



STATE STRATEGIES TO SCALE WORK-BASED LEARNING

Lessons Learned from an NGA Center Policy Academy

ACKNOWLEDGMENTS

This guide was prepared by Rachael Stephens, program director of the Workforce Development Program at the National Governors Association Center for Best Practices (NGA Center). The author would like to thank Martin Simon, director of Economic Opportunity at the NGA Center, and Meghan Wills, formerly of the NGA Center, who provided guidance and editing. The author also thanks Rachel Hirsch, Kimberly Hauge, Kristin Baddour and Ethan Ebert-Zavos of the NGA Center, for their support in content development and editing.

The NGA Center extends its appreciation to the Siemens Foundation, which provided funding and served as an intellectual partner to NGA Center staff for the NGA Center Policy Academy on Scaling Work-Based Learning. We look forward to continuing this partnership in the next phase of the policy academy, which as of publication is planned to extend into 2021.

FOREWORD

by David Etzwiler, CEO, Siemens Foundation



Siemens roots run deep in innovation and continuous learning. In Germany, Siemens has more than 10,000 people participating in apprenticeship programs each year and in the U.S., the company invests \$50 million annually in training and education for its employees. That expertise and our awareness of the challenges too many young adults face drives the Siemens Foundation's focus on closing the opportunity gap for young adults in STEM careers.

High-quality, work-based learning builds a bridge between a student's classroom learning and real-work experiences. It helps students gain an appreciation for, and familiarity with, the workplace, develops critical skills, and establishes professional networks. It establishes a clear pipeline of talent for employers and makes them partners in developing the skills of our workforce. And, by providing a context in which to apply lessons learned in the classroom, work-based learning supports students' academic success and reinforces that what's learned at school matters 'in real life.'

That's why the Siemens Foundation partnered with the National Governors Association Center for Best Practices to find out how we could scale effective models of work-based learning at the state level. We wanted to document and disseminate models to be integrated into state education and training systems to provide work-based learning opportunities to more students. The goal is to shift the trend from the exception to the rule. Thanks to the NGA and tireless leaders at the state-level, that shift is underway.

Since 2016, NGA's remarkable team has worked with 19 states and territories to build opportunities for young people to access quality work-based learning experiences. Now, we're excited to share lessons learned along the way. Our first four years of work with states identified three key elements of systems change governors should pursue to scale high-quality, work-based learning and embed it across education and workforce programs:

- Setting, communicating, and implementing a statewide vision;
- Using data to measure and scale quality work-based learning opportunities;
- Cultivating resource development and policy change to support and scale work-based learning.

If more states successfully pursue strategies in these three areas, the potential is limitless for state economies and for individual workers, their families, and their communities. For young adults, these experiences are life changing. They introduce students to career pathways with ladders to economic and educational growth. For employers, they lead to an expanded pool of highly skilled and qualified workers ready to fill jobs that enable their businesses to grow. For states, having more young adults and more employers actively engaged in meaningful work-based learning means more young people ready to thrive in the modern economy and to become the next generation of leaders in their communities.

We look forward to sharing details on these strategies with more state leaders to inspiring action through this report and our continued work with the National Governors Association Center for Best Practices through the Policy Academy on Scaling Work-Based Learning.

Sincerely,

A handwritten signature in black ink that reads "David Etzwiler". The signature is written in a cursive, slightly slanted style.

David Etzwiler
CEO, Siemens Foundation

EXECUTIVE SUMMARY

Broad economic disruption is changing work, workers and workplaces at an accelerated pace. These disruptive forces include technological advancement, artificial intelligence, globalization and labor force demographics, all of which contribute to the changing nature of work and the types of work that may be available in the near future.¹ Governors and other state leaders recognize that their residents must be better prepared to keep pace with and adapt to change and new technological disruptions throughout their careers. In this climate of disruption, these leaders are pursuing strategies to identify and scale high-quality education and training programs to prepare their residents for good jobs. One such promising strategy is work-based learning.

Work-based learning connects classroom education with on-the-job experience that states can deploy to help businesses and workers better meet their current needs while enhancing states' ability to prepare their future workforce for success. Moreover, as the nature of work and careers changes, work-based learning can prepare students to engage in active learning both at work and in the classroom and develop new skills throughout their careers.

WORK-BASED LEARNING CONNECTS CLASSROOM EDUCATION WITH ON-THE- JOB EXPERIENCE

Governors increasingly recognize the value of work-based learning as a key strategy to strengthen their talent pipelines and prepare their future workforce for success. As such, many governors are pursuing strategies to scale high-quality work-based learning opportunities for youth and young adults in their states. In the National Governors Association Center for Best Practices (NGA Center) Policy Academy on Scaling Work-Based Learning, the NGA Center worked with 19 states and territories over four years to scale high-quality work-based learning opportunities for youth and young adults. Through this work, the NGA Center and the participating states identified three core elements of long-term systems change to embed work-based learning in kindergarten through grade 12, postsecondary and adult training and education systems (see Figure). The NGA Center also worked with participating states to identify strategies governors can pursue to support each element of systems change.

Elements of State Systems Change

 **VISION AND COMMUNICATION**

Set, communicate, and act on a statewide vision for scaling work-based learning with engagement and support from:

- Governor's office
- Education and workforce systems
- Business and industry
- Relevant service providers

 **DATA AND MEASUREMENT**

Collect and use data on the following to measure, communicate about, and scale high-quality work-based learning:

- Work-based learning participation and programs across systems
- Quality of programs
- Outcomes

 **RESOURCES AND POLICY**

Cultivate resource development and policy change to support, scale, and sustain high-quality work-based learning opportunities, including:

- Policy and process changes in state agencies
- New or reallocated funding sources
- Governance structure



Governors can lead educators, employers and state policymakers in taking the following steps to **set, communicate and implement** a statewide vision for scaling work-based learning in their state:

- Set a statewide vision for scaling work-based learning.
- Align work-based learning goals with the governor’s broader education and workforce development priorities.
- Develop a statewide definition of “work-based learning.”
- Communicate and elevate the vision and definition by using the governor’s convening authority and branding work-based learning initiatives.
- Engage stakeholders in regular action planning and implementation.

Governors can enhance their state’s ability to **use data to measure and scale quality work-based learning opportunities** by guiding and supporting state leaders as they:

- Measure work-based learning participation across education and workforce systems in one of two ways:
 - Integrate work-based learning into state longitudinal data systems.
 - Build capacity to gather and connect data across education and training systems in the absence of a unified longitudinal data system.
- Develop metrics to measure the quality of work-based learning programs.
- Use data as a communication and accountability tool.

Governors can **cultivate resource development and policy change to support and scale work-based learning** and make their state’s efforts sustainable over the long term by taking the following actions:

- Establish cross-agency working groups to support system alignment.
- Establish offices of work-based learning.
- Braid and blend existing funding.
- Propose or support legislation to promote and scale work-based learning programs.

“State Strategies for Scaling Work-Based Learning: Lessons Learned from an NGA Policy Academy” provides greater detail on how governors can lead and work with state partners on each key element of systems change. The guide draws on examples and lessons learned from work with the 19 states and territories that have participated in the NGA Center Policy Academy on Scaling Work-Based Learning to date.

INTRODUCTION

National unemployment has reached record lows, but gaps persist between what employers need in skilled workers and what the workforce is equipped to deliver. Open jobs often go unfilled while new and incumbent workers struggle to find positions that provide a stable income and a long-term career path. Still other workers remain disengaged from the labor force altogether, discouraged by the difficulty of finding a job, in part because of their lack of marketable skills or work experience. Looming past the horizon of these immediate challenges is the swelling wave of broader economic disruption. The forces of globalization, an aging population and rapid technological advancements are changing the nature of work and the jobs that may be available in the future.

Much remains uncertain about the magnitude and pace of changes to the amount and nature of available work. What is certain, however, is that these changes call for a workforce that is adaptable, creative and adept at problem solving.² Growing proportions of the workforce will need to be prepared to engage in more frequent job or career transitions or take advantage of the opportunities that an on-demand economy and web-based platforms present to facilitate independent work and entrepreneurship.^{3,4} Problem solving, creativity and strong interpersonal communication skills are necessary in a world where automation technology reduces the amount of rote or repetitive tasks humans perform at work.⁵ Leading education research suggests that more can be done in our education and workforce training systems to cultivate these abilities in learners of all ages.^{6,7}

In this economic environment, governors are working to enhance education and training to ensure that the future workforce is ready for and adaptable to technological disruptions to the nature of work, workplaces and careers. Governors recognize that preparation for technological changes increasingly requires at least some postsecondary education. To that end, governors are setting ambitious postsecondary credential attainment goals for their state. More than 40 states have set goals to increase postsecondary credential attainment rates, and they are developing and implementing statewide strategies to reach those goals. About half of those states set goals to increase postsecondary credential attainment by 16 to 24 percentage points by 2030 or earlier.⁸

Work-based learning programs can help states reach these goals by giving businesses the skilled workers they need while helping workers attain the skills they need. These programs offer learners educational experiences that connect classroom learning to the “real world” of work and facilitate career exploration at an earlier age. By increasing work experience, career exploration and access to professional networks, work-based learning programs can lead to improved employment outcomes for students. Increasingly, states are looking to work-based learning as a future-oriented education and training strategy. Work-based learning can prepare students to engage in active learning on the job and in the classroom throughout their lives, which will help them adapt to changing skill needs in the future. Governors are recognizing the valuable ways work-based learning programs support the state’s workforce and economic development goals and are pursuing strategies to scale high-quality work-based learning opportunities in their state.

NGA Center Definition of and Quality Framework for Work-Based Learning

The National Governors Association Center for Best Practices (NGA Center) developed a definition of and framework for high-quality work-based learning through its work with an initial cohort of six states that participated in Phase II of the NGA Center Policy Academy on Scaling Work-Based Learning (Figure 1). In Phase II of the policy academy, participating states were presented with this definition and framework, and then built on and tailor them to meet their state’s needs.

THE NGA CENTER DEFINITION OF HIGH-QUALITY WORK-BASED LEARNING

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.

Some Phase II participating states, including **Alabama, Mississippi, and Utah**, elected to adopt the NGA Center definition of “work-based learning” as their statewide definition. Other states, including **Idaho, Illinois and Washington**, chose to add more detail and specificity on the types of activities or assessments that can be considered part of a high-quality work-based learning program or on how program quality will be assessed and measured. The NGA Center definition and framework form the basis for understanding high-quality work-based learning throughout “State Strategies for Scaling Work-Based Learning: Lessons Learned from an NGA

Policy Academy.” They are the basis for the development of technical assistance activities provided for the states participating in the NGA Center Policy Academy on Scaling Work-Based Learning.

