Significant economic shifts—spurred by rapid technological advancement and the Great Recession—fundamentally altered the path toward economic security and self-sufficiency in the United States, with major consequences for education and work. No longer are college and career readiness entwined in name only. More states and communities are prioritizing career pathways that start in high school and culminate in a postsecondary credential, and students are exploring their career interests earlier. As this shift takes hold, state boards of education can play a vital role in ensuring that high-quality opportunities are available to all students, especially those who are disproportionately underrepresented in high-value job fields.

Employment with family-sustaining wages now requires postsecondary education. Individuals with only a high school diploma have about a 30 percent chance of earning more than $30,000 a year, and most that do are male. According to the Georgetown Center on Education and the Workforce, nearly every job created during the recovery after the Great Recession required some postsecondary education or training. These data and even more recent workforce projections recognize, however, that not all students need a bachelor’s degree to thrive in the workforce. Nationally, more than 30 million “good jobs”—ones that provide a family-sustaining wage—are held by individuals with less than a bachelor’s degree and more than a high school diploma. This level of postsecondary education and training—postsecondary certificates, journeyman licenses, industry-recognized credentials, and associate degrees—represents a significant opportunity. In fact, nearly a third of all associate’s degree holders and many workers with one-year certificates earn more than the average worker with a bachelor’s degree.

<table>
<thead>
<tr>
<th>Total Number of CTE/Career Readiness Legislation Passed by Year</th>
<th>Number of States Passing CTE/Career Readiness Legislation by Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>139 (2016)</td>
<td>42 (2016)</td>
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State Efforts to Promote Career Readiness

Education policy leaders at the K-12 and higher education levels are responding to the economic reality by setting more ambitious goals for postsecondary credential attainment and making college and career readiness a larger focus of their high school strategies. And they are doing so with a more explicit focus on closing equity gaps, recognizing that past efforts to improve students’ career readiness have far too often tracked students of color and low-income students into low-quality offerings (see also Austin Estes and Brianna McCain’s article, page 10). Over the past four years, in particular, the country has witnessed increased momentum toward high-quality career readiness for all students. During that time, nearly every state has passed legislation pertaining to career readiness or career and technical education (CTE), accounting for more than 600 bills total (figure 1). Three areas account for the most policy growth:

- **Employer engagement.** States are increasingly calling on the employer community to partner in designing career pathways in secondary schools that develop the knowledge and skills necessary for success in high-skill, high-demand jobs.

- ** Accountability.** More than 40 states value students’ college and career readiness in their high school accountability systems, more than double the number of states a few years back (figure 2). States are emphasizing four types of measures: 1) college and career preparatory courses and pathways; 2) assessments indicating postsecondary preparation or demonstrating technical skill acquisition; 3) experiences outside the classroom, such as work-based learning, that help students learn and demonstrate professional skills; and 4) transitions beyond high school.

- **Work-based learning.** More than half of the states passed legislation in 2018 on using work-based learning opportunities to connect students with industry.
more high-quality, scalable partnerships and disseminate information about the conditions and strategies necessary for successful implementation of youth apprenticeships. (See also the article by Wanda Monthey, page 30).

The focus on strengthening and expanding career readiness is likely to continue. In 2019, more than half of governors’ state of the state addresses included some mention of career readiness.

**Keeping Tabs on Quality**

As states dramatically expand career readiness opportunities, state boards must help ensure that the opportunities are high quality, set students on a path to postsecondary education and training, and are available to students regardless of skin color, geography, or family income. Board members should take the following actions to put all students on a path to economic opportunity.

**Lock arms with higher education leaders to create pathways that articulate into and through postsecondary education.** As states look to scale high-quality programs of study, partnerships between K-12 and higher education will be imperative. State board members should work alongside other K-12 and higher education leaders to set a vision for quality that guides all state actions to expand and strengthen career pathways. The true mark of quality will come when each pathway 1) leads to measurable academic gains and increased postsecondary credential attainment for students in both the short and long term; 2) enables youth to earn fully transferrable postsecondary credits or industry-recognized credentials that have labor market value while in high school; 3) combines rigorous academic content with opportunities for applied learning in and outside the classroom; and 4) is supported by aligned academic and career advising across K-12 and higher education. Leading states such as Ohio and Kentucky have developed approaches to ensure that courses directly articulate for postsecondary credit at institutions statewide, accelerating students on a path to credential attainment.

