



WORKING TO LEARN AND LEARNING TO WORK

**A state-by-state analysis of high school
work-based learning policies**

SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS

Work-based learning opportunities such as internships, pre-apprenticeships, and cooperative education programs enable young people to gain work experience while in high school. Work-based learning enables young people to develop employability and technical skills that can help them succeed beyond high school, including through building positive relationships with adults, developing social capital, and building their networks.¹ High-quality work-based learning also allows students to experience new environments, learn new skills, build a career identity, and better chart a path to and through postsecondary education that aligns to their career goals.²

Several pieces of federal legislation, including the Every Student Succeeds Act (ESSA), the Strengthening Career and Technical Education for the 21st Century Act (Perkins V), and the Workforce Innovation and Opportunity Act (WIOA), encourage and incentivize states to implement work-based learning policies and programs at the secondary level (see Appendix A for more detail about these laws and definitions of key terms). These federal laws allow for considerable discretion in states' work-based learning programs, and, as a result, states have taken a wide range of approaches to implementing work-based learning in high schools.

We set out to understand states' approaches to work-based learning in high school, conducting desk research and soliciting feedback from state-level experts on work-based learning programs in all 50 states and the District of Columbia. We assessed each state's policies against a rubric we designed based on research on high-quality work-based learning programs. Our detailed analysis of each state's policies can be found in the accompanying [report](#). This document serves to highlight the key themes and recommendations identified through that analysis.

It's important to note that neither our research nor the rubric we use to assess states' policies account for COVID-19 and the shift to virtual work-based learning opportunities that many states have undertaken or are in the process of developing. Virtual internships and other virtual work-based learning opportunities not only allow states and districts to continue to offer work-based learning in the midst of public health crises like the COVID-19 pandemic, but also enable states to expand access to groups of students who may not be able to take advantage of in-person work-based learning opportunities. They are important components of high-quality work-based learning programs and deserve further research and analysis.

Our review of states' work-based learning policies surfaced six key themes:

- 1 State approaches to work-based learning policies tend to fall into two broad buckets: centralized and decentralized.** States that have strong local control orientations tend to approach work-based learning in a decentralized way, with the state providing some guidance and frameworks but leaving the details of implementation up to local school districts and individual schools. Others take a more centralized approach, with programs designed at the state level and implemented similarly across districts and schools.



2 A majority of states have broad eligibility requirements for participation in work-based learning; however, very few states commit to ensuring that every student can access a variety of work-based learning experiences.

The majority of states have broad eligibility criteria for work-based learning opportunities. Even where work-based learning is offered exclusively through career and technical education (CTE) programming, in most states, all or most students (as opposed to just CTE concentrators) are eligible to enroll in work-based learning courses. However, broad eligibility is not the same as widespread access. Very few, if any, states have explicitly committed to ensuring that all students have access to work-based learning. In other words, broad eligibility is just the first step. States must also provide enough opportunities to meet student demand.

3 Very few states have developed explicit policies or programs to support high-need high school students and remove barriers to equitable access and success in work-based learning.

All states have nondiscriminatory practices in place that meet federal requirements, and many have supports for certain groups of students, such as pre-employment transition services for students with disabilities, which may include work-based learning. However, very few states have programs or policies in place with the explicit goal of supporting high-need students and removing barriers to equitable access and success in work-based learning.

4 States commonly leverage federal funds focused on workforce supports to fund high school work-based learning, while a few states also provide dedicated state funding, incentives, and other infrastructure supports specific to work-based learning.

Perkins V is a major source of funding for states' CTE programs, through which many work-based learning programs are implemented. However, Perkins V funds are not primarily or exclusively used to create or expand work-based learning. Some states have created additional funding streams or grant programs exclusively to help districts implement work-based learning programs. States also operate tax credit programs that encourage businesses to host students in work-based learning programs.

5 Very few states do a good job of communicating available high school work-based learning opportunities.

Nationwide, just seven states have comprehensive, statewide communications infrastructure in place to ensure all stakeholders — students, families, school-based staff, and employers — have access to information about work-based learning opportunities. In many states, forging partnerships with employers and communicating among stakeholders is the responsibility of school- or district-level work-based learning coordinators. Some states have developed websites that allow employers to post opportunities at their companies and students to search opportunities that align with their interests and career goals, or states have leveraged the support and expertise of statewide intermediaries or coordinating bodies to enhance communications efforts.

6 Many states have not yet set clear quality and accountability expectations or developed systems to collect and use data on high school work-based learning for program improvement.

While most states collect at least some work-based learning data (through CTE program data collection, course codes, etc.), few have robust processes in place to ensure they are capturing the full breadth of work-based learning in which students participate. Even fewer currently use those data to inform programmatic improvements.



States vary in their progress toward implementing work-based learning programs. There's no one-size-fits-all approach to these programs, and states can address different elements of quality programs at different points in their implementation. The recommendations below are organized along a continuum of implementation; however, we recognize that no state fits perfectly into one of these categories. Instead, these recommendations are meant to help state leaders think about how to prioritize the various elements of high-quality work-based learning programming.

States still in the early stages of developing work-based learning policies and programs should:

- Focus first on clearly defining what work-based learning means in their state and identifying a set of work-based learning opportunities the state will offer its students
- Decide what quality looks like for both the school-based and employer-based components of work-based learning experiences and develop clear guidelines and expectations
- Develop guidelines or expectations that promote widespread access to work-based learning opportunities for all students
- Develop explicit programming or supports to ensure high-need student groups have equitable access to work-based learning opportunities. Take into consideration how all students — rural versus urban communities, students with disabilities, students from all socioeconomic backgrounds, etc. — can take advantage of work-based learning opportunities
- Develop explicit programming or supports to ensure a diverse pool of employers can provide work-based learning opportunities
- Ensure adequate funding for all parties involved — students, schools, and employers
- Establish a strong communication infrastructure to share available opportunities

States that have work-based learning policies in place but aren't sure how well those policies are working for students should:

- Ensure the state has a clear definition of quality and supporting guidelines and expectations, and revise existing definitions as needed
- Create a system to assess and track the quality measures developed
- Ensure widespread and equitable access for all students, creating or strengthening supports for high-need student groups as needed



- Develop processes and structures to collect data on programs, including the number of programs in operation, the types of experiences they provide, the number of students participating, and students' outcomes. These data should be disaggregated by demographics including student race/ethnicity, geography, and income to allow the state to identify gaps in equitable access or outcomes
- Ensure adequate funding for all parties involved — students, schools, and employers
- Establish a strong communication infrastructure to share available opportunities

States that have developed work-based learning programs with strong quality standards and data collection processes in place should:

- Ensure that data are used for quality improvement
- Ensure that program implementation is broad enough in schools and districts throughout the state to allow widespread, equal access for students
- Use data to identify gaps in quality program implementation and barriers to access, and revise policies to address those gaps and barriers
- Ensure adequate funding for all parties involved — students, schools, and employers
- Develop new or strengthen existing coordination mechanisms (e.g., intermediaries, public-private partnerships, websites, etc.) to strengthen statewide work-based learning infrastructure
- Establish a strong communication infrastructure to share available opportunities

States that have strong standards in place and/or are doing well on these metrics but don't have widespread access or participation should:

- Use data to understand where there are gaps in access and participation and identify barriers
- Ensure policies and funding streams encourage and incentivize universal access
- Explore and pilot opportunities to adapt work-based learning to virtual environments to expand access (e.g., to rural communities with few local employers) and address barriers (e.g., transportation, COVID-19)
- Strengthen and expand existing coordination mechanisms (e.g., intermediaries, public-private partnerships, websites, etc.) to strengthen statewide work-based learning infrastructure
- Establish a strong communication infrastructure to share available opportunities



BACKGROUND

High school work-based learning programs support young people in gaining the skills and experiences that help facilitate their transition from high school into college and career. Broadly, “work-based learning” includes all programming and coursework that provides high school students with an opportunity to gain real-world, job-embedded experiences. These experiences range from cooperative education and internship programs that partner with local businesses, enabling students to spend part of the school day in the workplace, to in-school opportunities such as school-based enterprises. States can, and do, define work-based learning differently to include many different types of opportunities. Fundamentally, as the name implies, work-based learning is the opportunity for a student to learn through work.

