MAKING CAREER READINESS COUNT

A 2025 Update: 10 Years of Measuring What Matters

ADVANCE CTE

State Leaders Connecting Learning to Work

COLLEGE IN HIGH SCHOOL ALLIANCE

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Executive Summary

Career Technical Education (CTE) and career readiness have become a national priority, reshaping high school curricula across the country. Once primarily centered on college preparation, college and career readiness now emphasizes career pathways as a key component of learner success, with 43 states including at least one career-focused indicator in their state and federal accountability systems. While progress is undeniable, questions remain about access, outcomes, and how accountability can drive meaningful change for all learners.

This report examines nationwide federal and state accountability data over the past decade to provide insights on how states have evolved, increased, and innovated the way they use career-focused indicators in accountability. Some of the data highlights include the following:

- **Since 2014, the number of states including at least one career-focused indicator** in their federal or state accountability has risen from **14 to 43**. Of those **43 states, 38** include more than one way for learners to demonstrate career readiness.
- **The top five most commonly valued career-focused indicators in accountability systems** include dual enrollment success, industry-recognized credential attainment, CTE pathway/program completion or concentrators, academic career readiness assessments, and experiential/work-based learning.
- **Dual enrollment success is the most highly valued career-focused indicator nationwide** and is included as an option for career readiness in **32 state** and federal accountability systems.
- **Of the 43 states with career-focused indicators in their accountability systems, 35 publicly report data** on their career-focused indicators. Only 13 states publicly report fully disaggregated career-focused indicator data to highlight enrollment figures for each indicator.

This report offers considerations for states when determining their federal and state accountability indicators for college and career readiness components. Some key takeaways include the following:

- **States should focus on selecting fewer high-quality, well-aligned, career-focused indicators.** Overloading accountability systems with too many indicators can create confusion and diminish the effectiveness of career readiness predictions.
- **Standalone career-focused indicators have the potential to be more effective than metaindicators, which group college and career readiness into a single measure.** Metaindicators enable schools to meet college and career readiness benchmarks without necessarily having any learners demonstrate meaningful career-ready outcomes
- **Publicly reporting career-focused data and disaggregating the data by indicator and learner demographics are crucial for transparency.** This approach helps identify and address gaps in performance and outcomes that may go unnoticed when data are aggregated into composite scores.
- **Effective data collection and coordination across state systems are key to evaluating the real impact of career-focused indicators on learner outcomes.** States must ensure that data are high quality and comprehensive to assess whether accountability systems truly prepare learners for workforce success.[1]

Introduction

In recent years, improving the quality of and access to college- and career-ready opportunities—especially Career Technical Education (CTE)—has become a national priority. For example, in 2024, 40 states enacted 152 policies affecting CTE and career readiness, including legislation, executive orders, and budget provisions that significantly changed funding.[2] As the world of work evolves and the economy continues to recover from the coronavirus pandemic recession, a newfound focus on career readiness and CTE as a critical component of the high school curriculum has emerged.

Over the past decade, college and career readiness within state and federal accountability systems, such as the Every Student Succeeds Act (ESSA), has transformed from a novel initiative in a handful of states to a standard component. To facilitate this shift, college and career readiness indicators have become increasingly integrated into state and federal accountability systems, with opportunities for strategic alignment across other structures, such as the Carl D. Perkins Career and Technical Education Act (Perkins V), which was signed into law in 2018.

Defining College and Career Readiness

College and career readiness provides all learners with experiences that put them on a path to access and succeed in their chosen careers, as well as experiences they need to build the knowledge and skills necessary for entry into and success in postsecondary education, training, and the workforce.[3]

As state systems have become increasingly inclusive of college and career readiness indicators over the past decade, career-focused indicators have proliferated alongside more traditional "college-ready" ones, such as postsecondary enrollment or a minimum score on an Advanced Placement (AP) or International Baccalaureate (IB) assessment. Career-ready measures aim to assess employability skills, technical skills, and a learner's ability to apply those skills to functions in the workplace.[4]

Often, "career ready" and "college ready" are used synonymously and limit preparedness to traditional core academic skills that learners need to enroll in postsecondary education successfully. While academic proficiency is critical to informing and educating learners entering the workforce, this limited definition is a missed opportunity to expand upon core curricula to include and prioritize CTE to create access for learners to enter career pathways that offer family-sustaining wages and career advancement.[5]

Since the first edition of *Making Career Readiness Count* in 2014, the number of states with at least one career-focused indicator in their accountability systems has increased from 14 to 43, with almost all of those states including more than one way for learners to demonstrate career readiness. Despite the progress made in integrating career readiness in accountability systems, much remains to be explored regarding access and outcomes across learner groups and special populations, the predictive value of some career-focused indicators over others, and what role accountability plays in incentivizing district and school leaders to move the needle on college and career readiness.

With generous support from the Gates Foundation and collaboration with the College in High School Alliance, Advance CTE compiled the past decade of its research on CTE and career readiness in state and federal accountability for this fourth edition of *Making Career Readiness Count*. Advance CTE seeks to present trends on how states have valued college and career readiness indicators—and which ones they have valued—over time. The report shares information from a landscape analysis and in-depth interviews with state CTE leaders. From these insights, Advance CTE offers targeted considerations to increase the effectiveness of accountability as a lever to invest in career preparedness for all learners. See *Appendix A* to learn more about the methodology.

For this report, the following indicators were collected to reflect career-focused indicators that states value in their accountability systems (see *Appendix B* for definitions):

- achievement on an academic career readiness assessment
- achievement on a technical skills assessment
- attainment of an industry-recognized credential
- CTE completion (pathway/program completion and concentrators)
- CTE diploma/endorsement
- CTE participation
- dual enrollment participation/success
- experiential/work-based learning
- postgraduation placement
- pre-/youth apprenticeship

