



Coalition for
Career Development
Center

Condition of Career Readiness in the United States

Solberg, V. S. H., Donnelly, H. K., Kroyer-Kubicek, R., Basha, R.,
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Center for Future Readiness

ABOUT THE COALITION FOR CAREER DEVELOPMENT CENTER

The Coalition for Career Development Center (CCD) Center is an industry-led nonpartisan coalition committed to making career readiness the first priority of American education and dedicated to transforming career development through priorities including education reform, research initiatives, stakeholder engagement and more. The CCD Center believes in providing ALL learners with high-quality career development services and technologies that will help secure productive employment in their chosen career as efficiently and cost-effectively as possible.

ABOUT THE BOSTON UNIVERSITY CENTER FOR FUTURE READINESS

The BU Center for Future Readiness focuses on generating and translating career and workforce development research into practice and policy. The Center collaborates with education systems and youth-serving organizations that are interested in designing and implementing developmentally-appropriate and culturally-responsive career and workforce development programs and services.

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IN GRATITUDE

This report would not be possible without the generous support provided by American Student Assistance. We thank them for their encouragement as well as their tremendous national leadership in supporting career readiness efforts in schools and youth-serving organizations.

We also thank the Collaborative for Academic, Social, and Emotional Learning (CASEL) for their funding to support the development of case studies showcasing Delaware, Kansas, and Wisconsin. In addition to highlighting these case studies in this report, they are available as separate reports.

IN MEMORIAM

Thank you Roger P. Weissberg for your encouragement and mentorship. We miss you and know your passion and vision lives on at CASEL.

TIME TO MAKE CAREER READINESS A TOP PRIORITY

On behalf of the Board for the Coalition for Career Development Center (CCD Center), I am pleased to share our first annual report on the Condition of Career Readiness in the United States. As an industry-led, non-profit organization, our CCD Center members aim to make career readiness the number one priority in American education. Our national challenge is that too many young adults leave high school without knowing whether or how their post-school training and education align with high paying, high demand occupations. Perhaps this is a contributing factor in why only five states are keeping over 90% of their young adults connected to employment, training, or education. And perhaps this is contributing to why so few states retain 80% or more of their first-year college students. As a nation, we must do better. We can do better.

The solution must include redoubling efforts to improve our national career advising system by using personalized career and academic plans that help youth identify their talent and skills, access paid work-based learning and attend early college experiences. While a large percentage of states offer high quality career advising and personalized career and academic plan policies, educators need access to professional development and career technologies that will enable schools to take full advantage of these policies and build their capacity to implement personal career and academic plans with quality and fidelity.

The results of this report should be concerning to us all. There is no one size fits all solution. And, by coming together as a nation, our CCD Center strives to work with communities on identifying and sharing cost-effective resources and strategies. As a community effort, we imagine a large tent to hold the many stakeholders and partners who are ready to invest in making career readiness for all youth a reality. Building the economic competitiveness of our local is a team sport and demands that we all enter the tent ready to work hard on behalf of today's youth and tomorrow's workforce. The invite is open to all – our federal and state policy makers, industry and business, leaders in K-12 and higher education, community-based organizations and our philanthropic community. Together, let's make career readiness our number one education priority.



Leo Reddy
Board Chair, Coalition for Career Development Center

CAREER READINESS IS A NATIONAL IMPERATIVE

Investing in career readiness is in the national interest: the American economy needs policies and practices that prepare young people to enter the labor market. States that succeed in ensuring that young people are career ready can expect strong economic returns through higher worker productivity, larger tax revenue, reduced reliance on public support programs, and lower unemployment. But in order to improve their career-readiness efforts, states need to know where they currently stand, and they need guidance on how to improve.

That's why this inaugural report on the Condition of Career Readiness in the United States is so necessary and important. By including a wide range of state-level data collected from government agencies and national organizations, and by coupling the data with case studies and exemplary practices, the Coalition for Career Development Center has created a valuable tool for states to use in improving young adults' career outcomes.

Investment in young adults who are disconnected from both school and work is one area that needs particular attention from the states. As this report shows, only 5 states ensure that 90 percent or more of their 20-to-24-year-old young adults remain connected to education, employment, or training. The national career readiness dashboard recommended in this report could go a long way toward helping states and local communities as they seek to provide career readiness services to disconnected young adults. By including information on employment and military pathways, this dashboard would provide states with a more complete picture of young adults' outcomes and potential pathways beyond postsecondary education.

Improving career readiness will require leadership within schools to organize and design programs that guide students in developing, updating, and executing their personalized career and academic plans based on their evolving goals. The longitudinal research and the Colorado case study in this report offer persuasive evidence that increasing the number of high school counselors to coordinate career-readiness efforts in high-need high schools would have a tremendous impact. As a nation, we are also failing younger children by not providing adequate numbers of school counselors in elementary and middle school. We must do better.

In addition to improving access to career counseling, we need to ensure that all young people have opportunities for career exploration and work-based learning all along their educational pathways. One place to begin is by establishing clear policies and incentives that will enable efficient and effective collaboration between industry, education, youth-serving agencies, and families. Ideally, all youth would have the opportunity to participate in paid internships and apprenticeships before leaving high school.

The CCD Center's work to "make career readiness the number one education priority in the United States" demands national effort and community-wide engagement. This report represents a significant step toward that goal.



Dr. Anthony P. Carnevale
Director, Georgetown University Center on Education and the Workforce

0.0 ACKNOWLEDGEMENTS

This report would not be possible without a tremendous range of support and feedback. Please see our Contributors page for a complete listing of partners involved in the development of this publication. This report would not have been possible without the support of many federal officers from the U.S. Departments of Education and Labor who provided timely feedback and consultation throughout. We want to thank the many national organizations that conduct 50-state reviews on key career readiness indicators and look forward to including more examples in our subsequent annual reports. In addition to our CCD-Center Scientific Committee, we owe tremendous gratitude to the many state leaders and organization leaders who participate and collaborate with us as part of the Coalition for Career Development Center's State Leaders Network. In many ways, the inception and design of this report evolved from our monthly discussions and collective willingness to share resources and mentor each other as we continue to advocate for making career readiness the number one priority in American education. All state leaders of career development from K12 and higher education, workforce development, and economic development are invited to participate in the State Leaders of Career Development Network (SLN). Please see our website at <https://www.ccd-center.org/> for more information.

We also thank the Prism Group Global for strategic communication support and publication layout and design.

Disclaimer: Every effort was made to ensure the accuracy of state information provided within the report. States may contact us directly for corrections and/or to highlight their ongoing promising career development activities.

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1.0 EXECUTIVE SUMMARY

Recommendations for Improving the Condition of Career Readiness in the United States

This inaugural Condition of Career Readiness in the United States report highlights findings and recommendations to help business and industry, federal and state agencies, elected officials, and national organizations reflect on what investments and resources are needed to support the future economic competitiveness of our nation. This inaugural report describes our states' progress towards becoming a Career Ready Nation. The report was produced for the Coalition for Career Development Center (CCD Center) by the Boston University Center for Future Readiness with support from American Student Assistance (ASA) and the Collaborative on Academic, Social and Emotional Learning (CASEL).

The CCD Center is an industry-led effort striving to make career readiness the number one priority in American education. The CCD Center organizes its efforts around five career readiness pillars that include: (1) improving the design and implementation of personalized career and academic plans, (2) increasing access to certified career advisors, (3) expanding access to applied work-based learning opportunities, (4) providing access to high quality and personalized technologies, and (5) ensuring accountability.¹

A Career Ready Nation is one in which young adults contribute to the economic competitiveness of their communities by navigating into high-demand occupations that align with their skills and interests. A Career Ready Nation offers integrated systems of support and services from K-12 and higher education, workforce development, and community-based organizations that enable youth and

young adults to develop the proactivity, resiliency, and adaptability skills necessary to thrive in adulthood. A Career Ready Nation graduates high school students with the academic, durable human, technical skills, and industry certifications needed to directly enter the world of work as well as equips them with the career navigation skills needed to enter and successfully complete training and postsecondary education pathways that align with their future goals and interests. It is no longer an option for students to choose college or career - all students need to graduate from high school career *and* college-ready.

An important feature of the Condition of Career Readiness in the United States report is a state-level analysis. Becoming a Career Ready Nation demands a national response whereby all states can identify new investments and activities that will drive their economic competitiveness. By describing the number of states that are meeting key career readiness benchmarks, this report strives to create a shared national perspective that will shape the future design and investment of career readiness policies and activities.

The report also provides an important foundation for the CCD Center's efforts to make Career Readiness the number one education priority in America. While it is clear that there is a lot of work to do, the report also identifies promising strategies for addressing these challenges. These strategies are drawn from practices shared by national organizations and state leaders who are participating on our CCD Center Board and Advisory Committees and our CCD Center's State Leaders Career Development Network.

KEY HEADLINE FROM THE CONDITION OF CAREER READINESS REPORT

To become a Career Ready Nation we all have work to do. And, cost-effective solutions and strategies being used by many states or regions within states offer a way forward.

CCD Pillar: Accountability

Recommendation 1. Expand Post-School Outcome Data to Reflect A Wider Range of Career Readiness Outcomes

In order to become a Career Ready Nation, we need accountability metrics that evaluate progress across a wide range of career readiness indicators. The most comprehensive career readiness outcome indicator to date is managed by the U.S. Department of Education's Office of Career, Technical and Adult Education (OCTAE). OCTAE expands the range of post-high school outcomes for youth completing two Career and Technical Education (CTE) credits needed to be classified as a CTE Concentrator. The range of outcome data includes postsecondary entry as well as participation in the military and employment. An encouraging sign is that for CTE Concentrators, 40 states are placing 70% or more into postsecondary training and education, military, or employment after high school graduation. However, only 3 states are placing 70% or more of their high school graduates into either a two-year or four-year postsecondary training or education program. It is recommended that OCTAE's accountability system be expanded so that military and employment can be counted as post-school outcomes for all youth.

Kansas Collecting Wide Range of Career Readiness Indicators.

Kansas is monitoring a wide range of career and workforce readiness indicators that include age-appropriate career development activities and participation in work-based learning (WBL) activities. An annual report provides high schools with information on the average percentage of students completing career interests, written postsecondary goals and post-secondary plans, portfolios,

internship records, dual course credit; certifications, and applications to postsecondary education. Kansas has also created assessments that identify advanced social-emotional learning skills that serve as high-demand employability skills.

Recommendation 1.1 Focus on Equity Related to Participation in CTE Programs

We need a stronger commitment to gathering and reporting demographic background and special population designation to ensure equitable participation and outcomes for youth and young adults across all career readiness investment efforts and outcomes.

OCTAE's model for CTE Concentrators reports on a wide range of demographic and special population information. It is recommended that OCTAE expand their reporting to include the same level of data for CTE Participants. CTE Participants are youth who begin a CTE program but may not complete the 2 credits needed to be designated as CTE Concentrators. By understanding more about who is participating in CTE, it will be possible to assess whether the background characteristics of CTE Participants are equally represented among CTE Concentrators and whether CTE participants' demographic backgrounds are consistent with the community's student population.

Recommendation 2. Identify Strategies to Keep Young Adults in School, Working, or Participating in Job Training

An encouraging sign is that 47 states are ensuring that more than 90% of their youth population aged 16-19 are connected to education, involved in training programs, or employment. However, only 5 states ensure that more than 90% of their young adults aged 20-24 are connected to education, training programs, or employment. The dire

economic implications for disconnected young adults have been made quite clear.² It is recommended that longitudinal data systems be designed to determine whether and when young adults become disconnected.

Scotland Creates 16+ Data Hub to Ensure Connection to Education, Employment or Training.

One promising international accountability strategy is Scotland's 16+ Data Hub. Managed by Scotland's Careers Services, the 16+ Hub integrates data from a range of sources including education, workforce, and health and human services. The aim is to quickly identify young adults who experience significant mental health/health challenges, leave school, or become unemployed. Once identified, Careers Services deploys a career counselor to reconnect them to education, training, and employment opportunities.

Buffalo, New York Sets Sights on Staying Connected to Young Adults.

Buffalo has established a Youth Employment Coalition initiative that is establishing a digital platform for 16 to 24-year-old youth who have left school and are not employed, in training or postsecondary education. The platform offers young adults access to information about career pathways in high-demand industries, the education and training necessary for advancement in those pathways, and the programs in the community that can help them obtain that education and training. Partners working with the Youth Employment Coalition are working through the legal agreements needed to identify young adults as they fall out of education or employment to proactively connect them to the digital platform as well as a career advisor who will provide individualized assistance, assessments, and referrals/continuous coaching to reconnect them to education and

workforce development opportunities.

Recommendation 3. *Improve Postsecondary Retention and Completion Rates*

One-year postsecondary retention rates need attention. Only 1 state is retaining 80% or more of their part-time students and 8 states retain 80% or more of their full-time students.

With respect to postsecondary completion rates, 5 states are graduating 60% or more of their two-year postsecondary students within three years of entry, and 21 states are graduating 60% or more of their four-year postsecondary students within six years of entry.

Wisconsin's Carthage College Prescribes 4-Year Career Advising Strategy

Started in 2019, Carthage College's "Aspire" is a structured four-year personalized career and academic plan effort that begins upon admission by connecting all students to a career advisor.³

Recommendation 3.1: *Focus on Equity Related to Postsecondary Participation and Completion Rates*

State-level data is needed to assess the differential postsecondary participation and completion rates among youth from diverse race/ethnic backgrounds, youth with disabilities, and youth representing special backgrounds such as youth in foster care.

Use Data Dashboards to Inform Public About Education and Career Readiness Outcomes.

Massachusetts offers a public access data dashboard that charts the progress of entering 9th-grade students through completion of either a two or four-year postsecondary training program or degree. The data dashboard is disaggregated

by district, high school, and a range of demographics. By adding data collected by OCTAE to include employment and military service, each state can offer a more comprehensive understanding of career readiness outcomes that can be used to frame education and workforce development as a community challenge that must include State and Local Education Agencies, Institutes of Higher Education, State Departments of Commerce, Workforce Development and Health and Human Services, youth-serving organizations as well as families and their youth.

CCD Pillar: Personal Career and Academic Plans

Recommendation 4. *Invest in Personalized Career and Academic Plans*

While 30 states offer high-quality career readiness policies - referred to as personalized career and academic plans (PCAP) - it is recommended that states leverage federal and state funds to support adoption and quality implementation of PCAPs by schools, youth-serving organizations and higher education institutions.

It is recommended that cross-sector teams within State Education Agencies examine how to fully align PCAP policy with related federal and state initiatives. Specifically, it is recommended that the team describes how PCAP aligns with their states' education, wellness, career readiness, and workforce development initiatives, policies, and resources.

A second cross-sector team to consider is one that includes community-wide collaborations with State Education Agency departments, institutes of higher education, and industry and business in order to design and implement

strategies that increase access to work-based learning opportunities and paid internships. Including youth-serving organizations on this team will also expand the range of work-based learning supports and services.

Kansas Connects PCAPs Across the States Workforce Development Initiatives.

Kansas has invested strongly in the design and integration of their PCAP policies (referred to as Individual Plan of Study).⁴ Their state vision of student success clearly outlines the PCAP as the vehicle to be used to achieve successful student outcomes. A digital guide articulates resources for implementing PCAP in career advising, CTE and pathways, social-emotional learning, work-based learning, certifications, and postsecondary education.

Wisconsin Connects the Dots Between PCAP, CTE, WBL, and SEL.

Wisconsin built early success for PCAPs (referred to as Academic and Career Plan in Wisconsin) and social and emotional learning connected to existing CTE programming and school counseling. Teams within the agency came together to integrate systems to accomplish the shared goal of serving the whole child. By sharing contacts and leveraging funding sources, Wisconsin is using their PCAP process to establish strategic collaborations with employers to address their] workforce needs. To support adoption and quality implementation, the state demonstrated the value and connections of PCAP to existing CTE, WBL and SEL initiatives.

Delaware Makes PCAP and SEL a Central Part of Workforce Development.

The Delaware Pathways initiative links education and workforce development efforts for youth. By creating a cross-sector team of diverse stakeholders, Delaware established a common

vision and language for linking their PCAP (referred to as Student Success Planning in Delaware) with CTE, SEL, and work-based learning initiatives in a manner that seeks to increase access 'for all students.'

CCD Pillar: Work-based Learning

Recommendation 5. Increase Access to Work-Based Learning for All Youth

Recent evidence verifies that future wage earnings and employment rates increase when youth engage in meaningful career conversations with caring and encouraging employers.⁵ Using a range of work-based learning policy indicators, 10 states received consistently high scores. An encouraging sign is that 29 states identified work-based learning as an important element in their Perkins V plans. However, fewer than 10 states address important work-based policy areas such as providing statewide infrastructure to support implementation (7 states), state (5 states) and federal (7 states) funding incentives to encourage industry/business participation, and communication systems (7 states) that enable schools, employers, and other stakeholders can access and participate in work-based learning.

Iowa Uses Intermediaries to Support Access to Work-Based Learning.

As part of their PCAP policy, Iowa established a network of 15 regional intermediaries through their community college system. The network connects businesses and the education system to offer relevant, work-based learning activities to students and teachers.

Georgia Defines High-Quality Work-Based Learning.

Georgia has defined standards

and a manual for high-quality WBL experiences which references the PCAP and includes rubrics to assess WBL program quality.

Pennsylvania Collaborates with Local Workforce Development Boards.

The Teacher in the Workplace grant program in Pennsylvania creates collaborations between business, workforce development boards, and K-12 educators to implement work-based learning programs.⁶ Teachers, counselors, and administrators interact directly with industry and business leaders to learn about industry trends, needs, and opportunities to enhance their classroom instruction, student learning, and career readiness.

Rhode Island Creates Non-Profit to Encourage Employers to Offer Work-Based Learning.

The Rhode Island Governor's Workforce Board established Skills for Rhode Island's Future, a non-profit organization to create an intermediary career advisor to match local businesses with qualified local job seekers.

Recommendation 5.1: Establish Data Dashboards to Measure Equity in Accessing Work-Based Learning

Only 5 states identify equity as an important element in their work-based learning policies and 11 states identify the use of data as a strategy for monitoring and encouraging higher participation in work-based learning among underrepresented groups.

CCD Pillar: Career Advising

Recommendation 6. Invest in Career Advising

An encouraging sign is that School Counselor to student ratios in high

schools are improving with 28 states meeting the American School Counseling Association's (ASCA) recommended school counselor to student ratio of 250:1. And, it should be recognized that high schools with high concentrations of community poverty, dropout rates, and lower postsecondary participation will need to go below the 250:1 ratio. If the trend among four-year institutes of higher education continues moving away from using standardized test scores for admissions, the quality of the personalized letter from a school counselor will become a more critical element of the application. As a consequence, there may be a need in many schools to establish school counselors that specialize in the 9/10 and 11/12 grades, respectively.

Colorado Investment in School Counselors to Coordinate PCAP Implementation Pays Off.

Increasing school counselors and adding funds to facilitate PCAP implementation in Colorado's historically lower-performing schools resulted in significant increases in postsecondary engagement and early college participation. Many schools saw a substantial increase in concurrent postsecondary enrollment ranging from 27 to 231 percent.

South Carolina Places Career Specialists in Every Middle and High School.

The CCD Center career readiness pillar for Quality Career Advising describes the need to increase access to certified career professionals. South Carolina is ensuring that Career Specialists complete the NCDA Career Development Facilitator certification to become proficient in the basic career facilitating process in order to design activities that facilitate career awareness, exploration, and planning for students in public schools, grades six through twelve.

New investment is needed to support access to career advising at the elementary and middle school level. Only 2 states meet the ASCA recommended school counselor to student ratio of 250:1. For grades K-8 the national average is 795:1.

Career Readiness Begins in Early Childhood.

Children can only aspire to future pathways in which they see their gender, race/ethnicity, and disabilities reflected. For this reason, beginning in preschool, children need opportunities to see themselves represented in a wide range of occupations. To address this concern, PBS KIDS is actively designing content about the world of work, targeting children ages 3 to 6.

The Cajon Valley Union School District Connects Elementary Learning with Career Learning.

El Cajon's gaining international attention for their World of Work Initiative which helps children from their lower income and racially/diverse community build the confidence needed to expand their range of possible selves. The program develops self-awareness and builds off student interests as a fundamental element to the process of learning.

CCD Pillar: Technology

Recommendation 7. Mobilize Efforts to Identify Technology and Funding Solutions to Support Career Readiness.

A total of 12 states provide all students with free access to a PCAP technology platform. The PCAP process relies heavily on career information systems to provide access to career-related assessments, labor market information, postsecondary, and work-based learning opportunities. And, with the rapid increase in technology solutions, the CCD Center

has established a Technology Committee to provide consumer information about how to evaluate technology solutions, disseminate a guide to technology innovations, and establish an annual Future Technologies report.

It is recommended that states develop funding supports to ensure all students have access to the career readiness technology needed to support quality PCAP implementation.

CCD Pillar: Accountability

Recommendation 7. (Re)Establish National and State Career Readiness Network to Create Data Dashboard Committees

Between 1976 and 2000, a national strategy for creating career development policies and resources for practice and professional development was established through a National Occupational Information Coordinating Committee (NOICC) and State Occupational Information Coordinating Committees' (SOICCs).⁷ To become a Career Ready Nation, it is important to consider establishing a new National Career Readiness Coordinating Committee (NCRCC) and State Career Readiness Coordinating Committees' (SCRCC). This version could primarily focus on creating a fully operational career readiness data dashboard system as well as identifying and disseminating cost-effective, evidence-based career readiness policies, practices and professional development resources.

2.0 INTRODUCTION

A national focus on career readiness is emerging due to a triple threat to states' future economic competitiveness. These threats include increased job displacement due to advances in technology⁸, "the great resignation" fueled by a global pandemic, and an aging workforce.⁹ The future outlook of our U.S. economy is strongly dependent on business and industry's ability to access a supply of new talent. To brighten this outlook, the World Economic Forum recommends that, in part, human capital investments must focus on education and career readiness strategies that more effectively align skills being learned to the skills needed in a future world of work. And, more importantly, schools need to recognize that in addition to academic knowledge, the world of work increasingly demands that youth develop strong and durable human skills *and* advanced technology skills.¹⁰ Several longitudinal studies conducted in the United States and internationally support the assertion that career readiness must become the number one education priority in the United States.¹¹ These studies offer strong evidence that state investments ensuring access to quality career readiness programs and services produce career-ready high school graduates who enter adulthood earning higher future wages and experience lower unemployment rates. With respect to equity, this body of research found that state investment in career readiness programs and services has the strongest future economic gains among "high need, high opportunity" youth populations¹², including youth with disabilities.

In the 2019 Career Readiness for All paper, the CCD set a course to make career readiness the number one education priority in the United States. The paper identified a range of action steps organized around five career

readiness pillars - the increased use of personal career and academic plans, access to career advising, engagement in work-based learning, access to career development technologies, and commitment to accountability. This Condition of Career Readiness in the United States report collected a range of data state-level indicators that address these five pillars to determine how well we, as a nation, are doing with regard to our career readiness policies, investments, and outcomes. This report will identify individual states that offer promising practices. The report will not identify individual state performance, as our aim is to mobilize a national response at the state and federal levels to the identified opportunities and challenges.

While chairman of the Board of Governors of the Federal Reserve System, Ben Bernanke made a speech at the 2007 U.S. Chamber Education and Workforce Summit in Washington, DC titled Education and Economic Competitiveness¹³. Bernanke made the point that efforts to increase educational attainment will drive states' economic competitiveness as well as the overall health and well-being of its citizens.

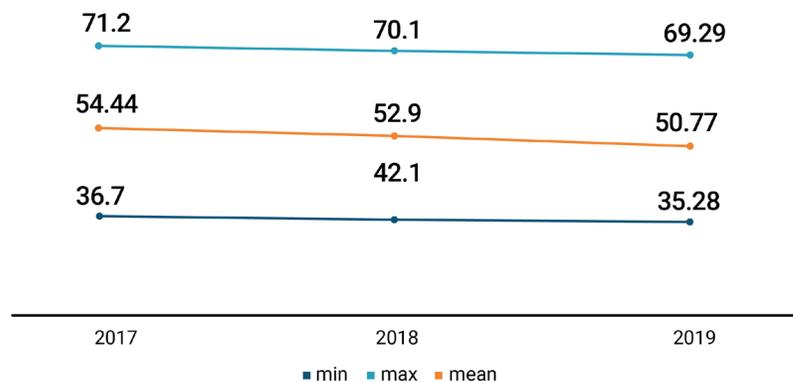
Longitudinal research has found that career readiness efforts drive educational attainment levels by helping youth become more proactive in seeking and participating in postsecondary training and education.¹⁴

The Opportunity Index¹⁵ offers a national economic competitiveness assessment that includes an overall Economy Score as well as specific scores for Education, Health, and Community. Each area is rated in terms of percentage (0%-100%) to which they address key indicators for each area.¹⁶ Figures 2.1-2.4 indicate the Opportunity Index ranges and the average for all 50 states and Washington DC.

For Overall Economic Competitiveness (Figure 2.1), since 2017 there has been an overall decrease in the national average. In 2019,

- 19 states received a score of 60 or more for their overall Economic Competitiveness.
- 28 states received scores between 50 and 60 for their overall Economic Competitiveness.

Figure 2.1: Economic Index Score



For Education Competitiveness (Figure 2.2), since 2017 there has been a small improvement in the national average. In 2019,

- 9 states received a score of 60 or more for their overall Education Competitiveness.
- 32 states received scores between 50 and 60 for their overall Education Competitiveness.

For Health Competitiveness (Figure 2.3) Since 2017, there has been a decrease in the overall national average. In 2019,

- 11 states received a score of 60 or more for their overall Health Competitiveness.
- 14 states received scores between 50 and 60 for their overall Health Competitiveness.

For Community Competitiveness (Figure 2.4) Since 2017, there has been little change in the overall national average. In 2019,

- 4 states received a score of 60 or more for their overall Community Competitiveness.
- 25 states received scores between 50 and 60 for their overall Community Competitiveness.

Figure 2.2: Education Index Score

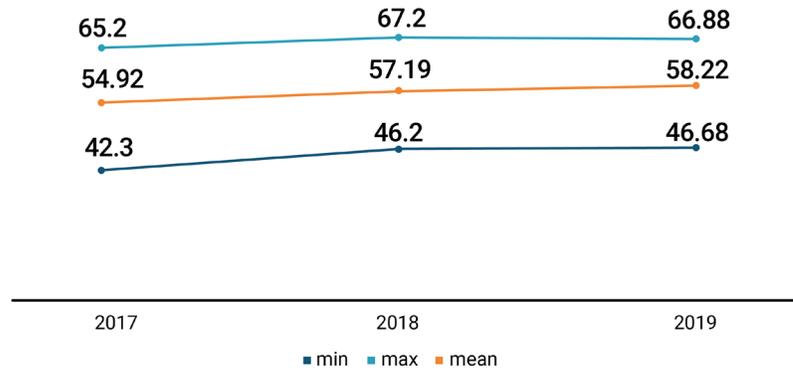


Figure 2.3: Health Index Score

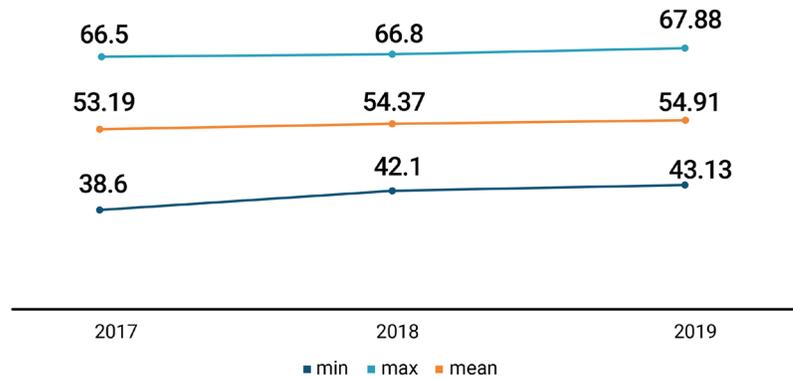
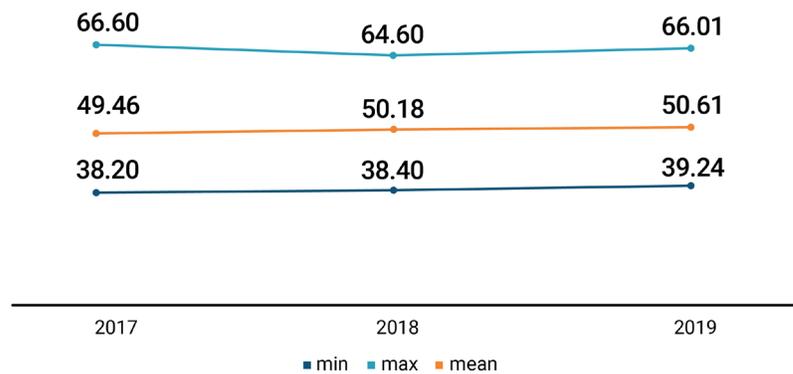


Figure 2.4: Community Index Score



2.1 WHAT IS CAREER READINESS?

At the individual level, OECD defines career readiness in terms of three indicators that include the ability to: (a) describe clear future career and occupational goals, (b) identify high demand, high wage opportunities, and (c) describe future learning and postsecondary training and education that align to their goals.¹⁷ In the United States, career readiness has been defined in many ways such as interpersonal and intrapersonal skills (e.g., human skills), cognitive and social-emotional skills needed to enter and complete a postsecondary program or degree (e.g., SAT or ACT scores), or obtain industry-recognized skills (e.g., credentials or certifications).¹⁸ Achieve and AdvanceCTE found that states are expanding the range of career readiness indicators that may include completion of dual enrollment courses, industry certification/credentials, CTE career pathways, workforce readiness certification, postsecondary enrollment, or employment or military placement.¹⁹ The U.S. Chamber of Commerce Foundation's Center for Workforce Development identifies five ways that states engage in career readiness efforts. In addition to dual enrollment, industry certifications/credentials, and standardized achievement and/or workforce skills assessments, they identify work-based learning and personal career and academic plans as strategies states are using to increase career readiness outcomes.²⁰ In a national review of career development policies and research, SRI Education identified four career readiness strategies: (a) promote college and career readiness, (b) align of education curriculum to the future of work, (c) ensure access to career awareness and planning throughout middle and high school, and (d) engage with employers.²¹

ABOUT THIS REPORT.