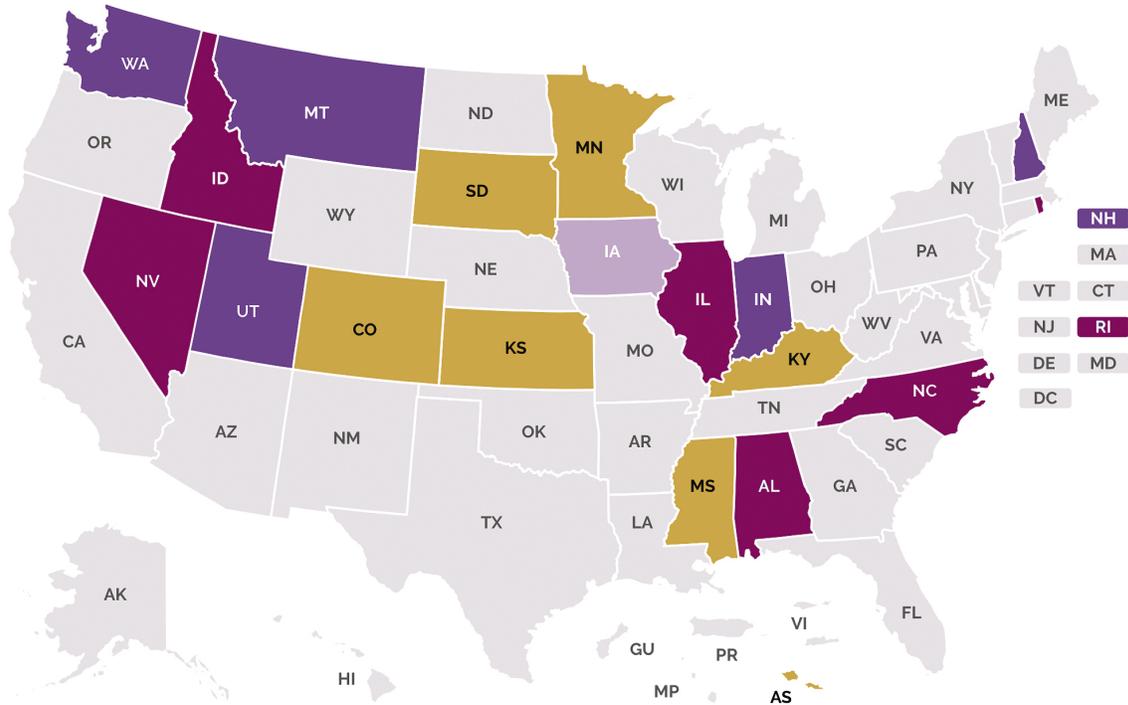


FIGURE 1: The NGA Center Quality Framework for Work-Based Learning

The NGA Center Policy Academy on Scaling Work-Based Learning

In 2015, the NGA Center partnered with the Siemens Foundation to develop a project with states to address their changing workforce needs by scaling work-based learning (Figure 2). The project followed the NGA Center’s policy academy model, in which a cohort of competitively selected states commits to developing and carrying out an action plan to achieve state-specific goals, with technical assistance from the NGA Center. In Phase I of the policy academy’s work with states (2016–2017), the NGA Center engaged six states in a rigorous, customized technical assistance program focused on scaling high-quality work-based learning opportunities for youth and young adults aged 16 to 29 years in science, technology, engineering and mathematics (STEM)-intensive fields. Through their work with the NGA Center, **Indiana, Iowa, Montana, New Hampshire, Utah and Washington** developed definitions for work-based learning. They also identified and implemented statewide strategies to elevate the value of work-based learning in their states, enhance existing programs, measure the quality and outcomes of programs and scale effective program models. Throughout Phase I, the participating states made important advancements in embedding work-based learning in state education and training systems. Yet, many struggled to build on their early successes, and additional work was required to ensure that they could sustain the systems changes they had achieved.

In Phase II (2018–2019), the NGA Center continued its work with five of the six Phase I states and expanded the technical assistance program to a new cohort of six competitively selected states: **Alabama, Idaho, Illinois, Nevada, North Carolina and Rhode Island**.⁹ An additional six states and one territory were accepted into a learning network through which they participated in peer conversations and cross-state meetings throughout the policy academy: **Colorado, Kansas, Kentucky, Minnesota, Mississippi, South Dakota and American Samoa**.¹⁰ In Phase II, the participating states built on the Phase I states’ experiences and lessons learned, refining and revising the definitions, visions and communication strategies the states had developed; expanding and deepening their work in the areas of data and measurement; and engaging in peer learning through policy, resource development and sustainability.



LEADER STATES were selected for inclusion in the first Policy Academy cohort in 2016. They have been receiving intensive technical assistance from NGA for several years and acted as mentors to a new cohort of states in Phase II.

POLICY ACADEMY STATES were selected for inclusion in the second Policy Academy cohort. They received intensive technical assistance from NGA in Phase II.

KNOWLEDGE EXCHANGE STATES were selected to participate in peer-learning from Leader States and an in-person convening.

Iowa was a participant in the first cohort of the Policy Academy.

FIGURE 2: States Participating in the Policy Academy From 2016 Through 2019

The NGA Center established basic requirements for states participating in both phases of the policy academy. Each state was required to identify a core team to lead the work. This team consisted of representatives from the governor’s office; the kindergarten through grade 12 (K-12), community college and higher education communities; workforce development initiatives; and economic development agencies. In the second phase, states were required to add a state data systems expert to their core team. This cross-agency core team was designed to support the state’s ability to reach decisions on comprehensive and effective work, define a vision and build an action plan to scale work-based learning. All state teams were required to develop, report on and iterate action plans that incorporated strategies to support each of the three core elements of systems change: setting, communicating and implementing a statewide vision; using data to measure and scale high-quality work-based learning; and cultivating long-term resource development and policy change to support and scale work-based learning (Figure 3). NGA Center staff members often facilitated action planning and discussions.

Core teams were required to include certain key activities within each core element of systems change:

- Host a governor’s summit to share and elevate the governor’s statewide vision for work-based learning.
- Gather data on work-based learning programs and participation levels.
- Develop policy recommendations for the governor.

Elements of State Systems Change

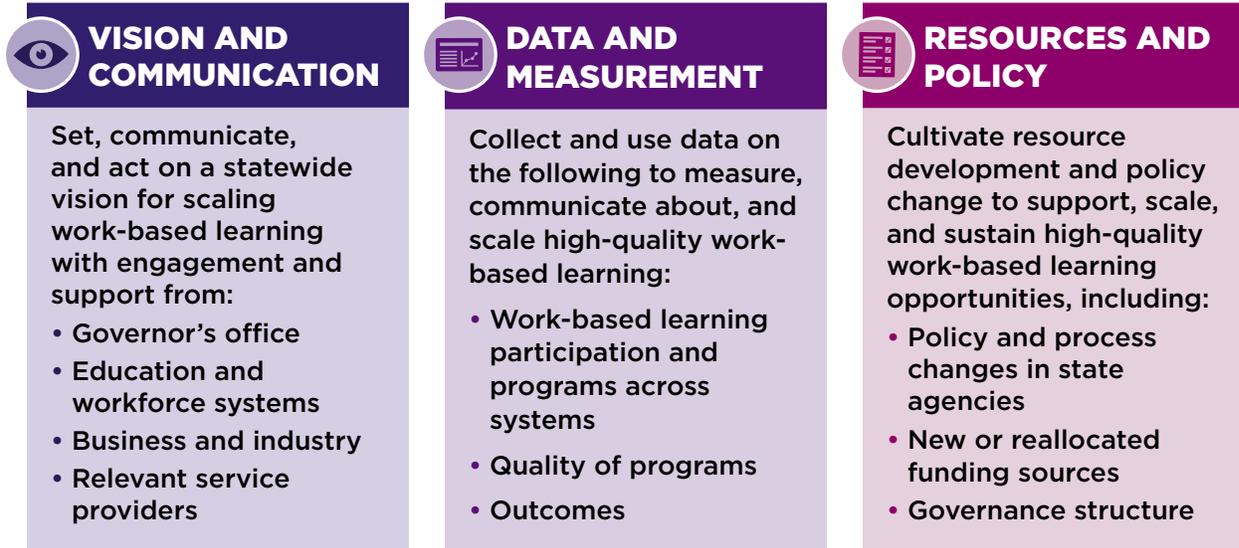


FIGURE 3: Elements of State Systems Change

States started the policy academy with the goal of expanding work-based learning in alignment with the broader statewide goals and strategies for education and credential attainment their governor has outlined. Within the context of this broad goal, each state defined more detailed goals related to the expansion of specific types of high-quality work-based learning programs, including apprenticeship, and identified target industries and populations for their work. The NGA Center developed the policy academy structure and technical assistance to guide and support states’ work toward these goals and to share best practices that other states could adopt and modify to advance their own objectives.

To this end, the NGA Center has gathered these best practices learned over four years of the policy academy into “State Strategies for Scaling Work-Based Learning: Lessons Learned from an NGA Policy Academy.” This report provides greater detail on how governors can lead and work with state partners on each key element of systems change. State examples and best practices for each of those elements are shared throughout this document.



SET, COMMUNICATE AND IMPLEMENT A STATEWIDE VISION

Governors have unique authority to set a vision for their state and convene stakeholders across the public and private sectors in support of that vision. Thus, the success of any statewide workforce development strategy depends on strong understanding by and support from the governor and his or her cabinet. This support is critical for scaling work-based learning because work-based learning relies on partnerships among employers, education institutions and diverse state agencies. Once a statewide vision and definition of “work-based learning” have been collaboratively established with leadership from the governor’s office, that office can function as the primary messenger and guide a statewide approach that aligns education and training systems in implementing this vision.

Governors can lead state agency leaders in taking the following steps to develop, communicate and implement a vision for scaling work-based learning in their state:

- Set a statewide vision for scaling work-based learning.
- Align work-based learning goals with the governor’s broader education and workforce development priorities.
- Develop a statewide definition of “work-based learning.”
- Communicate and elevate the vision and definition by using the governor’s convening authority and branding work-based learning initiatives.
- Engage stakeholders in regular action planning and implementation.

Set a Statewide Vision for Scaling Work-Based Learning

Interdisciplinary, cross-agency participation in developing a vision is critical to successfully scaling work-based learning opportunities. Work-based learning programs cannot be designed or implemented by any one agency or entity alone because the model relies on partnerships across multiple education and training systems. As such, governors must intentionally include diverse stakeholder voices in developing a strategic vision for scaling work-based learning programs in their state. Moreover, involving stakeholders in this process at the outset helps ensure stronger buy-in from those implementing the vision and strengthens the quality, comprehensiveness and power of the vision and the plan for implementing it.

From the beginning of their engagement in the policy academy, governors led their core team in setting the vision for the expansion and success of work-based learning in their state. North Carolina Gov. Roy Cooper identified work-based learning as a key component of a broader statewide vision aimed at “encourage[ing] business and industry to partner with our education systems to improve our workforce pipeline.” Gov. Cooper made it clear that implementing this vision would require coordination across education systems to address the challenges that broader economic trends posed.¹¹ This vision helped guide the core team’s work throughout its two years in the policy academy, focusing much of its efforts on collaboration between businesses and education partners.

INTERDISCIPLINARY, CROSS-AGENCY PARTICIPATION IN DEVELOPING A VISION IS CRITICAL TO SUCCESSFULLY SCALING WORK-BASED LEARNING OPPORTUNITIES.

“Changing demographics and technological advances are affecting our workforce landscape, requiring strategies for continuous improvement of our workforce pipeline. Students need a range of opportunities to be able to fully participate in this new economy, and business needs a stable supply of skilled workers. It is... critical that our education systems coordinate to make it as easy as possible for students, educators, and businesses to navigate through [these systems].”

—NORTH CAROLINA GOV. ROY COOPER¹²

The vision for work-based learning must be translated into actionable information that empowers education and training providers with a clear sense of their role in delivering on the vision. For example, former Idaho Gov. Butch Otter and his policy academy core team set a vision to develop a diverse workforce that possesses the knowledge and skills to meet the needs of Idaho’s economy. Elevating and clarifying the value of all pathways to good jobs, including work-based learning and apprenticeship, were critical to implementing this vision. Idaho’s core team then translated this vision into a clearly articulated continuum of activities across elementary, high school, postsecondary and workforce programs. The continuum, called “Idaho LEADER,” helps education and training providers clearly see where they fit into the vision the state has laid out. Most importantly, Idaho uses the continuum as an employer engagement tool that, by clearly articulating the opportunities and appropriate education partner for each, invites employers to identify the type of participation that best meets their needs. This approach, in turn, supports the state’s ability to successfully expand work-based learning across the learning continuum. The full Idaho LEADER work-based learning continuum is provided in Appendix A.

Align Work-Based Learning Goals With the Governor’s Broader Education and Workforce Development Priorities

It is critical that the statewide vision for scaling work-based learning align with and support the governor’s broader vision for the state’s workforce development and economic growth. One way states are ensuring this alignment is incorporating their work-based learning plans into efforts to reach their postsecondary education attainment goals. More than 40 states have set postsecondary education attainment goals, and states participating in the policy academy identified work-based learning as a critical piece of the state’s strategy to achieve those goals.¹³

Governors can also approach their work-based learning efforts as part of other education and workforce initiatives already underway in the state. For example, in 2017, Rhode Island Gov. Gina Raimondo launched Prepare Rhode Island (PrepareRI) to give all state youth the skills they need for high-quality jobs. PrepareRI is a strategic partnership among state government, private industry leaders, public education system, postsecondary education and nonprofit organizations (NPOs) across the state to work with youth and their families. Work-based learning is an education and workforce development priority that falls under the purview of PrepareRI.¹⁵

“In Rhode Island, work-based learning is an integral part of our PrepareRI initiative. Internship programs for high school and college students are the flagships of PrepareRI, and we could not have built these programs without the support from the NGA [Center] Policy Academy on Scaling Work-Based Learning.”

