

# Expanding Student Access to Work-Based Learning: Federal Policy Recommendations



# Expanding Student Access to Work-Based Learning: Federal Policy Recommendations

July 2023

#### **Authors**

Susan Patrick, Khamiah Alderman, Laurie Gagnon

#### Acknowledgements

The authors would like to acknowledge the contributions of the following people, who shared their substantial expertise and experience: Allison Burtka, John Fischer, Nithya Govindasamy, Megan Harrington, Jason Jansky, Jennifer Kabaker, Eliot Levine, Mike May and the X3 interns and employers who hosted visits, Danielle Mezera, Tony Monfiletto, Gretchen Morgan, Mandana Nakha, Quentin Suffren, Chiara Wegener, and Taylor White.

We'd like to thank our funder, the Bill & Melinda Gates Foundation, for their support and generosity. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of the foundation.

#### **About the Aurora Institute**

The Aurora Institute's mission is to drive the transformation of education systems and accelerate the advancement of breakthrough policies and practices to ensure high-quality learning for all. Aurora is shaping the future of teaching and learning through its work in policy advocacy, research, field-building, and convening. With a national and global view of education innovation, we work on systems change in K-12 education, promote best practices, examine policy barriers, and make recommendations for change to yield improved outcomes for students. Aurora envisions a world in which all people are empowered to attain the knowledge, skills, and dispositions necessary to achieve success, contribute to their communities, and advance society.





Patrick, S., Alderman, K., & Gagnon, L. (2023). Expanding student access to work-based learning: Federal policy recommendations. Arlington, VA: Aurora Institute.

Content in this report is licensed under a Creative Commons Attribution 4.0 International license. Front page photo credit: Allison Shelley/The Verbatim Agency for EDUImages





# **Table of Contents**

Introduction	
What Is Work-Based Learning?	
A Vision of Aligning PK-12, Post-Secondary, Career and Technical Education, and the Workforce	7
Synthesizing Research to Inform Policy	9
Components of High-Quality Work-Based Learning Programs	9
Challenges in Implementing Work-Based Learning Programs	11
Work-Based Learning Examples	12
Recommendations for Federal Policy Makers	.14
Conclusion	.16
References	.18

# Introduction

Every learner deserves an education system that ensures they have access to powerful, future-oriented learning experiences, fulfilling and lucrative careers, and thriving lives. This vision will require careeraligned pathways that connect PK-12, post-secondary, career and technical education (CTE), and the workforce. Key to this effort is pursuing the transformation to competency-based education systems that recognize learning beyond the classroom.



Work-based learning is a particularly powerful tool for anytime, anywhere learning. Students and parents value learning inside and outside of formal schooling. Work-based learning is inherently competency-based, providing students with hands-on opportunities to apply, grow, and demonstrate their skills. Learning and employment records communicate the competencies learners are building over a lifetime, changing the way individuals access education and career opportunities around the world. Work-based learning helps make high school, and even middle school, more relevant and engaging to a wide range of young people.

A fundamental question for policy makers is how to support students in building knowledge and skills with systems and policies that recognize learning experiences that cross traditional PK-12, CTE, post-secondary, workforce, and community boundaries. The federal government plays a major role in shaping the

infrastructure, size, and scope of the lanes for accelerating change to modernize education. Currently, the federal government's reliance on tweaking old structures and outdated policy frameworks, instead of investing in systems transformation, reinforces roadblocks at the state and local levels.

While momentum is growing at the local and state levels toward designing and implementing pathways, there is still much work to be done at the state and federal levels to create policy environments that truly support them. This brief begins by defining work-based learning, proposes a vision for an aligned education ecosystem that supports work-based learning, presents literature on best practices and challenges, and offers a set of federal policy recommendations. Targeted and thoughtful federal and state enabling policies could further incentivize and focus increased resources on pathways and work-based learning.

#### What Is Work-Based Learning?

"Work-based learning is a strategy designed to help students connect what they learn in the classroom with what is expected in the workplace by integrating learning with real-world applications in partnership with industry professionals" (National Academy Foundation, 2021).

Within this general definition, there are multiple approaches to work-based learning. Through a continuum of experiences, students ultimately gain awareness of career fields, develop professional skills, and have the opportunity to demonstrate their skills and knowledge through work experience. For example, in the New Ways to Work continuum (2009), work-based learning has three components: career awareness, career exploration, and career preparation. Many organizations leading on work-based learning—including

Jobs for the Future, Advance CTE, ExcellnEd, and the Brookings Institution—offer a similar continuum that distinguishes career awareness and engagement through progressively deeper career experiences, such as internships and pre-apprenticeships into apprenticeships and on-the-job training (Jobs for the Future, n.d.; Advance CTE, 2021; Canney & Mezera, 2020; Ross et al., 2020).

