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# Breaking Barriers in Career and Technical Education: Centering Black Students in Perkins Reauthorization



**Justin Nalley**  
*Former Senior Policy Analyst,  
Workforce Policy*



**Dr. Kayla C. Elliott**  
*Director, Workforce Policy*



**Araceli Chavez**  
*Former Policy Intern and University of  
California, Davis (UCD) Student*



## Executive Summary: Why This Matters Now

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In 2018, Congress passed the Strengthening Career and Technical Education for the 21st Century Act, the fifth reauthorization of the Carl D. Perkins Career and Technical Education Act of 2006 commonly referred to as Perkins V. This authorized \$1.2 billion in annual funding for state career and technical education (CTE) programs. CTE programs offer students the skills and experiences to enter the U.S. workforce or continue occupational education and training. Nationally, roughly 12 million students participate in CTE programs at high schools, community colleges, and technical colleges.

In the 2022–23 academic year, Black students made up 13 percent of national secondary enrollment in CTE programs. While Black students' overall participation in CTE is on par with national demographics, they are often overrepresented in service-oriented professions such as health sciences or education and training, which often lead to low wages. Black students' limited access to high-quality CTE opportunities stems from funding gaps, geographic disparities, and underinvestment in schools disproportionately serving Black communities.

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*Perkins reauthorization is an opportunity to break a cycle of occupational segregation that dates back over a century—when southern states used vocational tracking to limit Black students' career options and reinforce racial hierarchies. The next reauthorization can either perpetuate these patterns or become a turning point for economic mobility in Black communities.*

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Perkins V needs to be reauthorized in Fiscal Year 2026, which started in October 2025. While funding for Perkins V remains stable for the 2025–26 school year, Congress and the Department of Education cut funding from teacher professional development, after-school enrichment, and career exploration, making reauthorization funding for Perkins V activities unclear. Without intervention, the Trump administration's recent transfer of the Office of Career, Technical, and Adult Education from the Department of Education to the Department of Labor threatens to weaken student protections and disconnect CTE from education funding.

In this brief, the Joint Center presents findings from 21 interviews with CTE experts, including current and former CTE students, state directors, association staff, career and technical student organization members and staff, state and federal advocacy organizations, workforce development boards and organizations, training providers, and researchers from academia and national think tanks.

### Key findings on Black students' access and success include:

- ***The flexibility allowed by Perkins V can help reduce disparities and foster innovation.***

Perkins V gave states greater flexibility in determining quality, measuring outcomes, and allocating resources for CTE programs. Participants discussed this flexibility in four key areas of their work: career exploration, state and local funding decisions, data-driven decision-making, and special populations like Black students.

- ***Teachers are invaluable, but challenges limit their impact.***

Students, state directors, district leaders, and intermediary partners emphasized instructors' importance in the CTE ecosystem. Yet challenges with recruiting and retaining Black CTE teachers limit their impact. There also is a need to improve teachers' pedagogy and equitable practices through professional development and mentorship.

- ***Quality data collection and reporting are needed to understand students' experiences.***

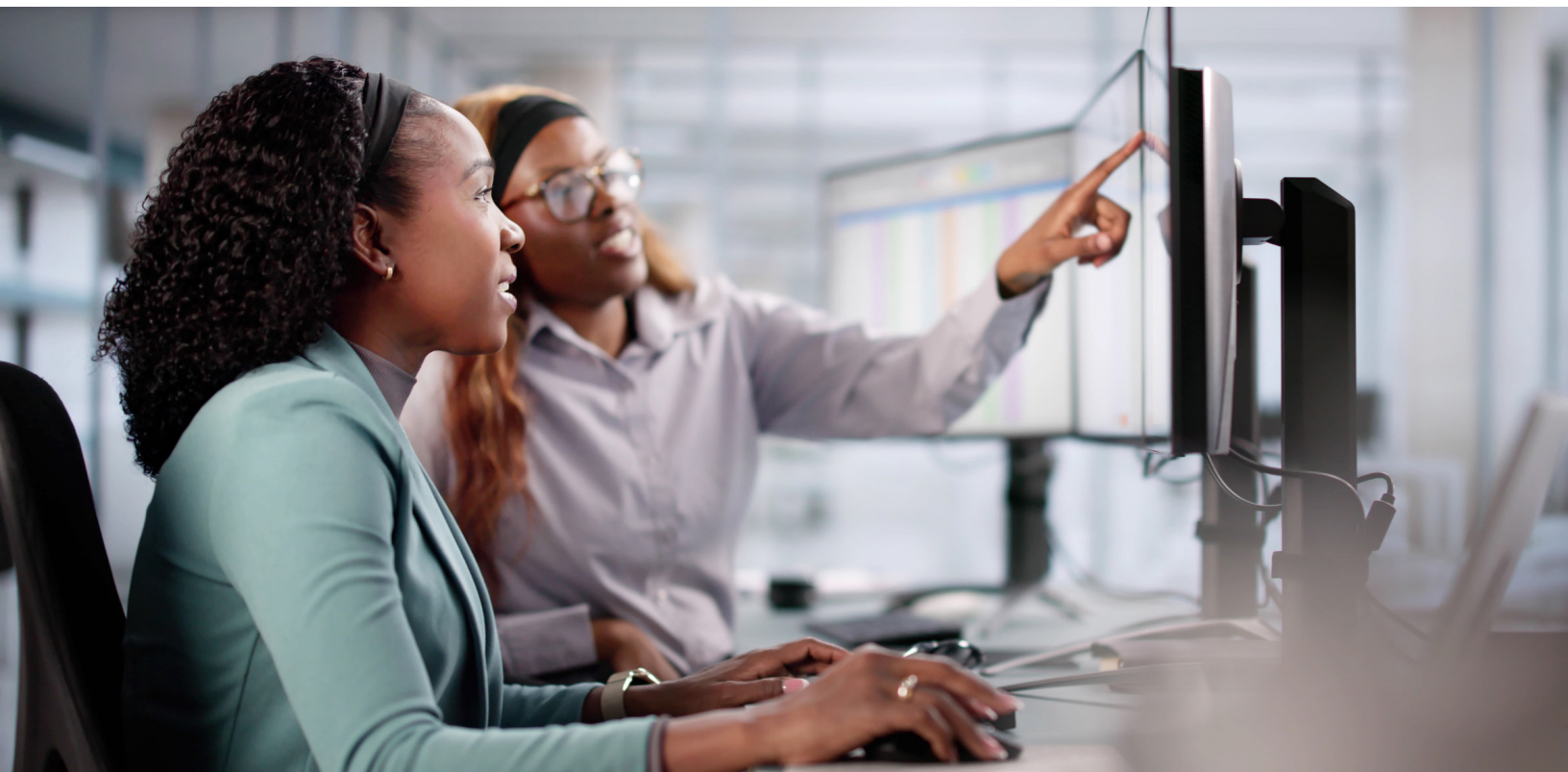
Robust data and accountability can drive results, but issues with data collection, availability, and quality persist. CTE data can be incomplete, outdated, and inaccurate, and many states and institutions lack the capacity to collect and analyze data. Experts stressed the importance of data for accountability, compliance, and assessing student experiences, but also offered cautionary advice on changing definitions and calculations.

