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College and Career Readiness, or a New Form of Tracking?

Lynne Graziano and Chad Aldeman

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Introduction

In the past few years, there's been a surge of interest in expanding the scope of high schools. Shifting away from an earlier era that focused primarily on graduation rates and achievement tests, states have built a range of college- and career-readiness measures to track things like whether students are taking and passing advanced courses, completing industry certifications, or pursuing other work-based learning opportunities.

No longer are high schools being held accountable just for low-level standardized tests and graduation rates.

On one hand, we're encouraged by states moving toward a more holistic picture of what makes for a successful high school experience. No longer are high schools being held accountable just for low-level standardized tests and graduation rates. Instead, states are asking their high schools to help their students complete key steps to be successful in college and career. These measures are in line with what we know about educational attainment and how it translates into improved life outcomes for students. As of 2019, the median earnings of associate and bachelor's degree recipients working full time were 24% and 61% higher, respectively, than those of high school graduates.[1] The benefits of higher education were not just limited to individuals but also accrued broader societal benefits: Workers who hold higher degrees pay more in annual taxes than high school graduates.

But expanding opportunities to help students achieve success in college and careers is not guaranteed to be universally beneficial to all students. There are two discrete ways these divergences are already emerging.

First, not all learning routes lead to the same outcomes. Even for people who complete a bachelor's degree, a study by the Georgetown Center on Education and the Workforce found that the lifetime difference between the highest- and lowest-paying college majors

was $3.4 million.[2] For example, a finance major with a bachelor's degree can expect a median salary of $73,000, compared to an average of $39,000 for those with a bachelor's degree in early childhood education.[3]

Second, it's not enough for states to promote high school college and career preparation *in general*; they also need to ensure that the promise and potential economic gains of the path they follow are being shared *equally*. Across the country, Black and Hispanic students have much less access to rigorous academic preparation and course offerings than their white peers. Black and Hispanic students have less access to Advanced Placement and International Baccalaureate classes and dual credit opportunities,[4] and to advanced career and technical training (CTE) programs as well.[5]

Differences also exist across gender lines. While female students enroll in advanced coursework tracks at higher rates than male students, female students still risk being "tracked" into lower-paying areas such as education and nursing. In contrast, male students, especially white males, are more likely to follow higher-paying programs such as engineering, manufacturing, or transportation.[6]

As states seek to expand college and career readiness in their high schools, they can take steps to mitigate against these inequities. But first, they need structures in place to monitor them. Tracking, or placing students into separate college or career preparation programs, is something many European countries determine for students, based on test scores and other factors. While America has never pursued tracking in this way, our schools have a history of leaving women and minority students behind. In other cases, students may attend a school that *offers* advanced courses, only to be blocked from enrolling in those courses due to other barriers.

In late 2019 and early 2020, we set out to examine whether states are alert to the potential lack of economic opportunity students face when not equitably prepared for postsecondary success. That is, are states choosing to create a simple, catchall measure, assessing all college and career pathways as equal, without differentiating their rigor or their likelihood of leading to successful outcomes? Or are states collecting and reporting data to know which students are pursuing which programs and coursework and providing data to families about what skills, credentials, and degrees are sought by employers?

Our results represent a particular snapshot in time, before the COVID-19 pandemic forced schools and businesses to close all across the country. While many states paused data collections and froze their formal accountability systems, we believe that the coronavirus pandemic has only made college- and career-readiness measures all the more important for students facing uncertain higher education and employment prospects. Students will need to lean on the pathways and credentials offered, and states will need to monitor how well students are transitioning into later life stages.

In our search, we found that nearly every state was reporting some form of college- and career-readiness (CCR) measure. However, many states were not disaggregating the results of their CCR indicators by specific pathways or by demographic groups. Without tracking those results, states have no way of knowing whether their CCR indicators are truly accomplishing their desired purposes, or merely adding another meaningless data point. For example, we found only 16 states disaggregated the results of their CCR indicator across the demographic categories required by the Elementary and Secondary Education Act (ESEA).