—RHODE ISLAND GOV. GINA RAIMONDO¹⁴

Similarly, in early 2018, North Carolina Gov. Cooper launched his NC Job Ready initiative focused on ensuring that North Carolina’s workforce is prepared for the jobs of today and tomorrow. A



key piece of this initiative is expanding work-based learning opportunities for youth and young adults.¹⁶ The North Carolina core team, led by the North Carolina Business Committee for Education (NCBCE), a long-standing NPO housed in the governor’s office, branded the work-based learning initiative “Experience More: Real-World Learning for Real-Life Success.”¹⁷ The core team ensured that the brand and their vision, goals and action plans for scaling work-based learning consistently work in close alignment with NC Job Ready to support the governor’s priorities and goals for the state.

Develop a Statewide Definition of “Work-Based Learning”

Establishing a clear statewide definition of “work-based learning” is an essential early step in developing a strategy to scale work-based learning. The term “work-based learning” is often used inconsistently to label different types of activities across and within education and training systems. A common definition enables all work-based learning program administrators to support clear communications with parents and employers and helps ensure consistent and accurate measurement of work-based learning program participation. The NGA Center required policy academy states to develop a statewide definition and incorporate its dissemination in their action plans. States did this collaboratively, starting with their interdisciplinary core teams. Once the core team members reached consensus on the definition for their state, key stakeholders outside the core team were engaged for their feedback and buy-in on the definition.

Some states in the policy academy, including Alabama and Utah, chose to adopt the NGA Center definition of “work-based learning” as their own and used it to guide their efforts. Other states incorporated work-based learning definitions into broader sets of definitions and frameworks already being developed. For example, Illinois established a statewide definition for “work-based learning” among the numerous terms and concepts defined in its Career Pathways Dictionary.¹⁸ The dictionary was developed by the Workforce Readiness through Apprenticeships and Pathways (WRAP) Committee, which former Gov. Bruce Rauner created as part of the Governor’s Cabinet on Children and Youth. The WRAP Committee included members from state education and workforce agencies brought together to develop clear, unified definitions for apprenticeship and other, related activities, such as work-based learning. The Idaho LEADER work-based learning continuum (Appendix A) offers another example of how states can clearly define and articulate work-based learning activities for multiple stakeholders.

Recent and upcoming federal legislation offer states an opportunity to align their definitions with those that the federal programs that support work-based learning use. The Strengthening Career

and Technical Education for the 21st Century Act of 2018 (Perkins V) includes a definition of “work-based learning” that expands on previous iterations of Perkins. The new definition includes active interaction with industry or community professionals in real workplace settings or in simulated educational environments (see Table 1 on page 21).¹⁹ Several states that participated in the policy academy are exploring ways to reconcile these definitions with their definition as part of a larger effort to align their activities with their Perkins V and Workforce Innovation and Opportunity Act of 2014 (WIOA) 2020 state plans.



Communicate and Elevate the Vision and Definition

Another key role governors play in scaling work-based learning is guiding and championing a communications strategy that elevates their vision for work-based learning and gives stakeholders ways to engage. This strategy should include clearly identifying and articulating the benefits of work-based learning for students, parents, jobseekers and employers. Without clear, consistent communication of these benefits and information about how individuals can find and engage in work-based learning opportunities, efforts to scale these programs may see limited success.

Governors' offices can also play a role in identifying strong champions for work-based learning programs who will consistently communicate a unified message. Policy academy states found it beneficial to include representatives from all levels of industry, education, state agencies and other entities aligned with their governor's vision for work-based learning. Empowering champions and leaders outside the governor's office helps reduce the risk that the initiative will stall during or after transition from one administration to another.

Branding Work-Based Learning Initiatives

Some policy academy states used brand recognition to elevate work-based learning initiatives. They found that brands that students, parents, employers and educators recognize and trust helped increase the effectiveness of efforts to gain interest and participation from students and employers. This strategy is particularly advantageous in an environment that has multiple programs operating across many sectors and administering agencies. When developing a brand and marketing strategy for a statewide work-based learning initiative, states must understand (1) what potential consumers (participants, employers) need to know about the value of work-based learning programs, (2) the target audiences for communications, (3) how those target audiences best receive and share information and (4) how to tailor communication plans to each target audience's needs and methods of receiving information.

Future Ready Iowa is a fast-growing brand for innovative policies that align with and drive the goal of 70% of the state's workforce having education or training beyond high school by 2025. Iowa has deployed the brand through intensive collaboration among state agencies as well as higher education and private sector partners to market policies launched in 2018 and 2019. These policies include a virtual K-12 work-based learning clearinghouse where employers post authentic projects for teachers to select; expanding registered apprenticeship programs, including in high schools, through start-up funding; a Last-Dollar Scholarship to help students achieve credentials up to two-year degrees that lead to high-demand jobs; and the Employer Innovation Fund, with a state match for local, private funding to increase postsecondary attainment. Gov. Kim Reynolds' leadership as a Future Ready Iowa champion continues to be critical in expanding public awareness and increasing community involvement. Future Ready Iowa enhances its brand impact through activities such as providing high-quality marketing materials, outreach through social media and holding dozens of regional Future Ready Iowa summits. The foundation for this work was laid in 2017 by the Future Ready Iowa Alliance, whose 58 members, representing business, education, NPOs and state and local government, named work-based learning as one of five priorities.

See Appendix B for a sample of additional branded initiatives states launched in the first four years of the policy academy as part of their efforts to scale work-based learning.

Using the Governor's Convening Authority

States participating in the NGA Center Policy Academy on Scaling Work-Based Learning have found that holding a statewide summit backed by the governor is an especially effective way to gain stakeholder buy-in and highlight promising programs around the state. In addition, statewide summits were invaluable in reinforcing work-based learning as a gubernatorial priority. When attempting to scale a successful work-based learning approach, some states indicated that state administrators struggled with a perceived lack of authority that hindered their ability to implement



GOVERNORS AND STATES MUST COMPLEMENT A STRONG COMMUNICATION STRATEGY FOR THE GOVERNOR'S VISION WITH QUALITY, UP-TO-DATE INFORMATION ABOUT WORK-BASED LEARNING PROGRAM AVAILABILITY AND HOW EMPLOYERS, STUDENTS, AND EDUCATORS CAN PARTICIPATE.

changes in program delivery systems or create new partnerships. Governors' summits are one avenue through which governors' offices can empower agencies, education systems, employers and community stakeholders to collaborate on program development and expansion.

These summits can also be opportunities to recognize strong work-based learning champions and encourage others to become champions. During Phase II of the policy academy, New Hampshire hosted its first annual Work-Based Learning Awards ceremony, hosted by Gov. Chris Sununu and attended by more than 200 educators, industry leaders, students and state policymakers. Gov. Sununu gave awards to 21 work-based learning champions who, as he stated at the award ceremony, were "getting the job done for students" by "bringing stakeholders together to match future opportunities with the workforce needs of employers" through work-based learning programs.²⁰ The event offered students and parents the opportunity to see work-based learning as an essential part of college and career readiness, not only for career and technical education (CTE) programs but also for traditional four-year college programs, rather than as a separate or lesser career preparation path. The success of the event has led the New Hampshire team to develop similar ceremonies to increase connections with employers and to further demonstrate how work-based learning models can benefit employers and students alike.

Connecting Students, Parents and Employers With Current and Accessible Information

Governors and states must complement a strong communication strategy for the governor's vision with quality, up-to-date information about work-based learning program availability and how to participate. This information must reach educators, employers, learners and their families; it must be relevant, digestible and readily available.

Some states have built online portals to provide relevant information to anyone interested in work-based learning and other education or training opportunities. Many of these platforms are also designed to help individuals connect directly with employers that host work-based learning opportunities. For example, North Carolina has launched a first-of-its-kind online tool that connects members of the business, education and workforce development communities.²¹ NCBCE developed The Navigator in collaboration with the governor's office and Fidelity Investments; the site launched in 2018.²² The Navigator is a one-stop marketplace where employers can post available apprenticeships, internships, career opportunities and other work-based learning experiences. Educators use this information to identify valuable real-world workplace engagements for their students. By improving student access to work-based learning opportunities, The Navigator has advanced North Carolina's talent pipeline and enabled employers to consolidate their recruitment efforts, reduce hiring and training costs and more accurately measure their impact on the community.²³ To date, more than 65,000 teachers have signed in to the platform. In 2020, The Navigator will become the tool of measurement for the state's CTE work-based learning goals.²⁴

See Appendix C for a list of similar online portals states have developed to connect students, parents, employers and others with information about work-based learning opportunities.

Engage Stakeholders in Regular Action Planning and Implementation

Work-based learning is a cross-disciplinary approach to education that requires public-private partnerships (PPPs) and engagement of leadership at the K-12 and postsecondary levels. Implementation of a statewide vision and development and dissemination of a communications strategy thus requires a dedicated cross-agency action-planning team. No one state agency or system can implement a statewide strategy to scale work-based learning on its own. Engaging private sector stakeholders early in setting the statewide vision and developing policy recommendations is beneficial, but state agency leadership is ultimately responsible for implementing the actions and making recommendations to achieve the vision. Therefore, it is important that these state agency partners drive the action planning and implementation process alongside the governor's staff.

As part of their participation in the policy academy, states' cross-agency core teams engaged in regular action planning throughout the project, often facilitated by NGA Center staff. This action planning included establishing deadlines and assigning responsibilities to participants both within and outside the core team, as needed. This aspect of the policy academy design modeled the process of developing feedback loops and regularly revisiting and revising action plans and assignments as implementation evolved to ensure realization of the statewide vision. Several states strategically engaged key industry leaders during specific stages of the action planning process and action plan implementation. Engaging the private sector in this way helped establish buy-in early in the process and contributed to increased interest and involvement in work-based learning among employers. In addition to establishing the policy academy core team and engaging in action planning activities, several participating states developed more formalized in-state groups to carry out action planning and implementation activities beyond the in-state meetings and site visits that the NGA Center policy academy team conducted.

Alabama is one of several states participating in the policy academy that exemplified the cross-agency approach in its work-based learning initiative. The state's core team consisted of experts from several executive agencies, including the Alabama Departments of Commerce, Labor and Education; the Alabama Community College System; and the Alabama Commission on Higher Education. Alabama thus ensured that all state education and training systems that could offer work-based learning programs were at the table to engage in action planning. It also ensured representation of business and industry, educators and students in formulating the state's strategic plan. The result was the development of robust, cross-agency work-based learning priorities. Notably, the cross-agency core team laid the groundwork for establishing the Governor's Office of Education and Workforce Transformation (GOEWT) in 2018. The GOEWT is governed by a cross-agency team of advisors tasked with implementing the governor's education initiative and workforce development strategic plan, much of which was developed by or in collaboration with policy academy core team members.²⁵ This action integrates cross-agency collaboration and intrasector partnerships into state operations for scaling work-based learning and across all workforce development and education areas.

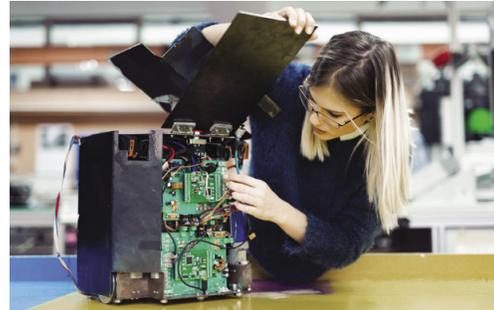
“Collaborating with states [that] are similarly engaged in expanding a currency of valuable credentials, competency-based learning, and work-based learning has helped Alabama connect education and the economy by aligning education and workforce programs to employer demand.”

—ALABAMA GOV. KAY IVEY²⁶



USE DATA TO MEASURE AND SCALE HIGH-QUALITY WORK-BASED LEARNING

The deliberate and consistent measurement of participation levels, quality and outcomes of work-based learning programs is necessary for effectively identifying and scaling those programs that are of high quality and that produce strong outcomes for participants. Many states are currently in a position to enhance their capacity to gather and connect data across sources; from various education and training programs; and from other programs, including human services programs. Such data helps states understand whether their efforts to expand access to work-based learning opportunities are actually leading to increased participation and positive outcomes. Data collection and measurement across agencies and programs is particularly important for helping governors assert leadership in establishing strong data processes and practices as a priority across state agencies.



Governors can support efforts across state agencies to collect data on work-based learning by calling on these agencies to take the following actions:

- Measure work-based learning participation across education, workforce and other relevant systems by using one of the following methods:
 - Integrate work-based learning into state longitudinal data systems.
 - Build capacity to gather and connect data across education and training systems in the absence of a unified longitudinal data system.
- Develop metrics to measure the quality of work-based learning programs.
- Use data as a communication tool.

