

Expanding Access to Opportunity

This brief, the fourth in a series focused on equity in Career Technical Education (CTE), examines strategies state leaders can use to expand CTE opportunities for each learner, including low-income learners, learners of color, learners with disabilities, female learners and other historically marginalized populations. The brief also examines promising strategies that states are using to dismantle barriers that prevent learners from accessing high-quality CTE.

Barriers to Accessing High-Quality CTE Opportunities

In practice, much of the conversation about equity in CTE is centered around access. Working toward parity in CTE programs is a good focus — particularly to ensure that learners are not under- or overenrolled in a specific program area — but such efforts must be coupled with a focus on program quality so that each and every learner is able to access and participate in a high-quality CTE program of their choice.¹

Common Access Barriers in CTE

The following are common barriers that may prevent learners from participating in high-quality CTE programs of study:

- Geography and availability of high-quality CTE programs in their school or institution of record;
- Funding and resources;
- At-home factors (parent involvement, income, trauma, child care needs, health needs);
- Academic preparation;
- Awareness/advising;
- Cultural awareness; and
- Physical and learning disabilities.

CTE programs are widespread in high schools, community colleges and area technical centers across the country. But not all programs are designed equally, and access to truly high-quality CTE programs is less common. While 98 percent of public school districts offered CTE programs to students at the high school level in the 2016-17 school year, only one-third of districts reported that all of their CTE programs were structured as career pathways that align with related postsecondary programs.²

Access gaps are even starker between geographic areas. While 42 percent of urban school districts reported that all of their CTE programs were structured as career pathways that align with related postsecondary programs, only 30 percent of rural districts reported that all of their CTE programs met the same criteria.³ This result indicates that a large swath of learners, particularly those in rural areas, do not have geographical access to high-quality CTE programs of study.









Other factors, such as income, transportation and family status, may also make accessing high-quality CTE program offerings challenging for certain learners. For instance, postsecondary learners may not be able to participate in high-quality CTE programs because they cannot secure child care or transportation. Secondary and postsecondary learners may not be able to participate in CTE programs of study because they are not aware of CTE opportunities, lack the foundational academic skills that are necessary to be successful in high-quality CTE programs, or cannot meet the entrance requirements for CTE programs.

Some states, however, have taken steps to expand access to high-quality CTE programs of study by addressing some of the systemic barriers that hinder learners' participation in CTE programs. In these states, leaders have worked to close access gaps by:

- Securing equitable resources;
- Expanding geographic access to CTE opportunities; and
- Addressing barriers to entry into CTE programs of study.

Securing Equitable Resources

Education institutions at all levels are working toward expanding access to CTE, but resource inequity presents a challenge to these efforts. To help local institutions expand access to high-quality CTE programs, states must target their investments of resources and funds to the communities that are most in need. Compared to other programs, CTE programs can be more expensive to fund due to higher fixed costs for equipment and facilities as well as costs associated with higher wages for teachers with extensive industry work experience, credential exams and paid work-based learning experiences, among other expenses. Additionally, providing sufficient funds and resources to support high-quality CTE programs in high-need areas can be difficult for states because of the distribution of funds and a lack of resources to meet learners' specific needs.

All too often, access to funds and resources at the secondary level is a function of the wealth of the community. States use differentiated structures to fund overall education at the elementary and secondary levels, with roughly 8 percent of funds for elementary and secondary education coming from the federal government. However, the remainder is split mostly between state and local funds, which allows communities with a larger tax base to generate more resources for their local schools and consequently provide greater access to opportunities for learners. In fact, in the 2016-17 school year, school districts in the United States spent \$23 billion more on predominantly white school districts than predominantly non-white school districts despite the districts serving roughly the same number of learners. On average, predominantly non-white school districts received \$2,226 less in funding per student than predominantly white districts, and high-poverty, predominantly non-white districts received \$1,487 less per student than high-poverty, predominantly white school districts. These funding gaps contribute greatly to resource inequities in education across communities with large non-white and low-income populations.

However, even in areas with significant funds dedicated to each learner, if there is not a commitment to quality and funds are not leveraged appropriately, access to high-quality CTE programs can still be an issue. Resource inequities can affect individual learners within the same building as well. For instance, low-income learners who qualify for free and reduced-price lunch or learners with disabilities who may need learning accommodations may require additional care and support in the classroom to unlock their full potential. Resource inequities greatly affect communities that have higher populations of learners with additional needs and have a weaker tax base to draw upon.