This inaugural Condition of Career Readiness in the United States compares data available on all 50 states and when available the District of Columbia. As Achieve and AdvanceCTE (2016) noted, state-level career readiness comparison data lacks breadth. Therefore, this report draws not only on existing federal data, but also state-by-state comparisons completed by leading national organizations. This report would not have been possible if not for the tremendous support and consultation provided by a number of our federal program officers and national organization leaders and staff.



“Career ready describes the capacity of young people to approach labor market entry and imagine career progression from an informed and confident perspective based on critical engagement with the world of work.”²²

Why the term “postsecondary training and education.” The CCD Center recognizes that the college completion rate for entering 9th-grade youth is around 30% and less than 25% for youth of color and youth with disabilities. By making career readiness the number one education priority, the CCD Center is supporting efforts that ensure every youth graduates high school with the skills and certifications needed to directly enter the world of work and possesses the academic and career navigation skills to enter and complete either two-year, and four-year training or degree programs that align with their future occupational and life goals.

In sum, becoming career-ready means that youth and young adults understand the relevance and value of K-12 education as well as are aware of the postsecondary training and education pathways needed to reach their future occupational and life goals. To become career-ready, youth and young adults must graduate high school and higher education with the navigation skills needed to optimize future employability by actively seeking lifelong workforce development opportunities (e.g., training programs and postsecondary pathways) that align with evolving regional labor market opportunities.

FEDERAL POLICY AND SUPPORT FOR CAREER READINESS.

Beginning with the National Defense Education Act of 1958 and continuing with the School to Work Opportunities Act of 1994, federal legislation has long focused on supporting state and local education agency alignment with workforce readiness needs. Recent legislation

including the Every Student Succeeds Act of 2015 (ESSA), Carl D. Perkins Career and Technical Education Act reauthorization of 2018 (CTE; Perkins V), and the Workforce Innovation and Opportunity Act of 2103 (WIOA) have elevated attention to career readiness by requiring states to create accountability plans using a range of college and career readiness indicators (ESSA), providing access to learning experiences that go beyond traditional academic learning (ESSA), align learning and training opportunities to local labor market opportunities (CTE, WIOA), increase access to work-based learning opportunities (CTE, WIOA), and increase the number of youth who graduate high school with an industry-recognized credential (CTE, WIOA).²³

At the state level, Governors have long recognized the important link between education and workforce development. In addition to making workforce development a priority in recent State of the State addresses,²⁴ Governors signed on to an initiative making College and Career Readiness the number one priority of U.S. education in 2008.²⁵ This initiative identified a range of career readiness that included: (a) completing rigorous academic courses (including math, ELA, Science, and access to AP/IB, dual/concurrent enrollment) in order to increase placement test scores and thereby decrease the need for remediation courses, and (b) participating in employment and work-based learning experiences to develop important transferable skills (including access to STEM and CTE programs) as well as (c) enable youth to align their course planning, career exploration and workforce development activities with their future career, and life goals.²⁶

2.2 ORGANIZATION OF THE CONDITION OF CAREER READINESS IN THE UNITED STATES REPORT

The Condition of Career Readiness in the United States report is designed to help business and industry, federal and state agencies, elected officials, and national organizations reflect on what investments and resources are needed to support the future economic competitiveness of our nation. The report is organized using a logic model (Figure 2.5) that begins with an analysis of Career Readiness Policies. Career Readiness Policies are state-level implementation guidelines, resources, and professional development that articulate the range of career and workforce development activities as well as funding and professional development resources that are available to support local implementation of those activities. In alignment with the CCD Center’s five pillars, the Career Readiness Policy section is focused primarily on states’ Personalized Career and Academic

Plan policies and the intersectionality of these policies with career and technical education and social-emotional learning.

The logic model presumes that Career Readiness Policies should connect to the types of Career Readiness Investments being deployed. In this report, State Career Readiness Investments refer to work-based learning and dual enrollment policies, investments to decrease student-to-school counselor ratios as well as output indicators that describe the number of students participating in Advanced Placement courses and completing the Free Application for Federal Student Aid (FAFSA®) forms.

Career Readiness Outcomes refer to several areas that support states’ economic competitiveness. These include high school completion rates, postsecondary participation and future wage earnings. Career Readiness

Outcomes also include the number of youth and young adults who are not participating in education and work.

Figure 2.5: Logic Model Guiding Report Design

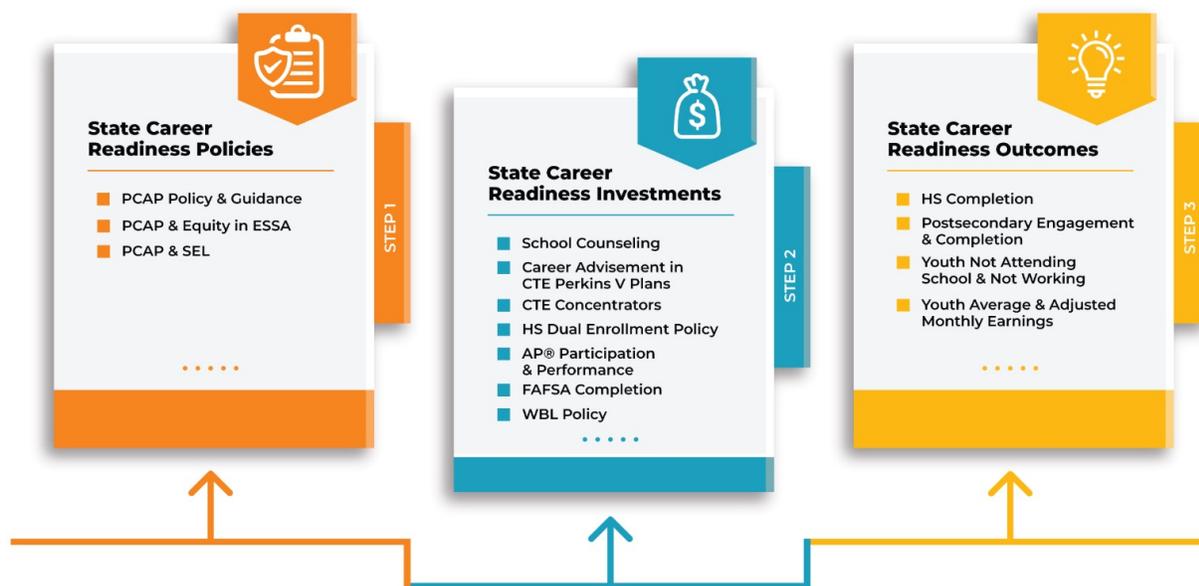


Figure 2.6 describes the career readiness indicators used in the report and whether the indicator measures state performance cross-sectionally (for a single year) or longitudinally as well as whether and how the indicator addresses equity with respect to gender, race/ethnicity, and/or disability status. See Appendix B for details on the data, sources and methodology.

Figure 2.6: Logic

Categories	Indicators	Type*	Disaggregated Data
State Career Readiness Policies	Depth of State PCAP Policy & Guidance	C	Not applicable
	PCAP Funding Support	C	Not applicable
	PCAP & Professional Development/Training	C	Not applicable
	PCAP & Standards/Curriculum	C	Not applicable
	PCAP & Technology Platform	C	Not applicable
	PCAP & Career Readiness in ESSA State Plans	C	Not applicable
	PCAP & SEL	C	Not applicable
	Scan of SEL Policy Indicators	C	Not applicable
	Opportunity Index Scores	C	Not applicable
State Career Readiness Investments	School Counselor Rates	L	Not applicable
	Career Advisement Strategies in CTE Perkins V State Plans	C	Not applicable
	PCAP in CTE Perkins V State Plans	C	Not applicable
	CTE Concentrator Rates	L	Gender, Race/ethnicity, Special Populations
	AP® School Participation Change Rate	L	Not applicable
	AP® Student Participation Change Rate	L	Gender, Race/ethnicity
	AP® Test Performance of 3 or Higher	L	Gender, Race/ethnicity
	High School Dual Enrollment Policy Evaluation	C	Not applicable
	Work-Based Learning (WBL) Policy Evaluation	C	Not applicable
	FAFSA Completion Rate	L	Not applicable
Career Readiness Outcomes	High School Completion rate	L	Race/ethnicity, Special population
	High School Completion Rate of CTE Concentrators	L	Gender, Race/ethnicity, Special population
	Postsecondary Placement- Colleges	L	Not applicable
	Postsecondary Placement- CTE Concentrators	L	Gender, Race/ethnicity, Special population
	College Retention Rate of Part-Time Students after 1 year	L	Not applicable
	College Retention Rate of Full-Time Students after 1 year	L	Not applicable
	On-Time Postsecondary Completion - In 3 years from 2-year colleges	L	Not applicable
	On-Time Postsecondary Completion - In 6 years from 4-year colleges	L	Not applicable
	Youth Not Attending School and Not Working	L	Race/ethnicity (only for age 16-19 group)
	Youth Average Monthly Earnings	L	Gender
	Adjusted Average Monthly Earnings	L	Gender

* Type of data: L = Longitudinal data, C = Cross-sectional data

3.0 QUALITY OF STATES' CAREER READINESS POLICIES

One strategic initiative most states have adopted to support their investment and engagement in career readiness is the use of Personalized Career and Academic Plans (PCAP).²⁷ PCAP is the first of five CCD Center Pillars for establishing quality career readiness programs and services. Nationally referred to as Individualized Learning Plans or ILPs, most states created their own naming convention (See Table 3.1). The Coalition for Career Development Center (CCD Center) has adopted Personalized Career and Academic Plans or PCAPs as its naming convention that will be used throughout this report.

National research into the nature and promise of PCAPs concluded that “career readiness derives college readiness.”²⁸ That is, investing in career readiness results in youth proactively seeking more rigorous academic courses, investing in performing better in core classes, and aligning academic and work-based learning opportunities to future occupational and postsecondary training and education goals.

In 2012, economist Tim Sullivan identified Personalized Career and Academic Plans (PCAP) as a critical state economic competitiveness strategy. Sullivan argued that PCAPs address the skills gap by helping middle and high school age youth identify: (a) high-demand occupational opportunities that align with their emerging talent and skills and (b) relevant training and postsecondary education pathways.

Longitudinal research reported in a recent OECD report concludes that PCAP-related efforts improve future wage earnings and employment when they incorporate the following activities: (a) frequent opportunities for reflecting on future career and life goals, (b) help youth learn how to use the labor market information to become aware of high demand opportunities, (c) includes

Table 3.1: State PCAP Naming Conventions

STATE	PCAP TITLE	STATE	PCAP TITLE
Alabama	Four Year Plan	Kentucky	Individual Learning Plan (ILP)
Alaska	Personal Learning and Career Plans and Planning (PLCP)	Louisiana	Individual Graduation Plan (IGP)
Arizona	Education and Career Action Plan (ECAP)	Maryland	Individual Academic and Career Plan (IACP)
Arkansas	Student Success Plan (SSP)	Massachusetts	My Career and Academic Plan (MyCAP)
California	Career Action Plan	Michigan	Educational Development Plan (EDP)
Colorado	Individual Career and Academic Plan (ICAP)	Minnesota	Personal Learning Plan (PLP)
Connecticut	Student Success Plan (SCP)	Mississippi	Individual Success Plans (ISP)
Delaware	Student Success Plan (SSP)	Missouri	Individual Career and Academic Plan (ICAP)
District of Columbia (D.C.)	Individual Graduation Portfolio (IGP)	Montana	Transformational Learning Plan
Georgia	Individual Graduation Portfolio (IGP)	Nebraska	Personal Learning Plan (PLP)
Hawaii	Personal Transition Plan (PTP)	Nevada	Academic Plan
Idaho	Student Learning Plan (SLP)	New Mexico	Next Step Plan (NSP)
Illinois	Postsecondary and Career Expectations (PaCE)	New York	Career Plan
Indiana	Student Graduation Plan (SGP)	North Dakota	Academic and Career Planning
Iowa	Individual Career and Academic Plan (ICAP)	Ohio	Student Success Plan (SSP)
Kansas	Individual Plan of Study (IPS)	Oklahoma	Individual Career and Academic Plan (ICAP)
Oregon	Education Plan and Profile	Utah	Plan for College and Career Readiness
Pennsylvania	Career Plan and Career Portfolio	Vermont	Personalized Learning Planning (PLP)
Rhode Island	Individual Learning Plan (ILP)	Virginia	Academic and Career Plan (ACP)
South Carolina	Individual Graduation Plan (IGP)	Washington	High School & Beyond Plan
South Dakota	Personal Learning Plan	West Virginia	Personalized Education Plan (PEP)
Tennessee	Plan of Study (Tennessee Pathways)	Wisconsin	Academic & Career Planning (ACP)
Texas	Personal Graduation Plan (PGP)	Wyoming	Student Success Plan (SSP)

active employer engagement, and (d) clearly communicates an “all means all” attitude for who facilitates as well as who participates in PCAP lessons and activities.²⁹ These results are consistent with a recent report from WestEd that found higher engagement in postsecondary training and education programs when youth receive PCAP activities throughout high school that include active engagement from caring and encouraging adults.³⁰

OECD VERIFIES KEY ELEMENTS OF PCAP PROGRAMS

According to a 2021 OECD report,³¹ quality PCAP programs and services:

- Offer regular opportunities for children and youth explore future life goals³²
- Help students examine labor market information to identify regional high demand, high wage opportunities and particularly emerging as well as career and technical occupations and pathways
- Adopt a school and community-wide “all means all” approach with regard to who delivers career services (career advisors, educators, families, and employers) as well as an “all means all” approach to ensuring all children and youth are fully included in the services
- Recognise the need to design culturally responsive services that develop their identity in ways that directly address the underrepresentation of women and individuals from diverse racial/ethnic background in key occupations
- Ensures access for children and youth from diverse as well as lower-income backgrounds as they need a higher level of access to services, and

- Ensure that business and industry are well-represented in providing career and workforce development experiences.

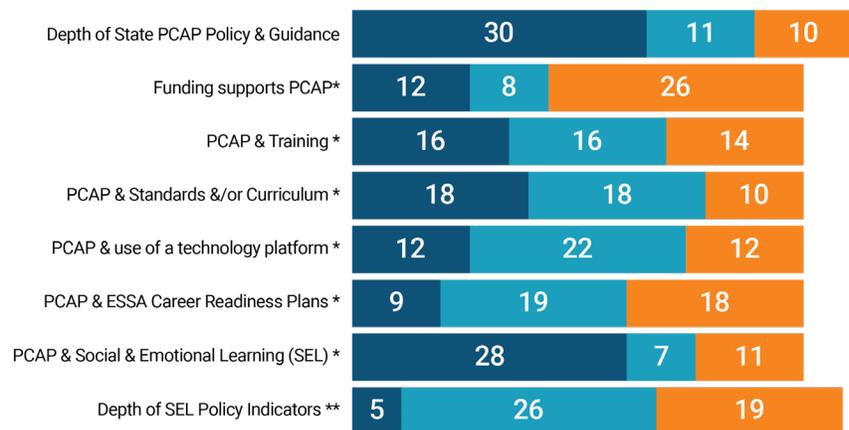
For this report, the CCD Center conducted a policy analysis of PCAPs for all 50 states and Washington, DC. The CCD Center rated the quality of states’ PCAP policies according to five areas: Overall policy language and guidance offered, funding supports, access to educator and school counselor professional development, standards and curriculum, and access to a technology platform (i.e., online career information system). Additional quality indicators were gathered from national studies conducted by the Collaborative for Academic, Social and Emotional Learning (CASEL).³³ The CCD Center assessed which states identify social-emotional learning (SEL) as part of their PCAP, while CASEL’s 2020 scanned and accounted for the existence of foundational social-emotional learning policies in states. AdvanceCTE assessed states’ Every Student Succeeds Act (ESSA) plans with regard to the inclusion of career advising.

PCAP Policy Collaboration Among State Leaders.

Most states including the District of Columbia offer quality PCAP policies. Many of the state leaders in charge of PCAPs are involved with the CCD Center’s State Leaders Career Development Network.³⁴ This network actively shares policies and resources that other states can adopt in whole or part. For example, Oklahoma relied on Wisconsin’s extensive Academic and Career Plan resources to design their own statewide efforts and brought in support from Colorado state leaders to mentor them on implementation.

Table 3.2 describes the results of the section on Quality States’ Career Readiness Policies. Sections of Table 3.2 will be examined in greater detail below.

Table 3.2: State Career Readiness Policy: Quality of States’ PCAP Policies



* 5 states excluded - No state PCAP Process
 ** DC was not evaluated in this review

3.1 QUALITY OF PCAP POLICY LANGUAGE AND IMPLEMENTATION

With regard to the depth of State's PCAP Policy and Guidance presented in Table 3.2, the results indicate that:

- 30 states offer high-quality PCAP policy language and guidance
- 9 states explicitly include PCAP in their state ESSA plans

States across the country continue to adopt PCAP efforts as a key college and career readiness effort designed to enable youth to successfully transition from high school and through postsecondary training and education.³⁵ PCAPs increase student and family engagement and learning when programs are structured, seamless, and scaffold career and workforce development throughout the K-12 systems.³⁶

With only 9 states including PCAP as part of their state's ESSA plans, there is concern that most states have not achieved a cross-agency understanding the nature and value of PCAP, and by extension career readiness, as a critical strategy for improving education outcomes. To fully leverage their impact on career readiness, PCAP policies and practices should be planned, developed, and delivered in an integrated manner by involving all state education and workforce development sectors. Within education, PCAP policies should align across a number of state education agencies including curriculum and instruction, Special Education, Career and Technical Education (CTE), School Counseling as well as key initiatives for at-risk and dropout prevention, whole child, and mental health needs of students. And, PCAP policies should align with states' workforce development initiatives as well as be integrated as part of the activities being provided by organizations receiving Workforce Innovation and Opportunity (WIOA) funds to support youth and young adults with and without disabilities, English language learners, and adult education programs.

PCAP policies need to describe how these programs and activities can be incorporated into state-level economic investment and development initiatives driven by their Departments of Commerce as well as explain the relevance of PCAP to key stakeholders such as workforce development boards, Chambers of Commerce or individual businesses and industry. Finally, higher education is another important consideration for aligning PCAP policies.

Using common language and planning teams ensures that the promise of PCAP can meet the needs of all students. This is especially important coming from the state K-12 education agency so multiple educational initiatives are presented as coherently integrated.

Kansas Connects PCAPs Across the States Workforce Development Initiatives.

Kansas has invested strongly in the design and integration of their PCAP policies (referred to as Individual Plan of Study).³⁷ Their state vision of student success clearly describes PCAP as the vehicle to be used to achieve successful student outcomes. A digital guide articulates resources for implementing PCAP in career advising, CTE and pathways, social-emotional learning, work-based learning, certifications, and postsecondary education.

Massachusetts PCAP Link to Workforce Development and Higher Education.

Massachusetts embedded PCAP (referred to as My Career and Academic Plan) as part of their Innovation Pathways³⁸ and Early College³⁹ initiatives. Workforce development boards from seven regions in Massachusetts conducted an occupational outlook assessment to determine which occupations would

be in high demand in the next decade.⁴⁰ Based on these results, the Innovation pathways initiative offers planning and implementation funds for schools to help youth develop high-demand skills by partnering with business and industry for work-based learning opportunities that align with specific academic coursework. The Early College initiative provides planning and implementation funds for school and high education to partner on expanding dual enrollment opportunities. As part of the award for schools receiving Innovation Pathways and Early College funding, schools must complete a three workshop PCAP series.⁴¹

Wisconsin PCAP Linking High School and Postsecondary Systems.

Milwaukee Public Schools, Milwaukee Area Technical College, and the University of Wisconsin-Milwaukee teamed up to create M3 (Stated M-Cubed) which is an early and thorough college program building off of the state's PCAP (referred to as Academic and Career Plan in Wisconsin).⁴² M-Cubed offers general, nursing, and education pathways that enable seniors to earn up to 20 college credits that can be used at either the two or four-year college level.⁴³

Colorado Goes ICAPing.

Colorado's PCAP (referred to as Individualized Career and Academic Plans) became a verb representing the process over the plan itself. With the support of adults, students develop the awareness, knowledge, attitudes, and skills to create their own meaningful and powerful pathways to Postsecondary and Workforce Readiness (PWR) with every student "ICAPing" to plan their futures supported by robust state resources, support, and training.⁴⁴

Denver Addresses FERPA to Transfer PCAP Portfolio into College Advisors.

Denver has developed a strategy to transfer the PCAP portfolio to college advisors in order to ensure that the life goals and accomplishments of young adults during middle and high school inform their efforts at the postsecondary level.

Pennsylvania Integrates PCAP Into Their ESSA Plan.

In Pennsylvania, the ESSA state plan uses the PCAP process (referred to as Career Plan and Career Portfolio) as part of the state accountability system.⁴⁵ They use a career readiness barometer to ensure that all students have access to career exploration and preparation activities that are standards-aligned and evidence-based, including the development of career plans and portfolios that help students identify pathways and opportunities for postsecondary success.

Washington requires CTE and Personalized Pathway Credit for high school graduation.

According to statute, each student must have a High School and Beyond plan to guide the student's high school experience and inform course taking that is aligned with the student's goals for education or training and career after high school. As part of the overall Career and College Ready graduation requirements, students choose three "personalized pathway" credits and 1 CTE credit that align with the student's personal plan.

PCAP WITH AN EYE ON EQUITY

The National Urban League's Equity and Excellence Project.⁴⁶ The National Urban League conducted an in-depth analysis of 36 states and Washington, DC, which have affiliated state National Urban League offices, to assess the extent to which ESSA policy language incorporated 12 equity indicators.

Their results indicated that:

- 10 states were effectively incorporating equity into their ESSA plans.
- 19 states met "minimum" standards for incorporating equity into their ESSA plans.

For the CCD Center, achieving equity in education outcomes means that all youth graduate with the abilities and career navigation skills to successfully pursue high paying occupations.⁴⁷ Many states require PCAP for all students which on the surface implies equal access. However, additional support and the strategic inclusion of role models are needed for youth living in lower-income households, youth of color, and youth with disabilities. Federal and state agencies have begun to consider equity as an accountability requirement. By observing disaggregated data regarding who is gaining access to quality career readiness programs and services, it is hoped that states will be in a stronger position to identify places where effective equity and inclusion practices access are occurring and thereby become motivated to apply these practices as scale.

In a special report titled *Creating Sustainable Career Pathways For Disconnected Youth*, America's Promise Alliance argues that effective career readiness policies will optimize future outcomes for youth when PCAP implementation offers learning environments that provide a web of caring and encouraging adult role models whose interests and backgrounds align with the students' demographic characteristics and future life goals.⁴⁸ OECD reports a future wage-earning premium for each meaningful career conversation youth to have with mentors from business and industry as well as educators.⁴⁹ The report also indicates that the wage earnings premium is higher for youth from lower-income backgrounds and youth with disabilities. As one female Black undergraduate noted recently: "If

I don't see myself represented in a given occupation then I assume I just don't belong there."

Kentucky's Equity Dashboard.

In Kentucky, the PCAP (referred to as Individual Learning Plan) is a graduation requirement that begins in middle school. Kentucky provides districts with an ILP implementation tool and online Equity Dashboard.⁵⁰ The Equity Dashboard helps districts visualize the under- or over-representation of various demographic groups on several indicators such as special education, advanced coursework/dual credit, CTE coursework, CTE completers, and benchmarks.

Alaska Encourages Equity Assessment.

Alaska is one of the most diverse states in the country according to the most recent census.⁵¹ As such, Alaska's Department of Education and Early Development works closely with other state agencies to ensure that PCAP implementation addresses equity by ensuring access to common resources available for schools, libraries, museums, and workforce development service providers. Alaska also encourages schools and organizations to use an equity assessment toolkit⁵² from RaceForward designed to guide organizations and practitioners to evaluate the inclusivity of their programs, operations, and culture.

Under Perkins V, disaggregated data on CTE concentrators are required for accountability in performance, but there are no requirements to check participation rates in CTE as a percentage of all students in the school. However, some states do include comparative rates. Delaware requires school districts to compare CTE subgroup rates to overall subgroup rates to determine if students are under or over-represented in CTE.

That’s also the approach Advance CTE recommends as part of the opportunity gap analysis workshop.

Longitudinal Research Verifies PCAP Engagement Associated with Postsecondary Engagement.

A recent nationally representative study from WestED found that students in receiving PCAP activities and meaningful career conversations throughout high school were more highly engaged with postsecondary planning and participation.⁵³

3.2 PCAP FUNDING AND PROFESSIONAL DEVELOPMENT

- 20 states have identified funding to support PCAP implementation
- 12 states provide all students with free access to a PCAP technology platform
- **32 states offer PCAP professional development opportunities**

In the report, *Developing a College- and Career-Ready Workforce: An Analysis of ESSA, Perkins V, IDEA, and WIOA*, the authors compare how ESSA, Perkins V, IDEA, and WIOA contribute to educating and training individuals and shaping the current and future workforce.⁵⁴ States that study this resource can benefit from better alignment and efficiency in common definitions, policies, and coordination of intra- and inter-agency work.

Delaware Braids Funding for PCAP From Multiple Sources.

To implement the Delaware Pathways strategic plan, Delaware braided funding across the state, federal, and philanthropic sources, including the J.P. Morgan Chase New Skills For Youth grant, Bloomberg Philanthropies, Perkins IV, and funds issued under the Workforce Innovation and Opportunity Act Title I as well as local sources.⁵⁵ The Delaware Student Success⁵⁶ and Delaware Pathways⁵⁷ initiatives integrate education and workforce development efforts for youth. These initiatives provide opportunities for youth to gain work experiences aligned with their career goals through a series of high-quality education programs that link to postsecondary education and careers.

Alaska Funds a Range of PCAP Resources and Technology.

The Alaska Commission on Postsecondary Education (ACPE), funded by the Alaska Student Loan

Corporation (ASLC), promotes access to and success in education and career training beyond high school which includes staff for PCAP resource development, training, and access to the career exploration platform for all Alaskans (AKCIS- Alaska Career Information System).

South Dakota and Wisconsin Offer Statewide Access to PCAP Technology System.

A number of states including South Dakota and Wisconsin provide state funds for a career development platform with associated training within a school's PCAP implementation.

Kansas Offers Access to ACT and WorkKeys Assessments

While the Kansas Legislature appropriated funds for a statewide contract to provide one free ACT® assessment and one free WorkKeys® suite of assessments to all public high school juniors. Students are encouraged to take both assessments.

While important, PCAP policies cannot result in quality PCAP implementation unless states offer professional development designed to build capacity for schools, communities, employers, and families to engage in effective PCAP practices.

Colorado Provides Access to PCAP Facilitators.

Colorado regulations require each school district to develop a PCAP (referred to as Individual Career and Academic Plan; ICAP) implementation plan that should include evidence that the district offers professional development for counselors, school administrators, school personnel, and/or approved postsecondary service

providers for implementation of the PCAP process. PCAP Facilitators are available to train regional schools and districts on the implementation elements of the PCAP as part of their Postsecondary and Workforce Readiness (PWR) initiative by facilitating meaningful career conversations between staff and students. Their Career Conversations series has also been adopted by the American School Counseling Association. Further, Colorado has developed a comprehensive searchable database of stories, curricula, lesson plans, practices, and videos to support their PCAP implementation.⁵⁸

Missouri Provides Regional Career Advisors.

To implement their PCAP efforts, Missouri (also referred to as ICAP) uses regional career advisors to work with school districts, area career centers, military, and post-secondary institutions to ensure that Missouri students acquire the knowledge, skills, and experiences to make successful transitions to post-secondary options based on their educational and career goals. Coordination with local, regional, and state counseling, CTE, and career pathways staff is central to programming alignment.

Wisconsin Establishes a PCAP "Community of Practice."

As part of their state's PCAP implementation (referred to as ACP in Wisconsin), Wisconsin established an online Community of Practice where district and school PCAP and CTE coordinators meet to learn about and explore ways to address problems of practice as well as offer professional development on a variety of integrated topics including work-based learning, certifications, and social and emotional learning support.

3.3 PCAP POLICY STANDARDS AND CURRICULUM

- **36 states identify standards and/or curriculum and offer their districts and schools lesson and program design resources.**

Pennsylvania Sets Grade Level PCAP Standards.

Directly links its economic future to having a well-educated and skilled workforce. Their Academic Standards for Career Education and Work describe what students should know and be able to do at four grade levels (3, 5, 8 and 11) in these four areas: Career Awareness and Preparation; Career Acquisition (Getting a Job); Career Retention and Advancement; and Entrepreneurship.⁵⁹ Through a comprehensive approach, the Career Education and Work Standards complement all disciplines and other academic standards to implement locally within existing disciplines or can implement standalone courses to specifically address these standards.

Colorado Focused on PWR.

In Colorado, the online playbook contains essential guidance, promising practices, stories, resources, and tools that support the implementation of a high-quality PCAP process for students and learners as they build toward Postsecondary and Workforce Readiness (PWR). In particular, a searchable database includes processes, implementation action steps, resources, and tools that schools and districts have developed specific to PCAP and PWR. Under PWR, the state connects multiple initiatives through the PCAP process: Individual Development, Career Development, Academic Development, Demonstrations of Learning, Personal Financial Literacy, Meaningful Career Conversations, Career and Technical Education, Diversity, Equity, and Inclusion, and Work-Based Learning.

Kansas Can!

Kansas' PCAP (referred to as Individual Plan of Study) was adopted in 2014. The Kansas Education Systems Accreditation (KESA) criteria include grade-level career readiness goals. Through the Kansans Can initiative, every middle and high school student must have a PCAP that aligns to "Career Awareness and Guidance" criteria. In addition, their Star Recognition program identifies school districts that offer quality and inclusive opportunities for each student to experience connected learning which

Kentucky Creates PCAP Playbook.

Kentucky (refer to PCAP as Individual Learning Plan) offers a Playbook of 5-12 grade-level themes and lessons for career exploration and social and emotional development.. Kentucky is among the first in the United States to connect career exploration with social and emotional learning skills (SEL).

Connecticut Provides PCAP Toolkit.

To support Connecticut's PCAP (referred to as Student Success Plan) implementation that begins in the 6th grade and continues through high school, educators have access to a comprehensive Toolkit that features model criteria aligned to academic, career, social, emotional, and physical development with sample templates for grades 6-9.

3.4 PCAP AND SEL

In preparation for this report, the CCD Center collaborated with CASEL and Civic Enterprises to develop a national framework for career readiness that describes the central role of SEL skills and in PCAP program design^{60 61} and co-develop three case studies of states providing model alignment between PCAP, SEL, CTE and workforce development.

