

# CTE WITHOUT BORDERS

## Policy Playbook

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## Building the Infrastructure for Expanded Access

To truly meet the needs of learners, we must remove the geographic barriers that limit access and opportunity, particularly for learners in rural communities.

This work is essential to ensure that each learner can access CTE without borders — one of the five principles of Advance CTE's *Without Limits: A Shared Vision for the Future of Career Technical Education*. Policies and programs should enable, not limit, mobility and access. States should come together to develop and expand new models of collaboration by investing in expanded-access systems that allow access both within and across states.

Achieving CTE without borders will require significant policy and programmatic changes to how CTE is designed and delivered. To support state and local leaders in the development of policies and programs that advance the expansion of CTE and work-based learning within and across states, Advance CTE, the Southern Regional Education Board, and the Western Interstate Commission for Higher Education partnered to create this CTE Without Borders Policy Playbook. The playbook was developed with input from more than 100 state and local leaders through a series of interactive roundtable discussions and interviews.

This policy playbook focuses on expanded access both within and across states and within and across secondary and postsecondary institutions. With a combination of key strategies, actions and policies across six focus areas, leaders can actualize expanded access within and across states to support learners' and industry's needs.

Leaders should leverage this resource to evaluate their CTE systems and discern where in their partnerships, systems, policies and practices they have opportunities to expand access within and across states to meet learners' and industry's needs. The strategies and actions in this playbook will support leaders as they determine the scope of this work for their state or region and understand where they have opportunities to prioritize various policy efforts to actualize CTE without borders.

## FOCUS AREAS

The following focus areas guide leaders through strategies and actions to develop policies and practices within and across systems, agencies and institutions to expand access to high-quality CTE and work-based learning within and across states. These focus areas provide leaders with an understanding of the full system of policies and supports necessary to expand access to high-quality CTE and work-based learning. These strategies and actions rely on partnerships among K-12 institutions, postsecondary institutions and systems, state agencies, workforce development and industry and employer partners to connect policies and practices to each other and should be informed by comprehensive data, focused on learner outcomes, and designed with equity in mind.



The focus areas are not intended to be, nor are they reflective of, one-year initiatives. For the best results, they require a multi-year approach that each state and/or leader should tailor to their needs and specific goals and continually revisit and revise over time.



**Align Partners, Values and Vision**



**Drive Decisions With Data**



**Incentivize Access With Flexible and Sustainable Funding**



**Capture Learners' Credits, Credentials and Experiences**



**Optimize the Conditions for Virtual and Hybrid Learning Opportunities**



**Inform and Support Learners and Families**

Additionally, because each state operates within a different structure and context, some strategies and actions lend themselves to expanding access only at secondary institutions, postsecondary institutions or within states or across states, while other strategies may encompass more than one area of expanded access. The following keys are identified throughout the playbook to help navigate the strategies and actions.



**Expands Secondary Access**



**Expands Postsecondary Access**



**Expands In-State Access**



**Expands Cross-State Access**

- This is the third of a four-part series comprising the CTE Without Borders Policy Playbook. These sections prepare leaders seeking to expand access within and across states to fund and build the infrastructure needed to successfully expand access within and across states and provide learners expanded access to high-quality CTE programs and work-based learning.



## Incentivize Access With Flexible and Sustainable Funding

Providing expanded access to high-quality Career Technical Education (CTE) programs and work-based learning within and across states requires flexible and sustainable funding to equitably serve learners regardless of their locality. Too often, funding can limit or restrict innovation when it is not distributed equitably, is too rigid, or creates unnecessary competition among institutions and partners. Addressing flexible funding removes barriers to enabling expanded access to CTE programs. Funding can support the many components, such as broadband access, equipment, tuition costs and more, that are necessary for learners to engage in CTE programs and work-based learning within and across states.

To incentivize expanded access with flexible and sustainable funding, leaders should consider:

- **Understanding the local investment for each district and institution;**
- **Examining existing funding sources to leverage for expanded access;**
- **Braiding federal, state and local funds;**
- **Pooling funding to share resources across the broader region or state;**
- **Incentivizing industry engagement; and**
- **Offering in-state financial aid with reciprocity agreements.**



## STRATEGIES AND ACTIONS

### to Incentivize Access With Flexible and Sustainable Funding



#### UNDERSTAND THE LOCAL INVESTMENT FOR EACH DISTRICT AND INSTITUTION



Understanding the local investment for each district and institution, whether they are sending or receiving learners, to engage in expanded access requires a comprehensive view of investments and additional context about program quality and outcomes. Gaining this understanding is an imperative first step for states to expand access. As a starting point, leaders should prioritize the needs of their state's, district's or institution's systems by collecting and analyzing

available data and mapping existing investments to address duplication of efforts and determine any gaps that may exist in the funding structures to promote expanded access to high-quality CTE and work-based learning. This step, and all steps in the process of expanding access, should be approached through an equity lens to ensure that resources and efforts are directed to the activities, communities and learners that need it most.



#### EXAMINE EXISTING FUNDING SOURCES TO LEVERAGE FOR EXPANDED ACCESS



The three main sources of funding available to states to support expanded access include federal, state and local funding sources.

**Federal Funding Sources:** Federal funding sources that are braided can support the alignment of statewide systems to support expanded access for learners. Braided funds can include leveraging funding streams to support access to resources, technology, professional development for instructors and more. Flexible funding streams such as the Reserve Fund and State Leadership Fund from the Strengthening Career and Technical Education for the 21st Century Act (Perkins V) can be leveraged to expand access to career pathways systems. **Colorado** uses Perkins V funding for virtual systems in many of its health care CTE programs. The state also has school districts that leverage consortium funding, as well as **innovation grants from the state Department of Education**, to fund mobile labs for rural learners to experience hands-on opportunities.<sup>28</sup>

**State Funding Sources:** States have opportunities to fund CTE programs and work-based learning through state-legislated budgets and additional grant and scholarship funding. There are also opportunities for competitive grants for states that engage in cross-state collaboration. These grants are similar to ones that states offer to districts or colleges interested in improving or expanding their CTE programs with recurring funds or one-time budget allocations intended to offset start-up or program transition costs.<sup>30</sup> States can leverage this structure to set and fund priorities that expand access to learners within and across states. **Kentucky** has a statewide virtual WeLead Computer Science Academy available to all learners in the commonwealth at no cost.<sup>31</sup>

Workforce Innovation and Opportunity Act (WIOA) funds can be leveraged to support tuition and training costs as well as work-based learning opportunities. The Governor's Reserve Fund provides state flexibility, and Title I funds can support youth activities and programs.<sup>29</sup> Bringing WIOA and Temporary Assistance for Needy Families (TANF) funds together provide an opportunity to provide more intensive career and training services to help postsecondary learners address barriers and successfully move into employment.