At the postsecondary level, the cost of attending an educational institution — above and beyond the cost of tuition — can prevent learners from accessing high-quality CTE programs of study. Many college students have to work part time or full time to support themselves through school. In the United States, 14 million postsecondary learners work more than 15 hours per week. Of those, 43 percent are low income, and about a third are over the age of 30.7

Postsecondary institutions have limited resources to support these learners. While programs such as the federal Pell Grant are available to support high-need learners, they are often insufficient to remove all barriers, particularly the cost of attendance at postsecondary institutions. In 1975, Pell covered 79 percent of the average cost of tuition, fees, room and board at public four-year colleges; today it covers just 29 percent.⁸ This situation is indicative of a pattern of inadequate resources to support learners from historically marginalized populations, particularly in environments with rising costs, including rising tuition costs. State leaders have a responsibility to secure appropriate resources and ensure that each learner has access to high-quality CTE opportunities.⁹

Amarillo College Emergency Fund

The cost of attending a postsecondary institution extends well beyond the cost of tuition. Housing, food, transportation and day care, among other necessities, contribute to the cost of attending a postsecondary institution. For many learners, but particularly for low-income learners, an unexpected cost can be enough to force a learner to drop a class or drop out of a postsecondary program.

Recognizing how tenuous many postsecondary learners' financial situations can be, Amarillo College, a community college in Texas, established an emergency fund to cover costs, such as car repair bills or water bills, that place learners in financial crises. This fund fits within the community college's larger strategy to support learners in poverty.⁸ Amarillo College also provides a legal-aid clinic, a food pantry, a low-cost day care center and free mental health counseling to learners to address the barriers that can prevent learners from participating in postsecondary programs.

Tennessee Promise

Some states, such as **Tennessee**, have taken steps to increase access to high-quality CTE programs at the postsecondary level. In 2014, Tennessee launched the Tennessee Promise program, which provides two years of tuition-free attendance at any of the state's 13 community colleges, 27 Tennessee colleges of applied technology (TCATs), or other eligible institutions offering an associate degree program. The program, which is largely funded through an endowment from the state lottery, is a last-dollar scholarship, meaning it covers college costs not already covered by federal grants.

Tennessee recognized that a lack of monetary funds is not the only barrier preventing learners from accessing postsecondary opportunities. In addition to tuition scholarships, high school students receive guidance and assistance from mentors in applying for college and completing the Free Application for Federal Student Aid. Mentors come from many different backgrounds and commit to mentoring five to 10 high school seniors for a total of 10 to 15 hours per year. In 2017, the Tennessee

Legislature passed the Tennessee Reconnect Act to expand Tennessee Promise and provide tuition scholarships for adult learners. Scholarships are available to eligible non-degree-holding adult students who are admitted to qualifying postsecondary institutions.

The Tennessee Promise program has greatly affected learners' ability to access postsecondary opportunities. In the first year of the program's implementation, the statewide college-going rate increased by 5.9 percentage points to 64.3 percent and has remained at this level since. Additionally, enrollment at public institutions overall increased 11.8 percent in the first year of the program's implementation, with community colleges experiencing a 27.7 percent increase and TCATs experiencing a 20 percent increase in first-time freshmen enrollment.

Tuition-Free vs. Debt-Free College Programs

Tennessee Promise is a tuition-free college program, meaning that it fully covers the cost of tuition at a postsecondary institution. While this support undoubtedly expands access to postsecondary opportunities for learners, such programs tend to favor high-income students whose tuition is not already covered by the federal Pell Grant. Learners in tuition-free college programs may still have to take out loans to pay for housing, books and food, among other expenses. Debt-free college programs subsidize the full cost of attending a postsecondary institution so that learners in the program do not need to take out loans to cover additional costs beyond tuition.

The program also has a positive impact on learners' graduation and transfer rates. Fifty-six percent of Tennessee Promise students who entered college in 2015 had graduated, had transferred or were still enrolled by 2017 — a rate that was 17 percentage points higher than students who had not enrolled in Tennessee Promise. ¹⁴ In total, the program has helped to facilitate more than 50,000 learners' participation in postsecondary opportunities. ¹⁵ By providing financial support and mentorship, Tennessee is able to address some of the major barriers that prevent learners from accessing postsecondary opportunities: lack of resources and advising.

