



May 2022

**Advanced Welding Workforce Initiative
(AWWI) Partnership Update
NETL FY22 FECM Spring R&D Project Review
Kinsey Walker**

Overview of the AWWI Initiative

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- 2** Belmont, St. Clairsville, OH
- 3** Westmoreland, Westmoreland, PA
- 4** RCBI, Huntington, WV
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Why does the regional workforce need AWWI?

AWWI's funding is jointly provided by ARC and DOE's Office of Fossil Energy High Performance Materials program to prepare a new generation of welders to manufacture and service high-temperature alloy components in advanced coal- and natural gas-fueled electric generating stations.

This initiative was formed in response to petrochemical manufacturing currently in development in Appalachia that is projected to attract between \$16 billion and \$20 billion in capital investment, and create more than 9,800 jobs directly and indirectly in Appalachia by 2025.

There is a national shortage of welders. According to the American Welding Society (AWS), the U.S. welder shortage will reach a deficit of 400,000 workers by 2024.

AWWI Projects

- **Westmoreland County Community College Advanced / Special Alloy Welding Program**
(Youngwood, PA)
- **Southeast Community and Technical College Harlan Welding Expansion**
(Harlan, KY)
- **Robert C. Byrd Institute Advanced Welding Program at Marshall University**
(Huntington, WV)
- **Calhoun Community College Robotic Welding Program**
(Decatur, AL)
- **Pipe Welding and Fabrication Project**
(St. Clairsville, OH)

Westmoreland County Welding Program



AWM funds will

- Fund faculty and program staff to support the new certifications
- Support operational costs

Challenges

- Fall semester enrollment numbers
- Strategic marketing plan to recruit program students is already increasing summer enrollment starting late March 2022

Wins

- The completion of the development for the three Welding procedures for AWS qualifications included in the College's new Welder Certification for Advanced Welding

Westmoreland County Welding Program

What's Next

- Westmoreland contributed the Robotic Welding arm students will be using to gain certifications to this project
- Have AWS certification in-house and they are an accredited test facility for students in PA.
- The new Special Alloy Welding Certificate has been developed and can now be earned in addition to Westmoreland's Welding Engineering Technology AAS.

Southeast Community and Technical College Harlan Welding Expansion

AWM Funds will

- purchase new updated training equipment for an existing welding program
- provide scholarships aimed at increasing student outcomes and credential attainment in the welding program.

Challenges

- Equipment quoting and shipment delays across the start

Wins

- Southeast reports 42 students in fall semester, well over the goal of 15!
- Scholarship access was crucial for students to retain participation



Southeast Community and Technical College

Harlan Welding Expansion

Continue the certificate courses offered for Spring Semester:

- ARC Cutter
- ARC Welder
- Gas Welder
- Gas Metal ARC Welding
- Gas Tungsten ARC Welding
- Production Line Welder
- Shielded Metal Arc Welding
- Tack Welder
- AWS National Skills Standard Level I
- Pipeline Welder
- Welder Helper

What's
Next

RCBI Advanced Welding Program Marshall University



AWM Funds Will

- Enable RCBI to hire new instructors to support AW courses and grow the employer partner network
- Purchase equipment for robotic welding simulators to expand mobile training options

Wins

- Employer partner network is now at 34 companies including 4 new small businesses using partnership for employee retention
- All spring enrollment started on April 1 and already all 59 slots are full!
- More folks from recovery to work partnerships are enrolled in training than ever before!

RCBI Advanced Welding Program Marshall University

What's Next

Mobile Training. The trailer modifications are still in progress. Retrofitting was slowed while training was being completed and additional components ordered. Equipment intended for the trailer was utilized for company onsite training to limit downtime of company's own equipment.

Continue industry advisory meetings and outreach to stay up to date with program offerings and partners needs

Offer more learn and earn opportunities through internships for enrolled students and employer partners

Calhoun Community College Welding Program

AWM Funding will

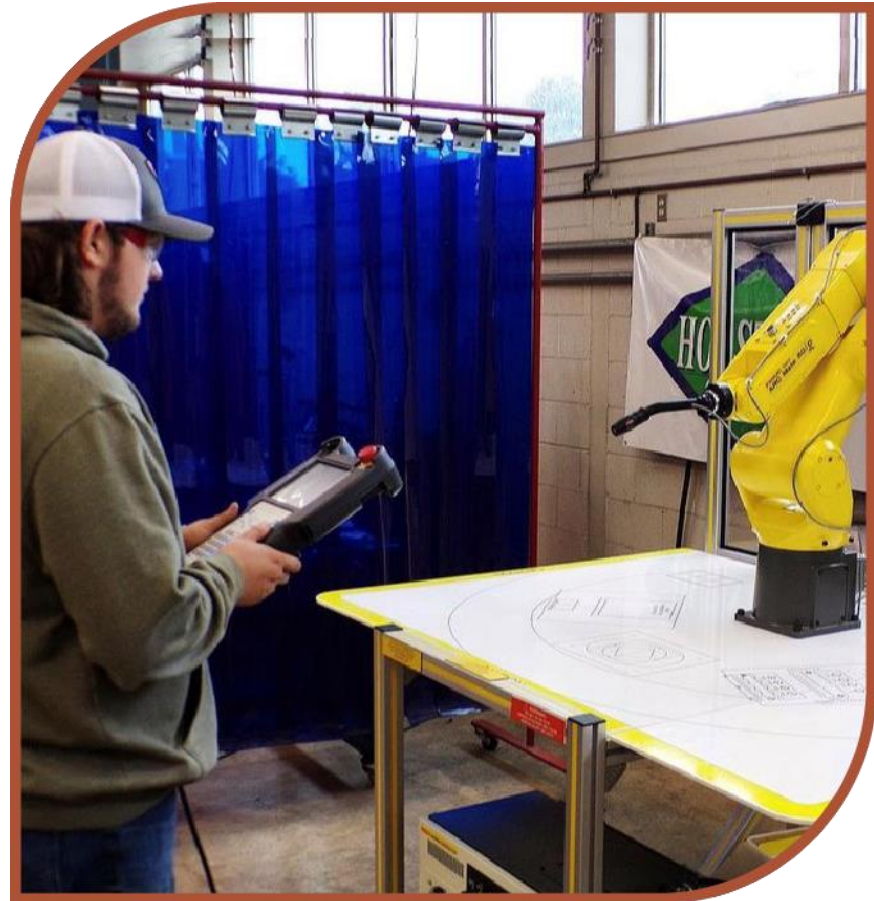
- Provide state of the art equipment to meet industry needs for immediate workforce participation
- Support instructors and hiring to meet class demand