- ***Negative narratives on career and technical education are persistent.***

CTE programs are often seen as a pathway for low-income students and students of color who were not believed to be ready or able to pursue postsecondary education. These perceptions are a byproduct of Jim Crow-era segregation and tracking students by race and class into low-quality programs. While almost three-quarters of CTE concentrators of all races enroll in a postsecondary program within three years of high school completion, Black students are less likely to do so.

**As states prepare to submit their Perkins plans and Congress considers reauthorization, the Joint Center offers five policy recommendations:**

- 1 Increase funding in the next reauthorization of the Perkins Act;
- 2 Improve CTE teacher recruitment, development, compensation, and retention;
- 3 Support the coordination and alignment of education and workforce development activities;
- 4 Reinvigorate the narratives about CTE pathways; and
- 5 Improve standards for the collection, quality, and reporting of CTE data.





# Introduction

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Career and technical education (CTE) offer students the skills and experiences to enter the U.S. workforce or continue occupational education and training.<sup>1</sup> Nationally, roughly 12 million students participate in CTE programs at high schools, community colleges, and technical colleges.<sup>2</sup> These programs offer coursework, career exposure, and career opportunities organized and conceptualized by the National Career Clusters Framework.<sup>3</sup> This framework groups CTE programs by occupational classification into clusters such as advanced manufacturing, construction, hospitality, financial services, and agriculture, as well as marketing and sales, events and tourism, and arts, entertainment, and design.

Under the Strengthening Career and Technical Education for the 21st Century Act, the fifth legislative version of the Perkins Act, or Perkins V (named after the late Rep. Carl D. Perkins of Kentucky), states collaborate with local school districts and institutions of higher education to decide which CTE programs to offer.<sup>4</sup> Perkins V, which in 2018 committed \$1.2 billion in annual funding to state CTE programs, expired in 2024 and needs to be reauthorized in Fiscal Year 2026 beginning October 2025. States are now preparing to submit their plans under the presumed reauthorization of Perkins and Congress's cuts to \$7 billion in previously appropriated federal education funding in the continuing resolution (CR) passed earlier this year. While funding for education and workforce programs, including Perkins V, remain stable for the 2025-26 school year, funding was cut from teacher professional development, after-school enrichment, and career exploration.<sup>5</sup>

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*Without intervention, the Trump administration's recent transfer of the Office of Career, Technical, and Adult Education from the Department of Education to the Department of Labor threatens to weaken student protections and disconnect CTE from education funding.*<sup>6</sup>

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The practices, policies, and data conventions for CTE programs vary from state to state, making national comparisons or analyses difficult. Research on Black students' access to these programs and their records of success in these programs is limited, though under Perkins V data on career and technical education was disaggregated for the first time by race and ethnicity. Most research now on Black students enrolled in CTE programs provides quantitative analyses of enrollment, representation, and outcomes. Black students are often underrepresented in high-wage fields such as engineering and architecture.<sup>7</sup> In many studies, compared to their white peers, Black students enrolled in these programs have lower grade point averages, lower earnings, and a lower likelihood of transferring, earning a degree or a credential, or gaining a job related to their program.<sup>8</sup>

To improve Perkins V and these outcomes, this issue brief offers qualitative insight into Black students' experiences and outcomes, based on new research conducted by the Joint Center for Political and Economic Studies (see Methodology below). We first present a background on career and technical education in the United States, the historical exclusion of Black students from these programs, and the Blacks students' outcomes in the programs. We then present our key findings on CTE programs and how they affect career explorations by student participants, state and local funding decisions, data-driven decision-making, and the importance of these programs for special populations of students.

