

National Association of State Boards of Education

FIFTH INDICATOR:

→ Career and Technical Education

By Don Long

States have made great strides toward focusing their education systems on college and career readiness. But far too many students—especially low-income students and students of color—still are not graduating from high school or are graduating without the knowledge, skills, and dispositions they need.¹

The Every Student Succeeds Act (ESSA) opens the door for a more holistic approach to accountability that can enhance career readiness.² ESSA calls for adding a measure of school quality and student success, dubbed the fifth indicator. With stakeholder input, many states are exploring ways to incorporate career and technical education (CTE)—along with work-based learning, industry credentials, and dual enrollment in high school courses for college-level credit—

as their fifth indicator.³ This selection aligns with a trend toward states articulating college and career pathways as equal means for student success.⁴

In 2016, 34 states included career-focused indicators in their accountability or reporting systems, an increase from 29 in 2014. Of these 34, 20 include at least one career-ready indicator (mostly dual enrollment), and 11 use a composite measure of college and career readiness.⁵ For some states, adopting CTE as a fifth indicator builds on earlier efforts and adds the leverage of accountability. For others, it marks a first step in raising CTE's profile (see map).

There are several benefits to adding CTE accountability measures. Students with greater exposure to CTE are “more likely to graduate from high school, enroll in a two-year college, be employed, and earn higher wages.”⁶

These students are just as likely as non-CTE peers to pursue a four-year degree college.

High-quality CTE exemplifies the deeper learning competencies students need in a continuously changing work environment: problem solving, critical thinking, applied learning, and learning to learn.⁷ Raising the profile of CTE in accountability systems can improve student outcomes and help bridge the historic divide between academic and technical education by promoting their greater integration to benefit all students.

This report examines ESSA plans and culls those that focus on CTE.⁸ These plans reflect stakeholder discussions and point to options for using CTE data in ESSA and state accountability systems, for state and/or local reporting, and as informal indicators for districts' and schools' own use. And many states chose to defer selection of indicators due to research or data issues.

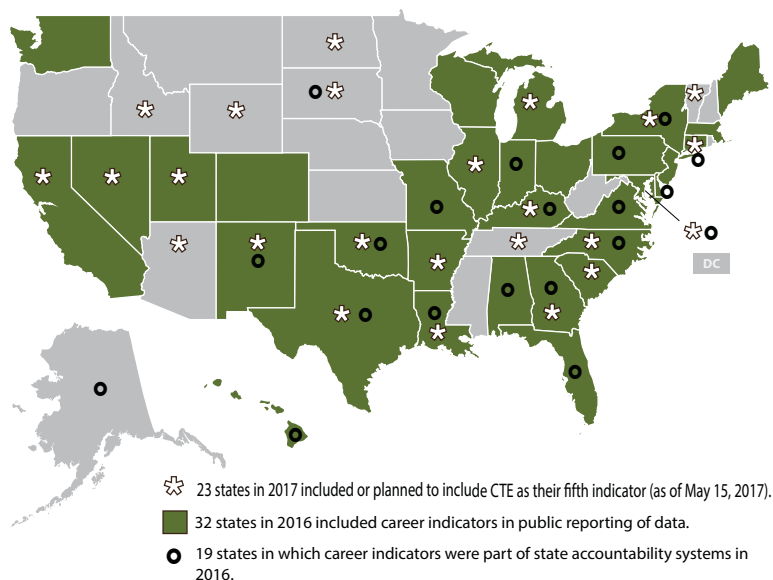
CTE IN THE FIRST WAVE

So far, 23 states out of 42 reviewed are proposing to include CTE as a fifth indicator. Of the 17 that submitted ESSA plans in spring 2017, 10 propose CTE as their fifth indicator.⁹ Seven of these also include dual enrollment; five add work-based learning as a third element.

Some states are intentionally associating CTE and academic rigor in the design of their accountability systems. For example, **Michigan's** 11-12 Advanced Coursework indicator uses a 100-point index that measures the percentage of students in grades 11 and 12 who are successfully completing advanced coursework through dual enrollment, early middle college, CTE, AP, and IB programs.

Like other states, **Tennessee** wrestled to address a trade-off in accountability design between complexity for greater accuracy and simplicity for greater clarity. “We want to balance priorities and ensure it is aligned to our strategic plan goals, address opportunity and inequities, and highlight success and areas for growth within and across schools and districts,” the state's education depart-

States Opt to Include CTE in Accountability and Reporting Systems



Source: Drawn in part from Council of Chief State School Officers, *How States Are Making Career Readiness Count: A 2016 Update* (Washington, DC: CCSSO, 2016), table 1.

ment said of its plan. “It is equally important that this metric ... can be understood by all stakeholders.” Tennessee’s Ready Graduate fifth indicator defines three equal pathways—university, college, and career—and the third includes CTE coursework that culminates in industry certification. Tennessee anticipates eventually incorporating performance-based measures beyond enrollment.

Connecticut and **Illinois** are considering robust accountability systems of 12 and 26 indicators, respectively, reflecting the broad scope of the discussions around accountability in their states. However, having so many measures risks reducing the weight of the fifth indicator. For example, Connecticut’s Preparation for Postsecondary and Career Readiness indicator includes CTE participation and work-based learning but has an overall weight of 3.7 percent, compared with 22.2 percent for academic achievement and 29.6 percent for academic growth.

