High-quality, work-based learning opportunities can confer a number of benefits — not only for students, but also for schools, employers and communities. And because high-quality work-based learning opportunities integrate applicable academic concepts and state standards and evaluate a student’s mastery of key employability skills, students can reap greater benefits from quality work-based learning programs than they can from traditional teen employment opportunities.

In the absence of state policies providing structures and funding for work-based learning programs, there can be disparities in program access from one district to another. Fewer than one-third of states have adopted policies regarding secondary student work-based learning, according to the National Skills Coalition. As of April 2017, 14 states had policies governing pre-apprenticeships and youth apprenticeship programs for high school students, and 11 states had policies governing other secondary student work-based learning.

Consequently, as a 2016 Jobs for the Future report notes, “challenges related to access threaten to limit the potential of work-based learning to respond to the needs of both employers and underserved populations. A lack of equitable access to work-based learning limits the career prospects and economic mobility of millions of youth and adults. It also prevents them from becoming part of the pipeline of skilled workers employers need to help spur local, state, and national economic growth.”

To ensure high school students statewide have equitable access to high-quality work-based learning experiences designed to prepare them for postsecondary and workforce success in high-demand occupations in their region or state, a comprehensive policy approach should include the following components:

**STATE AND REGIONAL COORDINATION**
- Single, clear and statewide definition of various work-based learning experiences.
- Development of a state strategic plan for work-based learning.
- Designated entity or entities coordinating state and regional efforts.
- Establishment of state or regional intermediaries.
- Development and broad dissemination of effective, vetted employer outreach and support strategies.
- Clear communication — and policy adoption as needed — on critical employer logistics.
These policy components are intended to be high-level and applicable to the diverse array of high school work-based learning experiences, rather than prescriptive to the needs of — for example — an apprenticeship program versus an internship program.

In addition, because all five policy areas are interrelated, these components should be viewed as a comprehensive package of policies for state adoption rather than a menu from which states may choose without compromising program availability or quality. For example, access and participation are compromised if funding strategies create disincentives for students or districts. Program quality is jeopardized in the absence of effective state and regional coordination. And in principle, all five policy areas can have a significant impact on program access.

The following section defines and provides the rationale for including each of the model components within a comprehensive state high school work-based learning policy and identifies examples of state provisions that align with each component.
State and Regional Coordination

Single, clear and statewide definition of various work-based learning experiences

Because a vast array of experiences fall under the umbrella of work-based learning, a single, clear and statewide definition can help ensure that all stakeholders share a common understanding of what constitutes each type of work-based learning experience and that students have consistent experiences statewide.

However, a 2018 analysis by American Institutes for Research suggests that statewide definitions of various types of work-based learning experiences are lacking in some states, and that some states also lack statewide definitions of work-based learning itself.

Examples of single, clear and statewide definitions of various work-based learning experiences include Kentucky’s Work-Based Learning Manual and Nevada’s Work-Based Learning Guide for Secondary Education, which provide definitions for a variety of experiences. Other states are working on definitions, including Idaho — for job shadowing, externship, pre-apprenticeship, apprenticeship, registered apprenticeship, clinical, on-the-job training, internship, co-op, work experience, subsidized employment and mentorship — and Montana.

State leaders who are working on developing a single, clear and statewide definition of work-based learning experiences should consider:

- Who is setting definitions? Which entities have agreed upon the definitions?
- Is there a plan to ensure definitions are broadly and effectively communicated to individuals involved in work-based learning at the state, regional and local (district and building) levels?
- Do the defined experiences reflect career awareness and exposure that may take place in the elementary and secondary grades? Do they cover the spectrum, from requiring no or minimal time outside the classroom to requiring extensive time in the workplace?

Development of a state strategic plan for work-based learning

A strategic plan establishes state direction for work-based learning policies and initiatives and helps to ensure long-term sustainability. Setting state direction is particularly important — perhaps even mission critical — in a policy area like work-based learning that involves so many state, regional and local actors from diverse sectors. A strategic plan should set forth:

- State priorities for work-based learning that align with high-demand jobs and employer/sector priorities.
- The rationale for selecting those priorities, particularly in terms of better preparing students for future careers through school-business partnerships that provide authentic professional learning experiences.
- State strategies to address those priorities (and ideally a timeline for deployment and expectations for public-private funding).
- The state entity (or entities) that will lead deployment of those strategies.

A strategic plan should convey a broad understanding that work-based learning is central to K-12 education and career preparation and reinforce a state expectation that high-quality work-based learning should be available to students regardless of where in the state they live.
Such a plan should be developed by, and represent consensus among, a coalition of state boards and agencies representing K-12 and postsecondary education, labor, economic and workforce development, and the governor’s office — in addition to any nonprofit, philanthropic and business/industry stakeholders committed to ongoing support of work-based learning activities.

