WeldREADY Program Offers a Fast-Paced Road to a Welding Career

This boot camp training program helps students become successful in their personal and professional lives

BY ROLINE PASCAL

What happens when public secondary charter schools, public workforce agencies, and private training institutions collaborate?

Foothills Education Charter High School, a public charter school located in Winder, Ga., and serving a 15-county area in Northeast Georgia, including Barrow County; The Northeast Georgia Workforce Development Board/Regional Commission, which provides oversight of and administers the federal Workforce Innovation and Opportunity Act funds allocated to the region; Lanier Technical College, a

post-secondary education campus in Barrow County; and Workforce Innovators of America (WIOA), a welding training provider, are focused on how to prepare students for the workforce. This is how these organizations came together to help develop the WeldReady program.

The Inception of the WeldREADY Program

WIOA is an organization that provides the 160-h WeldREADY boot camp welding training program for

students to learn welding skills as well as soft skills that appeal to manufacturing employers. The brainchild of Pete McGill and Clay Evans, the organization came about after McGill moved to Athens, Ga., in 2015 and noticed a lack of welders with basic skills in local industry.

After McGill relocated, he took a position with the Athens Technical College Economic Development Office as the director of corporate customer relations. During his tenure, he came to realize that local industry needed gas metal arc welders for production.



The Northeast Georgia Regional Commission mobile training lab brings its tools and classroom to students in areas that need it. (All photos courtesy of Matt Brewster and Workforce Innovators of America.)



Fig. 1 — The 53-ft-long mobile welding lab is equipped with eight welding stations, each of which contains a welding table, fixture stand, multiprocess welding machine, and stocked toolbox.

"Although the college offered a twoyear degree and a one-year diploma in welding, it became apparent that, even though this program was provided, it was difficult for some students to complete due to the long duration of the program, especially for those who were experiencing additional barriers, such as a low income, family difficulties, past offenses, being in recovery, having a disability, being a veteran, and other factors," McGill said.

With that in mind, he approached Evans with the idea to launch an organization that would bridge the gap between those searching for training that will quickly lead to sustainable employment and employers searching for skilled, prepared, and effective employees.

"After discussion, we also realized the need for welders to have a background in soft skills, too, because employers stress the importance of being on time, being at work every day, dressed in the correct personal protective gear, having a positive attitude

in the workplace, and handling difficult people and situations," McGill recalled.

Welding Program Extends Its **Reach with Mobile Lab**

The WeldREADY program takes someone who has never welded before and helps them master the basics of gas metal arc welding in four or ten weeks. It also emphasizes the importance of other skills, such as problem solving, critical thinking, teamwork, communication, and resilience.

Through close relationships with employers in the area, the organization is able to teach its students the skills needed to be employed locally immediately after completing the training program.

"Our goal is for each student to have a job offer before graduation," McGill explained. "We do emphasize to students that our fast-tracked training program does not substitute for a two-year welding degree . . . Our philosophy is to help students first master a skill or trade, get a job, and then, if they wish, transition to a postsecondary world that helps them hone the finer points of that trade."

McGill and Evans offer training at no cost if students fall into one of the following categories: low income; individualized education planrecipient; foster child; drop out; veteran; unemployed; underemployed; disabled; parent; ex-offender; and supplemental nutrition assistance program recipient.

"Additionally, we have a nonprofit called WorkForce Helpers, which assists our students with costs of childcare, transportation, or other living expenses as needed to help them complete job training and improve their lives," McGill said.

The program has also partnered up with Lanier Technical College and Athens Technical College to help students who were in the WeldREADY program and are ready to pursue a two-year degree.

In February 2020, McGill and Evans extended the program into a



Fig. 2 - A welding student is producing quality tack welds during his first week of class.



Fig. 3 — Instructor Thomas Grant demonstrates the proper technique for work and travel angle.

mobile training lab, which was authorized and owned by the Northeast Georgia Workforce Development Board/Regional Commission. With this flexibility, they were able to complete a pilot program that utilized the facility with Foothills Education Charter High School.

"We were able to bring our tools and classroom to them, so students could complete our new schoolschedule-friendly ten-week program while still in high school and graduate more prepared than others [and] ready to enter the trades workforce," McGill

In the mobile training lab program with Foothills, the program is adapted to a high school schedule, offering a ten-week program for three hours

each weekday. In contrast, the traditional program requires students to attend class at WIOA for eight hours a day, each weekday, for four weeks.