Work-based learning continua begin with career awareness, where students are exposed to various industries through workplace tours and field trips. During the exploration stage, students have the opportunity to job shadow in desired industries and receive guidance from a career mentor. In the last stage, students actively apply, learn, and demonstrate skills that prepare them for future careers through internships and apprenticeships. Curriculum in PK-12 can also integrate career awareness and early stages of exploration, and it can prepare students for the advanced stages of work-based learning that focus on high-quality, paid experiences embedded in the workplace, such as apprenticeships.

Work-based learning is referenced in four pieces of federal education legislation, with each offering different guidance for states to develop programming through the respective funding streams.

- The Strengthening Career and Technical Education for the 21st Century Act (Perkins V)
- Workforce Innovation and Opportunity Act (WIOA)
- Every Student Succeeds Act (ESSA)
- Individuals With Disabilities Education Act (IDEA)

Work-based learning is often situated within CTE programs, which span the PK-12 and post-secondary education systems. These programs should be integrated thoughtfully into educational opportunities to ensure that all students are gaining skills that lead to viable and well-paid career paths that evolve over time. Additionally, not all work-based learning programs are facilitated through CTE programs. Youth apprenticeship and internship programs outside of CTE also play an important role in increasing access. Regardless of students' chosen path, exploring career pathways and interests before investing time and money in further education encourages them to make more informed choices.

# A Vision of Aligning PK-12, Post-Secondary, Career and Technical Education, and the Workforce

Education systems around the globe are making important shifts toward learner ecosystems and are re-examining the very purpose of public education. As Aurora's *A Promise for Equitable Futures* (Casey & Patrick, 2020, p. 13) called for, "Now is the time to turn the unrealized hope of public education into an

actualized promise: that every learner will have access and support to pursue a certified pathway toward a meaningful, chosen career that will build social and economic capital over the course of their lives."

The federal government and states should let go of the notion that education has to be a linear, time-bound sequence of learning that occurs only within formal education institutions. Rather, education can be reimagined as a learning ecosystem. As outlined in the Aurora Institute Federal Policy Priorities (Patrick, 2022), it is imperative that the United States reorient education systems to develop high-quality and competency-based learning opportunities and educational pathways that are accessible to all students across the K-20 continuum and that are integrated with work and career explorations. A more aligned, coherent ecosystem would be equitable, dynamic, and responsive and would allow learners



to customize their learning experiences throughout their academic and professional careers. These new learning ecosystems can expand into networks across programs, schools, businesses, communities, and other institutions. Lawmakers must invest in new policies, practices, and infrastructure that align lifelong-learning ecosystems with personalized and competency-based pathways. Work-based learning is one promising vehicle for doing so.

Work-based learning experiences, including paid internships and apprenticeships, make careeraligned pathways tangible for students and facilitate the recognition of learning inside and outside of school. Pathways allow students to apply their learning, explore different careers, and have workforce experiences that build toward credentials that enable students to realize economic prosperity. These learning ecosystems recognize learning that happens anywhere, anytime and document that learning on a comprehensive learning and employment record over a lifetime. Work-based learning also strengthens the connections between the workforce community and the school system by creating opportunities for businesses and organizations to become partner learning institutions to prepare youth for vibrant and more prosperous futures.

On Capitol Hill, there is bipartisan support for increasing access to work-based learning. A federal government notice (Department of Education, 2019) summarizes research supporting work-based learning:

Apprenticeships, internships, and other work-and-learn opportunities can be beneficial to students, employers, and institutions. Students who participate in program-related, paid work experiences may have improved graduation outcomes, accumulate less debt, and enjoy better post-graduation employment opportunities. In addition, students who earn wages while enrolled in a work-based learning program may be more likely to retain Pell eligibility, if a portion of their wages are Federal Work-Study (FWS) wages since those earnings are not considered in the determination of a student's financial need. Work-based learning programs benefit employers by helping them develop a pipeline of qualified workers and help ensure that students graduate with strong workplace competencies. Employers also benefit when FWS wages offset a portion of the cost of work-based learning opportunities, thus reducing barriers to entry for employers that wish to start apprenticeship programs.

The federal government can and should increase its investments in paid work-based learning experiences to increase access, build infrastructure, and reorient systems toward aligned, competency-based systems. Aligning competency-based pathways across PK-12, post-secondary, CTE, and the workforce is critical to modernizing education and aligning practice with the science of learning. State policy makers who support transforming both PK-12 and workforce development systems can strategically target funding under Perkins V, WIOA, ESSA, and IDEA. States can leverage that funding to encourage alignment of programs with personalized pathways and competency-based approaches across PK-12, post-secondary education, CTE, and the workforce in each state.

