

Career Pathways and Education Alignment



① *State Leadership and Policy*



② *Outreach and Business Engagement*



③ *State Capacity to Develop, Launch, and Manage Programs*



④ *Pipeline of Apprentices and Increased Diversity*



⑤ **Alignment with Career Pathways and Post-secondary Education**

Since fall 2016, states have been using State Apprenticeship Expansion grants from the U.S. Department of Labor to build capacity for Registered Apprenticeship, expand apprenticeships into new industry sectors, and increase participation by diverse populations. This series captures promising practices for state-driven efforts to grow Registered Apprenticeship, with five briefs focused on each of the five key elements of effective apprenticeship expansion. This brief explores Element 5 - Alignment with Career Pathways and Post-Secondary Education.

Visit the Apprenticeship State Expansion Grants Community, ase.workforcegps.org, for the full series of promising practice briefs and other resources on the five elements of apprenticeship expansion.

EXPANDING APPRENTICESHIP THROUGH CAREER PATHWAYS AND EDUCATION ALIGNMENT

To support the long-term sustainability of apprenticeship expansion, states are creating clear linkages to secondary and post-secondary educational programs. Strategies that are helping

to embed apprenticeship as both an education and a training model in states include expanding youth apprenticeship offerings, integrating apprenticeship into career and technical education (CTE), and pursuing policy changes that allow apprenticeships to connect seamlessly with post-secondary educational pathways. The following examples highlight the different ways states are increasing alignment with career pathways and post-secondary education. *Italicized states are profiled in greater detail later in this document.*

- ➔ States are **INCREASING THE ROLE OF POST-SECONDARY EDUCATIONAL INSTITUTIONS** in Registered Apprenticeship through activities ranging from creating innovative programs that include apprenticeships in nontraditional occupations to making higher education policy modifications that support related instruction and career pathway integration with apprenticeship. For example, *Ohio's* higher education and apprenticeship agencies worked together to increase the role of colleges in apprenticeship, as both related instruction providers and program sponsors. *Montana's* efforts to better align education and apprenticeship have resulted in new programs in nontraditional apprenticeship sectors such as early childhood education and accounting that enable apprentices to earn college credit and degrees.
- ➔ States such as *Kentucky* and *Georgia* are **PROVIDING TUITION SUPPORT FOR THE RELATED INSTRUCTION COMPONENT OF REGISTERED APPRENTICESHIP PROGRAMS**. This state tuition assistance recognizes apprenticeship as an important education and training program that is as valuable as a traditional college degree for helping students and workers gain skills and start new careers.
- ➔ A growing interest in youth apprenticeship has led many states to **LAUNCH OR EXPAND EFFORTS TO PROVIDE EDUCATIONAL AND CAREER OPPORTUNITIES FOR HIGH SCHOOL STUDENTS THROUGH APPRENTICESHIP**. States such as *Colorado*, *Kentucky*, *North Carolina*, *Washington*, and others are creating and expanding youth apprenticeship programs that begin in high school, either by directly enrolling students as apprentices in registered programs or through pre-apprenticeship opportunities.
- ➔ States are **RECOGNIZING THAT GREATER ALIGNMENT BETWEEN APPRENTICESHIPS AND CTE PROGRAMS** can equip students with the skills they need to jump-start their careers by integrating classroom instruction and hands-on-learning. For example, *Oregon* launched a statewide effort to make Registered Apprenticeship more accessible and meaningful by aligning it with the State's secondary and post-secondary CTE systems.

This brief shares examples of how states are better aligning apprenticeship to career pathways and post-secondary education to the benefit of students and workers, businesses, and educational institutions.

OHIO:

ALIGNING APPRENTICESHIP AND POST-SECONDARY PATHWAYS

One of Ohio's strategies to expand Registered Apprenticeship is to strengthen connections between apprenticeship programs and post-secondary pathways. This increase in career and educational opportunities for apprentices is the result of a strong partnership between the State's higher education and apprenticeship agencies, which has increased the role of colleges in apprenticeship and enabled individuals to gain college credit through Registered Apprenticeship Programs.