The CCD Center’s policy analysis of PCAPs found that 31 states align PCAP with SEL policies. CASEL offers a rich 50 state analysis of whether SEL policies are available in seven key areas: Elementary (preK - Early Elementary), Standalone K-12 Competency/Standards, Standard SEL Webpage, State-specific implementation guidance/ resources, SEL in State Strategic Plans, State SEL Position, State-District/ School Partnerships.⁶²

Results indicate that:

- 5 states offer SEL policies that address 6-7 key areas
- 26 states offer SEL policies that address 3-5 key areas

CASE STUDIES OF STATES CONNECTING THE DOTS BETWEEN PCAP, SEL, AND WORKFORCE DEVELOPMENT.

In 2021, the CCD Center, in collaboration with CASEL, conducted three state case studies focusing on the integration of SEL and CTE into a PCAP process as part of a larger Collaborative States Initiative report on integrating SEL and Career and Workforce Development. Throughout this report, results from the case studies will be highlighted to showcase how Delaware, Kansas, and Wisconsin are integrating the SEL into the PCAP process, work-based learning, college access, and CTE career pathways.

Delaware Uses Grassroots Effort to Connect the Dots.

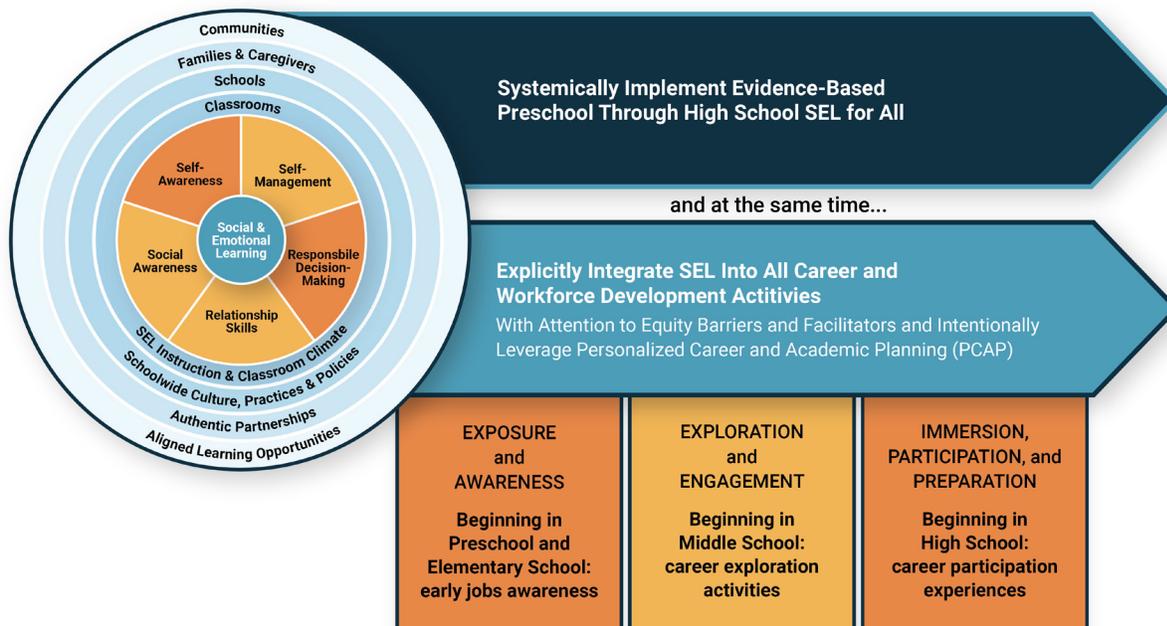
Delaware Pathways link education and workforce development efforts for youth. Through the state’s PCAP, Student Success Planning, state commitment for SEL integration was built on grassroots efforts which led

to thoughtful collaboration, coalition-building, and empowerment for a common vision study and language amongst stakeholders establishing effective internal and external communication, sharing responsibility for the work and logistics and aligning work across multiple initiatives. Delaware’s pursuit of diverse leaders’ involvement in this work is critical to their strong foundational efforts related to SEL and workforce development. Through this leadership, the intentional integration of SEL and work-based learning into the Student Success Plan process continues to gain traction and be recognized as not ‘for some students, but rather ‘for all students.’

Kansas Early Connector of PCAP, SEL, and CTE.

Kansas was an early leader in aligning Social and Emotional Learning skills, Personalized Academic and Career Plans (Individual Plan of Study-IPS), Work-Based Learning, and Early

Figure 3.1. Collaborating States Initiative Developmental Framework for the Integration of SEL, and Career and Workforce Development.



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College and CTE Career Pathways efforts to increase postsecondary readiness for all students. One unique quality of these efforts is incorporating Character Education development as part of their Social, Emotional, and Character Development Standards (SECD). The state also made a conscious effort from the beginning to provide a range of professional development support efforts to local districts to encourage the adoption of the SECD standards, PCAP, and work-based learning practices. One critical element to Kansas's success in implementation has been a commitment to demonstrating the value of SEL by engaging cross-sector stakeholders. In the early stages, Kansas struggled to get stakeholders to understand the importance of SEL for all students. By providing data on the impact of SEL (e.g., the PCAP surveys), fostering community engagement (e.g., the multi-city the Kansans Can Success Tour), and demonstrating the multiple initiatives SEL enhances (e.g., promoting safe schools and enhancing career prospects), the state earned buy-in from families and educators alike. Due to these efforts, the state prioritizes the importance of data collection, community engagement, and clear communication on the benefits of SEL. These efforts also align to a range of professional development training and resources.

Wisconsin Forged Collaborations and Shared Vision for PCAP, WBL, SEL, and CTE.

Wisconsin's success is built on solid PCAP adoption connected to existing CTE programming in schools across the state. Teams within the agency came together to integrate systems to accomplish the shared goal of serving the whole child. By sharing contacts and leveraging funding sources that

bridged related projects, such as PCAP, collaborations with employers ensured that workforce needs could be addressed. Attuned to the multiple priorities of school districts, the Wisconsin team worked to ensure that implementing an SEL framework and integrating SEL into career development was not an added burden. To support quality implementation, the state began with high school initiatives and demonstrated the value and connections of SEL to current work already underway in the multiple careers and workforce development initiatives (e.g., ACP, WBL, and Regional Career Pathways). In addition, the teams worked to provide resources to show the connections with other strategic initiatives (e.g., school counseling and mental health, career and technical education (CTE), Special Education, Positive Behavioral Intervention Supports (PBIS)/Response to Intervention (RtI)).

4.0 QUALITY OF STATES' CAREER READINESS INVESTMENTS

This section addresses areas of State Investments for Career Readiness:

- Career Advising examines school counselor to student ratios and the articulation of career advising in CTE Perkins V state plans.
- Postsecondary Readiness examines Advanced Placement scores, Dual Enrollment, FAFSA completion rates, and CTE Completer rates.
- Work-Based Learning examines the quality of state policies across eight domains.

for strong school counselor investment, the results indicate that several states are doing generally well with respect to investing in school counselors at the high school level. States are not showing strong investments concerning the total school counselor to student ratios at the K-12 level in large part due to the near lack of investment in providing school counselors at the 1st to 8th-grade levels. Only 2 states meet the ASCA 250:1 ratio recommendations for both K-12 and K-8 grades respectively. The 2020 national average ratio across K-12 is 378:1 and for K-8 is 795:1.

Career Readiness Begins in Early Childhood.

Children can only aspire to future pathways in which they see their gender, race/ethnicity, and disabilities reflected. For this reason, beginning in preschool, children need opportunities to see themselves represented in a wide range of occupations. To address this concern, PBS KIDS is actively designing content about the world of work, targeting children ages 3 to 8 and their families.

4.1 Focus on Career Advising

Career Advising is one of five pillars recognized by the CCD Center as essential for establishing quality career readiness programs and services. This section on Career Advising addresses (a) school counselor to student ratios, level of description of career advising within States' Perkins V (CTE) plans, and the extent to which PCAPs are described within States' Perkins V plans (Table 4.2).

SCHOOL COUNSELOR TO STUDENT RATIOS.

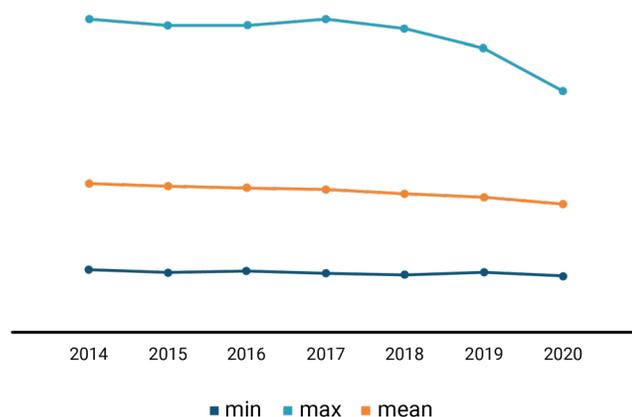
The global pandemic has shined an important light on the value of school counselors to provide mental health, academic, and career readiness support and resources to students, educators, and families.⁶³ The American School Counseling Association has set a benchmark ratio of 250 students for every School Counselor. And they admit that 250:1 may be too low in schools with higher concentrations of low-income households.

Figures 4.1-4.3 include the three views of School Counselor to Student Ratios for grades K-12, 9-12, and 1-8, respectively.⁶⁴ Using a 250:1 ratio or less as a benchmark

Table 4.1: State Career Readiness Investments: School Counseling



Figure 4.1: National Trends in School Counselor to Student Ratios for K-12



States vary considerably with respect to their School counselor to student ratios. In 2020:

- At the K-12 level, the national average school counselor to student ratio across all 50 states and Washington, DC was 378 to 1 with a low of 171 to 1 and a high of 707 to 1.
- For high schools, the national average school counselor-to-student ratio among those states reporting was 220 to 1 with a low of 103 to 1 and a high of 452 to 1.
- For elementary and middle school, the national average school counselor to student ratio among those states reporting was 795 to 1 with a low of 215 to 1 and a high of 3246 to 1.

SOUTH CAROLINA PLACES CAREER SPECIALISTS IN EVERY MIDDLE AND HIGH SCHOOL.

The CCD Center Pillar for Quality Career Advising that includes In South Carolina, funding is provided to qualified districts specifically for trained Career Specialists to provide career awareness, exploration, and guidance services to students in public schools, grades six through twelve. With an intent to provide a better counselor to student ratio for career development, the career specialist assists school counselors in providing the “Learning to Work” services to students as described in the SC Comprehensive Developmental Guidance and Counseling Program Model.⁶⁵ Career Specialists are also required to complete the NCDA Career Development Facilitator certification to become proficient in the basic career facilitating process while including productive interpersonal relationships.

Case Study: Colorado Invests in School Counselors to Coordinate PCAP Implementation.

In 2008, the Colorado legislature established the School Counselor Corps Grant Program (SCCGP) to provide competitive grants to school districts to increase the availability and effectiveness of school-based counseling services for secondary school students, particularly those with high dropout rates and rates of students qualifying for free or reduced-price lunch (FRL)⁶⁶. SCCGP funds are used to hire additional licensed school counselors, develop or implement a comprehensive school

counseling program aligned with ICAP state requirements, implement career awareness postsecondary preparatory services and programs, provide professional development to counselors and school staff aligned with SCCGP goals, and pay for college visits for students. District and school staff often note how impactful these funds are in carving out time and resources for planning and prioritizing the work.

SCCGP matriculation rates, entering postsecondary education, have seen substantial growth, particularly in the last five years, nearly closing the gap

Figure 4.2: National Trends in School Counselor to Student Ratios for High School (9-12)

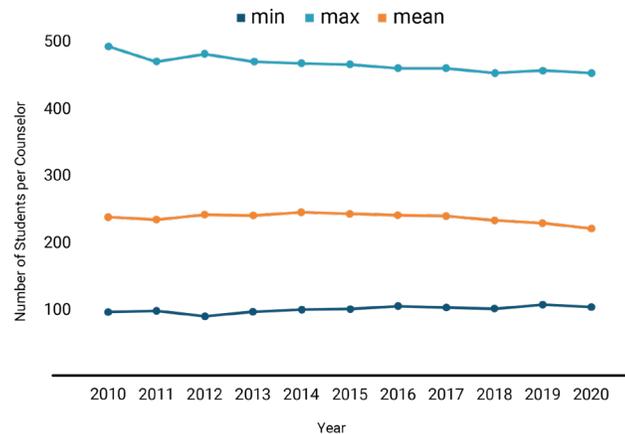
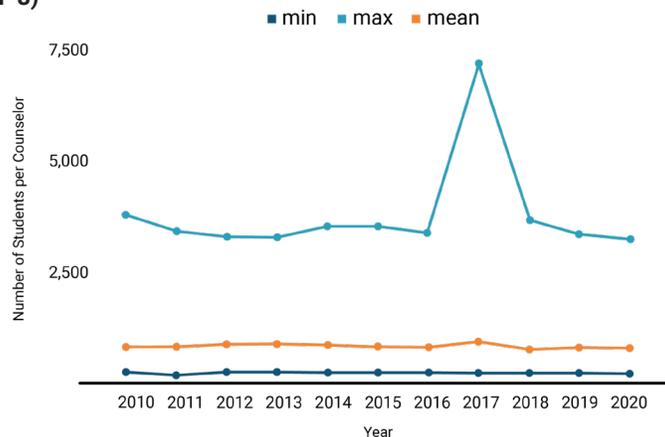


Figure 4.3: National Trends in School Counselor to Student Ratios for Elementary School (1-8)



between SCCGP schools and the state average from 9% to 2%.

Part of the success for matriculation may be due to the success SCCGP schools had supporting their students in completing ICAP elements, such as financial literacy and FAFSA completion, and increasing concurrent enrollment in postsecondary coursework. Most cohorts saw a substantial increase in concurrent postsecondary enrollment since receiving their SCCGP funding, ranging from 27 to 231 percent.

School counselors should be viewed as change agents supporting the system in focusing on each student’s postsecondary and workforce readiness. With career and college readiness being one of the primary ASCA domains, the ICAP, or similar individualized career and academic planning processes, should be central to school counseling programs. While the ICAP requires a schoolwide approach, the school counselor is the champion of the process and supports the development and implementation of a robust process that ensures impact through meaningful career

conversations with all staff. SCCGP is about more than reducing ratios; it’s about ensuring every student has access to and support from a licensed school counselor to develop and achieve their postsecondary and career goals.

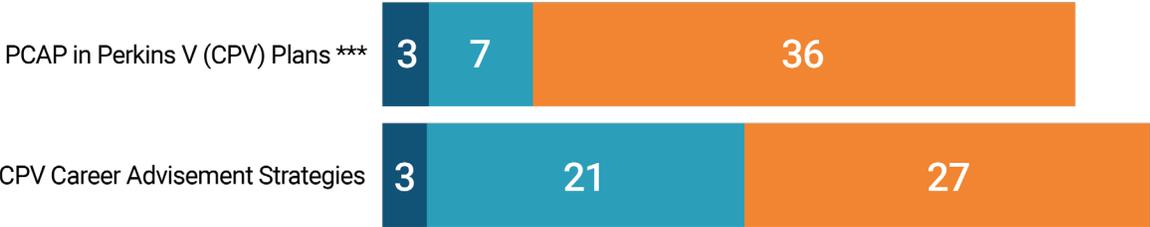
CAREER ADVISING AND PERKINS V PLANS.

While previous versions of Perkins legislation have mandated PCAPs, the primary aim in recent years is to establish career pathways that align with regional high-demand occupations and that incorporate employers, secondary education, and institutions of higher education (IHE). Career pathways offer youth and families a clear structure of the education, work-based learning, and postsecondary requirements needed to enter a given occupation. Career advising is necessary for helping youth and their families become aware of the transferable human and technical skills associated with participating and completing a given pathway. Career advising enables youth and their families to understand how the transferable human and technical skills offered in a given career pathway align with their future goals. Career advising also builds career navigation skills by

helping youth and families develop a postsecondary education plan that includes awareness of the stackable credentials needed to advance along a given pathway.

Each state submitted a plan for how they would use their Perkins V funding which now includes access to CTE for middle schools. AdvanceCTE evaluated whether the state plans identified career advising among 11 indicators and whether these indicators addressed middle school, secondary, and postsecondary, respectively⁶⁷. Table 4.2 indicates that 3 states identified career advising as part 6-7 of the key career advising indicators and 21 states identified 3-5 career advising indicators. Table 4.3 analyzes whether career advising was identified across a range of indicators. Overall, the results indicate that the majority of states did not articulate a role for career advising within their Perkins V plans and when a career advising indicator is identified, it is most likely part of the secondary education plan.

Table 4.2: State Career Readiness Investments: State Perkins V Plans Career Advising



*5 states excluded - No state PCAP process

As a follow-up using the data collected by AdvanceCTE, the CCD Center evaluated and two what extent states identified their PCAP as an element of their Perkins V plans. The results indicated that:

- 3 states mentioned their PCAP in two or more sections of their Perkins V plan.
- 7 states mentioned their PCAP in one section of their Perkins V plan.

Ohio PCAP Resources Deepen Engagement in CTE

Ohio offers an extensive array of resources in support of its K-12 PCAP efforts (referred to as the Student Success Plan). Resources include college and career readiness data dashboards,⁶⁸ The Career Connections Framework is a planning tool for the student success plan (SSP)⁶⁹ which aligns with college and career readiness efforts through guides for Parents and Families, Community Members, Businesses, and Teachers and School Counselors. Furthermore, Ohio high school students can earn an “OhioMeansJobs-Readiness” seal, a formal designation on transcripts indicating possession of personal strengths, strong work ethic, and professional experience that businesses need. Students work with at least three experienced mentors to validate the demonstration of skills in school, work, or the community.

Table 4.3: Career Advising Identified in State Perkins V Plans

EDUCATION LEVEL			CAREER ADVISING INDICATOR
Middle (5-8)	Secondary (9-12)	Postsecondary (13-16)	
9	6	1	Use of reserve funds to support career advising
9	21	12	Use of state leadership funds to support career advising
1	7	3	Career advising identified as a required element for program approval
8	15	10	Career readiness included in size and scope of quality CTE definition
4	6	2	Describes intention to pilot new career readiness programs/efforts funded through Perkins
10	22	20	Career advising identified as a necessary part of districts’ Comprehensive Local Needs Assessment and/or local application
6	13	6	Describes intention to develop career advising toolkits, rubrics or similar materials/tools
5	17	7	Describes intention to offer career advising professional development
2	7	3	Describes intention to offer technical assistance for providing career advising
9	6	2	Developing framework/standards for career counseling and advisement
19	4	12	Career advising engagement unclear or undetermined

Massachusetts Leverages Perkins V Funds for PCAP.

Massachusetts has combined state and Perkins V funds to enable middle and high schools throughout the state with the funds needed for school PCAP teams to engage in common planning time and participate in a series of workshops and coaching sessions.

Wisconsin PCAP and CTE Supports.

In addition to online PCAP resources and lessons, Wisconsin also provides annual training and a career readiness community of practice that brings together both CTE and PCAP providers at <https://dpi.wi.gov/acp/resources>.

Delaware supports state CTE through the Delaware Career Pathways system.

Growing out of work from the mid-2010s, Career Pathways is a collaborative workforce development partnership with an official multi-stakeholder steering committee. Career Pathways works to create a fluid relationship between the Delaware public education system's postsecondary education, non-profit, and employer communities to ensure that the pathway to college and a well-paying job is accessible for every Delawarean.

STATE'S IDENTIFYING PCAP WITHIN PERKINS V.

To complement the Perkins V Plans analysis conducted by AdvanceCTE, the CCD Center analyzed the plans to determine whether the state's PCAP was specifically identified for secondary and middle school grades (Table 4.2).

- 10 states identified their PCAP in their Perkins V plans
- 3 states identified the role of PCAP in multiple sections of their Perkins V plans

By referencing their state PCAP process at the core of quality career advising in their federal Perkins V state plans, these states demonstrate a commitment to connecting career advising to career readiness.

Indiana Offers Model PCAP Language in Perkins V.

Indiana calls out their Student Graduation Plan as part of the CTE secondary scope and accountability requirements stating, "students and their families are provided career advisement and academic guidance to help students identify career interests and to best prepare for college and career opportunities and any work-based learning must be in a position(s) aligned to the student's career pathway on their graduation plan

Rhode Island Describes PCAP Implementation Strategy in Perkins V.

Rhode Island's Perkins V plan specifically calls for Professional Learning Communities for PCAPs as a strategy to prepare teachers and faculty.

4.2 FOCUS ON POSTSECONDARY READINESS

State’s focus on postsecondary readiness was assessed according to the extent to which students are achieving an Advanced Placement (AP) score 3 or higher, existence and quality of dual enrollment policies, completion rates for the Free Applications for Federal Student Assistance (FAFSA®), and CTE concentrator rates (Table 4.4).

ADVANCED PLACEMENT (AP®).

Many exclusive IHEs use the number of AP courses completed as an indicator of college readiness, Many IHEs allow college course credit when students score 3 or higher on the AP exam. For this analysis, the percentage of students receiving a score of 3 or more on the AP exam is being used to evaluate the overall quality of the AP courses and support provided to students and their families.

- 21 states recorded AP exam scores of 3 or higher for over 65% of the students completing the exam.
- 22 states recorded AP exam scores of 3 or higher for between 55% and 65% of their students completing the exam.

It is important to note that for AP exam scores many students completed multiple exams each year and therefore the data does contain duplicate students.

Figure 4.4 indicates the 3 or high exam performance rates and average between 2010 and 2020. In 2020, the average state performance for students receiving a 3 or higher on their AP exam was 62% with states ranging from a low of 45% to a high of 75%.

Table 4.4: State Career Readiness Investments: Postsecondary Readiness



**2 states excluded - Missing Data or Outliers

Figure 4.4: AP® Test Performance- Score of 3 or higher

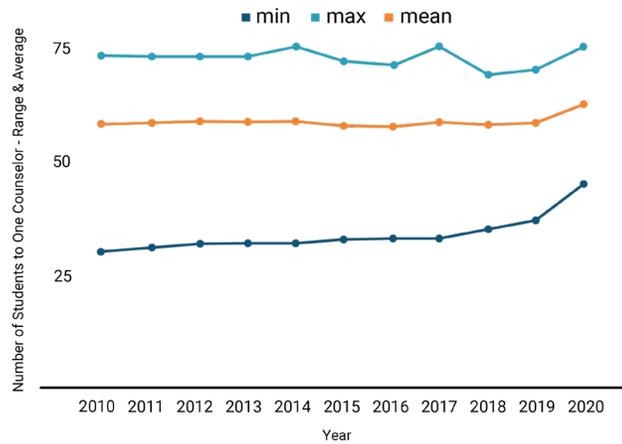


Figure 4.5: AP® Test Performance by Gender (2020)

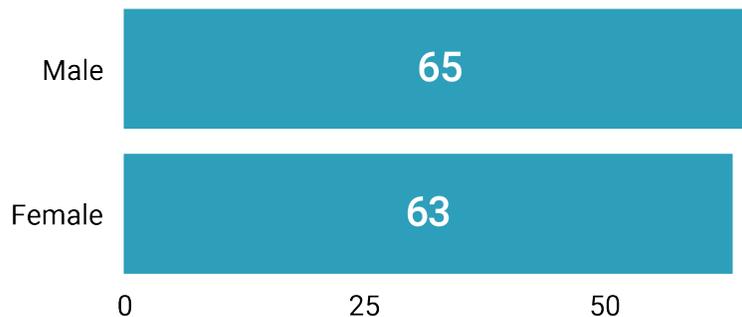


Figure 4.6 indicates the percentage of students receiving a 3 or higher AP exam score across a range of demographics. The results indicate sizable performance gaps for students from Black, Latinx, Indigenous/Native, and Hawaiian/Pacific Islander backgrounds.

AP® PARTICIPATION RATES

Figure 4.7 describes the change rate for the number of schools offering AP courses. There is a recent downward trend averaging nationally -1.2% in 2019 followed by -2.8% in 2020 of schools participating in providing access to AP courses. While some states showed an increase in the number of schools participating in offering AP courses, the maximum increase in 2020 was a 19% increase and the minimum was a loss of 17% of participating schools.

Figure 4.8 indicates the average rate of change of student participation in AP courses. In 2020, there was an average drop of nearly 8% nationally with a range between losing 22% and gaining 1%.

Figure 4.6: AP® Test Performance- Score of 3 or Higher by Race/Ethnicity (2020)

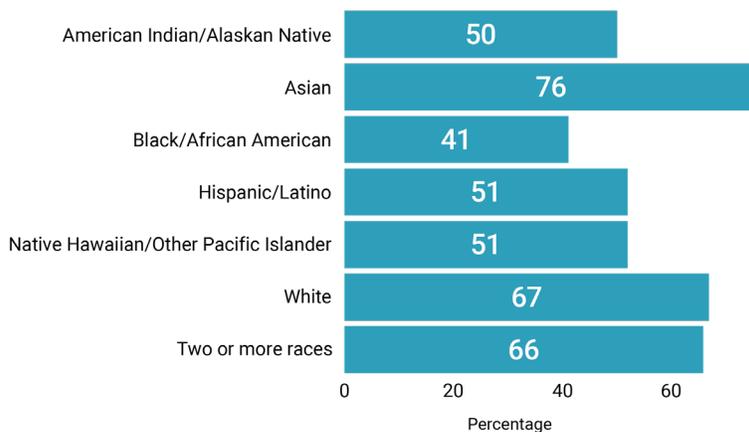


Figure 4.7: AP® School Participation Change

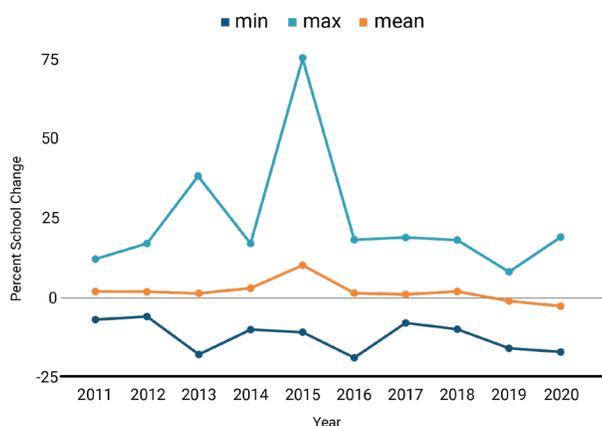


Figure 4.8: AP® Student Participation Change

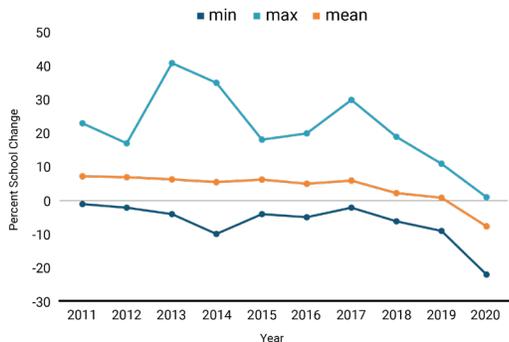


Figure 4.10 compares participation change rates across a range of demographics. Between 2019 and 2020, the highest decreases in participation rates were found for Black and Latinx youth while there was a sizable increase in participation among Indigenous Native youth.

DUAL ENROLLMENT POLICIES.

The Education Commission of the States analyzed dual enrollment policies for all 50 states including Washington, DC.⁷⁰ Dual enrollment refers to whether high school students can enroll in higher education courses. The primary criteria included whether a dual enrollment policy was established, whether courses were identified, and whether those courses provided credit for both high school and postsecondary training and degree programs.

ECS reports that nearly all states including Washington, DC have established dual enrollment policies. The report also notes that:

- 43 states offer dual-enrollment that allows students to receive both high school and postsecondary credit.

Tennessee Creates Seamless Vertical Alignment with Higher Education.

The Tennessee Pathways program offers college and career advising throughout K-12.⁷¹ Students are encouraged to complete early postsecondary and work-based learning opportunities while in high school. The partnership between the Tennessee Department of Education and the Tennessee Board of Regents provides seamless dual college credit and offers grants directly to students to pay for courses.⁷²

Dual Credit Identified in Arizona PCAP Toolkit.

Arizona’s PCAP “Implementation Toolkit” (referred to as Education and Career Action Plan) requires students to begin planning high school courses and exploring postsecondary options that align with their identified career goal.⁷³ The information included in a student’s PCAP, at minimum, artifacts are required to support personal development in academic, career, postsecondary, and extracurricular activities. Documenting the student’s record of participation in dual credit courses, honors placements,

AP courses, etc., as well as their participation in work experiences, internships, and/or job-shadowing build a resume that helps to ensure that students are meeting postsecondary entrance requirements.

Virginia Offers Technology Platform to Identify Dual Credit Options.

The Virginia Education Wizard technology platform targets high school and college students, as well as adults and veterans. The online tool serves to provide a comprehensive location for understanding the programs and majors available in

Figure 4.9: AP® Participation by Gender (2019-2020)

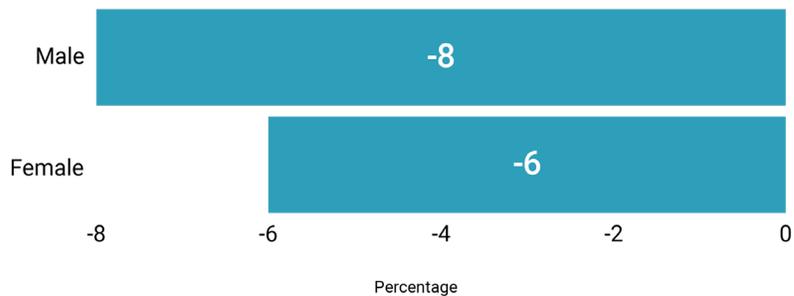
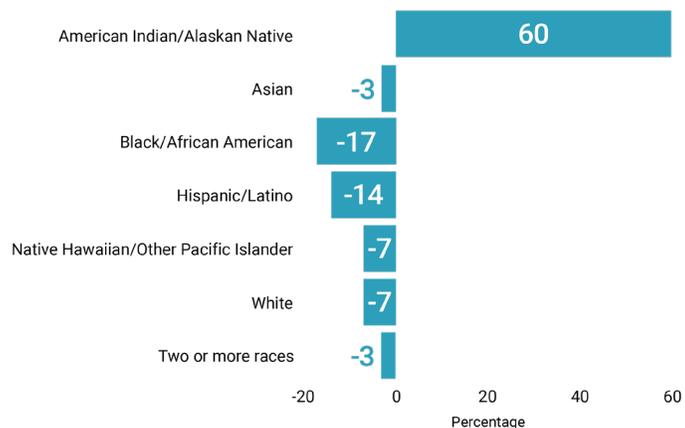


Figure 4.10: AP® Participation by Race/Ethnicity (2019-2020)



Virginia’s 2 and 4-year college settings. In addition, the site can search and show community college to 4-year college and university transfer agreements in place and how to pay for education, allowing students to make more informed decisions about college choices. The tool also includes an integrated financial planning tool to evaluate monthly expenditure costs to compare career choices to intended lifestyles.