However, the Tennessee Promise program does not cover the additional expenses associated with attending a postsecondary institution, such as books, food, housing and medical costs. As leaders in every state develop programs to expand access to CTE to more learners, considerations must be given to the variety of barriers that prevent learners from accessing programs.

Rhode Island Innovation and Equity Grants

State leaders can also leverage resources to promote systemic change to close equity gaps. **Rhode Island** has begun this work through its Innovation and Equity Grants. An initiative under PrepareRI, a statewide effort to equip all Rhode Island youth with the skills needed for high-wage jobs, the Innovation and Equity Grants aim to expand access to high-quality career preparation opportunities in priority industries for historically marginalized learner populations.

Rhode Island recognized the need for this grant program after using data to identify access and equity gaps within specific Career Clusters®. After state leaders at the Rhode Island Department of Education (RIDE) disaggregated Career Cluster data by sub-population, they found that English language learners, female learners, learners with disabilities, learners of color and low-income learners were not participating in CTE programs aligned with priority, high-paying industries in proportion to the larger student population.¹⁶

Industry	Race (non-white)	Poverty	Language	Disability	Gender (female)
Agriculture, Food & Natural Resources	3.5%	3.5%	-2.1%	4.1%	-13.2%
Architecture & Construction	-0.1%	2.4%	-3.4%	0.6%	-38.1%
Arts, Audio/Video Technology & Communications	1.7%	8.1%	-4.0%	-8.1%	5.6%
Business Management & Administration	-27.8%	-21.7%	-5.1%	-10.0%	-11.7%
Education & Training	13.8%	16.9%	-1.9%	3.3%	18.1%
Finance	5.7%	-3.3%	-5.1%	-12.0%	-17.0%
Government & Public Administration	-27.2%	-3.9%	-5.1%	1.4%	-36.0%
Health Science	19.1%	12.0%	-2.9%	-12.6%	32.1%
Hospitality & Tourism	17.3%	11.4%	-3.2%	-1.3%	19.1%
Human Services	6.5%	19.4%	-3.8%	-0.5%	50.2%
Information Technology	-19.0%	-16.7%	-5.1%	-0.5%	-27.2%
Law, Public Safety, Corrections & Security	19.8%	18.1%	-2.7%	-7.4%	6.8%
Manufacturing	11.7%	13.8%	-5.1%	-7.1%	-38.0%
Marketing	-31.2%	-14.2%	-5.1%	-10.5%	28.4%
Science, Technology, Engineering & Mathematics	-25.0%	-26.1%	-5.1%	-15.3%	-41.9%
Transportation, Distribution & Logistics	15.5%			-3.9%	-41.3%

Rhode Island CTE equity gaps in 2015-16 by industry sector, as represented by the difference between the percentage of students from the disadvantaged group in CTE programs and in overall Rhode Island high school enrollment. Positive numbers indicate over-representation, and negative numbers indicate under-representation. Retrieved from the Rhode Island Department of Education.

After identifying these equity gaps, RIDE recognized an urgent need to support schools and school districts to recruit under-represented learners and, as such, reallocated state CTE funding to develop the Innovation and Equity Grants. The grants are administered competitively to local education agencies for new or existing CTE programs that expand access to CTE for learner populations that are currently under-served, align to a priority sector industry as defined by the Governor's Workforce Board and meet industry-specific content standards. Grant recipients receive up to \$150,000 over two years and must provide a 25 percent local match to the amount of funding received.

The grant funds can be used to support implementation of a program for two years or to support one year of planning and one year of implementation. To ensure that the grants are actively helping to close equity gaps, the grant program is outcomes focused. Grant recipients must include outcome and implementation goals in their applications, which are evaluated in the middle and at the end of each grant year. The outcome goals must measure the impact of the program on learners and include credentials earned by the target populations and a goal related to closing credential gaps. RIDE focused specifically on ensuring that each new seat in a high-quality CTE pathway is made available for previously overlooked learners, bringing a concentrated focus on impact to a statewide investment. The implementation goals must measure whether the program carried out the plan proposed in the application and must include a goal related to equity seats, the number of new high-quality CTE seats for disadvantaged learners the program made available.

