

State and Local Strategies for Diversifying the CTE Educator Workforce



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ASSOCIATION FOR
CAREER & TECHNICAL
EDUCATION®

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INTRODUCTION

A major barrier to achieving equitable access and success in Career Technical Education (CTE) programs is the lack of diversity among CTE educators. An analysis of data reported for the Carl D. Perkins Career and Technical Education Act (Perkins V) reveals that 51 percent of secondary CTE concentrators were learners of color in 2021–22;¹ however, only 13 percent of CTE teachers in public schools were people of color in 2020–21.²

While efforts are emerging across the country to recruit and retain diverse CTE instructors, diversification is a real challenge as the CTE field also faces teacher shortages, even without taking diversity into account. To investigate the full scope of the issue and identify promising practices, Advance CTE and the Association for Career and Technical Education (ACTE) engaged with national, state and local experts in CTE, teacher preparation and teacher diversity to consider this critical issue and gather a variety of perspectives and potential solutions for diversifying the secondary CTE educator workforce.

The two resources that emerged from this collaboration are designed to assist state and local CTE leaders with strategically planning and developing policies and practices to increase diversity in the secondary CTE educator workforce. This report provides state and local CTE leaders with recommendations gleaned from national, state and local experts as well as from focus groups held with CTE teachers and administrators of color, informed by data and research. An accompanying resource — a list of [organizations](#) that represent industry professionals, current and future educators, and learners from underserved sectors of the population — attempts to address one issue identified by experts and focus group participants: where to begin when recruiting diverse professionals to become CTE educators.

While diversity is important at all levels of education, this report will explore issues and suggest strategies for diversifying the secondary CTE educator workforce in particular. In addition, throughout this report, the term “educator” will refer to both CTE classroom teachers and CTE administrators.

TEACHER-LEARNER RACIAL GAP COMPARISON

13%

51%

Public CTE Teachers 2020–21

Secondary CTE Concentrators 2021–22



MAKING THE CASE

Research has demonstrated the benefits of racial and ethnic diversification in the educator workforce generally. Teachers of color are associated with improved academic performance for learners of color; learners of color with teachers of color are less likely to be chronically absent or suspended; and learners of all races and ethnicities report feeling that their teachers of color care about them.³ Teachers and administrators of color also provide learners examples of Black and brown professionals and leaders, showing learners of color that a career in education is a possibility for them. In addition, greater diversity among educators can make teachers and administrators of color in the field feel less isolated, increasing retention.

Despite these benefits of educator diversity, more than 80 percent of the public school teacher workforce in the United States in 2020–21 identified as white.⁴ While the teacher workforce has become more diverse in recent decades, the percentage of teachers of color falls far short of the percentage of learners of color in public schools.⁵ Diversity of the teaching workforce is a challenge across urban, suburban and rural communities, with rural communities becoming increasingly racially and ethnically diverse in the past decade.⁶

The CTE teacher workforce is similar in racial demographics to the overall public school teacher workforce. And while little research has focused on the racial and ethnic demographics of CTE educators or the impact of diversification in CTE specifically, diversity in CTE has the added benefit of showing learners examples of successful professionals of color with experience in the career fields that interest them.

Educator diversity may be particularly impactful for high-wage, in-demand CTE programs of study in which learners of color are under-represented.

For instance, on a national level, Black learners were under-represented as secondary CTE concentrators in the Science, Technology, Engineering & Mathematics (STEM) Career Cluster[®] in 2021–22.⁷ Increasing the number of CTE teachers of color in STEM program areas could help close this equity gap.

In addition, while diversifying the CTE educator workforce is particularly relevant because of how it could affect equitable access to programs that prepare learners for high-wage career fields, communities should ensure that lower wage education roles can serve as launchpads to higher wage education careers. In this case, CTE programs of study must prioritize incorporating credit transfer agreements, credential attainment and other program elements that help all learners who choose important but less remunerative occupations, particularly historically underserved learners, to pursue further education and credentials after high school or later in life.

“It’s really hard
for kids to be who
they can’t see.”

PARTICIPANT OF THE CTE EDUCATOR
DIVERSITY FOCUS GROUPS



ASSESS THE CURRENT STATE OF CTE EDUCATOR DIVERSITY

Before state and local CTE leaders can act on diversifying the secondary CTE educator workforce, they must first define and understand the scope of the issue.

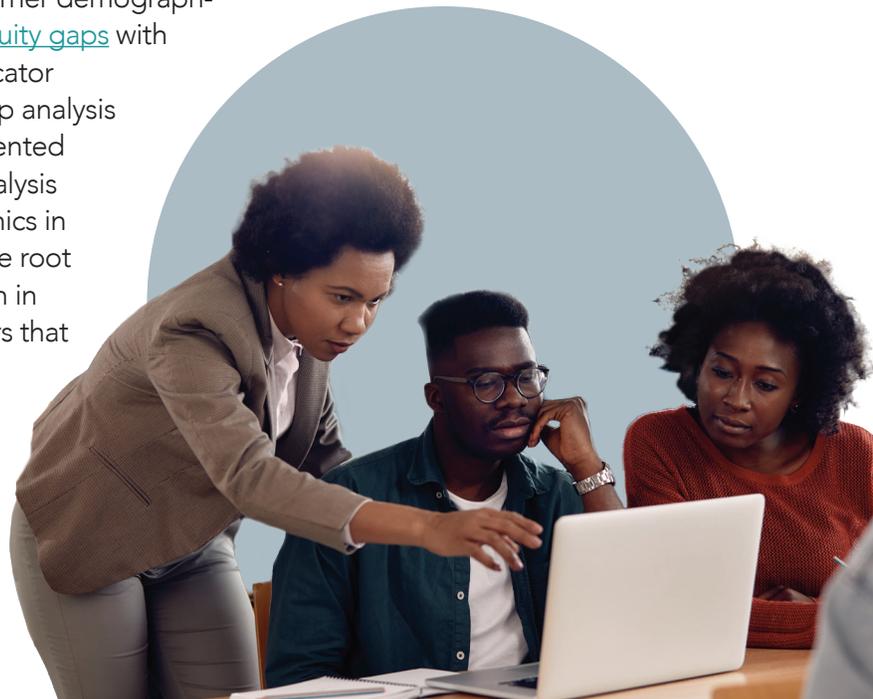
Understand CTE Educator Demographics

State and local leaders can begin examining the diversity of their current workforce by analyzing data on CTE teacher and administrator demographics and comparing this data to learner demographics. The nature and magnitude of the gaps between educator race, ethnicity, gender and other characteristics and those same demographics for learners can then guide root cause analysis and action planning.