CTE Encouraged to Clarify Dual Credit Opportunities.

While nearly all states provide outcome data on dual enrollment, states are encouraged to more effectively communicate the types of postsecondary credit available and the expectations for earning these credits.⁷⁴

FAFSA COMPLETION RATES.

In order to receive financial aid at most postsecondary institutions, families must complete the Free Application for Student Assistance (FAFSA) form. There is strong evidence FAFSA completion increases the probability that college and career-ready students from lower-income and diverse racial/ethnic backgrounds will successfully matriculate into a postsecondary training or education program. Figure 4.11 indicates that in 2020/21, the national average for FAFSA completion rates for high school graduates was 63.5% with a low of 36.4% and a high of 85.5%.

As reported in Table 4.4:

- 24 states recorded FAFSA completion rates above 60%.
- 19 states recorded FAFSA completion rates between 50% and 60%.

CTE CONCENTRATOR RATES.

CTE concentrator rates refer to the number of CTE students that have completed courses in a career pathway program. This data through 2018 is based on Perkins IV definitions when a CTE Concentrator was defined as a secondary student who earned a minimum of two-three credits, defined by the state, in a single CTE program area. CTE concentrator rates were drawn from the U.S. Department of Education’s Office of Career, Technical, and Adult Education. The CTE Concentrator “Rate” is based on the number of students participating in a CTE pathway or cluster with CTE Concentrator Rate referring to the percentage of CTE participants who complete the required number of credits in a single CTE pathway or cluster. One challenge is that there can be duplicate entries when students complete two credits for more than one pathway or cluster.

Figure 4.12 indicates that in 2020, there was a national average of 42% of CTE participants gaining the credits needed to be considered a CTE Concentrator with a range between 5% and 83%.

Table 4.4:

- 12 states were converting 60% or more of their CTE Participants into CTE Concentrators. CTE Concentrators are students completing 2 credits or more within a career pathway or cluster.
- 23 states converted between 30% and 60% CTE Participants into CTE Concentrators.

Figure 4.11: FAFSA Completion Rates

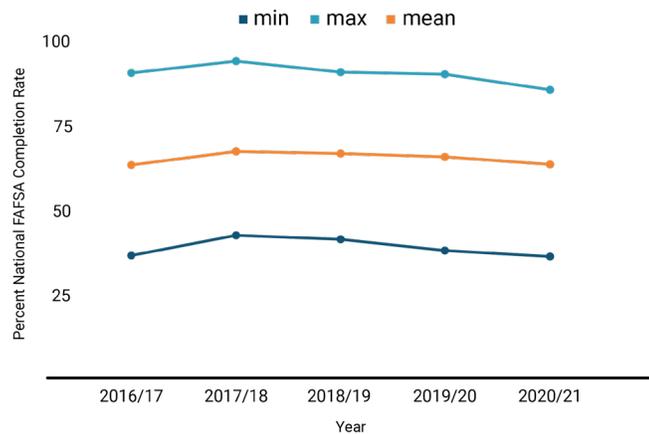
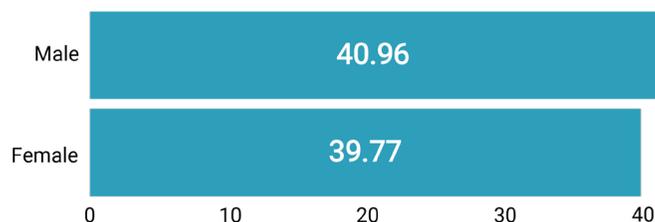


Figure 4.13: CTE Concentrator Rates by Gender (2019)



CTE is one of the only federal programs that offers an expanded view of participation rates by a range of demographics as well as important special populations. The percentages listed in Figures 4.14 and 4.15 represent the percentage of participants from the listed demographics or special population categories who reached the two-credit benchmark within a single cluster or pathway to be considered a CTE Concentrator. This data does not reflect whether the demographic backgrounds or special population status of students who begin as CTE Participants are participating at rates commensurate with their representation in their community or school district.

Figure 4.14: CTE Concentrator Rates by Race/Ethnicity (2019)

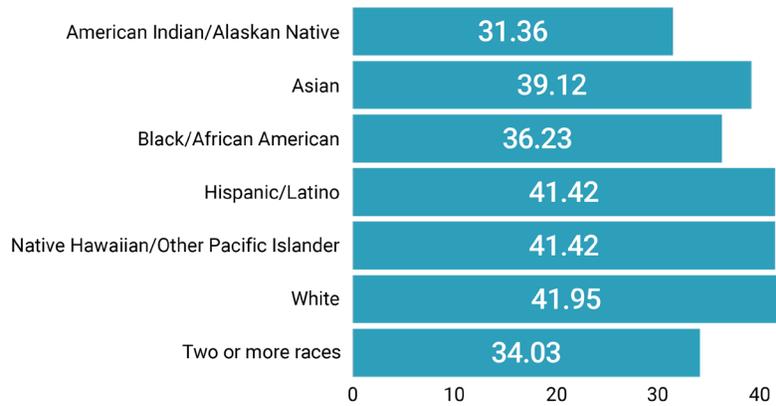
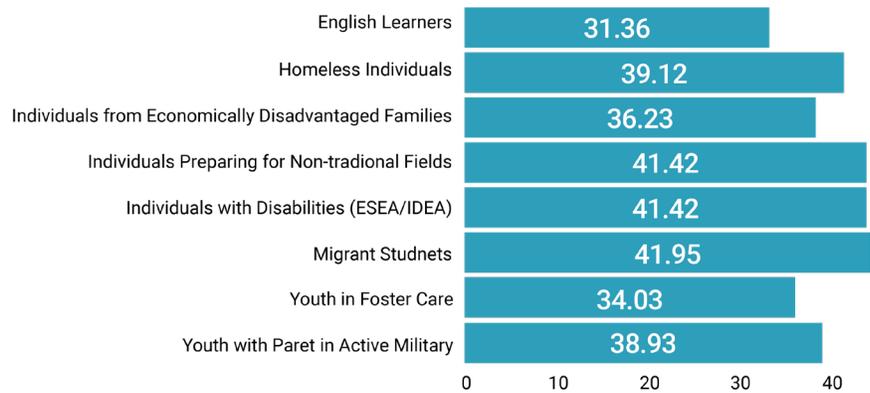


Figure 4.15: CTE Concentrator Rates by Special Population (2019)



4.3 FOCUS ON WORK-BASED LEARNING

A 2016 U.S. Chamber of Commerce Foundation for Education and Workforce report⁷⁵ asserts that career readiness must be inclusive of all students, or as many students as possible. Along with improving proficiency on core academic assessments, states can prioritize other components of career readiness based on input from industry and employer partners. These components include career-related course sequences, work-based learning, and industry credentialing—indicators that go beyond the college readiness components. A total of 29 states identified funding work-based learning opportunities as a key element of their federal Perkins V plans.

Scaling up work-based learning opportunities for more students while maintaining a high-quality experience is one of the most challenging components of career readiness preparation⁷⁶. This challenge can only be met by engaging the business community to take the lead, working through established or new intermediaries to ensure that industry-validated work-based learning processes are implemented with individuals or teams.

State-level work-based learning policies were analyzed by American Student Assistance (ASA)⁷⁷ using eight indicators (Table 4.5). Each indicator was rated for level of quality using a three-point scale (0, 1, or 2). The Overall score represents the total ratings with the highest quality rating being 16. Highlights from the ASA report include:

- 10 states received an overall Work-Based Learning Policy ratings of above 10.
- 5 states articulated a need to address equity with regard to increasing access to work-based learning for a range of traditionally underrepresented groups and special populations.

Table 4.5: State Career Readiness Investments: Work-Based Learning (WBL) Quality

WBL Policy - Overall Score	10	25	16
WBL Policy - Equity of Access	5	14	32
WBL Policy - Data to Drive Equity	11	25	15
WBL Policy - Data Collection	20	22	9
WBL Policy - Communications	7	34	10
WBL Policy - Statewide Support Infrastructure	7	20	24
WBL Policy - State Funding	5	19	27
WBL Policy - Perkins Funding	29	22	
WBL Policy - Financial Incentives	7	20	24

- 11 states indicated that they disaggregate student data to assess equitable access to work-based learning opportunities.
- 20 states identified data systems to track student participation in work-based learning.
- 29 states plan to use Perkins (i.e., CTE) funding to support work-based learning.
- 7 states have established statewide infrastructure in the form of a system or organization to facilitate access to paid and for-credit work-based learning opportunities for high school students
- 7 states have established communication systems that are designed to connect schools and students with employers and inform other key stakeholders about work-based learning options.
- 7 states offer financial incentives for employers to offer work-based learning experiences.
- 5 states have offers dedicated State Funding to support WBL efforts
- 1 state defines quality expectations for WBL

Pennsylvania Collaborates with Local Workforce Development Boards.

The Teacher in the Workplace grant program⁷⁸ Pennsylvania provides the opportunity for eligible organizations, in partnership with their Local Workforce Development Board (LWDB), to implement TIW programs that connect the classroom to the workplace for K-12 educators in Pennsylvania. Through the TIW program, teachers, counselors, and administrators are provided experiences interacting directly with industry and business leaders to learn about industry trends, needs, and opportunities to enhance their classroom instruction, student learning, and career readiness.

Rhode Island Creates Non-Profit to Encourage Employers to Offer Work-Based Learning.

For instance, the Rhode Island Governor's Workforce Board selected Skills for Rhode Island's Future, a non-profit that matches local businesses with qualified local job seekers, to serve as the statewide career readiness intermediary. As Rhode Island's intermediary, the organization is responsible for engaging employers, setting up work-based learning opportunities and coordinating students' placements. Skills for Rhode Island's Future helped Rhode Island expand access to work-based learning opportunities by helping the Governor's Workforce Board and RIDE set up the PrepareRI internship program, using its connections to establish work-based learning opportunities with leading employers in the state and taking on liability for students as the employer of record. Students are paid for the internship and earn college credit. Since implementing its partnership with Skills for Rhode Island's Future, Rhode Island has increased the number of students participating in PrepareRI internships from 162 in 2018 to 326 in 2019.

Iowa's PCAP Includes WBL.

PCAP (referred to as Individual Career and Academic Plan) legislation went into effect in 2016. An essential component defined is meant to ensure that career exploration is included. Students can engage in exploration experiences such virtually or in-person and may include job tours, career days or career fairs, and other work-based learning activities. To build out support for districts across the state, the Iowa Work-Based Learning Intermediary was developed. Made up of 15 regional programs, each associated with a community college, the network connects businesses and the education system to offer relevant, work-based learning activities to students and teachers. Students, businesses, and educators can connect with the regional network for assistance with WBL opportunities.

Georgia Writes WBL into its Administrative Code.

Similarly, Georgia's PCAP (referred to as Individual Graduation Plan) administrative code and Guide for School Counselors, Advisors, and Educators describes experience-based, career-oriented learning experiences such as participation in work-based learning programs. Georgia has defined standards and a manual for high-quality WBL experiences which references the PCAP with accompanying rubrics to assess WBL program quality.

5.0 QUALITY OF STATES' CAREER READINESS OUTCOMES

Table 5.1 describes state-level career readiness outcomes that align with economic competitiveness by examining a workforce readiness pipeline that includes high school completion, postsecondary engagement, percentage of youth and young adults who are not employed or in school, and wage earnings.

This section is organized into four sections - high school completion rates, postsecondary engagement, opportunity for youth who are not involved in work or education, and wage earnings.

5.1 High School Completion Rates

High school completion rates were analyzed for both the total student population (using IES-NCES data) as well as among CTE Concentrators (using Perkins Collaborative Resource Network (PCRN) data). Table 5.2 indicates that:

- 9 states are graduating 90% or more of their students.
- 39 states are graduating between 80% and 89% of their students.
- 47 states are graduating 90% or more of their CTE Concentrators.

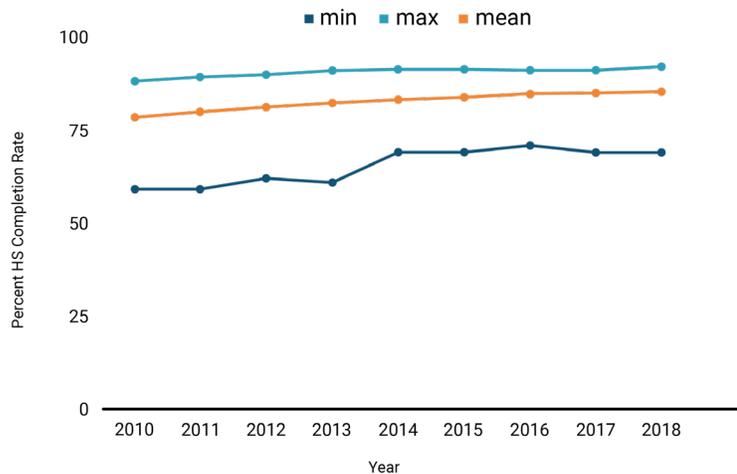
Figure 5.1 reports the national High School Completion Rates between 2010 and 2018. Over the past years, the average graduation rate has increased each year to a 2018 average of 85.3% with states ranging from a low graduation rate of 69% to a high of 92%.

Table 5.1: State Career Readiness Outcomes

HS Completion Rate (2018)	9	39	3
HS Completion Rate - CTE Concentrators (2018) *	47		3
Postsecondary Placement	3	42	6
Post-School Outcomes - CTE Concentrators (2018)*	40	9	1
College Retention Rate - Part-Time Students (2019)	1	3	47
College Retention Rate - Full-Time Students (2019)	8	43	
Postsecondary Completion - 4 year Colleges (2019)	21	28	2
Postsecondary Completion - 2 year Colleges (2019)	5	7	39
Youth not in Education, Employment, Training - 16-19 (2019)	47		4
Youth not in Education, Employment, Training - 20-24 (2019)	5	44	2
Average Monthly Salaries - 14-18 (2020)**	9	29	8
Average Monthly Salaries - 19-21 (2020)**	42		4
Adjusted Average Monthly Salaries - 14-18 (2020)**	7	32	7
Adjusted Average Monthly Salaries - 19-21 (2020)**	7	29	10

* 1 State Excluded - Outlier
** 5 states excluded - Data not available

Figure 5.1: High School Completion Rate



DIVERSE AND HIGH NEED POPULATIONS.

With race/ethnicity and high need populations, high school completion rates for Indigenous/Native, Black, and Latinx youth are lower than the national average with the largest divergence from the national average for students with disabilities, English language learners, homeless youth, and youth in foster care.

HIGH SCHOOL COMPLETION RATES AMONG CTE CONCENTRATORS.

Figure 5.4 indicates that the national average for high school completion rates among CTE Concentrators has been consistently higher than the general student population. In 2018, states high school completion rates for CTE Concentrators ranged between 89% and 99%.

Figure 5.2: High School Completion Rate by Race/Ethnicity (2018)

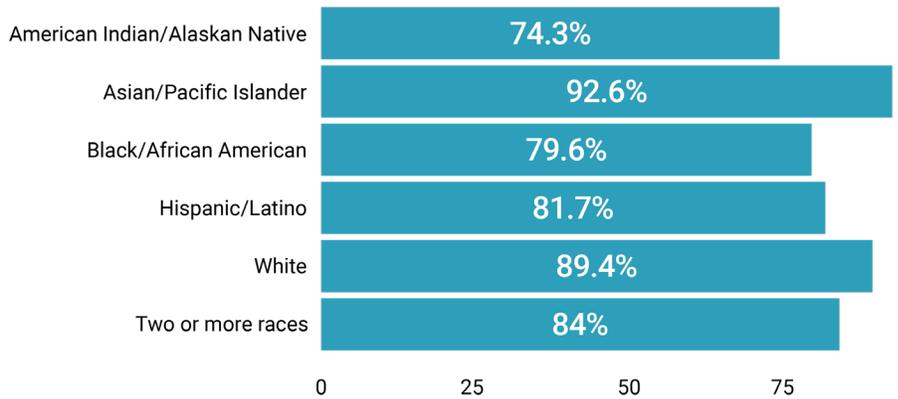


Figure 5.3: High School Completion Rate by Special Population (2018)

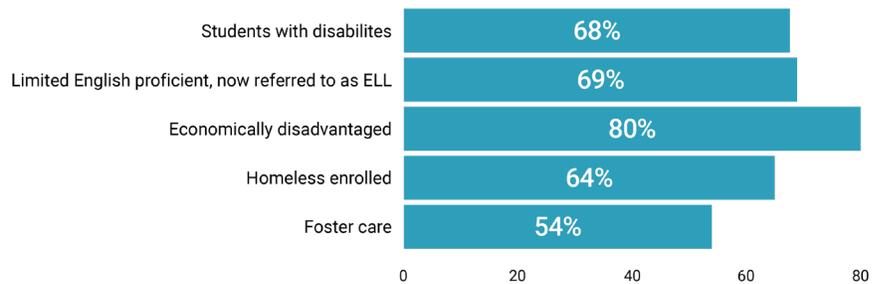
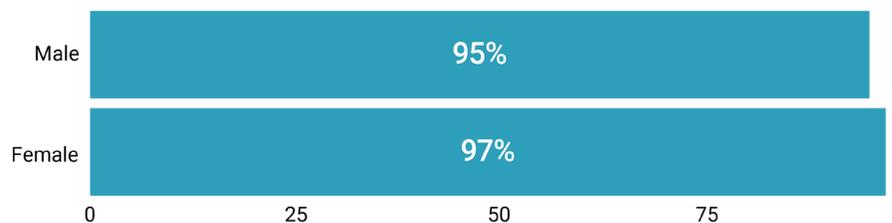


Figure 5.4: High School Completion Rate of CTE Concentrators



*One outlier in 2018 is excluded

Figure 5.5: High School Completion rate of CTE Concentrators by Race/Ethnicity (2018)

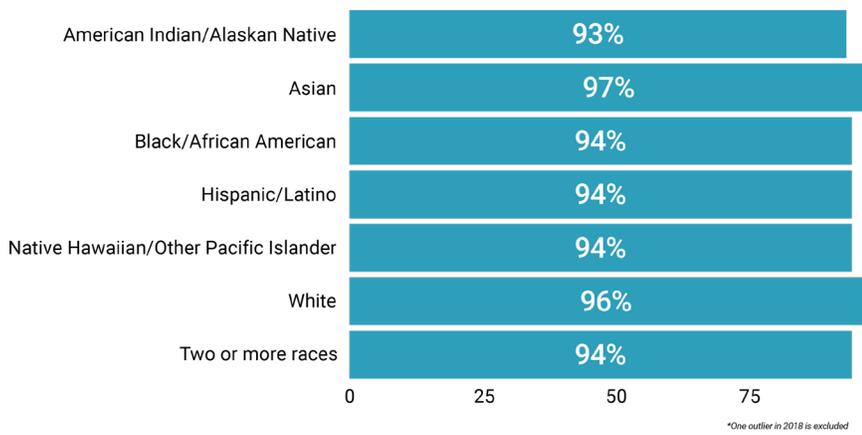
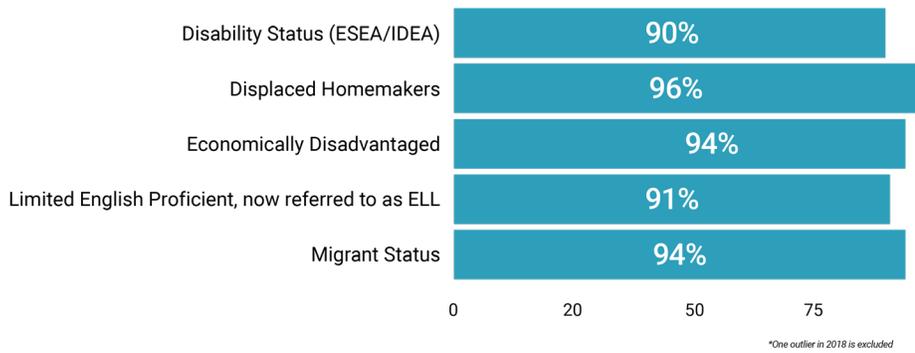


Figure 5.6: High School Completion rate of CTE Concentrators by Special Populations (2018)



5.2 POSTSECONDARY ENGAGEMENT

MATRICULATION INTO 2-YEAR OR 4-YEAR POSTSECONDARY TRAINING OR EDUCATION PROGRAMS.

This section reviews rates of postsecondary entry immediately after graduating from high school. Table 5.3 indicates that:

- 3 states have 70% or more of their high school graduates entering a two or four-year postsecondary training or degree program beginning the next Fall term.
- 39 states range between 50% and 69% of their high school graduates entering a two or four-year postsecondary training or degree program beginning the next Fall term.
- 40 states have 70% or more of their CTE Concentrator high school graduates entering a two or four-year postsecondary training or degree program, join the military or become employed beginning the next Fall term.
- 9 states range between 50% and 69% of their CTE Concentrator high school graduates entering a two or four-year postsecondary training or degree program, join the military or become employed beginning the next Fall term.

Figure 5.8 describes the postsecondary placement rates for the year 2012-2016. The data shows a 2016 average of about 60% of graduating high school students immediately entering a two or four-year training or degree program with a range of in-state percentage levels from a low of 41% to a high of 76%.

Table 5.3: State Career Readiness Outcomes: Postsecondary

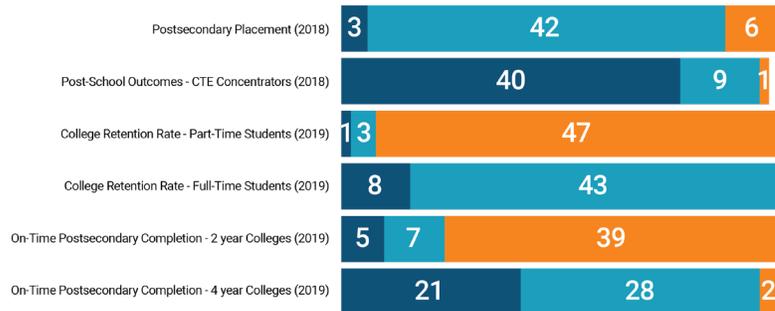
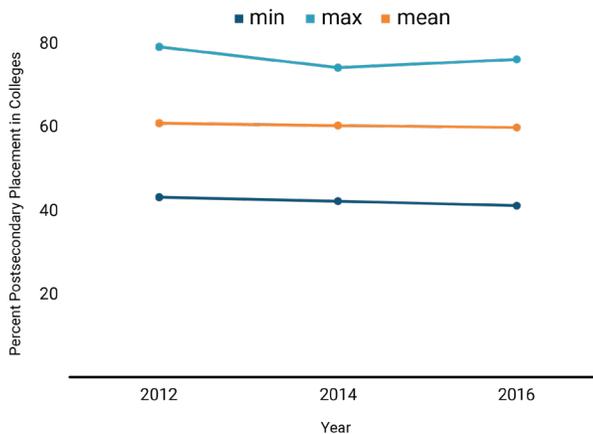


Figure 5.7: Postsecondary Placement



POST SECONDARY PLACEMENT FOR CTE CONCENTRATORS.

Figure 5.9 describes the postsecondary placement rates for the year 2010-2018. The data shows a 2018 average of 84% of CTE Concentrator high school graduates immediately entering a two or four-year training or degree program, joining the military or becoming employed with a range of in-state percentage levels from a low of 45% to a high of 100%.

Figure 5.8: Post-School Outcomes of CTE Concentrators

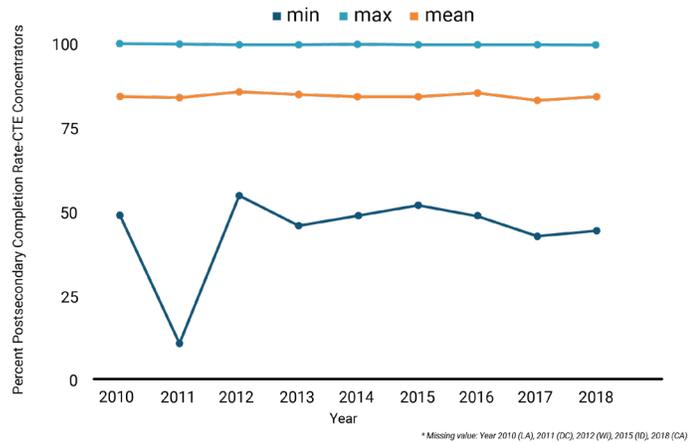
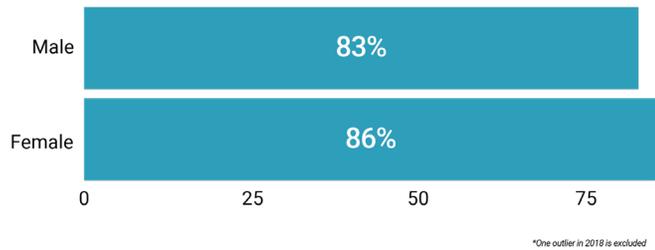


Figure 5.9: Post-School Outcomes of CTE Concentrators by Gender (2018)



CTE CONCENTRATOR TRAINING OR EDUCATION PROGRAMS AMONG DIVERSE AND HIGH NEED POPULATIONS.

With the exception of students with disabilities (74%) and English Language Learners (75%), over 80% of CTE Concentrators from diverse backgrounds and high need populations are entering a postsecondary training program or degree, joining the military or becoming employed after high school graduation (Figures 5.11-5.12).

POSTSECONDARY RETENTION AND COMPLETION RATES..

Table 5.3 describes States Postsecondary Retention and Completion Rates:

- 1 state is retaining 80% or more of its part-time post-secondary students.
- 3 states are retaining between 60% and 79% of their part-time post-secondary students.
- 8 states are retaining 80% or more of their full-time post-secondary students.
- 43 states are retaining between 60% and 79% of their full-time post-secondary students.
- 5 states are graduating 60% or more of their two-year postsecondary students within three years of entry.
- 7 states are graduating between 40% and 59% of their two-year postsecondary students within three years of entry.
- 21 states are graduating 60% or more of their four-year postsecondary students within six years of entry.
- 28 states are graduating between 40% and 59% of their four-year postsecondary students within six years of entry.

Figure 5.10: Post-School Outcomes of CTE Concentrators by Race/Ethnicity (2018)

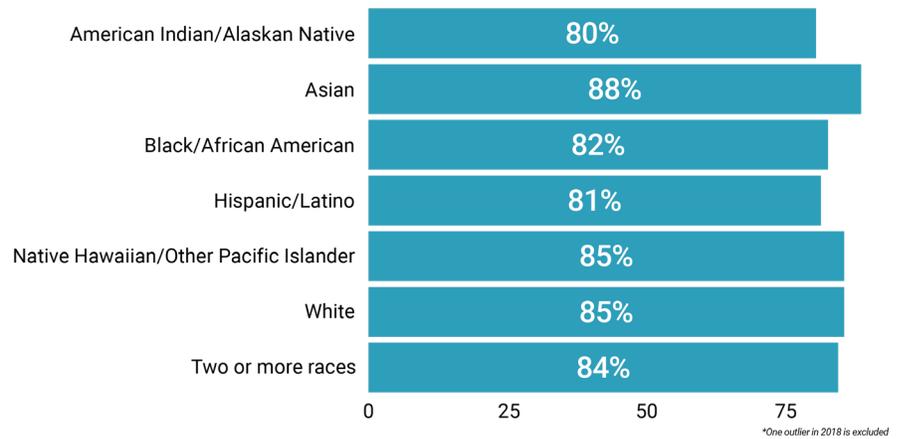


Figure 5.11: Post-School Outcomes of CTE Concentrators by Special Populations (2018)

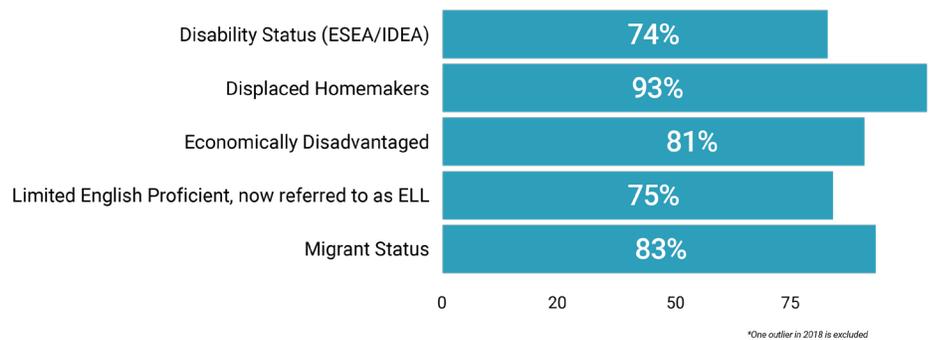


Figure 5.13 reports the one-year postsecondary retention rates for part-time students. From 2010 to 2019, the average retention rates remained relatively flat ranging from 42.8% (2012) to 46.7% (2019). Some states have significantly increased their part-time student postsecondary rates with the highest percentage of 67% in 2010 and beginning in 2015 a consistent trend of 80% or more for the highest rate. Since 2010, states with the lowest rates have maintained a postsecondary retention rate for part-time students below 30% except 2014 and 2017.

Figure 5.14 reports the one-year postsecondary retention rates for full time students. From 2010, there has been a slow but steady increase in the average retention rates from 71.3% in 2010 to 75% in 2019. There has been relatively little change in the postsecondary retention rate range for full-time students with 2019 indicating a low of 67% and a high of 88%.

Figure 5.15 reports the on-time postsecondary completion rates for two-year institutions. On-time completion is calculated as 3 years from entry. Since 2010, states are averaging between a low of 31.1% (2014) and a high of 36.5% (2019). The minimum and maximum rates vary considerably with states since 2010 reporting as low as 11% two-year postsecondary completion rates and a high of 100% (2013). For 2019, states ranged between a low of 15% and a high of 74%.

