NATIONAL GOVERNORS ASSOCIATION

White Paper

States Continue Advancing Strategies to Scale Work-Based Learning

Introduction

States increasingly need a more highly skilled workforce to meet the requirements of businesses, keep up with a rapidly changing economy and accelerate growth that leads to economic opportunity for workers and families. Changes spurred by technology, globalization and shifts in population demographics and geographic distribution demand adaptable strategies for preparing the nation's labor force. Economic forecasts have consistently predicted that the workforce of the future will require higher rates of postsecondary education, especially in the science, technology, engineering and math (STEM) fields, than exist in today's workforce.[1]

Governors and other state leaders are creating an ecosystem that supports both businesses seeking skilled workers and individuals seeking new or better employment. They recognize that their role is to bring together education, workforce and economic development as talent pipeline partners to better equip workers with skills businesses need. Governors are ideally positioned to champion these partnerships, and many have already taken steps to do that.[2] Work-based learning approaches have emerged from these partnerships as a promising strategy to address the mismatch between employer needs and the skill levels of available workers. These approaches connect work experiences that are of value and relevant to the sponsoring employer partners' workforce needs—also known as authentic work experiences—with structured learning activities. The goal of work-based learning is to reinforce practical and theoretical concepts, thus better preparing trainees for the realities of the workplace while meeting the needs of businesses.

Governors can create supportive environments for talent pipeline partners to develop, strengthen and increase the number of high-quality work-based learning opportunities by embedding work-based learning approaches into state education and workforce systems. They play a leading role in overcoming barriers to the scaling process, including limited understanding of the concept, outcomes and resources that support these programs. This paper is a guide for how governors can lead the way on expanding work-based learning opportunities as part of a pathway to career advancement for youth and young adults.

The information and state quotes presented in this paper are drawn from the experiences of six states that participated in a National Governors Association Center for Best Practices (NGA Center)

- **Business Roundtable** (2017): "As America continues to recover from the worst recession since the 1930s, our economic growth is hindered because the skills of today's workers have not kept up with the requirements of current and future jobs."[3]
- **Georgetown University** (2016): "Workers with a Bachelor's degree have added 8.4 million jobs in the recovery, but workers with a high school diploma or less [34% of the workforce] added only 80,000 jobs after losing 5.6 million jobs in the recession."[4]
- **New Hampshire** (2017): "New Hampshire is at a crossing point—we either adjust and rethink the importance of middle-skill jobs and training, or we lose the opportunity to strengthen the state's economy and do nothing to address the projected workforce shortages."[5]

policy academy on scaling high-quality work-based learning. **Indiana**, **Iowa**, **Montana**, **New Hampshire**, **Utah** and **Washington** participated in the policy academy between January 2016 and June 2017. This paper expands on the 2016 NGA Center paper *State Strategies to Scale Quality Work-Based Learning*, using more recent interactions and data from states.[6]

Defining Work-Based Learning

The six states—**Indiana**, **Iowa**, **Montana**, **New Hampshire**, **Utah** and **Washington**—that participated in the National Governors Association Center for Best Practices (NGA Center) policy academy were asked to develop a statewide definition for work-based learning in collaboration with relevant stakeholders. While the language and components of the definitions varied from state to state, the NGA Center developed a definition that reflects the elements of most states' definitions: "Work-based learning provides students with authentic work experiences where they apply and develop employability and technical skills that support success in careers and postsecondary education. Work-based learning activities culminate in an assessment and recognition of acquired knowledge and skills."

A continuum of work-based learning experiences can begin at a young age with career awareness and exploration activities, transition later to career preparation and training activities and culminate in entry into the workforce. Figure 1 below illustrates the four types of connected activities in the continuum.[7]

> Work-based learning provides students with authentic work experiences where they apply and develop employability and technical skills that support success in careers and postsecondary education.