PRACTICE DESCRIPTION

The foundation of Ohio's apprenticeship and post-secondary alignment is a strong partnership between two state agencies: the Ohio Department of Job and Family Services (ODJFS) and the Ohio Department of Higher Education (ODHE). In ODJFS, ApprenticeOhio is the State's apprenticeship agency that helps employers develop apprenticeship programs, registers programs, and provides oversight and technical support to existing programs to ensure quality and safety. In ODHE, the Apprenticeship Statewide Partnership Panel (ASPP) oversees the implementation process of new apprenticeship programs and identifies the apprenticeship programs for statewide articulation agreements that connect to any college or university in the State. ASPP also provides oversight of appropriate credits awarded and academic alignment for each of the apprenticeship programs.

Ohio's focus on articulated credit from Registered Apprenticeship Programs to post-secondary education began in the early 2000s when the state community college system began a statewide articulation process with the State's Joint Apprenticeship and Training Committees. The initial reason for this collaboration between the higher education system and the union-based apprenticeship training programs was to enhance the educational component of Registered Apprenticeship, the related instruction, and make it a transferable educational experience. As a result, many apprentices who complete apprenticeships in skilled trades, such as electrical, sheet metal, carpentry, and other trades, earn college credit that puts them on a path to a degree.

Another part of Ohio's strategy to align apprenticeship and post-secondary education was the adoption of a [state regulation](#) in 2014 stipulating that all related instruction for Registered Apprenticeship Programs be designed and/or provided in conjunction with a university or community college in Ohio. The regulation has some flexibility built in so that sponsors can provide training in house or choose an alternative provider for related instruction, such as a training provider in a neighboring state or an online provider. However, the regulation encourages sponsors to look first to leverage higher education opportunities in the State. As a result, the related instruction for most of Ohio's more than 900 Registered Apprenticeship Programs is provided by or in conjunction with the State's higher education system.

"The fire has been lit...colleges see this as not only a workforce development model for their employers but also to entice students to come through their doors."



Becky DeMatteis

*Program Administrator,
ApprenticeOhio*

When the State was awarded the State Apprenticeship Expansion (SAE) grant in fall 2016, ApprenticeOhio knew they wanted to use a part of the grant funds to build on these earlier efforts to align apprenticeship and post-secondary pathways. ApprenticeOhio used SAE funding to support 10 community colleges who registered as apprenticeship sponsors to cover administrative costs, as well as offset tuition costs for employers who enrolled students as part of an apprenticeship program. This engagement with

the colleges did not come without some challenges. ApprenticeOhio had to first take time to build relationships with colleges and convince college leaders of the value of Registered Apprenticeship. In addition, college leaders had to learn more about the apprenticeship model and how being a program sponsor can be a benefit to colleges. Once open to the idea, the colleges were able to see that they could simply adapt what they already do—supporting workforce development, working with employers, and delivering classroom instruction for employees—to become Registered Apprenticeship sponsors.

IMPACT AND RESULTS

Ohio’s efforts to align apprenticeship and post-secondary pathways have produced strong results across industry sectors. Many traditional apprenticeship programs, such as electrical, sheet metal, carpentry, and plumbing programs, provide a pathway to a post-secondary degree. At the same time, strategies that engage colleges and universities as both related instruction providers and sponsors have resulted in credit-bearing opportunities in nontraditional apprenticeship industries like healthcare, information technology, and early childhood education. Since the award of SAE funding to the original 10 community colleges, 4 additional education institutions have observed this success and become apprenticeship sponsors.

Interested in Learning More?

- ➔ Visit Ohio’s apprenticeship website at apprentice.ohio.gov
- ➔ Contact Becky DeMatteis, Program Administrator, ApprenticeOhio at Rebecca.DeMatteis@jfs.ohio.gov

DRIVERS OF SUCCESS

- ✓ **STRONG STATE SUPPORT FACILITATES POLICY DEVELOPMENT AND STAKEHOLDER COLLABORATION.** Efforts to align apprenticeship and post-secondary education in Ohio started as a vision of key leaders in ApprenticeOhio and ODHE and resulted in a key state regulation that grew into a priority of the Governor’s office. This support has resulted in strong collaboration between and among apprenticeship expansion stakeholders that has led to a statewide shift in the value of apprenticeship.
- ✓ **EARLY ADOPTERS CAN HAVE A POSITIVE INFLUENCE.** SAE grant funding allowed 10 community colleges to become “early adopters” in sponsoring apprenticeship programs. These models of success have influenced other colleges to engage in apprenticeship and become sponsors, even in the absence of grant funding that was available to the early adopter colleges.
- ✓ **POST-SECONDARY ARTICULATION ADDS VALUE.** Ohio values post-secondary pathways for apprentices in both traditional and nontraditional apprenticeship industries. This focus on alignment between related instruction and post-secondary credit has opened opportunities for individuals who are enrolled in traditional or nontraditional apprenticeships to earn certifications and degrees that are valued by employers and contribute to lifelong success.