RIDE received 25 applications in 2018 and awarded a total of \$1.2 million to eight recipient local education agencies. Through leveraging existing state funding for CTE, RIDE is able to provide

institutions with the resources they need to invest in improving or creating new programs that will provide more CTE opportunities to historically marginalized populations.

Expanding Geographic Access to CTE Opportunities

State leaders must also recognize the impact that location has on a learner's ability to access high-quality CTE opportunities. Many rural areas lack high-quality CTE opportunities because they do not have access to the same resources as urban communities, such as CTE teachers and employers willing to support work-based learning opportunities.¹⁷ However, even urban areas that have more resources struggle to provide each learner with high-quality CTE opportunities because of zip code inequity. Given the history of segregation in the United States by race and class, significant structural racism and classism still exist and prohibit certain populations from accessing robust CTE opportunities because of the area in which they live. Certain communities, particularly historically marginalized communities, may be unable to participate in high-quality CTE opportunities because of transportation issues and the location of educational institutions and communities in relation to employers, among other barriers.

Ohio: Leveraging Geographical Information Systems to Expand CTE Opportunities for Each Learner

Some states, such as **Ohio**, have taken steps to ensure that each learner has access to CTE opportunities regardless of where he or she resides. Ohio uses Geographic Information Systems (GIS) to identify equity gaps in access to meaningful programming, serve learners of color and urban learners more effectively, and tighten the alignment between program offerings and local needs.

Ohio is using GIS to develop a mapping tool that will allow districts to identify key factors that support or inhibit learners' access to work-based learning and CTE opportunities. Drawing on nationally available datasets, the maps allow users to examine the availability of work-based learning and CTE programs in different communities. The maps also allow users to consider the demographics of a community, including race, class, disability and English learner status, to see which populations are most affected by the key factors, such as transportation and access to industry, that support or inhibit work-based learning and CTE opportunities.

For example, Ohio used the mapping tool to demonstrate that black and economically disadvantaged learners in one community had disproportionately fewer high-quality CTE programs in their communities than their peers. In particular, the map showed that the nearest high-quality CTE program in one neighborhood was only a mile and half away, but the program and the community were separated by a major highway. Therefore, despite the proximity of the program, learners had no way to safely access the program without transportation provided by the district. Such maps allow Ohio to create a sense of urgency around providing historically marginalized communities access to CTE programs and allow the districts that serve the communities to understand where they should focus their resources to address barriers to access.

Ohio recognizes that the data from its maps do not tell the whole story and should be used as a starting point in the state's efforts to expand access to learners. GIS helps Ohio understand the complexity of the state environment so the state can decide whom it should convene to take action to expand opportunities for each learner. Ohio plans to use the data from the maps to help districts develop action plans to address equity gaps through a new series of equity labs, which the Ohio Department of Education will pilot in the 2019-20 school year. During an equity lab, state and local

education agencies convene to examine data and identify equity gaps, including gaps in access to programming. The state agency will work with the districts to help them develop equity action plans and incorporate these plans into their local applications for the Strengthening Career and Technical Education for the 21st Century Act (Perkins V) funds.

Addressing Barriers to Entry Into CTE Programs of Study

The introduction of entrance requirements for CTE programs of study and a lack of awareness about the CTE opportunities available are significant barriers that prevent learners from entering CTE programs.

High-quality CTE programs of study blend technical, employability *and* academic skills to prepare learners for high-wage, high-skill, in-demand occupations. Since many learners enter their program of study in the 10th or 11th grade, if they lack key foundational skills at that point in their education, they may not have the skills necessary to excel in high-quality CTE programs of study. To ensure that learners who participate in programs have the necessary skills, many states have set entrance requirements for programs of study. However, these entrance requirements can act as a significant barrier to learners' ability to access high-quality CTE programs.

Recently, some states also have introduced entrance requirements to address a demand for high-quality CTE programs that exceeds the opportunities available. When developing entrance requirements, states should examine data closely and frequently to ensure that these requirements are predictive of learner success in CTE programs and are not just a means to address an excess demand for CTE programs. They should also examine learner data to see who is disproportionately negatively affected by the entrance requirements and establish strategies to close any equity gaps that may exist. As an alternative to entrance requirements, state leaders can invest in and support programs, such as bridge programs or summer intensive programs, that will help to ensure that each learner has the foundational skills needed to succeed in CTE programs.