Work-based learning enables young people to develop employability and technical skills that can help them succeed beyond high school. High-quality work-based learning experiences help students build positive relationships with adults, develop social capital, and build their networks, which can help open doors for employment opportunities.³ These experiences additionally allow students to experience new environments, learn new skills, build a career identity, and better chart a path to and through postsecondary education that aligns to their career goals.⁴ But work-based learning also has benefits for employers and communities. Businesses and organizations partnering in work-based learning programs gain early access to potential employees, cultivate a pipeline of talent who have training and knowledge specific to their industry, and have the opportunity to bring new perspectives and voices into the company.⁵ Work-based learning programs that are closely tied to the labor and economic needs of the local community can reduce unemployment and help attract new business and industry.⁶

Work-based learning opportunities have long been a component of postsecondary education and career training programs. Registered apprenticeships are generally open to those 18 and older (and occasionally to youth 16 and older, but often require a GED or high school credential).⁷ Employers offer internships for college juniors and seniors more commonly than for high school-aged students.⁸ And clinical placements are regularly required for individuals

seeking a credential in a particular occupational field, such as health care.⁹ Yet as “career pathways” — continuums of education and training that provide a seamless transition across secondary education, postsecondary education, workforce institutions, and employers — have emerged and gained traction,¹⁰ work-based learning is becoming increasingly embedded in high schools as a way to test what a student might like prior to choosing a postsecondary path.

Work-based learning has received a fair amount of attention in recent years, at the federal, state, and local levels. In 2018, Congress passed the Strengthening Career and Technical Education for the 21st Century Act, a reauthorization of the Carl D. Perkins Career and Technical Education Act of 2006. This law, commonly referred to as Perkins V, provides nearly \$1.3 billion annually to the career and technical education (CTE) programs at the secondary and postsecondary level, through which many states offer work-based learning.¹¹ Governors across the country have emphasized the need for high-quality apprenticeship and work-based learning programs to develop a strong workforce.¹² Similarly, state legislatures have passed a flurry of legislation in recent years to strengthen and expand work-based learning programs and policies,¹³ ranging from requiring school report cards to include data on the percentage of students who participate in work-based learning in Illinois,¹⁴ to providing access to grant funds to implement new or expand existing work-based learning programs in Nevada,¹⁵ to expanding work-based learning outreach and coordination efforts in Washington.¹⁶

Private companies and organizations are also engaged in expanding work-based learning opportunities to high schoolers. In 2013, JPMorgan Chase invested \$75 million in the New Skills for Youth initiative, which, in partnership with the Council of Chief State School Officers and the

Work-based learning is the opportunity for a student to learn through work.



National Association of State Directors of Career Technical Education Consortium, worked to expand high-quality, career-focused education programs.¹⁷ In 2015, the company launched the New Skills for Work initiative to help cities build local workforce training systems. The company initially invested \$250 million in this initiative,¹⁸ and in 2019, made an additional \$350 million investment.¹⁹ The National Governors Association’s Policy Academy on Scaling Work-Based Learning provides grants and support to states to scale high-quality work-based learning programs for youth and young adults.²⁰

It is in this context that we set out to better understand how states are approaching work-based learning: how they conceptualize and define work-based learning at the high school level; how they are moving work-based learning into younger grades rather than the traditional postsecondary focus; how they implement programming, including student eligibility, funding, and support infrastructure; and how they hold programs accountable for quality.

OUR APPROACH

To help us assess states’ approaches to high school work-based learning opportunities, we developed a rubric consisting of 15 criteria organized into six categories (see Figure 1 and Appendix B). We relied heavily on existing research on quality work-based learning programming to develop this rubric, including reports such as the Education Commission of the States’ (ECS) “Work-Based Learning Model Policy Components,”²¹ ExcelinEd’s “Developing High-Quality State Work-Based Learning Programs: Playbook for State Policymakers,”²² and the College and Career Readiness Center’s “Work-Based Learning Definitions: Themes From States and National Organizations.”²³ There are also a handful of 50-state scans that look at various elements of states’ work-based learning policies that informed our work. The National Skills Coalition, for example, conducted a 50-state review to identify where states have work-based learning policies in place that include paid employment.²⁴ ECS has reviewed state-level policies related to apprenticeships.²⁵

Following our development of a rubric, we conducted a desk research review of information that states have

made publicly available on their agency websites, as well as information contained on other affiliated or partner organization websites. We used an expansive definition of work-based learning, which included a wide range of paid or unpaid opportunities designed to engage high school students, help them explore multiple education and career opportunities, and attain credentials that are valued in the workforce. These opportunities most commonly take the form of internships, apprenticeships (including registered apprenticeships — which are typically targeted at adults but sometimes include youth ages 16 and up — pre-apprenticeships, and youth apprenticeships), and cooperative education programs that integrate classroom learning with workplace learning (see Appendix A for definitions of these terms). We did not include activities like job shadows or guest speakers that lacked a student work component and are intended more to help students learn about work, rather than learn through work.

Because it can be difficult to get a full picture of work-based learning implementation based solely on reports, documents, and information contained on agency and partner websites, we sent our initial evaluation, along with our rubric, to leaders in each state (e.g., CTE program directors, work-based learning coordinators), asking for their feedback and clarification. We heard back from leaders in 43 states and adjusted our state-level descriptions and evaluations as needed. The state summaries provided in our [report](#) offer as full a picture of each state’s approach to work-based learning as possible. They are, however, a snapshot of a moment in time. Many states are actively making revisions and improvements to their work-based learning programs. Where it was clear that work was in process or continuing, we did our best to note those planned developments.

DISCUSSION OF KEY THEMES

Our review of work-based learning policies in 50 states and the District of Columbia revealed that states are in very different places in their implementation of programs and policies. There was considerable variation in where states fell on our rubric (see Figure 2). Even so, a number of themes emerged from our analysis.



Figure 1. Work-based learning (WBL) policy evaluation rubric

Category	Criteria	Description
Existence of WBL policy	WBL definition	Does the state have a formal definition of WBL that includes opportunities for high school students?
Content of WBL policies	WBL as part of HS graduation requirements	Does state policy allow or require internships or other WBL opportunities to count for credit toward graduation?
	WBL eligibility	Are all high school students eligible for WBL opportunities, or is eligibility restricted to students enrolled in specific programs?
	Equity of access	Are there state policies designed to support access for underserved groups of students (e.g., preference for low-income students or students enrolled in low-performing schools, explicit supports for students with disabilities, transportation stipends, etc.)?
	Addressing policy barriers	Does state policy address key barriers to WBL?
WBL funding	Financial incentives	Are there financial incentives (e.g., tax credits) for employers that offer WBL opportunities to high school students?
	Dedicated federal funding	Does the state use its Perkins funding to support WBL?
	Dedicated state funding	Is there a dedicated source of state funding for WBL?
WBL support infrastructure	Statewide support infrastructure, intermediary, and/or public-private partnerships	Is there a system or organization designed to facilitate WBL opportunities and/or are there public-private partnerships that support access to paid or for-credit WBL opportunities for high school students?
	WBL communications infrastructure	Are there systems in place to communicate among schools, students, employers, and other stakeholders about WBL opportunities?
WBL quality infrastructure	Experience quality	Is there a statewide framework in place that defines quality expectations for WBL experiences and holds employers accountable to those expectations?
	Program quality	Is there a statewide framework in place that defines quality expectations for WBL programs and holds schools/districts accountable to those expectations?
WBL accountability	Data collection	Is there a process in place to track student participation in WBL opportunities and their outcomes?
	Use of data to drive equity	Does the state disaggregate WBL data by student demographics and experience type?
	Use of data to drive quality	Does the state use disaggregated data as a component of its quality framework?



Figure 2. Summary of state ratings

Category	Criteria	Red	Yellow	Green
Existence of WBL policy	WBL definition	1	5	45
Content of WBL policies	WBL as part of HS graduation requirements	0	51	0
	WBL eligibility	1	12	38
	Equity of access	32	14	5
	Addressing policy barriers	8	29	14
WBL funding	Financial incentives	24	22	7
	Dedicated federal funding	22	0	29
	Dedicated state funding	27	19	5
WBL support infrastructure	Statewide support infrastructure, intermediary, and/or public-private partnerships	24	20	7
	WBL communications infrastructure	10	34	7
WBL quality infrastructure	Experience quality	30	20	1
	Program quality	19	26	6
WBL accountability	Data collection	9	22	20
	Use of data to drive equity	15	25	11
	Use of data to drive quality	34	15	2



State approaches to work-based learning policies tend to fall into two broad buckets: centralized and decentralized.