# Synthesizing Research to Inform Policy

Significant research exists on the components of high-quality work-based learning and the challenges to ensuring that every learner has access to these opportunities. The sections below discuss this research from organizations leading the field.

#### **Components of High-Quality Work-Based Learning Programs**

As discussed above, work-based learning programs encourage students to apply their learning from school as they explore various career options, while further preparing them to navigate the world by helping them develop professional and interpersonal skills. For work-based learning experiences to be truly effective and beneficial, they must be high quality.

#### **Program Content**

First and foremost, the research emphasizes that high-quality work-based learning programs must offer high-quality work experiences (Ross et al., 2020; Getting Smart & GPS Education Partners, 2021). High-quality experiences ensure that a student's investment in the program is worthwhile. Students should engage in work experiences that offer hands-on experience and expose students to real-life work situations (Ross et al., 2020). The work experience should be safe and legal and should comply with federal regulations. The tasks given to students should be meaningful and contribute to their skill development and overall learning plan (Ross et al., 2020). Along the same lines, high-quality workbased learning programs should provide students with tangible benefits. This could include assisting students with structuring their networks, building positive relationships with adults, and advancing their social and human capital (Ross et al., 2020). The experiences and skills students develop through work-based learning strengthen



their career identities and create a pathway toward their futures (Robson et al., 2021).

During their work-based learning experiences, students should have the opportunity to develop skills that are transferable to the classroom, their personal lives, and the workforce, regardless of industry (Getting Smart & GPS Education Partners, 2021; Messing-Mathie, 2021). In the workplace, learning experiences should build on the school-based curricula, which should create a foundation for, support, and reinforce the academic and career skills gained during those experiences (Canney & Mezera, 2020).

Finally, students should have a choice in the industries they want to explore and their worksite locations (Getting Smart & GPS Education Partners, 2021; Canney & Mezera, 2020). It's important that students have the opportunity to show leadership in their learning by developing their individualized learning plans and identifying their career goals (Canney & Mezera, 2020). During the program, students should receive support from both the school and the workplace to make the best choices for their futures.



#### **Program Structure**

Work-based learning experiences should be accessible to every student, regardless of race, identity, ability, and socioeconomic background (Ross et al., 2020). To alleviate financial challenges that could prevent students from participating, work-based learning experiences such as internships and apprenticeships should be paid (Canney & Mezera, 2020; Spaulding et al., 2020). This allows students who are forgoing traditional employment opportunities an opportunity to gain an income.

Another key component of program quality is clearly defined goals, expectations, and procedures to help guide and support the work-based learning ecosystem—including educators, employers, and the community—in carrying out the program (Getting Smart & GPS Education Partners, 2021; National Academy Foundation, 2021; Canney & Mezera, 2020). Metrics should identify what makes

a work-based learning program successful and track student progress throughout the program (National Academy Foundation, 2021; Messing-Mathie, 2021).

Finally, the research finds that high-quality work-based learning programs should fit within an accessible continuum of experiences (National Academy Foundation, 2021). Whether within a single comprehensive program or as part of a set of connected offerings in a system, high-quality work-based learning programs do not just offer work-based experiences in a vacuum (Canney & Mezera, 2020). Instead, they include opportunities for students to gain broader career awareness through other experiences such as field trips and tours, career exploration through job shadowing, and career preparation through skill application in internships (National Academy Foundation, 2021; Canney & Mezera, 2020; Robson et al., 2021).

#### The Work-Based Learning Ecosystem

Research finds that it is key for work-based learning programs to collaborate with partners in a region's or a state's greater work-based learning ecosystem, often with the support of a coordinating intermediary (Getting Smart & GPS Education Partners, 2021; Advance CTE, 2021; Partnership to Advance Youth Apprenticeship, 2022; Messing-Mathie, 2021). Work-based learning is multidimensional and requires in-sync collaboration among educators, employers, and the community (Canney & Mezera, 2020; Getting Smart & GPS Education Partners, 2021; National Academy Foundation, 2021). All partners should clearly understand their roles and responsibilities throughout the program. Partners should remain engaged with one another to ensure a successful program.

Intermediaries play an important role in managing the relationship between educators and employers, and they support both the launch and scaling of work-based learning (Education Strategy Group & Partnership to Advance Youth Apprenticeship, 2019). The intermediary function can be filled in different ways, such as by an individual school, district, or state coordinator, or a regional or state third-party organization (Advance CTE, 2016).

All members of the work-based learning ecosystem should receive proper training and support to carry out a successful program (National Academy Foundation, 2021). Members of this ecosystem need guidance to develop and foster a collaborative partnership, so that they can effectively carry out the program's goals.

#### **Challenges in Implementing Work-Based Learning Programs**

Several existing challenges can make it difficult for stakeholders to implement high-quality work-based learning experiences. While many challenges need to be addressed with state and local action, opportunities exist within federal policy to support improvement.

