Providing workforce solutions

A roadmap to hosting a career day for students

By Crystal Hunt, Public Relations Manager, Marketing Communications, Endress+Hauser USA, Greenwood, Indiana

We are all aware of the high demand for skilled—often highly skilled engineering—personnel needed in order for U.S. manufacturing to prosper. Process automation and control, a niche market within the advanced manufacturing realm, has an even greater need to attract talent to the industry. As demand increases in process automation, manufacturers are seeing the retirement of an experienced workforce, leaving manufacturers scrambling for a solution. Baby Boomers are retiring at an accelerated rate. In fact, nearly 10,000 Baby Boomers retire every day which equates to about 400,000 years of experience lost daily. As the manufacturing sector struggles to fill this gap, companies are looking to attract young people to the manufacturing job market.

How to attract young minds to the process automation and control industry?

Attracting young people to the industry is a nurturing process. The cradle-to-grave approach, led by the Automation Federation's Workforce Development model, stresses the importance of strengthening STEM at the grade school level. We are able to join in the efforts started by Project Lead the Way—a provider of STEM education curricular programs used in middle and high schools across the US—to create more awareness surrounding STEM-related careers in the field of automation.

We understand that it is important to start at the very beginning to make any changes. Therefore, we believe engaging with students in problem-based learning is essential. Young students need more hands-on opportunities. We see that critical thinking and problem solving skills are of the utmost importance and, as potential employers, we need to stress those skills in order to really engage students.

Why a "Career Day" is important?

In middle school, students are just beginning to develop their interests in different subject matters. Part of this development comes from exposure. If we want students to be interested in STEM, it is vital that they see what is offered by the field. For this reason, the first annual CCEF was born.

Coming to the Community Career+Education Forum (CCEF) allows young students to get a taste of what the industry is all about and what we do. We wanted to introduce the subject matter in an interesting and fun way that would stimulate this age group and get them excited for the activities. The CCEF goes a step further than a traditional career fair because we start at the beginning. We show them just how interesting and important STEM is, so that they can begin thinking of this field as they go through school.

Endress+Hauser

People for Process Automation

Why get involved with the community?

Endress+Hauser is lucky to be a part of a great community and we believe that it is important to give back to it. This was an opportunity to demonstrate how science, technology, engineering and mathematics (STEM) programs can prepare students for exciting careers in advanced manufacturing. Our mission was to change the perception of manufacturing and that is exactly what we accomplished with the forum.

Before we held our first CCEF, Brandyn Ferguson (Vice President of Human Resources) was very interested in community outreach. He spoke to our General Manager, Todd Lucey, who encouraged him to become further involved in community affairs for the company. We began by giving tours of our facility. We also attended job fairs at universities such as Rose-Hulman Institute of Technology, Purdue University, and Texas A&M University. This gave some access for those interested, but we felt we still needed to go a step further.

We began brainstorming ideas with Central Nine Career Center, a local vocational school, on how to really reach those in the community as well as to begin a potential partnership. At the same time, Brandyn Ferguson was involved with a program called Aspire Johnson County, which aimed at attracting talent and businesses to the county. Brandyn pulled some people within our Marketing Communications department into the program to overlay a degree of professionalism. As this was all taking place in 2014, a new training facility was being built on the Endress+Hauser campus and Todd Lucey was passionate about showcasing the company, and the industry to the community and beyond.

The CCEF is equally important for Endress+Hauser because we were able to establish ourselves in the community in a positive light as we bring in young kids to experience what we have to offer. It is very important that our company has a presence, but also that we are able to give back to the Greenwood community. The CCEF introduces new, innovative ideas to young students and gets them interested in the subject matter.

How much preparation will need to be done?

As far as planning goes, it is very important to lay everything out ahead of time. We began identifying the problem, the audience, and the take-away points in February of 2014. We had a working group that met every other week, for an hour or two from February until June, during which meetings we developed a plan and then worked to execute that plan.