While there is considerable diversity in how states approach their work-based learning policies and programs, their approaches tend to fall into two broad buckets: centralized and decentralized. States with centralized approaches define at the state level the requirements for work-based learning programs, including student eligibility requirements, data collection procedures, and other elements of program implementation such as requirements for school- or district-level work-based learning coordinators. Both New York and Washington, for example, have state-level processes in place that require schools to submit their work-based learning programs for approval or endorsement by the state Department of Education (in New York) or another state-level entity (in Washington). States with strong local control orientations tend to take a more decentralized approach, providing broad program contours and suggestions at the state level, but leaving the actual implementation decisions to local school districts. In Illinois, for example, multiple agencies are involved in implementing, overseeing, and/or providing guidance for work-based learning efforts, including the State Board of Education, the State Department of Commerce and Economic Opportunity, and the Governor’s Cabinet on Children and Youth. There is some state-level guidance available, but few requirements. The State Department of Commerce and Economic Opportunity and the State Board of Education partnered with Education Systems Center at Northern Illinois University to develop an implementation toolkit for work-based learning.²⁶ The toolkit offers guidance for districts on topics such as staffing considerations and staff professional development, engaging employer hosts and forming partnerships, and assessing student participants. Local school districts and communities use this guidance to develop their own plans and programs. District 214 in Arlington Heights, Illinois, for example, developed its own workplace learning toolkit.²⁷ The community of Greater Peoria, Illinois, took a slightly different approach, launching the Greater Peoria Essential Abilities and Knowledge

certification program. This program will help individuals develop the skills and competencies they need to be successful in today’s economy through work-based learning and other opportunities.²⁸

While we don’t take a stand on whether one approach is superior — and there likely isn’t a “right” way to approach work-based learning that would work in all state contexts — it is important to note that the more decentralized a state’s approach is, the harder it is to evaluate at a state level. With a decentralized approach, requirements such as student eligibility or data collection can vary substantially across districts within the same state, making it difficult to draw conclusions about program design and implementation statewide.

We also noted that, in many states — whether the state takes a centralized or decentralized approach — there often appears to be a lack of coordination between work-based learning opportunities provided by schools and districts (e.g., courses that include internships or co-ops) and more traditional apprenticeship programs (including registered apprenticeships, youth apprenticeships, and pre-apprenticeships). In many states, apprenticeships are run out of a department other than the department of education with businesses taking the lead on program development. It’s not always clear from state documentation whether or how district-run work-based learning courses and apprenticeship programs intersect for students. This can mean that students miss out on opportunities if there is not a streamlined source of information about all programs.

Finally, regardless of how centralized a state’s approach is, we noted that many have adopted a “work-based learning coordinator” model, where a school or district staff member manages all aspects of the work-based learning program. The coordinator’s responsibilities often include identifying potential employer partners and fostering those relationships, overseeing students participating in work-based learning activities, and managing communication and expectations among various stakeholders.



A majority of states have broad eligibility requirements for participation in work-based learning; however, very few states commit to ensuring that every student can access a variety of work-based learning experiences.

Work-based learning experiences are frequently embedded in districts' CTE or "career pathways" programming. As a result, it was often difficult for us to disentangle questions of eligibility for CTE programming from eligibility for work-based learning opportunities. While some states, like Massachusetts and Maine, have separate CTE high schools, most states implement CTE programming in their traditional, comprehensive high schools. In some states, all students clearly have access to CTE courses. Delaware, for example, requires all students to take at least three CTE courses in a pathway in order to graduate.²⁹ We can extrapolate from that requirement that CTE courses are widely available in Delaware's high schools. In other states, the extent to which students are eligible to participate in CTE programming, and thus, eligible to participate in work-based learning, is less clear. Despite the often-confusing or unclear overlap between CTE programs and work-based learning, it appears that the majority of states — 38 — have broad eligibility for which students can participate in work-based learning. Even where work-based learning is offered exclusively through CTE programming, most states allow all students (as opposed to just CTE concentrators) to enroll in CTE-based work-based learning courses.

Some states, however, do set eligibility requirements on work-based learning opportunities that limit the number and type of students who can participate. Most commonly, work-based learning opportunities are part of advanced-level CTE courses, requiring students to have taken one or more prerequisite courses prior to enrolling in a work-based learning course. Additionally, some states set age (typically 16+) or grade (typically 11th or 12th) requirements to ensure compliance with state labor laws. Other states have changed labor or insurance regulations at the state level to make work-based learning for younger students more possible. Ohio's minor labor laws, for example, explicitly exempt students participating in CTE, STEM, dual credit, or apprenticeship programs.³⁰

While we only assessed eligibility in our rubric, states must not stop with broad eligibility. Widespread access is critical. In fact, while 38 states have broad eligibility requirements, that does not mean that all — or even most — students in those states can actually enroll in a work-based learning opportunity if they want to. There's no comprehensive data on the number or type of work-based learning experiences offered in high schools to help us understand how these opportunities are distributed across high schools within a given state or community. However, national data on CTE program offerings shows us that about three-fourths of CTE programs offer on-the-job training, internships, practicums, clinical experiences, or cooperative education, while just 31% offer apprenticeships or pre-apprenticeship programs.³¹ These data suggest that access to work-based learning is not universal. No state ensures that there are enough work-based learning opportunities available to meet the needs of every student. While eligibility may be close to universal in some states, access to available programming is not universal — the demand for programming far outpaces the supply of opportunities. States can take the lead in ensuring every student who wants to participate in a work-based learning program has the ability to do so, whether they are enrolled in a CTE program or not.

States must not stop with broad eligibility. Widespread access is critical.

Very few states have developed explicit policies or programs to support high-need high school students and remove barriers to equitable access and success in work-based learning.

Creating broad eligibility and ensuring universal access to work-based learning opportunities is critical. However, states must also develop structures to help high-need students both access and succeed in a work-based learning experience.



Very few states have developed explicit policies or programs to support high-need students in accessing work-based learning opportunities. All states include nondiscrimination language in their work-based learning policies and, as required by Perkins V and WIOA, identify opportunities for schools to use federal funds to support high-need groups of students. States also offer programming to specific groups of students that may include a work-based learning component. For example, states offer pre-employment transition services for students with disabilities through their vocational rehabilitation services and include supports such as job exploration and counseling, workplace readiness training, and instruction in self-advocacy. Under WIOA, these services may also include work-based learning opportunities such as internships.³² Other programs, such as Jobs for America's Graduates (JAG), a nonprofit organization that supports at-risk youth to graduate from high school and transition into postsecondary or career opportunities,³³ may also connect students with work-based learning opportunities. But few states have developed policies or programs that are designed with

States must develop structures to help high-need students both access and succeed in a work-based learning experience.

the specific goal of ensuring high-need student groups can access and succeed in work-based learning opportunities.

Georgia's Great Promise Partnership, for example, is a public-private partnership that supports at-risk students to stay in

and complete high school while simultaneously developing real-world job skills and experiences through work-based learning opportunities.³⁴ In Illinois, state law requires the Department of Children and Family Services to provide eligible youth an apprenticeship stipend to cover the costs associated with entering an apprenticeship, including costs such as tuition for classes, work clothes, or occupation-specific tools.³⁵ Other states provide paid internship opportunities, which can help ensure that students who may otherwise need an after-school job are able to participate in work-based learning.³⁶ Most states, however, fall far short of these types of supports for high-need students.

States commonly leverage federal funds focused on workforce supports to fund high school work-based learning, while a few states also provide dedicated state funding, incentives, and other infrastructure supports specific to work-based learning.

