ACT

POLICY PLATFORM

CAREER & TECHNICAL EDUCATION

2018 EDITION

ACT's Policy Platform

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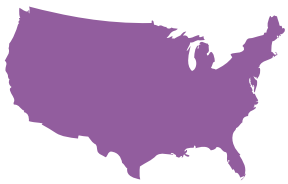


This Career and Technical Education Policy Platform offers ACT's unique experience and research in education and workforce assessment to ***focus on the challenge of ensuring CTE is of high quality***, that more students are able to access it, and that states are best equipped to deliver and monitor it.

In December 2014, ACT released three policy platforms that identified opportunities to improve the K–12, postsecondary, and workforce development sectors. Three years later, along with three updated platforms in those areas, ACT has also developed a new platform for Career and Technical Education (CTE) to acknowledge its powerful ability to positively impact an individual's education and workplace success.

Modern CTE in the United States is delivered via the National Career Clusters Framework®, an organizing structure for delivering CTE programs of study representing every sector of the economy.[1]

While the federal investment in CTE, most recently through the Carl D. Perkins Career and Technical Education Act, marked its 100th anniversary in 2017, it has undergone a dramatic series of transformations over those years and is especially relevant in today's economic and educational climates. Previously known (sometimes derisively) as "vocational" education, CTE programs no longer focus exclusively on developing entry-level occupational skills training to prepare students for a single job. Today, they provide students in high schools, community colleges, and technical centers across the country with a broad spectrum of rigorous academic and technical content designed to prepare them for a career. From career exploration to advanced technical training, CTE programs are also exceedingly flexible, spanning the nation's K–12, postsecondary, and workforce development systems and allowing students to choose their own educational and career pathways and change course as their interests and competencies evolve.

But even given its evolution and long history of strong bipartisan support, there are greater systemic changes needed to ensure that CTE fully meets the needs of both students and employers in the twenty-first-century economy.

The 2018 edition of the Career and Technical Education Policy Platform is organized around **three themes:**

1 **Ensure that CTE programs commit to and promote quality.**

2 **Bolster efforts that support student participation in and access to CTE programs.**

3 **Develop state and local CTE systems that are flexible, responsive to feedback, and accountable.**

The following sections present detailed recommendations for each of the themes.

1 ENSURE THAT CTE PROGRAMS COMMIT TO AND PROMOTE QUALITY.

1st RECOMMENDATION

EMPHASIZE FOUNDATIONAL SKILLS, IN ADDITION TO RIGOROUS ACADEMIC AND TECHNICAL INSTRUCTION, THROUGHOUT FEDERAL AND STATE CTE POLICIES AND PROGRAMS.

Major drivers of economic change and upheaval in the labor market—globalization, technological advancements, and an aging workforce—have increasingly required students to learn new, transferable foundational skills in addition to traditional academic and technical competencies.[2] These skills are foundational in that they are both fundamental, because they are the foundation toward more advanced skill development, and portable, because they are commonly recognized by employers nationwide and across a wide variety of occupations.[3]

High-quality CTE programs impart skills such as the ability to think critically, solve problems, and work collaboratively by grounding the classroom experience in the context of a career.[4] A recent analysis confirms the need for employees to possess these fundamental skills. For example, employment requiring higher levels of analytic skills has grown by 77 percent since 1980, while jobs requiring stronger social skills grew by 83 percent over the same period.[5] Further, 90 percent of secondary school teachers, 86 percent of postsecondary instructors, and 83 percent of workforce supervisors consider these skills to be important contributing factors for success in education and the workplace.[6]

To fully meet demand, high-quality CTE must ensure that foundational skills are not just included in its curricula but given equal weight with rigorous academics and technical instruction. As the ACT Holistic Framework™ illustrates, foundational skills are cross-cutting and are needed in a wide array of industry sectors and occupations. Research shows that such skills support greater student academic achievement, increase college graduation rates, and promote job satisfaction.[7]

2nd RECOMMENDATION

OFFER AUTHENTIC WORK-BASED LEARNING EXPERIENCES AS AN INTEGRAL COMPONENT OF CTE PROGRAMS.