**Delaware**, for example, adopted its *Learning to Work: Delaware Pathways Strategic Plan*, which was developed by the Delaware Pathways Steering Committee — a 14-member group representing five state boards and agencies, Delaware Technical Community College, local and regional school districts, nonprofits and philanthropies, and the private sector. The plan identifies five state priorities for work-based learning, three major work strategies to support each priority and one or two lead organizations to address each strategy.

**Designated entity or entities coordinating state and regional efforts**

By their nature, work-based learning efforts require the involvement of numerous stakeholders at the state, regional and local levels. For example, **Idaho**’s work-based learning efforts involve the state board of education, the division of career and technical education, the department of labor, the department of commerce, the governor’s office and the Idaho STEM Action Center. Thus, designating one or more entities or individuals as the state lead is essential to ensuring clear communication and coordination of the efforts of all involved.

Currently, the entity that states designate for this role varies across states. In **Delaware**, the Delaware Technical Community College is the lead entity; in **Tennessee**, the state department of education is leading the charge.

There is no one right agency to coordinate state and regional work-based learning efforts, but in identifying the appropriate agency, state leaders should consider:

- Which entity distributes Perkins funds in the state?
- Is there a designated full-time equivalent to adequately staff state efforts? Is more than one FTE necessary to adequately staff state efforts? If there are multiple FTEs coordinating state and regional efforts, will the best outcome result from housing those FTEs within a single agency or across more than one agency?
- What is the appropriate level of funding to support the agency FTE(s) dedicated to coordinating state and regional efforts, and is it sustainable?

**Establishment of state or regional intermediaries**

State or regional intermediaries perform the essential matchmaking role of connecting schools and districts with employers that, together, develop and roll out work-based learning programs and ensure students are placed into opportunities aligned with their interests and goals.

A state intermediary may be a more logical choice in a state serving fewer schools or districts or in which the intermediary is expected to broker partnerships and student placements into a single type of work-based learning program (for example, registered apprenticeships) serving a smaller population of students.

The Advance CTE brief *Leveraging Intermediaries to Expand Work-Based Learning* identifies key questions to ask when developing a state intermediary or regional intermediary network, as well as details about **South Carolina**’s Apprenticeship Carolina™ statewide intermediary and **Georgia**’s system of local intermediaries.
In Delaware, the Delaware Technical Community College is the statewide intermediary — training, placing and onboarding students; coordinating with industry sectors and employer associations to recruit students; and developing and deploying high-quality work-based learning experiences. Iowa hosts a statewide network made up of 15 work-based learning intermediary networks. The networks connect educators and businesses to facilitate work-based learning opportunities, especially in science, technology, engineering, and mathematics (STEM) occupations, and other targeted industries.2

As states build a statewide intermediary or networks of regional intermediaries, they should strive to:

- Clearly communicate the role and responsibilities of statewide or regional intermediaries and how they should work with the state-level coordinating entity, local employers, schools and districts.
- Ensure intermediaries align work-based learning efforts with state or regional employer priorities.
- Ensure adequate and reliable funding and staffing to support intermediaries.

Development and broad dissemination of effective, vetted employer outreach and support strategies

Because employers are a crucial component of work-based learning, it’s essential they understand the value of participating — not only for themselves, but also for students and their local communities — and how they can best take advantage of these opportunities.

Business leaders don’t always know how to get involved, according to Advance CTE, and making clear asks of employers that delineate their roles and responsibilities can contribute to fruitful experiences for both employers and students.3 Some states produce materials for employers that highlight the benefits of participating in work-based learning and outline ways in which employers can participate. Tennessee leads the way with a website full of resources for all stakeholders, including employers, to promote awareness and engagement in work-based learning. The site provides practical tools to support effective day-to-day program participation, including one-pagers that define expectations and examples of eligible experiences, guidelines for working with students, and sample language that schools and districts can use to engage with employers.

Clear communication — and policy adoption as needed — on critical employer logistics

Effectively communicating ways in which employers can engage in work-based learning is only one part of critical state action to secure employer participation. Also essential to employer outreach and support is information on the logistical issues of workers’ compensation, unemployment insurance, hazardous work laws, prevailing wage laws, liability and minimum ages — which can pose barriers to employer participation. States are incorporating information on state and federal policy on these logistical issues into work-based learning implementation guides. In addition to Tennessee’s Work-Based Learning Policy Guide, a few examples include Iowa’s Work-Based Learning Guide, Nebraska’s work-based learning webpage and Kentucky’s Work-Based Learning Manual.

