New Partnership Expands Advanced Manufacturing Opportunities for High School Students

(Dearborn, Mich., March 8, 2017) – Manufacturing jobs are on the rise, but the industry is dealing with a severe shortage of workers equipped with the knowledge and skills needed to function in advanced manufacturing workplaces. To help close the skills gap, NASA’s agency-wide HUNCH (High School Students United with NASA to Create Hardware) program and the SME Education Foundation’s PRIME (Partnership Response In Manufacturing Education) program are partnering to further expand the pipeline of skilled manufacturing talent in the U.S. This new collaboration will attract and introduce more high school students to career opportunities in the industry and prepare them to become the next generation workforce for jobs that are in high demand.

Predictions indicate that 3.5 million manufacturing jobs will be available in the U.S. by 2025. Unfortunately, a significant skills gap will result in 2 million of these jobs going unfilled. NASA and the SME Education Foundation are proud to work together to help solve this talent crisis.

“By combining our PRIME network with NASA’s HUNCH program and working together to further expand the number of schools in the combined network, we can provide more students with access to a STEM and manufacturing focused education using hands-on learning experiences,” said Brian Glowiak, vice president of the SME Education Foundation. “Through this partnership we are motivating youth to consider careers in manufacturing and preparing them with the skillsets and knowledge to succeed.”

PRIME connects regional manufacturers with local high schools to establish or build manufacturing education programs that will grow the workforce in their communities. The SME Education Foundation works with schools to provide industry-driven training for teachers as well as curriculum for the students, while also giving both access to real-world manufacturing equipment and resources.

The HUNCH program provides high school students with the opportunity to gain hands-on experience producing actual hardware identified by NASA scientists, astronauts, and engineers for training and deployment in the International Space Station (ISS). Since 2003, HUNCH students have made hundreds of products for NASA including single stowage lockers, cargo transfer bags, three-minute educational videos, and experiments to fly on the ISS.

Students who experience PRIME and HUNCH enter college or move into post-secondary careers with essential advanced manufacturing knowledge and expertise.

Through the HUNCH program, PRIME schools will have the opportunity to build actual hardware with NASA mentors, bringing a technology focus to even more high schools. Alternately, HUNCH schools will now be part of the PRIME network, having access to SME student memberships, mentoring programs, and technical resources.

“Being involved in programs like HUNCH and PRIME gives our students a chance to experience the best of both worlds – education and manufacturing – and we’re excited to see them combine efforts,” said Dr. Aaron Smith, program director at Denbigh High School’s Aviation Academy. “This collaboration will expose a greater number of students to real-life work experiences that they will carry with them throughout their careers.”

About the SME Education Foundation
The SME Education Foundation is committed to inspiring, preparing and supporting the next generation of manufacturing engineers and technologists. Since its creation by SME in 1979, the SME Education Foundation has provided grants, scholarships and awards through its partnerships with corporations, organizations, foundations and individual donors. Each year, the Foundation awards several hundred scholarships to students pursuing undergraduate and graduate degrees in engineering and technology disciplines closely related to manufacturing. The organization also administers scholarship awards on behalf of major corporations connected to manufacturing. Additionally, the Foundation’s PRIME® initiative was created to provide high school students with a tailored advanced manufacturing/STEM education.

Visit the SME Education Foundation at smeef.org. Follow @mfgeducation on Twitter or facebook.com/SME.Education.Foundation.

About SME
SME connects all those who are passionate about making things that improve our world. As a nonprofit organization, SME has served practitioners, companies, educators, government and communities across the manufacturing spectrum for more than 80 years. Through its strategic areas of events, media, membership, training and development, and the SME Education Foundation, SME is uniquely dedicated to the advancement of manufacturing by addressing both knowledge and skills needed for the industry. Learn more at sme.org, follow @SME_MFG on Twitter or facebook.com/SMEmfg.