When we first started in February, there were only eight to ten of us in the meetings. Just before the event, up to 20 people were working to prepare. We had 20 volunteers working the event itself. The first CCEF took place in late June of 2014.

We spent an estimated 250 hours planning for the CCEF. Some additional time was spent creating the model of the program since it had not been done before. Having the first forum under our belt will lessen the planning cycle. Moving forward, this year's CCEF will be held in October rather than in the summer because we found that it was very difficult for educators to round up students over their summer break. We would not recommend hosting a forum in the summer.

Our partners

Central Nine Career Center, a local vocational school that receives funding from nine school districts, was one of our major partners. They helped with community outreach and with communicating to the schools around us. Central Nine also had a booth at the forum.

Some of our other exhibitors included American Industrial Corporation, Caterpillar®, Electro-Spec, Inc., FIRST®, FTC®, FLL®, Heartland Machine & Engineering, Major Tool & Machine, Inc., Nachi, NSK, Rockwell Automation, Stratus Technologies, and VisualEdge, Inc. Many of these businesses are fellow advanced manufacturing companies with a mission similar to ours at Endress+Hauser.

We also wanted to have higher education exhibitors show students some of their options. Purdue University—College of Technology, Rose-Hulman Institute of Technology, and Ivy Tech Community College came to exhibit their role in the engineering field.

A few local schools also brought their robotics teams to the forum to display their hard work to students, such as First® Team 234 Cyber Blue Robotics (Perry Meridian High School), First® Team 1741 CyberCards Robotics (Southport High School), First®1741 Red Alert Robotics (Center Grove High School), and First® Team 3180 Blaise of Glory (Indian Creek High School).

How did we get in touch with schools?

We worked closely with Central Nine Career Center who had the capabilities to easily connect us to the local middle schools. Central Nine helped make contact with the guidance counselors and educators as well as send out flyers to the schools. One of our biggest hurdles was connecting with the schools. After Central Nine made contact, their requests would get bounced from superintendents to principals to assistant principals to guidance counselors, and nothing would get done.

Ultimately, we had to turn to the phones and face-to-face visits to find the right contact at the middle schools. We set up conference calls with the principals, assistant principals, and guidance counselors to really get the ball rolling.

Why was scheduling an issue?

Although it was difficult to get awareness out regarding CCEF from the teachers to the students during the summer when school was not in session, we still had around 300 attendees from ten middle schools. This year, CCEF will be held in October and we are estimating 600 attendees. We've had more time to plan and to communicate with these schools. This year we are shifting our target audience to 7, 8 and 9th grade students.

How much did it cost?

Endress+Hauser was the only source of funding for CCEF. We spent about $15,000 on the event and most of that was just in materials. Additionally, we offered grants to the schools and invited the participating manufactures to also help fund this cause. The classroom grants totaled $5,000; each of the ten schools received $500.

What did the students get to experience?

The PTU® (Process Training Unit) Challenge was one of the most popular events among students. They were able to interact with Endress+Hauser measurement instrumentation in a real-life process plant environment. Students were running from flowmeters to pressure sensors with grins as they read displays and learned the functions of each device.

Additionally, the students got to speak to ten area employers – the exhibiting advanced manufacturing companies - about career opportunities in manufacturing. The forum gave students a great opportunity to see firsthand that manufacturing isn't dirty factories and unhealthy work conditions anymore. We were able to show the students that the manufacturing industry is not only an enjoyable work environment, but also a career field that is incredibly rewarding.

As part of CCEF, Endress+Hauser worked to incorporate a theme that students could relate to and enjoy learning about – chocolate milk! Endress+Hauser took students on tours of the production centers where they learned firsthand how our measurement instruments helped in the chocolate milk production process. In 2015, our theme will be around ice cream production. Students will tour our manufacturing facilities and learn how ice cream is made and how process instrumentation and control plays a key role in ensuring quality and safety in this process. They also got to see many info booths at the forum with different groups like robotics teams and other manufacturing companies.