Figure 5.12: College Retention Rate of Part-Time Students after 1-year

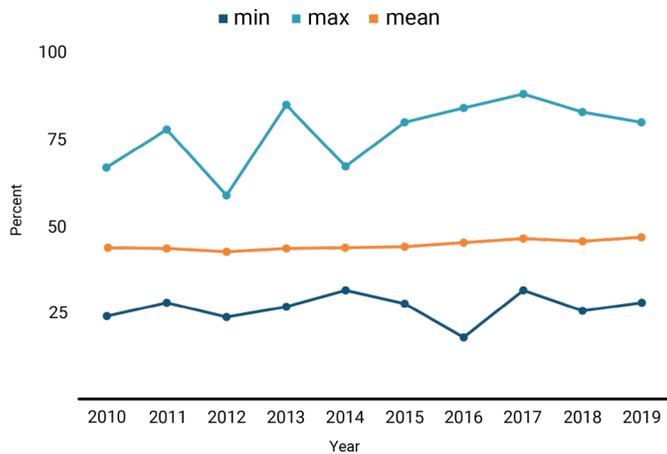


Figure 5.13: College Retention Rate of Full-Time Students after 1 year

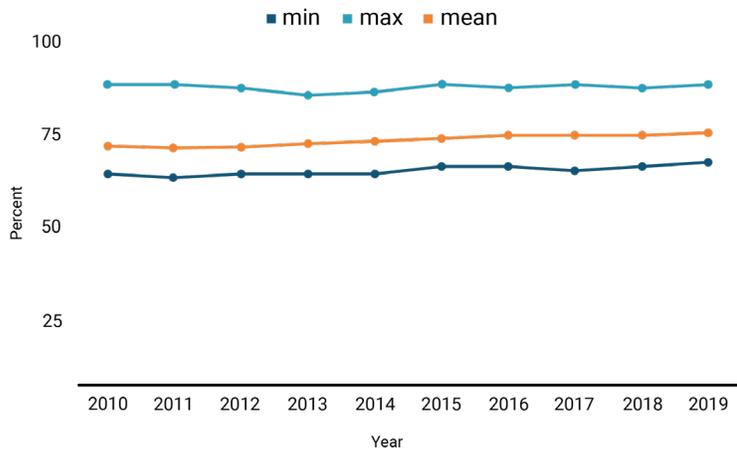


Figure 5.14: On-Time Postsecondary Completion- In 3 years from 2 year Colleges

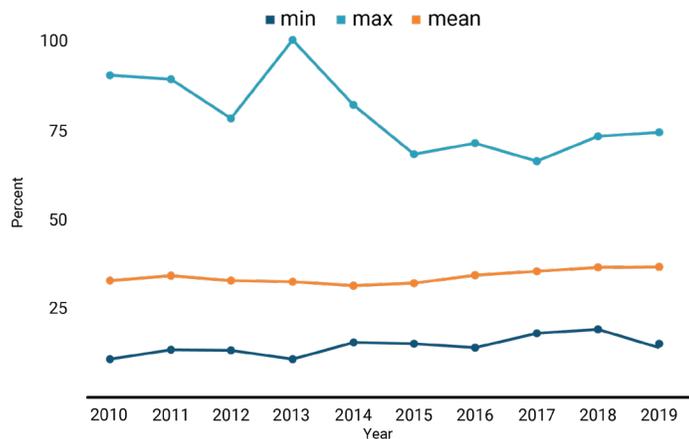
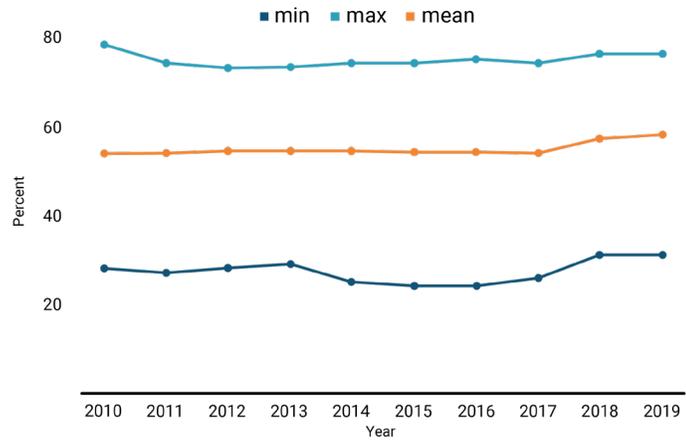


Figure 5.16 reports the on-time postsecondary completion rates for four-year institutions. On-time completion is calculated as six years from entry. Since 2010, the average completion rates and variations between the low and high rates have been relatively flat. The average on-time postsecondary completion rate for four-year institutions was 53.7% in 2010 and rose to 57.9% in 2019. The low rate has risen to 31% in 2019 compared to 28% in 2010.

Figure 5.15: On-Time Postsecondary Completion- In 6 years from 4 year Colleges



5.3 HIGH NEED, HIGH OPPORTUNITY YOUTH AND YOUNG ADULTS

In 2012, Belfield, Levin, and Rosen brought critical attention to the tremendous economic opportunity to states that reduce the number of youth and young adults who become disconnected from education and employment.⁷⁹ Internationally, the acronym “NEET” is used to describe these individuals - Not in education, employment, or training.” We refer to these youth and young adults as High Need, High Opportunity youth, and young adults.⁸⁰ The rationale is that special care needs to be given to the career readiness programs and resources needed to engage with individuals who have stopped out of school and work as well as the tremendous economic opportunity for efforts that keep young adults connected to education, training and employment.

Table 5.4 indicates that

- 47 states are maintaining their 14 to 19-year-old NEET youth rates below 10%
- 5 states are maintaining their 20 to 24-year-old NEET youth rates below 10%
- 44 states are maintaining their 20 to 24-year-old NEET youth rates below 20%

Figure 5.17 reports that among 16-19-year-olds, NEET rates have dropped from a high of 8.8% in 2010 to 6.7% in 2019. There is a wide variation across states with a low of 4% and a high of 12% of 16-19-year-olds who are not in education, employed, or training in 2019.

Figure 5.18 reports differences among key race and ethnic groups for youth aged 16-19. Compared to the 2019 average of 6.7, Indigenous/Native, Black, Latinx, and two or more races youth have elevated rates compared to other groups.

Table 5.4: State Career Readiness Outcomes: Economy



* 5 States Excluded - No Data Available

Figure 5.16: Youth not attending school and not working: Age 16-19

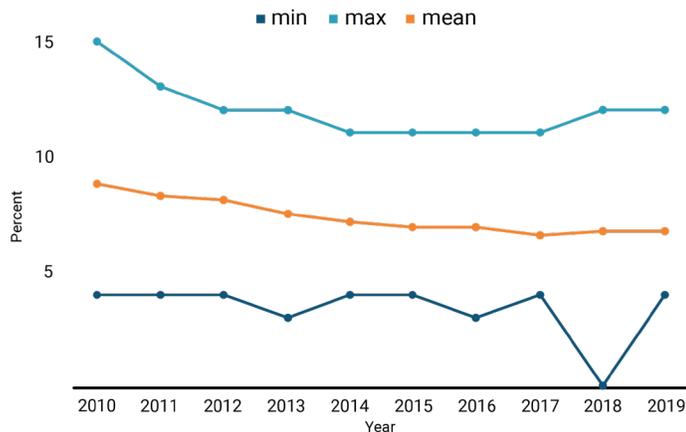
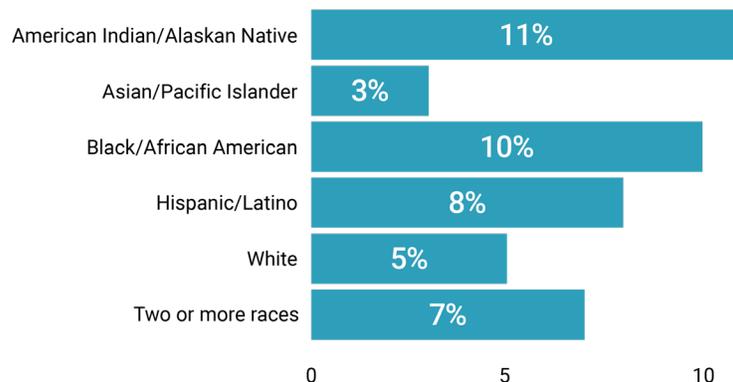


Figure 5.17: Youth not attending school and not working by Race/Ethnicity: Age 16-19 (2019)



*Age 20-24 by race/ethnicity data is not available

Figure 5.19 reports that among 20 to 24-year-olds, NEET rates have dropped from a high of 18.9% in 2010 to 13.8% in 2019. There is a wide variation across states with a low of 8% and a high of 21% of 20 to 24-year-olds who are not in education, employed, or training in 2019.

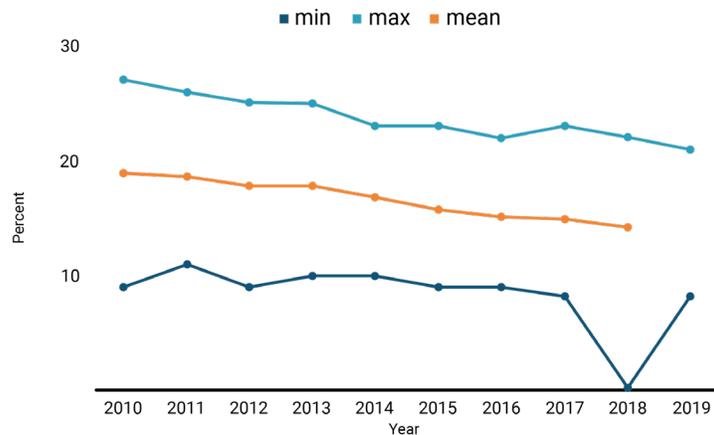
Scotland Creates 16+ Data Hub to Ensure Connection to Education, Employment or Training.

One promising international accountability strategy is Scotland’s 16+ Data Hub. Managed by Scotland’s Careers Services, the 16+ Hub integrates data from a range of sources including education, workforce, and health and human services. The aim is to quickly identify young adults who experience significant mental health/health challenges, leave school, or become unemployed. Once identified, Careers Services deploys a career counselor to reconnect them to education, training, and employment opportunities.

Buffalo, New York Sets Sights on Staying Connected to Young Adults.

Buffalo has established a Youth Employment Coalition initiative that is establishing a digital platform for 16 to 24-year-old youth who have left school and are not employed, in training or postsecondary education. The platform offers young adults access to information about career pathways in high-demand industries, the education and training necessary for advancement in those pathways, and the programs in the community that can help them obtain that education and training. Partners working with the Youth Employment Coalition are working through the legal agreements needed to identify young adults as they fall out of education or employment to proactively connect them to the digital platform as well as a career advisor who will provide individualized assistance, assessments, and referrals/continuous coaching to reconnect them to education and workforce development opportunities.

Figure 5.18: Youth not attending school and not working: Age 20-24



5.4 WAGE EARNINGS

- 9 states have youth aged 14-18 averaging \$1000 or more per month in salary.
- 29 states have youth aged 14-18 averaging between \$800 and \$999 per month in salary.
- 42 states have young adults aged 19-21 averaging \$1506 or more per month in salary.
- 4 states have youth aged 19-21 averaging between \$1133 and \$1506 per month in salary.
- 7 states have salaries (adjusted for cost of living) for 14 to 18-year-olds that are one standard deviation above other states
- 7 states have salaries (adjusted for cost of living) for 19 to 21-year-olds that are one standard deviation above other states

Figure 5.20 reports that the average monthly earnings for 14 to 18 year olds has increased from \$625 in 2010 to \$900 in 2020. All states have increased the average monthly earnings for 14-18 year olds with the low increasing from \$465 in 2010 to \$712 in 2020 and states with the highest salaries increasing from \$1138 in 2010 to \$1325 in 2020.

Figure 5.21 reports that the average monthly earnings for 19 to 21-year-olds have increased from \$1129 in 2010 to \$1649 in 2020. All states have increased the average monthly earnings for 19 to 21-year-olds with the low increasing from \$971 in 2010 to \$1469 in 2020 and states with the highest salaries increasing from \$1662 in 2010 to \$2053 in 2020.

Figure 5.22 reports on the 2019 gender differences in monthly salary for 14-18 and 19-21 year olds respectively. Results indicate that males are receiving higher monthly salaries than females.

Figure 5.19: Youth Average Monthly Earnings: Age 14-18

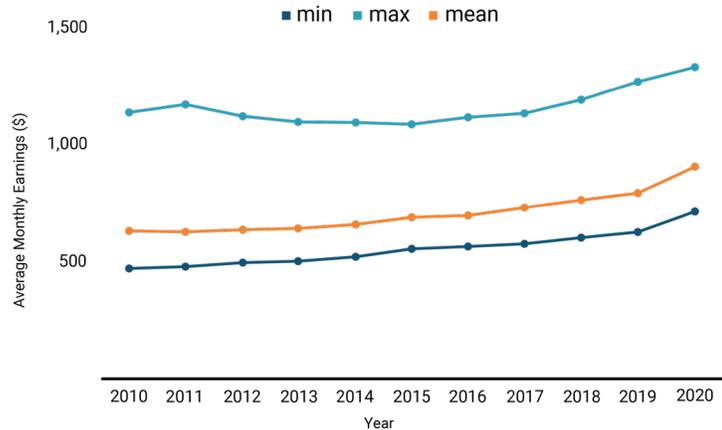


Figure 5.20: Youth Average Monthly Earnings: Age 19-21

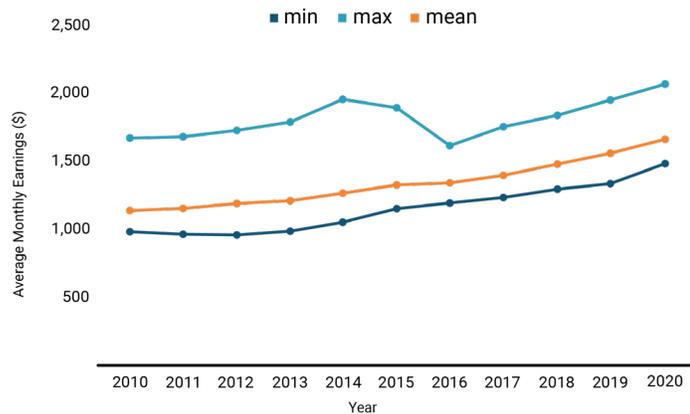


Figure 5.21: Youth Average Monthly Earnings by Gender (2019)



* The latest earnings by gender data is from 2019

6.0 SUMMARY AND NEXT STEPS

The Coalition for Career Development Center strives to gather national attention on making career readiness the number one education priority in America. While the data indicates that we, as a nation, have a long way to go to ensure career readiness for all, the report also highlights a number of promising strategies underway across the country. Below is a brief summary and ideas for next steps that are organized around our CCD Center's five career readiness pillars.

PRIORITIZE CAREER PLANNING.

The Condition of Career Readiness report found that 45 states and Washington, DC have established Personalized Career and Academic Plan initiatives with 30 states determined to offer high quality policy language and guidance. The CCD Center's State Leaders Career Development Network serves as a clearinghouse for innovative PCAP policy and practice. In addition to this report, the CCD Center has launched an interactive map of each state's policies as well as highlights states with especially effective policies.⁸¹ The Network serves the interests of state leaders from a wide range of agencies as well as national organizations focused on providing career planning programs and services. Case studies of Delaware, Kansas and Wisconsin were conducted in Collaboration with CASEL to showcase model policies and practices for connecting PCAP with SEL, CTE and work-based learning.

EXPAND ACCESS TO CAREER ADVISING.

For career advising, the Condition of Career Readiness report was limited to focusing on school counselor to student ratios. From the perspective of the CCD Center, school counselors are uniquely positioned to serve a leadership role in collaborating with educators on the design of PCAP programs and services. The PCAP process integrates academic, mental health and career readiness which represent the three major school

counseling program areas identified by the American School Counseling Association. The Colorado case study demonstrates the return on investment other states can expect by making investments to increase the number of school counselors in high need schools to support adoption and implementation of their PCAP program. While school counselors play a leadership role in collaborating on the PCAP program design, it is expected that all educators participate in delivering PCAP lessons and activities. The positive impact of educators facilitating PCAP lessons is supported by two longitudinal research reports. One study found that each meaningful career conversation with an educator results in increased future wage earnings and sustained employment in early adulthood⁸² and the second study found engaging in PCAP activities consistently throughout high school increases engagement in postsecondary education.⁸³ The Condition of Career Readiness report indicates that only 12 states offer funding to support PCAP implementation and professional development, respectively. Funding and access to professional development is critical to encouraging schools to fully adopt and effectively implement their states' PCAP policies.

EXPAND APPLIED AND WORK-BASED LEARNING OPPORTUNITIES.

Work-based learning is critical for helping children and youth become career ready. In early childhood, quality work-based learning activities offer positive images of adults from diverse backgrounds in order to support their "capacity to aspire"⁸⁴ to a wide range of professional, STEM occupations they otherwise would not consider. Building their capacity to aspire is also supported by creating meaningful conversations with business and industry as part of worksite tours, job fairs, job shadowing, mentoring and eventually paid internships and apprenticeships.

The Condition of Career Readiness report indicates that few states offer quality work-based learning policies and practices. As an industry-led effort, the Coalition for Career Development Center is committed to identifying promising work-based learning practices. For example, the U.S. Chamber of Commerce Foundation's Talent Pipeline Management strategy that seeks to support a range of work-based learning efforts from industry and business as a K-12 career readiness strategy.⁸⁵ The CCD Center recently showcased Toyota's successful efforts to diversify their workforce in San Antonio by connecting with youth early and throughout their high school education.⁸⁶ Identifying effective work-based learning policies and practices for states to consider will serve as a central theme in our 2023 report on the Condition of Career Readiness in the United States.

PROVIDE ACCESS TO HIGH-QUALITY CAREER DEVELOPMENT TECHNOLOGY..

Provide Access to High-Quality Career Development Technology. PCAPs and career advising is not possible without access to career information system technology. These systems provide important labor market information, access to assessment tools, extensive occupational information as well as the education, training and post-secondary pathways to pursue occupations of interest. The Condition of Career Readiness report found that only 12 states are providing access to technology for all students. While it should be recognized that many school districts pay directly for these technology systems, investment in education technology firms is resulting in a wave of new options coming into the marketplace. In addition to increasing funding to ensure high need and under-resourced districts can take advantage of career readiness technology, the CCD Center will soon be providing state's with consumer guidance on evaluating and selecting among the many available career readiness technologies.

ENSURE ACCOUNTABILITY.

As an annual report on the Condition of Career Readiness in the United States, the CCD Center is committed to improving our systems of accountability. The results shared in this report represent the bulk of data available on all 50 states which is limited.

The most comprehensive career readiness outcome indicator to date is managed by the U.S. Department of Education's Office of Career, Technical and Adult Education (OCTAE). The range of outcome data collected includes high school graduation follow up on CTE Concentrators for postsecondary entry as well as participation in military and employment. OCTAE's data dashboard system through the online Perkins Collaborative Resource Network (PCRN) is a well-designed, user-friendly data source that could be expanded to collect career readiness activities in secondary settings and capture additional post-school outcomes, such as military and employment, for ALL youth.

There are two datasets that in time would add important information about our career readiness outcomes. Currently, the Registered Apprenticeship Partners Information Management Data System (RAPIDS) captures individual record data for the 25 states administered by the U.S. Department of Labor Office of Apprenticeship and 18 of the 28 states/territories administered by State Apprenticeship Agencies (SAA), so it does not represent a complete national dataset at this time. In a positive move, the Office of Apprenticeship is currently working with states, not in RAPIDS, and with the U.S. Military Apprenticeship Program (USMAP) to crosswalk data into a format that is integrated into RAPIDS by October 2022. Once that goal is achieved, there will be a data set of national apprenticeship data for all states and territories.⁸⁷

A number of students choose military careers after high school. Data from the Bureau of Labor Statistics National Longitudinal Surveys resulted in a report of youth enlisting the Armed Forces in 2006. However, the results were for 1998-2003.⁸⁸ While the Department of Defense Manpower Data Center⁸⁹ provides data on current military manpower, it would offer an important indicator of career readiness by providing data on students that transition from high school directly into the military.

We also need better accountability systems to determine whether and to what extent there is equity with regard to career readiness indicators and outcomes. One area of need is to monitor participation in work-based learning opportunities and whether participation is open to all.

Our perspective on career readiness is that the future of our state's economic competitiveness relies heavily on all youth entering adulthood with the academic skills, career navigation skills and occupational aspirations needed to support emerging labor market opportunities as well as access high paying occupations. To mobilize a national effort, a next step is to consider the formation of a National Career Readiness Organizing Council as well as State Career Readiness Councils. These councils could be tasked with building capacity for states' engagement and outcomes by creating a more robust career readiness data dashboard and clearinghouse of model career readiness policy and practices.

In subsequent reports on the Condition of Career Readiness in the United States, we look forward to showcasing other national studies of career and workforce development that offer state level data such as those offered by American Student Assistance, AdvanceCTE, CASEL, the Education Commission of the States, and Opportunity Index that were highlighted in this inaugural report.

7.0 APPENDICES

APPENDIX 1: COMMON CAREER READINESS ABBREVIATIONS AND DEFINITIONS

ABBREVIATIONS

Abbreviations for organizations

- ACTE Association for Career and Technical Education
- ASA American Student Assistance
- ASCA American School Counselor Association
- BLS U.S. Department of Labor- Bureau of Labor Statistics
- CASEL Collaborative for Academic, Social and Emotional Learning
- CCD- Center Coalition for Career Development Center
- DOL U.S. Department of Labor
- ECS Education Commission of the States
- ED U.S. Department of Education
- LEA Local Education Agency, commonly the school district or similar

- NCDA National Career Development Association
- NGA National Governors Association
- OCTAE U.S. Department of Education- Office of Career, Technical, and Adult Education

- SLN State Leaders of Career Development Network
- SAA State Apprentice Agency
- SEA State Educational Agency
- WDB or WIB Workforce Development (Investment) Board

Abbreviations for career readiness

- AP® Advanced Placement® Testing
- CCR Condition of Career Readiness
- CD Career Development
- CLEP® College Level Examination Program
- Co-Op Cooperative Educational Experience
- CR Career Readiness
- CSI CASEL Collaborative States Initiative
- CTE Career and Technical Education
- CTSO Career and Technical Student Organization (e.g., FFA, SkillsUSA, FBLA)

- DE Dual Enrollment, also known as Concurrent Enrollment
- DEI Diversity, Equity, and Inclusion
- ECP Education and Career Plan, also known as ICAP, ILP, *PCAP- *SEE PCAP*

- ESSA Every Students Succeeds Act
- FAFSA® Free Application for Federal Student Aid
- GED® General Educational Development Test

- HS High School
- IB® International Baccalaureate
- ICAP Individualized Career and Academic Plans, also known as ECP, ILP, *PCAP- *SEE PCAP*
- IDEA Individuals With Disabilities Education Act
- IHEs Institutions of Higher Education
- ILP Individualized Learning Plans/Planning, also known as ECP, ICAP & *PCAP- *SEE PCAP*
- IRCs Industry-Recognized Credentials, also known as QIC, *SEE Credential*
- LMI Labor Market Information
- MS Middle School
- PBL Project-Based Learning
- *PCAP Personalized Career and Academic Plans/Planning, also known as ECP, ICAP, ILP
- Perkins IV (CPIV) Carl D. Perkins Career and Technical Education Act of 2006
- Perkins V (CPV) Strengthening Career and Technical Education for the 21st Century Act
- PK-12 Grades pre-kindergarten/early childhood education through grade 12
- PS Post-secondary
- QIC Quality Industry Credentials, also known as IRCs- *SEE Credential*
- RA Registered Apprenticeship
- ROI Return on Investment
- SBE School-Based Enterprise
- SEL Social and Emotional Learning
- TPM® Talent Pipeline Management Initiative- U.S. Chamber of Commerce Foundation
- VR Vocational Rehabilitation
- WBL Work-Based Learning and other Career Learning Experiences
- WDB or WIB Workforce Development Boards, also known as Workforce Investment Boards
- WIOA Workforce Innovation and Opportunity Act
- YA Youth Apprenticeship- *SEE WBL*

**Preferred term used by the Coalition for Career Development Center*

DEFINITIONS

Adult Basic Education - The ED- Division of Adult Education and Literacy (DAEL) administers adult education and literacy programs that help adults acquire the basic skills they need including reading, writing, math, English language proficiency, and problem-solving to be productive workers, family members, and citizens.

Career Development (CD)- Career development is a lifelong process of managing and navigating towards a personal vision of the future. More than just a major or a job, career development is holistic

and lifelong, constantly changing as a person changes and situations change. Career development influences include interests, abilities, values, personality, background, and circumstances.

Career Readiness (CR)- Career readiness, or employment readiness, refers to both developmental readiness (level of exploration, awareness of implications, maturity) and the academic, technical, social and emotional skills of a person to find, acquire, and keep an appropriate job, and manage transitions to new jobs.

1. **Skill Assessments**- Essentially, a skill assessment test is designed to evaluate a person's abilities in relation to a specific skill or set of skills. Academic, technical, interest, aptitude, employment, etc. tests are given in schools, in workplaces, as part of hiring, etc to determine levels of career readiness. A person develops skills by training and experience that improve the ability to do tasks.

Career Pathway- A series of *connected education and training programs and support services* that enable individuals to both secure employment within a specific industry or occupational sector, and to advance to higher levels of education and employment in that sector. As defined in WIOA, career pathways-

1. "Align with the skill needs of industries in the economy of the State or regional economy involved;
2. Prepare an individual to be successful in any of a full range of secondary or postsecondary education options, including apprenticeships registered under the National Apprenticeship program;
3. Include counseling to support an individual in achieving the individual's education and career goals;
4. Include, as appropriate, education offered concurrently with and in the same context as workforce preparation activities and training for a specific occupation or occupational cluster;
5. Organize education, training, and other services to meet the particular needs of an individual in a manner that accelerates the educational and career advancement of the individual to the extent practicable;
6. Enable an individual to attain a secondary school diploma or its recognized equivalent, and at least 1 recognized postsecondary credential; and
7. Help an individual enter or advance within a specific occupation or occupational cluster."

NOTE: Fundamentally, a *Career Pathways System* is about the coordination of people and resources. Within education, this includes *aligning our country's PK-12 and postsecondary education systems and, in particular, CTE programs of study within and across program providers* ([PCRN- Career Pathways Systems](#)).

Career Clusters- A framework for organizing education and training curriculum around broad career categories, and more specific career pathways. There are currently 16 identified national Career Clusters. See <https://careertech.org/career-clusters>.

Career Ladder- The part of a career pathway showing the additional knowledge and skills needed through education, training, or work experience, to advance in a career by moving up into positions with more responsibility.

Career and Technical Education (CTE)- CTE encompasses specialized and applied technical training in a specific field, linked to academics. Today's CTE provides students with: academic subject matter taught with relevance to the real world; employability skills, from job-related skills to workplace ethics; career pathways that link secondary and postsecondary education; second-chance education and training; and education for additional training and degrees, especially related to workplace training, skills upgrades and career advancement.

Legislation:

1. **Perkins IV (CPIV)** [Carl D. Perkins Career and Technical Education Act of 2006](#)
2. **Perkins V (CPV)** [Strengthening Career and Technical Education for the 21st Century Act](#)
3. **CTE Participant**- A CTE participant is defined as an individual at either the secondary or postsecondary level who completes at least one CTE course in a CTE program or program of study.
4. **CTE Concentrator**- This definition is the primary unit of analysis for Perkins accountability.
 - a. **Secondary**- A student who has earned three (3) or more credits in a single CTE program area (e.g., healthcare or business services), OR two (2) credits in a single CTE program area, but only in those program areas where 2 credit sequences at the secondary level are recognized by the State and/or its local eligible recipients.
 - b. **Post-secondary**- A student who earns 12 credits in a single CTE program or program of study or completes a CTE program if that program encompasses fewer than 12 credits.
5. **CTE Perkins Performance Indicators**- State required annual accountability counts for Perkins V federal funding including disaggregation by gender, race/ethnicity, special population categories, and career clusters.
 - a. **Secondary**:
 - i. Graduation rates (with an option to use the extended year rate),
 - ii. Academic proficiency in ESSA state academic standards,
 - iii. Post HS (2 quarters) placement in postsecondary education or advanced training, military service, a service program, the Peace Corps or employment,
 - iv. Measure of "CTE program quality" student attainment of recognized postsecondary credentials OR student attainment of postsecondary credits in their CTE program/program of study OR percentage of students participating in work-based learning, and
 - v. Percentage of CTE concentrators in CTE programs that lead to nontraditional fields.
 - b. **Postsecondary**:
 - i. Percentage of CTE concentrators who, during the second quarter after program completion, remain enrolled in postsecondary education, are in advanced training, military service, a service program, the Peace Corps or are placed or retained in employment,
 - ii. Percentage of CTE concentrators who receive a recognized postsecondary credential during participation in or within 1 year of program completion, and
 - iii. Percentage of CTE concentrators in CTE programs that lead to nontraditional fields.

6. **(CTE) Program of Study-** A coordinated, non-duplicative CTE sequence of academic and technical content at the secondary and postsecondary level that
- incorporates challenging, state-identified academic standards;
 - addresses academic and technical knowledge, as well as employability skills;
 - is aligned to the needs of industries in the state, region, Tribal community, or local area;
 - progresses in content specificity; has multiple “entry and exit points” that allow for credentialing; and
 - ultimately culminates in the attainment of a recognized postsecondary credential.

NOTE: Fundamentally, a Career Pathways System is about the coordination of people and resources. *Within education, this includes aligning our country's K–12 and postsecondary education systems and, in particular, the CTE services provided within and across program providers* ([PCRN- Career Pathways Systems](#)).

Credential- Credential is a broad term that includes certificates, certificates of completion of an apprenticeship, licenses recognized by the State or Federal Government, or associate, baccalaureate, or graduate and professional degrees.

- Certifications-** Indicate mastery of or competency in specific knowledge, skills or processes that can be measured against a set of accepted standards. They are not tied to a specific educational program, but are typically awarded through assessment and validation of skills in cooperation with a business, trade association or other industry group. Certification is voluntary but may be required by some employers in some occupations (e.g., nursing assistants, financial advisors).
- Educational Credentials-** A recognized educational credential is conferred upon the satisfactory completion of an education program.
 - Diplomas** are certificates awarded by an educational establishment to show that someone has successfully completed a program of study.
 - General Education Development test (GED®)- A HS equivalency diploma awarded for completing a series of tests to show high school level education.
 - HS Diploma- Awarded for successful completion of compulsory education
 - Technical Diploma- A PS diploma awarded for completion of specific technical skills training, generally a year or less.
 - Degrees** are awarded by a college, university, or other postsecondary education institution as official recognition for the successful completion of a program of study. Also called academic degrees indicating the extent of academic achievement.
 - Associate Degree- An award that normally requires at least 2 but less than 4 years of full-time equivalent college work. The education focuses on general education and theory.
 - Bachelor Degree- An award that normally requires at least 4 but not more than 5 years of full-time equivalent college-level work and delve more deeply into a program of study.
 - Graduate, Masters, Doctoral and Professional Degrees- Educational degree programs undertaken after earning a bachelor degree. All are Graduate degrees because they occur after earning a bachelor degree. A master's degree (1-2 years) and doctoral degree (4+ years) programs lead to the

conferring of specialized academic degrees. A graduate certificate requires completion of a non-degree graduate level program in a specific area of study. A professional degree, such as medical doctor (MD) or Juris Doctor (JD) of law, is specific to certain occupations.