About NASA HUNCH
High School Students United with NASA to Create Hardware (HUNCH) is an educational initiative originally started by Stacy Hale to give high school students the opportunity to create hardware with NASA’s aid. Students in the HUNCH program receive valuable experience creating goods for NASA from hardware to the culinary arts, while NASA receives the creativity of the high school students. NASA provide materials, equipment, and mentoring to each of the HUNCH teams across the country so that they can complete their projects to near expert quality over the course of their studies while keeping the students as safe as possible when working with the machinery. These students then present their projects during the HUNCH Ceremony where some projects will be selected to be used in NASA systems and on board the ISS.

Learn more at nasahunch.com or follow on Facebook and Twitter.

About NASA
NASA’s vision is to reach for new heights and reveal the unknown for the benefit of humankind. To do that, thousands of people have been working around the world -- and off of it -- for more than 50 years. In the early 21st century, NASA is extending our senses to see the farthest reaches of the universe, while pushing the boundaries of human spaceflight farther from Earth than ever before.

Learn more at nasa.gov.

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Launching a New Partnership to Advance Students’ Careers in Manufacturing

About PRIME®

Partnership Response in Manufacturing Education (PRIME) was established by the SME Education Foundation in 2011 to build a collaborative network of students, educators, and industry to drive interest and awareness in manufacturing careers and train the next generation manufacturing workforce. PRIME provides high school students opportunities to acquire the knowledge, skillsets and pathways to pursue careers as engineers and skilled technologists with expertise involving mechatronics, welding, CNC programming, robotics, and much more.

PRIME schools utilize real-world manufacturing curricula, teachers receive industry-driven training, and students gain practical experience using state-of-the-art technology and equipment deployed in industry.

Since the program began in 2011, PRIME has impacted more than 40,000 students — of which 7,500 were enrolled in the PRIME program in 2016.

About HUNCH

NASA's High School Students United With NASA Creating Hardware (HUNCH) program provides students with a real-world, project-based learning opportunity in science, technology, engineering and math (STEM). HUNCH students from more than 100 high schools across the United States create hardware for use in both space flight and training applications.

This 14-year-old program also includes design and prototype, soft goods, software development and communications products. There's even a culinary component in which students compete to have their food product flown to the International Space Station (ISS) for crew consumption.

To date, students participating in the HUNCH program have designed and/or manufactured more than 160 items for use on the ISS. Additionally, HUNCH has commenced work with other ongoing NASA programs on projects supporting the future of long-duration missions. Of the more than 20,000 students who have participated in the program, approximately 94 percent have pursued undergraduate degrees following high school graduation.
SMART MACHINES REQUIRE SMART PEOPLE.
START INVENTING THE FUTURE TODAY.

ABOUT THE PARTNERSHIP

NASA HUNCH and the SME Education Foundation are announcing a new partnership to introduce even more high school students to manufacturing career paths. Through HUNCH’s exemplary program, PRIME schools will have the opportunity to build actual hardware for NASA and work on real-world design solutions that will improve the quality of life aboard the International Space Station (ISS). HUNCH schools will be eligible to become part of the powerful PRIME network, which includes access to updated equipment and curriculum, teacher training, scholarships and tailored engagements with local manufacturers.

The partnership between HUNCH and PRIME has a natural synergy. Both organizations have student programs that promote advanced manufacturing and STEM education, as well as engineering and technology careers.

The HUNCH and PRIME programs provide students with relevant hands-on experience using current industry equipment and technologies.

Some 3.5 million manufacturing jobs are expected to become available in the United States by 2025, yet 2 million of those skilled jobs are estimated to go unfilled due to a skills gap. HUNCH and PRIME are helping to solve this crisis by preparing and developing youth to become America’s future manufacturing workforce.

TO LEARN MORE ABOUT THE PRIME PROGRAM VISIT SMEEF.ORG.
FOR MORE INFORMATION ABOUT THE NASA HUNCH PROGRAM VISIT NASAHUNCH.COM.
LAUNCHING A NEW PARTNERSHIP TO ADVANCE STUDENTS’ CAREERS IN MANUFACTURING

Come learn more at the Keynote!
Wednesday, March 8th at 8:00 a.m.
The Deck, Hall A

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THOUSANDS OF STUDENTS EXCITED ABOUT MANUFACTURING CAREERS.