We close with a set of recommendations for the U.S. Congress and the Trump administration, particularly as they pertain to Black students participating in career and technical education to ensure they have a fair and equitable

chance of entering and completing these programs. Specifically, we recommend:

- Increasing funding in the next reauthorization of the Perkins Act
- Improving CTE teacher recruitment, development, compensation, and retention
- Supporting the coordination and alignment of education and workforce development activities
- Reinvigorating the narratives about CTE pathways
- Improving standards for the collection, quality, and reporting of CTE data

## History of Race in CTE Legislation

Black communities' relationships with career and technical education are rooted in a history of racism and structural exclusions, a legacy that still shapes the distribution of funding and opportunity for Black students. In 1917, the Smith-Hughes Act funded vocational education in public schools as a separate entity from academic programs and required states to submit funding plans and establish boards for vocational education.<sup>9</sup> States—especially those in the south—regularly funneled Black students into vocational education, limiting their professional options and perpetuating racial stereotypes.<sup>10</sup> This occupational segregation diminishes Black workers' immediate earnings, job security, career advancement opportunities, and wealth accumulation.<sup>11</sup>

In 1967, a federal court ruled that these tracking systems were discriminatory and should be abolished. Other lawsuits challenged the federal government's weak enforcement of civil rights protections and equitable funding for vocational education students.<sup>12</sup> Amid these legal challenges, the U.S. Congress passed The Vocational Education Act of 1963, which was the first iteration of intentionally race-neutral federal legislation impacting career and technical education. Future CTE legislation, including the original Perkins Act of 1984 through Perkins V enacted in 2018, eventually required states to report the number of Black students who enrolled in and completed CTE programs.<sup>13</sup>

Still, these reauthorized laws failed to report results by subject matter, curtailing the ability to analyze and address racial disparities in fields that lead to high-income jobs.<sup>14</sup> Perkins IV, beginning in 2006, required states to report on how many people of color take and complete CTE programs in high school and college, but few states break this information out by subject matter. It can be challenging to determine how many African American students take classes in engineering technology, for example, or how many Latino students take classes in manufacturing. Program-level data matter because some fields of occupation are more likely than others to lead to stable, high-paying jobs that foster economic mobility.



## Today's Black CTE Students

In 2018, Perkins V mandated the disaggregation of CTE data by race and ethnicity and introduced the comprehensive local needs assessment, which put students' data at the center of program decisions and offered a clearer view of racial disparities. Today, the data show that program availability and underfunding continue to shape Black students' enrollment and outcomes in career and technical education.

In the 2022–23 academic year, Black students comprised 13 percent of national CTE secondary enrollment, and slightly less than 15.3 percent of postsecondary enrollment.<sup>15</sup> While Black students' overall participation in career and technical education is on par with national demographics, they are often overrepresented in service-oriented professions such as health sciences or education and training.<sup>16</sup> Black students' limited access to high-quality CTE program opportunities stems from funding gaps, geographic disparities, and underinvestment in schools disproportionately serving Black communities.<sup>17</sup>



In one study of CTE enrollment across 40 states, for example, Black students were less likely than their white peers to enroll in science, technology, engineering, math, and information technology classes and more likely to enroll in hospitality and human services courses.<sup>18</sup> In another study, Black students in CTE programs compared to their white peers had significantly lower grade

point averages, were significantly less likely to earn a degree or a credential at their first college, and they were significantly less likely to gain a job related to their programs. Controlling for highest degree attained and sector of study, the same study found that, on average, Black students earned more than \$8,200 less than white students.<sup>19</sup>

For students who took at least one course online, Black students were somewhat less likely to transfer than white students, and the earnings gap by race and ethnicity among CTE students who started in online courses and programs was much larger than the earnings gap by race and ethnicity among CTE students overall. Black students who started CTE courses online earned less than half of what their white peers who started in the same program in the same year and eventually earned the same degree.<sup>20</sup>

## Methodology

This study gathers qualitative data on how the current Perkins V law and its implementation affect the experiences and outcomes of Black students enrolled in career and technical education programs. The research team conducted 21 interviews with Black CTE experts. Interviewees included current and former CTE students, state CTE directors, CTE association staff, career and technical student organization staff, state and federal advocacy organizations, workforce development boards and organizations, training providers, and researchers from academia and national think tanks. All of the interviews were recorded and transcribed for accuracy. Our research team analyzed the transcripts using In Vivo coding and thematic coding in Dedoose.

## Key Findings

### Teachers are invaluable, but challenges limit their impact

Students, state directors, district leaders, and intermediary partners emphasized instructors' importance in the CTE ecosystem. As one longtime leader in career and technical education asserted, "The CTE teachers are what equip the next generation of students to keep the world moving." In particular, participants noted the importance of Black teachers in career and technical education. One state leader reflected:

*“ Having Black faculty is the number one driver for retention for our Black learners in nursing programs. If they're able to see themselves and the instructors share their backgrounds, talk about the barriers, and then work through it together to find a solution, I think they look at it as something inspirational and just making sure that they have access to faculty members that look like them and can share their passion and background. ”*

Yet challenges with recruiting and retaining Black CTE teachers limit their impact. There also is a need to improve teachers' pedagogy and CTE programs' equitable practices through professional development and mentorship. We turn to these challenges next.