This paper walks through a short description of the promise of college and career preparation coursework and programs, explains what we found about how states are measuring and weighing these options in their accountability equations, and then concludes with a set of recommendations for state leaders seeking to improve opportunities for students through data, clear guidance, and accountability measures.

The Upsides and Risks of College and Career Pathways

We tackled this paper to identify both the upsides and potential risks of the shift toward college- and career-readiness measures. Even beyond potential financial benefits, offering more tailored high school experiences can help keep students engaged, in school, and on track for a wide range of improved life outcomes.

But that promise can only happen if two conditions are met. First, states must monitor whether all of the pathways they are rewarding are truly valuable. If a state counts an Advanced Placement class, a dual credit course, and a workforce internship as equally positive for students, the state also has an obligation to monitor whether that assumption is valid. Is completion of each type of program equally beneficial to students? If not, how can states and districts convey to students the potential value of their chosen program?

Second, states need to monitor whether students are given differential access based on their families' income, their race or ethnicity, where they happen to live, or their gender. American schools have an unfortunate history of "tracking" students into certain postsecondary pathways while erecting barriers to the most rigorous, lucrative college and career pathways. It's not enough to merely permit students access to a range of college and career pathways. Instead, state leaders should set a goal of creating better, more tailored options for all students.

Depending on the specific pathway, there are a variety of potential upsides and risks for states as they consider incorporating these different programs into their school rating systems.

The Promise and Peril of Advanced Course-Taking

Advanced coursework such as Advanced Placement (AP), International Baccalaureate (IB), and dual enrollment classes offer a head start for students planning to attend college. Students can prepare for the rigors of college coursework and, in some cases, simultaneously receive college credit by successfully completing these classes, smoothing the path toward completing a degree. One study found that each additional advanced course taken by a student increased the likelihood of postsecondary credential completion and bachelor's degree completion by 1-2 percentage points. Unfortunately, the same study reported that college prep courses tend to be offered more often at larger schools with higher-achieving students and fewer low-income students.[7]

Black and Hispanic students also have less access to advanced coursework opportunities, both within and across schools. A recent study from the Education Trust found that the access gap was not due to differential success rates across student populations. Instead, it reflected Black and Hispanic students having less access to advanced courses in their schools, and lower rates of participation in the requisite courses that feed into them.[8] Once students are off the advanced track, it is difficult to "catch up" to more rigorous coursework. Theoretically, these patterns could reflect real academic differences. Most of the research, however, suggests that low-income, Black, and Hispanic students who are given the chance tend to succeed in advanced courses.[9] In particular, when lower-achieving students are given the opportunity to enroll in more college prep classes, the likelihood of completing a postsecondary credential increases.

For states, then, including advanced course-taking in their accountability systems sends a signal that these outcomes matter, and that all students should have access to these programs.

In many cases, states that award credit to schools based on advanced course-taking are rewarding larger schools and schools serving a wealthier, whiter student population. Those schools are typically more able to offer the most opportunities for advanced, college preparatory coursework. Rural districts may also lack college "partners" to provide dual enrollment-type programs, and often their low enrollment makes it less efficient to provide the same range of AP or IB coursework as larger schools.[10] Policies must be considered that would help less advantaged schools catch up by offering these programs.

Offering an incentive for schools to focus on postsecondary preparedness in the form of rigorous, college-preparatory coursework will encourage all schools to find a way to expand pathways for all students. For example, more districts could create Early College High Schools, a specific type of advancement program offered through partnerships between secondary and postsecondary schools. These programs provide the equivalent of a two-year associate degree, or two years' worth of credits toward a bachelor's degree, simultaneously as students earn a high school diploma, with little or no cost to

the student. In particular, Early College High Schools (ECHS) have been found to boost college enrollment, grade point average, and degree completion for low-income and lower-achieving students.[11]

The Promise and Peril of Using Career and Technical Education (CTE) Course-Taking

Modern CTE programs, when done well, provide academically rigorous programs that are aligned to postsecondary programs.

