



Alternative career readiness measures for small and rural districts in Texas

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Executive Summary

Texas House Bill 3 established a college, career, and military readiness (CCMR) outcomes bonus, which provides extra funding to districts for each annual graduate demonstrating CCMR under the state accountability system. Some small district and rural district leaders expressed concern about the ability of their graduates to meet the career readiness component of the CCMR accountability standards due to a lack of career and technical education (CTE) program or course resources. In response to a request from the Texas Education Agency (TEA), this study examined whether graduates from small districts and rural districts who did not demonstrate CCMR demonstrated career readiness via five possible alternative career readiness options identified by TEA: CTE completer, CTE concentrator, CTE explorer, CTE participant, and work-based learner.

The study used a statewide cohort of 2017–18 high school graduates to examine the percentage of graduates in each of four mutually exclusive CCMR accountability standard categories: met a college ready accountability standard, met a career ready accountability standard, met a military ready accountability standard, and did not meet CCMR accountability standards. For graduates who did not meet CCMR accountability standards, the study examined the percentages of graduates who met each of the possible alternative career readiness options.

Finally, the study explored whether graduates who met the alternative career readiness options (but did not demonstrate CCMR) performed comparably on postsecondary college and career outcomes with graduates who met CCMR accountability standards.

Key findings include:

- More than 40 percent of graduates did not demonstrate college, career, or military readiness.
- No substantive differences were identified between small districts and large districts or between rural districts and major suburban districts in the percentages of graduates who met a career readiness accountability standard.
- Nearly all graduates who did not demonstrate CCMR met at least one alternative career readiness option.
- Among graduates who did not demonstrate CCMR, a higher percentage from small districts and rural districts were CTE concentrators, whereas the percentage from small districts and rural districts who were CTE completers or work-based learners was similar to large districts and major suburban districts.
- CTE completers and work-based learners had higher rates of college enrollment than graduates who met a career readiness accountability standard.
- CTE completers had higher rates of credential attainment or college persistence than graduates who met a career readiness accountability standard.

What We Studied

Texas House Bill 3, a comprehensive reform of the state’s school finance system that passed in 2019, established a CCMR outcomes bonus, which provides extra funding to districts for each annual graduate demonstrating college, career, or military readiness under the state accountability system (TEA, 2019b). According to TEA, some small district and rural district leaders expressed concern about the requirement that graduates must earn either an industry-based certification or a Level I or Level II certificate to demonstrate career readiness. The expected pathway to earning an industry-based certification or a Level I or Level II certificate while enrolled in a Texas high school is through CTE programs. However, local capacity and funding issues in small or rural districts can be obstacles to implementing CTE programs of study that culminate in attaining a recognized postsecondary credential (including industry-based certifications), especially credentials needed for high-wage, in-demand occupations (Texas Rural Schools Task Force, 2017).¹ For example, rural districts may not have access to teachers with qualifications in certain CTE areas or the facilities required to train students in certain CTE areas. Rural communities may have fewer regional occupations that align to high-wage, in-demand occupations as defined by TEA, further constraining their options.

To address the concern that some districts may not be able to provide sufficient courses or programs to enable students to earn an industry-based certification, the provisions of House Bill 3 allow the Commissioner of Education to accept applications from districts to use graduate completion of a coherent sequence of courses aligned with an approved industry-based certification as a demonstration of career readiness for the CCMR outcomes bonus. District leaders must demonstrate in the application that the district is unable to provide enough courses or programs to enable students to earn an industry-based certification. The provisions of House Bill 3 also included a requirement that TEA conduct a study to determine whether graduates from small districts and rural districts demonstrate career readiness via alternative career readiness options. Instead of relying on individual districts submitting applications, the Commissioner of Education wants to use the results of the study to consider recommendations to the Texas Legislature for alternative career readiness options that are more accessible to small districts and rural districts and are associated with college and career outcomes.