First, the research finds that work-based learning is highly decentralized at the state and local levels, leading to variations in implementation and quality (Robson et al., 2021). Work-based learning requires collaboration and coordination among states, intermediaries, employers, and educators. Work-based learning is funded by several federal sources, each source defines it differently, and each source provides different guidance (Robson et al., 2021). Not having a shared definition of work-based learning and its essential design elements leaves states and localities creating mismatches with their own definitions of work-based learning (N. Govindasamy, personal communication, March 22, 2023). This disconnect increases the risk of ineffective implementation at a state or local level if understanding varies about the elements, inputs needed, and desired outcomes for high-quality programs. Additionally, states may not have a clear understanding of how to financially support, blend, braid, or locate funds for work-based learning programs. The different definitions within funding streams contribute to a lack of clarity, which

makes coordination and the blending and braiding of funds more challenging (T. White, personal communication, March 17, 2023).

Along with multiple funding sources come competing requirements for metrics, evaluating results, and accountability to those funding sources. While states create their own systems for accountability, those systems are typically influenced by federal accountability requirements. For work-based learning programs, there is not a clear accountability system to follow, making it difficult to measure program effectiveness, especially in measuring performance outcomes beyond program participation (Robson et al., 2021; National Academy Foundation, 2021). Also, in states that do not prioritize work-based learning opportunities within their PK-12 school accountability systems, these programs are less likely to be prioritized (T. White; D. Mezera; & Q. Suffren, personal communications, March 17, 2023).



Various factors have made it difficult for states to ensure that all students, regardless of identity or ability, have access to high-quality, paid work-based programs (Robson et al., 2021). For example, because work-based learning is largely a local and regional endeavor and depends on school and employer capacity, students in rural and underserved areas may not have access to high-quality work-based learning (National Academy Foundation, 2021). Compared to students from high-income households, students from low-income households also do not have access to the same resources that promote professional and personal development. Due to structural inequities past and present, low-income students lack access to the financial stability needed to accept unpaid internships. Thus, unpaid internships discourage participation from low-income students because they limit the opportunity to earn income (Messing-Mathie, 2021; Canney & Mezera, 2020).

Finally, research finds that employers lack incentives for participating in work-based learning programs (National Academy Foundation, 2021; Canney & Mezera, 2020; Partnership to Advance Youth Apprenticeship, 2022). Incentives for employers could include tax credits and government-funded or -subsidized insurance (Canney & Mezera, 2020). Also, uncertainty around program expectations and roles and responsibilities can affect quality and discourage employer participation (National Academy Foundation, 2021). This is another place where intermediaries can play an important role in engaging and training employers, including messaging work-based learning programs as talent development strategies (Education Strategy Group & Partnership to Advance Youth Apprenticeship, 2019).

#### **Work-Based Learning Examples**

The following examples spotlight innovative work-based learning efforts that can inform federal policy directions and opportunities to expand federal investment in work-based learning.

#### **STATE MODELS**

### ALABAMA - Braiding funds to create competency-based pathways that connect education and workforce

Through the Alabama Career Development Model, Alabama developed a continuous learning system with competency-based pathways in PK-12 education, CTE, post-secondary education, and the workforce. State leaders there are developing in-demand career pathways that align workforce development programs—such as industry-recognized and registered apprenticeships through the Alabama Office of Apprenticeship (AOA)—around the attainment of valuable credentials, post-secondary credits, and work-based learning experiences. To support coordination, Alabama established and funded the Governor's Office of Education and Workforce Transformation (GOEWT), a separate entity from the state's workforce, PK-12, and post-secondary education agencies. GOEWT's task includes aligning and braiding various funding sources, including WIOA, ESSA, and Perkins State Leadership and Administrator funds.

## DELAWARE - Breaking down silos between youth, educators, and employers for sustainable access to pathways, with cross-sector collaboration and braided funding streams

Delaware leverages federal, state, institutional, and private funding streams to support high-quality career pathways through an initiative called <u>Delaware Pathways</u>, a coordinated effort between education and workforce development systems to connect students, educators, communities, and employers. Starting with exploration as early as the middle grades, Delaware Pathways builds on traditional CTE programs to create true school-to-career pathways. These pathways respond to the economy's changing needs and allow students and adults to successfully pursue their education and career goals. The Office of Work-Based Learning at Delaware Technical Community College, an intermediary established for the Delaware Pathways initiative, coordinates this effort. An evaluation of the program (Delaware Pathways et al., 2021) found that 20 percent of all seniors in the state earned post-secondary credit in 2019-20, and 10 percent of seniors earned an industry-recognized credential aligned with a high-demand, high-skill occupation. The Delaware Pathways program increased its enrollment from 8,329 in 2017 to 23,009 in 2020, with over half of the state's high school students enrolled in 2019-20.