Increases in base funding and competitive grants can be used to offset the cost of CTE courses and help districts and colleges fund technology and equipment for learners to experience high-quality CTE programs that are accessed online.

Increasing funding to districts based on their enrollment, irrespective of how many students take CTE courses, is a strategy that can be leveraged to increase the base funding per student who is engaging in in- or cross-state CTE.



Incentivizing outcomes is a practice in which states use recurring funds to reward institutions and instructors based on student outcomes in CTE, such as attainment of industry credentials or completion of work-based learning.<sup>32</sup> States can leverage this practice to incentivize districts and schools that are providing expanded access to their students, whether they are providing access within their district or school or outsourcing to other districts and schools. Outcomes-based incentives reward high performance on desired learner outcomes by measuring CTE quality based on the attainment of those outcomes and allow higher-performing programs to grow and serve more students.<sup>33</sup>

**Local Funding Sources:** Districts can leverage local property taxes and levies to encourage open access with a base funding amount and added weights for characteristics such as expanded access.



### BRAID FEDERAL, STATE AND LOCAL FUNDS



When reviewing potential funding opportunities to determine ways to enable expanded access within and across states, states are encouraged to leverage the allowable uses for current policy in place at the federal, state and local levels. A significant opportunity to expand access lies in state and local agencies understanding how to braid funding to connect resources with other agencies at different levels to benefit equitable access for learners. **Braiding Funding to Support Equitable Career Pathways** walks states, postsecondary institutions and local agencies through promising practices for braiding funding to support high-quality, equitable career pathways.<sup>37</sup>

## FUNDING STREAMS THAT ARE AVAILABLE TO BRAID AND ENABLE EXPANDED ACCESS WITHIN AND ACROSS STATES

### FEDERAL FUNDING

- Some federal funding sources provide a direct connection to expanding access to high-quality CTE programs and work-based learning. These sources include Perkins V, which allocates more than \$1.4 billion annually to states to expand opportunities for learners to explore, choose and follow CTE pathways that result in credentials of value.<sup>34</sup>
- WIOA funding is available to states. This funding 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.<sup>35</sup>
- TANF can be leveraged to braid and blend funds to support strengthened coordination within the workforce system as allowed under WIOA.
- Secondary agencies and local districts can leverage portions of the Every Student Succeeds Act (ESSA), which includes CTE in its definition of a “well-rounded education” and requires the coordination of ESSA and Perkins plans.<sup>36</sup> Specifically, Title I, Part A; Title I Direct Student Services Funds; and Title IV, Part B and Part F can be used to support expanded access within and across states.

### LOCAL FUNDING

- At the local level, funds can be often braided with state and federal dollars to support CTE programs within and across states particularly at the secondary level.
- In addition to public funding, community-based organizations and other intermediaries can help by providing in-kind donations. Private funding is also available to provide grants to support expanded access.



## POOL FUNDING TO SHARE RESOURCES ACROSS THE BROADER REGION OR STATE



Pooling funds is an opportunity available to states, counties and districts to maximize their collective funds to support expanded access to high-quality CTE within and across state lines. While variations in methods to pool funding can coexist to support expanded access, opportunities such as pooling Perkins V and/or local property taxes can defray the costs associated with supporting learners outside of their home districts. States can work with neighboring states, and counties and districts can work with neighboring counties and districts to pool funds for CTE programs to support learners outside of their geographic boundaries. Some options for pooling local taxes to support expanded access to high-quality CTE programs, and more equitably distribute funding and resources, include:

- Levy a designated property tax for education and then pool the proceeds and distribute them to districts in proportion to their enrollment.<sup>38</sup>
- Pool all property taxes at the county level and distribute funds to school districts based on a legislated formula.<sup>39</sup>
- Pool property tax money at the state level and distribute this revenue along with a mix of state dollars through the state's formula.<sup>40</sup>
- Move property tax collection for education to the state level. The rate of the state education tax varies depending on the payer's home school district and its budgeted spending, but the tax itself is collected and pooled at the state level and no funding is retained locally.<sup>41</sup>
- Revenue sharing could also be done across regions within states, along municipal lines or even between neighboring districts.<sup>42</sup> Using geographic, revenue and enrollment data, states can determine the impact of revenue sharing at the neighborhood, county or state level. [Clean Slate](#) is a resource from EdBuild that helps to explore the effect of different pooling arrangements.<sup>43</sup>

**Wyoming** has adopted a unique recapture mechanism that pools excess revenue beyond what the state deems adequate so every school district can be funded fairly.

<sup>44</sup> The state determines a revenue entitlement for each school district using a resource-based allocation system

and accounts for factors such as staff salaries and course materials. Once the revenue entitlement is calculated, each district taxes \$25 for every \$1,000 in assessed local property wealth, and each county taxes \$6 for every \$1,000 in property wealth. The county tax is distributed to each school district in the county in proportion to its student enrollment. The taxes, in addition to other local sources, account for each district's local contribution to K-12 education. The local contribution is then subtracted from the state's estimated cost of providing education in that school district, and the difference is made up through state aid.<sup>45,46</sup>

States and districts can also leverage pooled resources to hire instructors or other key personnel, such as a work-based learning coordinator, or support CTE instructors with professional development and resources to ensure that instructors are equipped to serve each learner. **Georgia** has a statewide professional learning consortium called the [Career, Technical, and Agricultural Education Resource Network](#), which provides resources and training for K-12 CTE teachers and administrators. The consortium pools state resources to provide professional learning supports and resources at scale to all CTE educators.<sup>47</sup> Local education agencies set aside 5 percent of their Perkins allotment to feed into the statewide organization. This example of pooling resources can lend itself to expanding access to high-quality CTE and work-based learning opportunities by sharing resources, instructors and funds to support CTE programs within and across states.