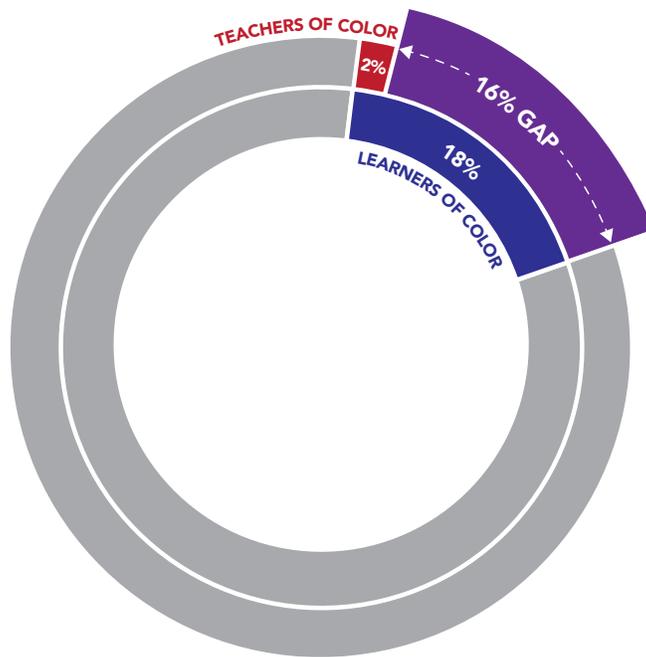
Ideally, state leaders will already have access to data on their CTE workforce that includes demographic information. If not, this information can be collected through administrative data held by the state's certification or licensing agency and/or through a short survey of CTE educators.

This analysis will be richer and more actionable if the dataset also includes gender identity, age, CTE program area and the educator's pathway into CTE teaching. While this report focuses on racial and ethnic diversity, other demographics such as gender identity are also important to consider when shaping a representative educator workforce that reflects learner identities. For comparison learner data, demographics such as race, ethnicity and gender identity can be found in the state's Perkins reporting.

To compare educator demographics to learner demographics, states can pair an analysis of [learner equity gaps](#) with an analysis that compares learner and educator demographics. For instance, if a learner gap analysis shows that Black learners are under-represented in the STEM Career Cluster, a follow-up analysis would examine Black educator demographics in that program area and explore whether one root cause of Black learner under-representation in the STEM program area is a lack of teachers that reflect their racial identity.



TEACHER-LEARNER GAP ANALYSIS EXAMPLE



To conduct a teacher-learner gap comparison using this example, calculate the proportion of Black teachers and the proportion of Black learners and compare them. For instance, if Black teachers make up 2 percent of the CTE workforce in the STEM Career Cluster in a state and Black learners make up 18 percent of the CTE concentrator population in that Career Cluster in that state, the difference is 16 percentage points. State leaders can then prioritize larger teacher-learner gaps; gaps among teachers and learners that align with critical learner equity gaps; and gaps in high-wage, in-demand program areas. In addition, this analysis can consider intersectionality by including gender identity along with race and ethnicity, as research has demonstrated that, for instance, young Black men benefit from interacting with Black male educators.⁸

This gap analysis process has already been used to demonstrate differences among educator and learner demographics more broadly. According to a recent analysis by the [National Council on Teacher Quality](#) that compared the overall percentage of learners of color to the percentage of teachers of color in each state, every state has a negative learner-teacher racial gap, with more learners of color than teachers of color. The gap ranges from -8 percent in Vermont to -48 percent in Nevada.⁹

Local CTE leaders can undertake a similar gap analysis to understand the differences between educator demographics and learner demographics, identify strategies, and develop goals to close gaps.



Every state has a negative learner-teacher racial gap, with more learners of color than teachers of color.



Recommendations

STATE AND LOCAL CTE LEADERS MAY CONSIDER THE FOLLOWING ACTION STEPS FOR **accessing and analyzing data on educator demographics:**

- Evaluate current sources of data about CTE teacher and administrator demographics.
- Consider collecting additional data through surveys or collaboration with the state teacher certification agency.
- Incorporate educator data, including demographics, vacancies and other relevant data, into statewide CTE dashboards.



Incorporate Educator Diversity into the Comprehensive Local Needs Assessment

Demographic data and questions assessing educator diversity can be incorporated into the Comprehensive Local Needs Assessment (CLNA) that local grant recipients must complete to receive funding under Perkins V. The CLNA requires local recipients to identify and address populations that are under-represented in the CTE teaching profession, among numerous other requirements.



Several states have included specific questions in their CLNA templates asking local recipients to consider this issue. For example, the [Ohio Department of Education](#) has incorporated questions on educator diversity into its CLNA, asking about the demographic makeup of teachers and staff, how these demographics compare to the learner population, and the systems and processes in place to increase recruitment and retention of under-represented learners and educators. It also directs local recipients to complete a root cause analysis to identify strategies that would close these gaps.

While this report focuses on the secondary CTE workforce, a robust analysis of educator demographics for the CLNA should also include postsecondary faculty. For instance, the CLNA template developed by the [Illinois Community College Board](#) and provided to postsecondary Perkins grantees requires recipients to answer the following questions:

- *... what groups are underrepresented among your CTE faculty by race/ethnicity, gender, and disability? How is this underrepresentation of faculty reflective of industry as well?*
- *Among your CTE faculty, how are you increasing the representation of underrepresented groups, especially in terms of groups that are underrepresented by race/ethnicity, gender, and disability?*
- *How do you advance culturally responsive teaching in CTE through professional development and any other ongoing, embedded, and systemic supports for educators?*
- *How do you ensure that your CTE program leadership is culturally responsive (e.g., deans, vice presidents, workforce partners, advisory committees)?*

In addition to the benefits that accrue to local CTE providers from understanding diversity gaps in their workforce and identifying strategies to close those gaps, incorporating an educator diversity analysis into the CLNA puts this information into the hands of the community stakeholders who are key to the CLNA process. State CTE Directors can also benefit from understanding the educator diversity issue on the local level and statewide.





Recommendations

STATE AND LOCAL CTE LEADERS MAY CONSIDER THE FOLLOWING ACTION STEPS FOR **incorporating educator diversity into the CLNA:**

- Incorporate a gap analysis as described in the previous section as well as a qualitative analysis of CTE educator diversity.
- Collaborate with partners to identify the root causes of gaps between learner and educator demographics and develop strategies to close these gaps.



CTE EDUCATORS OF COLOR FOCUS GROUP FINDINGS

In March 2023, Advance CTE and ACTE staff hosted four focus groups with CTE educators of color: one with early career CTE teachers of color with four years or less of experience, one with veteran CTE teachers of color with five years or more of experience, one with early career CTE administrators of color, and one with veteran CTE administrators of color. Twenty-seven CTE educators participated, and several important themes emerged from the discussions:

- Industry professionals of color are often unaware that becoming a CTE educator is a career option.
- Prospective and new CTE teachers of color may face barriers to licensure based on their ability to meet work and education requirements, including struggles transitioning credits earned in other countries and problems with the timing of their work and education experience.
- CTE educators of color report experiencing racism, microaggressions and other biases, including misogyny.
- CTE educators of color can struggle to rise into leadership roles because of cliques and networks from which they are excluded.
- CTE educators of color put great value on providing representation to learners of color.
- CTE educators of color cite the benefits of mentorship programs and professional learning communities, including opportunities for the general CTE educator workforce and those for educators of color specifically.