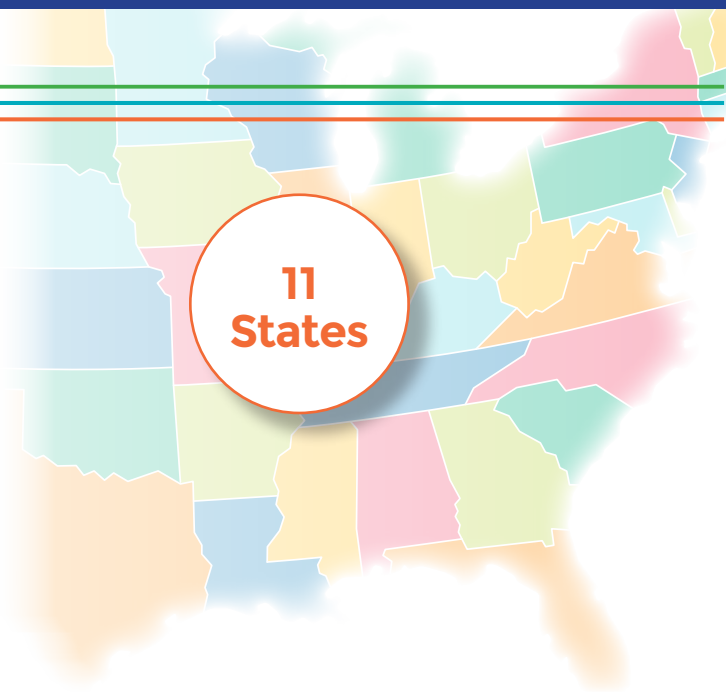
Use of Career Readiness Indicators

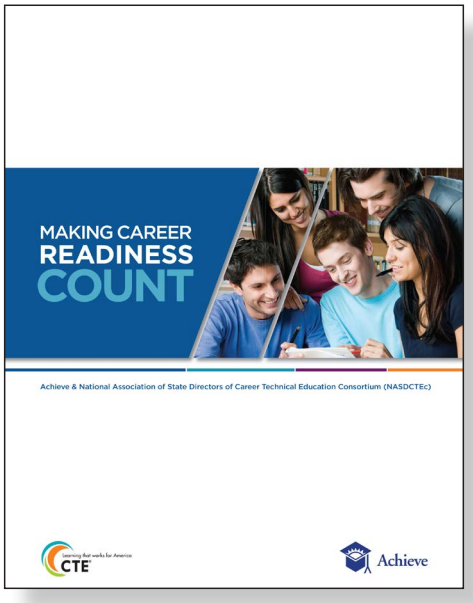
As state leaders continue to strengthen their accountability systems in the wake of shifting priorities, they have the opportunity to select indicators that inform continuous improvement, guide decisions about resource allocation, shape policies, track progress, and factor into accountability determinations. The indicators that states incorporate into their accountability formulas can be used to differentiate and classify schools and districts for support and intervention and/or serve as a means for schools and districts to earn bonus points or rewards for meeting specific benchmarks.

Roadmap from No Child Left Behind (NCLB) to ESSA through the coronavirus pandemic

2012: NCLB Waivers

In February 2012, the U.S. Department of Education announced its process to qualify for flexibility waivers that would exempt states from central provisions of NCLB. Among the criteria to qualify, states must have adopted college and career readiness standards in core academic subjects and give credit to progress made toward these indicators in state accountability systems.[6] Only 11 states were approved for a waiver, establishing early systems for measuring college and career readiness.





2014: Making Career Readiness Count Report

With so few states mandating avenues for college and career readiness in their state accountability systems, this inaugural report offered an original framework for how states could work toward, meet, and achieve college and career readiness in their state.

Eight states included career-focused indicators within their formula accountability systems. Six states valued them as formula and bonus points, totaling **14 states** with a career-focused indicator.

Formula Versus Bonus Points

In an accountability system, ESSA or otherwise, formula and bonus points serve different purposes in evaluating school and district performance. A formula is used to determine the overall performance of schools and districts based on defined indicators. The formula combines performance metrics into a weighted composite score to identify school and district status in meeting expectations for these indicators.[7]

For example, **Iowa** uses a postsecondary readiness indicator (PSRI) that makes up 11.1% of high school accountability measures in ESSA. Within this 11.1%, each indicator of the PSRI (e.g., dual enrollment success or work-based learning) is weighted evenly and contributes to a rubric including other school and district performance measures (e.g., academic proficiency, chronic absenteeism, or graduation rate).

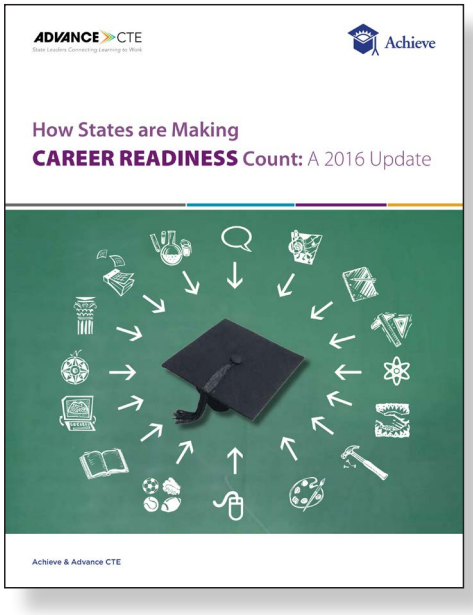
Bonus points reward schools or districts for exceeding certain performance thresholds or making notable progress on specific indicators. These points are usually added to a school's or district's score for additional recognition.[8]

For example, **Arizona** issues bonus points to schools and districts if the graduating cohort enrolls in postsecondary education or enlists in the military at a higher percentage than the previous cohort year on top of the predefined college and career readiness indicators.

2015: Elementary and Secondary Education Act (ESEA) Reauthorized as ESSA

In December 2015, ESEA was reauthorized and signed into law as ESSA, requiring all states to redesign their accountability systems by the 2017-18 school year with full implementation intended by the 2019-20 school year.[9]

ESSA included several key provisions related to college and career readiness, most notably requiring states to use at least one indicator of "school quality or student success" in addition to the required academic indicators in their accountability systems at the secondary level.[10] These changes to federal accountability requirements empowered states to experiment with new measures focused on learners' preparation for and successful transition to postsecondary education, training, and the workforce.[11]



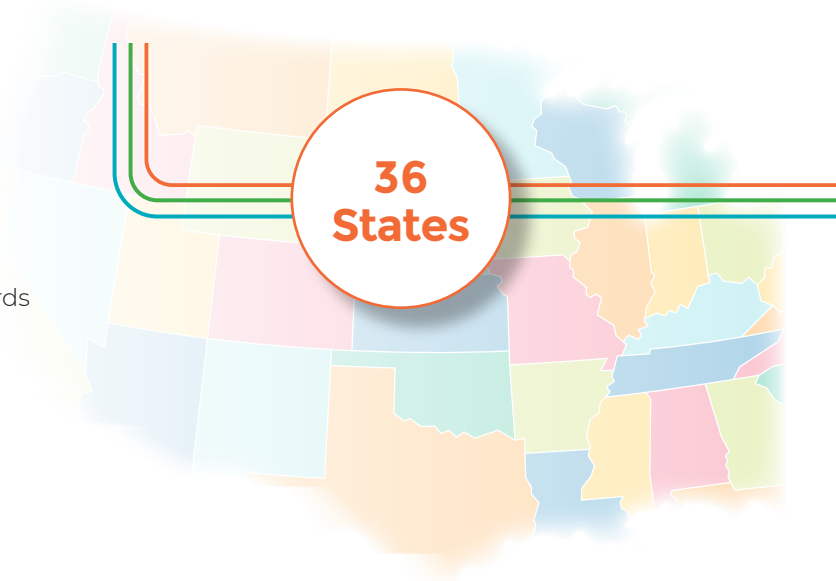
2016: *Making Career Readiness Count* Update

To support states as they began transitioning to ESSA, this update emphasized publicly reporting college and career readiness indicators as essential for data transparency and understanding for families, educators, and policymakers.[12] Using school report cards and dashboards, the report collected data on all career-focused indicators included in these public data breakdowns to highlight state best practices and gaps in data collection.

From this analysis, Advance CTE identified **32 states** that publicly reported anywhere from one to six career-focused indicators at the school or district level. However, only **17 states** valued college and career-focused indicators within federal and state accountability structures.

2017-18: ESSA State Plans Developed

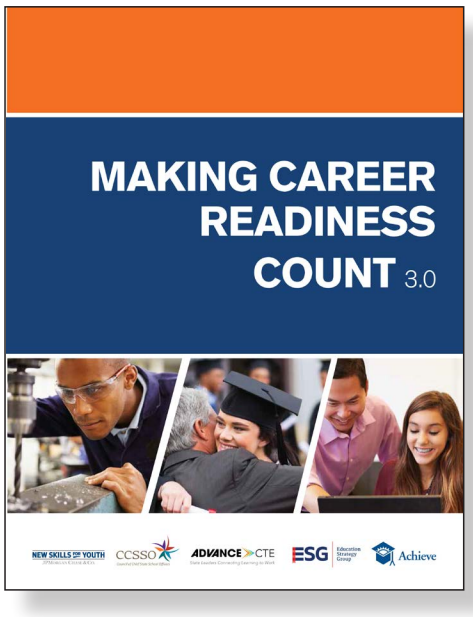
All states were required to redesign their accountability systems to include college and career readiness standards by the 2017-18 school year. In total, **36 states** included a career-focused indicator in their ESSA state plans.