Postsecondary institutions can also work together within and across states to pool teaching resources to jointly leverage their curricular offerings.<sup>48</sup> Large-scale inter-college instructional collaboration benefits learners by providing more options in choosing their courses and broadens the reach of colleges and universities by expanding the pool of potential learners for courses, reducing the chance of under-enrollment. Postsecondary institutions can work together to aim for symmetry in the number of class seats exchanged among collaborators, identify suitable courses at each institution, and develop structures to avoid anti-trust concerns. This strategy can apply to online and in-



person curricular offerings, and this type of pooling of instructional and virtual classroom resources provides more accessible postsecondary education to learners.

Wellesley College in **Massachusetts** has an agreement that permits students to cross-register during the fall and spring semesters for Massachusetts Institute of Technology (MIT) courses for which they meet prerequisites, including undergraduate and graduate courses. The courses these students take at MIT count toward their Wellesley degrees and the grades from those courses are reported on the transcript and counted in the students' Wellesley grade point average.<sup>49</sup> In addition to its agreement with Wellesley College, MIT has cross-registration agreements with Harvard University and the Massachusetts College of Art and Design. Cross-registration is available to

these students also in their fall and spring terms, and each school has its own cross-registration rules that students must review to determine if they are eligible.<sup>50</sup> Leaders can leverage this model to expand access by implementing cross-registration agreements among institutions within and across state borders.

Postsecondary institutions and school districts can work together to pool funding and capacity to expand access to college and career pathways within a region. Higher education and K-12 institutions can leverage their resources and capacity to help learners engage in CTE opportunities that are not typically available to them by addressing accessibility needs common to their regions and working together to expand CTE course offerings and work-based learning opportunities with local employers.

### POSTSECONDARY INSTITUTIONS AND SCHOOL DISTRICTS WORKING TOGETHER: EXPANDING ACCESS FOR ALL LEARNERS

**The Southwest Colorado Education Collaborative** is an amalgam of five Southwest Colorado school districts and two postsecondary institutions that dedicate their pooled funding, resources and capacity to expand opportunities for all learners in the region. The collaborative strengthens existing college and career pathways and develops new pathways that are available to any learner in any district.<sup>51</sup> School districts gain partners to share resources, meet learners' needs and interests and are sustainable over time. Local employers benefit from an increase in job-ready individuals to help address workforce shortages. Higher education institutions build relationships with K-12 institutions and learners who are more likely to enroll after their early college experiences with campuses and facilities.

The initiative supports school districts in developing deeper partnerships to address common challenges, and learners benefit from dynamic and culturally responsive programming, exposure to new opportunities, targeted job training, and the opportunity to earn college credit.

Southwest  
Colorado  
Education  
Collaborative



### INCENTIVIZE INDUSTRY ENGAGEMENT



Industry and employers are critical to expanding access to high-quality CTE and work-based learning. States can increase the representation of employers and industry through policies that encourage employer engagement and leverage intermediaries to support expanded access with employers through incentives.



Establishing, sustaining and promoting a comprehensive set of industry and employer engagement incentives is necessary for supporting education to workforce pathways. Incentives may

include grant funds, tax credit, or local and regional support services. Successful states, such as **Georgia**, **Indiana** and **Ohio**, have multiple types of incentives including tax credits, grants and reimbursement for earned credentials funded by employers.<sup>52</sup> They also have resources to develop and support the capacity of the regional/local intermediaries to amplify employer engagement and have clear communications about the value and return on investment of various types of engagement.



### OFFER IN-STATE FINANCIAL AID WITH RECIPROcity AGREEMENTS



At the postsecondary level, tuition reciprocity programs make out-of-state schools more affordable for non-resident learners, providing greater access to pursue and complete CTE programs. Tuition reciprocity refers to a discount on tuition, independent of any other financial aid a learner may qualify for, and takes the form of an agreement between states, counties or schools that allows learners to attend out-of-state higher education institutions for reduced or in-state tuition rates.



State, regional, county and individual agreements for tuition reciprocity programs are opportunities to expand access both within and across states for postsecondary learners. Institutions opt in to agreements that exist across regions, states and counties, providing learners with access to these schools, including both two-year and four-year colleges and universities.

Reciprocity agreements provide opportunities for learners to leverage expanded, equitable access to high-quality postsecondary CTE programs and for higher education institutions to attract more learners and increase their enrollment. Tuition reciprocity helps to improve the quality of academic programs an institution already offers instead of diverting funds to develop additional programs that duplicate those at other institutions.

Regional interstate education compacts facilitate agreements that offer learners in the states participating in the program reduced tuition rates at the public colleges and universities that opt in. Regional agreements include the **Midwest Student Exchange Program**,<sup>53</sup> the New England Regional Student Program **Tuition Break program**,<sup>54</sup> the **Western Undergraduate Exchange**,<sup>55</sup> the **Academic Common Market**,<sup>56</sup> and the **Regional Contract Program for Health Professions**.<sup>57</sup>

Individual state agreements can be established between neighboring states or a group of states to determine where learners can attend universities, colleges and technical colleges in the other state at that state's resident tuition rate. County agreements allow learners who are residents of certain out-of-state counties to pay in-state tuition. This type of agreement can be especially beneficial for specific CTE programs that are in high demand.





## FLEXIBLE AND SUSTAINABLE FUNDING STRUCTURES: AREA TECHNICAL CENTERS

Area technical centers (ATCs), incubated by federal law and investments, are CTE-focused institutions that serve learners from across multiple geographies, such as school districts, educational service areas, and workforce development areas or regions.<sup>58</sup> ATCs leverage a variety of funding structures that states and districts can apply to expand access to high-quality CTE and work-based learning within and across states.