3. **Industry-Recognized Credentials (IRCs)**, also known as QIC, comprise a set of certifications sought or accepted by employers within an industry or sector for their specific assessment of certain skills. In general, they are recognized, preferred or required as a credential for recruitment, screening, hiring, retention or advancement purposes. Where appropriate, the credential is endorsed by a nationally recognized trade association or organization representing a significant part of the industry or sector.
4. **License-** Licensure refers to the state of legally being able to practice or work in a profession. Usually, licensure is administered by a governmental entity for public protection purposes and certification by a professional association (e.g., Licensed Practical Nurse). However, licenses are similar to certifications in that they both require the demonstration of a certain level of knowledge or ability.
5. **Stackable Credentials-** Represent the continuum of credentials available to youths and adults, including but not limited to high school diplomas, GEDs, technical certificates, work readiness credentials, two- and four-year degrees, apprenticeship credentials, etc. In a system of stackable credentials, such as those identified in a program of study as part of a career pathway, each one serves to clearly connect pre-college academic work to credit-bearing career and technical coursework that leads ultimately to a college degree.

Diversity, Equity, and Inclusion (DEI)- DEI refers to the range of diversity initiatives taken in the workplace or in other organizations. Diversity is the presence of differences that may include race, gender, religion, sexual orientation, ethnicity, nationality, socioeconomic status, language, (dis)ability, age, religious commitment, or political perspective. Equity is promoting justice, impartiality and fairness within the procedures, processes, and distribution of resources by institutions or systems. Tackling equity issues requires an understanding of the root causes of outcome disparities within our society. Inclusion is an outcome to ensure those that are diverse actually feel and/or are welcomed. Inclusion outcomes are met when a person, institution, and programs are truly inviting to all and to the degree to which diverse individuals are able to participate fully in the decision-making processes and development opportunities within an organization or group. (<https://dei.extension.org/>)

1. **Civil Rights - Equal Access and Opportunity Legislation-** All youth living in the United States have the right to a free public education. The Constitution requires that they be given equal educational opportunity no matter their race, color, national origin, sex, or disability.
 - a. Title VI of the Civil Rights Act of 1964 (prohibiting discrimination based on **race, color, and national origin**) 34 CFR Part 100
 - b. Title IX of the Education Amendments of 1972 (prohibiting discrimination **based on sex**) 34 CFR Part 106
 - c. Section 504 of the Rehabilitation Act of 1973 (prohibiting discrimination **based on disability**) 34 CFR Part 104
 - d. Title II of the Americans with Disabilities Act of 1990 (prohibiting discrimination **based on disability**) 28 CFR Part 35

Dual Credit, Dual or Concurrent Enrollment- Often a confusing mix of programs and definitions, in general, dual or concurrent enrollment is a program offered by a partnership between at least one institution of higher education and at least one LEA through which a secondary school student who has not graduated from high school with a regular high school diploma is able to enroll in one or more postsecondary courses and earn postsecondary credit that— (A) is transferable to the institutions of higher education in the partnership; and (B) applies toward completion of a degree or recognized educational credential. Essentially, high school students earn both high school credit for graduation and college credit from taking a specific course. Programs differ as to what type of credit may be earned, how the credit is applied, course instructor qualifications, college enrollment requirements, and where the course(s) are taken.

1. **Articulation Agreement (also known as Credit Transfer Agreements)-** A formal link between at least two educational entities (i.e., high school, community college, university) designed for high school students to enroll in a postsecondary (PS) institution and take one or more courses to earn PS credit that is transferable to the institution of PS education in the partnership. Courses may be taken in the high school, PS institution, or elsewhere by qualified instructors. Credit may count as high school credit for graduation depending on the agreement.
2. **Equivalency Credit-** A program or class where secondary students earn credit in more than one area. For example, a machining class that counts as a math class or an agriculture class that counts as a science class towards HS graduation credit requirements.
3. **Credit for Prior Learning- An evaluation by PS institutions** to determine the college-level knowledge and skills an individual has gained outside of the classroom for college credit. It is also referred to as prior learning assessment or experiential learning. Examples of prior learning include workplace training, military training and service, independent study, professional certifications, national skill examinations (such as AP, IB, CLEP, etc), civic activities, volunteer service.
4. **Advanced Placement® (AP)-** National, standardized college-level courses taught in high school by certified instructors with no required concurrent college enrollment. Students may take an examination at the completion of the course for a fee to qualify for college credit. Colleges differ and may accept AP courses with specific scores for some majors. Students earn high school credit for passing the course and potentially college credit toward a degree, certificate, or other recognized postsecondary credential based on the college, major, and score achieved.
5. **College Level Examination Program® (CLEP)-** CLEP is a credit-by-examination program that measures a student's level of comprehension of introductory college-level material in order to test out and earn college credit. Similar to AP, Colleges differ and may accept CLEP test scores in lieu of a college course for some majors. Students earn potentially college credit toward a degree, certificate, or other recognized postsecondary credential based on the college, major, and score achieved. There is no concurrent high school credit for taking the test since it is not associated with a HS course.
6. **International Baccalaureate® (IB)-** The International Baccalaureate® (IB) program offers a continuum of international education through four educational programs to students aged 3 to 19 in schools authorized to teach the IB programmes. Similar to AP, Students may take an examination at the completion of IB programs to qualify for college credit. Colleges differ and

may accept IB courses with specific scores for some majors. Students earn high school credit for passing the program courses and potentially college credit toward a degree, certificate, or other recognized postsecondary credential based on the college, major, and score achieved.

7. **Early College High School-** Early College High School allows students to receive a HS diploma and an associate degree, or up to two years of college credit, by taking a mixture of high school and college classes. This differs from dual enrollment, where students are enrolled in a traditional HS and take college classes, whereas early college students take classes in preparation for full college workloads. At early colleges, students also have fewer HS classes because some of their college classes replace their HS classes. In addition, students generally spend most of their day at the college, and go to their HS occasionally for a course or other school events.

Guided Pathway- Defined by researchers from the Community College Research Center in [Redesigning America's Community Colleges](#) in 2015. The Guided Pathway approach “seeks to streamline an adult student’s journey through college by providing structured choice, revamped support, and clear learning outcomes—ultimately helping more students achieve their college completion goals. The reform recognizes that the current self-service model of community colleges leads many students to unintended dead ends or unforeseen detours in the form of excess or out-of-sequence credit.”

Labor Market Information (LMI)- Each state and territory in the U.S. has a Labor Market Information (LMI) office that produces statistical information in cooperation with the U.S. Department of Labor. State LMI offices collect, analyze, and provide the public with information on their states’ respective labor market. Statistics include employment levels, unemployment rates, wage and earnings data, estimates of available labor, employment projections, business staffing patterns, career planning information, etc.

1. **High Demand-** An industry sector that has a substantial current or potential impact on the State, regional, or local economy, and that contributes to the growth or stability of other supporting businesses, or the growth of other industry sectors; or an occupation that currently has or is projected to have a number of positions in an industry sector so as to have a significant impact on the state, regional, or local economy, as appropriate.
2. **High Growth-** Occupational growth can be considered in two ways: by the rate of growth (i.e., "employment change percent") and by the number of new jobs created by growth. The Organisation for Economic Co-operation and Development (OECD) defines high-growth firms as firms with 10 or more employees that have average annualized growth greater than 20 percent per year over a 3-year period, as measured by employment levels or employee turnover. In general, high growth could be defined as a percentage change of projected openings greater than the state, regional, or local average.
3. **High Wage-** While income definitions will vary and are based on different groups of workers with substantively different demographic, social, and economic characteristics, in general high wage could be defined as median salary above the state, regional, or local median.
4. **North American Industry Classification System (NAICS)-** The standard used by federal statistical agencies to classify business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. NAICS uses a six-digit

hierarchical coding system to classify all economic activity into twenty industry sectors. Five sectors are mainly goods-producing sectors and fifteen are entirely services-providing sectors.

5. **Standard Occupational Classification System (SOC)**- The standard used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. All workers are classified into one of 867 detailed occupations according to their occupational definition.

Personalized Career and Academic Plans/Planning (PCAP), also known as **ECP, ICAP, ILP**- A structured and scaffolded process and plan of youth activities, collaboratively developed and implemented with supportive adults, which outline a student's current level of ability, skills and interests and identifies specific goals for future attainment. Quality planning builds on a student's current level of learning and takes into consideration a student's cultural, linguistic and social-economic background.

PK-12 Education- The purpose of ESSA is to define compulsory public education in order to provide all children a significant opportunity to "receive a fair, equitable, and high-quality education, and to close educational achievement gaps."

1. **Pre-School**- Preprimary education (public and private) may either be part-time or full-time and can cover young children participating in programs intended to foster learning and emotional and social development. Preprimary education is not compulsory in the U.S. Daycare, childcare centers, and similar institutions that predominantly provide custodial care are not necessarily considered preprimary. Preschool programs are more learning-oriented and are often based on a certain approach to teaching with states requiring higher education standards for preschool teachers and directors.
2. **Primary**- This includes all forms of education prior to secondary education; it is equivalent to elementary education in the United States.
3. **Secondary**- Secondary school is defined as schooling after elementary school, therefore in the U.S. that would be grades 6 through 12.
4. **Legislation- [Every Students Succeeds Act \(ESSA\)](#)**-
 - a. Title I: Improving Basic Programs Operated by State and Local Education Agencies
 - b. Title II: Preparing, Training, and Recruiting High-Quality Teachers, Principals, or Other School Leaders
 - c. Title III: Language Instruction for English Learners and Immigrant Students
 - d. Title IV: 21st-Century Schools
 - e. Title V: State Innovation and Local Flexibility
 - f. Title VI: Indian, Native Hawaiian, and Alaska Native Education
 - g. Title VII: Impact Aid
 - h. Title VIII: General Provisions
 - i. Title IX: Education for the Homeless and Other Laws

Postsecondary Education & Training (PS)- A broad term encompassing a wide variety of formal instructional programs whose curriculum is designed primarily for students who are beyond the compulsory age for high school. This includes programs whose purpose is academic, vocational, and continuing professional education, but excludes adult basic education and hobby programs.

Completing education programming at a non-degree level is sometimes referred to as further education and training or continuing education as distinct from higher education.

1. **Institutions of Higher Education (IHEs)**- Postsecondary Education provided by universities, academies, colleges, seminaries, conservatories, and institutes of technology, and certain college-level institutions, including vocational schools, universities of applied sciences, trade schools, and other career-based colleges that award degrees.
 - a. **Public vs Private vs For Profit College**- Public colleges are funded by local and state governments and usually offer lower tuition rates than private colleges, especially for students who are residents of the state where a college is located. Private colleges rely mainly on tuition, fees and private sources of funding. For Profit colleges are businesses that offer a variety of degree programs which typically prepare students for a specific career. They tend to have higher costs, which could mean graduating with more debt. Credits earned may not transfer to other colleges, so be sure to check with the admission office at each college.
 - b. **Two Year College**- Two-year colleges offer programs that last up to two years that lead to a certificate or an associate degree. These include community colleges, technical colleges and career colleges.
 - c. **Four Year College**- Four-year colleges offer four-year programs that lead to a bachelor's degree. These include universities and liberal arts colleges.
 - d. **Community College**- Community colleges offer two-year associate degrees that prepare you to transfer to a four-year college to earn a bachelor's degree. They also offer other associate degrees and certificates that focus on preparing you for a certain career. Community colleges are often an affordable option with relatively low tuition.
 - e. **Technical College**- Technical and career colleges offer specialized training in a particular industry or career. Possible programs of study include the culinary arts, firefighting, dental hygiene and medical-records technology. These colleges usually offer certificates and/or associate degrees.
 - f. **Liberal Arts Colleges**- These colleges offer a broad base of courses in the liberal arts, which includes areas such as literature, history, languages, mathematics and life sciences. Most are private and offer four-year programs that lead to a bachelor's degree. These colleges can prepare you for a variety of careers or for graduate study.
 - g. **University**- Universities often are larger and offer more majors and degree options—bachelor's, master's and doctoral degrees—than colleges. Most universities contain several smaller colleges, such as colleges of liberal arts, engineering or health sciences. These colleges can prepare you for a variety of careers or for graduate study.
2. **Registered Apprenticeship (RA)**- Working under the direct supervision of an experienced worker, apprentices receive on-the job training supplemented by classroom instruction. Their sponsors, including employers, employer associations, and joint labor-management organizations, provide apprentices with instruction that reflects industry needs. Apprenticeships generally last about four years but can range from one to six years. Apprenticeship training programs are usually registered with DOL or a State Apprenticeship Agency and provide training under conditions specified in a written apprenticeship agreement.

Return on Investment (ROI)- ROI is a performance measure used to evaluate the efficiency or profitability of an investment or compare the efficiency of a number of different investments. In economic terms, it is one way of relating profits to capital invested. In career readiness terms, this could be used as a decision-making tool by youth considering postsecondary education and training costs versus long-term gains or opportunities for employment.

Social and Emotional Learning (SEL)- The process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible and caring decisions. SEL advances educational equity and excellence through authentic school-family-community partnerships to establish learning environments and experiences that feature trusting and collaborative relationships, rigorous and meaningful curriculum and instruction, and ongoing evaluation.

Special Education- Direct instructional activities or special learning experiences designed primarily for students identified as having exceptionalities in one or more aspects of the cognitive process or as being underachievers in relation to general level or model of their overall abilities. Such services usually are directed at students with the following conditions: (1) physically handicapped; (2) emotionally handicapped; (3) culturally different, including compensatory education; (4) mentally retarded; and (5) learning disabled. Programs for the mentally gifted and talented are also included in some special education programs.

1. **Legislation- [Individuals with Disabilities Education Act \(IDEA\)](#)**- Congress reauthorized the IDEA in 2004 and most recently amended the IDEA through ESSA in December 2015.
 - a. Subchapter I. General Provisions
 - b. Subchapter II. Assistance for All Children with Disabilities
 - c. Subchapter III. Infants and Toddlers with Disabilities
 - d. Subchapter IV. National Activities to Improve Education of Children with Disabilities
 - i. Part A—State Personnel Development Grants
 - ii. Part B—Personnel Preparation, Technical Assistance, Model Demonstration Projects, and Dissemination of Information
 - iii. Part C—Supports To Improve Results for Children With Disabilities
 - iv. Part D—General Provisions
2. **IEP (Individual Education Program)**- A required written instructional plan specific for students with disabilities designated as special education students under IDEA. Each plan includes a
 - a. statement of the child’s present levels of educational performance,
 - b. statement of measurable annual goals, including academic and functional goals,
 - c. for children with disabilities who take alternate assessments aligned to alternate achievement standards, description of benchmarks or short term objectives;
 - d. statement of the special education and related services and supplementary aids and services; and
 - e. statement of any individual accommodations that are necessary to measure the academic achievement and functional performance of the child on State and districtwide assessment; and if the IEP Team determines that the child must take an

alternate assessment instead of a particular regular State or districtwide assessment of student achievement, a statement of why the child cannot participate in the regular assessment and why the particular alternate assessment selected is appropriate for the child.

Special Populations- Student populations that must overcome barriers that may require special consideration and attention to ensure equal opportunity for success in an educational setting. These students must be provided support that will ensure they have equal access to education resources and opportunities.

1. ESSA defined-

- a. students with disabilities,
- b. migrant youth,
- c. students in the foster care system,
- d. English language learners, and
- e. homeless youth.

2. Special Education (IDEA) defined- 14 specific disability categories qualify for special education. See also Special Education.

- a. Autism
- b. Deaf-blindness
- c. Deafness
- d. Developmental delay
- e. Emotional disturbance
- f. Hearing impairment
- g. Intellectual disability
- h. Multiple disabilities
- i. Orthopedic impairment
- j. Other health impairment
- k. Specific learning disability
- l. Speech or language impairment
- m. Traumatic brain injury
- n. Visual impairment, including blindness

3. Perkins V defined-

- a. individuals with disabilities;
- b. individuals from economically disadvantaged families, including low-income youth and adults;
- c. individuals preparing for non-traditional fields;
- d. out-of-workforce individuals;
- e. English learners;
- f. homeless individuals;
- g. youth who are in, or have aged out of, the foster care system; and
- h. youth with parents on active duty in the armed forces.

4. English language learners (ELL)- Formerly referred to as “limited English proficient (LEP),” refers to students being served in appropriate programs of language assistance (e.g., English

as a Second Language, High Intensity Language training, bilingual education). ELL students are individuals who

- a. were not born in the United States or whose native languages are languages other than English;
 - b. individuals who are migratory, whose native language are languages other than English, and who come from environments where a language other than English is dominant;
 - c. individuals who are Native Americans or Alaskan Natives, or native residents who come from environments where languages other than English have a significant impact on their level of English language proficiency; and
 - d. individuals who have sufficient difficulties in speaking, reading, writing, or understanding the English language.
5. **Migratory**- A person is considered "migratory" if the parent or guardian is a migratory worker in the agricultural, dairy, lumber, or fishing industries and whose family has moved during the past three years. A "qualifying" move can range from moving from one residence to another or across school district boundaries due to economic necessity. A young adult may also qualify if he or she has moved on his own within the past three years to engage in qualifying work or sought to obtain qualifying work (with a history of qualifying moves).
6. **Homeless**- The McKinney-Vento Act defines homeless children and youth as individuals who lack a fixed, regular, and adequate nighttime residence. This definition also includes:
- a. Children and youth who are sharing the housing of other persons due to loss of housing, economic hardship, or a similar reason
 - b. Children and youth who may be living in motels, hotels, trailer parks, shelters
 - c. Children and youth who have a primary nighttime residence that is a public or private place not designed for or ordinarily used as a regular sleeping accommodation for human beings
 - d. Children and youth who are living in cars, parks, public spaces, abandoned buildings, substandard housing, bus or train stations, or similar settings, or
 - e. Migratory children who qualify as homeless because they are children who are living in similar circumstances listed above

Work-Based Learning (WBL) & Other Career Experiences- WBL is a general term used to describe a wide variety of career development activities completed in partnership with members of the business community. [Jobs for the Future WBL Glossary](#).

1. A spectrum of career experiences and WBL activities could include-

- a. **Business/Employer Classroom Speaker**
- b. **Career and Technical Student Organization (CTSO)**- CTSOs enhance student learning through contextual instruction, leadership and personal development, applied learning and real world application. CTSOs work as an integral component of the classroom curriculum and instruction, building upon employability and career skills and concepts through the application and engagement of students in hands-on demonstrations and real life and/or work experiences through a Career and Technical Education (CTE) program with opportunities to hold leadership positions at the local, state, and national level and attend leadership.

- c. **Company Tour**
 - d. **Co-Operative Education Experience (Co-Op)**- Academic programs linked with structured work experiences through which participants acquire professional and technical skills over a limited period of time under the supervision of a professional mentor.
 - e. **Entrepreneurial Experience-**
 - f. **Externship (For Teachers)**- A program where teachers/instructors spend time in the business environment. This helps teachers/instructors understand the workforce needs of the business community and what changes need to occur in the classroom to reflect these needs.
 - g. **Informational interview**
 - h. **Internship**- A structured program in which an individual gains supervised practical experience in an occupation through hands-on knowledge and training while working for a business.
 - i. **Job Shadowing**- Allows one to directly observe another person at work.
 - j. **Part-time or summer job**- Employment in any setting is valuable; however student part-time and summer jobs are not usually associated with formal WBL or career experiences. However, if the school, student, and employer form an educational agreement, these could easily be turned into connected educational experiences.
 - k. **Project-Based Learning (PBL)**- Project Based Learning is a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge.
 - l. **School-Based Enterprise (SBE)**- A functioning business based in a school and run by students with support from teachers or other school staff members.
 - m. **School Store**
 - n. **Simulated Worksite**- Classroom or lab activities in which students learn and demonstrate critical employability and technical skills as they use industry-specific tools, resources, and processes to complete tasks and solve authentic problems similar to, or representative of, those found in real-world workplace contexts.
 - o. **Volunteer/Service Learning**
 - p. **Youth Apprenticeship (YA)**- An apprenticeship designed for high school students that generally incorporates the key elements of other apprenticeship models, including paid workplace experience and related technical instruction. Partners from industry are often engaged in the design and implementation of youth apprenticeships.
2. **(Perkins V) CTE WBL Definition**- Formal WBL experiences are-
- a. Sustained interactions with industry or community professionals in real workplace settings where possible, but includes simulated environments as well,
 - b. That foster in-depth, first-hand engagement with the tasks required of a given career field and
 - c. be aligned to curriculum and programs and opportunities that allow students to see and understand how classroom instruction connects to the world of work.

Workforce/Talent Development- The enactment of WIOA, which went into effect on July 1, 2015, provides opportunities for the workforce system and career and technical education to work together. States are expected to consider how these programs can best work together to prepare individuals for careers that meet employer skill needs. WIOA requires states and local areas to develop career pathways that align with the skill needs of industries, through partnerships with secondary and postsecondary CTE to provide complementary services. Local workforce boards must engage employers to ensure that workforce investment activities meet the needs of businesses and to facilitate effective employer utilization of the local workforce development system. WIOA emphasizes the creation and use of industry-led sector partnerships to serve these and other purposes. CTE also engages employers in order to ensure that CTE programs prepare students with skills demanded by employers. Workforce boards and CTE leaders can work together, including through the use of sector partnerships, to prevent duplication and efficiently engage employers in a systemic fashion ([Source](#)).

1. Legislation- [Workforce Innovation and Opportunity Act \(WIOA\)](#)

- a. Title I- Workforce Development Activities
- b. Title II- Adult Education & Literacy
- c. Title III- Wagner-Peyser Act
- d. Title IV- Rehabilitation Act of 1973
- e. Title V- General Provisions

2. Workforce Development Boards (WDBs)- WDBs are part of the Public Workforce System, a network of federal, state, and local offices that support economic expansion and develop the talent of the nation’s workforce. State and local WDBs serve as connectors between the U.S. Department of Labor and local American Job Centers that deliver services to workers and employers. The WDBs’ role is to develop regional strategic plans and set funding priorities for their area.

3. Job Centers & Career OneStop- Sponsored by the DOL, American Job Centers (AJCs) deliver public workforce services, providing “one-stop” resources for persons seeking employment information and access to employment, work-related training, and education. Key workforce, education, and other partners provide comprehensive services to individuals searching for jobs and seeking to build their skills, and to employers looking for skilled workers to fill their job openings. Career OneStop provides integrated, easy-to-understand workforce information to help job seekers, students, workers, workforce intermediaries, and employers develop their capacity and make sound economic decisions in the new economy.

4. Vocational Rehabilitation (VR)- The ED Rehabilitation Services Administration provides formula grants to State Vocational Rehabilitation (VR) Agencies to administer the State VR Services, State Supported Employment Services, and Independent Living Services for Older Individuals Who Are Blind programs. These programs maximize the independence and employability of persons coping with personal, social, and vocational difficulties that result from birth defects, illness, disease, accidents, aging, or the stress of daily life. Case managers coordinate activities, assess client needs, and design and implement rehabilitation programs that may include personal and vocational counseling, training, and job placement as part of a statewide workforce development system.

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APPENDIX 2: DATA, SOURCES, AND METHODOLOGY

describe state-by-state career readiness, state level resources and outcome data sources needed to be determined, collected, and evaluated. The intent of the data analysis for the CCR report is to bring attention to actionable personalized career and academic planning (PCAP) elements that would assist states to move career readiness (CR) initiatives forward.

Several initial data indicators were reviewed and considered by the committee that would meet the report purpose. After months of data research for sources and availability of state-by-state data sets, collections, discussions with data source curators, and reviews of data limitations, the CCD Center determined that the following career readiness indicators would be used in the initial CCR report.

Categories	Indicators	Type*	Disaggregated Data
State Career Readiness Policies	Depth of State PCAP Policy & Guidance	C	Not applicable
	PCAP Funding Support	C	Not applicable
	PCAP & Professional Development/Training	C	Not applicable
	PCAP & Standards/Curriculum	C	Not applicable
	PCAP & Technology Platform	C	Not applicable
	PCAP & Career Readiness in ESSA State Plans	C	Not applicable
	PCAP & SEL	C	Not applicable
	Scan of SEL Policy Indicators	C	Not applicable
	Opportunity Index Scores	L	Not applicable
State Career Readiness Investments	School Counselor Rates	L	Not applicable
	Career Advisement Strategies in CTE Perkins V State Plans	C	Not applicable
	PCAP in CTE Perkins V State Plans	C	Not applicable
	AP® Test Performance of 3 or Higher	L	Gender, Race/ethnicity
	AP® School Participation Change Rate	L	Not applicable
	AP® Student Participation Change Rate	L	Gender, Race/ethnicity
	High School Dual Enrollment Policy Evaluation	C	Not applicable
	FAFSA Completion Rate	L	Not applicable

	CTE Concentrator Rates	L	Gender, Race/ethnicity, Special Populations
	Work-Based Learning (WBL) Policy Evaluation	C	Not applicable
Career Readiness Outcomes	High School Completion rate	L	Race/ethnicity, Special population
	High School Completion Rate of CTE Concentrators	L	Gender, Race/ethnicity, Special population
	Postsecondary Placement- Colleges	L	Not applicable
	Postsecondary Placement- CTE Concentrators	L	Gender, Race/ethnicity, Special population
	College Retention Rate of Part-Time Students after 1 year	L	Not applicable
	College Retention Rate of Full-Time Students after 1 year	L	Not applicable
	On-Time Postsecondary Completion - In 3 years from 2 year colleges	L	Not applicable
	On-Time Postsecondary Completion - In 6 years from 4 year colleges	L	Not applicable
	Youth Not Attending School and Not Working	L	Race/ethnicity (only for age 16-19 group)
	Youth Average Monthly Earnings	L	Gender
	Adjusted Average Monthly Earnings	L	Gender

Methodology

1. Longitudinal and cross-sectional indicators

Out of 30 career readiness indicators, 17 indicators are available at the yearly frequency and 13 indicators are available as a cross-sectional indicator.

As of October 2021, 17 longitudinal indicators for the available latest year and earlier years (no earlier than 2010) are compiled across states and years. Periods of years vary across indicators according to availability of data. For each year, average, minimum, maximum, standard deviation, and 95% confidence intervals were calculated across states. These summary statistics are presented in the each indicator statistics section later.

For the latest year, states were assigned Evaluation Levels that correspond to their numerical values (i.e., score, percentage) for ease of interpretation, and then the numbers and percentages of states in each level were calculated. To assign evaluation levels, cut-off points were used based on the distribution of numeric values (i.e., score, percentage) of indicators. The cut-off points vary across indicators according to the characteristics of data. Detailed information of cut-off points are indicated in the each indicator statistics section later.

For 13 cross-sectional indicators, states are also assigned an evaluation level that corresponds to their distribution of numeric values (i.e., score, percentage). The number and percentages of

states in each level were calculated. The cut-off points are different across indicators and indicated in the each indicator statistics section later.

2. Equity data

Disaggregating data by student characteristics including gender, race/ethnicity, and special population were only available for 9 indicators out of 31 indicators. For gender, data by two categories with male and female are available. For race/ethnicity, data by seven categories - American Indian/Alaskan Native, Asian, Black/African American, Hispanic/Latino, Native Hawaiian/Other Pacific Islander, White, Two or more races - are available. For special populations, data by seven categories - Disability Status (ESEA/IDEA), Displaced Homemakers, Economically Disadvantaged, Limited English Proficient, Migrant Status, Nontraditional Enrollee, Single Parents - are available. For each indicator, a national average of the latest year data is presented in this report.

3. Missing values

If states have no available data (missing values) or extreme values (outliers) for indicators, we did not include those states in the analysis. The list of states excluded in the analysis for this reason is indicated in the each indicator statistics section later.

4. Note

For proper interpretation of the data, it is noted that the directionality of career readiness indicators are different. Most indicators have directionality with higher values denoting higher career readiness. However, two indicators (secondary counselor rate, youth not attending school and not working) have opposite directionality in which higher values denote lower career readiness. Additionally, considering the diverse nature of indicators, direct comparisons between different indicators is not recommended.

Calculation and Statistics of Indicators

The original data resources of 32 career readiness indicators include diverse types of qualitative and quantitative information (i.e., description of policy, counts, rates, dollars, etc). To synthesize them in a comprehensive concept of career readiness and provide a simple summary of multiple indicators, original data of indicators were transformed into either 1) rating scale score or 2) percentage, except for high school counselors indicator (ratio = number of students per counselor) and youth earning indicator (U.S. dollar). Data processing for each indicator is described.

1. OPPORTUNITY INDEX SCORES

Four sub-categories of Opportunity Index scores were used. The cut-off points for state scores are less than 50 for Low State Index, 50-60 for Moderate State Index, and 60 or greater for High State Index.

Source: 3rd Party Evaluation by Opportunity Nation publicly available on website at <https://opportunityindex.org/>. The Opportunity Index provides a broad picture of opportunity within four dimensions of community well-being: Economy, Education, Health, Community. Scoring methodology changed in 2017, so only scores from 2017, 2018, and 2019 were used and standardized.