Work-based learning opportunities can vary significantly in structure, content and scale. However, high-quality programs exhibit several common elements, as shown in Figure 2 on page 3:

- **Partnership agreement.** The program includes a clearly articulated agreement among the employer, participant and education institution or intermediary organization that identifies expectations for each partner and the general structure of the experience;
- **Authentic work experience.** The participant engages in an authentic work experience that is supervised and mentored by an industry professional;
- **Structured learning component.** Closely connected to the authentic work experience, the structured learning component is designed to connect theory with practice and workplace skills; and

Figure 1. Work-Based Learning Continuum

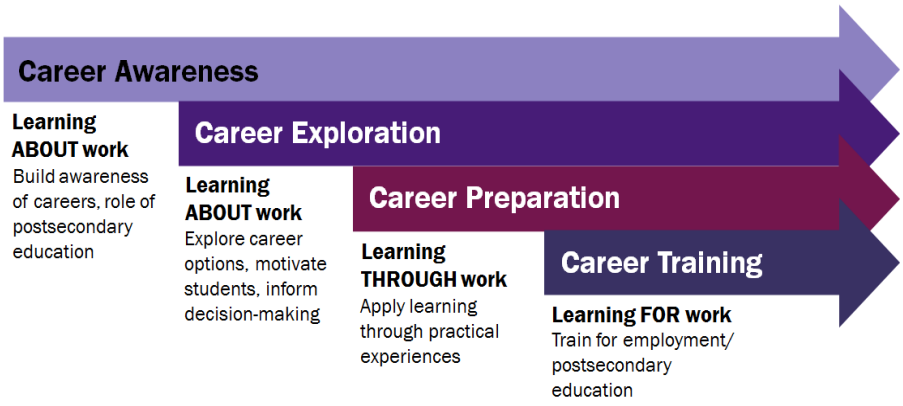
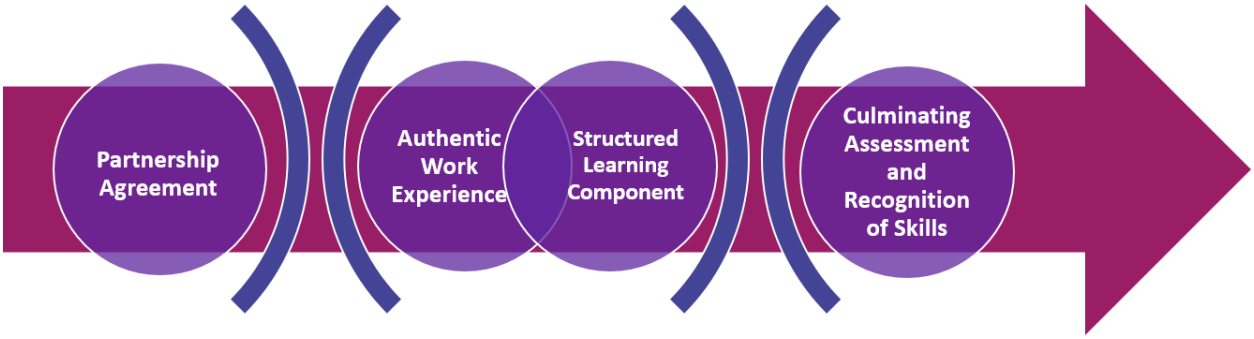


Figure 2. Elements of High-Quality, Demand-Driven Work-based Learning



- **Culminating assessment and recognition of skills.** The program culminates in an assessment and recognition of skills by a third party to ensure that recognition is aligned with the attainment of a credential or progress along a career pathway.

- **Iowa** (2017): "The Wild West nature of work-based learning has been corralled to a certain consistency."
- **Indiana** (2017): "Establishing a clear definition of work-based learning and of quality work-based learning experiences via a collaborative effort from partner agencies and stakeholders was definitely a huge win for Indiana… and enabled all other work to move forward at a rapid pace."