### Recruitment and Retention

Career and technical education programs have issues attracting and maintaining talent. One participant noted, "We could get them, but we couldn't keep them." Teacher pay in particular is a significant barrier to recruitment and retention. Many participants mentioned the difficulty of attracting full-time teachers because of the significant pay cut from their industry roles. One national leader shared:

*“ A diesel technician makes [a lot of money]. They would have to take a pay cut significantly and have a teaching certificate. And that is a very hard sell for a lot of people. So, states are considering how they can ramp up the dollars that we could pay. ”*

Another leader shared that such pay cuts are still a barrier even in states that provided incentives or waived licensure requirements to recruit teachers. This leader notes that in his state:

*“ They don't have to deal with lesson plans. They don't have to deal with paying out of their own pocket. They don't have to go to an educator prep program... But they weren't at a point where they were willing to take a \$40-50,000 pay cut so they could be that example in front of that student. ”*

In addition to pay, other recruitment barriers noted were a lack of incentives, engagement, and support. One participant said:

“It is hard to get Black teachers to enter this field and stay in it, particularly when you can go off and get paid a lot more money to do something else rather than teach a CTE course. And everything else has evolved. Being a CTE teacher is also not the same as being a regular teacher. It’s specialized. If you’re truly doing the model of CTE, it is classroom instruction and work-based learning, so students should do something outside the classroom that’s contributing to them getting real hands-on experience.”

Participants also pointed to strategies to target Black teachers specifically. Said one participant:

“For the states that have Historically Black Colleges and Universities, that’s a missed opportunity, especially since a lot of them are land grant institutions or have some connection to industry and agriculture. Their education programs could incorporate certification for students who are in engineering or other programs where they could actually quickly transition over to a teaching pathway and bring along some element of CTE in their skillset.”

Another recommended strategy was branching out to new populations with industry experience, such as retirees and immigrants who can easily transition to the classroom. Said one state leader:

“There are so many immigrants that come to this country with backgrounds in medicine, and law, and engineering, and credentials that struggle to receive reciprocity and recognition for those credentials when they come here. They possess a lot of knowledge and expertise that could absolutely be tapped into and channeled in CTE classrooms and in CTE programs, but it requires a level of nimbleness and flexibility and rethinking of the different pathways into CTE teaching.”

Experts also observed districts trying to attract teachers with outdated approaches like the appeal of summer breaks and suggested better incentives like signing bonuses. In addition, CTE teachers’ and programs’ connections to local communities are essential to students’ experiences. One participant asserted that recruiting Black teachers should be “hyperlocal” to students’ communities.

Importantly, one association leader noted that Black teachers’ presence in their communities can enhance narratives on career and technical education, pointing out, “There are viable pathways and even sometimes long-term careers that we sometimes shun because of the stigma related to them.”



It's incumbent upon Black teachers to be more visible in this messaging and the community.”

One program leader observed that teacher recruitment as part of broader program implementation at the community level is crucial. “Community design and community buy-in really help,” he said, then sharing an example of a mother and her son both attending the same program. This positions teachers to serve as mentors to students, a key factor in Black student success and retention.

### ***Professional development and mentorship***

Career and technical education programs need better funding and infrastructure to provide coaching and professional development for instructors. Pedagogy and culturally responsive teaching were participants' most cited areas of professional development needed for CTE teachers, especially for new, part-time, and provisional teachers. Interviewees pointed out teachers' struggles, such as incorporating core skills in specialized topics. Observed one former instructor:

*“How is a culinary arts teacher supposed to implement math in the classroom? How can you integrate that into all of your lessons so that students won't just have to learn math over here and not apply it anywhere else because it's applicable to all subject areas. So how do we effectively do that?”*

One remedy suggested was using bonuses to encourage and fund teacher licensure and professional development. But experts stressed the importance of training teachers to understand and serve Black students and their systemic barriers to training and employment. One technical assistance provider noted the importance of:

*“Ongoing professional development training for staff as well as faculty, but particularly if they're centering equity. How do we make sure that there's training on a clear understanding of what equity means and how it shows up in the classroom and in individual interactions with students?”*

Another participant noted that “if there's a commitment to equity, then there has to be some accountability and there has to be investment in ongoing learning for folks who are working at all levels at the institution, and particularly folks who are working with students directly.”

The need for professional development extends beyond classroom instructors to staff who work with employers and other partners. One technical assistance provider noted:

*“Because the staff was uncomfortable talking about [race], that spilled over into how they navigated or avoided having those conversations with their employer partners. A lot of the gap is that staff who are working with employers actually don't have the skillset, or are not comfortable or confident in their ability to even have that conversation. And so, if they're uncomfortable, they're not going to raise it, or they're going to skirt around it in ways that could be less productive. And so, there's something about increasing their capacity and skills.”*

## The flexibility allowed by Perkins V can reduce disparities and workforce innovation

Perkins V supports programming and system alignment across all levels of career and technical education and allows for greater connectivity with community stakeholders such as parents, students, and community organizations.<sup>21</sup> At the same time, however, Perkins V provided states greater flexibility in determining quality, measuring outcomes, and allocating resources for CTE programs.<sup>22</sup> This flexibility was a key compromise in the 2018 reauthorization: Perkins contains much more explicit equity requirements than any previous iteration of the law, but it also significantly reduced federal power in favor of states' autonomy.