The Illinois State Board of Education is developing a “meta-indicator” of college and career readiness that includes CTE, work-based learning, industry credentials, and dual enrollment. Research cited in its plan raises a significant concern that “siloeing students and fields by developing a narrower approach to college- and career-ready indicators ... could incentivize schools and districts to help students meet college- or career-ready benchmarks rather than a more comprehensive set.”¹⁰

North Dakota’s Choice Ready Framework articulates academic-, career-, and military-ready options. Its career-ready option is one of the most robust in the April cohort, including work-based learning experiences, community service, dual enrollment, WorkKeys tests of job skills, technical assessment, and industrial credentials.

THE SECOND WAVE

The remaining 34 states submitting plans in September can refine their approaches after the spring-submitted plans undergo the U.S. Department of Education’s peer review and approval process. Of the fall cohort, 25 states were reviewed, and so far 13 intend to use CTE as their fifth indicator. **Maryland** includes industry credentials and dual enrollment, and **South Carolina** includes work-

based learning and industry credentials.

Multiple states in the fall cohort are using the fifth indicator to emphasize the equal value of college and career pathways. South Carolina includes college and career readiness, giving points in the latter for CTE, youth apprenticeship programs, industry credentials, the WorkKeys test, and Armed Services Vocational Aptitude Battery.

Fourteen states lack published state plans but provide other information. Of these, California and Kentucky are the most likely to include a robust measure of career readiness. **California** is considering multiple measures for its three-tiered state and local accountability measure for college and career readiness, with a “concise subset” for the fifth indicator. **Kentucky**, long a leader in this area and one of the few states to link K-12 and employment data, makes college and career readiness a measure of academic proficiency, not a fifth indicator. Other states to watch include New York, North Carolina, South Dakota, Pennsylvania, Rhode Island, and Utah.

State boards exploring CTE measures should consider three issues critical to ensuring equity and excellence. First, lifting up career readiness in accountability systems must be accompanied by rigorous review and approval of high-quality CTE programs, as well as dual enrollment, to ensure alignment with high-wage, high-demand jobs and industry needs.¹¹ Second, state boards should ascertain whether there are disparities in access to quality programs by student subgroup, school factors (e.g., counseling), and geography (e.g., rural schools). Finally, state boards should monitor enrollment patterns and student outcomes to see whether student subgroups are disproportionately enrolled in CTE programs, especially low-quality ones.

This new measure of school quality and student success has engaged educators and stakeholders in shared learning about using accountability and data to reflect, highlight, and achieve educational priorities and values. They have wrestled with difficult issues and potential unintended consequences. Does an emphasis on CTE complement or contradict

other indicators? Does it unfairly penalize districts and schools with limited access to CTE?

Fifth-indicator discussions show that accountability itself is a learning system, continuing to evolve as priorities change and as research and data capacity support it.

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NOTES

1. See, e.g., Jennifer DePaoli et al., “Building a Grad Nation: Progress and Challenge in Raising High School Graduation Rates,” Annual Update (Washington, DC, and Baltimore: Civic Enterprises and Everyone Graduates Center at Johns Hopkins University, 2016).
2. Chad Aldeman, “Grading Schools: How States Should Define ‘School Quality’ Under the Every Student Succeeds Act” (Washington, DC: Bellwether Education Partners, 2016).
3. Eighty-two percent of high schools have dual enrollment coursework, and nearly half of these have a CTE focus. Education Commission of the States, “CTE Dual Enrollment: A Strategy for College Completion and Workforce Investment” (Denver: ECS, March 2014). See also Jobs for the Future and Achieve, “Integrating Earning College Credit in High School into Accountability Systems” (August 2015).
4. Education Strategy Group and CCSSO, “Destination Known: Valuing College AND Career Readiness in State Accountability Systems” (March 2017); Ace Parsi, “Career Readiness and CTE in a Post-NCLB World,” *Policy Update* 23, no. 14 (Alexandria, VA: NASBE, June 2016).
5. Advance CTE and Achieve, “How States Are Making Career Readiness Count: A 2016 Update” (May 2016).
6. Shaun M. Dougherty, “Career and Technical Education in High School: Does It Improve Student Outcomes?” (Washington, DC: Fordham Institute, April 2016).
7. Lori Meyer, *Toward a Better Balance: Bolstering the Second “C” in College and Career Readiness*. Study Group Report (Alexandria, VA: NASBE, October 2015); National Research Council, “Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century” (Washington, DC: NRC, 2012).
8. The analysis examines 17 state plans submitted this spring plus 25 states with substantial information about their current thinking as of May 15, 2017. Unless otherwise noted, the findings regarding CTE as a fifth indicator are at the high school level.
9. Arizona, Connecticut, Illinois, Michigan, New Mexico, and Tennessee.
10. Advance CTE and Achieve, “How States Are Making Career Readiness Count.”
11. Tennessee’s Jump Start is an exemplary, comprehensive system for developing and improving quality CTE. In addition, the New Skills for Youth initiative brings together 10 states to strengthen CTE. Partnership for 21st Century Skills, “Up to the Challenge: The Role of Career and Technical Education and 21st Century Skills in College and Career Readiness” (Washington, DC, 2010).