2018: Perkins Reauthorized

In July 2018, Perkins V was signed into law. The new law had a number of critical changes related to data and accountability, including the following:

- streamlining the secondary performance indicators
- providing states flexibility in identifying "program quality indicators" at the secondary level
- requiring more extensive public reporting and disaggregation by special populations, subgroups, and utcomes at the program or Career Cluster® levels[13]

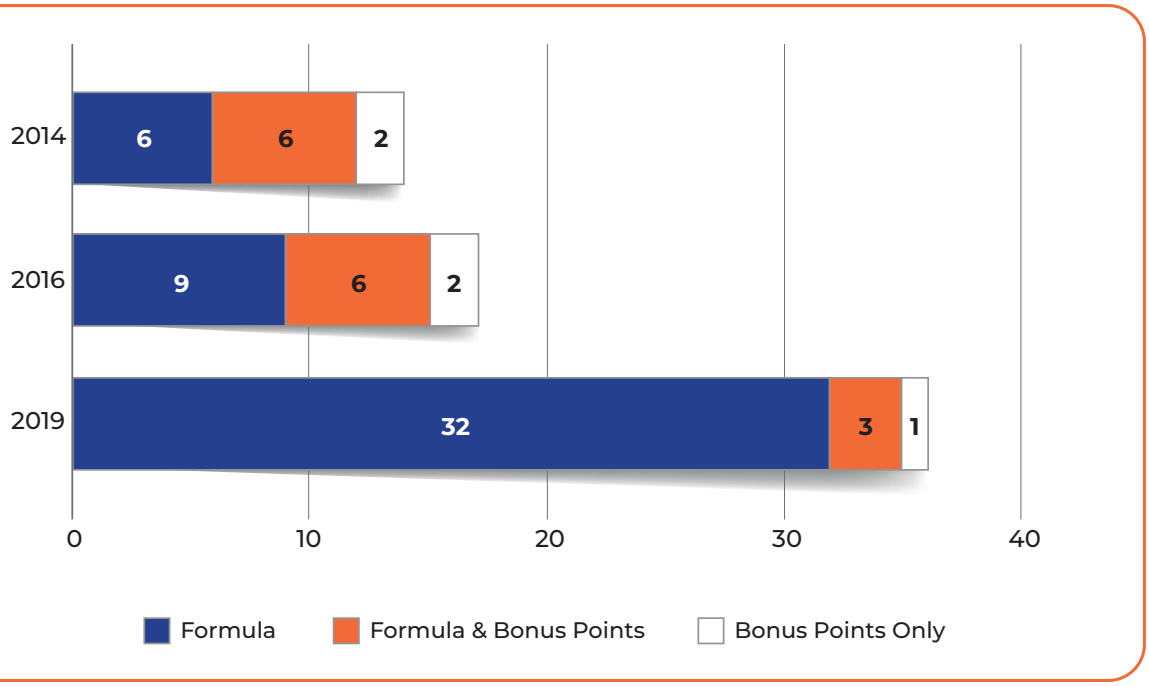


2019: *Making Career Readiness Count 3.0* Report

Between Perkins V and state progress in updating ESSA plans to include school quality and learner success indicators, the number of states including career-focused indicators in their ESSA accountability system, state accountability system, or both sharply increased from **17 in 2016 to 36 in 2019**.

Figure 1 shows how states incorporated career-focused indicators in their accountability systems before ESSA was fully implemented and at each interval of a new *Making Career Readiness Count* report (2014, 2016, and 2019).

Figure 1: How states included career-focused indicators in their accountability systems (2014, 2016, 2019)



2020–21: Perkins Implementation and the Coronavirus Pandemic

With six years of research on college and career readiness indicators—including early data reflecting ESSA requirement outcomes—significant changes emerged to address the evolving needs of education and the workforce.

After Perkins V reauthorization, the law set a new intention to improve CTE data transparency and make data more accessible for external partners to interpret and inform action.[14] With this new emphasis on data accessibility and reporting incentivized by Perkins V, states had until the 2020-21 academic year to improve upon general public reporting tools such as statewide and district report cards, accountability data dashboards, and digestible reports. Perkins V also created further opportunities for states to update and align existing accountability systems with it, adding to the surge of states valuing CTE and other career-focused indicators in their accountability components.

The coronavirus pandemic had widespread effects on learners, further exacerbating preexisting issues with data and accountability validity. The pandemic stalled data collection, as well as the college- and career-ready coursework and experiences, causing the U.S. Department of Education to provide state educational agencies with waivers from accountability requirements of ESSA for the 2019-20 and 2020-21 school years.[15] These waivers allowed for temporary adjustments to accountability systems due to missing or less reliable data because of the pandemic.[16] This situation created setbacks in longitudinal data collection from ESSA since its full implementation year in the 2019-20 school year. Only recently have states begun revising their ESSA state plans to include prepandemic growth measures.

What Is the Current Status

Currently, **43 states** include at least one career-focused indicator in their state or federal accountability systems, an increase from **36 states** in 2019. All 43 states include at least one career-focused indicator in their accountability formulas, with a few also offering opportunities for bonus points when exceeding minimum formula requirements. Figure 2 highlights the growth of career-focused indicator inclusion in state accountability systems over time.

Figure 2: States including career-focused indicators in one or more accountability systems over time (2014-24)