States Offer Tuition Support for Apprenticeships

Recognizing apprenticeship as an important education and training program, and as valuable as a college degree in helping students and workers gain skills and start new careers, many states are providing tuition support for Registered Apprenticeship Programs.

Kentucky has offered lottery-funded merit scholarships to students for post-secondary education for 20 years through the Kentucky Educational Excellence Scholarship (KEES). In 2017, Kentucky made an important change to leverage KEES to support participation in Registered Apprenticeship Programs. The Kentucky legislature modified the KEES rules to allow students to use the scholarship funds toward apprenticeship, and not just traditional college or university study. High school graduates participating in a Registered Apprenticeship Program may choose to request reimbursement of approved apprenticeship expenses from their KEES scholarship. Approved apprenticeship expenses include tuition, books, equipment, tools, licensures, uniforms, and travel. Apprentices taking related instruction through a college or university may also have funds sent directly to the educational institution.

To learn more about the Kentucky program, visit the [*KEES for Registered Apprentices*](#) web page. For more examples of states across the country offering tuition support to individuals in apprenticeship programs, visit the [*States That Offer Tuition Support for Registered Apprentices*](#) web page.

OREGON:

ALIGNING APPRENTICESHIP TO CAREER AND TECHNICAL EDUCATION

Oregon recognized that students and workers needed more pathways to successful careers. The State was looking for alternatives to its college system and military pathways that would provide individuals with education, skills, and credentials of similar value. To achieve this objective, the Oregon Department of Education (ODE) launched a statewide effort to make Registered Apprenticeship more accessible and meaningful by aligning it with the state's secondary and post-secondary career and technical education (CTE) systems.

PRACTICE DESCRIPTION

At the time, Oregon had an approximately 70-year-old apprenticeship system housed within the Oregon Bureau of Labor and Industries (BOLI), but it was underutilized. Apprenticeship was chiefly viewed as a narrow funnel reserved for individuals who were not college bound. Options for young people were limited. There were two youth workforce programs serving only the Portland metropolitan area, and

they mirrored the methods and practices of adult training programs instead of tailoring instruction for students and young workers. Pre-apprenticeship programs in the State had similar limiting characteristics, and existing programs were not successfully advancing participants into Registered Apprenticeship as intended.

In approaching this effort, ODE staff found inspiration in the report [Opportunities for Connecting Secondary Career and Technical Education \(CTE\) Students and Apprenticeship Programs](#), which profiles the ways that states across the country are aligning apprenticeship with CTE and high school courses. With help from many partners, ODE and the Oregon Employment Department (OED) coordinated apprenticeship across Oregon's education and workforce infrastructures to bring two needed solutions: 1) a means to promote apprenticeship as a premier training option, and 2) a long-term solution that would be embedded in the state's existing systems.

ODE and OED organized a core working group that had statewide reach and included representatives from BOLI's Apprenticeship and Training Division, ODE's CTE Programs Division, and the Higher Education Coordinating Commission's Office of Community Colleges and Workforce Development. The core group started with a collaborative cross-walk of BOLI's pre-apprenticeship checklist with ODE's CTE program of study approval process. While all Oregon pre-apprenticeship is industry driven and funded, the State requires that pre-apprenticeships obtain approval in order to receive BOLI's technical assistance services. In time, the working group had translated the existing program requisites across the two offices and recast them into a new application with a set of core components for robust and rigorous pre-apprenticeship programs.

"State government was already working to get every Oregon graduate from high school and with a GED to go on to school or work. The focus on apprenticeship was a perfect storm for a conversation about more options."