#### INNOVATION BY NONGOVERNMENTAL INTERMEDIARY ORGANIZATIONS

## CAREERWISE COLORADO - Modeling work-based learning innovation and leading the way for youth apprenticeship

A leader in youth apprenticeship, <u>CareerWise Colorado</u> is one of two learning hubs in New America's Partnership to Advance Youth Apprenticeship (PAYA) network. It offers more than a dozen occupational pathways that lead to high-paying, high-growth careers in fields such as advanced manufacturing, business operations, financial services, education, health care, and information technology. CareerWise youth apprentices split their time between their traditional high school classrooms and the workplace starting in their junior or senior year of high school and continuing with increased hours each year for two to three years in the apprenticeship until they reach proficiency. Apprentices earn a wage while receiving hands-on work experience, an industry-recognized credential, and/or college coursework credit. Employers benefit from a diverse talent development pipeline, with almost half of apprenticeship completers accepting a job offer from the employer. In spring 2023, there were about 665 active apprentices, with 1,497 placements since 2017. A study of the first two cohorts (2017-2018) of 232 apprentices found that 64 percent of CareerWise apprentices transitioned to post-secondary education, employment, or both after completing the program (Fuller et al., 2022).

## FUTURE FOCUSED EDUCATION (NEW MEXICO) - Responding to the need for paid work-based learning for high school students

In New Mexico, many high school students struggle to contribute financially to their families and stay in school, resulting in too many youth dropping out of school to work, but without good prospects. Future Focused Education (FFE) serves as an intermediary to develop paid work-based learning opportunities for high school students through its X3 Internship Program in Albuquerque. The program started as a pilot program in 2017 with five interns. As of spring 2023, it has provided 1,033 placements in paid internships. Employers pay a per-intern fee to FFE in return for the intern stipends, payroll management, insurance, training, and evaluation. FFE is a grantee and participant in the PAYA network, currently building on the existing internship program to launch the X3 NeXt program for recent high school graduates. This new program will combine college coursework, mentorship, and wraparound support to prepare young adults to step into middle-skill jobs in key New Mexico industries. Through work with the statewide innovation zone, which has a programmatic priority of work-based learning, FFE is supporting organizations in other regions of the state to adopt the model and integrate work-based learning into PK-12 school systems.

#### The Student Experience in Focus

David, a recent graduate of a local high school in Albuquerque, is one of over 30 interns at the University of New Mexico Hospital (UNMH) in the spring 2023 semester. In his role as an UNMH Computer Learning Technologies Intern, David supports the scheduling of required learning modules for new and existing UNMH staff. His supervisor shares: "[W]e want to help young people to understand the many roles available to them in a hospital setting. It's like a mini-city and there are many types of jobs that students might not know about. UNMH is a teaching hospital, and the internship program is an extension."

UNMH is one of the local employer partners of FFE's X3 Internship program. The goal of the program is to open doors to future careers and post-secondary education for high school students. The program notes: "Paid internships cultivate healthier and more prosperous communities, provide young people with opportunities to grow skills and build their social capital while allowing employers to shape their future workforce and community."

# Recommendations for Federal Policy Makers

The federal government plays an important role in shaping work-based learning, even though the nexus of the work is done within state and local contexts and depends on the economic opportunities and needs of different geographic regions. States and localities use federal resources through Perkins V, WIOA, ESSA, and, recently, the American Rescue Plan Act, which creates an opportunity to use federal policy to provide guidance and incentives to leverage resources effectively and equitably.

Federal recommendations to advance work-based learning:

- Launch a major federal cross-agency program to stimulate significant investments in modernizing work-based learning through grants focused on innovating state and regional work-based learning and competency-based pathways programs, including paid work placements, that span PK-12, CTE, post-secondary education, and industry/workforce. Special attention should be paid to systems that include competency-based credentials and micro-credentials that recognize and validate learning anywhere, anytime and the need to bridge these systems with institutions of higher education.
- Increase federal resources through innovation grants to states and intermediary organizations to align and coordinate transformation efforts across education and employment pathways in states. This includes:
  - Expand equitable access to work-based learning by race, identity, disability, or opportunity (such as students who are disengaged or behind in attaining credits).
  - Support states *moving to competency-based systems* for education, workforce training, and credentialing.
  - Incentivize *creating competency frameworks* and the infrastructure needed to support competency-based pathways for building knowledge and skills.
  - Incentivize *mapping system alignment* across early learning, PK-12 education, CTE, post-secondary education, and workforce to support competency-based pathways.
  - Support development and implementation of high-quality professional learning for educators and work-based learning providers.
- Ensure intermediary organizations are eligible for federal grant funds to support work-based learning and pathways to coordinate partnerships across state, regional, and local entities.
- Allow for flexible blending and braiding of federal funds into state, regional, or local innovation revolving funds and provide more flexible reporting for blended resources. Consider simplifying, combining, and/or allowing recipients to combine existing funding sources, such as within WIOA and Perkins V, to reduce silos and focus federal funds to increase their impact.
- Support redesigning accountability to be a reciprocal process with Elementary and Secondary Education Act pilots to support performance frameworks codesigned with local families, workforce, and community that may include paid, work-based learning integration and career exploration.