Another big success during the forum was incorporating social media as a channel for kids to engage and participate in during the event. Trivia questions were asked on our social media channel and students were able to answer questions via Twitter. Prizes such as beats headphones, iTunes gift cards and other neat electronics were given to winners of the trivia. We also used a hashtag during the forum - #CCEF2014. Kids really grabbed on to this social media concept and shared in their experience at the forum – which was really cool!

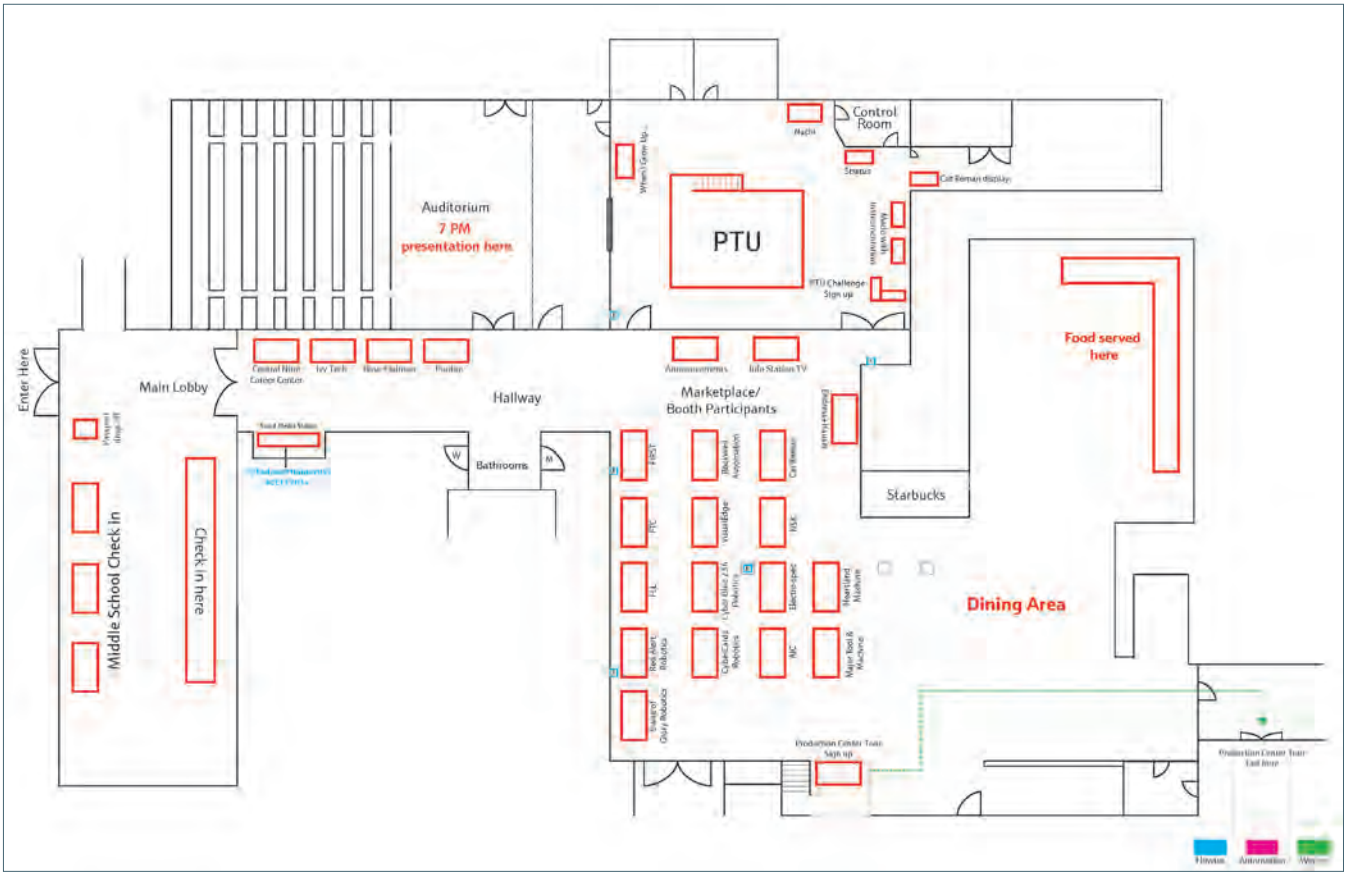
Other fun things that helped make the event so unique were: having a fun emcee making announcements throughout the night; free pizza dinner for the kids so that parents wouldn't have to worry about dinner that evening; and many more little details.