TEA partnered with Regional Educational Laboratory (REL) Southwest to conduct a study focused on attainment of alternative career readiness options among high school graduates, and specifically graduates in small districts and rural districts. TEA was interested in exploring the attainment of alternative career readiness options for graduates that are connected to CTE classifications as defined by the Texas Perkins V Comprehensive Local Needs Assessment or connected to work-based learning opportunities. The Perkins V CTE classifications reflect the number of courses a student completes and the credits a student earns for CTE courses within programs of study.²

The study provides information on the implications of the CCMR accountability standards for high school graduates by examining the extent to which the cohort of 2017–18 Texas public school graduates did not meet CCMR accountability standards, particularly for graduates in small districts and rural districts. The study also provides information on the extent to which graduates demonstrated career readiness via alternative career readiness options identified by TEA. Finally, the study explores whether graduates who met the alternative career readiness options attained similar postsecondary college and career outcomes to graduates who met CCMR accountability standards to inform the Commissioner of Education as he considers alternative career readiness options.

The study explored three research questions related to the TEA CCMR accountability standards and possible alternative options for meeting the career readiness standard:

¹ TEA identified high-wage, in-demand occupations in a two-phase process. In phase one, TEA identified high-wage, in-demand occupations using the median growth rate in employment, median annual salary, and minimum annual openings. In phase two, TEA formed groupings of occupations based on similarity of work activities, related postsecondary training, or related ONET standard occupational classifications. TEA (2019c) provides a more detailed description of the methodology.

² TEA aligns its definition of a program of study with Perkins V, describing a program of study as “a coordinated, nonduplicative sequence of academic and technical content at the secondary and postsecondary level that: Incorporates challenging state academic standards; Addresses academic, technical, and employability skills; Aligns with the needs of industries in the state, regional, and/or local economy; Progresses in specificity, beginning with all aspects of industry and leading to more occupation specific instruction; Has multiple entry and exit points that incorporate credentialing; Culminates in the attainment of a recognized postsecondary credential” (TEA, 2019c).

1. What percentages of 2017–18 high school graduates did not meet TEA CCMR accountability standards?
 - a. How did attainment of TEA CCMR accountability standards differ by district size and community type?
2. For 2017–18 high school graduates who did not meet a CCMR accountability standard, what percentage met alternative career readiness options identified by TEA?
 - a. How did attainment of alternative career readiness options for meeting the career readiness standard differ by district size and community type?
3. What percentage of 2017–18 high school graduates who met TEA CCMR accountability standards were enrolled in college, had obtained a certificate or an associate degree or had persisted in college a second year, or were employed, compared with graduates who met alternative career readiness standards?

How We Analyzed the Data

The study used administrative student records from TEA that included information about student demographic characteristics; course-taking history; attainment of CCMR accountability standards; and CTE classifications. The study used student-level information from public and private higher education institutions collected by the Texas Higher Education Coordinating Board. It used employment and earnings data collected by the Texas Workforce Commission.

The study used the statewide cohort of students who graduated in 2017–18 to answer all three research questions. This cohort of graduates is TEA’s Perkins V baseline cohort and identifies CTE concentrators and completers as defined by TEA’s Perkins V state plan. This cohort represents 347,893 graduates from Texas public high schools in 2017–18. Research question 2 included only those graduates who did not meet CCMR accountability standards.

The study placed graduates into four mutually exclusive CCMR accountability standards categories: college ready, career ready, military ready, and not college, career, or military ready. The study based these categories on definitions from the Texas Education Agency’s (TEA’s) 2019 Accountability Manual for Texas Public School Districts and Campuses (TEA, 2019a). These accountability standards applied to the 2017–18 cohort of high school graduates. The study considered five alternative career readiness options as identified by TEA including four mutually exclusive CTE categories as defined by the Texas Comprehensive Local Needs Assessment in the state’s Perkins V plan (CTE completer, CTE concentrator, CTE explorer, and CTE participant) and a work-based learner category.

The study used descriptive statistics (counts and percentages) to answer each research question. To address research question 1, the study team calculated the percentage of 2017–18 graduates who met each TEA CCMR accountability standard category overall and by district size and community type. To address research question 2, the study team first limited the analysis to 2017–18 graduates who did not meet CCMR accountability standards. The team next calculated the percentage of these graduates who met each alternative career readiness option overall and by district size and community type. To address research question 3, the study team first calculated the percentage of 2017–18 high school graduates within each TEA CCMR accountability standard category that achieved each postsecondary outcome (that is, enrolled in college within one year of high school graduation, employed within one year of high school graduation, or obtained a certificate or an associate degree within one year of high school graduation or persisted in college a second year following high school graduation). The study team next limited the analysis to 2017–18 graduates who did not meet CCMR accountability standards and calculated the percentage of 2017–18 high school graduates within each alternative career readiness option that achieved each postsecondary outcome.