This flexibility allows individual states to name and address disparities for Black learners and meet the needs of all students. Participants in our research discussed how this flexibility manifested in their work in four key areas:

- Career exploration
- State and local funding decisions
- Data-driven decision-making
- Special populations

### *Career exploration*

Perkins V supports career exploration at all CTE learning levels, but it is emphasized in the middle grades, defined as grades five through eight.<sup>23</sup> Career exploration includes career fairs, work-based tours, or exposure through academic instruction.<sup>24</sup>

One participant from a national nonprofit training organization explained how a workforce development agency and a nonprofit organization created a local network of businesses to enhance the CTE career-readiness ecosystem and train participants in information technology careers. Practices such as these expand students' social capital and access to professional networks.<sup>25</sup>

These experiences are vital for Black students, who are less likely to report access to mentors who provide career guidance and connections to institutions and job opportunities.<sup>26</sup> Unfortunately, there is no guidance or data on CTE programs' enrollment, structure, and outcomes for students in the middle grades. It is also difficult to direct funding to the middle grades. Another participant from a national CTE intermediary noted that their organization would like the ability to improve their role in career exploration and navigation to ensure students and families are informed of options and pathways in their educational career journey.

### *State and local funding decisions*

Perkins V allows states to reserve up to 15 percent of their funding allocation to drive innovation and implement programs of study, an increase from 10 percent in Perkins IV.<sup>27</sup> States are required to fund both secondary and postsecondary career and technical education, but also have flexibility to determine the split of Perkins V funds beyond the required minimums under the federal law and any additional state funding.

States can also “braid” Perkins V funding with other education or workforce programs. For instance, the Workforce Innovation and Opportunity Act (WIOA) provides funds and authorizes the nation's public workforce development system and related training programs.<sup>28</sup> State agencies receiving Perkins V funding must submit a four-year state plan outlining their CTE activities to the Secretary of the U.S. Department of Education.<sup>29</sup> States can choose to submit their CTE plan as part of their WIOA-combined state plan.

Participants noted that the ability to submit a combined state plan under WIOA allowed for greater connectivity across different CTE programs, as Perkins V is embedded in schools and can feel disconnected from workforce agencies.

One participant from a philanthropic organization shared, “In thinking through their state strategic workforce plan, combined state plans created a path for states to also think about how CTE fits in.”

Another leader’s motivation for combining the two plans was better funding to holistically support a broader range of students and workers. With minor exceptions for state set-asides, Perkins V nearly exclusively serves school youth, while WIOA mandates that 75 percent of all youth funding goes to serve youth who are not in school.

### ***Data-driven decision-making***

Perkins V introduced a comprehensive local-needs assessment of states’ planning, spending, and accountability as a requirement to receive funding.<sup>30</sup> This assessment also facilitates the review of gaps in access-and-performance data for CTE learners. It also includes significant stakeholder involvement.<sup>31</sup>

One participant noted that the comprehensive local-needs assessment “could be powerful,” but its requirements are still “loose.” Some experts described it as too prescriptive. Some state partners view the assessment as merely an administrative burden and an exercise in compliance. Others integrate their comprehensive local-needs assessments into local planning, budgeting, and outcomes.

Connecting student education data with programmatic decision-making through comprehensive local-needs assessments is a lever to track and promote access and completion for Black learners. A participant from a national workforce intermediary provided an example of this in action: “Baltimore’s Promise is a huge leader in [connecting] K-12 and workforce systems. They are working with the community college system to get data shared across these major educational and workforce systems to track long-term student outcomes.”

Perkins V is one of the few federal programs that measure student placement after completion.

### ***Advancing outcomes for special populations***

Perkins V increased the law’s focus on serving special populations. Special populations include individuals who are out of the workforce, English-language learners, individuals experiencing homelessness, individuals with disabilities, single parents including single pregnant women, youth who are in or have aged out of the foster care system, individuals preparing for careers that are non-traditional for their gender, youth with a parent who is a member of the armed forces on active duty, individuals from economically disadvantaged families, and low-income youth and adults. Reflecting on these special populations, one participant from a national workforce intermediary suggested:

“Perkins is, in my opinion, a huge opportunity for leveling the playing field. Seeing people leverage it in that way is a mixed bag. It might shift if people saw others celebrated for leveraging it that way. There is some of that, but it’s not nearly as widespread.”

A leader of a workforce training provider expressed that the historical exclusion of Black communities from federal dollars and opportunities is a continued challenge for Black learners and workers to access high-quality programming and reinforces occupational segregation. This leader said, “We should help drive the conversation, because normally when we get big pots of money, we don’t see it in our communities.”

## Spotlight: Student Voices as Heard Through Career and Technical Student Organizations

Students are experts of their own experiences. Current student perspectives are a valuable resource for understanding the challenges and successes of Black learners in CTE programs. Joint Center researchers interviewed four Black high school CTE students working toward industry certifications in biotechnology, culinary arts, cosmetology, and business management.

