SOLUTIONS

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McClarin is Reaching Out to Students

"It's the Right Thing to Do"

Industry must step up and help our school districts. This isn't just talk at McClarin Plastics—they're walking the walk too. For the past 5 years, McClarin has partnered with schools, colleges, chambers of commerce, industry associations and other manufacturers to offer programs designed to pique a student's interest not only in manufacturing, but in other careers as well.

"We're not doing this to find employees—we're involved with students because it's the right thing to do. It's good for the community and the economy," said Todd Kennedy, President of McClarin Plastics.

The newest program that McClarin is involved in is **Adventures in Technology**, a cooperative effort between McClarin Plastics, Mantec, and the South Western School District. During the Fall 2006 semester, eight students with diverse interests and backgrounds came together for two hours each week at McClarin. The 10th through 12th graders worked with McClarin mentor Tim Dietz and their school instructors to identify an issue for which the company is seeking a solution. They focused on how the company handled fiberglass overspray. The students studied the process, evaluated what was happening, developed a couple of solutions, ran a cost/benefit analysis and then presented their findings and recommendations to McClarin's management. The students' recommendation was deemed a viable, innovative solution and management decided to implement it. The solution is projected to save the company about $95,000 over the next five years.

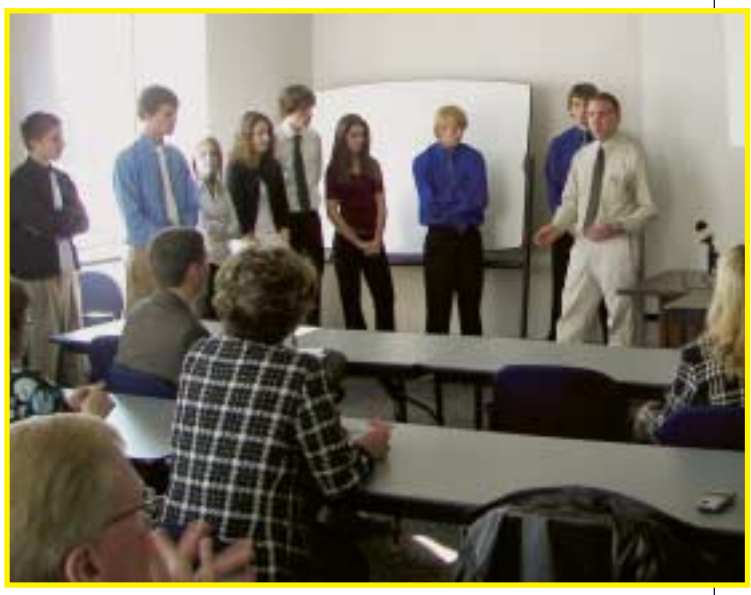
"This program was designed to give 'bottom line' exposure to the students and trigger ideas for their future. Manufacturing and corporate functions were disassembled so the students could understand how many disciplines fit together to make a company work," said Rob McIlvaine, Vice President of Mantec, a non-profit organization dedicated to meeting the needs of small and mid-sized manufacturing enterprises in South Central PA. Mantec secured a grant from the PA Industrial Resource Center Network to help fund the program.

The **Adventures in Technology** program has drawn so much interest from the students and community that FOX43 News featured it in one of their segments in December.

For the past three years, McClarin has joined Harrisburg Area Community College (HACC), the Hanover Chamber of Commerce, local school districts and eight other manufacturers to present **Introduction to Manufacturing**. The program is based on one of McClarin's **Economics of Manufacturing**, an in-house training program that all of their employees are required to complete. During the semester long program, students learn about the different disciplines that make manufacturing work, including management, sales, operations, finance, and the impact a product and company has on the economy. The students visit each of the eight participating manufacturers for a tour and the chance to meet and talk to a company representative. The program is taught by a full-time HACC instructor. The students earn one credit for participating in the program.

"When students are allowed to be creative and inquisitive, it gets their attention. The Adventures in Technology and Introduction to Manufacturing programs put a unique real world spin on what is possible for their future," said Lisa Dennis, School to Career Coordinator at South Western High School. "McClarin's interest in and commitment to our students is invaluable. They've made the programs a reality not only through their financial commitment, but also their personnel commitment—every company needs an Al Beily!" Beily is McClarin's contracted Director of Education and Training.

McClarin's commitment to our youth's development begins before high school. In May 2006, McClarin, along with the Thermoforming Division of the Society of Plastics Engineers, sponsored a three-day Plastics Outreach program. They arranged for a visit from PlastiVan,™ one of four from the National Plastics Center. The 10 year old program is geared to the middle school student, though all ages can learn from the program. It is designed to stimulate interest in plastics by educating the audience about the manufacturing, chemistry, history, environmental issues, application and social impact of the material. The program's facilitators demonstrate thermoforming right in the classroom while the teachers supplement the program with experiments of their own.



Students from South Western High School present their program findings to members of McClarin Plastics' management team.

