offering intellectual and social opportunities, primarily for young people – K-12, has generously funded $25,000 to the SME Education Foundation [3] for the Gateway Academy – a national technology-based educational program designed for 6th-8th graders offering science, technology, engineering and mathematics (STEM) education. The Andersen gift will cover the cost of Gateway Academies in Minnesota, New Jersey and Western Wisconsin, where Andersen has manufacturing facilities and employees.

The SME Education Foundation, which has become a catalyst for STEM education, offers a hands-on, real-world curriculum designed by Project Lead The Way (PLTW) through its Gateway Academy, the fastest-growing formal and rigorous education

program in the country. Educators at the Gateway Academy aren't just teachers and instructors, they're lifelong learners trained to inspire and motivate young minds. In 2010, the SME Education Foundation held 237 Gateway Academies and reached over 4,800 students in 34 states.

Business and industry leaders joining Andersen in funding the Gateway Academy program include: American Electric Power (AEP) [4], Emerson [5], Haworth [6], Kern Family Foundation [7], Kennametal [8] and SME Education Foundation. This year, thanks to these supporters, the SME Education Foundation grant funded $815,000 to Project Lead The Way.

Today, education has become the "hot button" for major organizations and government leaders at national, state and local levels, as thousands of young people continue to move through the education system which currently lacks a focus on STEM education, and teachers and professors are equally challenged.

Says SME Education Foundation Director, Bart A. Aslin, "While we are seeing increasing numbers of educators, community leaders, and the media becoming more involved in promoting STEM education, we have a lot of work to do. We need to place greater emphasis on reaching young people at an early age, and making sure they are guided and not intimidated by taking a more challenging course of learning. We see the demand for highly-skilled, technical people increasing every year, and China is in our backyard."

At Tomahawk High School in Wausau, Wis., the 4-H Gateway Academy, middle-school students took part in the week-long program exploring career opportunities in science, technology, engineering and mathematics. They created shelters out of newspapers, designed a toy for children ages 4 to 7 in a potential disaster relief shelter using common supplies, and built a bridge after being introduced to engineering principles on the West Point Bridge Builder website. To learn about local businesses and possible careers where science, technology, engineering and math are used, the students toured Tomahawk Log Cabin Homes and Daigle Brothers – an AISC certified steel fabricator and machine shop.

At another Gateway Academy held at Washington Middle School in Green Bay, Wis. , kids attending the week-long summer day camp learned to build cars, gliders and catapults of wood, paper and card board, and plastic robots they learned to program with computer software. Gateway Academies allow students to develop skills essential for achievement in the classroom and success in college and at work. They also achieve significantly higher scores in reading, mathematics, and science. Graduates earn higher GPAs as college freshmen, and are 5 to 10 times more likely to study engineering and technology.

The concept of the Gateway Academy was created in a partnership between the SME Education Foundation and Project Lead The Way, a not-for-profit organization that promotes engineering courses for middle and high school students. In 2010, the SME Education Foundation held 237 Gateway Academies and reached over 4,800 students in 34 states. For more information about the Gateway Academy program, contact Project Lead The Way at info@pltw.org [9].

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 $31million since 1980 in grants, scholarships and awards through its partnerships with corporations, organizations, foundations, and individual donors. Visit www.smeef.org [3]. Also visit www.CareerMe.org [10], a new website supporting advanced manufacturing careers, and our award-winning Web site for young people – www.manufacturingiscool.com [11].

Questions or comments may be directed to the SME Education Foundation by phone 313.425.3300, or email foundation@sme.org [12].

SOURCE [13]

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