The study considered differences of greater than 5 percentage points as substantive and reported these differences in the findings section. For research questions 1 and 2, the study used districts with 50,000 or more students as the district size reference group, and major suburban districts served as the district community reference group. The study used these reference groups to compare against small districts and rural districts. For research question 3, the study used graduates who met a career readiness accountability standard as the reference group.

This study has several limitations. First, the postsecondary outcome attainment analysis excluded graduates who pursued out-of-state or federal employment (including in the armed services), who did not have a Texas employment record, or did not have a Texas college record. Second, the study team limited alternative career readiness options to those identified by TEA. Third, the study team limited analyses to a single cohort of graduates. Fourth, except for college persistence in the second year following high school graduation, the study was able to identify postsecondary outcomes through one year post-high school graduation only. Any postsecondary outcomes that may have occurred at a later point in time could not be determined. Fifth, the study relied on unemployment insurance wage reports to determine employment outcomes. These data are not broken out by part-time or full-time status, and individuals can be employed in multiple jobs with multiple wages in each quarter.

What We Discovered

More than 40 percent of 2017–18 graduates did not demonstrate college, career, or military readiness.

Nearly 60 percent of 2017–18 graduates met at least one CCMR accountability standard (58.2 percent). Half of the graduating cohort (50.0 percent) met a college readiness standard. An additional 5.6 percent of graduates met a career readiness standard, and 2.7 percent met the military readiness standard. The remaining 41.8 percent of graduates did not meet any CCMR accountability standards.

A lower percentage of 2017–18 graduates from small districts met a college readiness accountability standard than large districts, whereas the percentages of college ready graduates from rural and major suburban districts were similar.

The percentage of graduates who met a college readiness standard varied by district size and community type. Districts with 50,000 or more students had a higher percentage of college ready graduates than districts with fewer than 1,600 students. Major suburban districts also had a numerically higher percentage of college ready graduates than rural districts; however, the 4.4 percentage point difference was just below the 5 percentage points threshold for substantive differences.

No substantive differences were identified between small and large districts or between rural and major suburban districts in the percentages of graduates who met a career readiness accountability standard; met a military readiness accountability standard; or did not demonstrate college, career, or military readiness.

The percentage of graduates who met a career readiness standard, who met a military readiness standard, and who did not meet any CCMR accountability standards was comparable for districts with 50,000 and districts with fewer than 1,600 students. Major suburban districts and rural districts also had a comparable percentage of career-ready graduates, military-ready graduates, and graduates who did not meet any CCMR accountability standards.

Nearly all 2017–18 graduates who did not demonstrate college, career, or military readiness met at least one alternative career readiness option.

Over 95 percent of graduates who did not meet a CCMR accountability standard met at least one alternative career readiness option identified by TEA. More than 60 percent of these graduates met the CTE completer alternative career readiness option (17.8 percent) or the CTE concentrator alternative career readiness option (44.8 percent). Fewer than 10 percent of these graduates met the CTE participant alternative career readiness option (that is, completed only one CTE course). In addition, 19.3 percent of these graduates met the work-based learner alternative career readiness option. Nearly all (98.9 percent) graduates who completed at least one work-based learning course also fell into one of the four mutually exclusive CTE categories.

Among graduates who did not demonstrate college, career, or military readiness, a higher percentage from small districts and rural districts were career and technical education concentrators, whereas the percentages from small districts and rural districts who were career and technical education completers or work-based learners was similar to large districts and major suburban districts.

More graduates in districts with fewer than 1,600 students and rural districts met the CTE concentrator alternative career readiness option than graduates in districts with 50,000 students or more or major suburban districts. Districts with 50,000 or more students and major suburban districts had higher percentages of graduates who met the CTE

explorer and CTE participant alternative career readiness option than districts with fewer than 1,600 students and rural districts. The percentages of graduates who met the CTE completer and work-based learner alternative career readiness option were comparable between districts with 50,000 students or more and districts with 1,600 or fewer students and between major suburban and rural districts.

