Weld your way at NCTA
Aggies add skills to toolbox

By Mary Crawford, NCTA News

CURTIS, Neb. – A challenge issued last fall to six students in a college welding lab scored an A+ for success.

“Study, practice your welds in the lab, and NCTA will provide the opportunity you need to try for a national certification,” Dan Stehlik told his Advanced Welding students at the Nebraska College of Technical Agriculture.

The two-year school in Curtis is addressing national and state workforce shortages of skilled and certified welders.

“This was a special, diverse group of students,” said Stehlik. All six passed the industry standard on their first attempt at the hands-on welding test.

Stehlik said they earned certification by the American Welding Society for category D1.1 structural steel weld.

Amanda Schmidt, Stanton; Trever Muellenberg, North Platte; Blake McCormick, Lewellen; Dalton Olsen, Heartwell; Sam Schukei, Kenesaw; and Clancey Smith, Amherst, each earned high marks from Stehlik.

McCormick, Olsen, Schukei and Smith started welding courses in their first semester of NCTA’s center pivot irrigation technician program.

Aggies in welding demo

Last September, at Husker Harvest Days near Grand Island, Aggie students volunteered to demonstrate virtual welding on simulators in a 53-foot “Careers in Welding” trailer.

The AWS virtual classroom travels around the U.S., showcasing welding careers and enticing visitors to try out the training simulators.

As Amanda Schmidt of Stanton demonstrated the simulator, Clancey Smith of Pleasanton narrated a video for two television and radio reporters.

“It was a lot of fun and gave us a good idea of all the career possibilities in welding jobs,” Smith said. In late January, Smith launched his career as a welder with Grayson Tool Company in Minden.

Blake McCormick applies welding skills at his family’s farm and ranch in Garden County. A year ago, he earned honors as the top welder among two-year college students who competed at a national ag mechanics contest.

Trever Muellenberg of North Platte combines these skills with his livestock management and agribusiness studies at his family’s ranch, located east of Maxwell. This semester he is completing remote classes in industry safety, ag marketing, chemistry and ag production “Capstone.”
Schmidt, the sole female in the class, says welding expertise is a skill set she’ll rely on in teaching.

“I planned an emphasis in welding and ag mechanics so I can teach ag education at the high school level and lead an FFA program,” said Schmidt. She completed her associate degree in December.

As a transfer student in January to the University of Nebraska-Lincoln, Schmidt is now at home in Stanton, taking remote courses in Ag Ed for her 4-year degree through the College of Agricultural Sciences and Natural Resources.

Classmates and rural neighbors Dalton Olsen and Sam Schukei will graduate May 7 as Ag Equipment Management majors. As seniors at Kenesaw High School, they’d considered diesel mechanics courses at a community college.

“Sam and I went to Curtis to visit because it was more of a farming school,” Olsen says. The AWS welding certification topped off their third semester at NCTA.

“That was something I really wanted to achieve,” Olsen says.

Currently, he and Schukei are each juggling their final semester of remote learning while preparing for spring planting at their family farms near Kenesaw.

Last summer, Schukei’s summer employment was as an irrigation technician with Plains Irrigation of Grand Island. The business helped in sponsoring part of his NCTA program. Electrical classes combined with welding are valuable skills, he says, there and now in farming. Earning the AWS certification was a bonus.

“I knew I wanted to be good at welding,” he says. “It’s a skill that helps in making me more marketable, should I also take a job off the farm.”

Roman Netherton, an Aggie alumnus from Cozad, was the first student to receive an AWS certification.

He also was the first graduate of NCTA’s 1-year welding certificate program. Netherton works for Darr Feedlot, located south of I-80, after having previously been a welder at a Lexington business.

Six for six

The American welding society provides certifying exams for professionals, those renewing certifications, and also tests newer welders in the industry. They also recruit students into trade schools and technical colleges like NCTA.

Stehlik knows the rigors of AWS tests, having achieved his own certifications in steel and aluminum, and previously teaching high school students and evening adult classes at Belleville, Kansas.

“That was the first such high school program in the nation,” he said. Then, the certification rate of his students was one out of four on a first attempt.

“This current achievement is huge for our five-year old welding certificate program at NCTA because it is set by national standards, is industry-based, and is administered as an outside assessment,” Stehlik said.

He’s proud of the six who earned the AWS certification in their two-step process.

First, during the Intermediate Welding in May of 2019, each passed an AWS 50-question written text as their final exam. Second, in December, came their final in Advanced Welding.
Test time

Two at a time, the Aggies arrived at the welding lab for their 90-minute session under the watchful eye of Chuck Hatzenbuehler, an AWS Certified Welding Inspector and in-house trainer with Reinke Manufacturing of Deshler, Nebraska.

They made test welds on two steel plates, following specifications defined for the type of wire, distance, amperage, voltage, wire speed, temperature, stick-out distance and other details, the process was complete.

Hatzenbuehler took the plates with him for evaluation, and in January notified Stehlik of the results. Support from Reinke and other industry partners for NCTA’s ag mechanics program and Aggie students is crucial.

“While the AWS certification may not guarantee these students a welding job, as each company has their own welding qualification, it should get them near the top of a group of applicants,” Stehlik said.

“Each student has demonstrated the ability to weld to specifications, and to pass the written exam.”

This fall, Stehlik has five students prepared to enter the Advanced Welding course and potential candidates for the AWS certification.

Agricultural mechanics courses in welding or pivot technology are designed for a 1-year certificate or a 2-year associate degree. Course requirements are outlined at: https://ncta.unl.edu/academic-programs.

Welding inspector Chuck Hatzenbuehler (right) describes the national certification criteria to (from left) Dalton Olsen, instructor Dan Stehlik, Clancey Smith and Sam Schukei. (Photo by Crawford / NCTA News)

Online article: https://go.unl.edu/sxtj

(Additional photographs are attached)
NCTA welding test day at the Nebraska College of Technical Agriculture began with students Blake McCormick of Oshkosh, far left, and Amanda Schmidt of Stanton (second from right) with instructor Dan Stehlik and Chuck Hatzenbuehler, certified welding inspector. (Photo by Crawford / NCTA News)

Amanda Schmidt of Stanton

Dalton Olsen of Heartland

From left, Clancey Smith, Pleasanton, Trever Muellenberg, North Platte with gold jacket, Chuck Hatzenbuehler, inspector, and Dalton Olsen of Heartland, in welding booth. (Crawford / NCTA)
Instructor Dan Stehlik, Dalton Olsen of Heartland, Trever Muellenberg of North Platte, and Chuck Hatzenbuehler, inspector.

NCTA student Trever Muellenberg, North Platte, watches Certified Welding Instructor Chuck Hatzenbuehler measure a weld during a certification test administered by the American Welding Society. (Crawford / NCTA photo)

NCTA welding students Dalton Olsen of Heartland, left, and Trever Muellenberg of North Platte, right, prepare weld plates for Certified Welding Inspector Chuck Hatzenbuehler of Reinke Manufacturing. (Crawford/ NCTA)