The Advance CTE report Connecting the Classroom to Careers: Removing Legal Barriers around Work-based Learning highlights efforts in California, New Jersey and Kentucky to provide clear communication and adopt policy as needed, addressing critical employer logistics.
Access

High-quality career awareness and exploration beginning in the elementary and middle grades

If students are not meaningfully exposed in the elementary and middle grades to an array of career options across diverse occupation groups, they may decide, by high school, that certain occupations are not for them.

For this reason, some states like Tennessee and Washington have messaged that high school work-based learning experiences are on the latter end of a continuum of career-related educational experiences that begins with exploration and preparation in earlier grades. And that exposure is most beneficial when those activities are high-quality.

To support quality assurance, at least nine states have adopted standards for career development, awareness and/or exploration, including Alabama, Florida, Georgia, Kentucky, Maine, Maryland, New Hampshire, New Jersey and Pennsylvania. Additionally, school accountability systems are a lever states can use to incentivize access and quality. For example, the school quality or student success indicators in Pennsylvania’s plan under the Every Student Succeeds Act (ESSA) include career exploration and preparation measures for grades five, eight and 11. Specifically, schools are evaluated based on the percentage of all students and each subgroup who participate in career exploration and preparation activities (by the end of grade five), create individualized career plans and participate in career preparation activities (by the end of grade eight) and implement those plans through ongoing development of a career portfolio and participation in career preparation activities (by the end of grade 11).4

Annual notification to all students and parents of work-based learning opportunities

As with other educational opportunities, students who are unaware of programs and the benefits of program participation will not know to take advantage of them. Providing program information to all students and their parents is a relatively low-cost approach, with the potential to increase program participation among traditionally underserved youth who may benefit most from work-based learning opportunities.

States may consider requiring the mention of work-based learning opportunities in annual notifications to high school students and parents about college- and career-connected learning opportunities. For example, Virginia statute requires local boards to implement a plan to notify students and their parents of the availability of various career- and college-oriented learning opportunities, such as Advanced Placement, dual enrollment and career and technical education. A recent legislative change now requires this annual notification to mention internships, externships, apprenticeships, credentialing programs, certification programs, licensure programs and other work-based learning experiences.5

Another potential avenue for states to increase awareness is to notify students of work-based learning opportunities as students develop and update their annual graduation plans. At least 34 states require all high school students to develop and maintain an individualized graduation plan that sets out the courses and experiences students will
participate in each year to be prepared for their post-high school goals. States may require counselors or other school staff facilitating development of these plans to make students and parents aware of the availability of work-based learning opportunities aligned with students’ postsecondary and career interests.

For example, Iowa requires eighth-graders to complete, and a parent to sign off on, an individual career and academic plan that will prepare them for life after graduation; and state board rule directs districts to provide career exploration activities that align with these plans.6

Career counseling and advising for students and parents before and during program participation

Annual notification is helpful but will not equip students with all the information they need to make wise choices regarding work-based learning opportunities. Career counseling and advising before and during participation in a work-based learning opportunity can help students make informed decisions about careers and postsecondary education. Including parents can help them more effectively support their student both during the work-based learning experience itself and in taking the essential next steps in career and postsecondary planning.

In rural or small schools or districts, where connecting students with career guidance may pose a greater challenge, states can leverage technology to bridge that access gap. The Idaho STEM Action Center Mentorship Portal is a virtual, project-based mentorship platform that connects students with industry-embedded mentors statewide. The portal also provides guidance to mentors and educators to support them in providing or facilitating high-quality mentoring.

High school and district support to inform and coordinate student, teacher and employer efforts

Beyond the matchmaking and onboarding that state and regional intermediaries can provide, high schools and districts can benefit from targeted support to inform and coordinate student, teacher and employer efforts. These may take any number of forms, including targeted counselor preparation, dedicated work-based learning coordinators embedded in buildings or districts to coordinate and support local efforts, and online resources. Here are a few examples:

Tennessee state board policy calls for a local, certified work-based learning coordinator, in conjunction with a team of supervising teachers, to facilitate all programming — including the recruitment of appropriate work sites, communication with employers, facilitation of instruction and documentation related to student work, safety training and job placements.

The Iowa Clearinghouse for Work-Based Learning, established by executive order, will virtually connect schools and employers to facilitate work-based learning opportunities and create an inventory of work-based learning programs for K-12, college and trade school students. Projects posted to the clearinghouse will have to meet certain standards, such as making learning relevant, modernizing the curriculum and meeting employer needs. According to the executive order, if state funding is available, mini-grants may help support projects, with employer matches — with the goal of 100 new work-based learning projects by July 2020.
Rhode Island’s PrepareRI Ambassadors, representing classroom teachers and district and community leaders, support career education activities on the ground — with a number of 2018-19 ambassadors focused on expanding work-based learning.