**Delaware** ATCs use local taxes as the primary source of funding for vocational/technical school districts, but they also use state block grants, Perkins V and WIOA funding. Locally, the school district uses the fees a learner pays when they register for classes to purchase textbooks and provides wraparound services such as gas cards, bus tickets, clothes, protective equipment and English learner support.<sup>59</sup>



**Florida** ATCs solely serve postsecondary and adult learners and are largely funded by the state's workforce development fund and tuition. They receive principal funding from K-12 school districts and leverage Perkins V and WIOA funding.<sup>60</sup>



**Ohio** ATCs leverage federal, state and local funds to support their institutions. Federal funding from Perkins V supports their secondary learners; secondary learners who participate in CTE outside of their home districts bring a percentage of their per-student allocation to the ATC. The per-person funding that travels with each learner remains in the public system. Federal funding from WIOA is also available to these institutions because they are eligible training providers that can receive WIOA Title I funds. State allocations support CTE at the secondary level, and a state-legislated funding formula provides the ATCs with additional funding based on full-time equivalencies (FTE)

for five different categories of high-wage, high-demand programs. The CTE programs that fall into category one receive the largest state subsidy whereas categories four and five have significantly fewer allocations per FTE. With this structure, Ohio ATCs are incentivized to offer programs aligned with community employers. Their ATCs are also funded through opportunity grants, aid for special learner populations and graduation bonuses. State funding allocations in the biennial budget also support adult learners and are distributed via a performance funding model averaged over three years and based on program completion, student retention, positive post-completion placement and credential attainment. ATCs in Ohio also leverage local taxes via separate CTE levies as approved by voters in each associated school district.<sup>61</sup>

**Oklahoma** ATCs also leverage local taxes and a portion of the state budget for CareerTech. These funds are allocated to districts via a state-approved funding formula.<sup>62</sup>



**Utah** ATCs are funded primarily through state allocations that are approved by the state Legislature. ATCs in Utah also receive supplemental performance-based funding through a weighted formula that incorporates certificate program graduates, occupational training, positive placement rates and efficiency of program completion.<sup>63</sup>



## RESOURCES TO SUPPORT Incentivizing Access With Flexible and Sustainable Funding

- [Braiding Funding to Support Equitable Career Pathways](#) (Advance CTE and Education Strategy Group)
- [Career, Technical, and Agricultural Education Resource Network](#) (Career Technical Agricultural Education Research Network)
- [Funding for Value: Maximizing the Impact of Career and Technical Education Funding](#) (ExcelinEd)



## Capture Learners' Credits, Credentials and Experiences

Meaningful expanded access within and across states calls for policy reform that ensures that CTE programs and career pathways from secondary systems to postsecondary systems are flexible for learners. States with CTE without borders should guarantee that learners' credits, credentials and experiences are captured, stackable and articulated to progressively higher levels of credentials and degrees.

In many instances, secondary and postsecondary institutions struggle to align accountability determinations, credit transfer, prior learning and more. This alignment challenge is further exacerbated by employers and industry partners providing real-world work experiences and learners leveraging these opportunities to further their progress in their CTE programs. The added complexity of expanded access within and across states can compound these challenges and prevent learners from successfully completing CTE programs and transitioning into a high-wage, high-demand career.

States with fully realized expanded access to high-quality CTE and work-based learning will include institutions, postsecondary systems and/or state policies that recognize the experiences of learners, including those with experiences outside of their geographic regions, to ensure that learners do not experience credit loss that puts them behind in earning a degree or credential. Capturing the credits and credentials of learners is imperative to accelerate learners' progress toward a postsecondary degree, credential, apprenticeship or job in their desired field.

To effectively capture the credits, credentials and experiences of learners to support expanded access within and across states, leaders should consider:

- **Addressing accountability and reporting determinations in a memorandum of understanding (MOU);**
- **Cross-walking courses, course codes and apprenticeships within and across states;**
- **Establishing credit transfer and articulation systems;**
- **Establishing reciprocity agreements; and**
- **Expanding learning and employment records (LERs).**



## STRATEGIES AND ACTIONS

### to Capture Learners' Credits, Credentials and Experiences



#### ADDRESS ACCOUNTABILITY AND REPORTING DETERMINATIONS IN AN MOU



Coordinating agencies and institutions to collaboratively expand access for learners requires alignment on metrics and accountability determinations when monitoring access to CTE programs, success within CTE programs, and learner outcomes in CTE programs.

A critical component is determining which institution reports the learner for state and/or federal accountability purposes. As partners determine roles and responsibilities, identifying how each partnering school, district, postsecondary institution and state will be held accountable for learner and program outcomes is critical for data clarity and implementation. Generally, decisions around accountability should align with decisions around funding. If a learner completes a program of study at an institution outside of their region — such as an ATC or virtually in another state

— the institution providing the CTE instruction should both be funded accordingly and be responsible for their CTE-related outcomes. **Ohio** ATCs leverage a similar practice with the district encompassing the CTE-serving school being responsible for federal and state CTE accountability measures.<sup>64</sup>

Initiatives such as PrepareRI in **Rhode Island** and the Rural Schools Innovation Zone in **Texas**, which provide expanded access to CTE and work-based learning, require learners' home districts to report accountability for their learners engaging in programs outside of their district. Leaders can replicate this practice within their own states by clarifying the reporting and accountability determinations in the MOU with partnering secondary institutions and ensuring that the reporting remains with the learners' home district.



#### CROSS-WALK COURSES, COURSE CODES AND APPRENTICESHIPS WITHIN AND ACROSS STATES



To further increase credential portability in expanded access, leaders should cross-walk courses and course codes to make them portable across state lines. With cross-walked courses and course codes, learners and institutions are circumventing issues with course and credential alignment. Cross-walking courses will require leaders across state lines to come together and review their courses, agree on common definitions and language, and implement courses aligned to the shared agreements within and across states.