States tap several different state and federal funding streams to fund work-based learning. In most states, schools can access categorical and/or foundational per-pupil funding to help cover some of the costs of operating work-based learning courses. For example, they can use these funds to reimburse teachers for the costs associated with traveling to students' worksites. These funds also frequently cover liability insurance for students. States additionally use federal funding to support work-based learning, most commonly through Perkins V or WIOA. Perkins V funds career and technical education programs of study and career pathways programs, which often include work-based learning.³⁷ WIOA funds employment and training services for adults, dislocated workers, and youth.³⁸

All of these funding sources help support the implementation of work-based learning. A handful of states have taken the additional step of creating dedicated funding streams solely or primarily focused on creating and expanding work-based learning opportunities. In Washington, the 2019 Workforce Education Investment Act authorized \$25 million in dedicated state funding to operate initiatives that support and scale work-based learning and other career-connected learning opportunities, as well as \$11 million in capital and transportation funding to support these initiatives.³⁹ In Texas, the Texas Workforce Commission provides funds to local education agencies and apprenticeship committees to support the costs of job-related classroom instruction in registered apprenticeship training programs.⁴⁰ The FY2020 operating budget of the Texas Workforce Commission includes \$5.7 million for apprenticeships (which are available to young people ages 16 and over).⁴¹ South Carolina provides dedicated funding to districts to support work-based learning. With these funds, districts can hire a work-based learning coordinator, integrate academic and CTE programming, provide staff development related to work-based learning, transport students, and more.⁴² In Rhode Island, the state's three-year action plan, PrepareRI, is supported by a \$2 million



grant from JPMorgan Chase and a \$1.5 million grant from American Student Assistance. Real Skills for Youth is a state-funded work-based learning and career exploration program through the Governor's Workforce Board that is part of PrepareRI and currently funded by the state at about \$2.5 million per year; it coordinates paid work-based learning experiences for high school juniors.⁴³

In addition to funding that supports districts or schools directly, tax credits or other incentives can offset costs on the employer side and encourage businesses to partner with schools to offer work-based learning opportunities. Many states offer tax credits to businesses that offer registered apprenticeships.⁴⁴ A few states have programs that include a broader set of work-based learning experiences. Delaware's Learning for Careers Initiative provides grant funding to engage Delaware's business community in a planning process that results in the creation or expansion of paid work experiences for youth and adult learners in the state.⁴⁵ And New Jersey's Career Accelerator Internship Program provides participating employers with up to 50% of wages paid to new interns, up to \$3,000 per student.⁴⁶

Beyond funding, states vary widely in terms of their infrastructure to support work-based learning. As noted above, many states have adopted a "work-based learning coordinator" model and tasked those coordinators with communicating among stakeholders about work-based learning programs and opportunities. Several states also have websites to help match young people with apprenticeship opportunities; however, very few of these websites include broader work-based learning opportunities. North Carolina's Navigator is an example of a platform that allows employers to post work-based learning opportunities and enables educators to search and track those opportunities across the state.⁴⁷

While work-based learning infrastructure remains in the early stages in most states, one common approach is the development of an intermediary or public-private partnership. Washington state's Career Connect Washington (CCW), for example, is a statewide initiative and public-private partnership that facilitates work-based learning opportunities through a system of regional networks, intermediaries, and local coordinators.⁴⁸ In Massachusetts,

the Department of Elementary and Secondary Education's Connecting Activities initiative establishes public-private partnerships through 16 local MassHire Workforce Boards to provide work-based learning experiences for students.⁴⁹ In Delaware, the Delaware Technical Community College (DTCC) serves as the lead agency for work-based learning in the state. DTCC's Office of Work-Based Learning serves as an intermediary between education agencies and business and industry partners to facilitate and scale work-based learning opportunities across the state.⁵⁰

Very few states do a good job of communicating available high school work-based learning opportunities.

Nationwide, just seven states have comprehensive, statewide communications infrastructure in place to ensure all stakeholders — students, families, school-based staff, and employers — have access to information about work-based learning opportunities. In many states, forging partnerships with employers and communicating among stakeholders is the responsibility of school- or district-level work-based learning coordinators. This approach to communications relies heavily on the capacity and networks of a single person, rather than leveraging the collective capacity and networks of stakeholders statewide. Websites such

Statewide intermediaries or coordinating bodies can be critical to developing a statewide communications initiative, providing additional support and expertise to ensure stakeholders have access to the information they need to develop, implement, and/or participate in high-quality work-based learning opportunities.



as Nevada’s Life Works⁵¹ or Rhode Island’s Work-Based Learning Navigator⁵² allow employers to post opportunities at their companies and students to search opportunities that align with their interests and career goals. Statewide intermediaries or coordinating bodies can be critical to developing a statewide communications initiative, providing additional support and expertise to ensure stakeholders have access to the information they need to develop, implement, and/or participate in high-quality work-based learning opportunities.

Many states have not yet set clear quality and accountability expectations or developed systems to collect and use data on high school work-based learning for program improvement.

Although many work-based learning programs are developed and implemented at the local level, states have an important role to play in setting quality expectations, collecting data, and holding schools and employers accountable.⁵³ States are at varying places in their development of quality expectations. Many states offer lists of roles and responsibilities for various parties, including the teacher or work-based learning coordinator, the employer partner, and the student, that can provide a framework for program design and establish expectations. For example, Iowa’s work-based learning guide states that work-based learning teacher-coordinators are responsible for program planning, development, and related classroom instruction; on-the-job instruction and coordination; guidance and advice; program administration and management; community and public relations; and development in

their professional roles and activities. Employers “provide instruction in the specific tasks students are expected to complete on the job, as well as information about safety and the general operation of the business.”⁵⁴ This delineation of expectations is an important first step. However, states should also define what high-quality implementation of these responsibilities looks like. Many fewer states have taken that step. Georgia has developed 11 standards for high-quality work-based learning. Each standard has an accompanying rubric to evaluate the extent to which a given program meets the standard.⁵⁵

An even smaller number of states has developed processes to hold either schools or employers accountable to quality expectations. Just six states have developed a quality framework and accompanying accountability for the school-based elements of a work-based learning program (e.g., standards for the instructor or coordinator, expectations about student evaluation, etc.); just one has done so explicitly for worksite experiences (e.g., setting standards for what a quality worksite mentor looks like, etc.).

Washington’s Career Connect Washington (CCW) initiative offers an example of a robust quality and accountability system for work-based learning programs. Any community and technical college, training center, university, or K-12 school (in partnership with a higher education institution) in Washington can offer a work-based learning program, called Career Launch.⁵⁶ In order to operate a Career Launch program, however, the sponsoring organization must complete an application, undergo a rigorous review process, and receive an endorsement from CCW.⁵⁷ Endorsements last for three years, at which time programs must undergo a subsequent review to renew their endorsement. This process ensures that there is a clear definition of quality programming at the state level and that all programs are held to the same set of expectations. The endorsement renewal makes sure that programs continue to meet quality expectations year after year.

Without these kinds of clear and consistent expectations, the quality of both schools’ work-based learning programs and the experiences provided by participating employers likely varies considerably both within a district and across the state.

States have an important role to play in setting quality expectations, collecting data, and holding schools and employers accountable.



CONCLUSION AND RECOMMENDATIONS

The discussion of key themes above, alongside our analysis and ratings of 50 states and the District of Columbia, are meant to support states in understanding strengths and areas for growth and improvement, both in their current work-based learning policies and programs and in the field more broadly. In an effort to honor states' work on various individual components of the rubric and to avoid overgeneralization, we did not provide an overall rating of each state, nor did we develop "tiers" or other categories to lump states together based on their work to date on work-based learning. That said, states' efforts generally fall along a continuum. Those at the very early stages of developing work-based learning policies and programs may benefit from focusing on different growth areas than those who have several years of implementation experience. The recommendations below should help state leaders think about how to prioritize the various elements of high-quality work-based learning programming.

However, before states undertake any action to strengthen their work-based learning programs, leaders must first decide to make work-based learning a priority and commit to creating, expanding, and improving opportunities for students in high school. Without this commitment from state leadership, states will struggle to provide all secondary students with equitable access to high-quality work-based learning opportunities. Once states have made this commitment, they should think through the following programmatic elements and support structures.

These recommendations align closely to the 15 criteria included in our rubric, and together, can offer states a road map for implementing robust, high-quality work-based learning that prepares young people for success beyond high school, strengthens the talent pipelines of local businesses, and addresses the economic and workforce needs of entire communities.

Beyond setting clear expectations for program design and quality, many states could improve the data they collect, analyze, and report on work-based learning. The vast majority of states collect and disaggregate data on CTE programming in order to meet the data reporting expectations outlined in Perkins V. These data often include work-based learning opportunities, especially in states where work-based learning courses have unique course codes that enable states to collect participation data and disaggregate it by student demographics. However, many

Many states could improve the data they collect, analyze, and report on work-based learning.

states offer work-based learning opportunities outside of CTE programming that are not measured in this CTE data reporting, meaning that CTE-based work-based learning data tell just a portion of the story.