Career and Technical Education (CTE) courses provide students with career-aligned training designed to build a pathway to postsecondary training or educational opportunities. Modern CTE programs, when done well, provide academically rigorous programs that are aligned to postsecondary programs. A recent comprehensive study of CTE students in Texas found that students from all racial groups have roughly equivalent CTE participation rates, with white students having the highest rates of concentration. Another study from Arkansas found that students who earn a CTE "concentration," given to students who complete at least three courses in one specific area, are more likely than their peers to enroll in college.[12]

Supporters of CTE often cite international programs where CTE courses and apprenticeships provide both broad-based academic competencies and technical skills aligned with specific career paths. Many of these countries have a much smaller income gap between high school graduates and college graduates than here in the United States.[13]

Vocational education in the United States, as originally practiced, often represented a less-rigorous track with weak academics, which resulted in students being prepared only for low-wage and low-skill jobs. For example, about two out of every five female high school graduates in 1982 completed a "business" concentration by taking courses in things like data entry and typing. That was about three and a half times higher than the figures for men at the time, who were disproportionately completing CTE concentrations in manufacturing, construction, and agriculture.[14] It's hard to know if schools assigned students to those types of courses or if there were other cultural factors at play, but schools were at least willing participants to it.

While informal and possibly inadvertent tracking as described above may still occur, the prevalence of formal tracking began to decline in the U.S. starting in the 1960s. Its decline came about as parents and advocates for low-income and minority groups fought against it. In the recent Arkansas study, for example, the CTE student population was found to be representative of the overall student body, with a slight overrepresentation for white students and mid-level academic students.

While CTE programs can help make the high school experience more engaging and financially rewarding for students, states and districts need to make sure they are serving a broad base of students who have willingly selected into them. These steps will help avoid returning to the formal tracking systems of the early 20th century or more recent informal tracking mechanisms.

The Promise and Peril of Using Industry Credentials and Other Work-Based Learning

Industry credentials and Work-Based Learning (WBL) are two other ways of providing career pathways for students. WBL is defined by the federal Elementary and Secondary Education Act (ESEA) as any opportunity that "provides students in-depth interaction with industry professionals and, if appropriate, academic credit."[15] More broadly, this can be any program where students divide their time between classroom learning and "hands on" work experience. Comprehensive programs align these two settings, ask students to apply academic concepts in work settings, and pair students with a workplace or classroom mentor.[16]

Industry credentials take various forms, but represent certified, recognized competence in a specific industry or skill set. Often, community colleges provide the academic and skill-building learning opportunities in partnership with local industries seeking qualified employees.[17]

Industry credentials can be valuable for students and employers. However, one study found that four out of every five credentials earned by students did not align with high-demand industries and the roles employers were actually looking to fill.[18] To ensure tighter alignment, states need to work with community and regional businesses to align the credentials students attain with well-paying work opportunities in the area. A recent study found more than 315,000 distinct "credentials" offered across the country, including 11,837 occupational licenses, 6,724 industry-recognized certifications, 1,014 coding bootcamp certificates, and 191,459 "digital badges."[19] Currently 26 states have added industry credentials to their high school accountability systems, but few states have combed through all of these different certifications to determine which of them offer the highest value for students.[20] Without measuring the value of individual programs, states may be inadvertently giving credit for credentials that do not provide a meaningful benefit to students.

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The Promise and Peril of Using Postsecondary and Employment Outcomes Data

All of the indicators discussed so far are best thought of as *proxy* measures. That is, states can have a reasonably high degree of confidence that students who complete advanced courses, take a CTE pathway, or complete an industry certification test are likely to have success in college or the workforce. But while all of these indicators are useful predictors for longer-term outcomes, they aren't perfect substitutes.