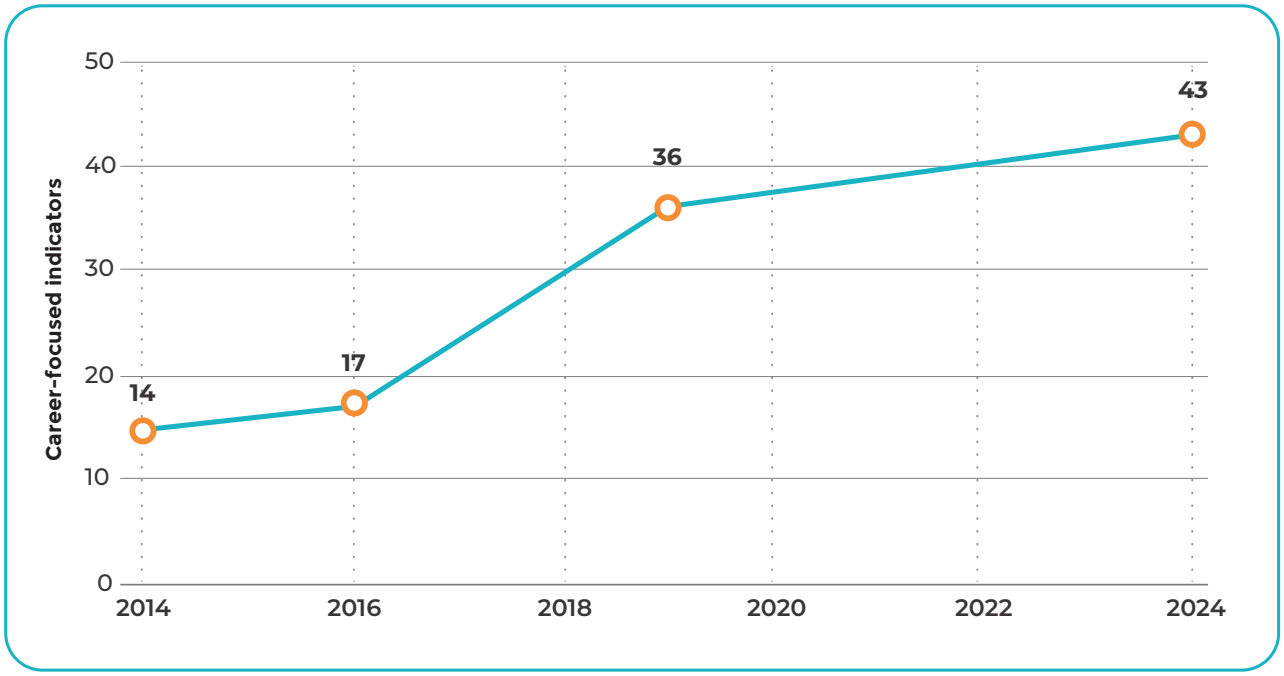
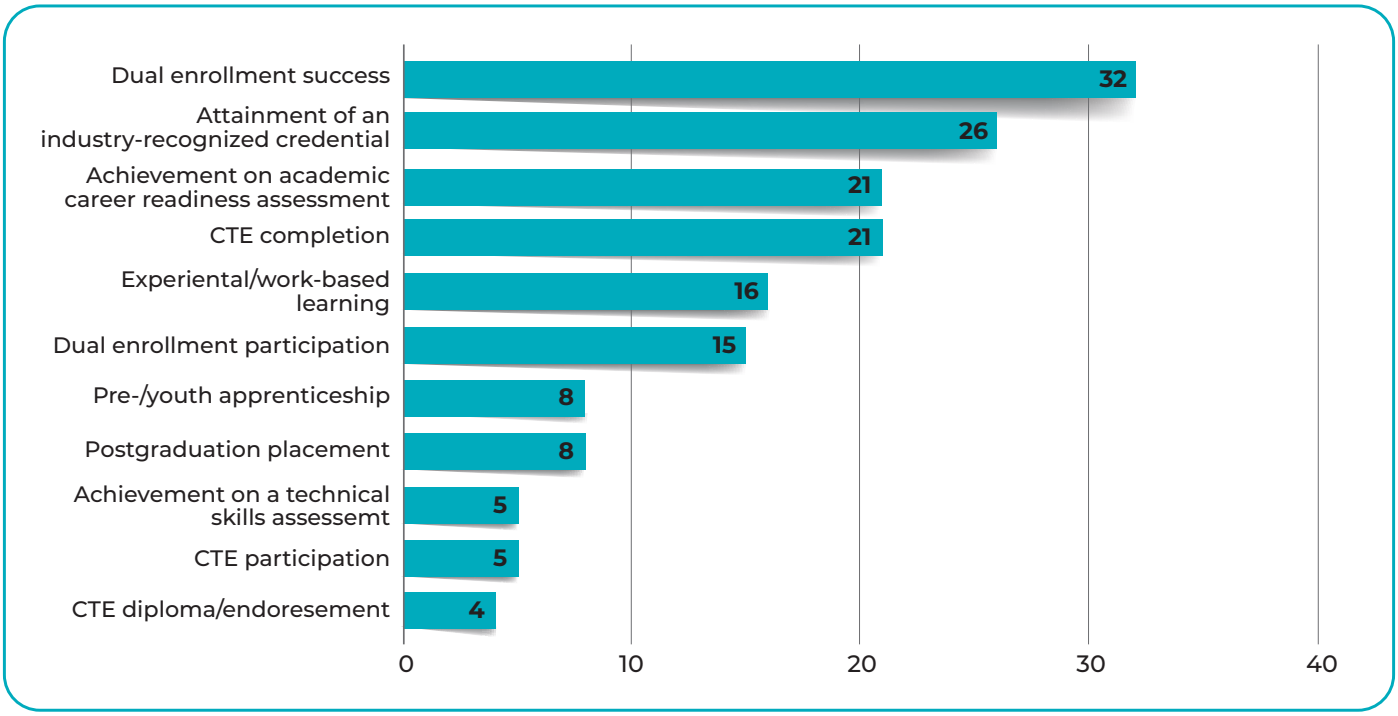


Figure 3: Career-focused indicators valued in accountability systems in 2024



Thirty-two states value dual enrollment success in their accountability formulas, making it the most common career-focused indicator. However, states vary in how they report and define dual enrollment. Some states count only learners who successfully complete a credit-bearing dual enrollment course, while others restrict qualifying courses to core academic or technical subjects. Other states still require learners to earn a specific number of dual enrollment credits/hours, such as six or more, to be counted. Furthermore, some states split dual enrollment into two separate indicators: success or participation. Fifteen states value dual enrollment participation (i.e., collecting enrollment data), although nine of these states also value dual enrollment success as an additional indicator. These discrepancies in how states define dual enrollment make comparisons of learner outcomes across states challenging, if not impossible. States also commonly report a measure of dual enrollment aggregated with AP, IB, or other advanced coursework, making knowing how learners perform on any one specific type of early postsecondary opportunity difficult.

Dual enrollment is not the only career-focused indicator that has assorted definitions across states. States have slowly adjusted indicator language after Perkins V–which introduced updated definitions of CTE completion and postgraduation placement (see Appendix B)–but not all states. CTE concentrators, program completers, and pathway completers are lumped together as a single indicator under CTE completion in Advance CTE's data due to the staggered definitions collected across state plans and technical guides that conveyed similar outcomes.

Comparably, a number of states that once included postsecondary enrollment, an indicator reporting two- and four-year institution enrollment, as a formulaic indicator now instead value "postgraduation placement." Postgraduation placement, as defined by Perkins V, refers to learners who are enrolled in an eligible type of postsecondary education, advanced training, military service, or service program or are employed during the second quarter after high school completion. Since this update in language from Perkins V, states have slowly transitioned to the updated postgraduation placement indicator in their ESSA and state accountability systems, but some still continue to value postsecondary enrollment. Three states (Connecticut, Hawai'i, Michigan) and the District of Columbia still value postsecondary enrollment as a college and career readiness indicator rather than postgraduation placement. As states are not required to align ESSA and state accountability indicators with Perkins V, the difference in indicator language further complicates attempts to compare indicator inclusion and outcomes across states.

10-Year Trends (2014–24)

Not only have states increasingly included college and career readiness components within accountability systems, but they also have increased the number of indicators within their systems. Notably, the 2019 data collection period saw a significant surge in indicator adoption, with 21 states adding at least two new indicators since 2016. States have continued to add indicators over the past couple of years, with 13 states adding two or more new indicators since 2019. Each of the 43 states with college and career readiness indicators encompasses an average of three indicators, with some having as many as seven and others having as few as one.

Presently, 15 states include five or more college and career readiness indicators within at least one accountability system. Nearly all these states operate under a metaindicator of accountability, through which learners are presented with multiple options or indicators to exhibit mastery in a college and career readiness opportunity and can satisfy the requirement by completing one or two of them. Though this design is not new, it has been further leveraged over time, likely in recognition of the multiple indicators contributing to career readiness.

With more college and career readiness indicators, states have developed various ways to package them to align with a learner's interests and postgraduation planning, such as college-ready, career-ready, or military-ready themed indicators.