Just 20 states collect comprehensive data on work-based learning participation, including student outcomes. Eleven states are able to disaggregate that comprehensive data to identify trends in work-based learning participation. Just two states have processes in place to use disaggregated data to inform work-based learning program improvement at a state level. South Carolina, for example, produces an annual work-based learning report that uses data to identify gaps in and barriers to work-based learning programming statewide. The state uses these data to inform policy and program changes to strengthen the state's approach to work-based learning.⁵⁸ Washington's Career Connect Washington captures data for all of its Career Launch programs and uses those data to identify gaps in programming, inform its overarching strategy, and provide additional support, resources, and assistance to individual programs as needed.⁵⁹

Without strong data collection, reporting, and analysis processes, it is impossible for states to identify trends in work-based learning participation and outcomes or to understand how current policies and practices may create opportunities or challenges for certain communities, districts, student groups, or employers affecting participation and outcomes.



Recommendations for states still in the early stages of developing work-based learning policies and programs

- 1** Focus first on clearly defining what work-based learning means in their state and identifying a set of work-based learning opportunities the state will offer its students
- 2** Decide what quality looks like for both the school-based and employer-based components of work-based learning experiences and develop clear guidelines and expectations
- 3** Develop guidelines or expectations that promote widespread access to work-based learning opportunities for all students
- 4** Develop explicit programming or supports to ensure high-need student groups have equitable access to work-based learning opportunities. Take into consideration how all students — rural versus urban communities, students with disabilities, students from all socioeconomic backgrounds, etc. — can take advantage of work-based learning opportunities
- 5** Develop explicit programming or supports to ensure a diverse pool of employers can provide work-based learning opportunities
- 6** Ensure adequate funding for all parties involved — students, schools, and employers
- 7** Establish a strong communication infrastructure to share available opportunities



Recommendations for states that have work-based learning policies in place but aren't sure how well those policies are working for students

- 1** Ensure the state has a clear definition of quality and supporting guidelines and expectations, and revise existing definitions as needed
- 2** Create a system to assess and track the quality measures developed
- 3** Ensure widespread and equitable access for all students, creating or strengthening supports for high-need student groups as needed
- 4** Develop processes and structures to collect data on programs, including the number of programs in operation, the types of experiences they provide, the number of students participating, and students' outcomes. These data should be disaggregated by demographics including student race/ethnicity, geography, and income to allow the state to identify gaps in equitable access or outcomes
- 5** Ensure adequate funding for all parties involved — students, schools, and employers
- 6** Establish a strong communication infrastructure to share available opportunities



Recommendations for states that have developed work-based learning programs with strong quality standards and data collection processes in place

- 1** Ensure that data are used for quality improvement
- 2** Ensure that program implementation is broad enough in schools and districts throughout the state to allow widespread, equal access for students
- 3** Use data to identify gaps in quality program implementation and barriers to access, and revise policies to address those gaps and barriers
- 4** Ensure adequate funding for all parties involved — students, schools, and employers
- 5** Develop new or strengthen existing coordination mechanisms (e.g., intermediaries, public-private partnerships, websites, etc.) to strengthen statewide work-based learning infrastructure
- 6** Establish a strong communication infrastructure to share available opportunities



Recommendations for states that have strong standards in place and/or are doing well on these metrics but don't have widespread access or participation

- 1** Use data to understand where there are gaps in access and participation and identify barriers
- 2** Ensure policies and funding streams encourage and incentivize universal access
- 3** Explore and pilot opportunities to adapt work-based learning to virtual environments to expand access (e.g., to rural communities with few local employers) and address barriers (e.g., transportation, COVID-19)
- 4** Strengthen and expand existing coordination mechanisms (e.g., intermediaries, public-private partnerships, websites, etc.) to strengthen statewide work-based learning infrastructure
- 5** Establish a strong communication infrastructure to share available opportunities



Appendix A: Definitions

Term	Definition
Apprenticeship	Apprenticeships combine paid on-the-job training with classroom instruction to prepare workers for highly skilled careers. Workers benefit from apprenticeships by receiving a skills-based education that prepares them for good-paying jobs. Apprenticeship programs help employers recruit, build, and retain a highly skilled workforce. ⁶⁰
Career and technical education (CTE)	Organized educational activities that: offer a sequence of courses that provide individuals with academic content and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions; include competency-based, work-based, or other applied learning; are coordinated between secondary and postsecondary education programming; and may include career exploration as early as the middle grades. ⁶¹
CTE concentrator	A secondary student who has completed at least two courses in a single career and technical education program or program of study. ⁶²
CTE program of study	A coordinated, nonduplicative sequence of academic and technical content at the secondary and postsecondary level that (A) incorporates challenging state academic standards; (B) addresses both academic and technical knowledge and skills, including employability skills; (C) is aligned with the needs of industries in the economy of the state, region, tribal community, or local area; (D) progresses in specificity (beginning with all aspects of an industry or career cluster and leading to more occupation-specific instruction); (E) has multiple entry and exit points that incorporate credentialing; and (F) culminates in the attainment of a recognized postsecondary credential. ⁶³
Cooperative education	A method of education that, through a written cooperative arrangement between a school and an employer, allows students to receive instruction including academic courses and related CTE instruction by alternating study in school with a job in any occupational field. ⁶⁴
Every Student Succeeds Act (ESSA)	ESSA is the reauthorized version of the Elementary and Secondary Education Act, signed into law in 2015. ESSA's purpose is to "provide all children significant opportunity to receive a fair, equitable, and high-quality education, and to close educational achievement gaps." ⁶⁵ ESSA provides authority to states and school systems to develop and adopt innovative approaches to accountability for school performance. ⁶⁶
Internship	A short-term (typically one to three months) experience where students gain entry-level general work experience. They tend to be longer than externships but shorter and less structured than apprenticeships. ⁶⁷ Generally train students to develop overall workplace skills rather than to train for a specific profession, like with an apprenticeship.
Pre-apprenticeship	Pre-apprenticeship is a program or set of strategies designed to prepare individuals for entry into registered apprenticeship programs or other job opportunities. Pre-apprenticeships may last from a few weeks to a few months and may or may not include wages or stipend. ⁶⁸ They typically involve a formal partnership with at least one registered apprenticeship program sponsor and offer a pathway into a registered apprenticeship. ⁶⁹ Typically, both youth and adults can access pre-apprenticeships.



Appendix A: Definitions (continued)

Term	Definition
Registered apprenticeship program (RAP)	A registered apprenticeship program is a proven model of apprenticeship that has been validated by the U.S. Department of Labor or a state apprenticeship agency. RAPs enable and energize more employers to participate and provide them access to larger talent pools that have been trained for entry-level to management positions, thereby meeting industry demands and reducing unemployment rates across the country. ⁷⁰
School-based enterprise	A simulated or actual business or industry conducted by a school (e.g., school store, restaurant). ⁷¹
Strengthening Career and Technical Education for the 21st Century Act (Perkins V)	Perkins V is the reauthorized version of the Carl D. Perkins Career and Technical Education Act of 2006, signed into law in 2018. Perkins V's purpose is to “develop more fully the academic knowledge and technical employability skills of secondary education students and postsecondary education students who elect to enroll in career and technical education programs and programs of study.” Perkins V aims to: support the development of high standards to prepare students for occupations; integrate academic and career and technical education; increase state flexibility to design and implement programming; conduct and disseminate research on best practices; provide technical assistance; support partnerships among institutions; provide individuals with education and training opportunities across their lifetimes; and increase employment opportunities for unemployed and underemployed populations. ⁷²
Work-based learning	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. ⁷³
Work-based learning continuum	A progression of activities designed to engage students across the K-12 spectrum in age-appropriate, work-related activities. Students in younger grades engage in activities such as career fairs, guest speakers, or field trips to learn about work, while secondary students engage in internships, apprenticeships, and other activities with a worksite component. ⁷⁴
Workforce Innovation and Opportunity Act (WIOA)	WIOA is a federal law enacted in 2014. It is designed to help job seekers access employment, education, training, and support services to succeed in the labor market and to match employers with the skilled workers they need to compete in the global economy. It includes a number of provisions, including training for adult and dislocated workers, Job Corps, adult education and literacy, vocational rehabilitation services, youth programs, and support for individuals with disabilities. ⁷⁵
Youth apprenticeship	These apprenticeship programs are tailored to high school-aged students and combine academic and technical classroom instruction with work experience through a registered apprenticeship program. They provide the foundation for students to choose among multiple pathways after high school — enroll in college, enter an apprenticeship program, begin full-time employment, or a combination. ⁷⁶



