SkillsUSA 2016 Championships

BY GREG AND SUE BURNET

For the past several months we've talked about—and lamented—the fact that the building industry is experiencing an acute shortage of skilled workers. In particular, young workers seem to be MIA these days—or so we thought. One program working to fill the void is SkillsUSA—a partnership of students, teachers, and industry working together to develop a skilled workforce for the building trades. SkillsUSA focuses on helping students excel by providing educational programs, events, and competitions that support career and technical education (CTE) in the nation's classrooms.

Recently, we had the opportunity to attend the 2016 SkillsUSA national conference, in Louisville, Ky. We had been invited by fellow JLC Live colleague, Bill Robinson, to be judges for the TeamWorks events, and we spent a whole week there taking in the competition.

When we arrived on the show floor for orientation, we were astonished by the enormity and energy of the event. All the building trades—carpentry, masonry, sheet metal, plumbing, electrical, and cabinetry—were represented, and we witnessed 400 to 500 students excel in each of these programs. And these were only the national qualifiers. For every team we saw, there were probably an equal number of second- and third-place competitors. These numbers suggest that there are thousands of children and adults interested in building-related industries.

Photos by Sue Burnet

THE NATIONAL COMPETITION

Held at the Kentucky Expo Center, the entire competition covered more than a million square feet. The TeamWorks area alone was about the size of a football field. This part of the competition is a two-day build where each four-member team is required to complete the construction of a small "house." The featured areas of skill are carpentry, plumbing, electrical, and masonry. Many of these disciplines also have their own (one-day) competition as well, but TeamWorks emphasizes being part of a collective effort rather than individual achievement **(1)**.

Of the 48 teams that competed at the TeamWorks event, 34 were from high schools and 14 were post-secondary (college or tech-school). The ages of the competitors varied greatly, from 15 to over 50. There is no age limit for the competition, but each participant needs to be enrolled in a school program and be a member of a SkillsUSA chapter.

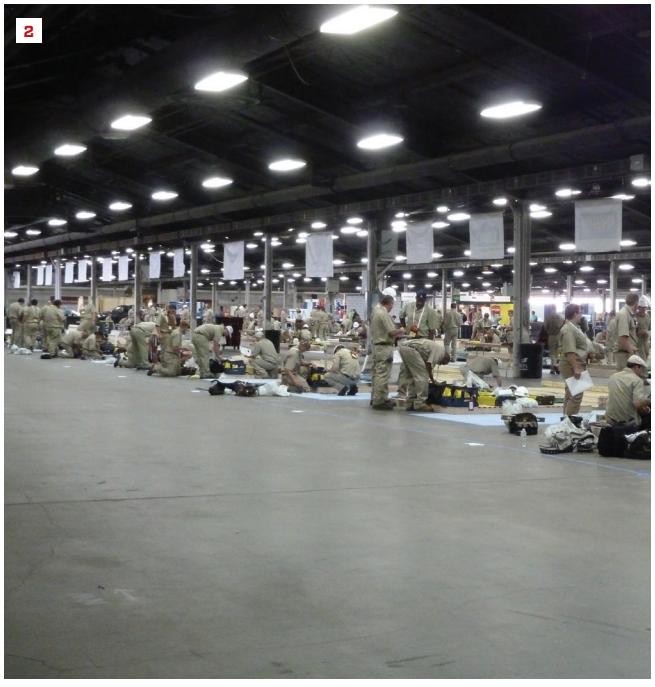
THE PREP

When the students arrived for the orientation, they received plans for the structure they were to build. That same day, they were required to present a 5- to 10-minute team synopsis, which they were graded on in front of the judges. At their presentation, they introduced their team, discussed their preparation and experience, and provided an outline of their plan for the build (time line, key responsibilities, and so on).

Once these initial presentations were complete, the teams were permitted to prep their tools and organize their workstations, but they were prohibited from beginning the build **(2)**. They could spend rest of the day reviewing the prints and finalizing a plan of attack.

THE BUILD

When the teams arrived for the two-day build the next day at 7:30 a.m., they began with a short briefing and then were off to the races by 8. Competitors could work until 2 p.m. that day and until 5 p.m. the following day. Seven judges oversaw the completion, watching for safety, as well as evaluating each build. Proper tool and ladder use were given extra attention. Even though the participants were required to have their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OSHA certification, they sometimes forgot the basics in the heat of the competition.

During the build, each team was required to pass a plumbing skills test and another for electrical. The plumbing test was somewhat complex, with one team member required to solder together, in less than 40 minutes, an assembly of copper pipes that had to match a prototype. Each completed assembly was pressure-tested, and if it passed, it was then checked for leaks by being placed in a tub of water. This proved to be a challenge, with only about 20 teams passing both tests **(3)**.

The electrical skills test was a bit easier: Each team had 10 minutes to identify seven different wired-box assemblies. Most of the teams passed this test. As judges, we helped to monitor this station and were impressed by one particular participant who was extremely methodical, checking her work twice before completing the test correctly. Afterward, we asked her age and she replied, "Fifteen." The knowledge and work habits she showed were remarkable for any age—we would have hired her in a second.

That ethic was typical of what we saw throughout the competition. The students had great beginning knowledge of the trades and plenty of drive and enthusiasm. Of course, they were "green," but for younger participants who may have been involved in these programs for only a couple of years and probably for only a few hours each day, their skills and attitude were amazing.

It was not our job as judges to step in and coach the teams—we so wanted to help them succeed, but this was not allowed. It was important to remain as impartial as possible; it was a competition after all.

NOT JUST HIGH-SCHOOLERS

In the 14 post-secondary teams, there is no age limit. We talked to several of these teams after the competition and heard interesting stories. On one team, from New Mexico, all four competitors attended the Navajo Technical University. In 2013, this school's team was the state TeamWorks gold medalist.

Another team, from Kansas, had a mother and son who had recently purchased a mountain cabin. They wanted to renovate the structure, so they both enrolled in a secondary program and are now working on the cabin together. The mom had worked for a utility company for 15 years and hadn't really swung a hammer until last August.

MOVING FORWARD

The building-trade competitions made up just a fraction of the overall event. Every conceivable trade, from robotics and computer programming to welding and culinary skills, was represented. The common mantra we heard was: "Take your time, do your best, and have fun!"

SkillsUSA made it clear that many people—young and old—are interested in the trades. So, how do we find them, recruit them, and get them to stay in the industry? Talking with other judges, the real question was: What are *you* going to do about it?

It comes down to involvement. Whether you're looking to change our industry, elevate skill levels, or simply find good help, you need to get involved. SkillsUSA is just one avenue. You can look for your local chapter or start your own. But there are many other things you can do as well: Contact a local Votech school and see how you can help them; mentor someone from a school or someone new to the industry; and think about how you can further develop your own employees with additional skills training.

Sue and Greg Burnet own Toolbelt Productions (toolbeltproductions.com).