Measure Work-Based Learning Participation Across Education and Workforce Systems

States interested in expanding work-based learning programs can start by conducting a baseline scan of data on existing work-based learning participation, programs and funding sources. In the policy academy, most states shared a common template with each state agency that administers work-based learning programs, asking them to contribute key information about program attributes (such as length), activities and participation levels. This exercise helped states understand how many work-based learning programs exist in their state, how many people participate in them, which agencies or institutions host them and how they are funded.

The data states gathered at one-year intervals included:

- Total number of programs.
- Types of program.
- Percentage of programs with a work experience or on-the-job training (OJT) component.

- Percentage of programs with a classroom instruction component.
- Percentage of programs with a career exploration component, including job shadowing; counseling; or other, similar activities.
- Percentage of programs with a STEM focus.
- Slots available per program.
- Total number of participants.

This data scan also helped states identify gaps in their capacity to gather reliable data from sources within their state. Once gaps were identified through the initial baseline scan, states in the policy academy were better able to close them and build their data-collection capacity across agencies.

Integrate Work-Based Learning Into Statewide Longitudinal Data Systems

States have established longitudinal data systems designed to measure and track participation and student outcomes across the phases of education and training. Many statewide longitudinal data systems (SLDSs) connect information from early-learning, K-12, postsecondary education and workforce programs, though not all states currently gather such data within the same data system.²⁷ Integrating work-based learning data into an SLDS helps the state better understand participant outcomes because states can then follow participants' progression through education or training into employment. This integration also reinforces the alignment of strategies to scale work-based learning with broader statewide education and workforce initiatives. As with other workforce and education program data, demographic information about participants can help states identify and work to close equity gaps on bases such as gender and ethnicity.

The Mississippi LifeTracks (MLT) SLDS has made significant progress toward incorporating data on work-based learning into its data-collection, sorting and reporting systems. The MLT is managed by the MLT Governing Board, which is made up of members from each state agency and institution that contributes data. The MLT collects and analyzes public education data at the individual, course, institution and systems levels, aggregating records from across the state's public education system.²⁸ The system tracks what types of work-based learning programs individuals participate in and which employers were involved in their program. Work-based learning programs are classified to match relevant federal classifications, such as registered apprenticeships or OJT, to make it easier for program administrators to report and use the data.



The Story of Mississippi LifeTracks

Mississippi LifeTracks (MLT) was developed across two gubernatorial administrations, with strong leadership and support from former Gov. Haley Barbour and Gov. Phil Bryant. To successfully integrate work-based learning data, MLT leadership worked closely with former Gov. Barbour to build a unified effort and engage data administrators from multiple agencies that track education and training program data. MLT was developed in partnership with the National Strategic Planning and Analysis Research Center (NSPARC) at Mississippi State University. NSPARC serves as a neutral third party to facilitate the alignment of data from multiple sources across education and workforce development agencies. With the governors' leadership, the MLT team was able to develop a common understanding of the value of gathering and linking this type of data to show improvements in student outcomes and to make it easier to implement, measure and report on state and federal programs. Finally, MLT leadership established resources that would permanently support the data infrastructure and ongoing training for staff to ensure that the system is properly managed.^{29,30} The combination of strong gubernatorial leadership to foster collaboration and buy-in across multiple state agencies with facilitation by a neutral third party (NSPARC) contributed to the successful development of MLT and to the deliberate and strategic inclusion of work-based learning data.



Build Capacity to Gather and Connect Cross-System Data in the Absence of an SLDS

As states continue to build capacity in their SLDSs or are still working to incorporate data from across state agencies, there are ways that states can improve their ability to gather work-based learning data and connect data on participants across systems to better track outcomes.

Alabama, for example, is in the process of developing the Alabama Terminal on Linking and Analyzing Statistics on Career Pathways. This system is being built to improve the collection, reporting and analysis of data on participation in work-based learning programs in addition to connecting participant data across education and workforce systems. This process will take time, but in the interim, the state has taken steps to improve data collection and strengthen connections. Over the course of the policy academy, state agency leadership developed memorandums of understanding (MOUs) between agencies that administer portions of work-based learning programs, such as the Alabama Departments of Commerce and Labor. These MOUs established that the agencies would more regularly and consistently share data on programs and participants so that the data could be aggregated to better track individual outcomes. Alabama's example illustrates one way in which states can work within existing systems in the short term to build or improve data collection and connections across systems, even as they engage in longer-term data systems alignment.

Work-based learning data is a priority for many states as they work to build their data-gathering capacity toward establishment of an SLDS. Building capacity to collect work-based learning data helps provide a focal point for identifying gaps and opportunities to build their cross-system, longitudinal data systems. States must assess quantity metrics on participation in work-based learning to make decisions about program funding and expansion, but a sound and measurable understanding of the quality of work-based learning programs informs these decisions.

Develop Metrics to Measure the Quality of Work-Based Learning Programs

A baseline scan of work-based learning program participation is crucial for understanding the landscape of work-based learning in a given state. States in the policy academy, however, were not only focused on the quantity of work-based learning opportunities and activities in their states but on identifying whether those programs offered participants high-quality experiences. States must assess the quality of work-based learning programs to ensure that program participants are engaging in a meaningful learning experience that connects work activities to classroom learning and leads to acquisition of valuable skills for future employment. Assessing program quality against a set of defined criteria can help states compare programs, identify core quality components of programs delivering strong outcomes and prioritize programs for funding. Quality assessment is also important for identifying which regional or local work-based learning programs states may choose to scale across the state.

Using the NGA Center's quality framework (Figure 1) as a starting point, several states began developing criteria for measuring program quality and implemented processes to gather information for those quality measures. The Career Connect Washington Task Force developed a checklist of criteria for high-quality career-connected learning. Their criteria define principles and standards to guide the process for assessing quality that can be applied to most programs:

- Equity.
- Person-centered approach.
- Structured learning component.
- Business/industry- and community-based connections.
- Partnership agreement.

- Assessment of effectiveness and recognition of skills.
- Part of a continuum, not a stand-alone effort.
- Design fidelity.
- Implementation and sustainability at scale.

The guidance also includes a menu of indicators to measure progress through developmentally appropriate experiences that enable learners to develop mastery over time. Examples of participation and quality metrics act as guideposts on the kinds of measurement, relationship, structure or design that indicate quality within each criterion.³¹ Washington has used this high-quality work-based learning framework to assess current program quality, and then work with program administrators to identify strategies to improve quality in areas in which a program does not meet one of the quality standards.

Use Data as a Communication Tool

Strengthening interest among students and parents and support among educators and employers can be challenging when working to scale work-based learning programs, which are often considered nontraditional or lesser alternatives to a four-year college degree. Strong data on program quality and positive employment and education outcomes can support communication and marketing strategies by clearly articulating the value and impact of work-based learning in terms that key stakeholders understand.

Nevada has used data to advance its communication strategy for work-based learning programs to the public and to policymakers to promote policy change. The Governor's Office of Workforce Innovation (OWINN) has used labor market information from state and national sources to describe Nevada's current and projected economic environment and what that means for workforce needs to inform state policymakers, educators and key industry leaders in the state. OWINN has also used available data on work-based learning and apprenticeship participation to articulate who is engaged in these programs and in what industry sectors. Juxtaposing that reality with projected needs in the state has proven powerful. The data contributed to the successful passage of state legislation supporting expansion of work-based learning opportunities in K-12 programs, dual enrollment, registered apprenticeship and college and career readiness diplomas. This data also helped create a sense of urgency to pass legislation that requires coordination across state agencies on work aligned with statewide economic development priorities.³²



Nevada's team members reflected on their experience using and sharing data and, with subject matter experts, shared recommendations with other policy academy states for using data to support policy change and increase public interest in work-based learning opportunities. First, make data visualizations simple, clearly articulating the message to readers. Graphs and charts should be labeled and easy to follow, not overly complex. Second, repeat a few key data points rather than overwhelm the audience with multiple data points. As with other messaging, repeat key data points that underscore the need for and impact of work-based learning often to drive the message home. Third, articulating the (real or potential) gain or loss from taking or failing to take a particular action helps create a sense of urgency, spurring action. Finally, attach the data to a specific call to action to ensure that data is being used to its full effect.³³



CULTIVATE LONG-TERM RESOURCE DEVELOPMENT AND POLICY CHANGE TO SUPPORT AND SCALE WORK-BASED LEARNING

To achieve the systems change necessary to support and scale work-based learning and incorporate it into state education and training systems, states must cultivate long-term governance structures, financial resources and policy change. The governor plays a key role in setting the direction for a collaborative approach to developing a vision and action plan. This leadership lays the groundwork for developing more permanent governance structures and creating long-term, sustainable coalitions to support the development and identification of financial resources and policy change drivers. Strong data on work-based learning participation, quality and outcomes is key to these processes and for informing investment priorities and policy recommendations.

Governors and state leaders should consider the following options as they develop plans to ensure that their efforts to scale work-based learning are implemented and sustainable beyond their administration:

- Establish cross-agency working groups to support systems alignment.
- Establish offices of work-based learning.
- Braid and blend existing funding opportunities.
- Propose or back legislation to support and scale work-based learning.

Establish Cross-Agency Working Groups to Support Systems Alignment

To implement their statewide vision for scaling work-based learning, coordinate efforts and develop policy recommendations across agencies, some governors have established interdisciplinary working groups, such as an advisory cabinet or task force of senior leadership from across the public and private sectors. Other governors have established new offices to oversee work-based learning. These approaches center on the inclusion of or coordination across state agencies that oversee systems in which work-based learning can be used. Which path a governor chooses depends on many state-specific factors, including preexisting buy-in, interest across stakeholders and the political capital the governor's office holds.

In 2017, Washington Gov. Jay Inslee established the Career Connect Washington Task Force as a partnership between the Office of the Governor and Washington's Workforce Training and Education Coordinating Board, the state's WIOA-authorized workforce board.³⁴ Gov. Inslee announced the task force at the May 2017 work-based learning summit, which drew 1,300 attendees from across the state and the public and private sectors.³⁵ The task force consisted of 22 members who represented major employers and industry sectors in the state and representatives from the state Legislature and labor

STRONG APPROACHES TO WORK-BASED LEARNING GOVERNANCE STRUCTURES CENTER ON THE INCLUSION OF OR COORDINATION ACROSS ALL STATE AGENCIES AND SYSTEMS IN WHICH WORK-BASED LEARNING CAN BE USED.

organizations. The task force was supported by staff from the state workforce board and Microsoft, the president of which co-chaired the task force.³⁶

The governor tasked this interdisciplinary group with creating policies and incentives to bring work-based learning to scale and to recommend investment goals and priorities.³⁷ Recommendations included introducing middle-school courses for formal career exploration; expanding dual-credit offerings and improving credential transferability across educational institutions; expanding registered pre-apprenticeships, apprenticeships and youth apprenticeships; and convening regional and state teams to build on existing career pathway mapping efforts.



Several of the Career Connect Washington Task Force’s policy recommendations have since been acted on. Actions taken thus far include work to better align education and training systems with employer needs and to engage employers in more stages of student learning. Recommendations that have recently been enacted in state legislation include new apprenticeships in sectors such as information technology and health care and support for regional networks to create a hub to connect employers and educators. Strong leadership from employers on the Career Connect Washington Task Force, who were also aligned with the governor’s workforce priorities through their membership on the state workforce board, helped build a strong and influential coalition to support the adoption of the task force recommendations. This support was, in turn, key to the successful passage and implementation of legislation. Since the culmination of the task force’s activities, the Career Connect Washington initiative has continued to effectively influence policy, building on the success, trust in and recognition of the initial task force.

Establish Offices of Work-Based Learning

Some governors prefer to set up interdisciplinary working groups or task forces, such as that described above. Others choose to establish a work-based learning office within the governor’s office or a state agency. Such an office is tasked with overseeing strategy and implementation of work-based learning programs across the state. Task forces can allow industries to lead or more actively participate as full partners in recommending state policy changes and overseeing workforce and work-based learning initiatives. In contrast, new offices may be useful when industry leaders in the state are less engaged with public workforce development activities or when the governor’s office and relevant state agencies have already established their policy priorities through the activities of a task force and the office is charged with operationalizing them.