PROMOTE CTE AS A CAREER CHOICE

Once state and local CTE leaders have identified the most pressing educator diversity gaps and their root causes, they can begin identifying strategies to promote the profession to current and potential educators of color.

One of the primary takeaways for Advance CTE and ACTE staff from the focus group discussions was that many industry professionals of color are unaware of opportunities to transition into teaching CTE. For instance, two participants said that they had been substitute teachers in general education classes for several years before they became aware that they could use their industry expertise to teach CTE.

Collaborate with Organizations to Promote CTE Teaching Careers to Individuals of Color

To help address this lack of awareness, one potential strategy for diversifying the CTE workforce is to build recruitment and hiring networks with minority-serving education institutions and learner groups, organizations that focus on developing the teacher pipeline among individuals of color, and industry associations that focus on diversity in specific occupations and sectors.

Examples of these groups include historically Black colleges and universities (HBCUs), Hispanic-serving institutions (HSIs) and Tribal colleges; industry affinity groups such as the National Society of Black Engineers and the National Association of Minority Contractors; and learner organizations such as the National Society for Minorities in Agriculture, Natural Resources and Related Sciences.

Building relationships with these organizations is one way to expand the base of potential new CTE educators. Many of these organizations exist on multiple levels, with national organizations; state associations; and chapters at colleges, schools or districts. State leaders can make these connections on the national or state level, which can pave the way for relationships to develop locally, and vice versa. As connections deepen, state and local leaders can consider incorporating representatives from these groups into CTE advisory boards and processes such as Perkins state planning and the CLNA.

To support these efforts, Advance CTE and ACTE have developed a list of [organizations](#) representing individuals of color to help local, regional and state CTE leaders make connections with these groups. Further information on this resource can be found later in this publication.

“How do you create a critical mass so that the people of color, the teachers, they feel comfortable and there’s enough of them then so that they can feel good about themselves teaching?”

PARTICIPANT OF THE CTE EDUCATOR DIVERSITY FOCUS GROUPS





Recommendations

STATE AND LOCAL CTE LEADERS MAY CONSIDER THE FOLLOWING ACTION STEPS FOR **collaborating with organizations representing individuals of color to promote CTE teaching as a career:**

- Compile a list of current organizational partners and potential partners in your state or local area that promote careers in education or CTE-relevant industries to people of color, consulting the list developed by Advance CTE and ACTE.
- Connect with your counterparts on the state or local level to build on existing networks and ensure that efforts are not being duplicated.
- Engage teachers and administrators of color to act as ambassadors to these organizations.

Market CTE Teaching Careers to Individuals of Color

When marketing CTE as a career to individuals of color, CTE educators can share the benefits of being a CTE teacher through inclusive marketing materials and messaging. These marketing resources can include promotional materials — graphics, fact sheets, websites, social media and more — that feature CTE educators of color and messages that resonate with potential teachers generally and potential educators of color in particular.

An important message for CTE educators of color, and a repeated theme that came out of the focus groups, was the importance of providing representation to learners of color because, as one focus group participant described it, “it’s really hard for kids to be who they can’t see.” Other benefits that speak to CTE educators of color also speak to CTE educators more generally, including making a difference to one’s local community, sharing one’s expertise and enjoying work-life balance.

To help state and local CTE leaders promote the CTE teaching profession, ACTE has produced a [toolkit](#) containing print- and web-ready pieces designed to help CTE educators spread the word about the benefits of choosing to be a CTE educator to their learners and potential career changers as well as guides for classroom activities and events.



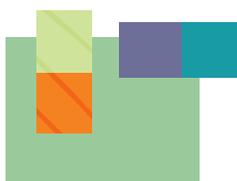
For a discipline-specific example, the [National Association of Agricultural Educators National #TeachAg Campaign](#) includes lesson plans, games, activities and branded materials that teachers can use in and out of the classroom to raise awareness of the profession and celebrate the positive contributions that agriculture teachers make. In addition, the [U.S. Department of Education](#) has created a video public service announcement promoting teaching across learner levels and subject areas that highlights teachers of color throughout.



Recommendations

STATE AND LOCAL CTE LEADERS MAY CONSIDER THE FOLLOWING ACTION STEPS FOR **developing inclusive marketing and messaging about CTE teaching as a career:**

- Evaluate current tools and consider creating new tools across different media formats that promote CTE with inclusive images and messages.
- Connect with CTE educators of color to ensure that the messaging in your recruitment material speaks to the needs of individuals of color and to local communities.
- Leverage messaging and tools created by professional associations and other organizations.



SUPPORT MULTIPLE PATHWAYS FOR TEACHER PREPARATION

Preparation is an important point in the teacher pipeline where prospective educators of color can run into barriers. Providing multiple options for teacher preparation can enable future CTE educators of color to find the preparation model that best meets their needs.

In addition to the traditional four-year teacher preparation pathway, an expanding variety of program models for preparing educators that can be leveraged to support CTE educator diversity are captured under the umbrella term “grow your own” (GYO). GYO models are increasingly popular options for addressing teacher workforce shortages and diversifying the education field. [New America](#) has developed an evidence-based definition of high-quality GYO programs focused on five components:

- Strong partnerships across school districts, educator preparation providers and community organizations;
- Community-based recruitment that aims to increase the ethnic, linguistic and racial diversity of the teacher workforce;
- Wraparound supports (e.g., cohort structure, scholarships, licensure test preparation, assistance navigating college admissions process) through the recruitment, preparation and induction years;
- Paid work-based experience under the guidance of an effective mentor teacher that aligns with educator preparation coursework; and
- Structured pathways for teacher candidates to earn required credentials and certification.

This report focuses on two GYO program models on the secondary level (programs of study in the Education & Training Career Cluster and youth apprenticeships) as well as models on the post-secondary and adult levels (alternative certification, apprenticeships and residencies).

For descriptions of additional GYO models and information about GYO funding, policies and model types offered in each state, please visit New America’s [GYO toolkit](#).

States can use state leadership funding to support local recipients in eliminating inequities in learner access to high-quality programs of study.



Develop Secondary Education and Training Pathways and Youth Apprenticeship Programs

A long-term strategy for developing and diversifying the future CTE workforce is to support young people, particularly young people of color, in pursuing education and training pathways in high school.