According to a recent Gallup student poll, only 49 percent of US public school students surveyed were engaged with school, and the figure diminishes dramatically as students grow older.[8] This is unfortunate in that research illustrates a correlation between student engagement and academic achievement.[9]

One of the core themes throughout CTE's history has been its connection and relevancy to the real world, ensuring that programs and curricula have genuine value for students inside and outside of the classroom. CTE begins chiefly with an approach to academic instruction that grounds it in a career or real-world context. High-quality CTE contextualizes and brings to life such concepts as the practical uses of mathematics, the real-world applications of reading comprehension, and the utility of biology for a future in the health sciences industry. One of the effects of this approach is that it helps students engage with the material being taught. This may explain in part why two-thirds of all states reported that the graduation rates of their CTE students were 10 or more percentage points greater than the graduation rates of their non-CTE peers.[10]

Another crucial form of engagement in CTE programs is the integration, at appropriate stages as students progress, of authentic work-based experiences. For example, job shadowing or workplace visits may be appropriate in K–12 education settings, while postsecondary education settings can offer more robust experiences such as internships or other forms of hands-on work experience. Incorporating these types of experiences into federal and state CTE policies—often through partnerships between CTE programs and employers—gives students an opportunity to experiment with various career paths, allowing them to more clearly identify their interests and strengths. Secondary CTE programs can also offer valuable work-based learning experiences that can act as a connection point to apprenticeship programs, which offer further intensive on-the-job training and relevant technical instruction.[11] This may be of particular value as interest has grown in expanding and strengthening the traditional apprenticeship model, as well as extending it into nontraditional occupations.

In addition to increasing engagement, such experiences can have a long-term impact on students' career success. A recent study in the United Kingdom found that four instances of contact with employers during students' secondary education increased their later earnings by 18 percent compared to their peers who had fewer or no such experiences.[12]

3rd RECOMMENDATION

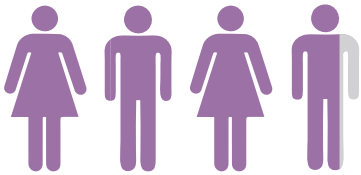
USE DUAL ENROLLMENT INITIATIVES TO REINFORCE CONNECTIONS BETWEEN SECONDARY AND POSTSECONDARY EDUCATION TO SUPPORT SUCCESSFUL TRANSITIONS.

High-quality CTE helps strengthen connections and transitions between secondary and postsecondary education, and ultimately the labor market. As postsecondary education and training beyond high school increasingly become a necessity for success in today's economy, federal and state policy should emphasize the importance of secondary-to-postsecondary transitions by expanding dual and concurrent enrollment opportunities.

CTE has been integral to the expansion of dual and concurrent enrollment programs. According to the most recent annual data available from the National Center for Education Statistics (NCES), nearly one-third, or 600,000, dual enrollment credits were earned through a CTE course.[13]

More important, there is a growing body of evidence that suggests dual enrollment programs improve student transitions between these learner levels,

PORTRAIT OF THE SOPHOMORE CLASS OF 2002



96% of the high school sophomore class of 2002 had **completed high school or an equivalency by 2012.**

84% of this cohort had enrolled in some form of **postsecondary education by 2012.**

52% of those enrolling in postsecondary education had **earned a postsecondary credential, certificate, or degree by 2012.**

increase the number of students attaining a postsecondary credential, promote postsecondary access and enrollment, help students accumulate postsecondary credit, encourage more students to complete high school, and promote students' overall academic achievement.[14]

4th RECOMMENDATION

ENSURE THAT CTE PROGRAMS ALLOW MULTIPLE OPPORTUNITIES, AT ALL EDUCATIONAL LEVELS, FOR STUDENTS TO EARN A CREDENTIAL.

Ninety-six percent of the high school sophomore class of 2002 had completed high school or an equivalency by 2012, but although 84 percent of this cohort had enrolled in some form of postsecondary education, only 52 percent of those enrolling in postsecondary education had earned a postsecondary credential, certificate, or degree by 2012.[15] It is well known that earning a credential beyond a high school diploma, even during high school, corresponds to greater median earnings for students after graduation or program completion, and that, on the whole, higher levels of educational attainment correspond to higher earnings for individuals.[16] Clearly, more should be done to promote postsecondary credential attainment, particularly at a time when nearly two-thirds of all occupations will require some form of postsecondary education or training by the next decade.[17]

While it is true that more than half (53 percent) of all undergraduate credentials in 2011–2012 were earned by students enrolled in a CTE program,[18] policies supporting high-quality CTE should promote multiple opportunities for students to earn a credential—not only at the end of a program, but also interim credentials. Earning credentials is an effective way for students to progressively validate their skills, knowledge, and competencies, and credentials help to ensure that no matter when students enter or exit a CTE program, they have tangible documentation that communicates their experiences to the wider labor market.