Appendix B: Detailed work-based learning evaluation rubric

Category	Criteria	Description	Red	Yellow	Green
Existence of WBL policy	WBL definition	Does the state have a formal definition of WBL that includes opportunities for high school students?	The state does not have a definition of WBL.	The state defines WBL in broad terms but does not specify what activities qualify as WBL.	The state has a definition of WBL that has a defined set of activities/experiences that qualify as WBL.
Content of WBL policies	WBL as part of HS graduation requirements	Does state policy allow or require internships or other WBL opportunities to count for credit toward graduation?	WBL does not count for credit toward graduation.	WBL counts as credit toward graduation but is not required for all students.	WBL is required for graduation from HS.
	WBL eligibility	Are all high school students eligible for WBL opportunities, or is eligibility restricted to students enrolled in specific programs?	The state imposes eligibility requirements beyond age/grade-level requirements that limit WBL opportunities to certain groups of students or students enrolled in certain courses (like CTE).	The state does not impose eligibility restrictions other than age/grade level, but allows for local eligibility requirements that may be more limiting.	The state has broad eligibility for WBL experiences, with no restrictions other than age (16+) or grade level most often correlating with age.
	Equity of access	Are there state policies designed to support access for underserved groups of students (e.g., preference for low-income students or students enrolled in low-performing schools, explicit supports for students with disabilities, transportation stipends, etc.)?	The state does not have policies or support structures in place to help underserved student groups access WBL opportunities beyond the minimum requirements laid out in Perkins V and WIOA.	The state has policies or support structures in place to support at least one group of underserved students to access WBL opportunities.	The state has policies or support structures in place to support multiple groups of underserved students to access WBL opportunities.
	Addressing policy barriers	Does state policy address key barriers to WBL?	State does not provide a centralized resource with information or guidance about relevant laws, policies, or barriers and has taken no active steps to address known barriers.	State provides a centralized resource with information or guidance about relevant laws and policies (e.g., safety, liability, child labor laws, workers' compensation).	State has a comprehensive plan and/or has taken active steps to address one or more of the most common barriers to WBL such as safety, liability, child labor laws, or workers' compensation.



Appendix B: Detailed work-based learning evaluation rubric (continued)

Category	Criteria	Description	Red	Yellow	Green
WBL funding	Financial incentives	Are there financial incentives (e.g., tax credits) for employers that offer WBL opportunities to high school students?	The state does not provide financial incentives for employers to offer WBL opportunities.	State policy provides financial incentives to some types of participating employers and/or for some types of WBL.	State policy provides financial incentives to all participating employers for all types of WBL.
	Dedicated federal funding	Does the state use its Perkins funding to support WBL?	The state did not select participation in WBL as a performance quality indicator in its Perkins V plan.	N/A	The state selected participation in WBL as a performance quality indicator in its Perkins V plan.
	Dedicated state funding	Is there a dedicated source of state funding for WBL?	There is no dedicated source of state funding for WBL.	There are grant opportunities or other sources of funding for WBL that are time-bound or less consistent.	There is a line item in the state's budget or other consistent source of state funding dedicated to WBL.
WBL support infrastructure	Statewide support infrastructure, intermediary, and/or public-private partnerships	Is there a system or organization designed to facilitate WBL opportunities and/or are there public-private partnerships that support access to paid or for-credit WBL opportunities for high school students?	There is no system or organization in place to facilitate cross-sector partnerships related to WBL.	There are systems or organizations operating at the local level to support certain schools or communities in developing WBL opportunities, and/or the statewide infrastructure lacks capacity to support a meaningful number of students to access WBL.	There is a statewide support infrastructure (an organization or system) that facilitates cross-sector partnerships that result in WBL opportunities for high school students.
	WBL communications infrastructure	Are there systems in place to communicate among schools, students, employers, and other stakeholders about WBL opportunities?	The state lacks clear guidance, expectations, or systems to facilitate communication about WBL among stakeholders.	The state has communications processes in place (e.g., a website aggregating registered apprenticeships or a set of expectations for local WBL coordinators to communicate among stakeholders), but lacks a unified, statewide approach to communicating among stakeholders about WBL opportunities.	There is a statewide communications infrastructure in place to ensure students and families have access to information about WBL opportunities (e.g., statewide website, regional lists of opportunities up-dated annually, etc.).



Appendix B: Detailed work-based learning evaluation rubric (continued)

Category	Criteria	Description	Red	Yellow	Green
WBL quality	Experience quality	Is there a statewide framework in place that defines quality expectations for WBL experiences and holds employers accountable to those expectations?	The state lacks guidance or policies about employer expectations, or the policies aren't intended to measure the quality of the student experience.	The state may provide guidance such as sample rubrics or checklists against state and federal laws that address some elements of the student experience, but there is no accountability for their implementation.	The state has a clear definition or framework outlining the components of quality WBL experiences, and a process in place to assess WBL placements and hold them accountable.
	Program quality	Is there a statewide framework in place that defines quality expectations for WBL programs and holds schools/districts accountable to those expectations?	The state does not define or assess the quality of WBL programs OR The state has outlined WBL program development plans in its Perkins and MOA plans but has not created structures beyond those plans to define or assess the quality of WBL programs.	The state has a framework or provides guidance for assessing the quality of WBL programs that goes beyond the program development plans outlined in Perkins or MOA plans, but the state does not hold WBL programs accountable for quality.	The state has a clear definition or framework to describe the components of quality WBL programming that goes beyond the program development plans outlined in Perkins or MOA plans, and a process in place to assess programs and hold them accountable.



Appendix B: Detailed work-based learning evaluation rubric (continued)

Category	Criteria	Description	Red	Yellow	Green
WBL accountability	Data collection	Is there a process in place to track student participation in WBL opportunities and their outcomes?	The state has not selected WBL participation as a program quality indicator in its Perkins plan AND The state does not have a data collection system in place to track key demographic information about student participation in WBL or their outcomes.	The state has selected WBL participation as a program quality indicator in its Perkins plan but implements WBL outside CTE AND/OR The state has a process in place to track data around WBL, but it does not include student participation rates as well as the outcomes (such as grades or employer ratings) within their WBL experiences.	The state has selected WBL participation as a program quality indicator in its Perkins plan and implements WBL only through CTE programming AND/OR The state has a data collection system in place for WBL that tracks key demographic information about students and their outcomes.
	Use of data to drive equity	Does the state disaggregate WBL data by student demographics and experience type?	The state's data collection system does not disaggregate WBL outcomes by student subgroups or by type of program, or the state does not collect data specific to WBL.	The state's data collection system disaggregates WBL for only a few subgroups of students or only a subset of WBL program types, or appears to be a one-time effort.	The state's data collection system disaggregates WBL by gender, ethnicity, income, geography, and type of experience (e.g., industry sector, internship vs. apprenticeship, etc.) at a minimum.
	Use of data to drive quality	Does the state use disaggregated data as a component of its quality framework?	The state is not using disaggregated data to inform WBL program improvement efforts.	The state is using disaggregated data to inform WBL program improvement for certain programs or in certain schools or regions.	The state is using disaggregated data to inform comprehensive, statewide WBL program improvement.