Indiana Gov. Eric Holcomb established the Indiana Office of Work-Based Learning and Apprenticeship (OWBLA) within the Indiana Department of Workforce Development through executive order in 2018. The office is charged with aligning the work of other agencies and scaling work-based learning opportunities across state

“With more than 80,000 open jobs around the state, we can’t wait for students to get out of school to fill them. We need to skill-up working adults as quickly as possible. That’s why expanding opportunities for working adults, in particular, is so critical — because they need the ability to work and earn money while they learn the skills they need to enter a new career in a high-wage, high-demand field. This office makes this possible.”³⁸

—INDIANA GOV. ERIC HOLCOMB ON THE FOUNDING OF THE INDIANA OFFICE OF WORK-BASED LEARNING AND APPRENTICESHIP



systems of education and training. It does so by coordinating with the U.S. Department of Labor, supporting and expanding work-based learning models in the state, engaging with businesses and developing relevant adult and youth-focused earn-and-learn program models.³⁹ As a result, OWBLA has established six pathways of practical experiences for Hoosiers to gain an understanding of an occupation by engaging in work-based learning. The office has recently conducted a regional tour and identified ways to better support local efforts and PPPs through funding. Gov. Kay Ivey has adopted a similar approach in Alabama with the establishment of the GOEWT, an office that engages leadership across state agencies to implement a statewide strategic plan for workforce development and education that includes the expansion of work-based learning opportunities. (For more information about the Alabama GOEWT, see page 13 .)

The task force and state agency office approaches can also work together. For example, a state may establish a temporary task force to develop policy priorities and recommendations, then set up a more permanent entity, such as an office with dedicated staff or a new organization. Utah Gov. Gary Herbert established Talent Ready Utah in 2017 through the work of a cross-agency core team participating in Phase I of the NGA Center Policy Academy on Scaling Work-Based Learning (2016-2017). Talent Ready Utah initially included the policy academy core team to plan and implement the work. It also included a formalized executive board made up of leaders from industry, education, workforce development and economic development agencies who are fully committed to carrying out the statewide vision for scaling work-based learning.

During Phase II of the policy academy (2017-2019), Gov. Herbert signed into a law a bill that established and funded the Talent Ready Utah Center as an ongoing operation within the Governor's Office of Economic Development.⁴⁰ This office, with guidance from the Talent Ready Utah executive board, serves several functions as the main work-based learning coordinating body in the state. The office administers roughly \$2 million in Talent Ready Utah grants to pilot and scale work-based learning initiatives across more than 80 programs.⁴¹ The Talent Ready Utah Center administers the Talent Ready Apprenticeship Connection program and the state's Strategic Pathway programs as well as Utah Works, which promotes partnerships between companies and postsecondary institutions to fill in-demand positions and provide technical skills training.⁴² According to members of the core team, Gov. Herbert's role in establishing and supporting Talent Ready Utah from its outset was critical to the program's initial momentum and longer-term success at garnering industry interest and legislative support.

Braid and Blend Existing Funding

In many cases, federal and state funding streams can be blended in new ways to support the work-based learning goals and other initiatives that support the governor's statewide vision and broader education and workforce development goals. "Braided funding" is the use of funds from different sources woven together to support a single initiative or strategy. "Blended funding" goes a step further by pooling various program funds into one funding source.

The governor's office and state agency leaders may not be fully aware of all the relevant federal funding that flows into the state, what funding levels are and to which agencies funding is distributed. When leaders of initiatives to scale work-based learning understand funding streams, they can assess the use of those funds to reduce redundancies and ensure that expenditures align with the state's overall vision and strategic plan for scaling work-based learning. Particularly as states develop, align and implement their next state plans for WIOA and Perkins V, they have a unique opportunity to align efforts across key federal workforce and education programs. Improving this alignment can help governors and state policymakers use these federal funds efficiently and in alignment with their goals.

During the policy academy, participating states were required to identify state and philanthropic funding streams that support work-based learning activities. In addition, the NGA Center team helped states identify federal funding streams available to support work-based learning activities and the

state agencies that administered those funds. States were then able to evaluate ways to tap into, blend and braid existing funding streams to better support their efforts to scale work-based learning.

Indiana’s core team members found the policy academy process for identifying available funding opportunities essential to their ability to find and fill gaps in using appropriated funds. They also found that the process led to more deliberate and fruitful conversations and action planning in collaboration with other state agencies. Building on this success, the Indiana Department of Workforce Development and the Family and Social Services Administration are partnering to create a map of applicable government subsidies to help at-risk populations better attain education, training and work-based learning opportunities without being removed from the system of public support that helps keep their households afloat.⁴³

Other states are earlier in the process of mapping and braiding funding resources for programs and participants. For example, a primary responsibility of Alabama’s GOEWT established by Gov. Ivey is to recommend ways to braid existing funding sources, including those from WIOA and Perkins V, to support career pathway programs, credential attainment and work-based learning for in-school youth. The GOEWT will also oversee the development of the state plan for the Every Student Succeeds Act of 2015 in addition to the Perkins V and WIOA state plans to ensure that resources are blended and braided effectively and efficiently and to align programs across these funding sources with the state’s broader objectives.⁴⁴

See Table 1 for a summary of federal programs that states can use to support work-based learning activities.

TABLE 1: Federal Funding That Can Support Work-Based Learning

OPPORTUNITY	DESCRIPTION
<p>Strengthening Career and Technical Education for the 21st Century Act (Perkins V)</p>	<p>Perkins V allocates approximately \$1.3 billion in federal funds annually to support career and technical education (CTE) programs at the state and local levels that provide work-based learning experiences.⁴⁵</p> <p>In addition, Perkins V redefines “work-based learning” as “sustained interactions with industry or community professionals in real workplace settings or simulated environments at an educational institution that foster in-depth, firsthand engagement with the tasks required in a given career field, that are aligned to curriculum and instruction.”⁴⁶</p>
<p>Workforce Innovation and Opportunity Act of 2014 (WIOA)</p>	<p>Work-based learning is a prominent feature of WIOA that requires the use of at least 20% of local youth formula funds for work-based learning. In addition, the legislation provides opportunities for vocational rehabilitation funds to be used to create work-based learning opportunities for individuals with disabilities.^{47,48}</p>
<p>Every Student Succeeds Act of 2015 (ESSA)</p>	<p>ESSA gives states an opportunity to align education, workforce and economic development systems. State plans for higher education must include support for work-based learning experiences that provide students with in-depth interaction with industry professionals. Under ESSA, states can also decide to include access to or completion of work-based learning as an indicator of school quality or student success for state education assessment purposes.^{49,50}</p>
<p>Patient Protection and Affordable Care Act Health Profession Opportunity Grants (HPOG) program</p>	<p>HPOG provides education and job training for Temporary Assistance for Needy Families recipients and other low-income individuals. HPOG trains these individuals for in-demand health care occupations in a pay-as-you-learn system.⁵¹</p>
<p>Higher Education Act (HEA)</p>	<p>Title IV of HEA authorizes federal work-study programs and provides additional funding for work colleges and other local work-study programs.⁵²</p>
<p>Community Development Block Grant (CDBG) program</p>	<p>CDBG grants can establish local job training and workforce development opportunities when connected with CDBG-eligible economic development activities.⁵³</p>



Propose or Back Legislation to Support and Scale Work-Based Learning

Scaling work-based learning often requires enacting legislation that goes beyond appropriating funds to develop and guide new activities. In some states, legislation has codified and provided official oversight responsibilities to interdisciplinary governance structures originally set up as less formal working groups by the state's governor. In others, legislation has been passed with strong gubernatorial leadership to enforce statewide definitions and develop new or scale tested programs.

Several states have advanced legislation that supports scaling work-based learning opportunities through incentives to employers. In 2017, Montana Gov. Steve Bullock proposed an apprenticeship tax credit that offers businesses a \$750 tax credit for every individual they hire who is offered OJT through the Montana Registered Apprenticeship Unit (the credit increases to \$1,500 if the individual is a veteran). The measure passed with strong legislative support.⁵⁴ Other policy academy states that offer apprenticeship tax credits for employers are Alabama, Illinois, Indiana, Iowa, Nevada, North Carolina and Rhode Island.⁵⁵



States have also established new funding allocations and programs through legislation to complement employer incentives. In January 2019, the Montana Legislature passed House Bill (H.B.) 387, the Create Advanced Opportunity Act for Montana Students, which provides funding for local school districts to support students' progression on postsecondary pathways for in-demand careers. The funding this legislation provides grew out of the policy academy core team's work and benefitted from strong support from Gov. Bullock. It supports district activities conducted in partnership with employers and postsecondary institutions, including funding CTE courses or equipment, incentives for employers partnering with the district to offer high-quality work-based learning opportunities and coverage of dual-enrollment fees. H.B. 387 directs \$750,000 of state general funds, beginning in fiscal year 2021, to qualifying districts for use in such options, designated "advanced opportunity aid," and gives districts the ability to expense a portion of these activities through the state's adult education fund.^{56,57}

During its participation in the policy academy, Rhode Island launched the PrepareRI College Internship pilot program to provide quality work-based learning experiences for first-generation college students. This pilot, based on a successful high school internship program with a similar model, was funded by the Governor's Workforce Board and is operated by Skills for Rhode Island's Future. Following the success of the summer 2019 pilot program, Rhode Island aims to double the number of internships the program supports in summer 2020 and again in 2021.⁵⁸

Rather than develop proposals for new legislation, some states successfully secured resources to support work-based learning by amending existing legislation to allow already-funded programs to redirect their funding toward work-based learning. Idaho had a preexisting program through which every student in grades 7 through 12 could access advanced opportunities that include

SEVERAL STATES HAVE ADVANCED LEGISLATION THAT SUPPORTS SCALING WORK-BASED LEARNING OPPORTUNITIES THROUGH INCENTIVES TO EMPLOYERS.

dual-credit and industry certifications. In their work to expand youth apprenticeship as part of expanding work-based learning opportunities, the Idaho team members found that limitations on the use of these funds posed a barrier for many students. In 2019, the core team worked with Gov. Brad Little's office and the Legislature to pass an amendment to this legislation. The program now includes new and more targeted support of up to \$500 per course, up to \$1,000 per year per student for specific workforce training and work-based learning courses connected to regionally in-demand occupations. This change will open opportunities for more students, particularly those in high schools, to participate in higher-quality work-based learning opportunities such as youth apprenticeship that are more closely tied to regionally in-demand jobs.⁵⁹

Other states have used legislation to develop more comprehensive strategies to scale work-based learning opportunities. For example, in April 2019, the Washington Legislature passed H.B. 2158, which provides additional resources for workforce investments in the state and supports training students in high-demand occupations. Specifically, the legislation will help Career Connect Washington improve, expand and develop registered apprenticeship programs and build on technical education efforts in the K-12 system and technical colleges. In addition, the bill will fund regional outreach and marketing strategies to ensure that students and their families throughout the state are aware of available work-based learning opportunities. The bill also funds new scholarship aid for dual-enrolment scholarships and for low-income students to pursue postsecondary degrees that include work-based learning programs. In total, the Career Connect Washington legislation authorized \$24 million over two years to support these and other initiatives that support and scale work-based learning and other career-connected learning opportunities. Importantly, the bill was developed and championed by Gov. Inslee and the governor's Career Connect Washington initiative in accordance with policy recommendations that had previously been developed by the governor's Career Connect Washington Task Force.⁶⁰

Governors' leadership of cross-agency, multistakeholder coalitions was crucial to the development and passage of legislative changes across states in the policy academy. As a result, at least 11 of the 12 states participating intensively in the first two phases of the policy academy have passed legislation designed to support or expand high-quality work-based learning opportunities. See Appendix D for more examples of relevant state legislation, executive orders and other actions taken in states that participated in the policy academy.



CONCLUSION

As demonstrated by the states that participated in the NGA Center Policy Academy on Scaling Work-Based Learning, governors are in a unique position to lead public and private stakeholders in identifying high-quality, demand-driven, work-based learning programs and bringing them to scale in their states. Governors' leadership can result in real systems change that embeds work-based learning into education and training systems and programs by setting, communicating and implementing

a strong vision for scaling work-based learning. Key to this process, governors must assemble a cross-agency leadership team and engage industry champions. Such successful collaborative efforts in the participating states focused on using cross-system data to understand and create awareness and to measure outcomes that inform the alignment of resources and policy changes to ensure that these efforts are sustainable in the long term, beyond a single administration. By working collaboratively in their states to improve access to work-based learning opportunities, governors, state leaders and business leaders can ensure that all young people in their state are on paths to good jobs and promising careers and that employers have the skilled workers they need to prosper.