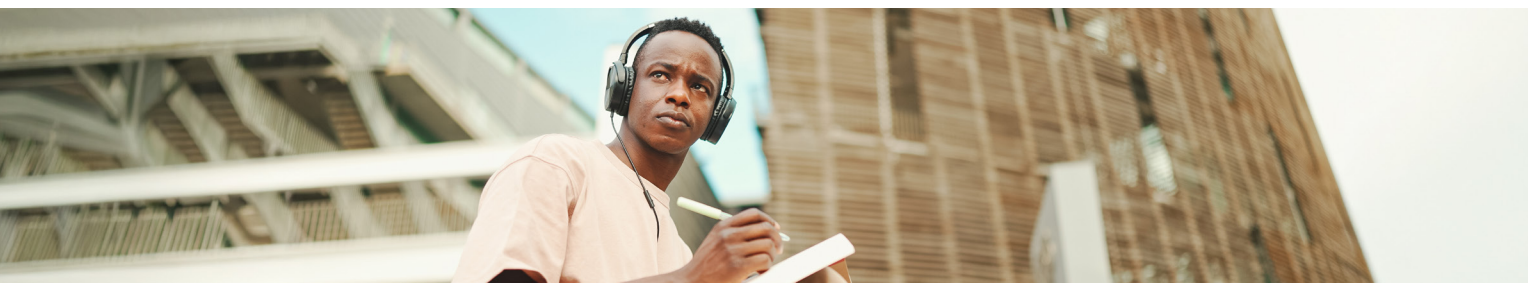
All four student participants were affiliated with a Career and Technical Student Organization, national nonprofit organizations that enhance CTE students' learning through cocurricular engagement in classroom instruction, leadership development, and applied learning such as hands-on demonstrations and work experience.<sup>32</sup> These students can hold local, state, or national leadership positions and attend conferences to network with other CTE students and industry partners.

These students expressed having positive experiences in their CTE programs. Most were inspired to enter their field by family or personal experience. Students acknowledged that involvement in a Career and Technical Student Organization was crucial to their success in completing their CTE program or obtaining a license or industry certification. Their involvement provided access to holistic support, such as, in the words of one interviewee, *“Having an advisor or your peers to motivate you to do anything and everything [is essential].”*

The students also valued the opportunities to network and connect with other CTE students and professionals in their respective fields, underscoring the importance of these programs as incubators of students' social capital. Another student reflected, *“We’ve had different workshops at our school. I attended a lash workshop to get certified in lashes and nail care, and met with two black woman-owned businesses. Talking to the women in those fields about being business owners, it was eye-opening. It helped me see that being a salon business owner was possible, achievable, and within reach.”*

Some Career and Technical Student Organizations offer opportunities to connect across regions or career interests, such as statewide conferences and competitions for students to showcase their technical skills. Students reported improving their self-esteem and confidence because they participated in the skills competitions and received support from their teachers.

In their interviews, the students offered recommendations to improve the CTE experiences for Black learners, including increasing the number of CTE teachers, increasing CTE program funding, and investing in Career and Technical Student Organizations. One student noted, *“One teacher covered [our organization] on her own. She made sure that we had the funds, the connections, everything that we needed to succeed. I remember thinking I can’t imagine doing all that by myself. She needs more help.”*





### **Robust data and accountability can drive results**

Experts stressed the importance of data in accountability, compliance, and gauging student experiences. Yet they also noted issues with the collection of data, its quality, and a lack of data reporting. One county administration reflected:

“ I am on a federal grant. What kind of reporting is needed for me? Essentially all they want to know for me to run my entire consortium is did I spend X amount of hours doing these three things? And it's literally checking a box and saying yes. This data does not care one bit who I'm serving, where I'm serving them, or whether I am missing anyone that isn't at the table. ”

Continuing, this leader also noted the desperate need for more comprehensive data and the legal challenges of collecting that comprehensive data.

“ We're begging the state board to at least update that god awful registration form to where we can collect some sort of data on the students, or we're going to get permission from our three partner colleges to send out a follow-up form that parents would sign, giving the colleges permission to put the students into their systems and that type of thing. So, we have to make sure we do the legal due diligence there on that. ”

Program leaders noted how much limited data prevented program success. Said one: “If I had the data to prove what I actually saw and what I actually witnessed and observed, it probably could have made more of an impact.”

Further, the accountability measures required under Perkins V are based only on CTE concentrators. Under the Department of Education's Perkins V guidance, a CTE concentrator is a secondary student who has completed at least two courses in a single Perkins-eligible CTE program. Postsecondary students cannot be considered concentrators. Said one expert:

“ I think it's really important to understand how the CTE system serves not just concentrators, but also participants and those individuals who are dabbling in CTE because I'm certainly of the belief that career-focused training and applied learning opportunities are beneficial, and so I think we can continue to refine our understanding of how beneficial they are even for individuals that have a light touch experience with CTE. ”

While participants desired broader accountability, they also offered cautionary advice on changing the definitions and calculations. Observed one participant in our study:

“ I think it’s also really important that policymakers do not unintentionally introduce perverse incentives around who to serve through CTE programs. I acknowledge that tension in CTE as a system• you want to be flexible enough to serve students who are explorers, who are really trying to understand themselves, understand their interests, understand the labor market, and as a result may just take a class or two here and there. Then you have students who are committed to pursuing a CTE path and having that be their pathway into further education and work. ”

With the current definition of CTE concentrators, states grapple with whether and how to account for middle school courses, introductory high school courses, and variations in program length, as well as whether the sequence, progression, and level of courses.<sup>34</sup>

There are also issues with CTE data that can be incomplete, outdated, and inaccurate.<sup>35</sup> Participants attributed some of these quality issues variously to some data being self-reported, the inability to share student-level data, and challenges with data infrastructure and capacity. In the absence of public-outcomes data, many states over-rely on surveys to assess student outcomes. WIOA, for example, has explicit regulations that allow stakeholders access to wage-record data. Perkins V does not have comparable guidelines for CTE practitioners’ access.