A growing body of research shows that states won't fully capture college and career readiness unless they measure actual student outcomes in college and career. For example, a paper looking at long-term outcomes in Massachusetts and Texas found that between-school differences among high schools were much more important for college attendance

than test scores.[21] A recent study from the Urban Institute on high school quality metrics in three states looked at school contributions to student growth and college enrollment, and found a correlation between those two measures of just 0.13. They concluded, "Schools that are good at raising test scores are not necessarily the same schools that are good at preparing students to enroll in college."[22] And a recent Mathematica study found that high schools varied widely in boosting their students' high school graduation rates, college enrollment, and eventual earnings. While the authors found all of the measures correlated somewhat, some high schools that were particularly good at promoting college enrollment and persistence did not necessarily boost the earnings of their graduates by age 26.[23]

While these studies suggest that proxy measures for what happens to students at ages 15 to 18 may not be perfect predictors of what is likely to happen to them after they graduate, states have been reluctant to incorporate postsecondary outcomes into their formal school rating systems. There are a variety of reasons for this. The simplest one is that high schools can control what happens inside their walls, as opposed to what happens afterward. That is, introducing outcomes data raises new questions about how responsible a high school should be for outcomes that may happen in subsequent years. Leaders of a high school or district may not feel responsible for students who may have graduated many years previously. Beyond the theoretical questions, states would also need to grapple with logistical questions around data infrastructure and policy questions involving student privacy when linking K-12, higher education, and employment databases.

The Education Strategy Group recommends specific steps states can take to help students earn labor market-valued credentials: identifying in-demand, high-skill, high-wage occupations and associated credentials; validating those findings with employers and finalizing a statewide list of priority credentials; incentivizing priority credential attainment through funding strategies for schools and colleges, articulated postsecondary credit for high school earners, and rigorous accountability systems; and reporting and monitoring priority credential attainment with reliable, verified data.[24]

Are states monitoring the quality of their CCR measures, or creating a measure and then turning a blind eye to long-term outcomes? The next section describes our process for seeing what measures states are tracking and whether they're disaggregating the results.

Our Approach

To better understand what data states were collecting, we navigated each state's website as if we were parents looking for data on a local high school. We followed the "scavenger hunt" approach outlined by the Data Quality Campaign.[25] Briefly, this involves using Google to search for "(state name) school report card." In most cases, one of the top three results yielded the state report card site.

Once the report card site was identified, we randomly selected a high school to review, as if we were a parent of a student at that school. From that individual high school report card, we determined whether the state reports a CCR indicator; whether the CCR indicator is reported as a singular measure or is broken down by its multiple subcomponents; and whether the results are disaggregated by race, gender, and socioeconomic and other factors.

To comply with the federal ESEA law, states are required to disaggregate each of the indicators used in their formal accountability systems by ten subgroups: All students; economically disadvantaged; students with disabilities; English learners; African American; American Indian or Alaska Native; Asian; Native Hawaiian/Other Pacific Islander; Hispanic or Latino; White. In some cases, states report additional categories, while other states combine two or more racial subgroups when the sample sizes are too small to be reported separately.

Some of the "best" states allow parents to find disaggregated data on their particular school, but even these states rarely facilitated easy comparisons or allowed users to step back and compare multiple schools. For a practiced researcher, identifying the

college- and career-readiness components, understanding what is being measured, and determining which students participate in the offered programs is challenging. For parents with less time and less navigational skill, they might abandon their search without understanding how the school is preparing students for postsecondary success.

In select cases, states report school-level results that are easily compared to district- and state-level results. However, we found that most of this data would not be easy to analyze, especially for a parent or even a school leader.

What We Found

Only four states — Alaska, Maine, Nebraska, and Oregon — are not yet reporting any CCR measure. The other 46 states and the District of Columbia are all tracking some measure of college and career readiness. We found the most common CCR measure is the number of students taking advanced coursework. Advanced coursework measures typically include how many students take Advanced Placement (AP), International Baccalaureate (IB), dual enrollment (DE), and other college-preparatory courses. Other states focus on measures such as standardized test benchmarks, career or military preparedness, CTE concentration, or credential completion. Table 1 on the next page provides an overview of the five main groups of CCR indicators and which states track and report them by high school.