The PlastiVan™ visited the Emory Markle Intermediate School in Hanover, PA. "As a teacher, I really enjoyed watching the students' faces when they were able to accomplish something they thought was impossible. They realized that it wasn't magic; it is science," said Maggie Hallman, a sixth grade teacher at Emory Markle.

The basic philosophy around McClarin is that we're all in this together. It benefits everyone to stimulate the intelligence, imagination, and confidence of our students.

The Aesthetics of Plastic

Using Color and Pattern in Manufacturing and Branding

Within 90 seconds of initial viewing, people make a subconscious judgment about a product; 62–90% of that assessment is based on color. (Source: CCICOLOR–Institute of Color Research) According to Gael Towey, the creative director at Martha Stewart Living Omnimedia, color creates emotion, triggers memory and gives sensation.

Because color affects a product's readability and ability to attract attention, it is vital to brand identity as evidenced in Vermeer's yellow. But color enhances a product design in other ways such as allowing changes without retooling.

"Color changes make mid-market and model year changes, limited editions, or highlighting a part easy and cost effective," said Roger Kipp, Vice President of Marketing and Engineering for McClarin.

Any color can be added or changed by using a colored plastic sheet or painting the piece with automotive quality paint. Painting is especially useful for limited quantity runs, high gloss finishes, cosmetic and stylized parts or two-tones such as JLG's engine cover in which the outside is the "brand" color and the interior a light color to make it brighter.

Traditionally, color has been used where aesthetics are considered important. But now, color and pattern are being used in not so glamorous applications, such as the service cab of a concrete truck. Employers and manufacturers are beginning to understand the positive impact of making the work environment friendlier and more comfortable.

Since pattern engages the consumer, it is an ideal companion to color; again offering the option to change the look without retooling—such as going from a wood to a chrome look. This is ideal for a limited edition offering.

Patterned plastics offer a number of benefits when used in place of an original material. Wood inspired patterns in plastic stand up to UV exposure and can be replaced with ease and economy. The patterned plastic parts can be easily reproduced with an exact pattern and offer consistency from piece to piece.

According to Mike Cardwell of Southtech Plastics, a raw plastics supplier, the most popular colors and patterns are brushed metals such as aluminum, copper, stainless, chrome and smoked chrome. Colored metallic finishes in yellow, orange and blue are hot. Wood-inspired plastics are becoming more sophisticated with the introduction of exotics like Zebrano, and new twists on straight grains like Metallic Cherry which features a metallic mist imposed over the wood look.

Molded-in color provides customer identification while maintaining a brand identity.

In addition to a decorative pattern, your logo can be reproduced in a repetitive pattern on the plastic to reinforce your branding.

Color and pattern can be achieved using paint, Gelcoats, films and various printing techniques including digital and screens. Painting, color matching and forming laminates of patterned plastic are all value-added services provided by McClarin Plastics.

The professionals at McClarin will work with you to help strengthen your design and branding efforts by using color and pattern. They will help you choose the most effective and cost efficient process to meet your needs.

A Bigger, Better Space for McClarin

It started out as a way to combine the synergies of office and manufacturing employees. The 2005 consolidation of two thermoforming plants and an office building should have served McClarin Plastics for at least 5 years. Within two years, they needed an additional 42,000 square feet of space to bring the state-of-the-art facility to 110,000 square feet. With this additional expansion, McClarin's total manufacturing space is now over 200,000 square feet combined in three facilities for FRP and Thermoforming.

Because the total involvement of all employees is essential to keeping McClarin competitive, employees were encouraged to make design recommendations. These suggestions became the driving force in making the space efficient, effective and user-friendly.

"We're investing in our customers, employees, and future—it's a big part of who we are. After all, more space is wasted space if it is not used properly."

– Todd Kennedy, President of McClarin Plastics

"We drew inspiration from those who use the space every day and involved every facet of the organization," said Todd Kennedy, President of McClarin Plastics. "We integrated their suggestions with three philosophies: Lean, Kaizen and the 5Ss."

Using the Kaizen philosophy, 'a short focused event that targets continuous improvement', and the 5Ss: Sort, Set & Order, Shine, Standardize and Sustain, the space ensures less stress for employees and the highest standard of service for customers. Some of the improvements include elimination of extra and repetitive movements, a vacuum system for continuous clean-up, and expanded employee facilities.

McClarin Plastics' new state-of-the-art facility in Hanover, PA.

The new space includes two Value-Added Assembly Cells, with room to add more; another new Brown Thermoforming machine; and three additional dock doors to accommodate Lean Manufacturing and stage trucking.

"Pushing the envelope is essential in our industry. To be years ahead in technology, we're taking our forward leaps in big chunks. It's not cheap, but the return on the investment for our employees and customers is tremendous. We only do it if it makes sense," continued Kennedy.

The new facility is located at 15 Industrial Drive in Hanover, PA. If you'd like to take a tour, contact **Robin Rebert** at **(800) 233-3189.**

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