Inside the Mobile Welding Lab

The 53-ft-long mobile welding lab is equipped with eight welding stations that include their own welding table, fixture stand, Miller XMT® 350 multiprocess welding machine, and stocked toolbox — Fig. 1, lead photo. The trailer is handicapped accessible and self-contained with heating, air conditioning, and ventilation. It also has ship-to-shore power connection along with generator power.

The trailer allows the program to go to areas that need it, whether in cities or rural areas, reaching far beyond Athens.

"We hope that this model can become the standard for teaching welding and other trades in underserved communities due to the mobility, flexibility, and innovation this type of program brings to the world of vocational training," McGill affirmed.

Curriculum Emphasizes Hard and Soft Skills

According to McGill, the boot camp training program is not for everyone.

"The curriculum is rigorous. Strict attendance and punctuality are required," he said. "We stress that we can teach the skills, but each student has to bring the will."

No one agrees more with that sentiment than Joey Cagle, a Foothills high school student. He graduated from the program last spring.

"I originally heard about the welding program through one of the head staff members at Foothills. He explained that I would have to be very dedicated to the program in order to graduate from it," Cagle said. "Something about the hard work and culture in the welding community made me feel at home . . . The environment the people at WorkForce Innovators provided was structured but laid back enough for us to learn and have fun at the same time."

Students in the program spend roughly 80 h learning gas metal arc welding through practice and courses, including introduction to welding, welding safety, welding symbols, and drawing; thermal cutting processes;

and welding inspection and testing — Figs. 2, 3.

The remaining 80 h are spent learning the hard and soft skills necessary to be a great employee. The hard skills are common skills trades employees are generally required to have that make them stand out from other applicants. The courses include additive manufacturing; basic forklift operator; blueprint reading; cranes and rigging; cardiopulmonary resuscitation (CPR), first aid, and automated external defibrillator (AED); electricity basics; Lean Six Sigma White Belt; measuring instruments; Occupational Safety and Health Administration (OSHA) 10; simulated work environment; torque wrench; and 5S.

The soft skills courses teach students to succeed in a professional working environment and their personal lives. These include developing as a professional, diversity in the workplace, finding your purpose, handling difficult people, handling difficult situations, importance of community, interpersonal communication, interviewing for success, personal finance, personal and professional ethics, positive attitude in the workplace, résumé writing, staying motivated on the job, working together as a team, and work-life balance.

Meet a Few of the Instructors

The program offers a total of five welding instructors and seven soft skill instructors.

Both Evans and McGill taught high school prior to establishing WIOA; Evans taught economics, and McGill taught chemistry and physics. However, they both transitioned to industry. Evans owned an IT company in Birmingham, Ala., and sold it in the early 2000s then retired. McGill worked for 35 years in manufacturing, mainly in the chemical industry, and retired in

Although both Evans and McGill lead the program, they also teach classes. Evans teaches personal finance, and McGill teaches résumé writing and interview skills.

The average teacher/student ratio is about 1:8 per class. There are 12 instructors who work on a rotating schedule to accommodate their other responsibilities. They teach up to eight students each four-week cycle and up to 16 students each ten-week cycle.

The program benefits from having a team of dedicated instructors, in-



Fig. 4 — Instructor Colonel Vernon Atkinson teaches WeldREADY students in an OSHA 10 training.



Fig. 5 — Pictured (from left) is Pete McGill, vice president, WIOA: Sherrie Gibney-Sherman, Foothills Charter High School superintendent; Instructor Colonel Vernon Atkinson; and Clay Evans, president, WIOA.

cluding Colonel Vernon Atkinson. With thirty-five years in the U.S. Army in operation and aviation maintenance, and after retiring in 2016 as a U.S. Army helicopter pilot, Colonel Atkinson began his career as an educator by teaching OSHA training at local technical schools before joining WIOA.

"[I] realized we needed to get these kids some lean manufacturing, communications, continuous improvement, quality, and customer satisfaction training," Atkinson said.

He teaches OSHA 10; CPR, first aid, and AED; Lean Six Sigma; 5S; and simulated work environment in each welding class — Fig. 4.

"We tried to give them all the OSHA 10 and lean manufacturing basics so they would be prepared to hit the ground running," Atkinson affirmed. "If you will put the time into your training [and] show up on time in the right uniform with a teachable spirit, you are only limited by your imagination and drive."

The 5S course teaches students to be organized, and Lean Six Sigma shows them the importance of constant quality improvement and reducing waste.

"Many of our students have never been in a manufacturing plant," McGill said. "We want them to know what to expect."