34 states and the District of Columbia have incorporated a CCR measure into their formal school accountability ratings.

Of the 46 states plus the District of Columbia, 12 states have not yet incorporated their CCR measure into their formal accountability measures. The remaining 34 states and the District of Columbia have incorporated a CCR measure into their formal school accountability ratings.

Of those states that do give a formal weight to their CCR indicators, those range from a low of 5% in Michigan and Iowa to a high of 40% in New Hampshire. Currently, some states roll up multiple components into one combined CCR measure, while others break their CCR measure into more specific subcomponents. Table 2 shows which states fall into these two camps.

Table 1

Most Commonly Used CCR Indicators

Type	Advanced Coursework	Assessment/ Testing	Career-Based	Military	Post-Graduation
Description	AP, IB, Dual Enrollment, or other advanced course	SAT, ACT, or other assessments	CTE, WBL, Credential, or Apprenticeship	Enlistment, coursework or vocational aptitude test (ASVAB)	Postsecondary enrollment and/or enrollment without remediation
Alabama	Y	Y	Y	Y	N
Alaska	NA	NA	NA	NA	NA
Arizona	N	N	N	Y	N
Arkansas	Y	N	Y	N	N
California	Y	Y	Y	Y	N
Colorado	Y	N	Y	N	Y
Connecticut	N	Y	N	N	Y
Delaware	Y	Y	Y	Y	N
District of Columbia	Y	N	N	N	N
Florida	Y	Y	Y	N	N
Georgia	Y	Y	Y	N	Y
Hawaii	N	N	Y	N	Y
Idaho	Y	Y	Y	N	N
Illinois	Y	Y	Y	Y	Y
Indiana	Y	N	Y	N	Y
Iowa	N	N	N	N	Y
Kansas	N	N	N	N	Y
Kentucky	Y	Y	Y	N	N
Louisiana	Y	N	Y	N	N
Maine	NA	NA	NA	NA	NA
Maryland	Y	Y	Y	Y	N
Massachusetts	Y	N	N	N	N
Michigan	Y	N	Y	N	Y
Minnesota	Y	Y	N	N	Y
Mississippi	Y	Y	Y	N	N
Missouri	Y	N	Y	N	N

Table 1 Most Commonly Used CCR Indicators, *continued*

Type	Advanced Coursework	Assessment/ Testing	Career-Based	Military	Post-Graduation
Description	AP, IB, Dual Enrollment, or other advanced course	SAT, ACT, or other assessments	CTE, WBL, Credential, or Apprenticeship	Enlistment, coursework or vocational aptitude test (ASVAB)	Postsecondary enrollment and/or enrollment without remediation
Montana	Y	Y	Y	N	N
Nebraska	NA	NA	NA	NA	NA
Nevada	Y	Y	Y	N	N
New Hampshire	Y	Y	Y	N	N
New Jersey	Y	N	Y	N	N
New Mexico	N	N	Y	N	Y
New York	Y	N	Y	N	N
North Carolina	Y	Y	Y	N	N
North Dakota	Y	Y	Y	Y	N
Ohio	Y	Y	Y	N	N
Oklahoma	Y	N	Y	N	N
Oregon	NA	NA	NA	NA	NA
Pennsylvania	Y	Y	Y	Y	Y
Rhode Island	Y	N	Y	N	N
South Carolina	Y	Y	Y	Y	N
South Dakota	Y	Y	Y	N	N
Tennessee	Y	Y	Y	Y	N
Texas	Y	Y	Y	Y	N
Utah	Y	Y	Y	N	N
Vermont	Y	Y	Y	Y	N
Virginia	Y	Y	Y	Y	Y
Washington	Y	N	Y	N	N
West Virginia	Y	N	Y	N	N
Wisconsin	Y	Y	N	N	N
Wyoming	Y	N	Y	Y	N
TOTALS (Y)	41	27	39	14	13