GOVERNORS' LEADERSHIP CAN RESULT IN REAL SYSTEMS CHANGE THAT EMBEDS HIGH-QUALITY WORK-BASED LEARNING INTO EDUCATION AND TRAINING SYSTEMS AND PROGRAMS BY SETTING, COMMUNICATING AND IMPLEMENTING A STRONG VISION FOR SCALING WORK-BASED LEARNING.

APPENDIX A: Idaho LEADER Work-Based Learning Continuum

Idaho LEADER Learn.Do.Earn.			Get Started – leader.nextsteps.idaho.gov					
Learning About Work			Learning Through Work			Learning At Work		
Category	Career Education	Employer Engagement	Externships	Internships	Pre-Apprenticeship	Co-op	On-the-Job Training	Apprenticeship
Definition	Teachers bring career information into the classroom.	Students learn by directly engaging with potential future employers.	Short practical work experiences to “ground-truth” theory.	A short-term position providing experience and exposure. May be paid or unpaid and for-credit or non-credit.	A program that teaches basic technical and job-readiness skills to prepare for an apprenticeship.	Structured method of classroom learning integrated with workplace experience where credit is received for both.	Individuals are taught by other employees how to complete a task while doing the job.	An “earn while you learn” model where on-the-job training is coupled with related instruction. Wage gains are incorporated and the experience culminates in industry-recognized credentials.
Activities	<ul style="list-style-type: none"> Career Counseling Pathway Planning Presentations examining growth careers Industry Speakers Interviews with current employees 	<ul style="list-style-type: none"> Host a tour for middle school/high school students or participate in school-organized career fairs. Provide an opportunity for students to job shadow. Become a mentor through the STEM Action Center’s Mentorship Portal. 	<ul style="list-style-type: none"> Host a teacher during the summer to bring real-world experiences into the classroom. 	<ul style="list-style-type: none"> Connect with college & career advisors at high schools to reach high-school interns. Connect with postsecondary institutions to reach college interns. 	<ul style="list-style-type: none"> Partner with an industry association to develop a program to teach workplace skills. Host a competitive job-skill-building event requiring potential apprentices to collaborate on project-based activities. 	<ul style="list-style-type: none"> Connect with a local community college or other postsecondary institution to identify cooperative education opportunities in areas of in-demand skills. 	<ul style="list-style-type: none"> Partner with the Idaho Department of Labor, Division of Vocational Rehabilitation and/or Department of Health & Welfare to hire Veterans, individuals with disabilities, and other individuals seeking work. 	<ul style="list-style-type: none"> Develop registered apprenticeship programs for hard-to-fill positions. Expand apprenticeship programs to School to Registered Apprenticeship to engage high school students.

Brought to you by:










APPENDIX B: Examples of Work-Based Learning Initiatives in States Participating in the National Governors Association Center for Best Practices Policy Academy on Scaling Work-Based Learning

ALABAMA SUCCESS PLUS

<https://alabamaworks.com/successplus>



CAREER CONNECT WASHINGTON

<https://careerconnectwa.org>



FUTURE READY IOWA

<https://www.futurereadyiowa.gov>



NC JOB READY

<https://ncjobready.nc.gov>



PREPARE RHODE ISLAND

<https://www.prepare-ri.org>



TALENT READY UTAH

<https://www.talentreadyutah.com>



APPENDIX C: Examples of Online Education and Training Portals That Include Work-Based Learning Opportunities**Idaho STEM Action Center Mentorship Portal:**

<https://mentorship.stem.idaho.gov>

Iowa Clearinghouse for Work-Based Learning:

<https://clearinghouse.futurereadyiowa.gov/about>

Indiana Career Ready:

<https://www.indianacareerready.com>

KANSASWORKS:

<https://www.kansasworks.com/ada/r>

Kentucky Career Center:

<https://kcc.ky.gov>

MontanaWorks:

<https://montanaworks.gov>

NC Navigator Consortium:

<https://wblnavigator.org/web/>

LifeWorks Nevada:

<https://www.lifeworksnv.org>

APPENDIX D: Actions on Work-Based Learning in States Participating in the National Governors Association Center for Best Practices Policy Academy on Scaling Work-Based Learning

Table D-1, Table D-2 and Table D-3 offer a selection of relevant legislation, executive orders and other actions in states participating in Phase 1 of the National Governors Association Center for Best Practices Policy Academy on Scaling Work-Based Learning and in Phase 2 leader states and policy academy states during their respective periods of participation in the policy academy. Examples include actions pertaining directly to work-based learning, apprenticeship, career and technical education (CTE) and education-connected work experience. Note that because of the number of actions taken in these states in other, related areas, such as dual-enrollment programming, apprenticeship tax credits or actions that state apprenticeship councils have taken, this appendix represents a sample rather than a complete list.

TABLE D-1: State Legislation

STATE	BILL NO.	TITLE	YEAR	DESCRIPTION
Alabama	House Bill (H.B.) 570	Apprenticeship Completion Requirements	2019	This legislation states that an individual who completes an apprenticeship may be granted an occupational licensure in that trade if the individual also meets other requirements. ⁶¹
Alabama	Senate Bill (S.B.) 242	Construction Trade Education	2019	This legislation develops a statewide program to increase the availability of construction trade education, creates the state Construction Trade Advisory Council and develops a statewide program to provide for construction trade educational grants. ⁶²
Alabama	S.B. 295	State Office of Apprenticeship	2019	This legislation formulates regulations for the Alabama industry-recognized apprenticeship programs (AIRAPs) and provides financial incentives for employers that hire apprentices. It also gives the Alabama Office of Apprenticeship established by Gov. Kay Ivey purview over the AIRAPs supported by the U.S. Department of Labor. ⁶³
Idaho	H.B. 366	Public Employment and Worker's Compensation	2018	This legislation states that a work experience student shall be covered by the school district's worker's compensation policy when the student is not covered by the private or governmental entity employing the student. ⁶⁴
Idaho	H.B. 432	Workforce Development Council	2018	This legislation establishes the Workforce Development Council in the governor's office and that the council will develop and implement youth employment and job training programs. The training programs are eligible for funds from public and private sources. ⁶⁵
Idaho	H.B. 629	Apprenticeship Registration Exemption	2018	This legislation amends existing law that prohibited high school students from apprenticeship registration requirements under certain circumstances. ⁶⁶
Idaho	S.B. 1105	Career Technical Workforce Training Fund	2019	This legislation gives students in grades 7 through 12 attending public schools in Idaho access to \$4,125 toward CTE workforce training courses, postsecondary credit-bearing examinations, overload classes and dual-credit opportunities. ⁶⁷
Idaho	S.B. 1106	Funding for Career and Technical Education	2019	This legislation amends existing law to expand CTE programs, as approved by the Idaho Career and Technical Education, to public charter schools. ⁶⁸
Idaho	S.B. 1222	Education Incentive Funding for Workforce Readiness	2018	This legislation adds to existing law to establish a quality funding mechanism for CTE secondary programs and incentive funding for workforce readiness. ⁶⁹
Idaho	S.B. 1295	Funding for Career Technical Schools	2018	This legislation amends existing law to revise provisions regarding funding for career technical schools. ⁷⁰
Illinois	H.B. 534	Bureau on Apprenticeship Programs	2019	This legislation revises provisions related to the Advisory Board for Diversity in Active Apprenticeship programs and allows the board to require necessary information from state agencies and public institutions of higher education. ⁷¹
Illinois	H.B. 2822	School Code	2019	This legislation requires the Illinois Board of Education's school report cards to include current data on the percentage of students who participated in work-based learning opportunities and whether a school offers CTE opportunities. ⁷²
Illinois	H.B. 2868	Work-Based Learning	2019	This act redefines "work-based learning" as "an educational strategy that provides students with real-life work experiences in which they can apply academic and technical skills and develop their employability." In addition, the legislation mandates the development of a work-based learning database to help facilitate relationships between school districts and businesses. ⁷³

STATE	BILL NO.	TITLE	YEAR	DESCRIPTION
Illinois	H.B. 5247	Registered Apprenticeship Program	2018	This legislation states that the Illinois Board of Education must create rules that allow students of any high school in the state aged 16 years or older to participate in registered apprenticeship programs. ⁷⁴
Illinois	S.B. 1525	Children and Family Services	2019	This legislation requires the Illinois Department of Children and Family Services Act to provide eligible youth an apprenticeship stipend to cover costs associated with entering an apprenticeship program, such as fees, tuition for classes, work clothes or occupation-specific tools. ⁷⁵
Illinois	S.B. 2024	Apprenticeship Study Act	2019	The Apprenticeship Study Act requires the Illinois Department of Labor to conduct a study on the potential expansion of apprenticeship programs in the state and to produce a report on the findings. ⁷⁶
Indiana	S.B. 50	Workforce Development, Career and Technical Education	2018	This legislation establishes the College and Career Funding Review Committee, establishes requirements for apprenticeship programs and establishes the Real-World Career Readiness program. ⁷⁷
Indiana	S.B. 297	Employability Skills Curriculum	2018	This legislation requires each school within a school corporation to include employability skills standards established by the Department of Workforce Development in the school's curriculum. ⁷⁸
Iowa	H.B. 2458	Future Ready Iowa Act	2018	This legislation creates the Future Ready Iowa Act to strengthen workforce development and establish a registered apprenticeship development program, a volunteer mentoring program, a summer youth intern program, a summer postsecondary course for high school students, an employment innovation fund and a workforce scholarship and grant program. ⁷⁹
Montana	H.B. 387	Montana Advanced Opportunity Act	2019	The Montana Advanced Opportunity Act directs \$750,000 of state general funds, beginning in fiscal year 2021, to qualifying school districts to support students' progression into in-demand careers. The funding is designed to support CTE courses or equipment, incentivize employer partnerships and cover students' dual-enrollment fees. ⁸⁰
Nevada	S.B. 66	Internship Programs	2017	This bill amends Nevada's work-based learning system by removing the limitation set on the number of credits a student can earn for completion of certain work programs. In addition, the legislation allows the board of trustees of a school district, a charter school or a nonprofit organization to apply for grant money from the Nevada Department of Education. to implement new or expand existing work-based learning programs. ⁸¹
Nevada	S.B. 516	Workforce Innovation and Apprenticeships	2017	This legislation made permanent the Office of Workforce Innovation within the Governor's Office; established the duties of the office and its executive director; revised the membership, procedures and duties of the State Apprenticeship Council; and revised the qualifications, requirements and duties of the state director of Apprenticeship. ⁸²
New Hampshire	H.B. 1100	Workforce and Job Training Commission	2018	This legislation establishes a commission to review and evaluate workforce and job training programs in New Hampshire. ⁸³
Rhode Island	S.B. 826	Governor's Workforce Board	2018	This legislation requests that the Governor's Workforce Board work with the Rhode Island Department of Labor to develop a plan for the expansion of new skills and competency-based apprenticeships and to help employers initiate new registered apprenticeship programs. ⁸⁴
Utah	S.B. 103	Strategic Workforce Investments	2016	This bill establishes the Strategic Workforce Investment Grant and appropriates \$1,500,000 annually from the state's education fund to develop educational pathway partnerships that will help meet regional industry workforce needs through work-based learning. ⁸⁵
Utah	H.B. 280	Apprenticeship Opportunity Awareness	2019	This legislation creates the position of commissioner of Apprenticeship Programs within the Utah Department of Workforce Services. ⁸⁶
Utah	S.B. 131	Talent Ready Utah Amendments	2018	This bill creates the Talent Ready Utah Center and the Talent Ready Utah Board, both within the Governor's Office of Economic Development, including appropriation of funds. ⁸⁷
Utah	S.B. 136	Scholarships for Career and Technical Education	2019	This legislation creates a scholarship for individuals to enroll in CTE programs at certain higher education institutions. ⁸⁸
Utah	S.B. 138	Apprenticeship Act	2019	This legislation modifies provisions to the Talent Ready Utah Center and the membership of the Talent Ready Utah Board. It also creates an apprentice pilot program in the Talent Ready Utah Center. ⁸⁹