Cross-walks are also beneficial for apprenticeships with academic credit and are increasingly recognized as a way to provide learners with academic and workplace skills as well as to support the economy of a community, region or state.<sup>65</sup> **Virginia** specifically cites academic credit for those who complete registered apprenticeships and requires each community college to develop policies and procedures for awarding

academic credit to any student who has successfully completed a state-approved registered apprenticeship credential in a field that is aligned with a credit-bearing program of study at the comprehensive community college in which the student is enrolled.<sup>66</sup>

The block transfer of lower-division general education attainment based on multi-state faculty-developed learning outcomes and proficiency criteria is also foundational to the Western Interstate Commission for Higher Education's Interstate Passport, a nationwide network of two-year and four-year colleges and universities.<sup>67</sup> While not specific to CTE, the model Interstate Passport used to create a framework for identifying and recognizing common learning outcomes and proficiency criteria across a diverse range of institutional offerings can provide valuable lessons learned.



## ESTABLISH CREDIT TRANSFER AND ARTICULATION SYSTEMS

Credit transfer systems that currently exist within states through one-to-one agreements between institutions and educational providers result in a complex system that creates inefficiencies for learners.<sup>68</sup> To support expanded access to high-quality CTE and work-based learning in terms of credit transfer, leaders should consider implementing statewide and cross-state transfer and articulation agreements that create a standardized approach to provide learners with transparency and ease of use.

A transparent and efficient credit transfer and articulation system should require the participation of all institutions, guarantee the transfer of certifications and associate degrees that include credit earned from out-of-college learning, and ensure articulation of all credits earned toward degrees and credentials.<sup>69</sup>

The **Ohio** Transfer and Articulation Policy guarantees the transfer of academic credit for many forms of out-of-college learning including military, apprenticeships, CTE and prior learning assessments (PLAs). This policy also outlines a competency-based common core, stackable credentials and associate to bachelor's degree pathways.<sup>70</sup> **Oregon** has established major-specific transfer maps and statewide transfer degrees; this state also recognizes that seamless transfer is an equity priority and prioritizes accessibility and affordability for many historically under-represented learner groups engaging in CTE programs and credit attainment in postsecondary institutions.<sup>71</sup>

Considerations pertaining to quality for expanded access

to CTE courses and work-based learning opportunities include factors that can affect online course offerings, such as policies, rules and regulations that affect for-credit college CTE programs.<sup>72</sup> These factors can include certification, licensing and accreditation requirements that traditionally require students to complete exams in person to demonstrate skills or be present for in-person learning hours. To remedy these issues, institutions providing expanded access via virtual learning should consider working closely with industry and employer partners to ensure that requirements accommodate online or hybrid modalities.<sup>73</sup> States should also consider adapting accreditation requirements to allow for more online program delivery and ensure that these changes are sustainable.

The State Authorization Reciprocity Agreement (SARA) is a voluntary initiative designed to establish comparable standards for U.S. states and territories regulating postsecondary distance education. With its reciprocity provisions, the agreement enables institutions to gain approval from their "home state" to offer distance education in participating states without having to individually apply to each state for such approval. The agreement is coordinated by the National Council for State Authorization Reciprocity Agreements in collaboration with the four regional higher education compacts, and currently, 49 states have opted to join. Participation is at the institutional level, meaning that all distance education courses offered by a participating institution — including postsecondary CTE offerings — are covered by the agreement when offered in accordance with SARA's policies.<sup>74</sup>



## ESTABLISH RECIPROCITY AGREEMENTS

Providing expanded access for learners within and across states will require reciprocity for PLAs, industry-recognized credentials, state-approved programs of study and licenses to meet learners' and industry's needs.

Reciprocity for PLAs ensures that learners, no matter where they are in their CTE program, are valued for their prior experiences and the knowledge they bring to their program. To establish reciprocity for PLAs, leaders should work together to evaluate their credit for prior learning (CPL) policies. Examination and development of CPL policy are most effective when

evaluated through an equity lens. The core elements of examining CPL policies are establishing CPL as a priority; ensuring that CPL values all learners and high-quality learning; establishing CPL processes that are transparent, seamless and learner centered; ensuring that CPL is powered by high-quality data; and leveraging CPL to enhance institutional effectiveness.<sup>75</sup>

Leaders expanding access should align credentials within and across states to ensure that all industry credentials earned in secondary or postsecondary are aligned with high-demand, high-skill, high-



wage occupations and valued by state and regional employers, some of which may cross state lines.<sup>76</sup> When establishing reciprocity for industry-recognized credentials, leaders working within and across states to expand access to CTE and work-based learning should ensure that credentials are aligned with employer demand, that they meet a basic wage threshold, and that learners are earning credentials that are valued in the labor market. **Louisiana** has an industry-recognized credential and CPL cross-walk. The state has identified which industry-recognized credentials count toward which credits and courses at their institutions.<sup>77</sup>

Reciprocity for state-approved programs of study provides learners the opportunity to navigate their CTE programs outside of their home districts or home states and still progress in their CTE programs. States and leaders can consider abbreviated approval processes for programs already approved by another state's workforce development board.<sup>78</sup>

Licensure requirements across state lines vary, and a lack of reciprocity agreements can create challenges for trainees and providers, particularly for those who commute across state lines for work.<sup>79</sup> To meet industry's needs, states expanding access should align their licensure requirements to ensure that learners have the competencies and skills necessary to enter a career regardless of where their learning occurs. Expanding reciprocity agreements among states should include adding training programs based in other states to the state-eligible training provider list and modifying these programs to allow them to go through the approval process.<sup>80</sup> States can enhance this approval process that already exists within states because many states allow individuals to use WIOA funds for an out-of-state program as long as the other state's eligible training provider list includes the program.<sup>81</sup>

The Nurse Licensure Compact (NLC) is an example of expanding access across state borders. In 2015, State Boards of Nursing developed and adopted the compact to allow nurses to have one multi-state license. Under the NLC, nurses can practice in other NLC states without having to obtain additional licenses.<sup>82</sup> Leaders can leverage this compact model to expand access across states for learners in other programs.

## EXPANDING ACCESS TO ONLINE POSTSECONDARY EDUCATION: ILLINOIS COMMUNITY COLLEGES ONLINE



**Illinois Community Colleges Online (ILCCO)** is a consortium of Illinois community colleges working together to provide leadership, facilitate collaboration, and share resources in online and technology-enhanced education.<sup>83</sup> Part of ILCCO's mission is to facilitate online course sharing through an internet course exchange among member colleges.