Table 2

Details of State CCR – Weighting and Disaggregation

	State Has Defined a CCR Indicator	State Includes a CCR Indicator in its Formal High School Ratings	State's CCR Indicator Is Broken Down Into Sub-components	State CCR Indicator Is Disaggregated by ESEA Subgroups (Yes, No, Partial*)	State CCR Indicator Has Sub-components and Is Disaggregated by ESEA Subgroups
Alabama	Y	Y	N	Y	N
Alaska	N	N	NA	NA	NA
Arizona	Y	Y	N	N	N
Arkansas	Y	Y	N	Y	N
California	Y	N	Y(NW)**	NA	N
Colorado	Y	N	Y(NW)	NA	N
Connecticut	Y	Y	Y	Y	Y
Delaware	Y	Y	Y	P	N
District of Columbia	Y	Y	N	N	N
Florida	Y	Y	N	Y	N
Georgia	Y	Y	Y	Y	Y
Hawaii	Y	N	Y(NW)	NA	N
Idaho	Y	Y	Y	Y	Y
Illinois	Y	Y	Y	Y	Y
Indiana	Y	Y	Y	P	N
Iowa	Y	Y	Y	P	N
Kansas	Y	N	N	NA	N
Kentucky	Y	N	Y(NW)	NA	N
Louisiana	Y	Y	N	N	N
Maine	N	N	NA	NA	NA
Maryland	Y	Y	N	N	N
Massachusetts	Y	Y	Y	Y	Y
Michigan	Y	Y	Y	Y	Y
Minnesota	Y	N	N	N	N
Mississippi	Y	Y	N	Y	N
Missouri	Y	N	Y(NW)	NA	N
Montana	Y	Y	N	Y	N
Nebraska	N	N	NA	NA	NA

Table 2 Details of State CCR – Weighting and Disaggregation, *continued*

	State Has Defined a CCR Indicator	State Includes a CCR Indicator in its Formal High School Ratings	State's CCR Indicator Is Broken Down Into Sub-components	State CCR Indicator Is Disaggregated by ESEA Subgroups (Yes, No, Partial*)	State CCR Indicator Has Sub-components and Is Disaggregated by ESEA Subgroups
Nevada	Y	Y	Y	P	N
New Hampshire	Y	Y	N	N	N
New Jersey	Y	N	Y(NW)	NA	N
New Mexico	Y	Y	N	N	N
New York	Y	N	N	NA	N
North Carolina	Y	Y	Y	P	N
North Dakota	Y	Y	N	N	N
Ohio	Y	Y	N	N	N
Oklahoma	Y	Y	N	Y	N
Oregon	N	N	NA	NA	NA
Pennsylvania	Y	N	Y(NW)	NA	N
Rhode Island	Y	Y	N	N	N
South Carolina	Y	Y	Y	N	N
South Dakota	Y	Y	Y	Y	Y
Tennessee	Y	Y	N	P	N
Texas	Y	Y	N	P	N
Utah	Y	Y	Y	Y	Y
Vermont	Y	Y	N	N	N
Virginia	Y	N	Y(NW)	NA	N
Washington	Y	Y	N	Y	N
West Virginia	Y	Y	Y	Y	Y
Wisconsin	Y	N	Y(NW)	NA	N
Wyoming	Y	Y	N	N	N
TOTALS (Y)	**47**	**35**	**15 Y / 9 Y(NW)**	**16Y / 7P**	**9**

**Note:* States marked as partial are states that are disaggregating by some ESEA categories, but omit one or more significant categories such as students with disabilities, English language learners, or economically disadvantaged — AND/OR — they do not report all the required ESEA racial categories, sometimes combining three or more races into one group.

***Note:* States marked as "NW" break their CCR down into subcomponents, but are not weighting them for accountability purposes.

Of the 34 states and the District of Columbia that weigh their CCR measure, 19 states and the District of Columbia report their data as a single measure. As examples, Texas reports one combined "college, career, and military readiness" measure, Louisiana uses a "strength of diploma" indicator, and Wyoming combines multiple measures into one "postsecondary readiness" indicator.