#### Federal policy recommendations

- Launch federal cross-agency program to stimulate significant investments in modernizing work-based learning
- Increase federal resources through innovation grants
- **s** Ensure intermediary organizations are eligible for federal grant funds
- Allow for flexible blending and braiding of federal funds
- Redesign accountability to be a reciprocal process
- Increase funding for Statewide Longitudinal data Systems Grant Program and data systems interoperability
- Modernize federal grants' peer-review processes
- Identify effective, new approaches for Pell funding
- Provide tax incentives to employers

#### State policy recommendations

- Create statewide vision for learning
- Build intermediary capacity
- Grant funding to expand pathways and work-based learning
- O Create revolving innovation funds
- O Create innovation zones
- Build systems that recognize and validate prior learning experiences
- Support digital learner employment records

- Increase funding for Statewide Longitudinal Data Systems Grant Program and data systems interoperability across different aspects of the education system (including early childhood, PK-12, and post-secondary education) and across other education and employment systems. Data systems support pathways and learner education and employment records, offer technical assistance for improving and moving to competency-based credentials, and modernize data infrastructure needed to transform education systems. Additionally, removing the ban on student outcomes data collection in the Higher Education Act could help to create a secure, privacy-protected, student-level data network at the National Center for Education Statistics (NCES).
- Revamp and *modernize federal grants' peer-review processes* to support innovative approaches to reimagining lifelong learning systems.
- Continue and evaluate the Experimental Sites Initiative for the Federal Work-Study Program to
  identify effective, new approaches for Pell funding, including dual enrollment and competency based education. Increase the maximum Pell Grant award amount and provide more funding
  for work-based learning internships, such as through the federal work-study program. Extend
  Pell Grant eligibility to high school students taking college courses while still enrolled in high
  school programs, to help scale proven solutions for increasing access to and completion of post secondary education.
- Provide tax incentives to employers supporting work-based learning.

At the state level, there is opportunity for the federal government to incentivize state modernization and coordination of work-based learning programs, including rethinking governance and bringing together government, education, and business leaders to help create coherent systems locally, regionally, and statewide for education and training. Career-aligned pathways recognize learning that happens inside and outside of schools, in the workforce, and in communities. To move the needle at the state level, federal policy makers should encourage state leaders to:

- Create a statewide vision for a lifelong, continuous system of learning to ensure all youth have pathways to prosperity. Align systems of early learning, PK-12 education, CTE, post-secondary education, and workforce training by creating competency-based pathways and certifications.
- Build intermediary capacity to spur innovations in work-based learning and help address insurance needs for employers supporting work-based learning, internship, and apprenticeship programs.
- Fund grants to expand pathways and paid work-based learning opportunities.
- Create revolving innovation funds to support blending and braiding of federal grants to support paid, work-based learning and simplify reporting on blending funds.
- Create innovation zones that provide a competitive priority to support and fund new paid, workbased learning programs in PK-12 for partnering with the workforce.
- Focus on building systems that recognize and validate prior learning experiences, including enabling anywhere, anytime learning.
- Support digital learner employment records infrastructure and digital wallets that learners own for a lifetime of building knowledge and skills.

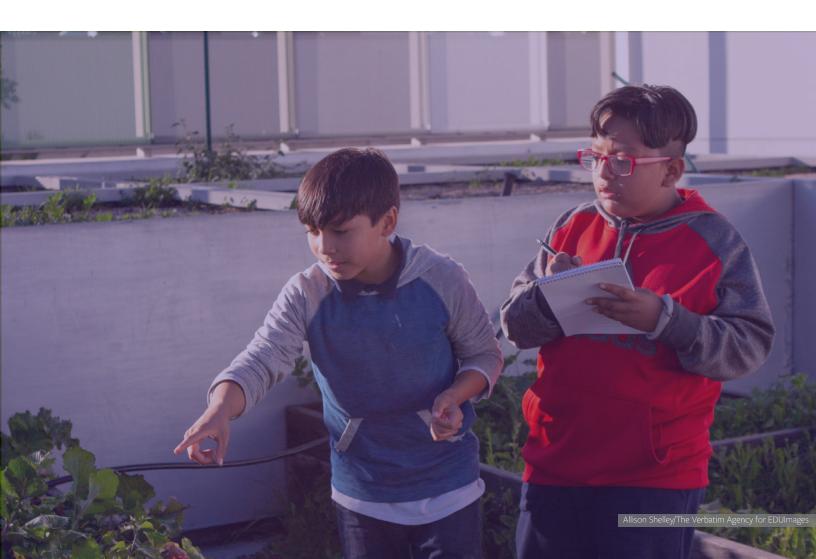
# Conclusion

In the context of rapid change in education and the workforce, policy makers need to take a long view on the future of education and work. The system needs to be reorganized to build knowledge and skills in the midst of changing trends, with more aligned structures, incentives, and supports for learner-centered pathways.