STATE	BILL NO.	TITLE	YEAR	DESCRIPTION
Utah	S.B. 263	Work-Based Learning Amendments	2017	This legislation moves the Career and Technical Education Board from the Utah Department of Workforce Services to the Governor's Office of Economic Development and provides for the Career and Technical Education Board to study and make recommendations for work-based learning. ⁹⁰
Washington	H.B. 2158	Workforce Education Investment Act	2019	The Workforce Education Investment Act allocates funding to help Career Connect Washington improve, expand and develop registered apprenticeship programs and build on technical education efforts in the kindergarten through grade 12 system and in technical colleges. In addition, the bill will support regional work-based learning outreach strategies and sponsor new scholarship aid to finance dual-enrollment opportunities and low-income postsecondary education programs involving work-based learning. ⁹¹
Washington	H.B. 2685	Preapprenticeship Opportunities for Students	2018	This legislation promotes pre-apprenticeship opportunities for students. ⁹²
Washington	S.B. 6133	Statewide Career and Technical Education	2018	This legislation expands CTE statewide and requires the Washington Department of Education to develop curriculum frameworks for career and technical content considered equivalent to academic courses that meet high school graduation requirements. ⁹³
Washington	S.B. 6274	Foster and Homeless Youth Apprenticeship	2018	This legislation helps foster and homeless youth complete apprenticeships and creates the Passport to Careers Program. ⁹⁴

TABLE D-2: Executive Orders

STATE	EXECUTIVE ORDER NO.	TITLE	YEAR	DESCRIPTION
Alabama	717	Establishing the Alabama Office of Apprenticeship	2019	This executive order by Gov. Kay Ivey establishes the Alabama Office of Apprenticeship, designed to enhance apprenticeship opportunities throughout the state. ⁹⁵
Illinois	19-03	Strengthening the State's Commitment to Workforce Development and Job Creation	2019	This executive order by Gov. J.B. Pritzker scales work-based learning initiatives by expanding state-, local-, and industry-led partnerships. In addition, the action mandates a review of the state's targeted growth industries and an analysis of the efficiency and effectiveness of existing workforce investment in these areas. ⁹⁶
Indiana	18-04	Creation of the Work-Based Learning and Apprenticeship	2018	This executive order by Gov. Eric Holcomb establishes the Office of Work-Based Learning and Apprenticeship, which focuses on improving the quality and quantity of work-based-learning opportunities available to students in Indiana. ⁹⁷
Iowa	1 (2018)	—	2018	This executive order by Gov. Kim Reynolds formed the Iowa Clearinghouse for Work-Based Learning. This virtual platform improves existing school-business partnerships and scales work-based learning opportunities in rural and urban communities. The clearinghouse launched in 2019. ⁹⁸
Montana	19-2018	Creating a Future Ready Cabinet	2018	This executive order by Gov. Steve Bullock created the Future Ready Cabinet to coordinate education and workforce initiatives that help prepare Montana residents for the jobs of today and of the future so that Montana employers can fill their workforce needs. The order includes statewide work-based learning initiatives. ⁹⁹

TABLE D-3: Examples of Other Actions by Governors' Offices or State Agencies

STATE	TITLE	YEAR	DESCRIPTION
Indiana	Graduation Pathways Policy	2017	The Indiana State Board of Education, which the Indiana General Assembly has authorized to develop and establish education policy, implemented the Graduation Pathways Policy in 2017. This action mandates that to graduate from high school, each Indiana student must demonstrate employability skills through the completion of a service-based, project-based or work-based learning experience. ¹⁰⁰
North Carolina	Gov. Roy Cooper's Recommended Budget	2019	This proposed budget allocates \$10 million to establish a Work-Based Learning Fund housed in the North Carolina Department of Commerce. The fund will provide grants to employers to encourage the development of new work-based learning opportunities that will improve talent pipelines throughout the state.
Washington	—	2017	Gov. Jay Inslee established the Career Connect Washington Task Force as a partnership between the Office of the Governor and Washington's Workforce Training and Education Coordinating Board, the state's Workforce Innovation and Opportunity Act-authorized workforce board. ¹⁰¹

ENDNOTES

- 1 Manyika, J. (2017, May). *Technology, jobs, and the future of work*. McKinsey Global Institute. <https://www.mckinsey.com/featured-insights/employment-and-growth/technology-jobs-and-the-future-of-work>
- 2 Kark, K., Briggs, B., Terzioglu, A., & Puranik, M. (2019, June 10). *The future of work in technology*. Deloitte. <https://www2.deloitte.com/us/en/insights/focus/technology-and-the-future-of-work/tech-leaders-reimagining-work-workforce-workplace.html>
- 3 World Employment Confederation. (n.d.) *The future of work*. World Employment Confederation.
- 4 Istrate, E., & Harris, J. (2017, November). *The future of work: The rise of the gig economy*. National Association of Counties.
- 5 Kark, K., Briggs, B., Terzioglu, A., & Puranik, M. (2019, June 10). *The future of work in technology*. Deloitte. <https://www2.deloitte.com/us/en/insights/focus/technology-and-the-future-of-work/tech-leaders-reimagining-work-workforce-workplace.html>
- 6 D2L. (2018, January). *The future of work and learning in the age of the 4th industrial revolution*. D2L.
- 7 NewSchools Venture Fund. (2018, March). *Navigating a future no one can predict: What today's students will need now for tomorrow's jobs*. NewSchools Venture Fund.
- 8 Sims, P. (2018, July 17). *Reaching a postsecondary attainment goal: A multistate overview*. The Hunt Institute. <http://www.hunt-institute.org/resources/2018/07/reaching-a-postsecondary-attainment-goal-a-multistate-overview>
- 9 National Governors Association. (2017, October 20). *States support work-based learning to expand employment opportunities* [Press release]. <https://www.nga.org/news/press-releases/states-support-work-based-learning-to-expand-employment-opportunities>
- 10 National Governors Association. (2017, November 17). *Additional states support work-based learning to expand employment opportunities* [Press release]. <https://www.nga.org/news/press-releases/additional-states-support-work-based-learning-to-expand-employment-opportunities>
- 11 North Carolina Office of the Governor, Public Schools of North Carolina, North Carolina Community College System, & North Carolina Business Committee for Education. (2017, September 15). *NGA Center Policy Academy on Work-Based Learning* (project proposal submitted to National Governors Association Center for Best Practices).
- 12 North Carolina Office of the Governor, Public Schools of North Carolina, North Carolina Community College System, & North Carolina Business Committee for Education. (2017, September 15). *NGA Center Policy Academy on Work-Based Learning* (project proposal submitted to National Governors Association Center for Best Practices).
- 13 Lumina Foundation. (2018, March). *Statewide educational attainment goals*. Lumina Foundation.
- 14 National Governors Association. (2020, January 21). *National Governors Association names 6 states to mentor peers on work-based learning* [Press release]. <https://www.nga.org/news/press-releases/national-governors-association-names-6-states-to-mentor-peers-on-work-based-learning>
- 15 PrepareRI. (n.d.). *Prepare Rhode Island*. <https://www.prepare-ri.org>
- 16 *Policy Academy on Scaling Work-Based Learning: Final report for North Carolina* (final report to the National Governors Association submitted May 15, 2019).
- 17 ExperienceMoreNC.com. (n.d.). *Experience more: Real-world learning for real-life success*. <https://www.experiencemorenc.com>
- 18 *Career pathways dictionary: A unified state framework for college and career readiness and success*. (n.d.). Illinois State Board of Education. <https://www.isbe.net/Documents/IL-Career-Pathways-Dictionary.PDF>
- 19 Carl D. Perkins Career and Technical Education Act, P.L. 88-210 (2006). [https://legcounsel.house.gov/Comps/Carl%20D.%20Perkins%20Career%20And%20Technical%20Education%20Act%20Of%202006\(not-in-effect\).pdf](https://legcounsel.house.gov/Comps/Carl%20D.%20Perkins%20Career%20And%20Technical%20Education%20Act%20Of%202006(not-in-effect).pdf)
- 20 New Hampshire Department of Education. (n.d.). *NH students, educators, industry leaders named work-based learning champions*. New Hampshire Department of Education. <https://www.education.nh.gov/news/2018/wbl-award-winners.htm>
- 21 *Welcome to The Navigator*. (n.d.). <https://wblnavigator.org/web>
- 22 *Welcome to The Navigator*. (n.d.). <https://wblnavigator.org/web>
- 23 *Welcome to The Navigator*. (n.d.). <https://wblnavigator.org/web>
- 24 *Policy Academy on Scaling Work-Based Learning: Final report for North Carolina* (final report to the National Governors Association submitted May 15, 2019).
- 25 Alabama Office of the Governor. (2015, February). *Governor Ivey's action plan: Developing in-demand career pathways, 2017-2022*. http://www.gcs.k12.al.us/wp-content/uploads/sites/106/2015/02/FINAL_GOVERNOR-WBL-STRATEGIC-PLAN.pdf
- 26 National Governors Association. (2020, January 21). *National Governors Association names 6 states to mentor peers on work-based learning* [Press release]. <https://www.nga.org/news/press-releases/national-governors-association-names-6-states-to-mentor-peers-on-work-based-learning>
- 27 Perez, Z., Jr. (2019, August 19). *50-state comparison: Statewide longitudinal data systems*. Education Commission of the States. <https://www.ecs.org/state-longitudinal-data-systems>
- 28 Mississippi LifeTracks. (n.d.). *Home*. <https://lifetracks.ms.gov/Default.aspx>
- 29 Parisi, M. (2018, May). Presentation to the National Governors Association.
- 30 Kentucky Center for Statistics. (n.d.). Reports. KYstats. <https://kystats.ky.gov/Reports/Reports>
- 31 Washington STEM. (n.d.). *Criteria for high-quality career connected learning: Checklist* (created for the National Governors Association Policy Academy Learning Lab Project).
- 32 Lamarre, M. (2018, October). *Using data to influence policy change*. https://www.nga.org/wp-content/uploads/2018/10/Plenary-Three-Session-III_Lamarre.pdf
- 33 Lamarre, M. (2018, October). *Using data to influence policy change*. https://www.nga.org/wp-content/uploads/2018/10/Plenary-Three-Session-III_Lamarre.pdf
- 34 Office of Washington Governor Jay Inslee. (2017, May 31). *Inslee aims to connect kids directly to careers with new apprenticeship and education initiative* [Press release]. <https://www.wa.gov/news-media/inslee-aims-connect-kids-directly-careers-new-apprenticeship-and-education-initiative>
- 35 Washington Workforce Training & Education Coordinating Board. Governors Summit News Release. <https://www.wtb.wa.gov/wp-content/uploads/2020/01/GovernorsSummitNewsRelease.pdf>
- 36 Washington Workforce Training & Education Coordinating Board. Career Connect Washington. <https://www.wtb.wa.gov/planning-programs/past-workforce-projects>
- 37 Washington Workforce Training & Education Coordinating Board. Career Connect Washington. <https://www.wtb.wa.gov/planning-programs/past-workforce-projects>
- 38 Indiana Office of the Governor. (<https://calendar.in.gov/site/gov/event/holcomb-creates-office-to-expand-work-based-learning-for-more-hoosiers-in-more-industries>)
- 39 Indiana Exec. Order No. 18-04 (2018). <https://www.in.gov/gov/files/2018030112440245.pdf>
- 40 Utah Talent Ready Utah Amendments, S.B. 131 (2018). <https://le.utah.gov/-/2018/bills/static/SB0131.html>
- 41 Utah Department of Workforce Services. (2020). *Talent Ready Utah Grant FY19*. Utah Department of Workforce Services.
- 42 GOED Team. (2019, October 3). Utah Works program provides workforce solutions. UtahPolicy.com. <https://utahpolicy.com/index.php/features/today-at-utah-policy/21798-utah-works-program-provides-workforce-solutions>
- 43 *Policy Academy on Scaling Work-Based Learning: Final report for Indiana* (final report to the National Governors Association Center for Best Practices submitted on May 15, 2019).
- 44 National Governors Association. (2019, February 28). *Braiding funding and leveraging untapped funding streams to support work-based learning* [Webinar]. National Governors Association. https://www.nga.org/wp-content/uploads/2019/11/WBL-Policy-Academy_Braiding-Funding.pdf
- 45 U.S. Department of Education Office of Career, Technical, and Adult Education, Division of Academic and Technical Education. (n.d.). Work-Based Learning Tool Kit. Perkins Collaborative Resource Network. <https://cte.ed.gov/wbltoolkit/index.html>
- 46 Carl D. Perkins Career and Technical Education Act, P.L. 88-210 (2006). [https://legcounsel.house.gov/Comps/Carl%20D.%20Perkins%20Career%20And%20Technical%20Education%20Act%20Of%202006\(not-in-effect\).pdf](https://legcounsel.house.gov/Comps/Carl%20D.%20Perkins%20Career%20And%20Technical%20Education%20Act%20Of%202006(not-in-effect).pdf)
- 47 Carl D. Perkins Career and Technical Education Act, P.L. 88-210 (2006). [https://legcounsel.house.gov/Comps/Carl%20D.%20Perkins%20Career%20And%20Technical%20Education%20Act%20Of%202006\(not-in-effect\).pdf](https://legcounsel.house.gov/Comps/Carl%20D.%20Perkins%20Career%20And%20Technical%20Education%20Act%20Of%202006(not-in-effect).pdf)
- 48 Hauge, K. (2018, January). *States continue advancing strategies to scale work-based learning*. National Governors Association. https://www.nga.org/wp-content/uploads/2019/09/0118_States-Continue-Advancing-Strategies-to-Scale-Work-Based-Learning.pdf
- 49 U.S. Department of Education Office of Career, Technical, and Adult Education, Division of Academic and Technical Education. (n.d.). Work-Based Learning Tool Kit. Perkins Collaborative Resource Network. <https://cte.ed.gov/wbltoolkit/index.html>
- 50 Hauge, K. (2018, January). *States continue advancing strategies to scale work-based learning*. National Governors Association. https://www.nga.org/wp-content/uploads/2019/09/0118_States-Continue-Advancing-Strategies-to-Scale-Work-Based-Learning.pdf