Finance

Funds to support deployment of all activities at the state, regional and local levels

If new programs calling for staffing increases, curriculum development, training or professional development, and other program supports are not accompanied by dedicated funding, they risk being perceived as unfunded mandates. States have tapped a variety of funding sources, beyond state legislative appropriations, to support work-based learning efforts. Here is a sampling:

**WORKFORCE INNOVATION AND OPPORTUNITY ACT:** Washington awarded $6.4 million in competitive grants from WIOA funds to develop career-connected learning experiences — including job shadowing, career planning, internships and apprenticeships — for 29,000 students in 11 communities through September 2019.

**ESSA:** A number of states’ approved ESSA plans call for funds from Title I; Title II, Part A – Supporting Effective Instruction; Title IV, Part A – Student Support and Academic Enrichment Grants; and Title IV, Part B – 21st Century Community Learning Centers to support work-based learning opportunities.

**PERKINS:** The accountability system in the newly enacted Perkins (Perkins V) establishes student participation in work-based learning as one measure eligible agencies may select to demonstrate program quality.

**PUBLIC-PRIVATE MATCH:** Massachusetts’ Connecting Activities is supported in part by public-private matching grants to workforce investment boards or other local public-private partnerships involving community job commitments and work-based learning opportunities for students. Grants require a minimum 200 percent match in student wages from private sector participants. Employers commit resources to pay salaries, provide mentoring and instruction on the job and work closely with teachers, while public funds pay for the costs of connecting schools and businesses to ensure that students serve productively on the job.

**501(c)(3):** CareerWise Colorado is a registered 501(c)3 that has adapted the Swiss model to offer apprenticeship opportunities in five career pathways: advanced manufacturing, information technology, financial services, business operations and health care. Students who complete the paid three-year apprenticeship program earn valuable work experience, a nationally recognized industry certification and up to a year of college credit.

**PHILANTHROPIC AND PRIVATE FUNDS, INCLUDING IN-KIND SUPPORT:** The Iowa Governor’s STEM Advisory Council website includes a page that identifies three types of business-education partnerships: experienced STEM professional, STEM resource and STEM supporter. Each type of partnership identifies activities that may require business funds as well as business in-kind support.

Regional intermediaries can also leverage connections with private partners to supplement state and federal dollars to support program development and delivery. BillingsWorks, a regional intermediary in Montana, is one example. Billings employers help fund a full-time staffer in the Billings School District to liaise with businesses and develop work-based learning experiences.
Funds available to pay students in time-intensive work-based learning experiences

Programs that set the expectation that students receive no pay for time-intensive work-based learning opportunities outside the school day may limit the participation of certain students, including low-income students and emancipated minors, who may rely on paid employment to support their families or themselves. So as not to limit participation for these students, states can adopt mechanisms to offer some compensation to students in time-intensive programs. In these cases, states will have to consider whether funds to support student pay will flow through districts, employers or another channel, or be paid directly to students.

While offering student pay may pose some logistical challenges, states have negotiated solutions. In one example, Iowa developed a mechanism to provide a stipend for students engaged in STEM pre-apprenticeships (or other work-based learning) in the state. The stipend is funded by a 501(c)(3) partner the student’s school identified, and/or another funding source, but only if the student’s work-based learning experience incorporates certain standards of quality — including a student product (such as a reflection, project or study); workplace host assessment; and school verification of completion.7

Program Quality

Development and dissemination of a state framework for work-based learning

An effective work-based learning framework builds upon the definitions of types of work-based learning experiences and the state strategic plan by elaborating upon the essential components of a high-quality work-based learning experience and clearly communicating the stakeholder(s) responsible for ensuring the delivery of each component. It also ensures that everyone is on the same page, in terms of what a high-quality work-based learning experience looks like and how it is delivered.

For example, Tennessee state board policy identifies six essential components of a work-based learning program, and it elaborates on state expectations for each.

Student awareness of and exposure to high-quality employability standards — aligned with state standards

One of the purposes of work-based learning programs is to help students become aware of and begin to adopt key employability skills — such as punctuality, work ethic, problem-solving and organization — that will contribute to their career and postsecondary success. As such, it’s important that they are aware of high-quality employability standards and what proficiency in an employability skill looks like. In addition, high-quality work-based learning experiences should, as practicable, also further and provide opportunities for students to apply their academic knowledge and skills.