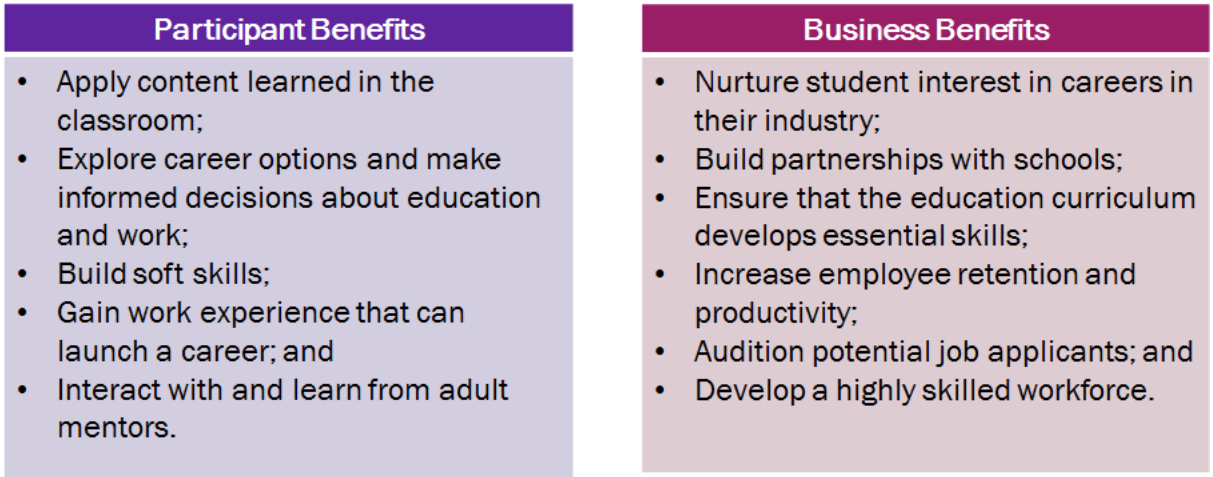
Why Work-Based Learning Works

Recent research shows that work-based learning benefits both businesses and participants. Economists at Case Western Reserve University and the U.S. Department of Commerce recently conducted a study on its value to businesses.[8] Using case studies of 13 businesses and intermediaries, they analyzed the benefits to businesses of registered apprenticeship. All the businesses reported benefits that outweighed the costs of running a program. The benefits are illustrated in Figure 3, focusing on the productivity provided by trainees, employee retention, development of a talent pipeline of job applicants and improved soft skills for employees.[9]

The Organization for Economic Cooperation and Development (OECD) conducted a study of work-based learning that identifies productivity gains for businesses and benefits for participants.[10] Beyond the commonly cited benefits listed in Figure 3 on page 4, the OECD research points out that youth at

- **New Hampshire** (2017): "We have heard from numerous students who have said 'but for this program' the student would have taken a very different, far less successful path."
- **Siemens Foundation** (2016): "[Companies] have the opportunity to shape the next generation of skilled workers from an early stage and engage directly with the local education system in a meaningful way. These experiences can also help build a positive culture in the workplace as current workers see their employer's commitment to training and giving back to the community.[11]

Figure 3. Benefits of Work-Based Learning Opportunities for Participants and Businesses



risk especially benefit from work-based learning opportunities, seeing reductions in mortality, arrest, conviction and incarceration rates.[12]

In every state, there are examples of high-quality, demand-driven work-based learning programs that exhibit these benefits for participants and businesses. Governors who are focused on improving economic opportunity in their states are looking to identify, expand and embed these types of programs as a strategy to increase their availability.

Components of Achieving Scale

The foundation for scaling— increasing opportunities for—high-quality work-based learning rests on three components: vision, measurement and sustainability. Success in each component requires interaction with and commitment from state talent pipeline partners.

Vision

Governors can establish a vision for scaling high-quality work-based learning as a core strategy to build a talent pipeline that connects people to work. They oversee many policy areas and have the capability to connect siloed organizations and efforts in pursuit of a common goal. Governors also have the capability to embed work-based learning in state education and workforce systems by adopting a definition for high-quality work-based learning, identifying programs that meet the definition and elevating the profile and importance of high-quality work-based learning.

State leaders can start by collaboratively developing a common definition—a shared understanding that is accepted by all partners and can be used as a starting point for engaging additional partners. Montana Governor Steve Bullock tasked a cross-agency team with creating not only a definition but a "Montana Career Readiness Ladder" that depicts the state's vision for a continuum of work-based learning activities. The team shared that definition and continuum with educators, employers and policymakers to create common ground for further conversation. As a result, the governor's staff conducted an inventory of programs that meet high-quality criteria and made a strong case for legislative investment with the successful passage of a new apprenticeship tax credit. The Indiana Department of Education developed a manual for employers, participants and local agencies to build a common language for work-based learning that outlines five models: registered apprenticeship, cooperative education, internship, school-based enterprise and service learning.[13]

Some governors choose to elevate the profile of work-based learning by convening industry and

education partners to discuss and promote it. Washington Governor Jay Inslee hosted a Governor's Summit on Career Connected Learning that brought together 1,300 Washingtonians through an in-person meeting and a web simulcast in 26 communities across the state in both urban and rural areas. During that meeting, Governor Inslee shared his vision for work-based learning, outlined a policy framework and announced a new public-private task force focused on employer engagement in work-based learning. Likewise, in 2016 New Hampshire hosted a governor's summit that featured employer work-based learning champions, including the Siemens USA president and CEO.