Further, credentials enable individuals to pursue additional postsecondary education and training at a later time if they choose to do so. This ensures the viability of a flexible pathway system that works for both traditional and nontraditional students. In addition to the initiative that many states and local communities have taken in this area, early legislative actions at the federal level have underscored the importance of this component of high-quality CTE. The most recent reauthorization proposal for the Perkins Act in the US House of Representatives identifies "multiple entry and exit points that incorporate credentialing" as a key piece of a new definition for a CTE program of study—a flexible approach for delivering CTE programming that states and local communities can make their own.[19] As the reauthorization effort continues, future legislation and policies should be implemented to ensure that opportunities for credentialing such as these are further emphasized at all levels of CTE.

2 BOLSTER EFFORTS
THAT SUPPORT STUDENT PARTICIPATION IN AND ACCESS TO CTE PROGRAMS.

1st RECOMMENDATION

PROMOTE PROCESSES THAT FACILITATE STATE AND LOCAL COMMUNITY INPUT INTO THE DEVELOPMENT OF CTE PROGRAMS TO REFLECT A COMMUNITY'S NEEDS.

As part of the Perkins Act, states and local communities are required to develop plans, after consulting various stakeholders, articulating how they will implement and improve CTE programs using federal funds. This process is a critical policy mechanism for oversight, but also has the potential to be something more meaningful and transformative.

One possible strategy to achieve this is to develop "needs assessments"—a policy mechanism that was incorporated in the recently enacted Every Student Succeeds Act (ESSA). While both Perkins and ESSA require a state and local plan in exchange for federal funding, these often simply provide a high-level overview of strategies for CTE or K–12 implementation. By comparison, a needs assessment would formalize regular check-ins with stakeholders after the development of a plan to ensure that these strategies are successful and, when problems are identified, new strategies can be developed to overcome them. Such a process supports continual improvement and refinement of CTE programs to ensure student and stakeholder needs are effectively met on a rolling basis, allowing for adjustments and course corrections throughout the lifetime of a program.

This will empower states and localities to tailor programs in ways that ensure that their CTE programs reflect the needs of diverse groups, including the employers who look to these programs for new talent and, most importantly, the students these programs serve, especially those populations traditionally underserved by CTE. Also, given the many stigmas still associated with CTE, such consultation could have the added benefit of changing families' historic perceptions of CTE, affording more students the opportunity to benefit from these programs.

2nd RECOMMENDATION

STRENGTHEN THE CTE INSTRUCTOR PIPELINE AND BRING SUCCESSFUL INITIATIVES TO SCALE TO BROADEN THEIR REACH.

The quality and availability of CTE programs rely on high-quality instructors. But current and future CTE programs in states and school districts are threatened by a shortage of qualified instructors. This is driven by numerous causes that understandably lack a singular policy solution. These include the availability of more lucrative salaries available in the private sector; geographic mismatches between industry experts and areas of need; waning interest in some CTE program areas; and closures of many CTE teacher preparation programs at colleges and universities. According to a recent survey, 98 percent of surveyed state CTE directors reported that remedying shortages of qualified CTE instructors has been a key priority for their state and all of the respondents indicated that this would be an important priority for their state moving forward.[20]

98%

of surveyed state CTE directors reported that ***shortages of qualified CTE instructors has been a key priority*** for their state and all of the respondents indicated that this would be an important priority for their state moving forward.