ILCCO's course sharing system allows learners to look beyond their institution's course offerings to meet their needs. The learner works through their institution and has one point of service. The learner registers through their institution and receives all student services there, but they are taught by an instructor at another institution. This system provides learners with an easier solution than enrolling at another institution and provides access to course offerings to meet their needs. It allows the student to remain local and simplifies the process for them in areas such as enrollment, financial aid, billing and transportation.

Course sharing arrangements are made through an ILCCO champion on each institution's campus. If a situation arises in which course sharing may be indicated, an adviser will work with the student to identify the needed course using ILCCO's internet course exchange system or work with the champion to identify options.

This consortium model supports expanded access within the state and provides learners with various course offerings to meet their needs and complete their postsecondary education programs. More information about ILCCO, including documents that can assist states seeking to replicate the model, can be found in the following resources:

- ILCCO [Course Sharing FAQ](#),<sup>84</sup>
- ILCCO [Course Sharing Policy](#),<sup>85</sup>
- ILCCO [Enrollment Process](#),<sup>86</sup> and
- ILCCO [Strategic Plan](#).<sup>87</sup>



**EXPAND LERs**



LERs are systems that contain verifiable information about a person’s achievements across a range of contexts, including formal or informal classroom-based or workplace-based education or training processes.<sup>88</sup> Effective LERs record, verify, transmit and interpret information about an individual’s learning achievements. With expanded access to high-quality CTE and work-based learning within and across state lines, learners and workers need a dynamic record of their learning, work experiences and achievements that is interoperable and easily shared with institutions and employers.

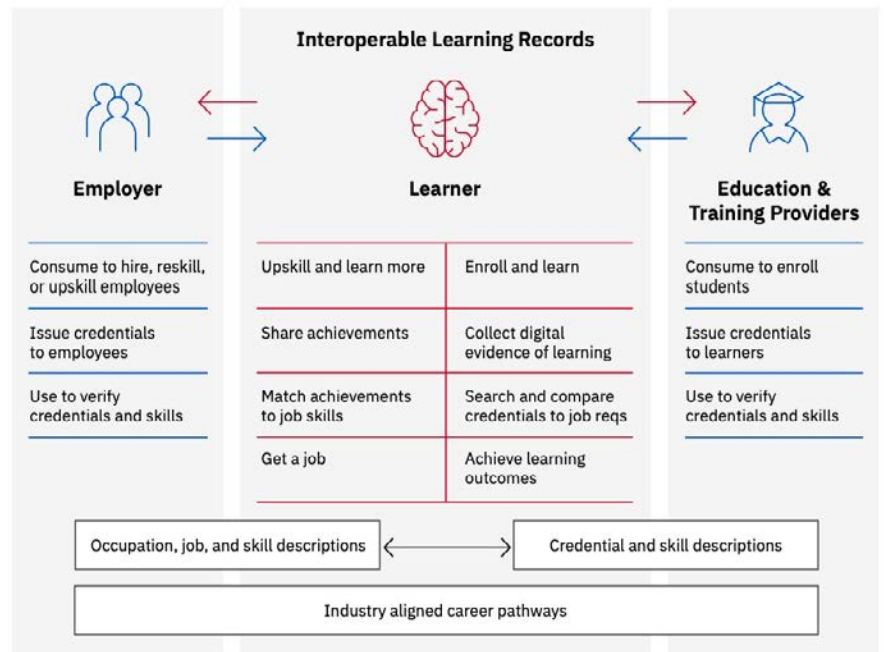
LERs should build a collective profile of achievement that represents the entirety of an individual’s experience.<sup>89</sup> These detailed records allow learners and workers to have control over their records, as well as the portability of their achievements to easily share their

skills and capabilities with institutions and employers. Additionally, employers and industry are provided with clear and transparent signals of job readiness that are responsive to their needs.

To provide learners, employers and institutions with robust records that capture all of learners’ skills and experiences, states and leaders should consider changes to learner records that reflect all courses they complete, credentials they attain, work-based learning placements they engage in, and skills and competencies mastered throughout their CTE programs and related experiences. Finally, states and leaders should support the infrastructure and investments for LERs and consider how to implement the digital and data needs of LERs. States can leverage federal and state funds and grants to help support an LER interoperable system.<sup>90</sup>

**EXPANDING ACCESS TO LEARNERS’ ACHIEVEMENTS, SKILLS AND EXPERIENCES: INTEROPERABLE LERs**

This diagram, developed by the American Workforce Policy Advisory Board, depicts how interoperable learning records work for employers, learners and institutions. Expanding learning records supports learners engaging in expanded access to high-quality CTE and work-based learning opportunities within and across states by capturing all their achievements, knowledge and skills that are relevant to their career field.





## RESOURCES TO SUPPORT

### Capturing Learners' Credits, Credentials and Experiences

- [All Learning Counts: State Policy Toolkit](#) (Lumina Foundation)
- [Embedding Credit for Prior Learning in Career Pathways](#) (Advance CTE and Education Strategy Group)
- [Industry-Valued Credentials Example Policies](#) (ExcelinEd)
- [Louisiana's Crosswalk of Industry Recognized Credentials and CPLs](#) (Louisiana Department of Education)
- [Mapping Upward: Stackable Credentials that Lead to Careers](#) (U.S. Department of Education)
- [Understanding Competency-Based Education, Credit for Prior Learning, and Other Flexible Learning Approaches in California](#) (California Edge Coalition)

Visit Advance CTE's Learning that Works Resource Center to read the complete ***CTE Without Borders*** series.