For example, a learner who earns a minimum cut score on the ACT/SAT may satisfy a college-ready component that meets the school's or district's college and career readiness requirement. A different learner in the same school could instead complete two courses in a CTE program of study and earn an industry-recognized credential to satisfy the career-ready component that feeds into the college and career readiness requirement. Similarly, another learner could complete a Junior Reserve Officers Training Corps program and obtain a cut score on the Armed Services Vocational Aptitude Battery for the military-ready component that feeds into the same formulaic breakdown.

The nationwide acceptance and promotion of career-focused indicators cannot be understated, and the prospect of new career-ready offerings for learners is invigorating. However, regardless of how the indicators are spliced or how many are included in one accountability system, not all indicators will be valued at the same level or frequency. These metaindicators can further perpetuate structures that allow learners to satisfy their college and career readiness requirements by valuing one path over the other.

Standalone Versus Metaindicator

Standalone indicators measure a single outcome or performance indicator. For example, a standalone indicator for industry-recognized credential attainment would assess each school/district against a preset benchmark for attainment.

Metaindicators offer numerous ways for learners to demonstrate their preparation. For example, a learner could satisfy a college and career readiness benchmark by earning credit from an AP, IB, or dual enrollment course, though they operate as three different course and credit-earning experiences.

The advantage of standalone indicators lies in their direct connection to specific outcomes, allowing for easier identification of successes and areas needing improvement. These indicators offer clear, actionable insights and highlight trends that external partners, educators, and families can rely on for informed decisionmaking. Although metaindicators offer flexibility, they often lack data accessibility and reliability for targeted interventions and analyses.

Indicator Insights

Table 1 shows the number of states that have included each career-focused indicator in one or more accountability systems over time.

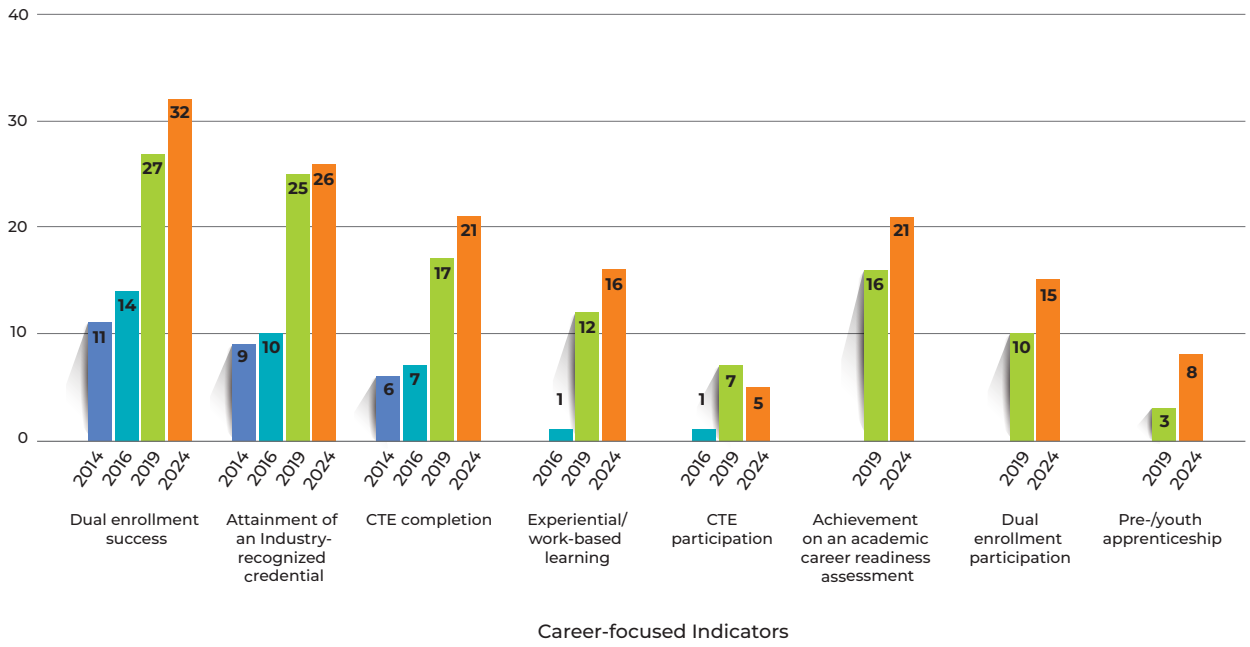
Table 1: Career-focused indicators over time (2014-24)

Career-Focused Indicator	2014	2016	2019	2024
Achievement on an academic career readiness assessment	0	5	16	21
Achievement on technical skills assessment	9	6	5	5
Attainment of an industry-recognized credential	9	12	25	26
CTE completion (pathway/program completion and concentrators)	4	7	17	21
CTE diploma/endorsement	3	2	N/A[a]	4
CTE participation	0	1	7	5
Dual enrollment participation	N/A[b]	2	10	15
Dual enrollment success	11	13	27	32
Experiential/work-based learning	0	2	12	16
Pre-/youth apprenticeship	0	0	3	8
	Postsecondary Enrollment			Postgraduation Placement
	0	4	3	8

a. During the 2019 data collection period, this data point was not collected.
b. During the 2014 data collection period, data were not differentiated by dual enrollment participation or success and instead defaulted to success.

Of the 11 collected indicators, not including postsecondary enrollment, eight indicators more than doubled between 2016 and 2019: CTE participation, CTE completion, dual enrollment participation, dual enrollment success, experiential/work-based learning, pre-/youth apprenticeship, achievement on an academic career readiness assessment, and attainment of an industry-recognized credential. Since data collection in 2019, many of these same indicators have continued to grow, with dual enrollment success as the nation's most frequently included college and career readiness indicator. Figure 4 shows the growth of the eight most frequently used indicators from 2014 to 2024.

Figure 4: Indicators with the most growth over time (2014-24)



The increasing emphasis on earning industry-recognized credentials and engaging in experiential/work-based learning as career-focused indicators aligns with state legislative priorities. In 2024, 29 states enacted 46 policies related to workforce development and experiential/work-based learning, consistent with the 48 policies that were enacted in 2023.[17] In Advance CTE's *state CTE policy tracking review*, industry partnerships and work-based learning had the second-highest rate of legislation passed in 2024, behind CTE funding and head of access and supports and data, reporting and/or accountability.[18]

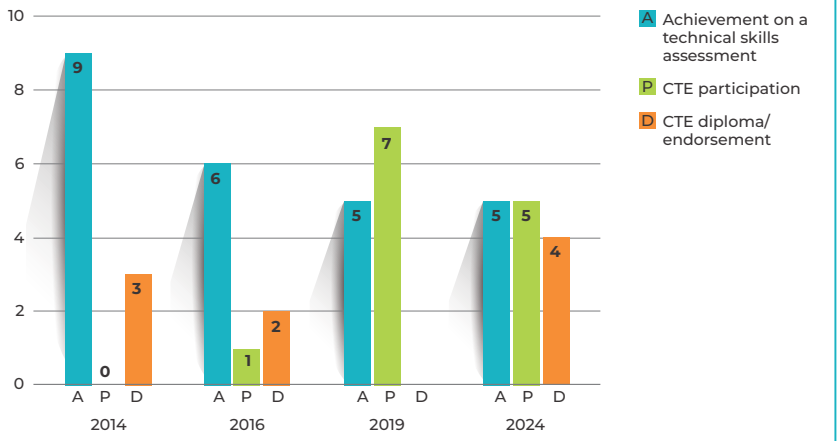
Dual enrollment success, leading the charge of career-focused indicators, has also seen widespread legislative initiatives, with 292 bills related to dual enrollment/college in high school programs introduced across 45 states just in 2023, resulting in 73 new laws.[19] Dual enrollment has been heavily supported by evidence-based research as an initiative that positively affects learner outcomes.[20] With years of data to elevate promising practices and exhibit success, dual enrollment has been scaled rapidly across states as a means for learners to attain college credit for little to no cost and support transitions into careers.