To facilitate this systems change, policy makers will need to support expanding work-based learning through pathways that accelerate successful outcomes. Investment in systems change to drive the complex coordination and the competency-based education and employment infrastructure required can make expanded, aligned pathways possible.

We must challenge frames and investments that perpetuate tinkering with the existing system, rather than reimagining it. The time is ripe to redesign education to align with future needs and purposes to achieve human flourishing.

To ensure all learners are prepared for life's uncertainties, as well as a more knowledge-driven workforce and economy, we must restructure the education and workforce systems to universally recognize anytime, anywhere learning and support pathways for equitable futures.



# References

Advance CTE. (2016, July). Leveraging intermediaries to expand work-based learning. <a href="https://cte.careertech.org/sites/default/files/files/resources/WBL\_casestudy\_Intermediaries\_FINAL.pdf">https://cte.careertech.org/sites/default/files/files/resources/WBL\_casestudy\_Intermediaries\_FINAL.pdf</a>

Advance CTE. (2021). Connecting every learner: A framework for states to increase access to and success in work-based learning. <a href="https://careertech.org/resource/work-based-learning-equity">https://careertech.org/resource/work-based-learning-equity</a>

Canney, M., & Mezera, D. (2020). *Developing high-quality state work-based learning programs: A playbook for state policymakers*. ExcelinEd. <a href="https://excelined.org/wp-content/uploads/2020/10/ExcelinEd.ctplaybook6.WorkBasedLearning.February2020.pdf">https://excelined.org/wp-content/uploads/2020/10/ExcelinEd.ctplaybook6.WorkBasedLearning.February2020.pdf</a>

Casey, K. & Patrick, S., (2020, October). A promise for equitable futures: Enabling systems change to scale educational and economic mobility pathways. Aurora Institute. <a href="https://aurora-institute.org/resource/a-promise-for-equitable-futures-enabling-systems-change-to-scale-educational-and-economic-mobility-pathways/">https://aurora-institute.org/resource/a-promise-for-equitable-futures-enabling-systems-change-to-scale-educational-and-economic-mobility-pathways/</a>

Delaware Pathways, Rodel Foundation of Delaware, Office of Delaware Work-Based Learning, Delaware Department of Education, & RTI International (2021). *Connecting Delaware students to careers: Final evaluation report on career pathways and work-based learning in Delaware*. <a href="https://rodelde.org/wp-content/uploads/2021/09/Connecting-Delaware-Students-to-Careers\_FinalRpt\_072621-1.pdf">https://rodelde.org/wp-content/uploads/2021/09/Connecting-Delaware-Students-to-Careers\_FinalRpt\_072621-1.pdf</a>

Department of Education. (2019, May 23). Notice inviting postsecondary educational institutions to participate in experiments under the experimental sites initiative; federal student financial assistance programs under Title IV of the Higher Education Act of 1965, as amended, 84 F.R. 23779. https://fsapartners.ed.gov/sites/default/files/attachments/2019-08/FR052319ESI.pdf

Education Strategy Group & Partnership to Advance Youth Apprenticeship. (2019, November). The critical role of intermediary organizations in expanding youth apprenticeship. <a href="https://edstrategy.org/wp-content/uploads/2019/11/ESG-Youth-apprenticeship-12092019-update.pdf">https://edstrategy.org/wp-content/uploads/2019/11/ESG-Youth-apprenticeship-12092019-update.pdf</a>

Fuller, J., Lipson, R., Mallah, F., Pendse, G., & Snyder, R. (2022, November). *The option multiplier: Decoding the CareerWise youth apprentice journey.* Harvard Kennedy School and Harvard Business School. <a href="https://www.pw.hks.harvard.edu/post/careerwise">https://www.pw.hks.harvard.edu/post/careerwise</a>

Getting Smart & GPS Education Partners. (2021, November). Work-based learning ecosystems: Improving opportunity for all by integrating school, community, and the workplace. <a href="https://cte.careertech.org/sites/default/files/files/resources/Work-basedLearning\_Ecosystems\_WhitePaper\_GettingSmartandGPSEd\_1121.pdf">https://cte.careertech.org/sites/default/files/files/resources/Work-basedLearning\_Ecosystems\_WhitePaper\_GettingSmartandGPSEd\_1121.pdf</a>