Key Equity Questions for CTE

State leaders should consider the following questions as they work to ensure that each learner is prepared to participate in high-quality CTE programs of study:

- How do policies related to academic/technical preparation, advising, entrance requirements, etc. prevent students from being prepared to participate in high-quality CTE programs?
- What partnerships may the state CTE office build to ensure that learners are on a path to be prepared to participate in high-quality CTE programs?

However, entrance requirements are not the only barriers preventing learners from being prepared for high-quality CTE programs of study. Opportunity gaps in CTE also exist, in part, because of a lack of awareness of CTE opportunities or a lack of access to information that would allow learners to make informed decisions. The *Making Good on the Promise: Building Trust to Promote Equity in CTE* brief outlines strategies states can use to make information accessible to learners, communities and parents. Additionally, advising can play a key role in closing information and awareness gaps. Each learner should have someone in his or her life who can play the role of navigator, helping guide the

learner along his or her educational journey, determine the steps needed to take to achieve his or her academic and career goals, and identify options to dismantle prohibitive barriers.

South Carolina Education and Economic Development Act

Some states, such as **South Carolina**, have taken steps to ensure that each learner receives individualized guidance to be prepared for advanced coursework, including CTE, in high school. In 2005, the state's Legislature passed the South Carolina Education and Economic Development Act (EEDA), which established the Personal Pathways to Success program. ¹⁹ Under the program, every high school student is required to declare a "major" aligned with one of the nationally recognized 16 Career Clusters. Students are expected to take career-focused courses through their elective graduation requirements, and districts are required to offer a standards-based academic curriculum that is organized around a Career Cluster system and provides students with individualized education choices. Through this curriculum, every learner receives a rigorous academic foundation that equips learners with the skills to achieve their college and career goals, even as these goals shift.

EEDA articulates a framework for career advisement that spans the entire elementary and secondary education continuum. Under the law, school districts are required to offer career exploration in elementary school.²⁰ To ensure that each learner has access to a guidance counselor, at the high school level, districts are required to provide at least one counselor for every 300 students, which is significantly less than the national student-to-counselor ratio of 482:1.²¹ Individual guidance and support services are connected to students' individual graduation plan, which they develop in eighth grade and update annually with support from parents, teachers and school counselors. The individual graduation plan details the student's course requirements, high school major, career aspiration and more.

As a result of this program, in the 2016-17 school year, 264,527 learners in grades eight through 12 — virtually 100 percent of the learner population — completed individualized graduation plans. ²² Through the Personal Pathways to Success program, South Carolina was able to change its education system to ensure that each learner, regardless of background, is made aware of education and career options and is placed on a path that ensures that he or she will complete the necessary coursework and experiences to achieve his or her individual academic and career goals.

A Path Forward

High-quality CTE programs of study equip learners with the real-world skills they need to succeed in the workforce. However, many learners, particularly those from historically marginalized communities, do not have access to these programs due to systemic barriers, resulting in significant opportunity gaps between learner populations. States leaders should consider the following when working toward closing opportunity gaps in CTE:

- Secure and leverage resources to close CTE opportunity gaps: State leaders should actively
 seek and reallocate resources to better serve the institutions and learners that are most in
 need. State leaders should leverage funding to hold institutions accountable for and
 incentivize institutions to close equity gaps.
- Work with stakeholders to expand geographic access to CTE: State leaders should identify
 why and where learners cannot access CTE opportunities because of geographical barriers.

State leaders should work with the appropriate stakeholders to create strategies to expand access to CTE opportunities, such as leveraging funds to provide appropriate transportation to CTE opportunities and leveraging technology to connect learners with industry experts, to address these barriers.

• Dismantle barriers that prevent learners from entering CTE programs: State leaders should identify the barriers that are preventing learners from being prepared to participate in CTE programs of study, whether that is a lack of academic preparation, lack of advising, entrance requirements or other barriers. State leaders should then build strategic partnerships and advocate for programmatic and policy changes that will ensure that each learner is prepared to participate in high-quality CTE programs of study. For instance, state leaders can leverage Perkins V to extend career exploration into early grades to prepare learners for programs of study.