Career and technical education completers and work-based learners had higher rates of college enrollment than graduates who met a career readiness accountability standard.

Thirty-two and a half percent of 2017–18 graduates who met career readiness accountability standards enrolled in college within one year of high school graduation. In comparison, higher percentages of graduates who did not demonstrate CCMR but who met the CTE completer or work-based learner alternative career readiness option enrolled in college within one year (44.6 and 39.9 percent, respectively) and a lower percentage of graduates who did not demonstrate CCMR but who met the CTE participant alternative career readiness option enrolled in college within one year (26.4 percent).

Career and technical education completers had higher rates of credential attainment or college persistence than graduates who met a career readiness accountability standard.

A higher percentage of 2017–18 graduates who did not demonstrate CCMR but who met the CTE completer alternative career readiness option obtained a certificate or an associate degree within one year of high school graduation or persisted in college a second year following high school graduation, compared to 2017–18 graduates who met a career readiness accountability standard (27.3 percent versus 19.1 percent. In contrast, a lower percentage of 2017–18 graduates who did not demonstrate CCMR but who met the CTE participant alternative career readiness option obtained a certificate or an associate degree within one year of high school graduation or persisted in college a second year following high school graduation, compared to 2017–18 graduates who met a career readiness accountability standard (13.7 percent versus 19.1 percent).

Discussion/Policy Recommendations

The findings point to several implications for TEA to take into account as it considers alternative options for demonstrating career readiness under the accountability system.

It may be worth exploring whether there are obstacles to graduates meeting college readiness standards in small and rural districts.

Findings from this study suggest that Texas graduates meet CCMR accountability standards primarily by demonstrating college readiness, which was more common in large districts than in districts with fewer than 1,600 students. Whereas college readiness rates for graduates in major suburban districts were numerically higher than rural districts, that difference of 4.4 percentage points was just under the 5 percentage point threshold for substantive differences. There may be obstacles to graduates meeting college readiness standards in small districts and rural districts. For example, small districts may not offer Advanced Placement courses because of limited numbers of students, or rural districts may not be in areas close to community colleges to offer dual credit classes.

Texas Education Agency’s selection of one or more alternative career readiness options would allow additional pathways for graduates to demonstrate college, career, and military readiness that are aligned to workforce outcomes.

Among graduates who did not demonstrate CCMR, a similar or higher percentage from small districts and rural districts were CTE completers, CTE concentrators, and work-based learners compared with large and major suburban districts. Furthermore, a similar or higher percentage of graduates who demonstrated career readiness via one of these three alternative career readiness options achieved postsecondary enrollment and credential attainment or persistence outcomes than graduates who met a career readiness accountability standard. Selecting one or more of these three alternative career readiness options would allow more graduates from all district sizes and community types, including small districts and rural districts, to demonstrate career readiness under the state accountability system and provide students additional pathways to demonstrate CCMR. Including one or more alternative career readiness options also would align with the state’s vision for education and workforce development and support TEA’s goals for preparing an educated and skilled workforce.

Other states with small or rural districts could consider similar standard-setting approaches to measuring college, career, and military readiness of high school graduates.

Findings from this study point to potential obstacles school districts face in implementing various courses and programs and the potential inequities in students' ability to achieve state career readiness standards. States with varying local capacities or regional occupations aligned with high-wage in-demand occupations could consider examining similar data to identify alternative ways to demonstrate career readiness that are more accessible across district settings and equivalently lead to desirable postsecondary outcomes.

Additional research is needed to better understand the implications of all CCMR accountability standards for graduates in small districts and rural districts and the implications for various student groups.

To enhance the findings from this study, it would be beneficial to conduct further research that incorporates additional cohorts of graduates and explores the attainment of CCMR accountability standards by various student subgroups. In addition, to fully understand how the standards align to postsecondary outcomes, it would be informative to explore postsecondary outcomes beyond the timeframe of this study to determine whether the accountability standards and alternative career readiness options lead to degree attainment or sustained employment in high-wage, in-demand occupations.

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