Industry-Recognized Credentials of Value

Want to learn more about how states are developing and maintaining state-approved credentials of value? Advance CTE's The State of *Career Technical Education: Credentials of Value* report dives into promising state practices and relevant policies, and it provides an interactive map to explore state approaches to credentialing.

Figure 5: Indicators with regressed or stalled inclusion over time (2014-2024)

As state and federal priorities have shifted, leaders have deprioritized some career-focused indicators. Two indicators, achievement on a technical skills assessment and CTE participation, have seen declines in inclusion over the past decade. Figure 5 highlights three indicators that have been removed from accountability systems or have not substantially grown over time.



a. During the 2014 data collection period, CTE participation was not included in any state or federal accountability systems.
b. During the 2019 data collection period, CTE diploma/endorsement was not collected.

The decline in use of achievement on a technical skills assessment as a career-focused indicator can be attributed to the increased popularity of industry-recognized credential attainment and academic career readiness assessment indicators and the replacement of the "technical skill attainment" indicator in Perkins V with the new program quality indicator. As for CTE participation, the decline in use may be due to its lack of strength as an indicator compared to CTE program completion. Recent studies have found positive outcomes for CTE concentrators after high school graduation, including postsecondary enrollment, earnings, and workforce engagement, as opposed to one-off participation.[21]

One career-focused indicator, CTE diploma/endorsement, has plateaued from 2016 to 2024. Despite this, states have expanded their high school graduation requirements to include aspects of CTE and career-focused indicators. However, states that have moved toward CTE diplomas/endorsements have seemingly removed these indicators from their federal accountability systems and enforced these alternative diplomas separately. States such as **Indiana** are considering how to encourage CTE and career readiness through optional readiness seals designed to increase graduates' flexibility by offering various pathways to exhibit postsecondary, career, and military enlistment through diploma endorsements.[22]

How states publicly report career readiness data

Although many states have made strides in publicly reporting college and career readiness indicators, there is still work to do on how states make information available. Of the 43 states with career-focused indicators in their accountability systems, 35 publicly report college and career readiness indicators through a state or accountability report card, and 19 display aggregated data through a metaindicator or composite score. A composite score calculates indicators within the college and career readiness measure and provides a flat score for how the state, school, or district performs in that particular component. How a composite score is calculated varies across states, and the result does not typically highlight which indicators are contributing to the figure more than others. This approach makes parsing out indicator enrollment and gleaning outcome data from the composite score difficult.

Though not as opaque as displaying a composite score for college and career readiness performance, publicly reporting an aggregated metaindicator, such as an overall score for AP, IB, dual enrollment, still leaves questions unanswered. For example, **Illinois** values multiple career-focused indicators across its federal accountability system, including CTE completion, dual enrollment success, pre-/youth apprenticeship, and experiential/work-based learning, among others. However, the state report card highlights only the number of career-ready indicators that learners have earned across subgroup and special populations demographics (from zero to three or more possible indicators) without specifying which indicators.[23] While this result provides an idea of career readiness attainment across learner demographics, the lack of clarity in specific indicator achievement limits understanding of indicator success/gaps in enrollment. Similar to a composite score, this approach makes determining the root cause of enrollment and outcome gaps challenging to extrapolate and therefore makes prescribing support difficult.

Some states publicly report partially disaggregated data on college and career readiness indicators by reporting data on some required indicators but not others. For instance, a state may fully disaggregate industry-recognized credential attainment by subgroup and population but not report data on dual enrollment, though both are indicators in its accountability formula on dual enrollment, though both are indicators in its accountability formula.

Another example would be **Nevada**. The state values multiple career-focused indicators in its ESSA and state accountability system, including CTE participation, CTE pathway completion, and both dual enrollment participation and dual enrollment success; however, the state publicly reports and disaggregates only CTE enrollment by subgroup on its external data dashboard.[24] Reporting on all indicators allows external partners to understand the collected indicators and learner outcomes. For example, **Georgia's** public-facing data dashboard offers a clear, disaggregated view of its career-focused indicators. Unlike many states that present AP, IB, and dual enrollment data as a single metaindicator, Georgia allows users to explore which indicators make up its composite score for accelerated enrollment, which indicators make up its composite score for accelerated enrollment, including AP, IB, and dual enrollment.[25] Collaborators viewing these reports are then able to digest Georgia's 90% accelerated enrollment rate as 70% AP enrollment, 46% dual enrollment, and 4% IB enrollment.[26]

Similarly, **Alabama** provides disaggregated data on all included career-focused indicators and specifies subgroup attainment across indicators.[27] Identifying attainment by subgroup and special populations can illuminate opportunity gaps among learners and inform supports for increased access to career readiness experiences.

Figure 6: How states publicly report college and career readiness indicators (2024)

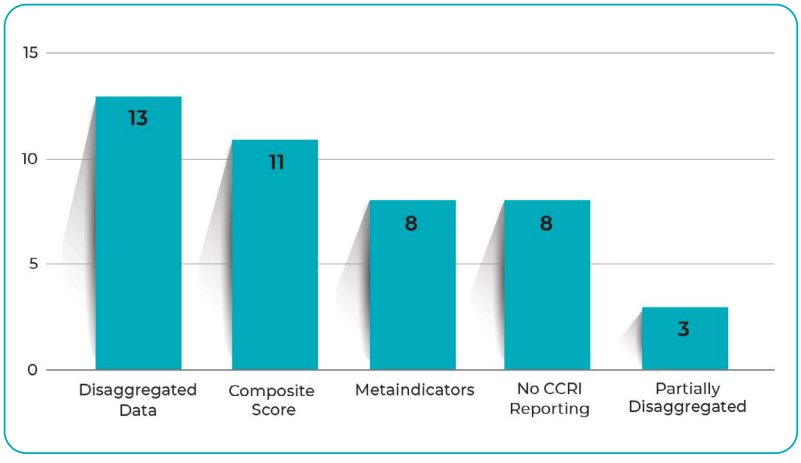


Figure 6 details how states publicly report college and career readiness indicators through report cards and dashboards. Unfortunately, some states do not include any college and career readiness reporting on their public dashboards or report cards.

Considerations

Including college and career readiness components within accountability systems aims to ensure that learners are equipped with the skills and experiences they need to excel in their post-high school graduation plans. Often, the outcome of this goal plays out differently depending on myriad factors in a state, such as the weight states have vested across their indicators in an accountability system, the complexity and alignment of these accountability systems, and how indicators are incentivized.

Critically, when a school, district, or state observes increased learner outcomes in career-focused indicators, more often than not, accountability is not the sole reason for this progress. The conditions for accountability systems to thrive and, in turn, properly incentivize college and career readiness for learners are multifaceted and can undergird a state's career preparation ecosystem. The following are some of the important conditions to consider when valuing career-focused indicators in accountability systems to support the greatest learner impact.