CTE pathways into teaching are increasingly popular, with more than 127,000 secondary learners achieving concentrator status in the Education & Training Career Cluster in 2021–22, up from about 115,00 in 2020–21 and 98,000 in 2019–20.¹⁰ These programs of study ideally include CTE coursework, work-based learning, dual enrollment, and Career Technical Student Organization (CTSO) experiences focused on exposing learners to education careers. For instance, at [Olentangy Schools](#) in Ohio, the district's Teacher Academy places juniors and seniors with an Olentangy elementary or middle school teacher for a year of mentorship and hands-on learning, earning postsecondary credit toward an education major. The academy is affiliated with the learner organization Educators Rising Ohio.



Some districts and institutions are targeting education pathways toward under-represented learners. At the [William M. Davies, Jr. Career and Technical High School](#) in Rhode Island, input from stakeholders and data analysis, including an examination of educator data showing that the teaching staff's demographics differed from the demographics of their learners, led the school to develop its own education and child care program to encourage its largely minority learner population to enter these fields. Learners are prepared to earn state certification as paraprofessionals through the ParaPro assessment, which can lead to employment in a school district. The hope is that learners will leverage their experience to continue into postsecondary teacher preparation and a more family-sustaining career as a teacher.



Another option on the secondary level is youth apprenticeship in the education field. The [Partnership to Advance Youth Apprenticeship](#)

defines a high-quality youth apprenticeship as including paid, on-the-job learning under the supervision of skilled employee mentors; related, classroom-based instruction; ongoing assessment against established skills and competency standards; and culmination in a portable, industry-recognized credential and postsecondary credit.

Within education and training pathways, educators should expose learners to teaching not only in the core subject areas but also in CTE program areas. CTE teachers in other program areas ranging from manufacturing to health care to STEM can also promote teaching as an option for their learners.



Because this strategy to increase CTE teacher diversity directly affects current CTE learners, states and local recipients may be able to channel **Perkins funding** to it. For example, states can use state leadership funding to support local recipients in eliminating inequities in learner access to high-quality programs of study, which may include programs that prepare learners for careers in education. States can also earmark reserve funding for recruiting diverse populations into CTE education and training pathways and supporting their success.

In addition, states can leverage the required set-aside for recruiting special populations, a category that includes economically disadvantaged learners, learners with disabilities, foster youth, learners experiencing homelessness and more. While this funding cannot directly support recruiting learners based on an underserved race or ethnicity, it can support learners who qualify both as a member of a special population and as a learner of color. For instance, this funding



could target recruiting non-traditional learners into education and training pathways with inclusive materials aimed at increasing the percentage of men preparing to be educators, particularly men of color. States may also have separate sources of funding for supporting diversity in education pathways, which will be addressed later in this publication.

On the local level, if the CLNA finds that learners of color are under-represented in education and training pathways locally — as they are in many states — local recipients can direct funds toward closing these gaps.¹¹ In addition, local recipients are permitted to use Perkins dollars to reduce or eliminate out-of-pocket expenses for special populations participating in CTE. This use of funds could apply to costs such as learner participation in dual or concurrent enrollment programs that are part of education and training pathways as well as fees for activities such as participating in CTSOs geared toward future teachers. As on the state level, this funding cannot be directed to learners of color specifically; however, it can support learners of color who are also members of special populations.



Recommendations

STATE AND LOCAL CTE LEADERS MAY CONSIDER THE FOLLOWING ACTION STEPS FOR developing secondary CTE education and training pathways:

- Assess disaggregated enrollment and performance data in youth apprenticeships and CTE education and training pathways to identify the representation of learners of color in these programs.
- Evaluate current education and training programs of study and youth apprenticeships on the state and local levels.
- Consider developing or incentivizing new education and training programs of study or youth apprenticeships, particularly in areas with larger proportions of learners from under-represented communities, to increase access for learners of color.
- Assess the curriculum, experiential learning and other elements of CTE education and training programs or youth apprenticeships for quality, relevance and cultural sensitivity.
- Evaluate career exploration and planning that exposes learners to careers in CTE teaching for a focus on diversification and mitigating bias.
- Investigate funding streams that could support closing equity gaps in education and training pathways or youth apprenticeships based on needs identified in state planning or through the CLNA.
- Track learner outcomes from education and training programs of study and youth apprenticeships.





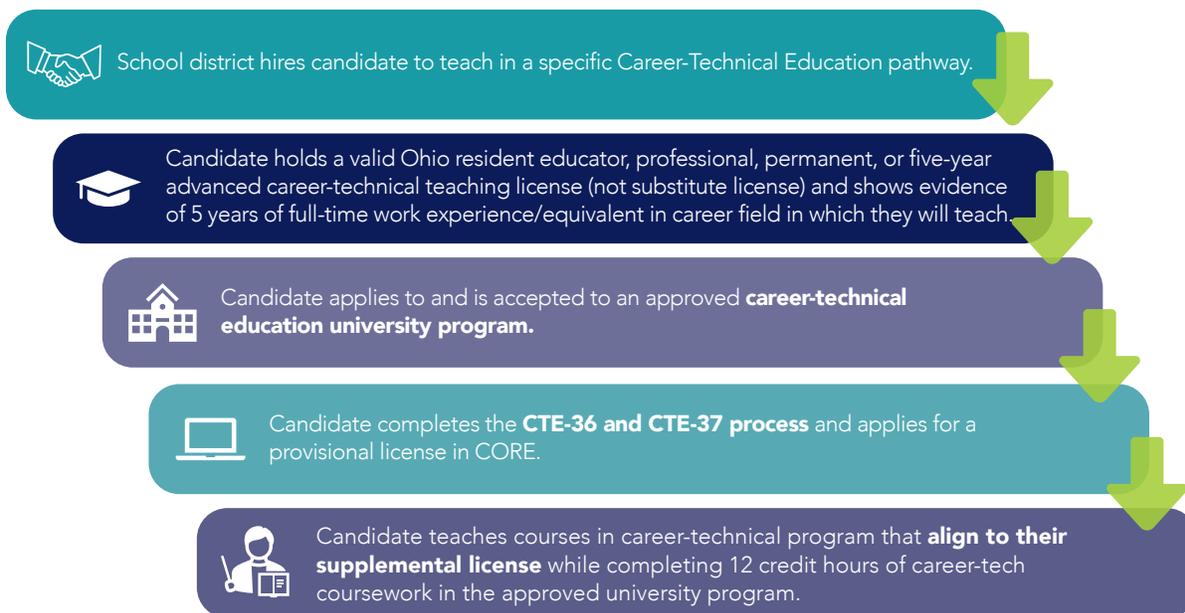
CTE TEACHER PREPARATION AND LICENSURE PATHWAYS

Most instructors aspiring to teach core subjects participate in teacher preparation programs hosted at universities prior to going into the classroom. In CTE, the situation is more varied. Some teachers, particularly in subject areas such as agriculture, business and family and consumer sciences, complete a university-based education program before entering the classroom. However, many CTE teachers who change careers from industry pursue an alternative pathway that moves them quickly into the classroom, where they can earn a wage while concurrently taking part in preparation and induction programs.