Challenges

- Equipment delivery and availability, but second choices on equipment made for better classroom experience

Wins

- The goal was 110 students served and already 410 are enrolled, with the first graduates this fall
- Train the trainer model implemented to retain staff with students



Calhoun Community College Welding Program

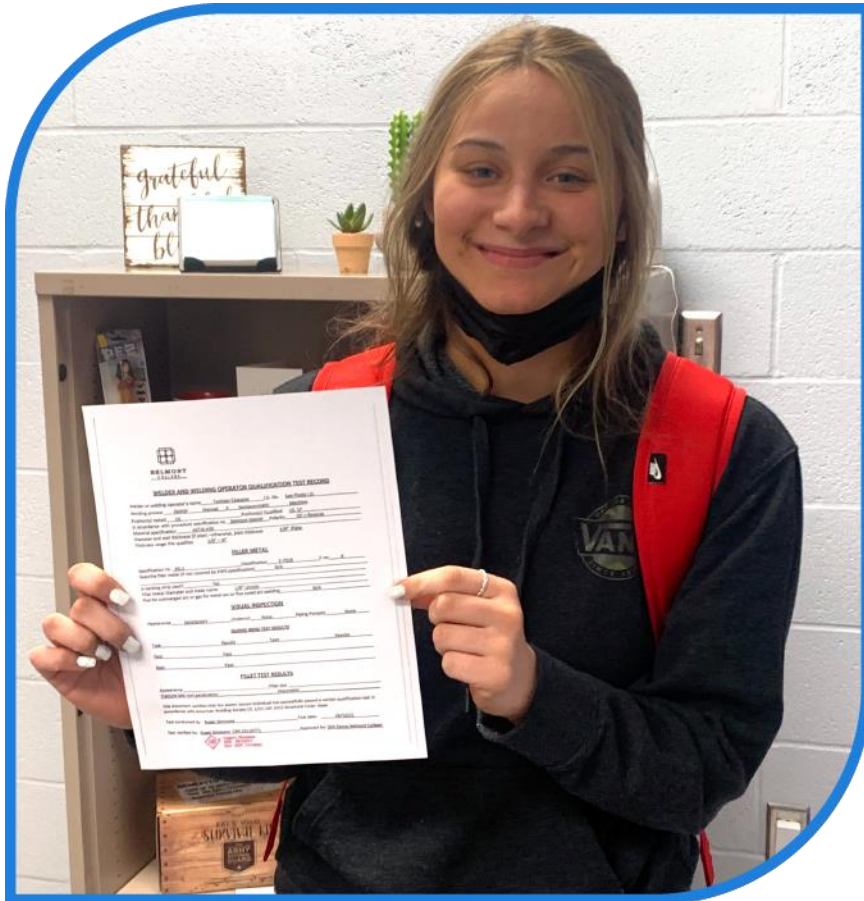
There will be some budget revisions to provide more equipment to meet the needs of the rapidly growing enrollment

Calhoun CC will be able to expand offerings with train the trainer model for additional staff

Working to increase and formalize employer partnerships with the ability to supplement robotics training

What's
Next

Belmont College Pipe Welding and Fabrication Project



AWM funding will

Provide the equipment and instructors needed for expanding opportunities for neighboring high school learners and credit earning adult learners through Belmont college

Challenges

The equipment procurement and space related challenges at Belmont required some creativity due to growing enrollment

Wins

6 new high schools have lead to 38 non credit students enrolled and the graduation rate in all 6 schools has gone up

28 credit seeking students are currently enrolled with a faster track to advancing employment

Belmont College Pipe Welding and Fabrication Project

**Plans
Moving
Forward**

- Belmont will continue to expand their partnerships with area high schools for noncredit enrollment and more businesses to increase enrollment for credit seeking students
- Additional equipment is set to arrive soon to facilitate program growth with Belmont College, Mid East Career and Technical Centers, and Eastern Gateway to bring forward final performance measures

Overall Trends for AWWI

Enrollment

- More women enrolled in AWS than all previous years within 3 of 5 partner schools

Employer partnerships

- Employer partnerships have expanded to small businesses for the first time and overall formalized more than before

Students served

- Schools have been able to retain and instructors to create these opportunities for the first time

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