- 51 U.S. Department of Health and Human Services Office of Family Assistance. (n.d.). *Health Profession Opportunities Grants*. <https://www.acf.hhs.gov/ofa/programs/hpog>
- 52 Fountain, J. H. (2018, February 20). *Campus-based student financial aid programs under the Higher Education Act* (Congressional Research Service Report No. 7-5700). <https://fas.org/sgp/crs/misc/RL31618.pdf>
- 53 U.S. Department of Housing and Urban Development. *Community Development Block Grant Program, Chapter 2: Categories of eligible activities*. HUD Exchange. <https://www.hudexchange.info/onecpd/assets/File/CDBG-National-Objectives-Eligible-Activities-Chapter-2.pdf>
- 54 Office of Governor Steve Bullock. (2017, June 1). *Governor Bullock highlights tax incentive for Montana businesses to grow and create jobs* [Press release]. <http://governor.mt.gov/pressroom/governor-bullock-highlights-tax-incentive-for-montana-businesses-to-grow-and-create-jobs>
- 55 U.S. Department of Labor, Employment and Training Administration. (2020, January 28). *Apprenticeship: Learn about tax credits*. <https://www.doleta.gov/OA/taxcredits.cfm>
- 56 Montana Office of Public Instruction. (2019, June). *2019 66th legislative session summary of legislation related to K-12 education*. <http://opi.mt.gov/Portals/182/2019%20Legislature/K-12%20Education%202019%20Legislative%20Session.pdf?ver=2019-06-21-113956-170>
- 57 Montana Advanced Opportunity Act, H.B. 387 (2019). <https://leg.mt.gov/bills/2019/billhtml/HB0387.htm>
- 58 *Policy Academy on Scaling Work-Based Learning: Final report for Rhode Island* (final report to the National Governors Association Center for Best Practices submitted on May 15, 2019).
- 59 Idaho Career Technical Workforce Training Fund, S.B. 1105 (2019). <https://legislature.idaho.gov/wp-content/uploads/sessioninfo/2019/legislation/S1105.pdf>
- 60 Daudon, M. (2019, April 29). Email correspondence with the National Governors Association Center for Best Practices; see also the final task force recommendations: https://www.wtb.wa.gov/wp-content/uploads/2020/01/CCT2018_8PgFolio_SimplePrint.pdf
- 61 Alabama Eliminating Legal Barriers to Apprenticeship Act, H.B. 570 (2019). http://custom.statenet.com/public/resources.cgi?id=ID:bill:AL2019000H570&ciq=ncl5&client_md=00cde4257eec8ee2bf5f8379bf6fa57&mode=current_text
- 62 Alabama Education, Construction Trade Academy Fund, S.B. 242 (2019). <https://legiscan.com/AL/text/SB242/2019>
- 63 Alabama Industry Recognized and Registered Apprenticeship Program Act, S.B. 295 (2019). <https://legiscan.com/AL/text/SB295/id/2049623/Alabama-2019-SB295-Enrolled.pdf>
- 64 Idaho Public Employment and Workers' Compensation Act, H.B. 366 (2018). <https://legislature.idaho.gov/sessioninfo/2018/legislation/HO366>
- 65 Idaho Workforce Development Council, H.B. 432 (2018). http://custom.statenet.com/public/resources.cgi?id=ID:bill:ID2018000H432&ciq=ncl5&client_md=f516be0ce61f46f6f2cc57fddd592a31&mode=current_text
- 66 Idaho Apprenticeship Registration Exemption, H.B. 629 (2018). <https://legislature.idaho.gov/sessioninfo/2018/legislation/h0629>
- 67 Idaho Career Technical Workforce Training Fund, S.B. 1105 (2019). <https://legislature.idaho.gov/wp-content/uploads/sessioninfo/2019/legislation/S1105.pdf>
- 68 Idaho Funding for Career and Technical Education, S.B. 1106 (2019). <https://legislature.idaho.gov/sessioninfo/2019/legislation/s1106>
- 69 Idaho Education Incentive Funding for Workforce Readiness, S.B. 1222 (2018). <https://legislature.idaho.gov/sessioninfo/2018/legislation/s1222>
- 70 Idaho Funding for Career Technical Schools, S.B. 1295 (2018). <https://legislature.idaho.gov/sessioninfo/2018/legislation/s1295>
- 71 Illinois Bureau Apprenticeship Programs, H.B. 534 (2019). <http://www.ilga.gov/legislation/BillStatus.asp?DocNum=534&GAID=15&DocTypeID=SB&LegId=116471&SessionID=108&GA=101>
- 72 Illinois School Code School Report Card, H.B. 2822 (2019). <http://www.ilga.gov/legislation/BillStatus.asp?DocNum=2822&GAID=15&DocTypeID=HB&LegId=119115&SessionID=108&GA=101>
- 73 Illinois School Code Work-Based Learning, H.B. 2868 (2019). <http://www.ilga.gov/legislation/BillStatus.asp?DocNum=2868&GAID=15&DocTypeID=HB&LegId=119172&SessionID=108&GA=101>
- 74 Illinois School Code Registered Apprenticeship Program, H.B. 5247 (2018). <http://www.ilga.gov/legislation/BillStatus.asp?DocNum=5247&GAID=14&DocTypeID=HB&LegId=110956&SessionID=91&GA=100>
- 75 Illinois Department of Children and Family Services Apprenticeship Stipends, S.B. 1525 (2019). <https://legiscan.com/IL/bill/SB1525/2019>
- 76 Illinois Apprenticeship Study Act, S.B. 2024 (2019). <https://legiscan.com/IL/bill/SB2024/2019>
- 77 Indiana Workforce Development, Career and Technical Education, S.B. 50 (2018). http://custom.statenet.com/public/resources.cgi?id=ID:bill:IN2018000S50&ciq=ncl5&client_md=fcc8ad7714727d43d5debcd164cfc35&mode=current_text
- 78 Indiana Employability Skills Curriculum, S.B. 297 (2018). http://custom.statenet.com/public/resources.cgi?id=ID:bill:IN2018000S297&ciq=ncl5&client_md=4efe3652aac20ecf329c3cc254f539d6&mode=current_text
- 79 Iowa Future Ready Iowa Act, H.B. 2458 (2018). http://custom.statenet.com/public/resources.cgi?id=ID:bill:IA2017000H2458&ciq=ncl5&client_md=6c9cc2c496d44dab15716b641c45871&mode=current_text
- 80 Montana Advanced Opportunity Act, H.B. 387 (2019). <https://leg.mt.gov/bills/2019/billhtml/HB0387.htm>
- 81 Nevada Work-Based Learning Program, S.B. 66 (2017). <https://legiscan.com/NV/text/SB66/2017>
- 82 Nevada Act to Create an Office of Workforce Innovation, S.B. 516 (2017). <https://www.leg.state.nv.us/App/NELIS/REL/79th2017/Bill/5764/Overview>
- 83 New Hampshire Act to Create a Workforce and Job Training Commission, H.B. 1100 (2018). <https://legiscan.com/NH/text/HB1100/id/1790527>
- 84 Rhode Island Governor's Workforce Board, S.B. 826 (2017). http://custom.statenet.com/public/resources.cgi?id=ID:bill:RI2017000S826&ciq=ncl5&client_md=4382d1a3dba15adbac07d29d80b33950&mode=current_text
- 85 Utah Strategic Workforce Investments, S.B. 103 (2016). <https://le.utah.gov/-2016/bills/static/SB0103.html>
- 86 Utah Apprenticeship Opportunity Awareness, H.B. 280 (2019). http://custom.statenet.com/public/resources.cgi?id=ID:bill:UT2019000H280&ciq=ncl5&client_md=8393e1b2e64960ba819fd716c668947e&mode=current_text
- 87 Utah Talent Ready Utah Amendments, S.B. 131 (2018). <https://le.utah.gov/-2016/bills/static/SB0103.html>
- 88 Utah Scholarships for Career and Technical Education, S.B. 126 (2019). http://custom.statenet.com/public/resources.cgi?id=ID:bill:UT2019000S136&ciq=ncl5&client_md=4c19f95011f4e5471735b0eec33b53a2&mode=current_text
- 89 Utah Apprenticeship Act, S.B. 138 (2019). http://custom.statenet.com/public/resources.cgi?id=ID:bill:UT2019000S138&ciq=ncl5&client_md=249e68f331623e484e06d9f8a193a1a1&mode=current_text
- 90 Utah Work-Based Learning Amendments, S.B. 263 (2017). <https://le.utah.gov/-2017/bills/static/SB0263.html>
- 91 Washington Workforce Education Investment Act, H.B. 2158 (2019). <http://lawfilesexpl.wa.gov/biennium/2019-20/Pdf/Bills/House%20Passed%20Legislation/2158-S2.PL.pdf>
- 92 Washington Preapprenticeship Opportunities for Students, H.B. 2685 (2018). <https://apps.leg.wa.gov/billssummary?BillNumber=2685&Year=2017&Initiative=false>
- 93 Washington Expanding Statewide Career and Technical Education Course Equivalency Option, S.B. 6133 (2018). <https://app.leg.wa.gov/billssummary?BillNumber=6133&Year=2017>
- 94 Washington Helping Foster and Homeless Youth Complete Apprenticeships, S.B. 6274 (2018). <https://app.leg.wa.gov/billssummary?BillNumber=6274&Year=2017>
- 95 Alabama Exec. Order No. 717 (2019). <https://governor.alabama.gov/wp-content/uploads/2019/07/EO-717-Establishing-Alabama-Office-of-Apprenticeship.pdf>
- 96 Illinois Exec. Order No. 19-03 (2019). https://www2.illinois.gov/Pages/government/execorders/2019_3.aspx
- 97 Indiana Exec. Order No. 18-04 (2018). <https://bloximages.chicago2.vip.townnews.com/nwtimes.com/content/tncms/assets/v3/editorial/f/d4/fd43ff4a-4595-5037-8f14-a437c1e7abbe/5a986830c6832.pdf.pdf>
- 98 Iowa Exec. Order No. 01 (2018). <https://governor.iowa.gov/sites/default/files/documents/ExecutiveOrder-1.pdf>
- 99 Montana Exec. Order No. 19-2018 (2018). https://governor.mt.gov/Portals/16/docs/2018EOs/EO-19-2018_Creating%20Future%20Ready%20Cabinet.pdf
- 100 Indiana State Board of Education. (2018, July 11). *Graduation pathways policy guidance*. Indiana Department of Education. <https://www.doe.in.gov/sites/default/files/graduation-pathways/guidance-document.pdf>
- 101 Office of Washington Governor Jay Inslee. (2017, May 31). *Inslee aims to connect kids directly to careers with new apprenticeship and education initiative* [Press release]. <https://www.governor.wa.gov/news-media/inslee-aims-connect-kids-directly-careers-new-apprenticeship-and-education-initiative>



National Governors Association
444 N. Capitol Street NW, Suite 267
Washington, DC 20001
202-624-5300 | www.nga.org