

PROMISING PRACTICES IN APPRENTICESHIPS: AN IMPLEMENTATION MODEL FROM MIIA

Introduction

Make it in America (MIIA) grantee, the South Carolina Appalachian Council of Governments' (ACOG) grant program, in partnership with the WorkLink Workforce Development Board and their sub-recipients, is complementing its successful training strategy with a unique approach to linking education to work experience: Registered Apprenticeships. This "earn and learn" model is a formalized, structured training program that combines supervised on site job training with related technical instruction (typically classroom-based) and is registered with the U.S. Department of Labor or a federally recognized State Apprenticeship Agency. By effectively promoting the apprenticeship model among students and employers, ACOG, WorkLink and their sub-recipients are able to meet the training needs of regional manufacturers at low cost while providing MIIA participants with the opportunity to receive relevant, usable, hands-on, state-of-the-art training for in-demand jobs in the automotive industry. The purpose of this resource brief is to use ACOG/WorkLink's experiences and lessons learned to show that apprenticeship can be a viable, successful route to employment for your MIIA participants as well.

Program Overview

Fundamentally, the purpose of the project, "Select SC: Improving Manufacturing Competitiveness in the Palmetto State," is to bring employers and employees together and to improve the workforce and the quality of life in the northwest corner of South Carolina including the counties of Anderson, Oconee, and Pickens, Cherokee, Greenville, and Spartanburg. As multi-faceted organizations commit to providing quality services to local governments, ACOG and WorkLink's partnership seeks to ensure that people in the area are able to keep up with the ever changing skill sets that are required by business and industry

The ACOG/WorkLink MIIA project has already surpassed its goal of training 196 unemployed, underemployed, and incumbent workers in fields that lead to industry recognized credentials in Computer Numerical Control (CNC), welding, mechatronics and South Carolina Manufacturing Certification. Participants have earned more than 195 credentials through September 30, 2015. In the last six months, four MIIA participants have been placed into CNC Operator Apprenticeships after earning their credentials.

Key Partners

ACOG/WorkLink's MIIA Economic Development Administration (EDA) project partner, Clemson University Center for Workforce Development (CUCWD), and National Institutes of Standards and Technology (NIST) project partner, South Carolina Manufacturing Extension Partnership (SCMEP), are working together to improve manufacturing competitiveness in the South Carolina Appalachian Region through in-sourcing, expansion, and direct foreign

investment. To achieve this goal, ACOG/WorkLink ensures that the employment and training needs of businesses and job seekers are met by funding various strategies such as incumbent worker upskilling, Registered Apprenticeships and On-the-Job training (OJT).

Through the MIIA grant, ACOG/WorkLink was able to promote the apprenticeship model by convening all partners to determine the needs of local employers. ETA partners (Northeastern Technical College, Tri-County Technical College, and Greenville Technical College) were utilized to match qualified candidates to apprenticeship opportunities at local employers such as Bosch Rexroth, a leading manufacturer of hydraulics for heavy equipment. In addition, Apprenticeship Carolina, a division of the SC Technical College System, is a key partner working to ensure all employers in South Carolina have access to the information and technical assistance they need to create demand-driven registered apprenticeship programs.

The Challenge

As of 2010, advanced manufacturing represents 17 percent of employment in the South Carolina (SC) Appalachian Region. The growing manufacturing base has helped wage levels rise and made the region attractive to other manufacturers (as suppliers or customers). However, there is a shortage of technologically skilled manufacturing workers. As of 2012, 46 percent of the region's adults 25 years and older had attained a high school diploma or less. Employers want to close the talent gap by upskilling their current workforce through incumbent worker training, but they often lack the resources to train them. Although Registered Apprenticeships can help address this issue by quickly moving students and workers along a career pathway to fill critical area needs, employers tend to associate apprenticeships with unions, which makes building employer support for apprenticeships challenging in South Carolina, a right-to-work state.