We also had a formal presentation with a few short speeches in the middle of the event that proved to not be a favorable idea. Kids were so engaged in the forum so pulling everyone together to sit through speeches was less than ideal – but a good learning opportunity for us.

Useful tools

Endress+Hauser's Marketing Communications team put together several tools and collateral that helped out in the evening's flow of activities, such as a:

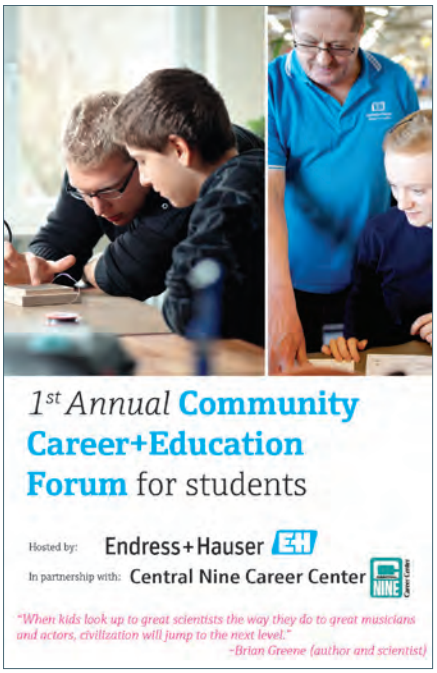
1. Marketplace map



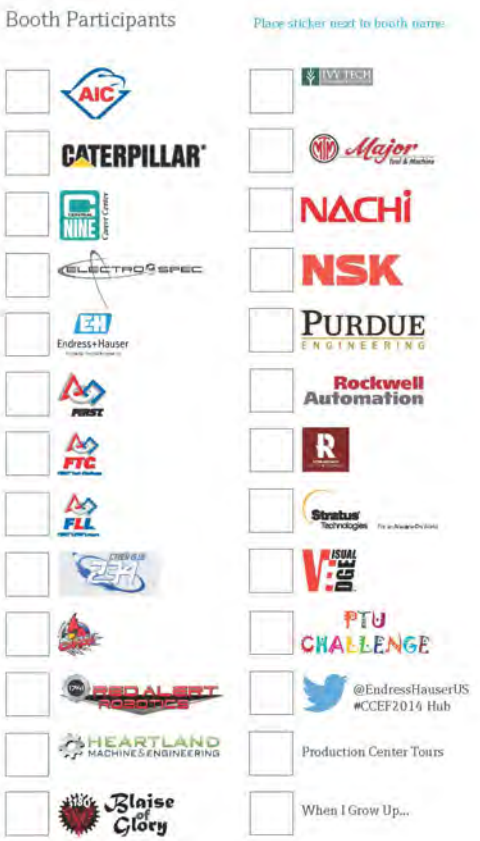
2. Program

The program outlined the following information:

- Letter to our guests
- Special thanks to all partners and participants
- Evening agenda
- Information about speakers
- Information about each booth participant (1 paragraph description as well as their company logo)
- About the PTU® (Process Training Unit) Challenge
- About the "Going places with STEM Passport"
- Map of the marketplace booths and activities
- Social Media details



3. Passport



In summary

CCEF was an opportunity for us at Endress+Hauser to educate and introduce new ideas surrounding the manufacturing field. We were able to inspire and interact with students who may have had no idea these types of opportunities were out there. Students left excited and enthusiastic about learning and we were excited about our future workforce!

To learn more about the Community Career+Education Forum, please visit the following links for more details:
http://www.us.endress.com/CCEF-2014
http://www.us.endress.com/ccef-recap-2014

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