Table 1.1. Summary statistics of Opportunity Index Scores

	N	Min	Max	Mean	Median	SD	Lower	Upper
Economy 2017	51.00	42.30	65.20	54.92	54.90	5.58	53.35	56.49
Economy 2018	51.00	46.20	67.20	57.19	57.50	5.22	55.72	58.66
Economy 2019	51.00	46.68	66.88	58.22	59.06	5.03	56.81	59.64
Average (Economy)	3.00	45.06	66.43	56.78	57.15	5.28	55.29	58.26
Education 2017	51.00	38.60	66.50	53.19	53.70	5.79	51.56	54.82
Education 2018	51.00	42.10	66.80	54.37	54.70	5.59	52.80	55.94
Education 2019	51.00	43.13	67.88	54.91	54.92	5.60	53.34	56.49
Average (Education)	3.00	41.28	67.06	54.16	54.44	5.66	52.57	55.75
Health 2017	51.00	36.70	71.20	54.44	53.30	8.79	51.96	56.91
Health 2018	51.00	35.80	70.10	52.90	52.60	8.65	50.47	55.34
Health 2019	51.00	35.28	69.29	50.77	49.07	8.84	48.29	53.26
Average (Health)	3.00	35.93	70.20	52.70	51.66	8.76	50.24	55.17
Community 2017	51.00	38.20	66.60	49.46	49.90	7.15	47.45	51.47
Community 2018	51.00	38.40	64.60	50.18	50.70	6.89	48.24	52.12
Community 2019	51.00	39.24	66.01	50.61	51.11	7.22	48.58	52.64

Average (Community)	3.00	38.61	65.74	50.08	50.57	7.09	48.09	52.08
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Table 1.2. Economy Index Score [CCRR Figure 2.1]

Year	Min	Max	Mean
2017	42.3	65.2	54.92
2018	46.2	67.2	57.19
2019	46.68	66.88	58.22

Table 1.2.1. 2019 State Economy Score [CCRR Figure 2.2]

Score	Count	Percentage
$60 \leq x$	19	37.3
$50 \leq x < 60$	28	54.9
$x < 50$	4	7.8

Table 1.3. Education Index Score [CCRR Figure 2.2]

Year	Min	Max	Mean
2017	38.6	66.5	53.19
2018	42.1	66.8	54.37
2019	43.13	67.88	54.91

Table 1.3.1. 2019 State Education Score

Score	Count	Percentage
$60 \leq x$	9	17.6
$50 \leq x < 60$	32	62.7
$x < 50$	10	19.6

Table 1.4. Health Index Score [CCRR Figure 2.3]

Year	Min	Max	Mean
2017	36.7	71.2	54.44
2018	35.8	70.1	52.9
2019	35.28	69.29	50.77

Table 1.4.1. 2019 State Health Score

Score	Count	Percentage
$60 \leq x$	11	21.6
$50 \leq x < 60$	14	27.5
$x < 50$	26	51

Table 1.5. Community Index Score [CCR Figure 2.4]

Year	Min	Max	Mean
2017	38.20	66.60	49.46
2018	38.40	64.60	50.18
2019	39.24	66.01	50.61

Table 1.5.1. 2019 State Community Score

Score	Count	Percentage
$60 \leq x$	4	7.8
$x < 50$	22	43.1

2. CAREER READINESS INPUTS (PCAP POLICIES)

2. Career Readiness Inputs (PCAP Policies)

Statewide PCAP Policy and Guidance

7 principal components of PCAP and relevant policy of states are scored from 0-5 by following *State PCAP Scan Rubric* ([Appendix 3](#)). The CCD Center scan for these elements relied on locating and reviewing language or statements within applicable legislative statutes, web pages and guidance documents. Scores may or may not reflect the actual quality or level of coordination and integration, but are based on what could be discovered in searches. The cut-off points for state scores are 0-1, 2-3, and 4-5. The labels of each component's cut-offs are presented in the graph of each component.

Source: CCD Center evaluation of policy through LexisNexis and state K12 department of education webpages. Additional clarification requested of State Leaders of Career Development Network K12 department of education leaders in PCAPs, career development, counseling and CTE email contacts from all 50 states and at monthly October 2021 meeting.

Table 1. Summary statistics of State PCAP Scan Scores

	N	Min	Max	Mean	Median	SD	Lower	Upper
Depth of State PCAP Policy & Guidance	51	0	5	3.18	1.58	1.6	3.15	3.89
Funding supports PCAP implementation	46	0	5	1.61	1.76	1.77	1.09	2.13
PCAP Policy & Guidance addresses staff training	46	0	5	2.37	1.65	1.66	1.88	2.86
PCAP Policy & Guidance includes Standards &/or Curriculum	46	0	5	2.85	1.41	1.40	2.43	3.27
PCAP Policy & Guidance includes use of a technology platform	46	0	5	2.54	1.43	1.44	2.12	2.97
PCAP & ESSA Career Readiness	46	0	5	1.83	1.64	1.66	1.34	2.31
PCAP & Social & Emotional Learning (SEL)	46	0	5	3.15	1.48	1.46	2.71	3.59
Total*	46	1	32	17.87	18	0.99	15.87	19.87

*Missing values: FL, ME, NH, NJ, NC in all components except 1st one

Note: Tables 2.1-2.7 & 2.9 correspond to CCRR Table 3.2

Table 2.1. Depth of State PCAP Policy & Guidance

Score	State Count	Percentage
0~1 red	10	17.6
2~3 yellow	11	23.5
4~5 green	30	58.8

Table 2.2. Funding supports PCAP

Score	State Count	Percentage
0~1 red	26	56.5
2~3 yellow	8	17.4
4~5 green	12	26.1

Table 2.3. PCAP & Training

Score	State Count	Percentage
0~1 red	14	30.4
2~3 yellow	16	34.8
4~5 green	16	34.8

Table 2.4. PCAP & Standards &/or Curriculum

Score	State Count	Percentage
0~1 red	10	21.7
2~3 yellow	18	39.1
4~5 green	18	39.1

Table 2.5. PCAP & use of a technology platform

Score	State Count	Percentage
0~1 red	12	26.1
2~3 yellow	22	47.8
4~5 green	12	26.1

Table 2.6. PCAP in ESSA Career Readiness Plans

Score	State Count	Percentage
0~1 red	18	39.1
2~3 yellow	19	41.3
4~5 green	9	19.6

Table 2.7. PCAP & Social & Emotional Learning (SEL)

Score	State Count	Percentage
0~1 red	11	23.9
2~3 yellow	7	15.2

3. CAREER READINESS INVESTMENTS

State Scan of SEL Policy Indicators

In 2020, CASEL scanned for the existence of 8 policy indicator components present in the state. The presence of these indicators was summed. The cut-off points for state scores are 1-2 for Few Policy Indicators, 3-5 for Some Policy Indicators, 6-7 for Multiple Policy Indicators. One missing value (District of Columbia) was excluded in the analysis.

Source: 3rd Party Evaluation by CASEL published in *From Insights to Action: Redefining State Efforts to Support Social and Emotional Learning (March 2020)*.

Table 2.8. Summary statistics of State Scan of SEL Policy Indicators (2020)

	N	Min	Max	Mean	Median	SD	Lower	Upper
SEL Policy Indicators	50.00	1.00	7.00	3.32	3.00	1.82	2.80	3.84

*Missing value: DC

Table 2.9. Scan of State SEL Policy Indicators (2020)

Score	State Count	Percentage
1~2 red	19	38.0
3~5 yellow	26	52.0
6~7 green	5	10.0

3. Career Readiness Investments

School Counselor Rates. School Counselor rate was calculated as follows. The cut-off points for state scores are less than 250 for Low Ratio, 250-400 for Moderate Ratio, and 400 or greater for High Ratio.

$$\text{Ratio} = \frac{\text{Number of students}}{\text{Number of counselors}}$$

Source: Ratio determined by dividing enrollment students from public school by number of public schools. Counselor rates are presented in the three categories: K-12 (counselors in grade 1-12), secondary (counselors in grade 9-12), and Elementary (counselors in grade 1-8). U.S. Department of Education National Center for Education Statistics Common Core of Data (CCD) "State Nonfiscal Public Elementary/Secondary Education Survey" 2009-10 v.1b 2010-11 v.1a 2011-12 v.1a 2012-13 v.1a 2013-14 v.1a 2016-17 v.1a 2017-18 v.1a 2018-19 v.1a 2019-20 v.1a.; "State Nonfiscal Public Elementary/Secondary Education Survey Membership Data" 2014-15 v.1a 2015-16 v.1a; "State Nonfiscal Public Elementary/Secondary Education Survey Staff Data" 2014-15 v.1a 2015-16 v.1a.

Note: Tables 3.1.1, 3.2.1 & 3.3.1 correspond to CCRR Table 4.1.

Table 3.1. Summary statistics of K-12 School Counselor Rates [CCRR Figure 4.1]

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2014	51	187	916	438	420	141	385	492
2015	51	179	896	430	410	133	378	480
2016	51	182	897	424	403	126	374	470
2017	51	177	913	420	393	128	367	465
2018	51	172	888	408	385	122	361	456
2019	50	181	831	397	376	113	354	441
2020	49	171	707	378	360	97	342	419
Average	7	178	864	413	392	123	366	460

**School Counselor rates for K-12 from 2010 to 2013 are not included here because more than 50% of states don't have applicable values in these years, especially counselor for Kindergarten.*

Missing values or Outliers: 2019 (DC), 2020 (IL, UT)

Table 3.1.1. K-12 Counselor Ratio (2020)

Score	State Count	Percentage
$x < 250$	2	3.9
$250 \leq x < 400$	31	60.8
$x \geq 400$	16	31.4

**Missing values or Outliers: IL, UT*

Table 3.2. Summary statistics of High School School Counselor Rates [CCRR Figure 4.2]

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	51	96	492	237	216	75	198	253
2011	51	97	469	233	210	78	195	248
2012	51	89	479	241	218	80	202	255
2013	51	96	468	240	216	78	198	251
2014	51	99	467	244	222	82	203	261
2015	51	100	465	242	221	79	201	262
2016	51	104	456	240	218	76	200	257
2017	51	102	459	239	215	77	198	255
2018	51	100	452	232	215	77	195	253
2019	37	106	456	228	207	79	196	252
2020	35	103	452	220	207	77	194	249
Average	11	99	465	236	215	78	198	254

**Missing values or Outliers: 2019 (DC, ID, IA, KS, KY, LA, ME, NJ, ND, OH, OR, PA, SD, TX), 2020 (ID, IL, IA, KS, KY, LA, ME, NJ, ND, OH, OR, PA, SD, TN, TX, UT)*

Table 3.2.1. High School (9-12 Counselor Ratio (2020))

Score	State Count	Percentage
$X < 250$	28	54.9
$250 \leq x < 400$	4	7.8
$x \geq 400$	3	5.9

**Missing values or Outliers: ID,IL,IA,KS,KY,LA,ME,NJ,ND,OH,OR,PA,SD,TN,TX,UT*

Table 3.3. Summary statistics of Elementary School Counselor Rates [CCRR Figure 4.3]

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	51	249	3789	815	670	683	624	1142
2011	51	187	3416	825	667	664	650	1143
2012	51	256	3296	880	662	697	679	1207
2013	51	251	3283	889	659	727	694	1254
2014	51	238	3530	864	660	726	670	1233
2015	51	232	3521	821	668	623	642	1109
2016	51	244	3391	821	672	611	640	1080
2017	51	234	7157	938	644	1133	606	1142
2018	51	228	3667	768	624	590	602	1060
2019	37	230	3349	803	594	577	583	988
2020	35	215	3246	795	565	616	553	946
Average	11	233	3786	838	644	695	631	1119

**Missing values or Outliers: 2019 (DC,ID,IA,KS,KY,LA,ME,NJ,ND,OH,OR,PA,SD,TX), 2020 (ID,IL,IA,KS,KY,LA,ME,NJ,ND,OH,OR,PA,SD,TN,TX,UT)*

Table 3.3.1. Elementary (1-8) Counselor Ratio (2020)

Score	State Count	Percentage
$X < 250$	2	3.9
$250 \leq x < 400$	3	5.9
$x \geq 400$	30	58.8

*Missing values or Outliers: ID,IL,IA,KS,KY,LA,ME,NJ,ND,OH,OR,PA,SD,TN,TX,UT

State Investments in Perkins V

PCAP in CTE Perkins V State Plans. To complement the Perkins V Plans analysis conducted by AdvanceCTE, the CCD Center analyzed state submitted plan information available in the Perkins V sections on PCRN. The plans were searched by each states' PCAP term to determine whether the PCAP was specifically identified for secondary and middle school grades as part of CTE.

Source: Perkins V State Plans Data Explorer tool at <https://cte.ed.gov/dataexplorer/>

Table 3.4. PCAP in CTE Perkins V State Plans [CCRR Table 4.2]

Score	State Count	Percentage
Found in 2+ sections	3	7.5
Found in 1 section	7	15.2
Not Found	36	78.2

*Missing values: FL, ME, NH, NJ, NC

Career Advisement Strategies in CTE Perkins V State Plans. Evaluation scores of 10 components from the CTE report were summed. The cut-off points for state scores are 0-2 for Few methods to advance career advisement in Perkins V; 3-5 for Some methods to advance career advisement in Perkins V; 6-7 for Multiple methods to advance career advisement in Perkins V.

Source: 3rd Party Evaluation by AdvanceCTE published in *The State of CTE: Analysis of States' Perkins V Priorities* (October 2020). Methodology noted in Appendix C of AdvanceCTE report. Evaluation based on what's written in state plans. Note that some states include more information about non-Perkins funded state initiatives and policies, and others didn't.

Table 3.5. Career Advisement in CTE Perkins V State Plans [CCRR Table 4.2]

Score	State Count	Percentage
0~2	27	52.9
3~5	21	41.2
6~7	3	5.9

Table 3.6. Summary statistics of Career Advisement in CTE Perkins V [CCRR Table 4.3]

	N	Min	Max	Mean	Median	SD	Lower	Upper
Career Advisement in CTE Perkins V State Plans	51	0	7	2	2	2	2	3
In what ways is the state advancing career advisement at the secondary level through the Perkins V plan?							Number of States	Percentage
Reserve fund							6	12
Explicit use of state leadership funds							21	41
Required element for program approval							7	14
Included in size, scope and quality definition							15	29
Piloting new programs/efforts funded through Perkins							6	12
Prioritized in CLNA and/or local application							22	43
Developing toolkits, rubrics or similar materials/tools							13	25
Targeted Professional Development							17	33
Targeted Technical Assistance							7	14
Developing framework/standards for career counseling and advisement							6	12

AP® Test Performance of 3 or Higher. Percentage of exam takers earning a 3 or higher on any AP® exam among total exam takers on the AP® annual performance report. The cut-off points for state scores are 55 or less for Low Performance, 55-65 for Moderate Performance, and greater than 65 for High Performance.

Source: College Board Archived Data at <https://research.collegeboard.org/programs/ap/data/archived>

Table 3.9. Summary statistics of AP Test Performance of 3 or Higher

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	51	30.0	73.0	58.2	59.7	9.6	55.5	60.9
2011	51	31.0	73.0	58.4	60.2	9.7	55.7	61.1
2012	51	32.0	73.0	58.7	60.9	9.6	56.0	61.4
2013	51	32.0	73.0	58.5	60.9	9.6	55.8	61.2
2014	51	32.0	75.0	58.7	61.1	9.9	55.9	61.5
2015	51	33.0	72.0	57.6	60.2	9.5	54.9	60.3
2016	51	33.0	71.0	57.6	59.5	9.4	54.9	60.2
2017	51	35.0	75.0	58.5	59.2	9.5	55.9	61.2
2018	51	35.0	69.0	57.9	59.3	8.8	55.5	60.4
2019	51	37.0	70.0	58.4	59.8	8.7	56.0	60.8
2020	51	45.0	75.0	62.4	64.1	7.3	60.3	64.5
Average	11	34.1	72.6	58.6	60.4	9.2	56.0	61.2

Table 3.10. 2020 AP® Test Performance of 3 or Higher [CCRR Table 4.4]

Score	State Count	Percentage
$65 < x$	21	41.2
$55 < x \leq 65$	22	43.1

Table 3.11. 2020 AP® Test Performance of 3 or Higher by Gender (duplicated) [CCRR Figure 4.5]

Male	65
Female	63

Table 3.12. 2020 AP® Test Performance of 3 or Higher by Race/Ethnicity (duplicated) [CCRR Figure 4.6]

American Indian/Alaskan Native	50
Asian	76
Black/African American	41
Hispanic/Latino	52
Native Hawaiian/Other Pacific Islander	51
White	67
Two or more races	66

AP® School Participation Change Rate. The yearly change in the number of schools who participated in AP® courses. AP® school participation change rate was calculated as follows. No cut-off points were applied for this indicator.

Percentage (%) =

$$\frac{(\text{Number of schools participated AP in year } N) - (\text{Number of schools participated AP in year } N - 1)}{(\text{Number of schools participated AP in year } N - 1)}$$

X 100

Source: College Board Archived Data at <https://research.collegeboard.org/programs/ap/data/archived>

Table 3.5. Summary statistics of AP® School Participation Change Rate [CCRR Figure 4.7]

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2011	51	-7.0	12.0	1.7	1.4	3.6	0.7	2.8
2012	51	-6.0	17.0	1.8	1.1	4.6	0.5	3.1
2013	51	-18.0	38.0	1.1	0.3	7.1	-0.9	3.1
2014	51	-10.0	17.0	2.8	2.0	4.4	1.6	4.0
2015	51	-11.0	75.0	9.9	7.1	12.2	6.4	13.3
2016	51	-19.0	18.0	1.3	2.0	5.8	-0.4	2.9
2017	51	-8.0	19.0	0.9	0.0	5.1	-0.5	2.4
2018	51	-10.0	18.0	1.8	1.0	4.8	0.5	3.2
2019	51	-16.0	8.0	-1.2	-0.8	4.5	-2.4	0.1
2020	51	-17.0	19.0	-2.8	-3.7	7.3	-4.8	-0.7
Average	10	-12.2	24.1	1.7	1.0	5.9	0.1	3.4

AP® Student Participation Change Rate [CCRR Figure 4.8]. The yearly change in the number of students who participated in AP® courses. AP® school participation change rate was calculated as follows. No cut-off points were applied for this indicator.

Percentage (%) =

$$\frac{(\text{Number of students participated AP in year } N) - (\text{Number of students participated AP in year } N - 1)}{(\text{Number of students participated AP in year } N - 1)}$$

X 100

Source: College Board Archived Data at <https://research.collegeboard.org/programs/ap/data/archived>

Table 3.6. Summary statistics of AP® Student Participation Change Rate [CCRR Figure 4.9]

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2011	51	-1.0	23.0	7.2	6.9	4.6	5.9	8.5
2012	51	-2.0	17.0	7.0	7.4	4.0	5.9	8.1
2013	51	-4.0	41.0	6.3	6.0	6.2	4.6	8.1
2014	51	-10.0	35.0	5.4	5.3	6.2	3.7	7.2
2015	51	-4.0	18.0	6.3	6.0	5.0	4.9	7.7
2016	51	-5.0	20.0	5.0	5.0	4.2	3.8	6.1
2017	51	-2.0	30.0	5.9	4.9	4.9	4.5	7.3
2018	51	-6.0	19.0	2.2	2.0	4.1	1.1	3.4
2019	51	-9.0	11.0	0.8	0.5	3.1	0.0	1.7
2020	51	-22.0	1.0	-7.7	-6.7	5.8	-9.3	-6.0
Average	10	-6.5	21.5	3.9	3.7	4.8	2.5	5.2

Table 3.7. 2019-20 National AP® Student Participation Change Rate by Gender (duplicated) [CCRR Figure 4.9]

Male	-8
Female	-6

Table 3.8. 2019-20 National AP® Student Participation Change Rate by Race/Ethnicity (duplicated) [CCRR Figure 4.10]

American Indian/Alaskan Native	60
Asian	-3
Black/African American	-17
Hispanic/Latino	-14
Native Hawaiian/Other Pacific Islander	-7
White	-7
Two or more races	-3

High School Dual Enrollment Policy Evaluation. 3 components (i.e., State HS Dual Enrollment Policy in Place; High School Dual Enrollment- At High School &/or Postsecondary Locations; High School Dual Enrollment- Credits Earned) were evaluated and the sum of three components was calculated. The cut-off points of sum scores are 0-1 for Minimal policy in place, 2 for Policy, Course, &/or Credit may be in place, 3 for Policy in place in the state for DE Course/Credit.

Source: 3rd Party Evaluation by Education Commission of the States published *50-State Comparison: Dual/Concurrent Enrollment Policies* (August 2019). This evaluation did not include state policies governing Tech Prep, early/middle college high schools, credit articulation or apprenticeship/pre-apprenticeship programs. The 3 policy components examined policy found in statutes, regulations and other state policy documents and guidelines and were counted for: a Policy in place (1 or 0)? Where courses are provided - high school and/or postsecondary (0, 1, or 2 for both)? And Where credits are earned- high school and/or postsecondary (0, 1 or 2 for both)?

Table 3.13. Summary statistics of High School Dual Enrollment Policy Evaluation

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
Sum of High School Dual Enrollment Policies	51	0.00	3.00	2.78	3.00	0.58	2.62	2.95

Table 3.14. Sum of HS Dual Enrollment Policy

Score	State Count	Percentage
0-1	2	4
2	6	12
3	43	84

Table 3.15. HS Dual Enrollment Policy in Place

Score	State Count	Percentage
0	1	2
1	50	98

Table 3.16. HS Dual Enrollment- At High School &/or Postsecondary Locations

Score	State Count	Percentage
0	5	10
1	46	90

Table 3.17. HS Dual Enrollment- Credits Earned

Score	State Count	Percentage
0	5	9.8
1	46	90.2

FAFSA Completion Rate. FAFSA completion rate of completed FAFSAs until September 30 for each cycle by 18-year-olds divided by the enrollment of grade 12 in public secondary school of each year for states was multiplied by 100 to transform into percentage. The cut-off points for state scores are 40 or less for Low completion rate, 50-60 for Moderate completion rate, 60 or greater for High completion rate.

Source: A total number of completed FAFSA as of September 30 was retrieved from Federal Student Aid (<https://studentaid.gov/data-center/student/application-volume/fafsa-completion-high-school>). The enrollment of grade 12 in public secondary school was retrieved from IES-NCES (Digest of Education, Table 203.40).

Table 3.18. Summary statistics of FAFSA Completion Rate [CRR Figure 4.11]

FAFSA Cycle	N	Min	Max	Mean	Median	SD	Lower	Upper
2016/17	51	36.6	90.3	63.6	64.7	11.0	60.6	66.7
2017/18	51	42.6	94.0	67.5	66.9	10.7	64.5	70.5
2018/19	51	41.5	90.7	66.8	65.9	10.8	63.7	69.8
2019/20	51	38.0	90.0	65.8	65.3	10.7	62.8	68.8
2020/21	51	36.4	85.5	63.5	63.3	10.4	60.6	66.4
Average	5	39.0	90.1	65.4	65.2	10.7	62.4	68.5

Table 3.19. FAFSA Completion Rate for Fall 2020 [CRR Table 4.4]

Score	State Count	Percentage
60 < x	24	47.1
50 < x ≤ 60	19	37.3
x ≤ 40	8	15.7

CTE Concentrator Rates. CTE Concentrator (who completed 2 credits or more of CTE program) rate was calculated as follows. The cut-off points for state scores are less than 30 for Low rate, 30-60 for Moderate rate, 60 or greater for High rate. One outlier in 2018 (Louisiana) was excluded due to its value which is greater than 100(%)

$$\text{Percentage (\%)} = \frac{\text{Number of CTE Concentrators}}{\text{Number of CTE Participants}} \times 100$$

Source: Perkins Collaborative Resource Network (PCRN) publicly available data at <https://cte.ed.gov/dataexplorer/>. Perkins IV data available through 2018-19. Beginning with 2019-20 data, Perkins Participant and Concentrator definitions are standardized for all states. *Under Perkins IV, states could define student CTE participants and concentrators. Data is difficult to compare state to state due to these differing definitions in counting. Note that under Perkins V, all states will count CTE participants and concentrators using the same standard definition.*

Table 3.20. Summary statistics of CTE Concentrator Rates [CCRR Figure 4.12]

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	51	6.0	100.0	41.0	37.0	26.4	33.6	48.5
2011	51	0.0	100.0	38.9	35.0	27.8	31.1	46.7
2012	51	5.0	100.0	39.3	35.0	24.7	32.4	46.3
2013	51	6.0	100.0	37.8	36.0	24.1	31.0	44.5
2014	51	6.0	100.0	37.3	34.0	23.9	30.5	44.0
2015	51	7.0	100.0	38.3	39.0	24.4	31.4	45.1
2016	51	6.0	100.0	39.5	39.0	24.4	32.7	46.4
2017	51	6.0	100.0	39.5	39.0	24.3	32.6	46.3
2018	50	6.0	100.0	39.9	36.5	25.3	32.7	47.1
2019	49	5.0	83.0	42.4	41.0	19.3	36.9	48.0
Average	10	5.3	98.3	39.4	37.2	24.5	32.5	46.3

*Outlier: Year of 2018 (LA) and 2019 (NY, RI)

Table 3.21. CTE Concentrator Rates (2019) [CCRR Table 4.4]

Score	State Count	Percentage
$60 \leq x$	12	24.5
$30 \leq x < 60$	23	46.9
$x < 30$	14	28.6

* Outliers (NY, RI)

Table 3.22. CTE Concentrator rate by gender (2019, duplicated) [CCRR Figure 4.13]

Male	40.96
Female	39.77

Table 3.23. CTE Concentrator rate by race/ethnicity (2019, duplicated) [CCRR Figure 4.14]

American Indian or Alaskan Native	31.36
Asian	39.12
Black or African American	36.23
Hispanic/Latino	41.42

4. CAREER READINESS OUTCOMES

White	41.95
Two or More Races	34.03

**PERCENTAGE of each group that is represented as CTE Concentrators = e.g., 31% of all American Indian/Alaskan Native among all CTE Concentrators; Data is duplicated because one person can have more than one equity indicator*

Table 3.24. CTE Concentrator rate by special population (2019, duplicated) [CCRR Figure 4.15]

English Learners	31.2
	8
Homeless Individuals	34.0
	6
Individuals from Economically Disadvantaged Families	39.5
	9
Individuals Preparing for Non-traditional Fields	39.8
	2
Individuals With Disabilities (ESEA/IDEA)	36.2
	1
Migrant Students	37.6
	6
Out of Workforce Individuals	69.4
	1
Single Parents	39.3
	2
Youth In Foster Care	28.4
	0
Youth with Parent in Active Military	38.9
	3

Work-Based Learning (WBL) Policy Evaluation. Using the original color coding from the report, levels were assigned values of green (2, 'Desired state for component'), yellow (1, 'Desired state but that there is room for improvement'), and red (0, 'No elements of the desired state or that element is missing') which were then summed and standardized. Evaluation scores of 9 components from the ASA/Bellwether report were summed. The cut-off points of sum score for state scores are 0-5 for Low Level condition, 6-10 for Moderate Level condition, and greater than 10 for High level condition.

Source: 3rd Party Evaluation Report published by ASA/Bellwether *Working To Learn And Learning To Work: A State-By-State Analysis Of High School Work-Based Learning Policies Research Study* (March 2021). Desk evaluation of reports, documents, websites., with follow up to state leaders (e.g., directors of CTE, WBL program coordinators, etc.) for their feedback and clarification. Work ” such as Cooperative education (Co-op), Entrepreneurial experiences, Internships, Practicum, Service learning, Pre-apprenticeships, and Project-based learning were assessed for Existence of WBL policy, Content of WBL policies, WBL funding, WBL support infrastructure, WBL quality, and WBL accountability.

Table 3.25. Summary statistics of Work-Based Learning (WBL) Policy Evaluation

	N	Min	Max	Mean	Median	SD	Lower	Upper
Equity of access	51	0	2	0.47	0	0.67	0.28	0.66
Data to drive equity	51	0	2	0.96	1	0.72	0.76	1.16
Data collection	51	0	2	1.25	1	0.72	1.05	1.46
Communications	51	0	2	0.94	1	0.58	0.78	1.10
Statewide support infrastructure	51	0	2	0.67	1	0.71	0.47	0.87
State funding	51	0	2	0.57	0	0.67	0.38	0.76
Perkins funding	51	0	2	1.14	2	1.00	0.86	1.42
Financial incentives	51	0	2	0.67	1	0.71	0.47	0.87
Experience quality	51	0	2	0.43	0	0.54	0.28	0.58
Total	51	0	16	7.08	7	3.60	6.06	8.09

Note: Tables 3.26-3.25 correspond to CCRR Table 4.5

Table 3.26. Work-Based Learning (WBL) Policy- Overall Score

Score	State Count	Percentage
$10 < x$	10	19.6
$5 < x \leq 10$	25	49
$0 \leq x \leq 5$	16	31.4

Table 3.27. WBL Policy- Equity of Access

Score	State Count	Percentage
green	5	9.80
yellow	14	27.45
red	32	62.75

+Description: Are there state policies designed to support access for underserved groups of students (e.g., preference for low-income students or students enrolled in low-performing schools, explicit supports for students with disabilities, transportation stipends, etc.)?

Table 3.28. WBL Policy-Data to Drive Equity

Score	State Count	Percentage
green	11	21.57
yellow	25	49.02
red	15	29.41

+Description: Does the state disaggregate WBL data by student demographics and experience type?

Table 3.29. WBL Policy- Data Collection

Score	State Count	Percentage
green	20	39.22
yellow	22	43.14
red	9	17.65

+Description: Is there a process in place to track student participation in WBL opportunities and their outcomes?

Table 3.30. WBL Policy- Communications

Score	State Count	Percentage
green	7	13.73
yellow	34	66.67
red	10	19.61

+Description: Are there systems in place to communicate among schools, students, employers, and other stakeholders about WBL opportunities?

Table 3.31. WBL Policy- Statewide Support Infrastructure

Score	State Count	Percentage
green	7	13.73
yellow	20	39.22
red	24	47.06

+Description: Is there a system or organization designed to facilitate WBL opportunities and/or are there public-private partnerships that support access to paid or for-credit WBL opportunities for high school students?

Table 3.33.. WBL Policy- State Funding

Score	State Count	Percentage
green	5	9.80
yellow	19	37.25
red	27	52.94

+Description: Is there a dedicated source of state funding for WBL?

Table 3.33. WBL Policy- Perkins Funding

Score	State Count	Percentage
green	29	56.86
yellow	0	0.00
red	22	43.14

+Description: Does the state use its Perkins funding to support WBL?

Table 3.34. WBL Policy- Financial Incentives

Score	State Count	Percentage
green	7	13.73
yellow	20	39.22
red	24	47.06

+Description: Are there financial incentives (e.g., tax credits) for employers that offer WBL opportunities to high school students?

Table 3.35. WBL Policy- Experience Quality

Score	State Count	Percentage
green	1	1.96
yellow	20	39.22
red	30	58.82

+Description: Is there a statewide framework in place that defines quality expectations for WBL experiences and holds employers accountable to those expectations?

4. Career Readiness Outcomes

High School Completion Rate. Public high school 4-year adjusted cohort graduation rate provided by IES-NCES was multiplied by 100 to transform into percentage. The cut-off points for state scores are less than 80 for Low completion rate, 80-90 for Moderate completion rate, 90 or greater for High completion rate. Missing values in 2010 (Idaho, Kentucky, Oklahoma), 2011 (Idaho, Kentucky, Oklahoma), and 2012 (Idaho) were excluded in the analysis.

Source: IES-NCES Tables. The percentage of public high school freshmen who graduate with a regular diploma within 4 years of starting 9th grade. Students who are entering 9th grade for the first time form a cohort for the graduating class. This cohort is "adjusted" by adding any students who subsequently transfer into the cohort and subtracting any students who subsequently transfer out, emigrate to another country, or die. NOTE: The Alabama State Department of Education has indicated that their ACGR data for some years was misstated.