Because of that discrepancy between the two laws, some states allow CTE access to wage-record data, and others do not. One workforce development leader observed:

“ What platforms, what tools do you have for data collection to be consistent, to vet data, to filter it, to clean it? Some of it’s a capacity issue. It takes someone dedicated to this with a skillset for it, with tools for it. And then many times, not all, some of our affiliates have very good data collection practices and have dedicated staff, but many times they don’t. ”

Sometimes, the capacity issue is not in the number of staff but in their limited understanding. Observed another workforce development leader:

“ Secondary and postsecondary data systems across the country are not putting the information in the hands of the individuals who are making decisions about programs. We’ve had states that have said, well, we don’t have any gaps. So, where we’ve had to really focus most of our initial efforts has been around identifying and letting them know that there are gaps. ”

Finally, experts expressed a desire for qualitative data that illuminates student experiences and potential biases. One program leader collecting interview data noted: “We wanted to get that perspective from someone who does not share the same value, so they can actually tell the story about what the investment and what the return is. So that’s something that we’re doing right now.”

Some participants observed that quantitative data only goes so far, with one leader noting:

“Even when you pull the data, you’re not seeing everything. It’s like, well, is the teacher a racist? Is the program not successful? So, there’s other elements that you need to be thinking of as you’re pulling the data. It’s like, why are these students not in this program? Are they not being told about this program at the school district? Do they not have access? There’s no transportation? So quantitative has to be mixed with qualitative, especially in this space because there’s too many things that we don’t know in play, so we have to be asking the questions.”

### ***Negative narratives on career and technical education are persistent***

Career and technical education is often seen as a pathway for low-income students and students of color who were not believed to be ready or able to pursue postsecondary education.<sup>36</sup> These perceptions are a byproduct of the Jim Crow-era segregation and tracking students by race and class into low-quality programs.<sup>37</sup> While almost three-quarters of CTE concentrators of all races enroll in a postsecondary program within three years of high school completion, Black students are less likely to do so.<sup>38</sup>

Many participants in our study felt the narrative around career and technical education is a hindrance to interest in CTE programs for Black learners. Leaders at career and technical student organizations provided great insight into Black perceptions of these traditionally negative narratives today. One leader recalled, “Back in the day, if you were in one of those CTE programs, or if you were in what we used to call vocational education, it had a stigma attached to it, but that is no longer the case.”

But a director at another career and technical student organization explained:

“I think we also have an opportunity to continue to rethink how we reframe how we talk about the CTE period as a career opportunity or career tracking. Since it was vocational education, we still face the theory that the less smart kids or the less educationally inclined students end up in this pathway, versus students with just a different interest. And it doesn’t mean you won’t go to college because you do CTE. And so, I think there’s still some better groundwork you need to do to rebrand what CTE is and what it can be.”

Some participants felt that Black communities need additional information about wages and educational requirements for possible career paths. A leader at a statewide education organization recognized that for Black families to receive this information, “the narrative needs to be led by the Black community, by Black scholars, by Black institutions, because I think it’s really about making sure our students have competitive options for what they want to do in their adulthood.”

A national workforce association leader reflected on a different aspect of changing the CTE narrative, observing:

“*Narrative change is part of the education. I think people don’t take family and community education seriously, but that moved the college access movement forward. That, in addition to seeing people close to them who came home with their degree and invested in their communities. So, we need to understand that CTE pathways are also very lucrative. However, that narrative is not out there.*”





## Policy Recommendations

Based on the findings of our research, the Joint Center for Political and Economic Studies offers five policy recommendations to improve career and technical education programs overall and ensure that Black students participating in these programs have a fair and equitable chance of entering and completing these programs. Specifically, we recommend:

- Increasing funding in the next reauthorization of the Perkins Act
- Improving CTE teacher recruitment, development, compensation, and retention
- Supporting the coordination and alignment of education and workforce development activities
- Reinvigorating the narratives about CTE pathways
- Improving standards for the collection, quality, and reporting of CTE data

Below, we detail each of these recommendations in turn.

### ***Increase funding in the next Perkins reauthorization***

Congress must increase funding in the next Perkins reauthorization in Fiscal Year 2026, which began in October 2025, to appropriately serve the approximately 12 million secondary students engaged in career and technical education.<sup>39</sup> Black students comprise about 13 percent of secondary CTE concentrators.<sup>40</sup> After a slight \$10 million yearly increase in 2023, federal grants to the states under Perkins have since remained level for two years.<sup>41</sup>

The co-chairs of the House Career Technical Education caucus, Rep. Glenn “GT” Thompson (R-PA) and Rep. Suzanne Bonamici (D-OR), submitted a bipartisan request to congressional appropriators for robust funding for the Carl D. Perkins Career and Technical Education Act in the FY2026 Labor, Health and Human Services, and Education appropriations bill.<sup>42</sup> Increased funding could help target more resources to further Black CTE students’ access to CTE programs and improve their completion rates. State leaders and CTE practitioners must target resources to remove barriers for Black learners. Finally, increasing federal and state support for career and technical student organizations is vital to student development and social capital building.