REFERENCES

1. Martha Ross, Richard Kazis, Nicole Bateman, and Laura Stateler, *Work-Based Learning Can Advance Equity and Opportunity for America's Young People* (Washington, DC: Brookings Metropolitan Policy Program, 2020), https://www.brookings.edu/wp-content/uploads/2020/11/20201120_BrookingsMetro_Work-based-learning_Final_Report.pdf.
2. American Student Assistance, *Spotlight on High School Internships* (Boston, MA: Strategic Insights Series, 2020), <https://file.asa.org/uploads/Spotlight-on-High-School-Internships.pdf>.
3. Ross, Kazis, Bateman, and Stateler, *Work-Based Learning Can Advance Equity and Opportunity for America's Young People*.
4. American Student Assistance, *Spotlight on High School Internships* (Boston, MA: Strategic Insights Series, 2020), <https://www.asa.org/research-study/spotlight-on-high-school-internships/>.
5. "Benefits of Work-Based Learning," Jobs for the Future (JFF), <https://www.jff.org/what-we-do/impact-stories/center-for-apprenticeship-and-work-based-learning/benefits-work-based-learning/>.
6. "Benefits of Work-Based Learning," Jobs for the Future (JFF), <https://www.jff.org/what-we-do/impact-stories/center-for-apprenticeship-and-work-based-learning/benefits-work-based-learning/>.
7. "What Is Pre-Apprenticeship?," Frequently Asked Questions, Apprenticeship Toolkit, US Department of Labor, <https://www.dol.gov/apprenticeship/toolkit/toolkitfaq.htm#3c>.
8. American Student Assistance, *Planning Their Entry Into the Workforce: Exploring Students' Perceptions and Expectations for Internships and Other Experiential Work Strategies* (Boston, MA: Strategic Insights Series, 2019), <https://file.asa.org/uploads/ASA-Internship-Report.pdf>.
9. Jacqueline Rodriguez, Heather Fox, and Heather McCambly, *Work-Based Learning as a Pathway to Postsecondary and Career Success* (College of Education at Illinois: Pathways to Results series, 2016), <https://files.eric.ed.gov/fulltext/ED574535.pdf>.
10. Charlotte Cahill, *Making Work-Based Learning Work* (Boston, MA: JFF, 2016), <https://files.eric.ed.gov/fulltext/ED567846.pdf>.
11. "Perkins V," Perkins Collaborative Resource Network (PCRN), <https://cte.ed.gov/legislation/perkins-v>.
12. Bryan Kelley and Erin Whinnery, *Governors' Top Education Priorities in 2020 State of the State Addresses* (Denver, CO: Education Commission of the States, 2020), <https://www.ecs.org/wp-content/uploads/Governors-Top-Education-Priorities-in-2020-State-of-the-State-Addresses.pdf>.
13. Rachael Stephens, *State Strategies to Scale Work-Based Learning* (Washington, DC: NGA, 2020), https://www.nga.org/wp-content/uploads/2020/02/NGA_Work-Based-Learning_Guide_final_web.pdf.
14. Amendment to School Code, Ill. Public Act 101-0068 (passed July 12, 2019), <https://www.ilga.gov/legislation/BillStatus.asp?DocNum=2822&GAID=15&DocTypeID=HB&LegID=119115&SessionID=108&GA=101>.
15. Amendment 14, Nev. Leg. § Ch. 596 (passed June 15, 2017), <https://www.leg.state.nv.us/App/NELIS/REL/79th2017/Bill/4713/Overview>.
16. Creating a Workforce Education Investment to Train Washington Students for Washington Jobs. Wash. § HB 2158 (passed April 28, 2019), <https://app.leg.wa.gov/billssummary?BillNumber=2158&Initiative=false&Year=2019>.
17. "New Skills for Youth: Investing \$75M Today to Build Tomorrow's Economy," JPMorgan Chase & Co., <https://www.jpmorganchase.com/news-stories/newskillsforyouth>.
18. "New Skills at Work," reports, JPMorgan Chase & Co., 2015, <https://www.jff.org/resources/new-skills-work/>.
19. "JPMorgan Chase Makes \$350 Million Global Investment in the Future of Work," release, JPMorgan Chase & Co., March 18, 2019, <https://www.jpmorganchase.com/news-stories/jpmorgan-chase-global-investment-in-the-future-of-work>.
20. "Work-Based Learning & Apprenticeship," NGA, June 27, 2018, <https://www.nga.org/center/issues/work-based-learning-apprenticeship/>.
21. Jennifer Zinth, *Work-Based Learning: Model Policy Components* (Denver, CO: Education Commission of the States, 2018), <https://www.ecs.org/wp-content/uploads/Work-Based-Learning-Model-Policy-Components.pdf>.
22. Melissa Canney and Danielle Mezera, *Developing High-Quality State Work-Based Learning Programs* (Tallahassee, FL: ExcelinEd, 2020), <https://excelined.org/wp-content/uploads/2020/10/ExcelinEd.CTEPlaybook6.WorkBasedLearning.February2020.pdf>.
23. Jessica Giffin, GeMar Neloms, Amanda Mitchell, and David Blumenthal, *Work-Based Learning Definitions: Themes from States and National Organizations* (Washington, DC: American Institutes for Research, 2018), https://ccrcenter.org/sites/default/files/WorkBasedLearning_StateDefinitions.pdf.
24. Bryan Wilson and Sapna Mehta, *Work-Based Learning Policy: 50-State Scan* (Washington, DC: National Skills Coalition, 2017), <https://www.nationalskillscoalition.org/wp-content/uploads/2020/12/WBL-Learning-Policy-50-State-Scan.pdf>



25. Erin Whinnery, Lexi Anderson, and Tom Keily, “50-State Comparison: Statewide Apprenticeships,” Education Commission of the States, September 16, 2019, <https://www.ecs.org/50-state-comparison-statewide-apprenticeships/>.
26. Heather Penczak, *Career Development Experience Toolkit* (Chicago, IL: Education Systems Center, 2019), https://edsystemsniu.org/wp-content/uploads/2019/11/CDE_Toolkit_110519.pdf.
27. Center for Career Discovery, *Workplace Learning Toolkit* (Arlington Heights, IL: Center for Career Discovery, 2017), <http://pwract.org/wp-content/uploads/2019/02/Career-Discovery-Toolkit-2.0-Final-1.pdf>.
28. “Greater Peoria Essential Abilities and Knowledge Program to Launch in January,” Greater Peoria Economic Development Council, September 10, 2020, <https://greaterpeoriaedc.org/greater-peoria-essential-abilities-and-knowledge-program-to-launch-in-january/#:~:text=Coming%20in%20January%2C%20the%20Greater,successful%20in%20today’s%20work%20environment.&text=The%20program%20is%20set%20to%20launch%20in%20January%202021>.
29. High School Graduation Requirements and Diplomas, Del. Title 14 § 500, <https://regulations.delaware.gov/AdminCode/title14/500/505.shtml>.
30. Employment of Minors, Ohio revised code Ch. 4109, <http://codes.ohio.gov/orc/4109>.
31. InformED, “Bridging the Skills Gap: Career and Technical Education in High School,” US Department of Education, 2019, <https://www2.ed.gov/datastory/cte/index.html>.
32. “Regulations Implementing the Rehabilitation Act of 1973, as Amended by the Workforce Innovation and Opportunity Act,” regional training series, Rehabilitation Services Administration, <https://www2.ed.gov/about/offices/list/osers/rsa/wioa/transition-of-students-and-youth-with-disabilities-from-school-to-postsecondary-education-and-employment.pdf>.
33. “Home,” Jobs for America’s Graduates, <https://jag.org/>.
34. “Home,” Great Promise Partnership, <https://gppartnership.org/>.
35. Amendment to the Children and Family Services Act, Ill Public Act 101-0558 (effective January 1, 2020), <https://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=101-0558>.
36. Bryan Wilson and Sapna Mehta, *Work-Based Learning Policy: 50-State Scan* (Washington, DC: National Skills Coalition, 2017), <https://www.nationalskillscoalition.org/wp-content/uploads/2020/12/WBL-Learning-Policy-50-State-Scan.pdf>.
37. “Perkins V,” PCRN, <https://cte.ed.gov/legislation/perkins-v>.
38. “Workforce Innovation and Opportunity Act: About,” US Department of Labor, <https://www.dol.gov/agencies/eta/wioa/about>.
39. “Legislature Creates Washington College Grant Scholarship Program to Help Families Afford College & Apprenticeships; Expands Community College,” release, Washington State House Democrats, April 28, 2019, <https://housedemocrats.wa.gov/hansen/2019/04/28/legislature-creates-washington-college-grant-scholarship-program-to-help-families-afford-college-apprenticeships-expands-community-college/>.
40. Apprenticeship Training Program, Tex. Reg. Ch. 837, <https://www.twc.texas.gov/files/jobseekers/rules-chapter-837-apprenticeship-training-program-twc.pdf>.
41. Bryan Daniel, Julian Alvarez III, and Aaron Demerson, “Operating Budget for Fiscal Year 2020,” Texas Workforce Commission, December 1, 2019, <https://www.twc.texas.gov/files/agency/fy-2020-operating-budget-twc.pdf>.
42. Office of Career and Technology Education, “State EIA Funds: Expenditure Guidelines,” South Carolina Department of Education, June 21, 2018, <https://ed.sc.gov/instruction/career-and-technical-education/cte-administration/cte-local-application/finance-section/fy19-eia-expenditure-guidelines/>.
43. “Governor’s Workforce Board Approves Real Skills for Youth Grants,” release, Rhode Island Governor’s Workforce Board, April 22, 2019, <https://gwb.ri.gov/governors-workforce-board-approves-real-skills-for-youth-grants-2>.
44. “State Tax Credits and Tuition Support,” US Department of Labor, <https://www.apprenticeship.gov/investments-tax-credits-and-tuition-support/state-tax-credits-and-tuition-support>.
45. “Learning for Careers Initiative, Delaware Workforce Development Board, Delaware Dept of Labor and Education,” Philanthropy Delaware, <https://philanthropydelaware.org/event-3718879>.
46. “NJ Career Accelerator Internship Program,” New Jersey Department of Labor & Workforce Development, <https://www.nj.gov/labor/employer-services/internship-opportunities/employers.shtml>.
47. “Welcome to the Navigator,” North Carolina Navigator, <https://wblnavigator.org/web/>.
48. “Welcome to Career Connect Washington,” Career Connect Washington, <https://careerconnectwa.org/>.