# Endnotes

- <sup>28</sup> Colorado Community College System. (n.d.). *Colorado Perkins plan*. <http://coloradostateplan.com/administrator/perkins/perkins-forms-and-files/>
- <sup>29</sup> Association for Career and Technical Education, National Skills Coalition, & Advance CTE. (n.d.). *Aligned by design: WIOA and Career Technical Education*. [https://cte.careertech.org/sites/default/files/Aligned\\_Design\\_WIOA\\_CTE\\_2015.pdf](https://cte.careertech.org/sites/default/files/Aligned_Design_WIOA_CTE_2015.pdf)
- <sup>30</sup> ExcelinEd. (2019, February). *Funding for value: Maximizing the impact of career and technical education funding*. <https://excelined.org/wp-content/uploads/2019/01/ExcelinEd.CTEPlaybook4.FundingforValue.February2019.pdf>
- <sup>31</sup> Kentucky Department of Education. (2022, September). *Computer Science/IT Academy*. <https://education.ky.gov/school/diglrn/Pages/ComputerScienceITAcademy.aspx>
- <sup>32</sup> ExcelinEd. (2018) *College and career pathways industry certifications policy brief*. <https://www.excelined.org/wp-content/uploads/2018/07/ExcelinEd.PolicyToolkit.CollegeCareerPathways.IndustryCertificationsPolicyBrief.2018.pdf>
- <sup>33</sup> ExcelinEd. (2019, February). *Funding for value: Maximizing the impact of career and technical education funding*. <https://excelined.org/wp-content/uploads/2019/01/ExcelinEd.CTEPlaybook4.FundingforValue.February2019.pdf>
- <sup>34</sup> U.S. Department of Education. (n.d.). *Perkins V*. <https://cte.ed.gov/legislation/perkins-v>
- <sup>35</sup> U.S. Department of Labor. (n.d.). *Workforce Innovation and Opportunity Act*. <https://www.dol.gov/agencies/eta/wioa>
- <sup>36</sup> Every Student Succeeds Act, 4 U.S.C. § 8002 (52) (2015). <https://www.congress.gov/bill/114th-congress/senate-bill/1177>
- <sup>37</sup> Advance CTE. (2002, January). *Braiding funding to support equitable career pathways*. <https://careertech.org/resource/braiding-funding>
- <sup>38</sup> “Final Operating Budget, Fiscal Year 2019,” p. 2, Brandywine School District, January 14, 2019, [https://www.brandywineschools.org/site/handlers/filedownload.ashx?moduleinstanceid=7720&dataid=8337&FileName=FY\\_19\\_FINAL\\_OPERATING\\_BUDGET\\_-\\_FINAL.pdf](https://www.brandywineschools.org/site/handlers/filedownload.ashx?moduleinstanceid=7720&dataid=8337&FileName=FY_19_FINAL_OPERATING_BUDGET_-_FINAL.pdf)
- <sup>39</sup> Wyo. Stat. Ann. § 21-13-201 (Lexis 2020).
- <sup>40</sup> Taylor, M. (2012, November 29). *Understanding California’s property taxes*. Legislative Analyst’s Office, California Legislature. <http://www.lao.ca.gov/reports/2012/tax/property-tax-primer-112912.pdf>
- <sup>41</sup> Saas, D. R. (2007, January). *School finance in Vermont: Balancing equal education and fair tax burdens*. New England Public Policy Center. <https://www.bostonfed.org/-/media/Documents/Workingpapers/PDF/neppcdp0701.pdf>
- <sup>42</sup> EdBuild. (2020). *Clean slate*. <https://edbuild.org/content/clean-slate/full-report.pdf>
- <sup>43</sup> *bid*.
- <sup>44</sup> Marar, S. (2020, July). *School finance policy in Wyoming promotes equity between districts*. Reason Foundation. <https://reason.org/commentary/school-finance-policy-in-wyoming-promotes-equity-between-districts/>
- <sup>45</sup> *Ibid*.
- <sup>46</sup> Nickerson, G. (2013, June). *Two key facts to know about Wyoming’s K-12 education funding*. WyoFile. <https://wyofile.com/wyomings-k-12-education/>
- <sup>47</sup> Career, Technical, and Agricultural Education Resource Network. (n.d.). <https://www.ctaern.org/what-is-ctae>
- <sup>48</sup> Villasenor, J. (2020, June). *Why colleges should pool teaching resources*. The Chronicle of Higher Education. [chronicle.com/why-colleges-should-pool-teaching-resources](https://www.chronicle.com/why-colleges-should-pool-teaching-resources)
- <sup>49</sup> Wellesley College. (n.d.). *Cross-registration with the Massachusetts Institute of Technology*. [https://www.wellesley.edu/registrar/registration/cross\\_reg/mit](https://www.wellesley.edu/registrar/registration/cross_reg/mit)
- <sup>50</sup> Massachusetts Institute of Technology Registrar’s Office. (n.d.). *Cross-registration*. <https://registrar.mit.edu/registration-academics/registration-information/cross-registration>