Jobs for the Future. (n.d.) *About work-based learning*. <a href="https://www.jff.org/what-we-do/impact-stories/center-for-apprenticeship-and-work-based-learning/about-work-based-learning/">https://www.jff.org/what-we-do/impact-stories/center-for-apprenticeship-and-work-based-learning/about-work-based-learning/</a>

Levine, E., & Patrick, S. (2019). What is competency-based education? An updated definition. Aurora Institute. https://aurora-institute.org/resource/what-is-competency-based-education-an-updated-definition/

Loyd, A., & Schwartz, B. (2017). *Learning for careers: Lessons from strong VET systems abroad and in the U.S.* Jobs for the Future, Harvard Graduate School of Education. <a href="https://www.nmlegis.gov/handouts/ALESC%20111517/%20Item%201%20gb%20-%20Lloyd%20PtoP%20NM%20LESC%20111517.pdf">https://www.nmlegis.gov/handouts/ALESC%20111517/%20Item%201%20gb%20-%20Lloyd%20PtoP%20NM%20LESC%20111517.pdf</a>

Messing-Mathie, A. (2021). Youth apprenticeship in action: Principles in practice. Jobs for the Future Center for Apprenticeship & Work-Based Learning, Partnership to Advance Youth Apprenticeship. <a href="https://">https://</a> ifforg-prod-new.s3.amazonaws.com/media/documents/YA\_in\_Action\_-\_Final\_-\_09-08-2021.pdf

National Academy Foundation. (2021). *Work-based learning: Critical infrastructure for a future-ready workforce*. https://naf.org/wp-content/uploads/2021/11/Work-Based-Learning-Policy-Paper.pdf

National Pathways Summit. (2023). *National education summit on pathways from school to college to career: Policy platform and agenda*. <a href="https://nationalpathwaysinitiative.org/wp-content/uploads/2023/01/NPS-Policy.pdf">https://nationalpathwaysinitiative.org/wp-content/uploads/2023/01/NPS-Policy.pdf</a>

New Ways to Work. (2009). *Guide to creating quality work-based learning*. <a href="https://casn.berkeley.edu/resource\_files/CreatingQualityWBLGuideJUNE2009.pdf">https://casn.berkeley.edu/resource\_files/CreatingQualityWBLGuideJUNE2009.pdf</a>

Partnership to Advance Youth Apprenticeship, New America, & National Governors Association. (2022). State policy playbook to advance youth apprenticeship. <a href="https://www.nga.org/wp-content/uploads/2022/07/PAYA-State-Policy-Playbook\_June2022.pdf">https://www.nga.org/wp-content/uploads/2022/07/PAYA-State-Policy-Playbook\_June2022.pdf</a>

Patrick, S. (2022, July). *Aurora Institute's 2022 federal policy priorities*. Aurora Institute. <a href="https://aurora-institute.org/wp-content/uploads/Aurora\_2022FedPolicyPrioritiesRecs\_v8-FINAL.pdf">https://aurora-institute.org/wp-content/uploads/Aurora\_2022FedPolicyPrioritiesRecs\_v8-FINAL.pdf</a>

Robson, K., O'Neal Schiess, J. & Lammers, J. (2021). Working to learn and learning to work: A state-by-state analysis of high school work-based learning policies. American Student Assistance & Bellwether Education Partners. https://file.asa.org/uploads/Learning-to-Work-and-Working-to-Learn.pdf

Ross, M., Kazis, R., Bateman, N., & Stateler, L. (2020). *Work-based learning can advance equity and opportunity for America's young people*. Brookings Metropolitan Policy Program. <a href="https://www.brookings.edu/wp-content/uploads/2020/11/20201120\_BrookingsMetro\_Work-based-learning\_Final\_Report.pdf">https://www.brookings.edu/wp-content/uploads/2020/11/20201120\_BrookingsMetro\_Work-based-learning\_Final\_Report.pdf</a>

Spaulding, S., Hecker, I., & Bramhall, E. (2020). *Expanding and improving work-based learning in community colleges*. Urban Institute. <a href="https://www.urban.org/research/publication/expanding-and-improving-work-based-learning-community-colleges">https://www.urban.org/research/publication/expanding-and-improving-work-based-learning-community-colleges</a>



The mission of the Aurora Institute is to drive the transformation of education systems and accelerate the advancement of breakthrough policies and practices to ensure high-quality learning for all.

1100 N. Glebe Rd., Suite 1010 Arlington, VA 22201

ph. 703.752.6216 | fx. 703.752.620









www.aurora-institute.org