Fifteen states that include their CCR measure in accountability take an additional step. These states have determined that a single indicator is inadequate to define college and career readiness. Rather than focus only on one measure of readiness, they select two or more subcomponents to provide a more detailed report.

For example, Michigan combines two measures — an advanced coursework measure and postsecondary enrollment data — in its CCR measure with a combined weight of 5%. South Carolina has nine criteria for its CCR measure: five separate components for college ready and four for career ready. In aggregate these criteria account for 25% of its high school ratings. Indiana has a mix of weighted and unweighted indicators. For its formal school ratings, Indiana measures the percentage of students demonstrating CCR by passing an AP or an IP exam, earning an approved industry certification, or earning three college credit hours or more through an approved course. In total, these indicators are worth 30% of each school's rating. For separate, unweighted state reports, Indiana tracks three additional subcomponents: high school graduates enrolling in college, Indiana public college students needing remediation, and Indiana public college student performance.

We found only 16 states are in full compliance with ESEA by disaggregating the college and career measure by the required subgroups.

States often fail to disaggregate their data across subgroups or into subcomponents. In fact, we found only 16 states are in full compliance with ESEA by disaggregating the measure by the required subgroups. Nine of these states provide the best group we found: states with multiple components disaggregated across the required student subgroups. These are: Connecticut, Georgia, Idaho, Illinois, Massachusetts, Michigan, South Dakota, Utah, and West Virginia. The other seven states that disaggregate their singular indicator by the required ESEA subgroups are: Alabama, Arkansas, Florida, Mississippi, Montana, Oklahoma, and Washington.

Another seven states with a weighted CCR disaggregate across some but not all ESEA-required subgroups: Delaware, Indiana, Iowa, Nevada, North Carolina, Tennessee, and Texas. These states could move quite easily into providing a more complete picture of their students' pathways simply by adding the missing ESEA subgroup(s).

However, that leaves 11 states — Arizona, Louisiana, Maryland, New Hampshire, New Mexico, North Dakota, Ohio, Rhode Island, South Carolina, Vermont, and Wyoming — and the District of Columbia weighing their CCR but failing to disaggregate it by student subgroups. Not only are these states out of compliance with federal law, they also have no way of knowing whether schools are tracking students into less rigorous pathways based on their gender or the color of their skin.

In addition to accountability ratings for schools, states could also encourage CCR pathways by requiring some form of CCR participation for graduation. According to the nonprofit research group Achieve, the graduation pathways available to students can be "complicated, messy, and evolving."[26] They often lack clear ties to postsecondary results. Only seven states and the District of Columbia currently require students to take a CCR course of study in high school, and 14 additional states have a CCR course as the default option.[27] However, many of these states fail to disaggregate and analyze student data by subgroup, so they have no way of knowing *which options* graduates are taking, or if failure to participate in these programs is tied to dropout rates.

States that automatically default or require students to take CCR coursework tend to have lower achievement gaps. Those defaults signal that schools must ensure low-income students, students of color, and English learners are participating in CCR pathways at equal rates as their peers. Indiana, for example, starts every student on a CCR path, and reports a three-percentage-point gap between Black and white student completers. Massachusetts, in contrast, depends on students to voluntarily opt in to the CCR program and, partly as a result, reports a 22-percentage-point gap between Black and white students.[28]

Two states rise to the top as particular examples of robust CCR measures and clear data presentations.

Illinois is an example of a state with robust CCR data collection and reporting. It has a CCR indicator broken into subcomponents and disaggregated by demographic factors. Illinois offers report cards, available at state, district, and school levels, with disaggregation at all the ESEA-required levels and including additional categories such as gender and "Two or more races."[29] For easier access, parents can choose to search for their school with an interactive dashboard.[30] For researchers who want an Excel data set, Illinois makes one available for download.[31]

Georgia provides another example of data accessibility for parents, although not as comprehensive for conducting research. On the Georgia Department of Education website, a parent can easily search for the College and Career Performance Index report for their child's school. High school level reports include a "readiness" component made up of several factors, including "pathway completion" and "college and career readiness." Each of these components can be reviewed in a dashboard that clearly shows the percentage of ESEA subgroups meeting that indicator. Additionally, the ability to download data to Excel would enhance the usefulness of the data for researchers and journalists.

