CSCU Office of Decision Support & Institutional Research

Assessing Measures of College-and-Career Readiness in High School: **How Do They Relate to College Success?**

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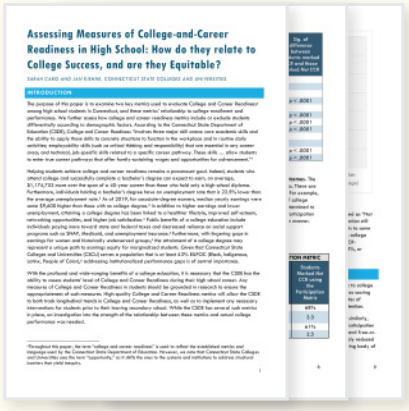
FEBRUARY 2023

Key Takeaways

- We investigated how two different College and Career Readiness (CCR) metrics were related to early college success.
- While each metric was correlated with success, the course-taking metric yielded greater inclusivity compared to the exam-based metric.
- Our suggestions include giving precedence to the course-taking metric, as well as exploring other possible CCR metrics.


Assessing Measures of College-and-Career Readiness in High School: How do they relate to College Success, and are they Equitable?

In this paper, we examine two key metrics used to evaluate College and Career Readiness (CCR) among high school students in Connecticut, and these metrics' relationship to college enrollment and performance. We further assess how CCR metrics include or exclude students differentially according to demographic factors. The full version of this report can be found **here**.

Helping students achieve CCR remains a paramount goal. Indeed, students who attend college and successfully complete a bachelor's degree can expect to earn, on average, $1,174,752 more over the span of a 40-year career than those who hold only a high school diploma. Furthermore, individuals holding a bachelor's degree have an unemployment rate that is 22.5% lower than the average unemployment rate.[1] In addition, attaining a college degree has been linked to a healthier lifestyle, improved self-esteem, networking opportunities, and higher job satisfaction.[2] With lingering gaps in earnings for women and historically underserved groups, the attainment of a college degree may represent a unique path to earnings equity for marginalized students.

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Given the profound and wide-ranging benefits of a college education, any measures of College and Career Readiness used by the CT State Department of Education (CSDE) should be grounded in research to ensure their utility and equity. While the CSDE has several such metrics in place, an investigation into the strength of the relationship between these metrics and actual college performance was needed. To this end, we leveraged the P20-WIN data exchange to join the CSDE's high school student data with the Connecticut State Colleges and Universities (CSCU)'s data on students' college performance.

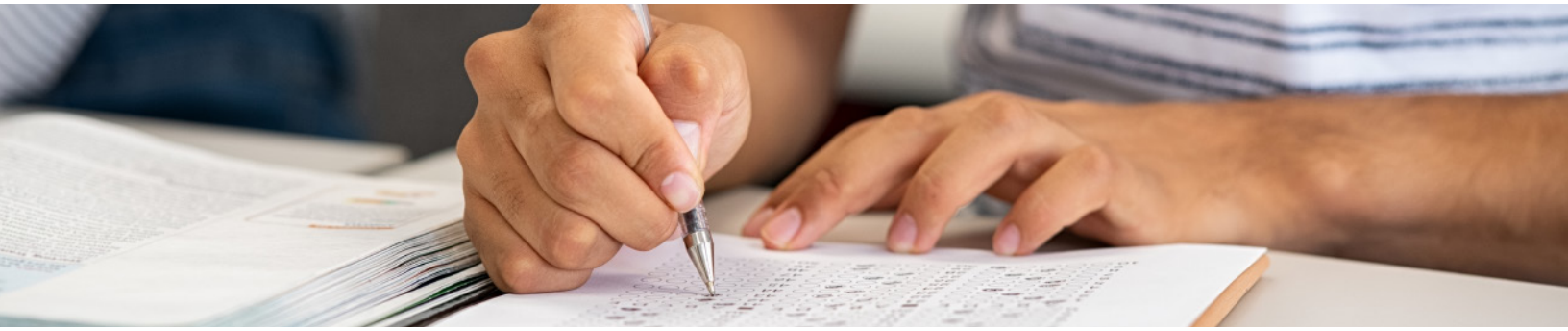
CCR Metrics

We examined the relationship between the CCR Metrics used by the CSDE and college success outcomes in a population of 35,417 students who graduated from a public CT high school in 2017.

To analyze the relationship between CCR metrics and college success, we focused on two main CCR metrics used by the CSDE to determine whether a student is college-and-career-ready in high school:

CCR-Exam: The CCR-Exam metric is a binary metric that uses SAT, ACT, Advanced Placement (AP), International Baccalaureate (IB) exam scores to categorize each student as CCR or Not CCR. If a student meets a certain benchmark on an SAT or ACT test, or on any AP or IB Exam, they are identified as CCR-Exam. If they have not met the benchmark score on any of those metrics, they are identified as Not CCR-Exam.

CCR-Participation: The CCR-Participation metric is a binary metric that uses course participation to determine CCR status. If a student has taken two or more AP, IB, or Dual Enrollment (DE) courses, they are identified as CCR-Participation. If a student has taken fewer than two such courses, they are considered Not CCR-Participation.



