The Foundation of the Fabricators & Manufacturers Association, Intl.®

For more information contact:
Patricia Lee
FMA
(815) 227-8286
patl@fmanet.org

SUMMER MANUFACTURING CAMPS INSPIRE NEXT GENERATION OF AMERICA'S SKILLED WORKERS

Nuts, Bolts & Thingamajigs Camps Encourage Kids to Explore Hands-on Careers and Respond to Growing Skills Gap in the Manufacturing Workplace

Rockford, Ill. Dec. 19, 2011 --

Who would imagine that metalworking, robotics and welding would replace swimming and sports as major activities for a number of youngsters who attend summer camps? Yet, such programs are starting to flourish, introducing young people to the joys of making things and underscoring the opportunities in manufacturing.

The young students who attend these camps learn, for example, to create a three-dimensional design on a computer, transfer the design to a computer numeric control (CNC) machine, and complete the product to take home following their camp experience. They also tour local companies to learn about careers in manufacturing.

This burgeoning camp movement is an important stepping stone to help avert a growing crisis in America – too few young people are developing the kind of hands-on, high-tech skills required by industries, workshops and engineering practices. Concurrently, today's employers face a shortage of skilled workers that gets more urgent each year.

One organization seeking to spark youth interest in the trades -- Nuts, Bolts & Thingamajigs® (NBT), The Foundation of the Fabricators & Manufacturers Association, Intl. (FMA) –provides grants to educational institutions that offer camps to introduce young people to careers in manufacturing.

A New Camp Experience

"NBT summer manufacturing camps provide a positive, hands-on experience so young people will consider manufacturing as a career option," said Traci Tapani, chairman of the NBT board of directors. "They target youth at the critical level of secondary education, exposing them to math, science and engineering principles, and give them opportunities to see the technology being used in industry and the high level of skills that will be required from the workforce."

"If we're to continue to be the greatest manufacturing nation in the world, it's vital that we inspire the next generation of engineers and manufacturers," said Ed Youdell, president of FMA and its foundation. "These camps introduce kids to vocational and technical training providing them with hands-on-experience that builds their confidence, skills set and foundation for a successful future."

The camps begin with an exploration of science and engineering principles. Students are introduced to CAD software and use it to design a project. They build their projects utilizing available technologies such as welding, press brakes, CNC lathe, waterjet and sometimes advanced laser technology – and take their projects home with them as lasting reminders of their new skills. In addition to manufacturing technologies, camp participants learn entrepreneurship principles such as how product ideas can become businesses. The final days of the camp are reserved for visiting local

manufacturing companies to see what types of career opportunities are available as well as learning about the training and skills needed to obtain those jobs.

Camps Across the Country

Camps take place at numerous locations across the country – each aimed at changing the image of manufacturing for youth. Since the program began in 2004, camps have been held in 27 states. NBT provides guidelines on the basic structure of how a camp should be conducted. Schools follow that blueprint and use their community resources to develop the camps based on local manufacturing needs.

"We're making an investment in the workforce of tomorrow," said Youdell. "We need to increase the pool of available, highly skilled workers to achieve a manufacturing renaissance and improve our economy."

Testimonials

The summer manufacturing camps often leave an indelible mark on the young students who attend them as well as their family members.

Sandra Fabian of St. Cloud Technical College's Summer S.T.A.R. (Students, Technology and Robots) Camp in St. Cloud, Minn., discussed how one student's positive experience made a real impact on the family's future.

"A student's mom approached me so thankful for this opportunity for her son," said Fabian. "She told me how much her son loved the camp and how he came home telling his family all about each day. She talked about how he shared new words he'd learned and processes he'd been taught. She also mentioned that his older brother has now shown interest in attending our college in a technical field, based on his younger brother's enthusiasm."

Students often report positive impressions of their camp experience.

Rick Frazier, camp director at Girls Empowered in Manufacturing at Tallahassee Community College in Tallahassee, Fla., said that a young female camper that was initially hesitant about entering camp changed significantly after the hands-on activities began. “I just realized I am doing something that not every young woman gets to do, and I never imagined I could do this,” the young student said. “I could see myself as a welder and making a good living.”

A student attending a camp at Washington State University in Vancouver Wash., said, “This camp was amazing. I learned so much and it opened my eyes to new horizons.” Another student attending the same camp said he “liked the ability to see first-hand how products are made from raw materials to the final products.”

Attending a summer manufacturing camp can have a positive effect on a child who likes working with their hands and is interested in technology and math. Parents and educators should recognize the availability of such programs and consider introducing their children and students to these fun learning experiences while at the same time battling negative stereotypes about manufacturing.

”Numerous surveys conducted by our own organization and others associated with manufacturing validate the current skilled labor shortage and predict that it will continue to escalate over the next decade if we don’t inform the nation’s youth about the available opportunities and enlist them to fill the sophisticated, high-tech jobs available in areas such as robotics and laser technologies, said Youdell.”

# # #