To compensate, states have begun to leverage postsecondary CTE as a workaround strategy to fill persistent gaps. In the survey cited above, 55 percent of surveyed state directors indicated that they offer guidance to school districts encouraging the use of dual credit and other articulation agreements as a means to share faculty among and between postsecondary institutions and secondary schools. Similarly, more than 40 percent of states support high school student access to postsecondary CTE courses through methods including covering the costs of postsecondary tuition, making use of virtual learning platforms, or offering funding to cover transportation costs incurred by students taking dual or concurrent enrollment programs.[21]

Given the growing demand for CTE, the instructor shortage is not likely to disappear any time soon, and may even increase. Thus only a collection of policies, targeted specifically at each of the underlying causes, can begin to truly solve the problem. For example, federal policymakers can provide incentives to maintain, reopen, or develop CTE teacher preparation programs throughout the postsecondary education system. State policymakers can legislate higher salaries or other incentives for these instructors, to attract and keep them in the classroom. States can develop alternative routes to teacher certification, incorporate co-teaching or part-time instruction into CTE programs, and create financial incentives to grow the pool of qualified instructors. The Minnesota state legislature's recently commissioned task force report on this subject incorporates many of these strategies and provides a clear picture for how other state policymakers can address the CTE instructor shortage through improvements to licensing and certification.[22] Policymakers should continue to experiment with new policies, and where successful bring them to scale, in order to effectively address both current and future demands on the CTE instructor pipeline.

3rd RECOMMENDATION

ENCOURAGE CAREER AWARENESS AND ADVISEMENT ACTIVITIES TO BEGIN EARLIER IN A STUDENT'S EDUCATIONAL PATHWAY.

Developing a career plan is the critical first step in an individual's lifelong journey toward making their educational and career aspirations a reality. While research has demonstrated that students stand to benefit the most from career exploration activities that take place early in their education, particularly in middle school,[23] two primary barriers currently prevent career awareness from occurring sooner.

First, the current student-to-school-counselor ratio in the US is an astonishing 491 to 1.[24] In addition to lighter caseloads allowing for greater attention to assisting students along their education and career pathways, school- and institution-based counselors should be provided with professional development opportunities focused on promoting career readiness to ensure that they are able to act as a conduit of relevant and timely information for students as they seek out CTE programs and coursework that fit their needs and match their interests.

Second, support for introductory or exploratory CTE courses that seek to familiarize students with industries, careers, and available credentials are often fragmented and overshadowed by other priorities such as core academic courses, or are simply not offered at all. Students need greater exposure to CTE courses earlier on in order to capitalize on this important moment in their educational pathway. State and federal CTE policy should therefore aim to ensure that middle school students have the opportunity to enroll in introductory or exploratory CTE courses that seek to familiarize students with potential CTE pathways to keep students engaged with their learning and help them begin to formulate a plan for their future.