Relatedly, requirements for certifying CTE teachers vary from state to state and among different CTE program areas. However, several elements are common across states:

- Forty-eight states require CTE teachers to have work experience in a relevant occupation.¹² Requirements for work experience are often balanced with educational requirements so that applicants with more advanced education credentials can demonstrate fewer hours of work experience while applicants with a high school diploma as their highest credential are required to demonstrate more hours of work experience.
- Twenty-six states require CTE teachers to hold an industry-recognized credential.¹³
- About 41 percent of CTE teachers enter teaching through an alternative certification program, in which individuals with relevant work experience begin teaching in the classroom immediately while pursuing coursework on pedagogy and completing state-required assessments.¹⁴ This approach is particularly common in CTE programs such as health care, manufacturing and mechanics and repair — more than 50 percent of teachers in these subject areas started through an alternative certification program.¹⁵

The following graphic describes a pathway to provisional CTE licensure in Ohio. While each state's approach differs, the process for alternative, provisional or temporary certification may look something like this:



Source: Ohio provisional licensure process from [Guide for Licensing Candidates in Career-Technical Education](#), August 2023, Ohio Department of Education.



Create Alternative Certification, Apprenticeship and Residency Programs

CTE alternative certification, apprenticeships and residencies are important options for diversifying the CTE workforce on the postsecondary and adult levels. As noted previously, a significant percentage of CTE teachers enter the profession through alternative pathways. In addition, individuals of color are more likely to enter the teaching field through alternative certification, including CTE alternative routes as well as other non-traditional routes.¹⁶



To help apprenticeship, residency and alternative certification programs attract a diversified group of new teachers, CTE leaders can build locally grounded educator pipelines that reflect the diversity of communities. Programs can also be targeted to help shepherd industry professionals with relevant experience or general education teachers into CTE teaching. The New Jersey Department of Education's [High School CTE Teacher Pathway Initiative](#) seeks to increase the supply of high school CTE educators in program areas aligned with New Jersey's in-demand industry sectors through two routes: the CTE Teacher Bridge Program, which enables general education teachers to become CTE teachers through paid industry externships and mentorship and co-teaching with an experienced teacher, and the Industry Fellows Program, which brings professionals into the classroom through a part-time, co-teaching model.

Teacher apprenticeships are another pathway gaining in popularity to enable new teachers to complete preparation requirements while teaching, often with an experienced co-teacher, and benefiting from additional supports such as mentorship. The [U.S. Departments of Education and Labor](#) recently invested in expanding Registered Apprenticeships for educators and released new National Guidelines for Apprenticeship Standards for Registered Apprenticeships for K-12 teachers. Research on teacher residen-

cy programs, a similar model, demonstrates that they are effective both in bringing more teachers of color into the profession and in helping them to stay for the long term.¹⁷



For nearly 40 years [Success Via Apprenticeship](#) in New York City has prepared graduates of CTE high schools to become CTE teachers through a program consisting of five years of college courses completed concurrently with three years of industry experience and two years of mentored teaching. The program is a collaboration of the New York City Department of Education, the United Federation of Teachers (UFT), and the City University of New York. Apprentices receive a competitive salary, health benefits, sick leave, UFT membership and 44 postsecondary credits paid for by the New York City Department of Education.



Keeping educator preparation local through district-based preparation programs can help CTE programs reflect the diversity of their communities. [Rutherford Teach Now](#) at Rutherford County Schools in Murfreesboro, Tennessee, hosts the first district-led educator preparation program in the state. This cohort-based program provides CTE, math and science teachers working in the classroom with courses on classroom management, assessment, planning and instructional strategies. Teachers also participate in a series of peer observations. Successful completers move from the state's practitioner license to a professional license.



As with the prior strategy, on the state level, **Perkins funding** levers such as state leadership funding, reserve funding and the special populations set-aside may be harnessed to support these initiatives. On the local level, recipients can direct funding toward closing gaps, reducing or eliminating out-of-pocket expenses for special populations, and meeting needs identified by the CLNA.





Recommendations

STATE AND LOCAL CTE LEADERS MAY CONSIDER THE FOLLOWING ACTION STEPS FOR **developing alternative certification, apprenticeship and residency programs:**

- Identify current alternative certification, apprenticeship and residency programs in the state or local area, including CTE-specific programs and broader programs into which CTE could fit.
- Evaluate potential barriers to implementing these programs such as licensing requirements and scheduling challenges for participants and mentors.
- Consider developing or incentivizing alternative certification, apprenticeship or residency programs for CTE educators, evaluating these different models for their pros and cons specific to your state or local context.
- Assess supports such as mentorship and financial assistance as part of any apprenticeship, residency or alternative certification programs.
- Consider creating district-based CTE educator preparation programs, particularly in communities with high percentages of individuals under-represented in CTE teaching.
- Evaluate the success of apprenticeship, residency and alternative certification programs for CTE educators.



PROVIDE OPTIONS AND SUPPORTS FOR LICENSURE AND HIRING

Even if individuals from diverse backgrounds are interested in and prepared for CTE teaching, policy and practical barriers built into the licensure and hiring process can derail their entrance into the profession. State and local CTE leaders can address these issues to help to build a more diverse CTE educator pool.

Build Flexibility and Financial Assistance into Teacher Licensure

Certification and licensure is a specific stage in the teacher pipeline during which state CTE leaders can work with educator licensing agencies and departments to ensure that requirements are relevant and provide flexibility. These flexible options help broaden the pool of potential teachers, including teachers of color, who are more likely to enter teaching through non-traditional routes.

For instance, state leaders can reconsider requirements for CTE teachers to complete basic skills exams. A number of states have eliminated these basic skills tests for all teachers.¹⁸ For CTE teachers, states vary as to whether basic skills assessments are required for credentialing, with many states instead requiring occupational assessments or industry credential attainment. Tests that assess industry knowledge and skills are more relevant for CTE teachers, and such performance assessments offer an equal opportunity for all teachers to demonstrate their mastery of the required skills. Research has found that teachers of color achieve similar scores to white educators on performance assessments, in comparison to other licensure exams that have been found to be culturally biased against Black educators.¹⁹



Another strategy is for states, districts or schools to cover the costs of pursuing licensure, which can reach \$300 per exam, with some teacher candidates needing to pass multiple subject area exams or take exams multiple times.²⁰ Professional associations can also help with this effort. For instance, [Virginia ACTE](#) provides grants to prospective and new CTE teachers to assist with the cost of the Praxis Core Academic Skills for Educators assessment.