The elements of a high-quality pathway should be prioritized in state funding and accountability systems. Through federal Perkins or state dollars, states can offer direct or incentive funding to promote pathways that help students gain postsecondary credit while in high school and articulate directly into opportunities in higher education to earn a credential with labor market value. As states continue to improve their high school accountability systems, they should prioritize measures such as dual enrollment, industry-recognized credentials, and work-based learning.

It is particularly important that states be explicit about how all these efforts align—to each other and to a student's pathway. For example, a dual-credit experience that is disconnected from a student's pathway can be a positive experience, but it will not contribute to a student's postsecondary success in the same way a fully aligned, integrated opportunity to earn early postsecondary credit would. Delaware has worked to address both issues. The state phases out funding for any programs that do not provide students with an opportunity to earn postsecondary credit or an industry-recognized credential. And in the state's accountability system under the Every Student Succeeds Act, the elements of a high-quality career pathway—such as dual credit within a state-approved program of study—are included in the state's career preparedness measure.

**Use labor market data to create and phase out career pathways.** States need a demand-driven system for determining which educational programs and pathways warrant continued development and investment, and which should be scaled back or phased out. The foundation of those decisions should be traditional and real-time labor market information and workforce projections. These data present a robust vision of current and future job openings and associated wages, often at both the regional and state levels, which can be mined to help state leaders better understand the skills and credentials most in need today and in the future within priority industries.

States should leverage this information—and engagement with employers—as the starting point for pathway approval, renewal, and phaseout. For instance, Tennessee approves and phases out state-approved programs of study based on alignment with workforce projections and a review of alignment between course standards and industry needs. New Jersey code
State board members should request that the state agency provide data on availability of pathways, enrollment in the courses within those pathways, and the number of students completing the full sequences of courses within those pathways. All of those data should be disaggregated by race/ethnicity, gender, and income status and then mapped across geographic regions to identify gaps and showcase schools and pathways within schools that have closed equity gaps. The data should be provided to board members and other state policymakers annually and should be easily accessible to the public and researchers for further study.

Kentucky, for example, developed “heat maps” that display access and enrollment in pathways aligned to high-demand industry sectors by school district. The maps have helped the state education agency apply a data-driven approach for prioritizing technical assistance to districts (figure 3).

Data should be an asset in this work; instead, it is an Achilles’ heel.

Greater than 60%
50% to 60%
Less than 50%
Grades K-8 Only/No Data

Source: Kentucky Center for Statistics

Make data on high-quality pathways transparent. State boards must ensure that information on high-quality opportunities statewide is available and use that information to catalyze state and local action. Unfortunately, in most states, those data either are not readily available or are rarely used to inform critical policy decisions. According to a recent survey by Advance CTE, Education Strategy Group, and others, less than half of state CTE directors are confident that their current data systems can give them the information they need to make meaningful programmatic and policy decisions about secondary and postsecondary career readiness opportunities.

State board members should request that the state agency provide data on availability of pathways, enrollment in the courses within those pathways, and the number of students completing the full sequences of courses within those pathways. All of those data should be disaggregated by race/ethnicity, gender, and income status and then mapped across geographic regions to identify gaps and showcase schools and pathways within schools that have closed equity gaps. The data should be provided to board members and other state policymakers annually and should be easily accessible to the public and researchers for further study. Kentucky, for example, developed “heat maps” that display access and enrollment in pathways aligned to high-demand industry sectors by school district. The maps have helped the state education agency apply a data-driven approach for prioritizing technical assistance to districts (figure 3).