4th RECOMMENDATION

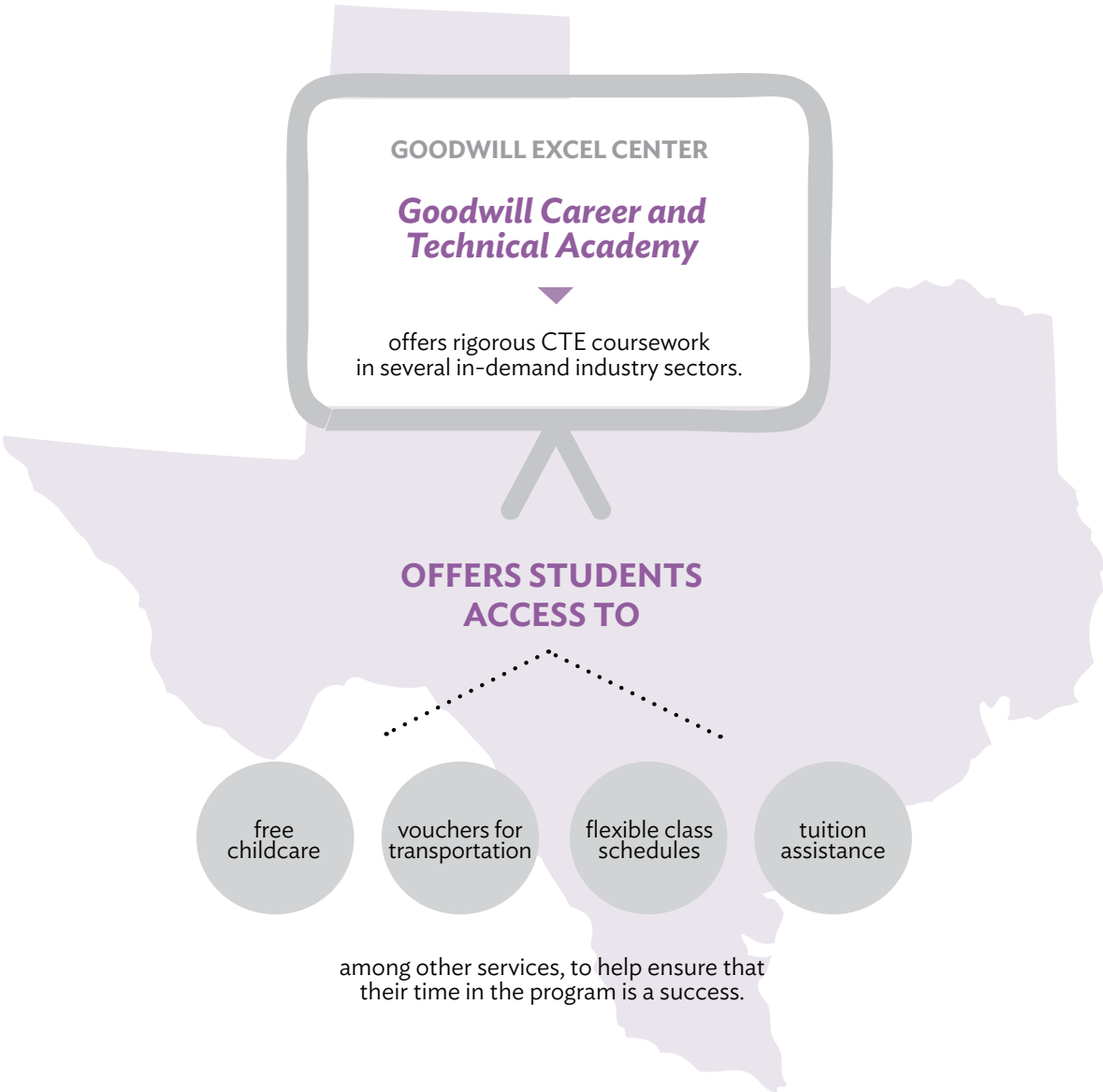
EFFECTIVELY LEVERAGE SUPPORT AND WRAPAROUND SERVICES TO ENSURE THAT UNDERSERVED STUDENT POPULATIONS CAN FULLY PARTICIPATE IN CTE PROGRAMS.

CTE programs at all educational levels serve students from a wide variety of backgrounds and with unique needs. Services aimed at helping individuals complete a CTE program—including childcare, personalized counseling, dual and concurrent enrollment opportunities, flexible scheduling, and assistance with transportation—should be used to the greatest extent possible to ensure that underserved populations have the opportunity to take advantage of high-quality CTE.

Although federal investment in CTE through the Perkins Act represents only approximately 10 percent of all funding for programs in the US, this can and should be used by stakeholders as a springboard for coordinating and aligning with other state and federal programs that provide such support services for students. For example, career pathways funded by the Workforce Innovation and Opportunity Act (WIOA) offer a robust menu of supportive services that can be used to better ensure access for underserved student populations. Other initiatives, such as those separately piloted by the US Departments of Education and Labor in recent years, offer free or low-cost quality childcare to parents in training programs and otherwise involve both the working parent(s) and their children. All of these initiatives should be coordinated and aligned with CTE program delivery frameworks such as CTE programs of study.

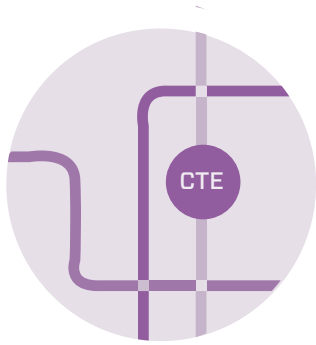
GOODWILL CENTRAL TEXAS

A nonprofit organizational chapter of Goodwill Industries based in Austin, Texas, serves as a strong example of how support services can be incorporated and integrated into CTE.



Source: "About Us," The Goodwill Excel Center, *https://www.goodwillcentraltexas.org/excel-center/about-us.*

3 DEVELOP STATE AND LOCAL CTE SYSTEMS THAT ARE FLEXIBLE, RESPONSIVE TO FEEDBACK, AND ACCOUNTABLE.



1st RECOMMENDATION

EMBRACE AND ENCOURAGE MULTIPLE PROGRAMMATIC APPROACHES AND FUNDING STREAMS FOR DELIVERING CTE COURSEWORK.