Overcoming the Challenge: The Apprenticeship Model

By partnering with employers that have existing Registered Apprenticeship programs and tailoring the incumbent worker training curriculum to each company's specific goals and requirements, ACOG/WorkLink and its sub-recipients are overcoming the challenges of promoting apprenticeships among businesses in the region. One local employer that has been supporting these efforts since Apprenticeship Carolina was formed in 2007 is Bosch Rexroth, which hires 12 apprentices each year, six in January and six in June. Twelve apprentices complete the program each year, including six to eight incumbent workers. Many apprentices who pass their classes at Greenville Technical College and complete the on-site training are hired into open positions at Bosch Rexroth and other companies.

The process: The ACOG/WorkLink project works with its partners to meet the needs of local businesses. ACOG/WorkLink shares apprenticeship opportunities with colleges, partners with Apprenticeship Carolina in efforts to promote the benefits of apprenticeships to job seekers and employers, and listens to local businesses while offering viable solutions for their workforce development and training needs. When companies have a job to fill, ACOG/WorkLink and its sub-recipients help employers fill positions by recruiting potential candidates and scheduling interviews. ACOG/WorkLink assists employers as they identify candidates in need of training. They connect businesses with Apprenticeship Carolina, which informs employers about Registered Apprenticeship and OJT opportunities and describes how the Registered Apprenticeship model can be an effective strategy for upskilling the current workforce and hiring new talent.

The Registered Apprenticeship model includes both classroom-based technical skills training at the local technical

college and onsite training with a local employer, where company trainers and school instructors help apprentices practice and perfect their skills on the factory floor. Depending on the program of study, Registered Apprenticeships can last anywhere from one to six years but, on average, it takes three years to complete depending on the occupational requirements. To ensure advancement along the career pathway, apprentices are incentivized with gradual pay increases that are pre-determined by the employer and tied to progress in the classroom and competency-based skills learned on the job. Partnering with technical colleges allows them to assist companies design and often provide the training curriculum, which focuses on stackable certificates in order to build core skills and gain industry-recognized credentials, maximizing transferability from one employer to another and job-relevant skills.

The Results

Utilizing Registered Apprenticeships as a workforce development strategy enables the ACOG/WorkLink project to better serve job seekers, training providers, and employers as well as enhance their own performance goals. Further, this model is mutually beneficial to all of the partners involved by providing a very customizable training model that is helping South Carolina manufacturers develop a highly-skilled workforce at low cost; increase employee motivation, morale, retention, loyalty, productivity, and innovation; improve safety; and create a structured and standardized system that transfers knowledge from veteran employees to new hires. These opportunities not only allow students to immediately earn wages while in training, gain practical and relevant work experience, and get mentored by experienced professionals, but they also provide students with a formal path for advancement in their careers. The positive outcomes of the apprenticeship model are a result of ongoing collaboration among educational providers, economic development partners, employer networks, and workforce development agencies. As students succeed, workforce development agencies, education and training providers, and businesses are deepening their relationships with one another. By working together to offer more opportunities to learn by doing, businesses, training providers, and workforce development agencies are able to meet the career needs of local job seekers and create a pipeline for new skilled workers while quickly meeting the immediate training needs of employers.

MIIA Apprentice Profiles

"The CNC class opened the door for a whole new world of possibilities."

-Jody

Unable to find work eight months after being laid off from her job of 27 years at the *Greenville News*, Jody enrolled in the CNC class at Greenville Tech. Upon graduation, she interviewed with Bosch Rexroth and landed a spot in their registered apprenticeship program. She was recently chosen to advance into the mechatronics program at Greenville Tech.