Table 4.1. Summary statistics of High School Completion Rate [CCRR Figure 5]

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	48	59.0	88.0	78.4	80.0	7.0	76.3	80.4
2011	48	59.0	89.0	79.8	80.5	6.8	77.8	81.7
2012	50	62.0	90.0	81.2	83.0	6.2	79.2	82.8
2013	51	61.0	91.0	82.1	84.0	6.4	80.2	84.0
2014	51	69.0	91.0	83.1	85.0	5.4	81.5	84.7
2015	51	69.0	91.0	83.8	86.0	5.0	82.4	85.3
2016	51	71.0	91.0	84.6	86.0	4.6	83.3	86.0
2017	51	69.0	91.0	85.0	86.0	4.4	83.8	86.4
2018	51	69.0	92.0	85.3	87.0	4.5	84.0	86.6
Average	9	65.3	90.4	82.6	84.2	5.6	80.9	84.2

**Missing value: Year of 2010 (ID, KY, OK), 2011 (ID, KY, OK), 2012 (ID)*

Table 4.2. 2018 High School Completion Rate [CCRR Table 5.1]

Score	State Count	Percentage
$90 \leq x$	9	17.6
$80 \leq x < 90$	39	76.5
$x < 80$	3	5.9

Table 14-2. 2018 High School Completion Rate by Race/Ethnicity

American Indian/Alaskan Native	74.3
Asian/Pacific Islander	92.6
Black/African American	79.6
Hispanic/Latino	81.7
White	89.4
Two or more races	84.0

Table 14-3. 2018 High School Completion Rate by Special Population

Students with disabilities	68
Limited English proficient, now referred to as ELL	69
Economically disadvantaged	80
Homeless enrolled	65
Foster care	54

High School Completion Rate of CTE Concentrators

High school completion rate of CTE concentrators from Perkins IV report was multiplied by 100 to transform into percentage. The cut-off points for state scores are less than 80 for Low completion rate, 80-90 for Moderate completion rate, 90 or greater for High completion rate. Outliers in 2010 (Oklahoma) and 2018 (California) were excluded due to their extreme values.

Source: Perkins Collaborative Resource Network (PCRN) publicly available data at <https://cte.ed.gov/dataexplorer/>. Perkins IV Indicator Secondary 4S1, Percentage of CTE concentrators who were included as graduated in the State's computation of its graduation rate, data available through 2018-19.

Table 15. Summary statistics of High School Completion Rate of CTE Concentrators

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	50	42.0	100.0	91.7	94.3	10.7	88.6	94.9
2011	51	44.0	100.0	91.4	94.3	10.8	88.4	94.7
2012	51	70.0	100.0	93.1	94.7	5.7	91.7	95.0
2013	51	82.0	100.0	93.7	94.7	4.6	92.3	95.0
2014	51	84.0	100.0	94.1	95.2	4.4	93.1	95.5
2015	51	69.0	100.0	94.2	95.7	5.6	92.9	96.0
2016	51	64.0	99.0	94.1	96.1	5.9	92.8	96.1
2017	51	81.0	100.0	95.3	96.4	3.9	94.7	96.7
2018	50	89.0	99.0	95.7	96.4	3.0	94.8	96.5
Average	9	69.4	99.8	93.7	95.3	6.1	92.1	95.6

**Outlier: Year of 2010 (OK), 2018 (CA)*

Table 15-1. 2018 High School Completion Rate of CTE Concentrators

Score	State Count	Percentage
$90 \leq x$	47	94
$80 \leq x < 90$	3	6
$x < 80$	0	0

**One outlier in 2018 (CA) is excluded*

Table 15-2. 2018 High School Completion rate of CTE Concentrators by Gender

Male	95
Female	97

Table 15-3. 2018 High School Completion rate of CTE Concentrators by Race/Ethnicity

American Indian/Alaskan Native	93
Asian	97
Black/African American	94
Hispanic/Latino	94
Native Hawaiian/Other Pacific Islander	94
White	96
Two or more races	94

Table 15-4. 2018 High School Completion rate of CTE Concentrators by Special Populations

Disability Status (ESEA/IDEA)	90
Displaced Homemakers	96
Economically Disadvantaged	94
Limited English Proficient, now referred to as ELL	91
Migrant Status	94

Postsecondary Placement - Colleges

For 2012 data, the rate of college enrollment of students graduated within 12 months from public or private high school in 2012 Fall provided by IES-NCES was multiplied by 100 to transform into percentage.

After 2012, the rate of college enrollment of students graduated within 12 months from public or private high school was no longer publicly released. Therefore, rates of later years were calculated by the following equation with three data resources from IES-NCES (Digest of Education Statistics Table 205.80, 219.20, 309.20).

Percentage (%)

=

$$\frac{(\text{Number of college enrollment of students graduated within 12 months from public or private high school})}{(\text{Number of public high school graduates}) + (\text{Number of private high school graduate})}$$

X 100

Because the number of private high school graduates were only available in even numbered years, calculated data of 2014 and 2016 were only available after 2012 as of October 2021. The cut-off points for state scores are less than 50 for Low Placement Rate, 50-70 for Moderate Placement Rate, and 70 or greater for High Placement Rate.

Source: IES-NCES Tables. Includes all first-time postsecondary students who graduated from high school in the previous 12 months and were enrolled at reporting institutions. Data for “Colleges” are Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs.

Table 16. Summary statistics of Postsecondary Placement - Colleges

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2012	51	43.0	79.0	60.8	61.0	7.3	58.7	62.8
2014	51	42.0	74.0	60.1	61.0	7.6	58.0	62.2
2016	51	41.0	76.0	59.7	60.0	7.3	57.6	61.7
Average	3	42.0	76.3	60.2	60.7	7.4	58.1	62.3

Table 16-1. 2018 Postsecondary Placement - Colleges

Score	State Count	Percentage
$70 \leq x$	3	5.9
$50 \leq x < 70$	42	82.4
$x < 50$	6	11.8

Postsecondary Placement - CTE Concentrators

Post high school placement rate of CTE concentrators from Perkins IV report was multiplied by 100 to transform into percentage. The cut-off points for state scores are less than 50 for Low Placement Rate, 50-70 for Moderate Placement Rate, and 70 or greater for High Placement Rate. The missing values in 2020 (Louisiana), 2011 (District of Columbia), 2012 (Wisconsin), 2015 (Idaho), and 2018 (California) were excluded in the analysis.

Source: Perkins Collaborative Resource Network (PCRN) publicly available data at <https://cte.ed.gov/dataexplorer/>. Perkins IV Indicator Secondary 5S1, Percentage of CTE concentrators who left secondary education and were placed in postsecondary education or advanced training, in the military service, or employment in the second quarter following the program year in which they left secondary education, data available through 2018-19. Beginning with 2019-20 data, specific indicator 3S1 data is defined and standardized and will be collected and disaggregated by all states.

Table 17. Summary statistics of Postsecondary Placement - CTE Concentrators

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	50	49.0	100.0	84.5	89.5	14.0	77.7	88.2
2011	50	11.0	100.0	84.0	90.5	17.1	82.2	90.2
2012	50	55.0	100.0	85.9	91.0	13.3	80.7	89.4
2013	51	46.0	100.0	85.0	91.0	14.4	80.1	88.3
2014	51	49.0	100.0	84.4	89.0	13.6	81.0	89.1
2015	50	52.0	100.0	84.4	91.0	14.1	81.9	89.9
2016	51	49.0	100.0	85.6	93.0	13.8	78.8	88.1
2017	51	43.0	100.0	83.2	92.0	15.8	80.2	88.9
2018	50	45.0	100.0	84.3	91.0	14.7	80.7	88.5
Average	9	44.3	100.0	84.6	90.9	14.5	80.4	89.0

**Missing value: Year of 2010 (LA), 2011 (DC), 2012 (WI), 2015 (ID), 2018 (CA)*

Table 17-1. 2018 Post High School Placement of CTE Concentrators

Score	State Count	Percentage
$70 \leq x$	40	80.0
$50 \leq x < 70$	9	18.0
$x < 50$	1	2.0

Table 17-2. 2018 Postsecondary Placement - CTE Concentrators by Gender

Male	83
Female	86

Table 17-3. 2018 Postsecondary Placement - CTE Concentrators by Race/Ethnicity

American Indian/Alaskan Native	80
Asian	88
Black/African American	82
Hispanic/Latino	81
Native Hawaiian/Other Pacific Islander	85
White	85
Two or more races	84

Table 17-4. 2018 Postsecondary Placement - CTE Concentrators by Special Populations

Disability Status (ESEA/IDEA)	74
Displaced Homemakers	93
Economically Disadvantaged	81
Limited English Proficient, now referred to as ELL	75
Migrant Status	83

College Retention Rate of Part-Time Students after 1 year

College retention rate for part-time students provided by IES-NCES IPEDS data was multiplied by 100 to transform into percentage. The cut-off points for state scores are less than 60 for Low Retention Rate, 60-80 for Moderate Retention Rate, and 80 or greater for High Retention Rate.

Source: IES-NCES IPEDS Tables. For 4-year institutions, retention rate is the percentage of all part-time, first-time bachelor's (or equivalent) degree-seeking undergraduates from the previous fall who are again enrolled in the current fall. For all other institutions retention rate is the percentage of part-time, first-time degree/certificate-seeking undergraduates from the previous fall who are again enrolled in the current fall. Data collected from Title IV postsecondary institutions in the United States.

Table 18. Summary statistics of College Retention Rate of Part-Time Students after 1 year

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	51	24.0	67.0	43.9	44.0	7.3	41.9	46.0
2011	51	28.0	78.0	43.7	41.9	8.0	41.4	45.9
2012	51	24.0	59.0	42.8	42.5	6.7	41.0	44.7
2013	51	27.0	85.0	43.7	42.8	8.2	41.4	46.0
2014	51	32.0	67.0	44.0	44.1	6.4	42.2	45.8
2015	51	28.0	80.0	44.2	43.4	7.8	42.0	46.4
2016	51	18.0	84.0	45.3	45.0	8.7	42.8	47.7
2017	51	32.0	88.0	46.5	45.2	8.5	44.1	48.9
2018	51	26.0	83.0	45.9	45.6	8.8	43.5	48.4
2019	51	28.0	80.0	46.7	45.8	8.5	44.3	49.1
Average	10	26.7	77.1	44.7	44.0	7.9	42.4	46.9

Table 18-1. 2019 College Retention Rate of Part-Time Students after 1 year

Score	State Count	Percentage
$80 \leq x$	1	2.0
$60 \leq x < 80$	3	5.9
$x < 60$	47	92.2

College Retention Rate of Full-Time Students after 1 year

College retention rate for full-time students provided by IES-NCES IPEDS data was multiplied by 100 to transform into percentage. The cut-off points for state scores are less than 60 for Low Retention Rate, 60-80 for Moderate Retention Rate, and 80 or greater for High Retention Rate.

Source: IES-NCES IPEDS Tables. For 4-year institutions, retention rate is the percentage of all full-time, first-time bachelor's (or equivalent) degree-seeking undergraduates from the previous fall who are again enrolled in the current fall. For all other institutions retention rate is the

percentage of full-time, first-time degree/certificate-seeking undergraduates from the previous fall who are again enrolled in the current fall. Data collected from Title IV postsecondary institutions in the United States.

Table 19. Summary statistics of College Retention Rate of Full-Time Students after 1 year

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	51	64.0	88.0	71.3	71.1	4.5	70.0	72.5
2011	51	63.0	88.0	71.0	71.1	4.7	69.6	72.3
2012	51	64.0	87.0	71.1	70.9	4.9	69.7	72.5
2013	51	64.0	85.0	72.0	71.3	4.8	70.6	73.3
2014	51	64.0	86.0	72.9	72.9	4.7	71.6	74.2
2015	51	66.0	88.0	73.5	73.7	4.6	72.3	74.8
2016	51	66.0	87.0	74.2	74.4	4.7	72.9	75.5
2017	51	65.0	88.0	74.4	74.1	4.8	73.0	75.7
2018	51	66.0	87.0	74.4	74.7	4.8	73.1	75.8
2019	51	67.0	88.0	75.0	75.2	4.7	73.7	76.3
Average	10	64.9	87.2	73.0	72.9	4.7	71.6	74.3

Table 19-1. 2019 College Retention Rate of Full-Time Students

Score	State Count	Percentage
$80 \leq x$	8	15.7
$60 \leq x < 80$	43	84.3
$x < 60$	0	0.0

On-Time Postsecondary Completion - In 3 years from 2 year colleges

Completion rate in 3 years from 2 year colleges provided by IES-NCES IPEDS data was multiplied by 100 to transform into percentage. The cut-off points for state scores are less than 40 for Low Retention Rate, 40-60 for Moderate Retention Rate, and 60 or greater for High Retention Rate.

Source: IES-NCES IPEDS Tables. All Postsecondary Graduation rate within 150% of normal time at 2-year postsecondary institutions by state (e.g., 3 years). This table presents data collected from Title IV institutions in the United States.

Table 20. Summary statistics of On-Time Postsecondary Completion in 3 years from 2 year Colleges

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	51	11.0	90.0	32.6	29.9	13.3	28.9	36.4
2011	51	13.0	89.0	34.0	31.6	14.3	29.9	38.0
2012	51	13.0	78.0	32.7	31.5	13.2	29.0	36.5
2013	51	11.0	100.0	32.2	28.9	15.5	27.9	36.6
2014	51	15.0	82.0	31.1	28.4	13.9	27.2	35.0
2015	51	15.0	68.0	31.8	29.8	12.9	28.1	35.4
2016	51	14.0	71.0	34.0	30.5	13.5	30.2	37.8
2017	51	18.0	66.0	35.2	32.6	12.0	31.8	38.5
2018	51	19.0	73.0	36.1	33.0	13.0	32.4	39.8
2019	51	15.0	74.0	36.5	32.9	13.1	32.9	40.2
Average	10	14.4	79.1	33.6	30.9	13.5	29.8	37.4

Table 20-1. 2019 On-Time Postsecondary Completion- In 3 years from 2 year Colleges

Score	State Count	Percentage
$60 \leq x$	5	9.8
$40 \leq x < 60$	7	13.7
$x < 40$	39	76.5

On-Time Postsecondary Completion- In 6 years from 4 year colleges

Completion rate in 6 years from 4 year colleges provided by IES-NCES IPEDS data was multiplied by 100 to transform into percentage. The cut-off points for state scores are less than 40 for Low Retention Rate, 40-60 for Moderate Retention Rate, and 60 or greater for High Retention Rate.

Source: IES-NCES IPEDS Tables. All Postsecondary Graduation rate within 150% of normal time at 4-year postsecondary institutions by state (e.g., 6 years). This table presents data collected from Title IV institutions in the United States.

Table 21. Summary statistics of On-Time Postsecondary Completion in 6 years from 4 year Colleges

Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	51	28.0	78.0	53.7	54.7	10.3	50.8	56.6
2011	51	27.0	74.0	53.7	54.6	9.9	50.9	56.4
2012	51	28.0	73.0	54.2	55.5	9.9	51.5	57.0
2013	51	29.0	73.0	54.3	55.0	9.9	51.5	57.0
2014	51	25.0	74.0	54.3	54.8	10.2	51.4	57.1
2015	51	24.0	74.0	53.9	54.0	10.6	51.0	56.9
2016	51	24.0	75.0	53.9	54.1	10.7	50.9	57.0
2017	51	26.0	74.0	54.9	55.2	10.6	51.9	57.9
2018	51	31.0	76.0	57.0	56.7	9.6	54.3	59.7
2019	51	31.0	76.0	57.9	57.7	9.6	55.2	60.6
Average	10	27.3	74.7	54.8	55.2	10.1	51.9	57.6

Table 21-1. 2019 On-Time Postsecondary Completion- In 6 years from 4 year Colleges

Score	State Count	Percentage
$60 \leq x$	21	41.2
$40 \leq x < 60$	28	54.9
$x < 40$	2	3.9

Youth Not Attending School and Not Working

Also known as NEET (Not in Education nor Employment), Rate of youth who are not attending school and not working from The Annie E. Casey Foundation’s KIDS COUNT® was multiplied by 100 to transform into percentage. The cut-off points for state scores are less than 10 for Low NEET rate, and 10-20 for Moderate NEET rate, 20 or greater for High NEET rate.

Source: 3rd Party Analysis by the Annie E. Casey Foundation. KIDS COUNT® data derived from NEET Table and NEET Table (EQ). This measure is sometimes referred to as “Idle Teens” or “Disconnected Youth.” Primary data source identified as Population Reference Bureau, analysis of data from the U.S. Census Bureau, 2008 - 2019 American Community Survey.

Table 22. Summary statistics of Youth not attending school and not working: Age 16-19

Age 16-19								
Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	51	4	15	8.8	9	2.6	8	9.5
2011	51	4	13	8.3	8	2.2	7.7	8.9
2012	51	4	12	8.1	8	2	7.5	8.7
2013	51	3	12	7.5	7	2.1	6.9	8.1
2014	51	4	11	7.2	7	1.8	6.7	7.7
2015	51	4	11	6.9	7	1.7	6.4	7.4
2016	51	3	11	6.9	7	1.9	6.3	7.4
2017	51	4	11	6.6	6	1.6	6.1	7.1
2018	51	0	12	6.7	6	2.3	6	7.3
2019	51	4	12	6.7	7	1.9	6.1	7.2
Average	10	3.4	12	7.4	7.2	2	6.8	7.9

Table 22-1. 2019 Youth not attending school and not working: Age 16-19

Score	State Count	Percentage
$20 \leq x$	0	0
$10 \leq x < 20$	4	7.84
$x < 10$	47	92.16

Table 22-2. 2019 Youth not attending school and not working by Race/Ethnicity: Age 16-19

American Indian/Alaskan Native	11
Asian/Pacific Islander	3
Black/African American	10
Hispanic/Latino	8
White	5
Two or more races	7

**Age 20-24 by race/ethnicity data is not available*

Table 23. Summary statistics of Youth not attending school and not working: Age 20-24

Age 20-24								
Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	51	9	27	18.9	19	3.8	17.8	20
2011	51	11	26	18.6	19	3.6	17.6	19.6
2012	51	9	25	17.8	18	3.8	16.7	18.9
2013	51	10	25	17.8	18	3.8	16.8	18.9
2014	51	10	23	16.8	17	3.3	15.8	17.7
2015	51	9	23	15.7	16	3.5	14.7	16.6
2016	51	9	22	15.1	15	3.5	14.1	16.1
2017	51	8	23	14.9	15	3.7	13.8	15.9
2018	51	0	22	14.2	14	3.9	13.1	15.3
2019	51	8	21	13.8	14	3.2	13	14.7
Average	10	8.3	23.7	16.4	16.5	3.6	15.3	17.4

Table 23-1. 2019 Youth not attending school and not working: Age 20-24

Score	State Count	Percentage
$20 \leq x$	2	3.92
$10 \leq x < 20$	44	86.27
$x < 10$	5	9.8

Table 24. Summary statistics of Youth not attending school and not working: Age 16-24

Age 16-24								
Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	51	7	21	14.4	14.0	3.3	13.4	15.3
2011	51	9	20	14.0	14.0	2.9	13.2	14.8
2012	51	8	19	13.5	14.0	3.0	12.7	14.4
2013	51	8	20	13.4	13.0	3.0	12.5	14.2
2014	51	7	18	12.7	13.0	2.5	11.9	13.4
2015	51	8	17	11.9	12.0	2.5	11.2	12.7
2016	51	7	17	11.6	11.0	2.6	10.8	12.3
2017	51	6	17	11.2	11.0	2.6	10.4	11.9
2018	51	7	17	11.0	11.0	2.7	10.2	11.7
2019	51	6	16	10.6	10.0	2.4	9.9	11.2
Average	10	7.3	18.2	12.4	12.3	2.8	11.6	13.2

Youth Average and Adjusted Average Monthly Earnings

Original data of average monthly youth earnings from the U.S. Census was used with its own unit (\$). For both youth age 14-18 and 19-21 data, missing values in 2010 (Colorado, Massachusetts), 2011-15 (Colorado), 2016-17 (Alaska, Colorado), 2018-19 (Alaska, Arkansas, Colorado, Mississippi), 2020 (Alaska, Arkansas, Colorado, Mississippi, Kansas) were excluded in the analysis.

The cut-off points of 2020 youth average monthly earnings for states scores of youth age 14-18 data are less than 800 for Low average monthly earning, 800-1000 for Moderate average monthly earnings, 1000 or greater for High average monthly earnings. The cut-off points of 2020 youth average monthly earnings for states scores of youth age 19-21 data are less than 1133 for Low average monthly earnings, 1133-1506 for Moderate average monthly earnings, 1506 or greater for High average monthly earnings ([2020 Federal poverty guideline](#)).

Additionally, considering living costs vary across states, adjusted youth earnings in 2020 was calculated. First, average monthly youth earnings from the U.S. Census was divided by Regional Price Parities (RPP) from the Bureau of Economic Analysis. RPP is the adjusted index of living costs which is created by comparison of national average and state average. Second, the value was transformed as a standardized score (i.e., mean = 0, standard deviation = 1). Adjusted earning (standardized score) is not interpretable as the unit of dollars, but it enables us to compare the relative value of earnings across different states. The cut-off points for 2020 adjusted earnings of state scores of both youth age 14-18 and 19-21 data are lower than -1 standard deviation for Low adjusted average monthly earnings, [-1 standard deviation, +1 standard deviation] for Moderate adjusted average monthly earnings, and greater than +1 standard deviation for High adjusted average monthly earnings.

Source: [DOL BLS QWI Explorer- EarnS- Full Quarter Employment AVG Monthly Earnings](#) Average Monthly Earnings by Age Group through QWI Explorer. QWI Explorer filters by state, "EarnS- Full Quarter Employment AVG Monthly Earnings", and age groups 14-18, 19-21. [BEA Interactive Data Tables - Regional Price Parities \(RPP\) in 2020](#).

Table 25. Summary statistics of Youth Average Monthly Earnings: Age 14-18

Age 14-18								
Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	49	465	1138	625	610	119	580	653
2011	50	473	1167	621	608	116	577	649
2012	50	490	1119	631	609	110	589	657
2013	50	497	1093	634	610	107	595	659
2014	50	516	1089	654	630	107	614	679
2015	50	548	1080	684	658	101	647	706
2016	49	560	1112	695	671	102	661	721
2017	49	572	1126	722	693	111	684	749
2018	47	597	1186	756	719	122	715	786
2019	47	620	1263	785	754	130	741	816
2020	46	712	1325	900	871	140	850	930
Average	11	550	1154	701	676	115	659	728

**Missing value: Year of 2010 (CO, MA), 2011-15 (CO), 2016/2017 (AK, CO), 2018/2019(AK, AR, CO, MS), 2020(AK, AR, CO, MS, KS)*

Table 25-1. 2020 Youth Average Monthly Earnings: Age 14-18

Score	State Count	Percentage
$1000 \leq x$	9	20.0
$800 \leq x < 1000$	29	64.4
$x < 800$	8	17.8

**5 states data are not available (Alaska, Arkansas, Colorado, Kansas, Mississippi)*

Table 25-2. 2020 Adjusted Youth Average Monthly Earnings: Age 14-18

Score	State Count	Percentage
$x > 1SD$	7	15.2%
$-1SD \leq x \leq 1SD$	32	69.6%
$x < -1SD$	7	15.2%

*Missing values: AK, AR, CO, KS, MS

Table 26. Summary statistics of Youth Average Monthly Earnings: Age 19-21

Age 19-21								
Year	N	Min	Max	Mean	Median	SD	Lower	Upper
2010	49	971	1662	1129	1097	130	1082	1138
2011	50	950	1671	1144	1101	140	1095	1159
2012	50	946	1718	1182	1140	158	1126	1205
2013	50	979	1774	1204	1159	162	1146	1229
2014	50	1043	1947	1257	1204	181	1193	1286
2015	50	1142	1880	1314	1277	156	1261	1337
2016	49	1187	1599	1332	1314	104	1298	1362
2017	49	1226	1744	1385	1366	113	1351	1421
2018	47	1288	1830	1467	1435	131	1422	1501
2019	47	1328	1944	1546	1515	143	1497	1581
2020	46	1469	2053	1649	1623	131	1602	1682
Average	11	1139	1802	1328	1294	141	1280	1355

* Missing values: Year of 2010(CO, MA), 2011-15 (CO), 2016/2017 (AK, CO), 2018/2019(AK, AR, CO, MS), 2020(AK, AR, CO, MS, KS)

Table 26-1. 2020 Youth Average Monthly Earnings: Age 19-21

Score	State Count	Percentage
$1506 \leq x$	42	91.3
$1133 \leq x < 1506$	4	8.7
$x < 1133$	0	0

Table 26-2. 2020 Adjusted Youth Average Monthly Earnings: Age 19-21

Score	State Count	Percentage
$x > 1SD$	7	15.2%
$-1SD \leq x \leq 1SD$	29	63.0%
$x < -1SD$	10	21.7%

* *Missing values: AK, AR, CO, KS, MS*

Table 27-1. 2019 Youth Average Monthly Earnings by Gender

Age	14-18	19-21
Male	866	1793
Female	735	1312

* *The latest earnings by gender data is from 2019*

Scientific Committee Membership (February 2021)

Sheila Arredondo	Senior Program Associate, Quality Schools & Districts, West Ed
Chad d'Entremont	Executive Director, Rennie Center for Education Research & Policy
Lynda Dusenbury	Senior Research Scientist, Collaborative for Academic, Social, and Emotional Learning (CASEL)
Austin Estes	Manager of Data & Research, AdvanceCTE
Kevin Fudge	Director of Advocacy, American Student Assistance (ASA)
Alisha Hyslop	Senior Director- Public Policy, Association for Career and Technical Education (ACTE)
Deborah Jonas	Director, SRI- Center for Education & Research
Scott Solberg	Vice President of Research, CCD-Center and Professor, Boston University
Susan Therriault	Managing Director, American Institutes for Research (AIR)
Orrin White	Director, United Way Delaware
Robin Worth	Lead Researcher, Wisconsin Evaluation Collaborative (WEC)- Consortium for Policy Research in Education (CPRE), Wisconsin Center for Education Research (WCER)

APPENDIX 3: STATE PCAP SCAN RUBRIC

Abbreviations in Scoring Chart:

- ASCA- American School Counselor Association
- CD- Career Development
- CR- Career Readiness
- CTE- Career & Technical Education
- ESSA- Every Student Succeeds Act
- HS- High School
- P&G- Policy & Guidance
- PCAP- Personalized Career and Academic Plan
- SEL- Social and Emotional Learning

CATEGORY	GREEN	YELLOW	RED
Statewide PCAP P&G	<ul style="list-style-type: none"> ● P&G Mandated ● Required for most/all students, not just some populations ● Required for a range of grades, at least in HS 	<ul style="list-style-type: none"> ● P&G Recommended for adoption by schools ● Implementing for more/all students ● Required for all in special population (e.g., at risk, Special Ed, etc) ● Range of grades recommended 	<ul style="list-style-type: none"> ● No P&G or PCAP process ● CD/CTE web pages link to only national organizations & resources ● Schools on own for PCAP ● PCAP process not specified under CD information
Funding supports PCAP implementation	<ul style="list-style-type: none"> ● Federal, State, Philanthropic or combination funding supports many PCAP expenditures for state resource development & staff training at local level, software platform, etc. ● Money goes to schools for PCAP implementation 	<ul style="list-style-type: none"> ● Federal, State, Philanthropic or combination funding allows for PCAP expenditures such as state resource development & staff training at local level ● No money goes to schools or for software platform 	<ul style="list-style-type: none"> ● No state or federal funding sources found for CD thru an PCAP process
PCAP addresses Staff Training	<ul style="list-style-type: none"> ● Training required or optional w/training staff & resources provided to local regions or schools ● Additional support available 	<ul style="list-style-type: none"> ● Training is optional ● Resources on state webpage only 	<ul style="list-style-type: none"> ● No Training nor Training resources provided for a PCAP &/or CD process

<p>PCAP includes Standards &/or Curriculum</p>	<ul style="list-style-type: none"> • PCAP process is outlined in standards, specifications &/or curriculum for schools • Quality curricular activities are provided for implementing PCAP in schools & classrooms • PCAP process best practices are highlighted • CD/PCAP curriculum integrated into other courses • Quality of process is assessed regularly 	<ul style="list-style-type: none"> • PCAP process may be outlined in standards, specifications &/or curriculum for schools • Curriculum may or may not be integrated in classes outside of counseling time & special ed • Schools develop activities on own- none provided by state • Consistent quality is not assessed 	<ul style="list-style-type: none"> • No state PCAP process standards or curriculum exist • Standards are same as national ASCA domains
<p>PCAP includes use of a Technology Platform</p>	<ul style="list-style-type: none"> • PCAPs required to be built in a virtual portfolio • Software platform available to all students in state to complete PCAP 	<ul style="list-style-type: none"> • PCAP software technology platform(s) recommended • Schools on own to find & use if desired 	<ul style="list-style-type: none"> • No PCAP software technology platform(s) or portfolio process required or recommended
<p>PCAP is addressed in ESSA CR</p>	<ul style="list-style-type: none"> • PCAP is specifically referred to in the state's ESSA CR plan 	<ul style="list-style-type: none"> • PCAP might not be emphasized but may be referenced somewhere in state ESSA plan, but not called out specifically under CR 	<ul style="list-style-type: none"> • PCAP is not part of the state's ESSA CR plan
<p>PCAP & SEL</p>	<ul style="list-style-type: none"> • SEL is part of PCAP in Definitions, Guidance, Quality Criteria • PCAP SEL skills are not just taught for CTE students • PCAP SEL skills are not just called out as Employability Skills 	<ul style="list-style-type: none"> • PCAP refers to SEL as part of process, but mostly as Employability • CD & PCAP include reference to employability, soft, or professional workplace skill development 	<ul style="list-style-type: none"> • SEL &/or Employability skill development are not in place in state
<p>PCAP & State Perkins V Plans (CTE)</p>	<ul style="list-style-type: none"> • PCAP is reference in MULTIPLE locations for secondary programming: Narrative, Program Administration, Budget, Accountability for Results, Miscellaneous- Middle Grades • PCAP is integral as part of state's CTE size, scope, quality, and/or accountability 	<ul style="list-style-type: none"> • PCAP is reference in FEW locations for secondary programming: Narrative, Program Administration, Budget, Accountability for Results, Miscellaneous- Middle Grades 	<ul style="list-style-type: none"> • PCAP is not referenced in State Perkins Plans

8.0 ENDNOTES

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