In Tennessee, students’ personalized learning plans must outline how they plan to develop and demonstrate employability skills, including the application of academic and technical knowledge and skills, career knowledge and navigation skills, and personal and social skills. The state provides an Employability Skills Checklist that outlines skills that can be introduced and reinforced through various work-based learning experiences, helping teachers pinpoint which skills are most important to evaluate through work-based learning.
**Teacher participation in high-quality training**

Just as in other areas of K-12 education, teachers need exposure to high-quality preparation and training to effectively support successful work-based learning experiences. To prepare teachers to be effective partners in work-based learning programs, **Tennessee** offers a [work-based learning certification](#) for instructors who possess an active teaching license. Certification authorizes teachers not only to teach work-based learning courses for credit, but also to become work-based learning coordinators and oversee local work-based learning programs. The training leading to the certification provides strategies to recruit appropriate worksites, communicate effectively with workplace mentors and teachers to ensure appropriate student placement, facilitate instruction that meets work-based learning framework requirements, promote the development of strong student portfolios and reflect work-based learning course standards, among others.

**Program reporting and inclusion in state accountability systems**

Reporting on work-based learning program outcomes messages that the state is monitoring student access to and participation in work-based learning experiences and the effectiveness of partnerships and providers. In **Iowa**, the department of education requires each regional work-based learning intermediary network to report on its ongoing program implementation, including expenditures, worksite core services, number of career clusters services and program outcomes.8

Additionally, inclusion of work-based learning participation in state accountability systems messages that completion of a quality work-based learning experience is a meaningful indicator of a high school student’s college and career readiness.

ESSA requires state plans to adopt metrics to identify the percentage of high school students (or recent high school graduates) who demonstrate college and/or career readiness. Approved ESSA plans in at least 10 states — **Arizona, Connecticut, Delaware, Georgia, Idaho, Illinois, Kentucky, Maryland, North Dakota** and **Oklahoma** — explicitly include completion of a work-based learning opportunity as a means for high school students to be included in the state’s college and career ready count.9

**Post-experience evaluation for students, employers, teachers and other participants**

Post-experience evaluation is essential for ensuring all participants fulfilled program objectives. Without this evaluation, it is difficult to quantify whether students acquired new and meaningful knowledge and skills, employers had a successful experience and were equipped to support students effectively, and other stakeholders met communicated expectations.

For students, this evaluation may be in the form of an assessment of the learner’s mastery of integrated applicable state standards, technical skills or employability skills. For employers, the evaluation may pose questions to assess their preparation for, supports during and satisfaction with the work-based learning experience. In **Tennessee**, students in work-based learning programs must demonstrate their knowledge and skill attainment through artifacts and/or portfolios. The state also provides satisfaction surveys for employers and [local education agencies](#) that can surface program shortcomings that warrant improvement.
Graduation Credit

Non-elective graduation credit for approved work-based learning experiences

If students are not awarded credit toward high school graduation requirements for work-based learning experiences, it may deter student participation — particularly for students in out-of-school work-based learning experiences who need to justify taking time away from other activities, such as caring for their children or younger relatives or working.

Policies should allow for students to earn credit for learning validated by either a teacher or other appropriate adult participant, such as an employer or community partner, and permit credit to be awarded for experiences regardless of where and when the learning experience takes place — including outside the classroom and outside the school day/year. Additionally, when work-based learning experiences embed academic standards and students have documented their proficiency in those standards, policies should allow for awarding of credit toward applicable subject areas — not only credit for career technical education. And to the extent that work-based learning experiences embed postsecondary expectations, students should be awarded dual credit — high school graduation credit as well as postsecondary credit.

Ohio statute directs the department of education to develop a framework for issuing high school credit to students who demonstrate subject area competency through work-based learning experiences, internships or cooperative education.10

For Technical Assistance and Support

If you have questions or are looking for more resources on sound work-based learning policies, contact Education Commission of the States.
ENDNOTES

1. Siri Smillie, Office of Montana Gov. Steve Bullock, in email communication with author, August 1, 2018; and Angela Hemingway, Idaho STEM Action Center, in email communication with author, July 26, 2018.


3. Austin Estes, Advance CTE, in email communication with the author, July 31, 2018.


10. R.C. § 3313.603(J)(3).

AUTHOR

Jennifer Zinth leads high school policy and STEM efforts at Education Commission of the States. When not saving lives through education policy, she enjoys yoga, travel, trying out new recipes and spending quality time with her husband, son and daughter. Contact Jennifer at jzinth@ecs.org or 303.299.3689.

ACKNOWLEDGMENT

This brief was made available by generous support from the Joyce Foundation.