Another MIIA apprentice, Miguel, first became interested in CNC while working at a cabinet shop in 2003. He worked for nine long years at a bridge company before finally earning his GED. In March 2014, Miguel quit his construction job and took full-time classes for three months at the Buck Mickel Center to earn his Manufacturing Skills Standards Council (MSSC) certification. While completing his courses, Miguel learned that advanced classes would be paid for if he passed all his tests. Miguel passed all his exams for the MSSC certification and enrolled in the CNC operator class with Scotty Nicholson. While still in school and working for Executive Cabinetry as a foil press operator/supervisor, Miguel was contacted by Bosch Rexroth for an interview. By the end of November 2014, Bosch Rexroth hired Miguel and he began his apprenticeship in January 2015.

"It's been a privilege working with very professional people. I have learned a lot in the past six months. It hasn't been easy, but with self-motivation and ambition I continue to look forward to learn even more. I'm thankful to [my teacher], Scotty Nicholson and [my supervisor], Mike Bryan, for believing in me and giving me the opportunity to be a part of Bosch Rexroth's apprenticeship program. Greenville Tech's CNC operator class takes you to new heights. The first step is to understand the basics, which is the foundation of your success in becoming a real CNC Machinist."

-Miguel

Apprenticeship Implementation Strategies

- **A cohesive outreach plan:** A formal marketing plan is not necessary, but work with your NIST, EDA, training, and business partners to deliver a clear and consistent message and determine opportunities to jointly promote your efforts.
- **Reduce the financial burden for employers:** In South Carolina, employers must offer apprenticeships to receive MIIA funding. In addition, employers receive a tax credit of \$1,000 per apprentice. Use reimbursements and federal funding such as Pell Grants to offset the cost of providing apprenticeships. Although the incentives may not cover the employer's full cost, they do serve as an effective marketing tool.
- **Approach companies with established apprenticeship programs first** to secure early achievements and build momentum. This network of supporters can help promote the apprenticeship model to other companies and provide assistance as they develop and implement their own apprenticeship programs.

Keys to Replication

- **Employer Engagement:** Begin building relationships with employers from day one. Before discussing apprenticeships with potential partners, learn about their goals and needs and gain their trust by engaging with them through the local Chamber of Commerce and industry associations. Show employers how a partnership will serve their needs and add value to their business.
- **Customized Training:** To build employer support and attract job seekers interested in working for local companies, tailor the curriculum for each company. Employers should determine eligibility requirements and play an active role in developing and reviewing the curriculum and program. Work with training partners to ensure that the curriculum provides training that meets the competency requirements for job openings and adapts to the changing needs of employers. Schedule coursework to accommodate production schedules and promote apprentice retention.

Resources

[Employer's Playbook for Building an Apprenticeship Program](#)

Three advanced manufacturers (Alcoa, The Dow Chemical Company, and Siemens Corporation) take the reader step-by-step through the process of building an apprenticeship program – from workforce planning and building your business case for an apprenticeship program, to establishing critical public-private partnerships, and marketing the program. Importantly, playbook also provides guidance on how employers and their external partners can maintain the relevance of the apprenticeship program and ensure its long-term success.

[Registered Apprenticeship Trends in Advanced Manufacturing](#)

This resource describes the role of employers, workforce development systems, and training organizations in developing apprenticeships in advanced manufacturing. It also includes profiles of employers and apprentices.

[ApprenticeshipUSA](#)

ApprenticeshipUSA provides employers and job seekers with the latest information on registered apprenticeships. The website features many tools to help employers build and implement apprenticeships including online training to learn about the apprenticeship model, an [Apprenticeship Assessment and Planning Tool](#), a [Guide for Business Service Representatives](#), and more.

[21st Century Apprenticeship Community of Practice](#)

This online community is dedicated to stakeholders and partners focused on developing and maintaining a strong training model for all industries in need of skilled workers and for all workers and job seekers needing a leg up to a better life and long-term career.

Next Steps

Would you like to know more about how the ACOG/WorkLink project successfully promotes apprenticeships? Do you want additional information on developing and implementing Registered Apprenticeships?

Contact your Technical Assistance Coach or email us at jobsaccelerator@dol.gov and check out these resources!