

Heavy Metal Summer Experience

by Kathy Bergstrom, CEBS

Alejandra Rios's plan to study accounting at her local community college "fell out the door" the minute she did her first hands-on project at a summer camp highlighting careers in the trades.

Rios, now 21, was a participant in one of the first Heavy Metal Summer Experience (HMSE) camps in the summer of 2021, and that first project was a metal toolbox. "Once I was introduced to this, I found out this is my jam. I could see myself doing this more than accounting," Rios recalled.

Although the camp's name might evoke thoughts of screaming guitars and pounding drums, HMSE focuses on a different kind of heavy metal—copper pipes, sheet metal, ductwork and more.

Almost immediately after completing the camp, Rios was hired into an entry-level job as a material handler with the host contractor as she waited for a spot to open in an apprenticeship program. Rios is now a third-year sheet metal apprentice and looking forward to a career in the trades.

Contractors and apprenticeship programs that host HMSE camps hope that the program will get more high school students like Rios excited about and working in the trades.

Program History

HMSE is a nonprofit organization that provides union contractors and apprenticeship programs in the United States and Canada with program design and tools to run their own programs.

Angie Simon, the nonprofit's executive director, first came up with the idea for a summer camp to promote the trades in 2020. Simon was the former chief executive officer of Western Allied Mechanical, a sheet metal contractor in Union City, California, and was also the president of the Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) at the time. "As I went through the country to talk to local association boards, everyone had such a big concern about where we're going to get tradespeople coming up to replace the people who would be retiring in the next five or ten years," Simon remembered.

She thought about the underserved youth who live in the East Palo Alto, California neighborhood in her company's backyard and wondered whether there was a way to solve two problems at once. "I thought maybe we should run a summer camp and teach some people that they could have an amazing career in the trades," she said.

She put together a business plan and presented it at the SMACNA national virtual convention in 2020. The first two camps were held in the summer of 2021 with 28 participants. Last summer, there were 36 camps in the U.S. and Canada with 500 campers. So far in 2025, 53 camps are planned with approximately 900 students.

Camp Details

Simon has since retired from her day job and co-founded the HMSE nonprofit with Rick Hermanson, the chief executive officer of Hermanson Company in Kent, Washington.



Alejandra Rios (left) participated in one of the first Heavy Metal Summer Experience camps. She is now a third-year sheet metal apprentice.

The HMSE camp is free to participants. In addition to the instruction, participants receive a pair of work boots and a toolbelt, the cost of which is covered by donors. The camps may be hosted by a union contractor or a joint apprenticeship and training committee (JATC). HMSE funds approximately half of the \$2,000 cost per participant, and the local host must provide the remainder of the funding.

Each camp runs for 30 to 40 hours, with schedules varying by site. Some run their programs for a few hours in the late afternoon for several weeks when shop time is available, and others run one-week, full-day programs.

The camps focus on providing hands-on experience in sheet metal, plumbing and pipe fitting, and electrical trades. Campers might learn skills as basic as using a tape measure to more complicated tasks like 3D modeling.

"Right off the bat we get them going on projects," Simon said. "We have found that they love fire, and welding things seems to be very popular with them."

Projects range from belt buckles and lamps to copper stands for tablet computers and toolboxes. Campers at one Michigan site made firepits, which requires steps including computer design, cutting metal and welding. The camps submit their projects to a playbook maintained by the nonprofit, providing ideas for other sites. The playbook also has resources, including permission slips, marketing materials and posters.

Some of the camps are extending into other trades or specializing in one trade. For example, a camp in the Quad Cities area of Iowa and Illinois plans to have an all-electrical trades curriculum this summer. The Tennessee Titans football team will host a camp at its new stadium construction project.

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Campers at the Hamilton, Ontario Heavy Metal Summer Experience site put their newly learned skills to the test.

Campers

The recommended target group for participants is 16- to 19-year-olds who are still in high school, but camps will accept freshmen and sophomores as well as young adults taking a gap year.

“The big challenge is recruiting,” Simon said. Programs reach out to technical education programs at high schools to find participants. Simon also encourages them to work with nonprofits and to focus on recruiting girls and people of color. “My goal is to make construction look a little different than it does now. I stress to the camps, try to make the demographics of the camp look like your city, and I’m really impressed. Most of our camps are doing a great job of that,” she noted.

Word of mouth typically builds after one camp is held in a community, and some of the sites are beginning to receive more applicants than they can accommodate.

Experience Gained

“I think we open their eyes to the possibilities of how much money they can make and also the great benefits in a career in the union trades,” Simon said. “We open their parents’ eyes as well.”

“I’m surprised at how many kids said ‘when I thought of construction, I thought it was digging a ditch or Roto-Rooting.’ They don’t realize how much technology is involved in construction, how many benefits there are and how much need there is going forward in the construction industry as many people are retiring,” she added.

“The biggest thing is the students get some hands-on time with real professionals in the trade. They’re working shoulder to shoulder with them,” said Chris Muha, a foreperson who coordinates the camp hosted by Lancaster Group in Hamilton, Ontario. Participants get a chance to ask tradespeople what they like about working in the trades and the opportunities it provides, he added.

“I always explain to the students that just because you start in apprenticeship doesn’t mean you’re going to have your hands on tools the rest of your career,” Muha commented. “It’s a career path that has so many different facets to it and so many different avenues that once you get your foot in the door you can pretty much go wherever you want with it if you’re willing to put in the time.”

Muha also sees value in the campers learning that they may not want to work in the trades.

Making Career Connections

About 90% of surveyed campers say they would consider a career in the trades, but tracking relies on the camps reporting student numbers back to HMSE. The nonprofit is working on setting up a better system, such as an app, to track graduates and whether they pursue apprenticeships.

Hermanson Company, which was one of the first two campsites, hired two participants—including Rios—after its first camp. The other ex-camper hired by Hermanson is now a union apprentice in the pipe trades. “It’s exciting watching some of these kids come to work for us. There’s a lot of joy when they join the apprenticeship program,” said Jana Burbank, chief of staff at Hermanson.

Although there is usually a wait to get accepted into an apprentice program, participants can still join the union and start in entry-level jobs, she explained. “They get to start working in the trades and really get to see if they like it. We get to see whether we like them and if they are a good fit.”

Conclusion

Both Simon and Burbank noted that one side benefit of the program is the opportunity it provides the employers and journeyworkers to connect with young people and share their knowledge. “They love seeing the kids. They want to give back,” Simon said.

“The biggest benefit is really the joy or the pride that I get out of it, and that’s not just me, but our other employees who are part of this program and part of the apprenticeship classes,” Burbank added.

Rios is happy with her career choice and plans to complete the five-year sheet metal apprenticeship program and become a journeyworker.

She enjoys being able to solve problems and learning new skills. Long term, Rios would like to be involved in recruiting new workers: “I’m a huge advocate for the trades now.”