

ONLINE EXCLUSIVE: AME, Reshoring Initiative Encourage Education to Drive Manufacturing Growth

By Glenn Marshall

[The Association for Manufacturing Excellence](#) (AME) and the Reshoring Initiative led by Harry Moser are continuing to work with policymakers, alliance partners and corporate members to help schools and colleges provide the pathways to a relevant curriculum, training and critical thinking skills to prepare students to be successful in [shipbuilding](#) and [advanced manufacturing](#) careers.

The National Association of Manufacturers (NAM), Manufacturing Institute (MI) [2011 Skills Gap study](#) reports that 82 percent of manufacturers have a moderate or serious shortage of skilled production workers, 5 percent of all manufacturing jobs — or 600,000 jobs — open because there is no qualified talent.

Age promises to have an effect as well, with 2.7 million manufacturing employees of 55 years of age or older leaving the labor force over the next 10 years. U.S. unemployment, as measured by Gallup without seasonal adjustment, increased to 9.1 percent in February 2012 from 8.6 percent in January and 8.5 percent in December.

In addition to the 9.1 percent of U.S. workers who are unemployed, 10 percent are working part time but want full-time work. This percentage is similar to the 10.1 percent in January, but is higher than the 9.6 percent of February 2011.

President Obama and his Council of Economic Advisers released a report, "Preparing The Workers of Today for the Jobs of Tomorrow." The report details the needs for a more effective educational and training infrastructure. These initiatives can produce well-trained and highly skilled workers who will be positioned to secure high-wage jobs, and will help fuel future prosperity and the "Rebirth of Manufacturing Jobs." The bottom line is manufacturing jobs depend on today's students having the ability and opportunity to learn.

Challenges

U.S. students trail students in other industrialized nations, according to the results of the 2009 Program for International Student Assessment (PISA). The study revealed that U.S. students rank average in reading and science, but below average in math. America's high school graduation rate ranks 19th in the world, while 40 years ago, the United States ranked No. 1.

Steep school dropout rates average 7,200 students daily, or about 1.3 million a year. To participate fully in society and the workplace, citizens will need powerful literacy abilities (capable of reading and writing properly) that until now have been achieved by only a small percentage of the population. Having a steady supply of highly skilled workers, scientists, researchers and engineers is seen as the top driver of the manufacturing competitiveness of nations and their standard of living.

Foundation for Learning

To be successful in today's 21st century global economy, U.S. students must develop oral language, reading and writing abilities that are central to an education. Investing in world-class public education and U.S. human capital is the only option to sustain innovation and international competitiveness if the U.S. wants to once again become the world's leading manufacturing powerhouse. The [International Dyslexia Association \(IDA\)](#) is supporting the newly developed Literacy Education for All, Results for the Nation (LEARN) act.

"Toward this end, each state must establish new laws mandating student literacy," said Cinthia Coletti Haan, IDA Board vice president. "All U.S. students must be literate — able to read, to write, to spell and to think critically about printed material and subject matter."

Through industry and education and government, we need to prepare children to go to work, according to John Shifflett, [Newport News Shipbuilding](#), director of leadership, professional and technical development. For example, we participate in a program at the federal level called Career Pathways through the Department of Education. Schools can apply to participate in the program. Together, we connect with students about the fact that they can have good [careers in shipbuilding](#).

[Career Pathways](#) program is a proven way to reach out to the public schools to attract students to consider, and prepare them for careers in manufacturing following the [Manufacturing Pathway Map](#). The manufacturing presence in the elementary, middle and high schools provides exposure to companies, and career readiness needs requiring STEM

(Science Technology Engineering Math) skills. Career Pathways is providing career readiness skills as well as providing a more advanced knowledge of those same STEM skills needed for college or jobs in advance manufacturing.

Students with learning or social challenges can be provided the appropriate research-based intervention at the earliest possible age for them to be successful. Detected early, such students can avoid emotional pain and frustration that comes from feeling stupid, and being teased or bullied by their classmates. Going undiagnosed, many give up, drop out of school and can even end up in prison.

Positive Learning Environment

In addition to helping students overcome learning challenges, other situations affecting a productive and positive learning environment must exist in our schools. The National Association of School Psychologists estimated 160,000 students miss school every day because of verbal or physical intimidation by their classmates.

Almost 30 percent of youth in the United States (or more than 5.7 million) are estimated to be involved in bullying, are a target of bullying, or both. According to the University of Virginia, 100,000 students carry a gun to school and 282,000 students are physically attacked in secondary schools each month. Conflict resolution can be one of the biggest problems facing society in stressful and disruptive economic times. This is a situation that must be proactively addressed; left unchecked, it will continue to contribute to the lack of a safe, effective and productive learning environment.

Schools and organizations are looking for proven programs to address these troubling issues. One of the leading programs is [Peaceful Alternatives to Tough Situations](#)(PATTs). It was developed by [Center for Child and Family Services](#) in Hampton, VA. The Center, which was established in 1943, is a comprehensive provider of counseling and support services to children, adults, families and organizations. Its mission is to provide quality counseling and support services that *empower* individuals and families to improve their lives.

PATTs is a school-based aggression management program designed to help students increase positive conflict-resolution skills, increase the ability to forgive transgressions and reduce aggressive behavior. PATTs features three separate curricula (for kindergarten through grade 2, grades 3 through 5, and middle and high school), each of which is delivered in nine weekly, one-hour sessions.

Sessions are highly interactive and use group discussion, role-playing, games and skills review. Parents and teachers receive training informing them about the skills taught to students and encouraging them to support the use of the skills at home and in the classroom. PATTs is designed to be delivered by teachers, guidance counselors and graduate or undergraduate mental health counselors. "Not only did this program work for our gang-intervention youth, it changed my facilitators in a positive way," said L.Fauntleroy, YAP Director, Atlantic City, NJ.

Since its inception in 1993, PATTs has been implemented in seven different school districts and a total of 46 schools. Since 2009, PATTs became an accredited evidence-based program and has been sold to 31 different facilities in 18 states. Besides the public schools, PATTs has been used in a variety of other settings, including alternative schools, juvenile court services, group homes, psychiatric facilities and outpatient mental health agencies.

The results achieved by successful youth empowerment programs can have a significant impact on enhancing the learning experience, academic performance and quality of life for the students, teachers, parents and employees.

About the Reshoring Initiative

A 40-year manufacturing industry veteran and retired president of GF AgieCharmilles, Harry Moser founded the Reshoring Initiative to move lost jobs back to the United States. For his efforts in this initiative, he was named to *Industry Week's* Manufacturing Hall of Fame in 2010. Additional information on the Reshoring Initiative is available at www.reshorennow.org.

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