Data should be an asset in this work; instead, it is an Achilles’ heel. The path to closing equity gaps starts with states using disaggregated data to drive conversations about high-quality opportunities for students, especially students from traditionally underserved student populations or geographies. For instance, finding that only one-quarter of information technology certificates are awarded to females can help education
leaders grapple with questions about access, stigma, advising, supports, and communications. All states must build better linkages across sectors so that educators and policymakers can have actionable data.

**Ensure that the state accountability system prioritizes high-value, industry-recognized credentials.** States and communities have begun to recognize that industry-recognized credentials play an important role in education system’s responsiveness to the new economy. Yet with over 4,000 credentialing bodies nationwide offering thousands of industry-recognized credentials across sectors, very little information is available about their value. How can states that have encouraged the growth of industry-recognized credentials determine which ones to scale up?

To help answer that question and guide states’ work in this area, Education Strategy Group in partnership with CCSSO and Advance CTE convened a work group of state and national leaders from K-12, higher education, and industry to develop a road map for how states can identify which credentials the labor market values and what approaches improve credential attainment and reporting. Our report, “Credential Currency: How States Can Identify and Promote Credentials of Value,” argues that high-quality credentials (those with “value”) either 1) help an individual find employment or advance in the workforce and/or 2) accelerate a student’s progression into and through
postsecondary education and training. States need to place their greatest focus on the credentials that provide the greatest value to students and employers. According to the report, to do so, states should do the following:*

- Identify high-value credentials through analysis of employer signals and determination of those that count for postsecondary credit. All states should build a cross-sector priority credential list to use in programmatic and funding decisions.
- Incentivize attainment of high-value credentials by demonstrating their value for students’ futures; providing funding for attainment to schools and districts; including priority credentials in state accountability systems; and publicly communicating the importance of specific credentials.
- Collect and report credential attainment data without relying upon self-reported information.

To support states in this critical work, ESG has developed tools for implementing these recommendations. Figure 4 illustrates the process that states may take to identify and prioritize credentials with labor market value. ESG recently published work that provides state leaders with tools to guide them through that process.9

State boards should leverage their authority and bully pulpit to ensure that policies and regulations distinguish between high- and low-value credentials; there is a robust process, including the use of labor-market information and employer feedback, to determine which credentials are valued in the workforce; and the information collected from schools and districts is at the individual student level so that policymakers can monitor access and success disaggregated by student groups.

With 26 states including industry-recognized credentials in their high school accountability systems—up from 11 prior to the passage of the Every Student Succeeds Act—and others contemplating whether such credentials should count toward their postsecondary attainment goals, the stakes have never been higher.10 The choices states make about which nondegree credentials “count” will either encourage learners to head down a meaningful career path or unwittingly steer them toward lower value credentials that do not lead to good jobs.

Accelerating Progress, Closing Gaps

States have done a tremendous job over the past few years reframing and expanding career readiness opportunities for K-12 students. This positive momentum should be celebrated. It is leading to tangible improvements in student outcomes and as a result will likely continue for the foreseeable future. As states work to accelerate that progress, quality must be the driving consideration. These opportunities should be built on a foundation of concrete, not sand. Otherwise, states will jeopardize the momentum to date, fail to meet the evolving needs of the workforce, and deliver empty promises to students.

A deep focus on quality is critical not only to prepare students for the workforce but also to advance equity: States have a responsibility to make sure all students, especially those from traditionally underserved backgrounds, have the skills and knowledge they need to be successful in life after high school. We must not accept our past of tracking students of color and those from low-income families into low-quality career pathways as our future. ■

**The choices states make about which nondegree credentials “count” will either encourage learners to head down a meaningful career path or unwittingly steer them toward lower value credentials.**

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2 Anthony P. Carnevale et al., “America’s Divided Recovery: College Haves and Have Nots” (Washington, DC: Georgetown University Center on Education and the Workforce, June 2016).
3 Anthony P. Carnevale et al., “Good Jobs that Pay Without a BA” (Washington, DC: Georgetown University Center on Education and the Workforce, 2017).
10 “Making Career Readiness Count.”

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