## Endnotes continued

- <sup>51</sup> The Southwest Colorado Education Collaborative. (n.d.). <https://www.swcoedcollaborative.org/history-and-funding>
- <sup>52</sup> ExcelinEd. (n.d.). *Framework of policies: Employer engagement*. <https://pathwaysmatter.org/policies/?policy=industry-engagement-incentives>
- <sup>53</sup> Midwestern Higher Education Compact. (n.d.). Midwest Student Exchange Program. <https://msep.mhec.org/>
- <sup>54</sup> New England Board of Higher Education. (n.d.). Tuition Break. <https://nebhe.org/tuitionbreak/>
- <sup>55</sup> Western Interstate Commission for Higher Education. (n.d.). Western Undergraduate Exchange (WUE). <https://www.wiche.edu/tuition-savings/wue/>
- <sup>56</sup> Southern Regional Education Board. (n.d.). Academic Common Market. <https://www.sreb.org/academic-common-market>
- <sup>57</sup> Southern Regional Education Board. (n.d.). *Regional Contract Program*. <https://www.sreb.org/regional-contract-program>
- <sup>58</sup> Advance CTE. (n.d.). *Area technical centers*. <https://areatechnicalcenters.org/>
- <sup>59</sup> Advance CTE. (n.d.). *Area technical centers: Supporting postsecondary skill and credential attainment in Delaware*. <https://areatechnicalcenters.org/wp-content/uploads/2021/01/ATC-StateProfile-Delaware.pdf>
- <sup>60</sup> Advance CTE. (n.d.). *Area technical centers: Supporting postsecondary skill and credential attainment in Florida*. <https://areatechnicalcenters.org/wp-content/uploads/2021/02/ATC-StateProfile-Florida.pdf>
- <sup>61</sup> Advance CTE. (n.d.). *Area technical centers: Supporting postsecondary skill and credential attainment in Ohio*. <https://areatechnicalcenters.org/wp-content/uploads/2021/01/ATC-StateProfile-Ohio.pdf>
- <sup>62</sup> Advance CTE. (n.d.). *Area technical centers: Supporting postsecondary skill and credential attainment in Oklahoma*. <https://areatechnicalcenters.org/wp-content/uploads/2021/01/ATC-StateProfile-Oklahoma.pdf>
- <sup>63</sup> Advance CTE. (n.d.). *Area technical centers: Supporting postsecondary skill and credential attainment in Utah*. <https://areatechnicalcenters.org/wp-content/uploads/2021/01/ATC-StateProfile-Utah.pdf>
- <sup>64</sup> Advance CTE. (n.d.). *Area technical centers: Supporting postsecondary skill and credential attainment in Ohio*. <https://areatechnicalcenters.org/wp-content/uploads/2021/01/ATC-StateProfile-Ohio.pdf>
- <sup>65</sup> Advance CTE. (2019, April). *Developing credit for prior learning policies to support postsecondary attainment for every learner*. [https://cte.careertech.org/sites/default/files/files/resources/Advance\\_CTE\\_Credit\\_for\\_Prior\\_Learning\\_April2019\\_0.pdf](https://cte.careertech.org/sites/default/files/files/resources/Advance_CTE_Credit_for_Prior_Learning_April2019_0.pdf)
- <sup>66</sup> Code of Virginia. *Policy of award of academic credit for apprenticeship credentials*. <https://law.lis.virginia.gov/vacode/title23.1/chapter29/section23.1-2907.1/>
- <sup>67</sup> Western Interstate Commission for Higher Education. (2023). *Interstate Passport*. <https://interstatepassport.wiche.edu/>
- <sup>68</sup> Research for Action. (2020). *All learning counts: State policy toolkit*. [https://www.researchforaction.org/wp-content/uploads/2021/08/AllLearningCountsStatePolicyToolkit\\_12\\_7\\_2020.pdf](https://www.researchforaction.org/wp-content/uploads/2021/08/AllLearningCountsStatePolicyToolkit_12_7_2020.pdf)
- <sup>69</sup> *Ibid.*
- <sup>70</sup> *Ibid.*
- <sup>71</sup> *Ibid.*
- <sup>72</sup> Anderson, T., Briggs, A., & Lopez, D. (2021). *Online career and technical education programs during the pandemic and after: A summary of college survey findings*. Urban Institute. [https://www.urban.org/sites/default/files/publication/104193/online-career-and-technical-education-programs-during-the-pandemic-and-after\\_1.pdf](https://www.urban.org/sites/default/files/publication/104193/online-career-and-technical-education-programs-during-the-pandemic-and-after_1.pdf)
- <sup>73</sup> *Ibid.*
- <sup>74</sup> NC-SARA. (n.d.). <https://www.nc-sara.org/about-nc-sara>
- <sup>75</sup> Advance CTE. (2022, July). *Embedding credit for prior learning in career pathways*. [https://cte.careertech.org/sites/default/files/files/resources/CPL\\_PolicyBenchmarkTool\\_090922.pdf](https://cte.careertech.org/sites/default/files/files/resources/CPL_PolicyBenchmarkTool_090922.pdf)

## Endnotes continued

- <sup>76</sup> ExcelinEd. (n.d.). *Pathways matter framework of policies*. <https://pathwaysmatter.org/policies/?policy=skills-retraining-credentialing>
- <sup>77</sup> Louisiana Community and Technical College System. (2019, July). *LCTCS IBC to credit matrix*. <https://campussuite-storage.s3.amazonaws.com/prod/1558543/91b64910-2d2e-11e8-8c09-0a7155647e8a/1957696/0592a192-a968-11e9-bb28-12fbbed74e94/file/LCTCS%20%20IBC%20to%20Credit%20Matrix%20-%20July%202019.pdf>
- <sup>78</sup> Bauman, K., & Christensen, C. (2018, September). *Improving skills through America's workforce development system*. American Enterprise Institute. <https://www.aei.org/wp-content/uploads/2018/09/Improving-Skills-Through-Americas-Workforce-Development-System.pdf>
- <sup>79</sup> *Ibid.*
- <sup>80</sup> *Ibid.*
- <sup>81</sup> *Ibid.*
- <sup>82</sup> National Council of State Boards of Nursing. (n.d.). *Nurse Licensure Compact*. <https://www.ncsbn.org/compacts/nurse-licensure-compact.page>
- <sup>83</sup> Illinois Community Colleges Online. (n.d.). <http://www.ilcco.net/ILCCO/>
- <sup>84</sup> Illinois Community Colleges Online. (2018, June 8). ILCCO course sharing FAQ. <https://docs.google.com/document/d/1GwwN6Q7GVGw-hosl5yc89uUwhgFDrmui/edit>
- <sup>85</sup> Illinois Community Colleges Online. (n.d.). *Course sharing operational information*. <https://docs.google.com/document/d/1tloH4C4Mo88KIW97BVFmvsbijLK9ZsgNt/edit>
- <sup>86</sup> Illinois Community Colleges Online. (n.d.). *Enrollment form*. [https://drive.google.com/file/d/1c3PF2yoWXgeBYK1EKVq\\_8H-RMBTxGFqV/view](https://drive.google.com/file/d/1c3PF2yoWXgeBYK1EKVq_8H-RMBTxGFqV/view)
- <sup>87</sup> Illinois Community Colleges Online. (2019, June 12). *ILCCO strategic plan*. <https://docs.google.com/document/d/17c2HVqg4zRUKk8QBV05ZQ5AwRVI4Hhur/edit>
- <sup>88</sup> American Workforce Policy. (2020, September). *Learning and employment records: Progress and the path forward*. <https://www.commerce.gov/sites/default/files/2020-09/LEWhitepaper09222020.pdf>
- <sup>89</sup> *Ibid.*
- <sup>90</sup> *Ibid.*