### ***Improve CTE teacher recruitment, development, compensation, and retention***

The next reauthorization of the Perkins Act must allow for greater support of CTE instructors. States and school districts must improve recruitment of Black CTE instructors, especially in schools and districts with high Black student enrollment. States can pilot innovative models such as grow-your-own programs, co-teaching, and flexibility in teacher licensing.

Increased funding also can support better teacher compensation, including base pay and additional compensation such as sign-on bonuses to boost recruitment or performance incentives based on student outcomes. The next reauthorization of the Perkins Act and its appropriated funding must maintain and expand support for instructors’ training, development, and peer-to-peer learning in their fields of expertise and instruction. Further, the next reauthorization must continue to allow states the flexibility to train CTE teachers in cultural competence and inclusive pedagogy to better reach and teach Black students.

### ***Support the coordination and alignment of education and workforce development activities***

State workforce development agencies and career and technical education offices can collaborate by sharing terminology, data, processes, and other policy levers that serve their mutual purposes. Increased alignment also can include the innovative “braiding” of federal funding under the WIOA and the Perkins Act, integrating CTE representation on state workforce development boards, and investments in wrap-around support for students.

The federal government can provide states with more robust technical assistance and support to further align career and technical education with primary, secondary, and post-secondary education and with workforce development agencies. Alignment can include combining WIOA plans, braiding and blending funding, and improving data coordination. Congress also can tailor the next reauthorizations of the Perkins Act and WIOA to better connect on concrete issues such as approvals for state CTE programs, stakeholder engagement, and holistic support.

To be sure, alignment between workforce development programs and federal support for state-level education should not subjugate one issue over another. Despite laws requiring the U.S. Department of Education to direct all Perkins Act funding, the department signed an interagency agreement in June 2025 to move the program to the U.S. Department of Labor. Leaders and advocates argue the move will undermine program effectiveness.<sup>43</sup>

### ***Reinvigorate the narratives about CTE pathways***

Under Perkins V, developing four-year state plans requires consultation with parents, students, and community organizations.<sup>44</sup> The current law also requires engaging these stakeholders in comprehensive local-needs assessments.<sup>45</sup> These requirements should continue.

Career and technical education administrators should strive to help Black students, families, and communities understand high-earning career and technical pathways. State leaders must utilize the legally required consultation to elevate these pathways through robust communication, awareness, and outreach campaigns. Campaigns should include representation of Black workers in high-earning technical occupations, thus expanding CTE students' perceptions and their social capital and connections.

Perkins V must also include sufficient definitions, guidance, and funding for CTE exposure and exploration for students in the middle grades. Perkins V allows funding for program activities as early as fifth grade, but there is no guidance to states on middle grades CTE programs. The federal statute allows career awareness and exploration, early CTE exposure, preparation for CTE program of study, but does not clearly define these activities, nor does it require states to define them. While some Black parents think of career and technical education as a backup plan, many more now see it as a pathway to economic security and emphasize the importance of exposing younger Black students to CTE pathways at a young age.<sup>46</sup> In our research, CTE student participants supported this claim and expressed that their interest in the program stemmed from family members' or teachers' exposure in elementary and middle grades.

### ***Improve standards for the collection, quality, and reporting of CTE data***

The federal government must improve data governance, enhance data infrastructure and interoperability, invest in data-quality assurances, and foster data-driven decision-making across federally funded state education programs and workforce development systems. The Biden administration tried to improve CTE data collection through two expanded Information Collection Requests, but the Trump administration rescinded both in early 2025. This decision should be reversed.

To understand and improve outcomes for Black students, the next reauthorization of the Perkins Act must enhance accountability at the state and local level must maintain and expand the requirement to disaggregate performance data by race and ethnicity.<sup>47</sup> Reauthorization offers the opportunity to standardize reporting norms between states and better align state CTE data systems with education and workforce development data. States with longitudinal data systems can serve as models for others and collaboratively develop shared standards for the collection, quality, and reporting across federal, state, district, and institutional systems.

Beyond quantitative data on enrollment and outcomes, qualitative data from interviews, focus groups, and observations can help interpret and contextualize performance data. Qualitative data can tell stories of students' experiences, as well as those of teachers and leaders. Stakeholder consultation requirements under Perkins V allow for a seamless transition to adding qualitative data collection to when the law is reauthorized in 2026.

## Conclusion

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The Strengthening Career and Technical Education for the 21st Century Act, or Perkins V, was authorized from FY 2019 to FY 2024 and is due for reauthorization.<sup>48</sup> The reauthorized law can potentially build upon and expand on Perkins V's efforts to dismantle barriers to access and high-quality CTE programs for Black students. Yet the future of federally funded career and technical education is uncertain.

This brief's policy recommendations based on the insights gathered in our research and interviews with a wide array of CTE leaders and participant will be helpful as Congress navigates the reauthorization of the Perkins Act. Robust federal appropriations and support must continue to provide Black students with enriching CTE experiences that lead to longer-term economic mobility and educational advancement.







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### Media Contact

[press@jointcenter.org](mailto:press@jointcenter.org) | 202.789.3500 EXT 105

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### Joint Center for Political and Economic Studies

633 Pennsylvania Ave., NW

Washington, DC 20004

[info@jointcenter.org](mailto:info@jointcenter.org) | [jointcenter.org](http://jointcenter.org)



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