49. "Connecting Activities," Massachusetts Department of Elementary and Secondary Education, <https://www.doe.mass.edu/connect/>.
50. "What We Do," Delaware Office of Work-Based Learning, <https://deowbl.org/about/>.
51. "Home," LifeWorks Nevada, <https://lifeworksnv.org/>.
52. "Work-Based Learning Navigator," Prepare Rhode Island, <https://riwblnavigator.com/#:~:text=The%20PrepareRI%20Work%2DBased%20Learning,and%20work%2Dbased%20learning%20opportunities>.
53. Advance CTE, "Measuring Work-Based Learning for Continuous Improvement," Connecting the Classroom to Careers series, Advance CTE, 2016, https://cte.careertech.org/sites/default/files/files/resources/WBL_casestudy_measuring_FINAL.pdf.
54. Division of Community Colleges and Workforce Preparation, *Iowa Work-Based Learning Guide* (Chicago, IL: Iowa Department of Education, 2017), <https://educateiowa.gov/sites/files/ed/documents/Iowa%20Work-based%20learning%20guide%20final.pdf>.
55. Georgia Department of Education, *WBL Coordinator Resource Manual* (Atlanta, GA: Georgia Department of Education, revised 2018), <https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Documents/2018-WBL-Manual-Combined-files.pdf>.
56. "Career Launch," Washington State Board for Community and Technical Colleges, <https://www.sbctc.edu/career-launch/>.
57. "Career Launch Endorsement Review (CLER)," Washington State Board for Community and Technical Colleges, <https://www.sbctc.edu/career-launch/career-launch-endorsement-review.aspx>.
58. South Carolina Department of Education, *Work-Based Learning Annual Report* (Columbia, SC: South Carolina Department of Education, 2020), <https://ed.sc.gov/instruction/career-and-technical-education/career-guidance/work-based-learning/proviso-1a-5-wbl/>.
59. Career Connect Washington, *Progress Report to Governor Inslee and the Legislature* (WA: Career Connect Washington, 2020), <https://w9p.ea4.myftpupload.com/wp-content/uploads/2020/09/2020-Career-Connect-Washington-Progress-Report-to-Governor-Inslee-and-the-Legislature.pdf>.
60. "Apprenticeship," US Department of Labor, <https://www.dol.gov/general/topic/training/apprenticeship#:~:text=Apprenticeships%20combine%20paid%20on%2Dthe,workers%20for%20highly%2Dskilled%20careers.&text=Apprenticeship%20programs%20help%20employers%20recruit,retain%20a%20highly%2Dskilled%20workforce>.
61. Carl D. Perkins Career and Technical Education Act of 2006, PL 88-210, amended February 15, 2019, <https://www.govinfo.gov/content/pkg/COMPS-3096/pdf/COMPS-3096.pdf>.
62. Carl D. Perkins Career and Technical Education Act of 2006, <https://www.govinfo.gov/content/pkg/COMPS-3096/pdf/COMPS-3096.pdf>.
63. Carl D. Perkins Career and Technical Education Act of 2006, <https://www.govinfo.gov/content/pkg/COMPS-3096/pdf/COMPS-3096.pdf>.
64. Carl D. Perkins Career and Technical Education Act of 2006, <https://www.govinfo.gov/content/pkg/COMPS-3096/pdf/COMPS-3096.pdf>.
65. Every Student Succeeds Act, S. 1177, 114th Cong. (2015), <https://www.congress.gov/bill/114th-congress/senate-bill/1177/text>.
66. Rich Smith, "ESSA Implementation: An Update from Washington, DC," ExcelinEd, March 13, 2017, https://excelined.org/2017/03/13/essa-implementation-an-update-from-washington-dc/?gclid=CjwKCAiA9bmABhBbEiwASb35VyXtBHSiGW0Xv1qBqofbsKNkX1SLg8ZJFx71q5xGcY0yCabiNnk9LxoCcQEQA_VD_BwE.
67. "What Is the Difference Between an Apprenticeship and an Internship?," US Department of Labor, <https://www.apprenticeship.gov/help/what-difference-between-apprenticeship-and-internship>.
68. "What Is Pre-Apprenticeship?," US Department of Labor, <https://www.apprenticeship.gov/help/what-pre-apprenticeship>.
69. "What Is Pre-Apprenticeship?," Frequently Asked Questions, Apprenticeship Toolkit, US Department of Labor, <https://www.dol.gov/apprenticeship/toolkit/toolkitfaq.htm#1f>.
70. "What Is a Registered Apprenticeship Program?," US Department of Labor, <https://www.apprenticeship.gov/employers/registered-apprenticeship-program>.
71. Corinne Alfeld, Ivan Charner, Lisa Johnson, and Eric Watts, *Work-Based Learning Opportunities for High School Students* (Louisville, KY: National Research Center for Career and Technical Education, 2013), <https://files.eric.ed.gov/fulltext/ED574519.pdf>.
72. Carl D. Perkins Career and Technical Education Act of 2006, <https://www.govinfo.gov/content/pkg/COMPS-3096/pdf/COMPS-3096.pdf>.
73. Carl D. Perkins Career and Technical Education Act of 2006, <https://www.govinfo.gov/content/pkg/COMPS-3096/pdf/COMPS-3096.pdf>.
74. "Work-Based Learning Continuum," ConnectEd Studios, <https://connectedstudios.org/url-zuxskK7vMA8hV3H8j-dNGv6tMhJdnw>.
75. Workforce Innovation and Opportunity Act, H.R. 803, 113th Cong. (2014), <https://s3.amazonaws.com/PCRN/docs/BILLS-113hr803enr.pdf>.
76. "What Is Youth Apprenticeship?," US Department of Labor, <https://www.apprenticeship.gov/help/what-youth-apprenticeship>.



ACKNOWLEDGEMENTS

We would like to thank the many individuals who gave their time and shared their knowledge with us to inform our work on this project. We are particularly grateful to the dozens of state-level experts who reviewed our analysis and provided detailed insight and feedback on earlier versions of our research. Thanks also to Chad Aldeman, Alexander Brand, and Michael Johnson for their research support, to Super Copy Editors, and to Five Line Creative for graphic design.

The contributions of these individuals and groups significantly enhanced our work; any errors in fact or analysis are the responsibility of the authors alone.

ABOUT THE AUTHORS

Kelly Robson is an associate partner at Bellwether Education Partners. She can be reached at Kelly.Robson@bellwethereducation.org

Jennifer O'Neal Schiess is a partner at Bellwether Education Partners. She can be reached at Jennifer.Schiess@bellwethereducation.org

Julie Lammers is Senior Vice President of Government Relations and Advocacy at ASA. She can be reached at jryder@asa.org.

ABOUT ASA

American Student Assistance® (ASA) is a national nonprofit committed to helping kids know themselves, know their options, and make informed choices to achieve their education and career goals. ASA® has a 60-year legacy of working directly with students to increase their access to higher education through loans and financial education. ASA has turned its experience into impactful solutions for students in grades 6-12 to help them pursue their dreams. To learn more about ASA, visit www.asa.org/about-us.



ABOUT BELLWETHER

Bellwether Education Partners is a national nonprofit focused on dramatically changing education and life outcomes for underserved children. We do this by helping education organizations accelerate their impact and by working to improve policy and practice.

Bellwether envisions a world in which race, ethnicity, and income no longer predict opportunities for students, and the American education system affords all individuals the ability to determine their own path and lead a productive and fulfilling life.

