

REGISTERED APPRENTICESHIP & ADVANCED MANUFACTURING

This document summarizes a call for state apprenticeship expansion (State Apprenticeship Expansion [SAE], Apprenticeship State Expansion [ASE], and SAE 2020) grantees held February 25, 2021. The call featured speakers from Jobs for the Future, the South Carolina Community College System, the South Carolina Manufacturers Alliance, and the Idaho Department of Labor, who discussed promising practices for expanding Registered Apprenticeship in the advanced manufacturing industry.

ABOUT THE SPEAKERS

- Jobs for the Future (JFF) is a national nonprofit that works to ensure that all students and workers have access to the education and training needed to gain credentials and skills that employers require. JFF is contracted as a National Industry Intermediary with the U.S. Department of Labor to expand advanced manufacturing apprenticeships. For assistance, contact Mark Genua at mgenua@jff.org.
- The South Carolina Community College System is the home of Apprenticeship Carolina, which is responsible for all apprenticeship programs including program quality assurance and regulatory adherence to federal and state guidelines. There are 348 manufacturing companies in South Carolina with Registered Apprenticeship Programs and 881 adult apprentices and 98 high school youth apprentices in manufacturing. For more information, contact Dr. Amy Firestone at firestonea@sctechsystem.edu.
- The South Carolina Manufacturers Alliance supports over 5,000 employers across the State and is working to expand advanced manufacturing Registered Apprenticeships among its membership. For additional information, contact James Richter at james@myscma.com.
- The Idaho Department of Labor administers ApprenticeshipIdaho, which assists employers in developing standards for Registered Apprenticeship. ApprenticeshipIdaho works closely with the Idaho Manufacturing Alliance to expand advanced manufacturing apprenticeship. For more information, contact Gina Robison at Gina.Robison@labor.idaho.gov or Michelle Stout at Michelle.Stout@labor.idaho.gov.

WHY APPRENTICESHIP WORKS IN ADVANCED MANUFACTURING

The advanced manufacturing industry is experiencing disruption and opportunity related to shifting skill needs, recovery from the pandemic, and greater utilization of technology. Manufacturers are using information technology (IT) and automation in new ways, employing new supply chain strategies, and reimagining workspaces and processes. At the same time, manufacturers increasingly recognize the need to diversify their talent pipeline and identify new ways to recruit, train, and retain skilled workers.

These shifts require a corresponding and agile response regarding talent preparation, skill and credential attainment, and ongoing professional development. Proven talent development models like Registered Apprenticeship and work-based learning can respond to these changing dynamics. Innovation in these training models and increased funding have elevated Registered Apprenticeship as a model for a diverse range of manufacturing occupations.

A LOOK AT APPRENTICESHIP IN ADVANCED MANUFACTURING TODAY

Use of Registered Apprenticeship within the advanced manufacturing industry is increasing among employers and job seekers. Businesses are also using Registered Apprenticeship to upskill incumbent workers, using it as a tool to help current employees attain advanced credentials in traditional manufacturing occupations as well as in cross-industry occupations in areas such as payroll, human resources, and IT. Within the advanced manufacturing industry, the top occupations for apprenticeship are mechatronics technician and industrial engineering technician.

CHALLENGES AND RECOMMENDATIONS

Partnership development is a critical strategy to educate employers about Registered Apprenticeship, support them in program development, and recruit diverse populations into the manufacturing workforce. Businesses are more receptive to working through organizations they already know and trust. Industry associations can be great partners to support employer outreach efforts and may even serve as group program sponsors for small- and medium-sized employers. Community-based organizations can provide access to underserved populations but require intentional efforts to engage them in apprenticeship initiatives.

The pandemic has accelerated trends toward greater use of automation and increased demand for a highly skilled and versatile manufacturing workforce. With fewer workers on the factory floor, manufacturers have needed to increase their efficiency through greater utilization of technology and robotics. In this new environment, workers need more training in a broad set of skills across occupations. Employers are interested in Registered Apprenticeship as a structured way to organize training, upskill their workforce, and retain talented employees.

Manufacturers increasingly recognize Registered Apprenticeship as an opportunity to meet their workforce challenges but require customized technical assistance to address their specific needs. Manufacturers face highly specific challenges depending on their subsector, location, organizational size and administrative capacity, workforce and skill needs, and other factors. Engaging manufacturers requires patience, persistence, a willingness to listen, and flexibility to tailor your programs. Nevertheless, manufacturing provides excellent career options for workers, a foundation for economically vibrant communities, and opportunities for apprenticeship expansion.

ADDITIONAL RESOURCES

- Apprenticeship.gov's [Advanced Manufacturing page](#) links to a toolkit, competency models, apprenticeship standards in high-demand occupations, and more.
- The [Apprenticeship in Advanced Manufacturing page](#) on Workforce GPS offers program examples, outreach materials, and other resources to help expand Registered Apprenticeship in the advanced manufacturing sector.