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⁴ U.S. Department of Education. (2017). *The federal role in education*. Retrieved from https://www2.ed.gov/about/overview/fed/role.html

opportunity — need strengthening, not cuts. Retrieved from https://www.cbpp.org/research/federal-budget/pell-grants-a-key-tool-for-expanding-college-access-and-economic-opportunity

¹ Advance CTE. (2017). *Policy benchmark tool: CTE program of study approval*. Retrieved from https://careertech.org/resource/program-approval-policy-benchmark-tool

² U.S. Department of Education. (2018). *Career and technical education programs in public school districts: 2016-17.* Retrieved from https://nces.ed.gov/pubs2018/2018028.pdf

³ Ibid.

⁵ EdBuild. (2019). *23 billion*. Retrieved from https://edbuild.org/content/23-billion
⁶ *Ibid*.

⁷ Georgetown University Center on Education and the Workforce. (2018). *Balancing work and learning: Implications for low-income students*. Retrieved from https://cew.georgetown.edu/cew-reports/LearnAndEarn/

⁸ Center on Budget and Policy Priorities. (2017). *Pell Grants — a key tool for expanding college access and economic*

http://wapp.capitol.tn.gov/apps/BillInfo/default.aspx?BillNumber=HB0531&GA=110

¹² Tennessee Higher Education Commission & Tennessee Student Assistance Corporation. (2018). *Tennessee Promise annual report*: 2018. Retrieved from

https://www.tn.gov/content/dam/tn/thec/bureau/research/promise/TN%20Promise%20Report%20-%202018%20-%20Final.pdf

¹⁴ Tamburin, A. (2017). Tennessee Promise students more likely to succeed in college, less likely to drop out, new data shows. *Tennessean*. Retrieved from

https://www.tennessean.com/story/news/education/2017/09/21/tennessee-promise-students-more-likely-succeed-college-less-likely-drop-out-new-data-shows/690091001/

¹⁵ Tennessee Higher Education Commission & Tennessee Student Assistance Corporation. (2018). *Tennessee Promise annual report*: 2018. Retrieved from

https://www.tn.gov/content/dam/tn/thec/bureau/research/promise/TN%20Promise%20Report%20-%202018%20-%20Final.pdf

¹⁶ Rhode Island Department of Education. (2018). *RIDE career and technical education programs: Innovation and Equity Grants*. Retrieved from http://www.ride.ri.gov/Portals/0/Uploads/Documents/Students-and-Families-Great-Schools/Educational-Programming/Career-and-Tech/2018-Innovation-Equity_CTE_Innovation-Equity_Grant_FINAL.PDF

- ¹⁷ Advance CTE. (n.d.). *CTE on the frontier*. Retrieved from https://careertech.org/resource/series/CTE-frontier
- ¹⁸ Advance CTE. (2019). *Making good on the promise: Building trust to promote equity in CTE*. Retrieved from https://careertech.org/resource/building-trust-promote-equity-cte
- ¹⁹ South Carolina Education and Economic Development Act. (2005). Retrieved from https://www.scstatehouse.gov/code/t59c059.php
- ²⁰ Advance CTE. (2018). *Expanding middle school CTE to promote lifelong learner success*. Retrieved from https://careertech.org/resource/expanding-middle-school-cte
- ²¹ National Association for College Admission Counseling & American School Counselor Association. (n.d.). *State-by-state student-to-counselor ration report: 10-year trends*. Retrieved from https://www.schoolcounselor.org/asca/media/asca/Publications/ratioreport.pdf
- ²² South Carolina Department of Education Office of Student Intervention Services. (n.d.). *2016-17 individual graduation plan (IGP) conference data summary*. Retrieved from https://ed.sc.gov/districts-schools/student-intervention-services/education-and-economic-development-act-eeda/2016-17-dashboard/

⁹ Bombardieri, M. (2018). Colleges are no match for American poverty. *The Atlantic*. Retrieved from https://www.theatlantic.com/education/archive/2018/05/college-poor-students/560972/

¹⁰ Tennessee Government. (n.d.). *About Tennessee Promise*. Retrieved from http://tnpromise.gov/about.shtml

¹¹ Tennessee Reconnect Act. (2017). Retrieved from

¹³ Ibid.