Support for recruiting, preparing or retaining CTE teachers, faculty and staff is a required use of **state leadership funding** under Perkins V that could assist CTE teachers with licensure costs. Similarly, on the local level, schools and districts are permitted to fund efforts to recruit and retain CTE teachers, faculty, school leaders, administrators, specialized instructional support personnel, career guidance counselors, academic counselors and paraprofessionals.





Additionally, states can explore allowing part-time teaching by industry experts and co-teaching among licensed CTE teachers and industry professionals, including professionals of color. For instance, in Kentucky, part-time CTE teachers can be hired under the state’s [adjunct certification](#) on a year-to-year contract basis. These instructors work at a reduced full-time equivalent rate and do not receive benefits. Staff at Jessamine Career and Technology Center, an area technology center in Kentucky, have found these industry professionals, who are usually still employed in their field, semi-retired or retired, to be effective teachers who often engage learners with their workplaces for experiential learning.

Finally, states can provide flexibility and supports to help CTE educators who are already certified transition their teacher credentials or education credits from different states or even different countries. State agencies can also help CTE teachers who are certified in program areas that are not in high demand to recertify in related program areas.



Recommendations

STATE AND LOCAL CTE LEADERS MAY CONSIDER THE FOLLOWING ACTION STEPS FOR **improving CTE teacher licensure:**

- Connect with the state teacher licensure agency to ensure that the agency understands the nuances of CTE teacher licensure and to determine whether flexibility can be incorporated into CTE teacher licensure, including the use of performance assessments in place of basic skills tests, recertification in related program areas and part-time/co-teaching models.
- If legislation is needed to change CTE teacher certification in your state, identify and connect with policy-makers who may be interested in supporting these changes.
- Explore federal, state and local funding streams to offset costs for CTE teacher licensure.
- Track data on teacher retention by licensure type, educator demographics and CTE program area.



Craft Competitive Salary and Benefits Packages

One of the biggest challenges of recruiting industry professionals into CTE is the pay differential between industry and education. To counteract this, state and local CTE leaders can craft salary and benefits packages that close this gap and recognize industry experience. This approach can make CTE a more attractive profession, particularly for individuals from underserved communities.



For instance, in Idaho, [2020 legislation](#) revised the state's career ladder compensation schedule for CTE teachers to recognize relevant industry experience, starting these educators higher on the career ladder than they might otherwise stand. On the local level, Beaumont Unified School District in California has developed a [CTE teacher salary schedule](#) with multiple steps that allow for salaries to increase based on work experience and industry-recognized credentials. The salary schedule recognizes up to 15 years of industry experience and/or teaching experience. Local leaders were even able to negotiate this scale into their teacher union contracts, and they report very high CTE teacher retention rates.



Recommendations

STATE AND LOCAL CTE LEADERS MAY CONSIDER THE FOLLOWING ACTION STEPS FOR **crafting competitive CTE educator compensation packages:**

- Evaluate CTE teacher compensation packages and how they compare to industry compensation packages.
- Consider creating transparent salary scales or developing incentives that recognize CTE educators and staff for industry experience and credentials.

Use Diverse Hiring Practices

Local CTE leaders can help diversify the CTE educator workforce by engaging in hiring practices that encourage candidates from under-represented backgrounds to apply, and states can support local programs with these efforts through relevant professional development.

One recruitment strategy that can increase diversity in the education workforce is advertising job openings through [organizations representing individuals of color](#) and on job boards targeted at diverse candidates. Another tactic that may foster diversity is advertising open positions earlier in the calendar year. Research conducted in Boston Public Schools found



that Black and Latinx teachers comprised nearly 40 percent of teachers hired before August but only 27 percent of hires made during August.²¹ In addition, leaders can promote openings to CTE program alumni from diverse backgrounds, who likely have relevant industry experience to bring to the classroom.



When it comes to hiring, CTE leaders can develop hiring committees that include teachers and administrators of color. In addition, hiring committees can engage search advocates — faculty and staff who serve on the search committee in a non-voting capacity and receive training on helping committee members consider and mitigate biases. This technique has been adopted by many postsecondary institutions such as [Lower Columbia College](#) in Washington. Finally, CTE leaders can use “blind hiring” techniques that prevent reviewers from inferring race and ethnicity or gender identity when considering application materials.

Research conducted in Boston Public Schools found that Black and Latinx teachers comprised nearly 40 percent of teachers hired before August but only 27 percent of hires made during August.



Recommendations

STATE AND LOCAL CTE LEADERS MAY CONSIDER THE FOLLOWING ACTION STEPS FOR **implementing diverse hiring practices:**

- Evaluate your current advertising and hiring practices for inclusive strategies.
- Consider where and when you advertise open jobs to maximize the likelihood of attracting diverse candidates.
- Use blind hiring techniques that remove indicators of race and ethnicity and gender identity from resumes and other application materials.
- Incorporate educators and staff of color into hiring committees and consider using search advocates.
- Provide professional development on inclusive hiring practices to administrators and educators involved in that process.
- Track the outcomes of diverse advertising and hiring practices.





NATIONAL ORGANIZATIONS THAT SUPPORT EDUCATOR DIVERSITY

Organizations dedicated to providing resources and supports to expand and diversify the educator workforce can serve as important partners in this work. The following are just a few examples of many organizations that are focused on educator diversity.

The [Center for Black Educator Development](#) supports a number of initiatives to diversify the teacher pipeline, including a [Teaching Academy](#) that provides Black high school learners with an afterschool curriculum grounded in Black pedagogy and historical frameworks as well as dual enrollment opportunities. Learners are eligible for the center's [Black Teacher Pipeline Fellowship](#), which includes academic support, professional coaching, scholarships and retention bonuses. The organization also creates affinity spaces and provides mentorship uniquely tailored for Black male educators.

[Man Up Teacher Fellowship](#) has a mission to give learners in high-poverty, urban and rural communities, particularly male learners of color, access to high-quality male teachers of color and advance policies that promote equity in prekindergarten–grade 12 schools. The Man Up Teacher Fellowship is a five-year teacher pipeline program designed to recruit, retain and support male teachers of color and empower them to succeed in their classrooms and careers. Man Up provides fellows with access to experienced coaches who observe fellows twice per month, provide feedback, and lead development sessions to support fellows' growth. Man Up also places fellows in an education preparation program that prepares them to be effective educators and leads them to certification. Lastly, Man Up provides fellows with Praxis preparation support. These services are provided to fellows at no cost.

New America has created a number of resources dedicated to [GYO programs](#) and their role in expanding and diversifying the teacher workforce. The organization also hosts a [Grow Your Own Educators National Network](#), a professional learning community for GYO programs across the country.