Strategically select career-focused indicators and align them to statewide goals

When selecting career-focused indicators for accountability systems, less can be more. Not all indicators are created equally, and when multiple options are available through a metaindicator, learner outcomes are varied by selection. Oversaturating college and career readiness components with multiple career-focused indicators can overwhelm schools and create an unequal impact of choice. Career-focused indicators are intended to not only prepare learners for postgraduation opportunities but also serve as state predictors of career readiness. States select career-focused indicators under the assumption that learners' attainment or completion of these experiences will result in the skills and knowledge needed to thrive in the workforce. However, multiple variables can lead to increased ambiguity in their predictive power. Instead, states should prioritize career-focused indicators by determining which outcomes and experiences they want to encourage and affect through their accountability systems.

The **Utah** State Board of Education strategically selects its ESSA and state accountability system indicators to align with its statewide strategic plan. The state strategic plan has long-term goals to increase access to personalized teaching and learning experiences, which include an implementation strategy to partner with Utah technical colleges, higher education, and workforce services to align competency-based learning and postsecondary success.[28] In practice, this strategy is furthered through increasing access to dual enrollment opportunities for special populations and establishing durable skills across CTE course strands and standards. Intentionally, Utah values only CTE concentrator status and dual enrollment success in its ESSA and state accountability systems.

States can align their accountability systems and, in turn, their chosen career-focused indicators with larger education goals, such as a postsecondary attainment goal or workforce development metrics. When states, selected their program quality indicators for Perkins V, they relied heavily on input from their key audiences, such as industry partners, to make the final decision. This approach has allowed states to prioritize efforts around experiential work-based learning or credential attainment, for example, if they were identified as key priorities by the field. If states have yet to establish statewide goals for college and career readiness outcomes, they can do so by anchoring them within the state's vision for postgraduation success, setting specific and contextually relevant targets, and aligning them with broader education priorities and governance structures to drive meaningful progress.

Choose standalone career-focused indicators in place of a metaindicator for college and career readiness

States can determine how they will weigh their career-focused indicators within the college and career readiness measure within the overall accountability component. With many states operating under a metaindicator, a school may be able to gain full points in the accountability formula without learners demonstrating career readiness. This situation occurs because of the joint nature of college-ready and career-ready indicators coupled under the umbrella of college and career readiness, allowing learners to select a college-ready experience to satisfy the entire indicator. States can work to avoid this result by creating within their accountability formulas a standalone indicator of career readiness that must be completed by learners to satisfy a part of the requirement. For example,

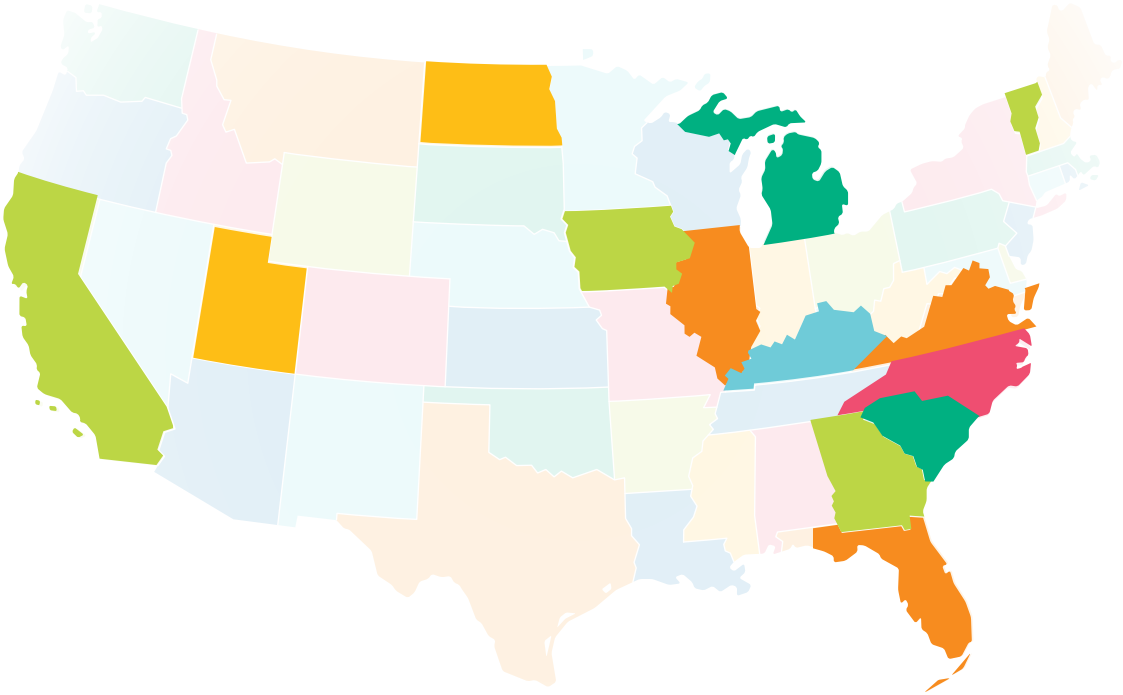
Hawai'i includes the CTE concentrator rate as an accountability requirement. This standalone indicator may have more impact on encouraging schools and districts to maintain robust CTE programs of study and call learners to not only enroll in these programs but also persist.

If a state considers all career-focused indicators within its offerings to be genuinely equivalent and interchangeable, the metaindicator approach may fit well into an accountability formula. However, states should publicly report the outcomes for each indicator included in the metaindicator to provide useful data to practitioners and external partners.

Without enrollment and outcome data on each disaggregated indicator within the metaindicator, there is less information to interpret and more opportunity for misinformed assumptions. For example, if one high school completes its college and career readiness benchmark primarily through CTE pathway completion, and another high school in the same district satisfies it primarily through AP/IB enrollment, there is no way to distinguish this difference or assess the implications. For this reason, metaindicators can mask inequities without revealing which learners are participating in select college and career readiness opportunities.

Publicly report career-focused outcome data and disaggregate them by indicator and learner demographics

Publicly reporting data on accountability indicators can provide comprehensive insights on their attainment, outcomes, and accessibility. Of the 35 states that publicly report college and career readiness data, only 13 **(California, Florida, Georgia, Illinois, Iowa, Kentucky, Michigan, North Carolina, North Dakota, South Carolina, Utah, Vermont,** and **Virginia**) disaggregate data for each indicator within their accountability system. States should consider disaggregating college and career readiness data to accurately display learner attainment and outcomes and avoid oversimplifying figures or masking valuable insights.



Evaluate the impact of career-focused indicators to determine the greatest effect on learners

Assessing the impact of career-focused indicators on learners post-high school graduation can reveal which have the greatest long-term effect on learners' chosen path. States can work to benchmark current initiatives to decide whether their career-focused indicators sufficiently measure career readiness and are appropriate for accountability systems. Check out Advance CTE's *Career Readiness Metrics Framework* tool and related considerations for constructing valuable indicators.

Evaluating career-focused indicator outcomes begins with high-quality, valid data collection. As the number of career-focused indicators continues to grow, states will have to generate processes for validating self-reported and third-party data for relevant indicators.

Data collection can be challenging for indicators that are experience based and do not rely on standardized assessments, such as work-based learning or postgraduation placement. As states navigate outcome analyses, they should take stock of what data are already being collected and make decisions on what else should be included, using administrative data sources when possible. Coordination between data systems and state offices will be crucial in creating channels to track outcome trends that influence indicator use. With little evidence-based research on college and career readiness practices to date, this next phase of data collection and research on indicator outcomes will propel the nation toward new horizons for equipping learners for the world of work.