To be more effective, states will need to measure which pathways work best for which students. As students follow various pathways — advanced coursework, CTE, dual enrollment, early college high school, and other approaches — and those pathways are measured for postsecondary credentials, apprenticeships, two- and four-year college entrance and completion, and, ultimately, employment outcomes, states will have more information to inform and shape the pathways for future students.

Conclusions and Recommendations

The increased interest in building college and career pathways for high school students is an important trend for improving the long-term life outcomes for students. The interest in establishing CCR metrics and collecting student data is a positive step for states, districts, and schools. Translating this interest into measurable gains for long-term academic and economic student success, including equal access and opportunities for all students, will be more challenging.

We recommend all states have a CCR measure and include it in their formal high school accountability systems. The four states that lack a CCR measure of any kind, and 12 more that track CCR but omit it from their formal high school rating systems, have failed in this regard. Accountability systems encourage all schools in a state to get more students enrolled in and completing college and career pathways. In addition to the equity implications of holding ALL schools accountable for maximizing the percentage of students completing some form of postsecondary preparation, accountability systems send a clear message that these metrics matter and are important outcomes for school and district leaders to work toward.

Accountability systems encourage all schools in a state to get more students enrolled in and completing college and career pathways.

As states gather this data, they will be able to determine which pathways are the most helpful in improving postsecondary readiness and career success. Making this type of information readily available will help students and parents make informed decisions about which pathways to pursue. At the district and state level, disaggregated data would help determine whether their programming needs to change, or whether they need to scale up, or ramp down, any particular programs in their communities.

In addition to improving ease of access for parents, states should consider providing more detailed options for researchers and policymakers wishing to download and explore the results in a more systematic way. This data can then be further analyzed to determine whether certain student subgroups are being tracked toward, or away from, certain CCR pathways. Having that information would then force hard questions about whether students were being blocked from certain pathways due to their gender, the color of their skin, or the school in which they are enrolled.

Additional research needs to focus on issues of both access and outcomes. Are certain CCR strategies more successful than others? Are some student subgroups better served by advanced coursework while others succeed with dual enrollment? How should policymakers balance shorter-term results with longer-term outcomes? Which CTE concentrations or other areas of study lead to the best long-term employment and economic opportunities? Armed with this type of information, state policymakers can ask themselves how they can help schools provide all students with equal access to advanced coursework opportunities, dual enrollment, early college high school, and/or CTE.

Nonprofit organizations interested in facilitating career- and college-ready students can also contribute to this work. There are a number of states that are already reporting disaggregated data on CCR access and success. State-level advocacy organizations could analyze which pathways are most promising for students, and whether all students have equal access. Even simple descriptive data could help shape funding decisions for state policymakers, foundations, and community nonprofits.

These efforts can help states drive an agenda toward the long-term goal of helping all students on track for a successful transition into postsecondary education and a fulfilling, rewarding career.

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About the Authors

Lynne Graziano

Lynne Graziano is an analyst at Bellwether Education Partners.
She can be reached at lynne.graziano@bellwethereducation.org.

Chad Aldeman

Chad Aldeman is a senior associate partner at Bellwether Education Partners.
He can be reached at chad.aldeman@bellwethereducation.org.

About Bellwether Education Partners

Bellwether Education Partners is a national nonprofit focused on dramatically changing education and life outcomes for underserved children. We do this by helping education organizations accelerate their impact and by working to improve policy and practice.

Bellwether envisions a world in which race, ethnicity, and income no longer predict opportunities for students, and the American education system affords all individuals the ability to determine their own path and lead a productive and fulfilling life.