Governors also can share their vision for work-based learning through targeted campaigns and social media. In Iowa, former Governor Terry Branstad established the Future Ready Iowa Alliance, which developed recommendations to close the skills gap by improving access to education and training beyond high school.[14] The alliance found that work-based learning was a promising strategy to meet the state's workforce and skill challenges. In addition, the alliance worked to rebrand middle-skills jobs as "fast-track careers" and released more than 7,000 public service announcements to change the perception of middle-skills jobs. The public service announcements received more than 250,000 online impressions.

- **Utah** (2017): "Having the governor's support is absolutely critical. Talent Ready Utah would not have become a state initiative if [Governor Herbert] was not invested in the program."
- **Iowa** (2017): "The biggest success has been to elevate work-based learning to the forefront as a state-wide priority. Within state policy circles, work-based learning was seen more as an afterthought or sometimes not even a consideration. Now work-based learning is one leg of the integrated tripod that has career guidance and high-quality college- and career-ready curriculum as the other two legs."

Measurement

Another core component in scaling high-quality work-based learning is to measure the scale and quality of existing programs. States often find it challenging to do that because of the diversity in system ownership of programs and quality standards. However, the six policy academy states agreed that measuring work-based learning efforts helps set benchmarks and goals. The process of establishing measurement systems with stakeholders and setting expectations enabled and improved communication among partners.

Many policy academy states made progress in measuring the scale of work-based learning efforts and used that data to inform policy making. Montana identified "industry areas of focus" by using labor market information to find high-growth industries where the supply of skilled workers did not yet meet industry demand. The talent pipeline partners in those industry areas of focus then measured participation in work-based learning programs, and the Montana Department of Labor established a work-based learning unit to further scale opportunities.

State leadership also can focus on measuring the quality of programs to determine what characteristics make them successful when working with different industries and populations. In 2016, Washington identified 21 high-quality work-based learning programs in the state, with a wide range of methods of expanding opportunities for young people to access work-based learning. The state measured program participation and provided grants to support their participation in an analysis of their programs and the potential for growth. The grants were supported by federal Workforce Innovation and Opportunity Act

discretionary funding.[15] The state released a report that highlighted effective practices and summarized the programs' different approaches and the systems needed for success.[16]

Once states gather data on the level of participation and quality of work-based learning, it is important to put that information in the right hands to support decision making. Indiana Career Ready is a new online platform where state residents can obtain employment data and find local training opportunities, including work-based learning programs.[17] It is designed to be a "front door" for exploring and preparing for careers based on real-time industry demand trends.

- **Indiana** (2017): "Reach out early and often to all partners in the continuum to locate various existing data sources and streams for gathering/reporting purposes and strive to help them understand the purpose of the data collection and how it fits into the larger picture for telling both local and statewide success stories stemming from work-based learning."
- **Montana** (2017): "Use stakeholders to gather an initial scan of what is currently happening across the state and identify successful work-based learning programs that can be used to showcase best practice."
- **Iowa** (2017): "Pay attention at the outset to how work-based learning data needs to be collected and begin adjusting the policy and administrative process to make the collection process uniform and consistent. Keep in mind the long-term goal of incorporating work-based learning data into conventional education and workforce databases."

Sustainability

To embed work-based learning in education and workforce systems and sustain those efforts throughout leadership changes, it is important that states institutionalize processes to find and scale high-quality work-based learning programs. Through the process of creating a vision for work-based learning and measuring scale and quality, governors can ascertain the biggest barriers to scale and establish policies to support effective long-term strategies.

One immediate challenge policymakers may face when scaling work-based learning is limited cross-system data to identify programs and participation, as described in the previous section. To overcome that barrier, Utah Governor Gary Herbert signed a bill that created the Utah Data Research Center (UDRC).[18] The UDRC will streamline data from the state's board of education, board of regents, department of workforce services and department of health and the Utah System of Technical Colleges. Moving forward, the governor's office plans to use the UDRC as a resource for data on the scale of work-based learning.

Many governors hear from businesses that the start-up cost is a barrier to sponsoring a work-based learning program. Montana Governor Steve Bullock addressed that challenge by proposing and successfully passing an apprenticeship tax credit in 2017 that will support businesses engaged in apprenticeship programs.[19] Montana businesses will receive a $750 tax credit for every individual hired ($1,500 for a veteran) who is offered on-the-job training through the Montana Registered Apprenticeship unit.