Conclusion

Since the last edition of *Making Career Readiness Count* six years ago, there has been great progress in the inclusion of CTE and career preparedness in school curricula and increased policies to promote high-quality programs and offerings. Based on data from the past decade, the country has embraced the opportunity to prepare learners for all career pathways, which has been reflected in federal and state accountability systems. Now, states must continue guiding districts and schools in implementation by offering clear direction and a strategic vision for career readiness, ensuring that all learners have meaningful opportunities to demonstrate career readiness.

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Appendix A: Methodology

The primary sources of information and data for this research report and executive summary were a landscape analysis and state interviews.

The authors identified career-focused indicators in state accountability systems by examining approved plans for ESSA, as well as state-level accountability systems in states with dual systems, and published accountability documentation and technical manuals on state education agency websites in spring and fall 2024. All data collected through online sources went through quality assurance for accuracy and completeness.

If a potential career-focused indicator was found, the authors noted the following characteristics:

- the most recent year that the source material (e.g., ESSA plan, technical guide) had been
- approved or amended
- the definition of the indicator (e.g., CTE pathway/program completion, dual enrollment/credit,
- experiential/work-based learning, industry credential, achievement on an assessment)
- whether the indicator is used for federal or state-level accountability
- which school level (i.e., high school and/or middle grades) the indicator is included in
- whether the career-focused indicator is a standalone indicator or is tied to achievement or
- attainment on other non-career-focused indicators (e.g., earning AP credit, meeting ACT/SAT
- benchmarks)
- how the percentage of learners achieving and/or participating in the indicator is established
- (e.g., the "denominator" of the ninth-grade cohort, high school graduates, 11th graders)
- the proportion of the accountability formula for which the career-focused indicator is responsible

The authors also conducted seven semistructured virtual interviews with representatives from six states, including participants from state education departments, community college systems, and technical college systems. Participants were selected for their direct involvement in their states' college and career readiness and accountability efforts. Interviews were recorded and transcribed to allow for analysis to identify themes, patterns, and promising practices. In winter 2025, the authors shared state-specific findings from the interview data with interviewees and state education agency staff and sought approval or clarification. The authors then compiled longitudinal data from the three previous *Making Career Readiness Count* reports to provide an updated analysis of how states value college and career readiness in accountability systems over time.

Appendix B: Glossary

Achievement on academic career readiness assessment: An assessment that measures a learner's proficiency in the academic knowledge and skills required for career readiness.

Achievement on a technical skills assessment: Results on a test used to evaluate CTE learners' attainment of technical skills that are aligned to industry standards where available and appropriate. Technical skills assessments are typically given at the end of a CTE course or pathway to validate the learning.[29]

CTE completion (secondary): A learner who is served by an eligible recipient and has completed at least two courses in a single CTE program or program of study.[30]

CTE diploma/endorsement: A CTE or technical endorsement on top of graduation requirements or a course of study that is aligned with admissions requirements for postsecondary institutions, typically agreed upon by state higher education agencies or systems.[31]

CTE participation (secondary): Refers to a learner's completion of no less than one course in a CTE program or program of study.

CTE pathway (secondary): A sequence of academic, career, and technical courses and training that begins as early as ninth grade and leads to progressively higher levels of education and higher skilled positions in specific industries or occupational sectors.[32]

Dual enrollment participation: Refers to a learner's enrollment in one or more postsecondary courses through a formal partnership between at least one institution of higher education and at least one local educational agency, prior to high school graduation. While enrolled, the learner engages in college-level coursework; however, participation does not necessarily result in the attainment of postsecondary credit or progress toward a postsecondary credential.

Dual enrollment success: Refers to a learner's completion in a program established through a partnership between at least one institution of higher education and at least one local educational agency. It enables secondary school learners who have not yet graduated to enroll in one or more postsecondary courses and earn postsecondary credit that is transferable to the partnering institutions of higher education and applicable toward the completion of a degree or a recognized educational credential, as defined by the Higher Education Act of 1965.[33]

Experiential/work-based learning: A type of learning experience, such as job shadowing, internship, apprenticeship, or a service-learning project, that allows learners to apply academic and technical knowledge and skills through real-world experience and engagement with adults outside of high school and gain experience working in an environment related to their CTE pathway.[34]

Industry credential/recognized postsecondary credential: A credential awarded by a certification body, such as an industry association or company, based on an individual demonstrating through an examination process that they have acquired the designated knowledge, skills, and abilities to perform a specific occupation or skill. The examination can be written, oral, and/or performance based. Certification is a time-limited credential that is renewed through a recertification process.[35]

Postgraduation placement: Reflects learners who, during the second quarter after high school completion, remain enrolled in postsecondary education, continue their education in a postsecondary institution, participate in advanced training, serve in the military, engage in a service program supported by Title I of the National and Community Service Act of 1990 (42 U.S.C. 12511 et seq.), volunteer as outlined in Section 5(a) of the Peace Corps Act (22 U.S.C. 2504(a)), or secure or maintain employment.[36]

Pre-/youth apprenticeship: A type of learning program designed to prepare learners for entry into registered apprenticeship programs or other job opportunities.[37]

Registered apprenticeship program: An industry-driven, high-quality career pathway through which employers can develop and prepare their future workforce and individuals can obtain paid work experience with a mentor and receive progressive wage increases; classroom instruction; and a portable, nationally recognized credential.[38]

Appendix C: Career-Focused Indicators Valued in 2024

	2024										
State	CTE participation	CTE completion	CTE diploma/ endorsement	Dual enrollment participation	Dual enrollment success	Pre-/youth apprenticeship	Experiential/ work-based learning	Achievement on a technical skills assessment	Achievement on an academic career readiness assessment	Attainment of an industry-recognized credential	Postgraduation placement
Alabama					■				■	■	■
Arizona	■	■			■		■	■	■	■	■
Arkansas					■		■				
California		■		■	■	■					
Colorado										■	■
Connecticut	■			■	■		■				
District of Columbia				■							
Delaware		■			■		■		■	■	
Florida					■				■	■	
Georgia		■			■		■		■	■	
Hawai'i		■									
Idaho				■	■	■	■	■		■	
Illinois		■			■	■	■		■	■	■
Indiana			■								
Iowa		■		■							
Kentucky					■	■	■			■	
Louisiana					■				■	■	
Maryland		■		■	■	■			■	■	
Massachusetts				■	■		■				
Michigan		■			■						
Mississippi				■	■				■	■	
Missouri				■	■				■	■	
Montana		■			■						
Nevada	■	■		■	■						
New Hampshire		■			■	■			■	■	
New Mexico	■	■		■	■				■		
New York			■	■				■		■	
North Carolina									■		
North Dakota		■			■		■	■	■	■	
Ohio			■		■	■	■			■	■
Oklahoma		■		■		■	■				
Pennsylvania				■			■		■	■	■
Rhode Island					■					■	
South Carolina		■		■			■		■	■	
South Dakota	■		■				■		■	■	
Tennessee					■				■	■	
Texas		■			■					■	■
Utah		■			■						
Vermont					■				■	■	■
Virginia		■			■		■		■	■	
Washington					■						
West Virginia		■			■						
Wyoming		■			■			■	■	■	
Totals	**5**	**21**	**4**	**15**	**32**	**8**	**16**	**5**	**21**	**26**	**8**

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