TNTP's [Black Educator Excellence Cohort](#) provides aspiring Black educators with financial assistance, practice exams and other supports to pass teacher certification exams as well as networking opportunities. TNTP also provides assistance to school districts in retaining Black educators through activities such as affinity networking, virtual mentoring, help with school culture and climate, equity training and more. In addition, [TNTP Teaching Fellows](#) offers career changers, graduating college seniors and recent graduates a more affordable, faster path to teacher certification through practice, job-embedded training and personalized coaching. About half of the teaching fellows identify as people of color.



PRIORITIZE RETENTION AND PROFESSIONAL LEARNING

Once state and local CTE leaders have recruited teachers and administrators of color into the profession, they must work to retain these qualified educators by making them feel welcome, providing professional growth opportunities, and facilitating their transition into leadership.

Create Inclusive Work Environments

Research has demonstrated the importance of effective and skilled leaders in retaining teachers of color.²² Local CTE leaders can help retention by creating a welcoming and inclusive environment for current teachers and administrators of color. To support them, states can offer professional development to local administrators about strategies to help educators of color feel welcome and respected.

Local CTE leaders can help retention by creating a welcoming and inclusive environment for current teachers and administrators of color.

Strategies for creating an inclusive environment include, minimally, providing professional development on cultural competency in teaching and learning and on recognizing unconscious bias and microaggressions; facilitating brave spaces where educators, learners and key partners can share their perspectives; encouraging multilingual teachers to use their language skills; and recognizing holidays and events that are important to various populations in the community.

To help local CTE leaders implement these strategies on the ground, states can, on their own or through partnerships with local organizations, provide professional development, resources and supports for local leaders through statewide conferences, in-person and online learning events and toolkits. Third-party organizations can also provide school districts assistance in retaining educators of color through activities such as affinity networking, virtual mentoring, help with school culture and climate, equity training and more.





Recommendations

STATE AND LOCAL CTE LEADERS MAY CONSIDER THE FOLLOWING ACTION STEPS FOR **creating inclusive environments:**

- Consider the professional development and resources you already provide about cultural competency, implicit bias and related topics to leaders and educators.
- Assess where you need to develop new professional learning activities and resources.
- Consider how to track the success of professional development on these topics.

Provide Professional Learning Communities and Mentorship Programs for CTE Educators

Another strategy that state and local CTE leaders can use to support and retain CTE educators of color is developing professional learning communities (PLCs) and mentorship programs. Evidence shows that these approaches help teachers remain and grow in the profession²³ and that matching mentors with new teachers of the same race or ethnicity leads to improved retention of teachers of color.²⁴



These communities and programs can be organized and structured in many ways. One consideration is whether mentorship and PLCs are time limited — for instance, occurring during an educator’s first two or three years as part of an induction program — or ongoing. These programs may also be designed for teachers who are new to the profession, veteran teachers, or people who are new to administrative roles or for a mixed group of educators with varying levels of experience. For instance, in Peoria Unified School District in Arizona, CTE leaders developed multiple PLCs that included online and in-person presentation, discussion and networking opportunities. One set of communities was directed at the needs of teachers transitioning from industry while another was organized by CTE program area.

Despite the variations in approaches, effective PLCs and mentoring programs have a few objectives in common: fostering collaboration with other educators, building social networks, and transferring knowledge from veteran to novice teachers and administrators.

State and local CTE leaders will need to consider how to structure these experiences to affect diversity while ensuring that all CTE educators have the supports and resources they need. For instance, leaders could develop PLCs for new CTE teachers and administrators paired with mentorship opportunities that, as much as possible, match new educators with veteran educators who reflect their identities.





In addition, CTE leaders can leverage connections with professional associations that offer affinity networking groups and mentorship programs targeted toward educators of color. For instance, the [Colorado Association of Latino/a Administrators and Superintendents](#) co-hosts the 4 Corners Latinx Leadership Academy, which provides four two-day leadership seminars each year to emerging Latinx leaders, including CTE administrators, in district and organizational leadership in Arizona, Colorado, New Mexico and Utah. The academy includes opportunities for professional learning, network building and mentoring.



Recommendations

STATE AND LOCAL CTE LEADERS MAY CONSIDER THE FOLLOWING ACTION STEPS FOR **developing PLCs and mentorship programs that support educators of color:**



- Evaluate current PLCs and mentorship programs for overall effectiveness and for opportunities to connect educators of color.
- Identify third-party organizations and groups such as ACTE state associations that currently offer or could offer PLCs and mentoring to educators of color.
- Consider new communities and mentorship programs to support CTE educators and address diversity and inclusion.
- Track the outcomes of PLCs and mentoring programs.

Offer Leadership Preparation and Development for CTE Administrators

Effective leadership development can benefit CTE educator diversity by helping leaders of all races and ethnicities promote diversity through creating inclusive environments, prioritizing diversity in job recruitment and hiring, and providing supports for new teachers and administrators. These strategies can create a more effective onboarding and induction process for new teachers of color and foster retention of current teachers of color.

In addition, leadership preparation can specifically help new CTE administrators of color, including those moving into leadership from teaching as well as those new to the education space, to develop skills and build networks of fellow administrators of color to support each other and alert each other to career opportunities.



One way to make leadership training accessible and responsive to educators of color is through online and self-paced delivery methods. For instance, the University of Central Missouri online [CTE Administration Leadership graduate certificate](#) supports CTE educators working toward the state's CTE administrator certification as well as individuals from other states who want to understand topics such as Perkins, finance and funding of CTE programs and career centers, integrating industry-recognized credentials, and working with



learner leadership organizations. The program develops real-world skills through hands-on projects such as creating a budget for a career center and designing a new or improving an existing CTE program.



Professional organizations can also support leadership development for CTE educators of color.

This work is one of the purposes of the [Oklahoma Association for Minorities in Career and Technology Education](#), which provides networking opportunities, supports members' career advancement, and provides CTE learners of color with scholarships.

Leadership preparation can specifically help new CTE administrators of color, including those moving into leadership from teaching as well as those new to the education space, to develop skills and build networks of fellow administrators of color.



Recommendations

STATE AND LOCAL CTE LEADERS MAY CONSIDER THE FOLLOWING ACTION STEPS FOR **preparing CTE administrators:**

- Evaluate existing pathways from classroom to administration to identify the representation of teachers of color.
- Assess your current strategies for providing equity-centered preparation and training to CTE administrators generally and administrators of color specifically.
- Consider how to better recruit and provide supports to help aspiring leaders of color take advantage of leadership development opportunities.
- Identify additional resources and trainings you could provide or leverage.
- Track data on numbers of CTE administrators and leaders of color.



INVESTIGATE POLICY AND FUNDING LEVERS

To implement the strategies outlined in this report, state and local CTE leaders can leverage relevant funding and policies that enable them to direct resources toward diversifying the CTE educator field.