Robert Johnson, the lead instructor for the soft skills portion of the program, has spent his entire professional career serving people residing in lowincome and rural communities. He graduated from The City University of New York with a bachelor's degree in political science and law.

"I believe that my commitment is related to my personal experience of growing up in the inner city, losing my father at 16, and experiencing my family of eight children, myself being the oldest, and transitioning from homelessness to a proud, working-class family," Johnson said.

During his time in college, Johnson created an on-campus legal services program that provided aid for adult-commuting students. After college, he began directing employment and training programs for inner city youths in Atlanta.

In 1996, Johnson created the Georgia Fatherhood Services Network, a program administered by the state of Georgia, which provided employment and training services to men who were in contempt of court for nonpayment of child support. Facing jail time, the model provided an alternative to incarceration and allowed motivated fathers to enroll in a short-term training program — such as welding, air condition and refrigeration, appliance repair, and other short vocational-based courses — at the technical schools in the area.

"During my 11-year tenure, this program was recognized as the largest, most compressive program of its kind in the country," explained Johnson. "During this time, over 50,000 men transitioned from contempt of court for nonpayment of child support to tax-paying citizens."

After serving as state consultant for the Georgia Fatherhood program, Johnson accepted a position with Athens Technical College, where he directed the school's Fatherhood Program. Afterwards, he was asked by the president of the college to lead the development of a curriculum for a then newly established Manufacturing Ready program and develop 11 soft skills courses.

"Over the next six years, I worked under the leadership of Pete McGill to implement the model . . . This experience has led to my role today as lead instructor with the WeldREADY program," said Johnson.

Some of the courses that Johnson administers are positive attitude in the workplace, listening-workplace communications, respect and responsibility, interpersonal skills, and more.

WeldREADY Program Gives Students a Head Start

"At our local campus, we usually have between six to eight students per class. To date, if the student makes it through the first week of class, we have a 100% completion rate, and our employment rate after completion is above 80%," McGill said.

According to McGill, the program's students are mainly employed locally, especially with the program's main partners that include Caterpillar and Kubota. After graduating from the WeldREADY program, Cagle was hired part time as an intern at Kubota through the Foothills work-based learning program.

"I will not be able to return to work until I graduate high school, for I have completed all possible credits. But I am guaranteed a job after high school," Cagle said.

The pilot high school welding program with Foothills has a total of 16 students. Of the seven seniors who participated, all were offered welding jobs starting at \$36,000/year. Additionally, three of the participating underclassmen are or were working parttime in manufacturing, including Cagle, who worked in assembly for 30 h as an intern.

"With this type of program, we can open doors for high school students who may have never considered trade skills as a career and give them a legup as a job candidate," McGill said.

The program also partners with Goodwill Industries and Action Inc. to train students. In this instance, these organizations teach the soft skills curriculum, and the program handles the welding portion.

After completing the program, each student earns certifications for OSHA 10; first aid, CPR, and AED; forklift; and Lean Six Sigma White Belt. They

also take American Welding Society (AWS) qualifications tests given by an AWS Certified Welding Inspector at the end of the program.

Acknowledgment and Conclusion

McGill points out the program would not have existed if it weren't for a village of supporters, from individuals to companies — Fig. 5. The duo acknowledged those who helped turn an idea into a thriving program, including Carol Rayburn, director at North Georgia Regional Commission.

Rayburn provided the welding training trailer and the material support as well as covered half of the instructors' cost for the program.

McGill also acknowledges Irene Munn, regional career pathway coordinator, and Sherrie Gibney-Sherman, superintendent, at Foothills Education Charter High School.

According to McGill, Munn and Gibney-Sherman wanted to offer a way for their graduates to start a successful career after high school. They found money in their budget to pay the other half of the instructors' cost.

Additionally, Greg Worley, training manager for Kubota Mfg. of America, is a great supporter of the program.

"Their efforts are the reason that the school district chose to implement this pilot program," McGill said.

The WeldREADY program offers a fast-tracked pace of welding instruction. It provides students with all the skills they need to enter the trades workforce and be a successful employee in a number of weeks.

"We are teaching skills that help students be successful in their personal lives as well as their professional lives," McGill affirmed. "We believe in the importance of teaching beyond the trade because our students are more than just employees." WJ

To learn more about the WeldREADY boot camp welding training lab, contact Pete McGill, WorkForce Innovators of America, via pete@wioamerica.com or (706) 308-4792.

ROLINE PASCAL (rpascal@aws.org) is education editor of the Welding Journal.