Findings and Conclusions

Being assessed as CCR in high school, whether by the CCR-Exam or CCR-Participation metric, was strongly correlated with first-year math and English GPA, attending any college, first-year retention, and number of semesters attended. Therefore, high school participation in AP, IB, and/or DE courses, as well as scoring above benchmark on an AP, IB, or college admission test, were strongly related to attending, persisting, and succeeding in college.

While the two metrics were correlated similarly with college success, they differed in terms of the demographic makeup captured as CCR by each. Specifically, using the CCR-Participation metric to determine CCR status more closely matched the sample make up in terms of ethnicity, such that the equity gaps in achieving CCR status was considerably reduced when using the CCR-Participation metric. For example, as seen in figure 1, using the CCR-Exam metric to assess CCR-status results in White students achieving CCR status at a rate of about three times that of Black and Hispanic students. In contrast, using the CCR-Participation metric results in white student achieving CCR-status at a rate of 1.6x that of Black and Hispanic students, a relatively lower rate.

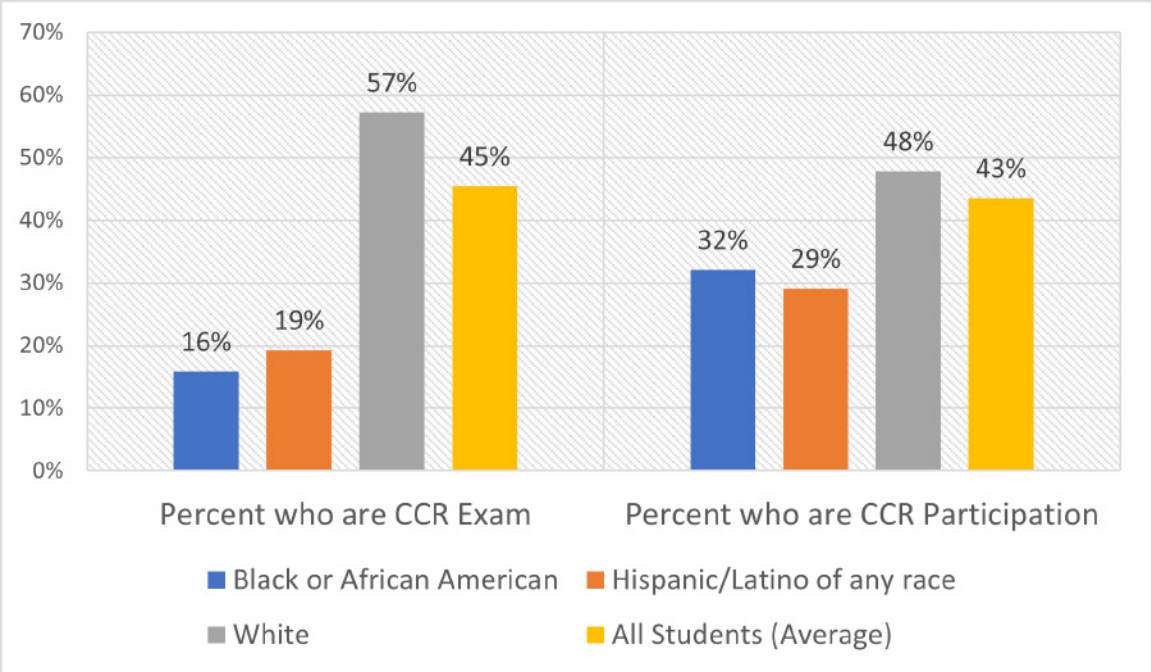


Figure 1. Percent assessed as *CCR* in high school, by Ethnicity and CCR Metric

We wish to caution readers to be wary of taking the findings to mean that when students score below benchmark on CCR metrics, they are not ready for college and should be guided toward other endeavors. On the contrary, about half of the students determined to be Not CCR according to the CCR-Participation metric still went on not only to attend college, but to persist for at least three semesters. As such, we suggest that the focus is not on guiding students who score below the CCR thresholds away from higher education. Instead, a useful focus could be on raising students' performance on CCR metrics, which are positively correlated with college success.

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Several areas are ripe for future research. Although it is clear that college-level coursework in high school is related to positive postsecondary outcomes, additional research could evaluate whether DE, AP, and IB all convey equal benefits in terms of college outcomes, or whether one type of college-level course is more highly related to success. To follow, an assessment of whether ethnicity-based performance gaps in college-level course-taking are consistent across schools, types of schools, and districts should consider whether there is equitable access to quality programming in all locations and for all groups of students. Last, a high-school-GPA-based CCR metric could be explored in terms of its relative usefulness compared to existing CCR metrics used in Connecticut.

Funding

The research reported here was supported by the Institute of Education Sciences, U.S. Department of Education, through Grant R372A200008 to Connecticut State Department of Education. The opinions expressed are those of the authors and do not represent views of the Institute or the U.S. Department of Education.

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