Identify Funding Streams that Can Support CTE Educator Diversity



Funding educator diversity initiatives on the state or local level is a powerful way to show that educator diversity is a priority. States and local recipients can leverage several federal funding sources to address CTE teacher diversity on the secondary level:

- While Perkins V makes no mention of educator diversity initiatives on the state level, it does require states to use their leadership funding for recruiting, preparing or retaining CTE teachers through preservice, professional development or leadership development programs. Nothing in Perkins precludes states from considering diversity within these activities. On the local level, recipients are required to use funds to support professional development of the educator workforce and are permitted to use funds to support recruitment and retention activities. In addition, local recipients must consider teacher diversity as part of the CLNA. Again, nothing precludes local funding from promoting diversity.
- [American Rescue Plan Elementary and Secondary School Emergency Relief III](#) funds enable states to expand the educator pipeline and diversify the educator workforce. States have used this money for initiatives ranging from recruiting teachers from diverse backgrounds to building the bilingual teacher workforce to providing supports for rising education leaders from historically underserved racial and ethnic groups. However, states are running out of time to spend these funds: The money must be obligated by September 30, 2024.
- [Every Student Succeeds Act Title IIA](#) addresses teacher quality and access to effective teachers. Funds may be used to support GYO programs, professional development and teacher training programs that incorporate a focus on diversification.
- The [Augustus F. Hawkins Centers of Excellence Program](#) supports centers of excellence at HBCUs, HSIs, Tribal colleges and other minority-serving institutions with accredited teacher preparation programs. Grant recipients must provide high-quality preparation for teacher candidates, including sustained preservice clinical experiences and mentoring by experienced teachers.
- [Indian Education Professional Development Grants](#) can support the licensure, job placement and retention of Native American educators in local education agencies that serve a high proportion of Native American learners.



- [Teacher Quality Partnership](#) grants are focused on improving the preparation of prospective teachers and enhancing professional development activities for new teachers; holding teacher preparation programs at institutions of higher education accountable for preparing qualified teachers; and recruiting highly qualified individuals, including people from historically underserved groups and individuals from other occupations, into the education workforce.

 In addition to federal sources, states may have their own buckets of funding to support this work. For instance, Minnesota’s [Grow Your Own—Teacher Diversity](#) grant funds activities such as education and training pathways that encourage high school learners to pursue teaching through dual credit courses, learner organizations for future teachers and experiential learning; GYO programs for community members, with an explicit focus on adults who are Black, indigenous or other people of color; and financial aid and supportive services to help learners of color and Native American learners enroll in teacher preparation programs.

 In another example, Massachusetts has created a [Teacher Diversification Pilot Program](#) for FY 2024. Grants can be used for high school education pathways that recruit learners from traditionally under-represented populations and for school culture support through employee resource groups and diversity, equity, inclusion and belonging professional development, among other options. All grant awardees will be required to participate in a teacher diversification PLC.

Explore state funding opportunities for GYO programs with New America’s [50-state scan](#).



Recommendations

STATE AND LOCAL CTE LEADERS MAY CONSIDER THE FOLLOWING ACTION STEPS FOR **identifying funding streams to support teacher diversity:**

- Identify, with key partners, the evidence-based strategies that would most benefit from additional funding.
- Evaluate existing funding for CTE teacher diversity through federal, state or local sources and consider additional funding streams that could support this work.
- Work with policymakers in your state to develop new funding opportunities.



Promote CTE Educator Diversity Through State Legislation and Regulation

In addition to funding diversity initiatives, state CTE leaders can use other policy levers to affect educator diversity. These levers may include legislation and regulation that address diversifying the CTE workforce specifically or the education workforce more generally.



Legislation can put force behind educator diversity efforts by requiring, incentivizing or directly funding these efforts and holding schools and districts accountable through data collection and metrics. For instance, Connecticut in 2016 created the [Minority Teacher Recruitment Policy Oversight Council](#) to annually advise the commissioner of education on ways to encourage minority learners to attend institutions of higher education and enter teacher preparation programs, recruit and retain minority teachers, and recruit minority professionals in other fields to enter teaching.



In another example, [Tennessee](#) State Board of Education policy requires local education agencies to set goals for educator diversity and report those goals to the state Department of Education; offers suggested strategies for the recruitment and retention of minority educators; outlines ways the department will monitor and report on educator diversity in the state; and describes how the department will develop tools and resources to support local education agencies in this work.

These state policies can support local CTE leaders in using strategies on the ground, including the strategies outlined in this report, to prioritize diversity in recruitment and retention.



Recommendations

STATE AND LOCAL CTE LEADERS MAY CONSIDER THE FOLLOWING ACTION STEPS FOR **identifying policies to support teacher diversity:**

- Identify existing policies in your state that could be harnessed to support CTE teacher diversity.
- Connect with policymakers in your state or locally who would be open to sponsoring legislation on this issue.
- Determine, with key partners, the evidence-based strategies that would most benefit from proposed legislation.
- Offer supports and resources to school districts to implement and comply with policies that promote CTE teacher diversity.



COMPANION RESOURCE: RECRUITING DIVERSE EDUCATORS: A DATABASE OF ORGANIZATIONS REPRESENTING UNDERSERVED POPULATIONS

In addition to this report, a second resource that grew out of this work is a contact list of organizations that serve minority populations, including industry professionals, learners, and current and future educators of color. The list offers a starting point for local, regional and state CTE leaders looking to develop the educator pipeline and recruit educators from under-represented populations to teach in CTE.

One of the key findings of the focus groups Advance CTE and ACTE held with CTE teachers and administrators of color was that CTE educators are often haphazardly recruited. Without chance encounters, several of the focus group participants would not have been aware of the opportunity to bring their expertise to a secondary classroom.

Based on this information, Advance CTE and ACTE staff and the national, state and local partners engaged in this work decided to create this contact list, which includes organizations such as the following, among many others:

- National Association of Asian American Professionals;
- National Association of Hispanic Nurses;
- National Association of Minority Contractors;
- National Black Nurses Association;
- National Indian Education Association;
- National Organization of Minority Architects;
- National Pan-Hellenic Council;
- One Million Teachers of Color; and
- Society of Hispanic Professional Engineers.

The Google spreadsheet is filterable by a number of columns, including community of interest; program area, industry or occupation; Perkins subgroup; and location. The document includes a hyperlink to each organization's website; however, users will need to investigate further to identify the appropriate state-, regional- or local-level contacts that will be most useful for their individual context.

[Recruiting Diverse Educators: A Database of Organizations Representing Underserved Populations](#) informs the CTE field about these organizations and opens the door for the field to work with the identified organizations to make diverse populations aware of the opportunities associated with being a CTE educator. As the nation attempts to solve high teacher and administrator turnover rates and a lack of diversity in the education field generally and within CTE specifically, this tool can help the field reach and communicate with the communities they serve to find the next generation of the CTE workforce.



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