Gabby Sloss

*Work-Based Learning and
Apprenticeship Education Specialist,
Oregon Department of Education*

Once the pre-apprenticeship application was approved by the State Apprenticeship and Training Council, the core group shifted to creating better pathways for individuals transitioning into Registered Apprenticeship Programs from CTE and secondary systems. They started with CTE programs of study that were already approved by ODE and could be approved by the State Apprenticeship and Training Council as registered pre-apprenticeships. They embedded apprenticeship-specific activities into these CTE programs of study just as one would for a career or college readiness curriculum, by cross-walking materials, adding in articulation across courses and instruction, and devising dual credit options. The partners weaved apprenticeship into the existing fabric of CTE without creating anything additional. When aligning apprenticeship with post-secondary programs of study, the process was made easier and

faster by leveraging established working relationships and communication channels. Because Oregon’s CTE programs of study are consortium based, secondary programs are required to have relationships with community colleges. Additionally, Oregon’s community colleges readily provide apprenticeship supports and services; therefore, apprenticeship as a post-secondary career pathway was a natural fit.

IMPACT AND RESULTS

The education, training, and employment landscape in Oregon today includes a coordinated apprenticeship system that spans the school-to-work pipeline. High school students transitioning to post-secondary opportunities like Registered Apprenticeship can enter apprenticeship at two access points—pre-apprenticeship and CTE—both at the secondary and post-secondary levels.

Interested in Learning More?

- ➔ Visit Oregon’s apprenticeship website at oregonapprenticeship.org
- ➔ Visit oregon.gov/boli/apprenticeship/Pages/pre-apprenticeship-programs.aspx to look at Oregon's pre-apprenticeship program application
- ➔ Contact Jennifer Denning, Strategic Programs Analyst, Office of Workforce Investments at jennifer.l.denning@oregon.gov

DRIVERS OF SUCCESS

- ✓ **WHEN IT CAME TO LEADERSHIP, TWO HEADS WERE BETTER THAN ONE.** The initiative was co-led by members who had deep expertise in the State’s education and employment systems. This team approach was helpful during key points, such as the initial design work and when inventing solutions along the way. Sharing the process and the decisions ultimately helped everyone reach a single outcome of alignment.
- ✓ **TAKING PATHS OF LEAST RESISTANCE HELPED KEEP THE MOMENTUM UP AND THE PROJECT COSTS DOWN.** While this initiative came with a clear mandate, it did not come with additional funding. Existing networks, such as the CTE consortia, became reliable workgroups. Leveraging their existing systems, policies, and procedures made it possible to stay on a planned timeline and reduced the need for outside funding.
- ✓ **THE LEADERS WERE SKILLED TRANSLATORS AND FACILITATORS.** The multi-stakeholder design was key to the success of this initiative. Having leaders who are skilled at interpreting a single notion across the core group of agency representatives prevented the work from getting stuck due to misunderstandings. Facilitating open communication allowed team members to voice concerns and ask questions, fostering a collaborative dynamic.

Apprenticeships Offer Post-Secondary Education and Credit

As Montana's skills gaps were growing more pronounced, the State's leadership and business community felt greater urgency to press for new and innovative solutions. Apprenticeship expansion became a key strategy to drive the larger goal of statewide alignment of resources for workforce development. The Governor, business leaders, and the commissioners of the Montana Department of Labor and Industry (MTDLI) and the Montana University System (MUS) had set forth goals to strengthen partnerships between two-year colleges and employers and provide opportunities for students to earn college credit for prior experience. MTDLI and MUS pursued a series of interagency projects to advance the State's workforce development goals while improving alignment, integration, and coordination of programs, services, and resources offered by both organizations. Working together, the agencies have made collaboration between colleges and industry more open and responsive, facilitated apprenticeship expansion in Montana's network of community and tribal colleges, and helped create a new prior learning credit policy in the university system to increase the number of credits that apprentices earn.

One example of interagency alignment and credit attainment is the Montana Early Childhood Apprenticeship Program, which is a collaborative effort of MTDLI, the Early Childhood Project at Montana State University, and the Early Childhood Services Bureau of the Montana Department of Public Health and Human Services (DPHHS). Apprentices complete 24 credits in early childhood education, are awarded a Child Care Development Specialist certificate, achieve Level 4 on the DPHHS Practitioner Registry, and are set on a career ladder in the field of early childhood education. For more information, visit the [DPHHS Professional Development](#) page or read this [case study](#) about the program.