CTE can be delivered in a number of settings—high schools, community colleges, technical colleges, area technical centers—and as early as middle or even elementary school. There are also many ways in which CTE coursework can be delivered in each of these settings, often tailored to the needs of different learner levels and/or the capacities available in different state, regional, or local contexts. Finally, there are many existing funding streams that support the wide array of education, workforce, and economic development activities at the federal, state, and local levels. While all of these investments have distinct purposes, their goals and objectives often overlap.

It is important to connect high schools, area technical centers, community and technical colleges, and other institutions to deliver CTE in a manner that provides a coherent structure across coursework at all educational levels, but policymakers should continue to prioritize preserving this robust variety of delivery frameworks rather than advocating for a one-size-fits-all model to be used everywhere.

As the lines blur between policy areas and as funding constraints become ever more pressing, policymakers must make a concerted effort to approach these initiatives more holistically. Doing so will conserve finite resources for these activities and help to maximize the impact of these investments. For example, federal policymakers should seek to align and coordinate legislation overseeing workforce development, K–12 education, and higher education with existing investments in CTE such as the Perkins Act, and state and local policymakers should seek to mirror these efforts to the greatest extent possible.

State systems should, at a minimum, be tied together through shared, rigorous CTE standards and aligned, as required by ESSA, to each state's academic standards. But innovative approaches should be encouraged and incentivized to strengthen the CTE enterprise. A flexible (and flexibly funded) system will afford practitioners and policymakers alike the opportunity to continually innovate and customize CTE programs to best fit all stakeholder needs—both those of today and those on the horizon.

North Carolina's Certified Career Pathways initiative, led by the state's Department of Commerce, is an instructive example of how states can encourage cross-agency collaboration to serve a common purpose. In 2015 the agency endeavored to establish criteria to 'certify' career pathways in the state as a means to ensure program quality. The certification process requires a review by an interagency panel of experts, each leveraging the state and federal programs that their departments oversee.[25]

2nd RECOMMENDATION

DEVELOP AND MAINTAIN ROBUST PROCESSES AND SYSTEMS AT THE STATE AND LOCAL LEVELS THAT ALLOW FOR EMPLOYER ENGAGEMENT AND FEEDBACK.

Only 29 percent of surveyed business leaders in a recent Gallup poll reported that their firm was actively collaborating with a postsecondary institution. At the same time, only 11 percent of those same firms "strongly agreed" that the postsecondary education system was producing students with the skills and competencies needed to meet their business needs.[26] While these survey results were largely in the context of the ongoing debate about the value of a baccalaureate degree, they also speak to a more general disconnect between expectations of the employer community and the ability of the US educational system to equip students with applicable skills and relevant competencies needed for the workplace.

As more employers approach CTE programs and related systems as an "end consumer," their engagement with and feedback to CTE programs and systems can be of great value to themselves, to the students, and to the system at large.[27] For example, employers can help reduce their future training costs by ensuring that programs are teaching the most relevant and in-demand skills; they can recruit the most talented students before they enter the labor market; and they can raise their overall visibility in a given state or local area, which can promote a greater sense of goodwill that helps their business attract and retain talent in the long term. While engagement requires a certain degree of effort on the part of employers, the benefits vastly outweigh the potential costs.

One promising model of employer engagement is sector or industry partnerships. These partnerships convene employers in a given industry with education, training, and other community-based organizations in order to communicate the needs of the targeted industry and, most importantly, develop policies and programs to address those needs.[28] State and federal policy should provide incentives and emphasize exemplars to encourage this type of business and education collaboration moving forward.

3rd RECOMMENDATION

DEVELOP MEANINGFUL STATE ACCOUNTABILITY SYSTEMS THAT EMPHASIZE THE IMPORTANCE OF CTE OUTCOMES.

The adage "what gets measured gets done" has undergirded the idea of accountability in education and workforce development policy for some time. Increasingly, the national dialogue on education and workforce development has begun to take this to heart. At a time when the federal role has to an extent been minimized in these policy areas, attention has begun to be paid to states where there is new flexibility to develop robust accountability systems that can promote a more coherent vision for their respective CTE systems. This has existed for some time under the framework of the Perkins Act, and ESSA has further codified this. Policymakers must continue to build on this in future legislation to create a robust system of accountability that incentivizes important CTE outcomes at all learner levels.