Educational institutions face similar financial barriers when measuring and scaling high quality work-based learning programs. To overcome that challenge,

Indiana Governor Eric Holcomb signed a bill in 2017 that establishes a pilot career explorer program in 15 schools along with stipends to cover administrative costs for curriculum and delivery of work-based learning activities.[20]

Finally, some states are taking steps to ensure that all young people have access to work-based learning opportunities. Washington is considering a bill that would expand a scholarship program for low- and middle-income students pursuing postsecondary education through two-year associate degree or certificate programs, which could be linked to work-based learning activities.[21]

- **Washington** (2017): "Our advice to other states would be to start the actual [policy framework] process much earlier. What really helped finally unite our priorities was separating specific issues or goals into where action was required—whether it was at the state, administrative or legal level."
- **Montana** (2017): "We don't have to recreate the wheel. In many cases, we just have to find the wheel and make some adjustments, so it will fit on our car. Capitalizing on those pockets of success also makes engaging less intimidating for partners who are new to the concept of work-based learning."

Importance of Partnerships

Woven through the above components are examples of how governors established talent pipeline partnerships that include workforce, education and economic development system leaders to collaboratively identify, scale and embed high-quality work-based learning. Those partnerships are the building blocks of any successful work-based learning strategy, and the governor can serve as the visionary to guide the partners' work.

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Among the policy academy states, partnerships to support work-based learning took various forms. Some state partnerships conducted informal cross-system check-ins, discussing the components of work-based learning as a group to assess progress toward the governor's goals and decide on needed action steps. Other state partnerships were more formalized, such as Utah Governor Herbert's "Talent Ready Utah" initiative. The Talent Ready Utah executive board brought together industry, education, workforce and economic development agency leaders who have identified their agencies' roles and have fully committed to the partnership. In addition, education institutions can jointly apply to receive state funds to strengthen their investment in high-quality work-based learning opportunities.[22]

The collaborative process of bringing together talent pipeline partners to support the growth of work-based learning also helps leverage and align resources that may not have been previously considered. Table 1 on page 8 shows examples of funding sources and initiatives that can support work-based learning.[23]

- **New Hampshire** (2017): "New Hampshire 'gets the job done' by engaging broad partnerships with industry, education, philanthropic, legislative and community leaders."
- **Washington** (2017): "If you're really going to take [work-based learning] to scale, if all really does mean all, you have to be open to partnerships from every corner of the state and from every possible sector."

Table 1 Federal Funding Sources and Initiatives that Support Work-Based Learning

Opportunity	Description
Workforce Innovation and Opportunity Act (WIOA)	Work-based learning is a prominent feature of WIOA. At least 20 percent of local youth formula funds received by states must be used for work-based learning. WIOA also raises the reimbursement levels for on-the-job training and supports partnerships across human services, education, workforce and economic development systems.
Every Student Succeeds Act (ESSA)	ESSA gives states an opportunity to develop stronger alignment of education, workforce and economic development partners. State ESSA plans must demonstrate that the state will provide work-based learning opportunities that give students in-depth interaction with industry professionals. In addition, states have the option of including access to, or completion of, work-based learning opportunities as an indicator of school quality or student success in the state's accountability system.
State Postsecondary Credential Attainment Goals	Many states have developed postsecondary credential attainment goals to make their workforce more competitive. Growth of high-quality work-based learning can help states achieve these goals.
Competency-based Education	The education system is discussing a shift from inputs such as in-classroom time to outputs such as competencies obtained. Work-based learning is a competency-based model that can support that shift.
Sector Strategies	States can use sector partnerships to determine common skill needs among employers in an industry sector and use work-based learning programs to meet industry needs.
Career Pathways	States can work with education institutions to recognize skills developed outside of the traditional classroom through work-based learning programs and integrate them into traditional academic, career and technical programs as part of a recognized career pathway.

Conclusion

Governors are uniquely poised to lead their talent pipeline partners in identifying high-quality, demand-driven work-based learning programs and bringing those programs to scale. Growth of high-quality work-based learning may be slow because of limited understanding of the concept, the outcomes and the resources that can support it. By working with their economic development, education and workforce systems partners, governors can overcome these

barriers and embed work-based learning across the systems. Talent pipeline partners can work together to establish and share a vision for access to work-based learning in their state, measure progress in scale and quality and support policy change and alignment of funding to sustain their progress. The support of these talent pipeline partners in improving access to work-based learning opportunities will ultimately create a more competitive labor market for businesses, a stronger economy in the state and a pathway to career advancement for youth and young adults.

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Endnotes

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