According to a recent report, 34 states currently publicly report or include career-focused indicators in their K–12 accountability systems—an increase of 17 percent since 2014.[29] In light of this shift, policymakers should acknowledge and assist the process by articulating a minimum framework for CTE accountability in future legislation that focuses on a core set of indicators aligned to the primary objectives of high-quality CTE at the secondary educational level and beyond. For example, states have begun to consider the incorporation of interim metrics, such as student attainment of dual credit and the need for remedial coursework at the postsecondary level, to promote secondary and postsecondary transitions. Postsecondary completion rates are also an important metric, as they provide an indication of which programs or concentrations are doing the best job of getting students through the education and training pipeline. As students progress in a CTE program, labor market outcomes take on greater importance, while more familiar metrics such as credential attainment and job placement are folded into a wider system of program accountability.

K-12 ACCOUNTABILITY SYSTEMS

34 states currently publicly report or include **career-focused indicators** in their K–12 accountability systems

17% increase since 2014.

Performance on these indicators should be an integrated part of state and school district accountability report cards for families and parents. Policymakers should ensure that such a framework incorporates consistent units of analysis, such as standardized definitions for participating students and eligible programs, to allow for comparisons among and between states—an essential ingredient for program improvement. Most importantly, policymakers must ensure that the indicators honor CTE's dual responsibility as both an educational approach and a pathway for career preparation.

The recommendations offered in this platform continue a framework that acknowledges the importance of ***aligning the education and workforce sectors*** to help fulfill ACT's mission of helping people achieve education and workplace success.

ACT's mission is to help people achieve education and workplace success.

At a time when the nation's economy is quickly changing and states are looking for ways to ensure that employers have a pool of qualified workers, this Career and Technical Education Policy Platform offers ACT's unique experience and research in education and workforce assessment to focus on the challenge of ensuring CTE is of high quality, that more students are able to access it, and that states and local systems are best equipped to deliver and monitor it. The recommendations offered in this and ACT's three other 2018 policy platforms continue a framework, established more than three years ago, that acknowledges the importance of aligning the education and workforce sectors to help fulfill ACT's mission.

ALL OF ACT'S POLICY PLATFORMS ARE AVAILABLE ONLINE:
www.act.org/policyplatforms

Notes

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23. Katherine L. Hughes and Melinda Mechur Karp, *School-Based Career Development: A Synthesis of the Literature* (Columbia University Teachers' College Institute on Education and the Economy, 2004), *www.tc.columbia.edu/iee/PAPERS/CareerDevelopment02_04.pdf.*
24. For context, the association recommends a ratio of 250 to 1. *Student-to-School-Counselor Ratio 2013–2014* (Alexandria, VA: American School Counselors Association), *https://www.schoolcounselor.org/asca/media/asca/home/Ratios13-14.pdf*.
25. For more information, visit NCWorks' Certified Career Pathways website: *http://nccertifiedcareerpathways.com/*.
26. *What America Needs to Know about High School Redesign* (Washington, DC, and Indianapolis, IN: Gallup and the Lumina Foundation, 2014), *http://www.gallup.com/file/services/176759/2013%20Gallup-Lumina%20Foundation%20Report.pdf*.
27. The US Chamber of Commerce Foundation's Talent Pipeline Management Framework is the authoritative source espousing the view of employers as end consumers of the US education and workforce training system. *Managing the Talent Pipeline: A New Approach to Closing the Skills Gap* (Washington, DC: US Chamber of Commerce Foundation, 2014), *https://www.uschamberfoundation.org/sites/default/files/media-uploads/Managing%20the%20Talent%20Pipeline_0.pdf*.
28. The National Skills Coalition's Sector Partnership Policy Toolkit provides a robust overview of this model. Brooke DeRenzis and Bryan Wilson, *Skills in the States: Sector Partnership Policy Toolkit* (Washington, DC: National Skills Coalition, 2015), *https://www.nationalskillscoalition.org/resources/publications/file/Final-Sector-Partnership-Policy-Toolkit-1.pdf*.
29. *How States are Making Career Readiness Count: A 2016 Update* (Washington, DC, and Silver Spring, MD: Achieve and Advance CTE, 2016), *https://www.achieve.org/files/CareerReadiness2016.pdf*.

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