

2018-19 Evaluation of Career and Technical Education

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At-a-Glance

The Career and Technical Education (CTE) Department provided courses designed to prepare students in grades six through twelve for future careers or professional competencies. The goals of the CTE program were to prepare students for college and career success, to provide them with the skills to be competitive in a global economy, and to recognize and meet the unique needs of a diverse student population. The total budget of the CTE Department in 2018-19 was \$7,079,587 including a \$2,771,669 Perkins grant. This represented a 6.0 percent increase from the total budget in 2017-18 (\$6,653,768).

Dallas ISD campuses offered courses and course sequences in 271 career pathways within 16 career clusters in 2018-19. Dallas ISD also housed 47 National Academy Foundation (NAF) academies, small career themed learning communities within larger schools or as standalone public high schools at 20 campuses. Five career institutes were opened in 2018 at W.H. Adamson, L.G. Pinkston, W.W. Samuell, H. Grady Spruce, and Wilmer-Hutchins high schools. Career institutes partner with a Dallas County Community College District (DCCCD) college to offer more comprehensive coursework for CTE students with a closer relationship with industry partners than other CTE programs. There were also 23 Dallas ISD early college high school (ECHS) programs in 2018-19. ECHS students were offered the opportunity to earn an associate degree or up to 60 hours of tuition-free college credit by the time of high school graduation. Students throughout the district had the opportunity to earn industry-based certifications verifying that skill standards established by an industry or industry group were met.

Purpose and Methods of the Evaluation

The purpose of this evaluation was to examine: (1) the CTE Department budget, (2) characteristics of the Dallas ISD CTE program, (3) the completion rates of CTE dual credit courses, (4) the number of industry-based certifications earned, (5) the performance of Dallas ISD on CTE related state accountability indicators, (6) CTE student academic achievement outcomes on *State of Texas Assessments of Academic Readiness End-of-Course (STAAR EOC)* exams, and (7) college enrollment data for the Dallas ISD graduating class of 2018.

CTE program enrollment data for the 2018-19 school year were extracted by the Public Education

Information Management System (PEIMS) department staff members of Dallas ISD on January 24, 2019 and merged with the district demographic file dated October 26, 2018. The district criteria for identifying students in CTE programs was modified in 2018-19 to more closely align with state accountability data. Consequently, enrollment totals were lower than previous years and equivalent comparisons between years were not possible. CTE program staff provided NAF, career institute, and certification data. CTE student dual credit completion rates were calculated by merging CTE program enrollment data dated January 24, 2019 with district course files dated August 14, 2019. College, career, and military readiness (CCMR) and the Performance-Based Monitoring Analysis System (PBMAS) data were created and released by the Texas Education Agency (TEA). STAAR EOC assessment data were extracted from the district STAAR EOC data file dated June 4, 2019 and merged with the district CTE status file and the district demographic file. STAAR EOC data from 2017-18 and 2016-17 were extracted from district STAAR EOC data files dated September 6, 2018 and April 30, 2018. College enrollment was examined using data provided by the National Student Clearinghouse (NSC) as of June 27, 2019.

What were CTE student enrollment and course characteristics?

There were fewer CTE coherent sequence students in Dallas ISD in 2018-19 ($n = 15,989$) than 2017-18 ($n = 20,755$; Grimberg, Lorenz, Mejia, Watson, & Turner, 2018) or 2016-17 ($n = 19,507$; Turner, Sanguras & Barton, 2017). About a quarter (23.8%) of middle school students were enrolled in a CTE elective. Almost seventy-one percent (70.6%) of Dallas ISD high school students were enrolled in a CTE coherent sequence (39.3%) or a CTE elective (31.3%) in 2018-19. Almost seventy-four percent (73.6%) of CTE elective and CTE coherent sequence students were Hispanic. A lower percentage of CTE coherent sequence students were English learners (29.0%) than CTE elective (43.1%) or non-CTE students (41.5%). There was a higher percentage of non-CTE special education students (10.9%) than CTE elective (7.5%) or coherent sequence students (7.5%).

A total of 10,464 students participated in 47 NAF academies. There were 1,285 more Dallas ISD students who participated in a NAF academy in 2018-19 compared to 2017-18 ($N = 9,179$; Grimberg et al., 2018) and 3,856 more than participated in 2016-17

(N = 6,608; Turner et al., 2017). There were 952 Dallas ISD students who participated in five career institutes. The W.H. Adamson Institute of Automotive Technology had the largest student enrollment (n = 370), followed by the H. Grady Spruce Automotive Collision Refinishing and Repair Career Institute (n = 325). The L.G. Pinkston Institute of Welding had the lowest student enrollment (n = 18).

The CTE courses that enrolled the highest numbers of Dallas ISD high school students were Business, Administration, and Management (n = 8,326); Information Technology (n = 6,583); Finance (n = 5,115); Arts, A/V Technology, and Communications (n = 4,735); and Health Science (n = 4,724). A higher number of females were enrolled in CTE courses nontraditional for their gender than males (n = 3,213 versus n = 2,554).

What were the completion rates of CTE dual credit courses?

A total of 4,980 Dallas ISD students (including 2,917 CTE coherent sequence students) participated in 10,475 CTE dual credit courses in the 2018-19 school year. Eighty-eight percent (88.3%, n = 9,264) of CTE dual credit courses were completed. A higher percentage of CTE coherent sequence students completed a CTE dual credit course (89.7%) than non-CTE coherent students (85.0%).

How many industry-based certifications were earned in 2018-19

Overall, 3,529 Dallas ISD students took 5,038 industry-based certifications exams in 2018-19 earning 4,652 certifications (92.3 percent pass rate). This was a decrease from the reported number of certifications earned in 2017-18 (n = 5,117) and very similar to the number of certifications earned in 2016-17 (n = 4,643). One-third (33.8%) of Dallas ISD students who graduated in 2018-19 and were enrolled in the district four years prior received at least one certification which was lower than 2017-18 (36.6%). Certifications identified by TEA for the A to F accountability system accounted for 4.6 percent (n = 214) of the total certifications earned. Certifications identified in the Perkins Effectiveness Report (PER) accounted for 34.9 percent (n = 1,622) of the total certifications earned. CTE coherent sequence students received three-quarters (76.2%) of all certifications in the district which was higher than CTE elective students (16.8%) or non-CTE students (7.0%).

How did Dallas ISD perform on CTE-related accountability indicators

House Bill 22 (HB22) required the TEA to evaluate the academic performance of school districts with an

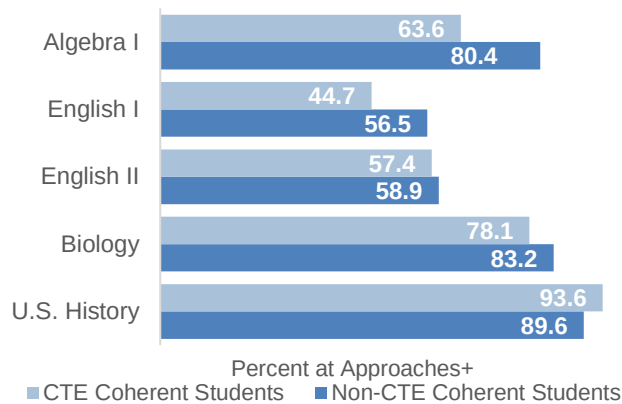
accountability rating of A through F based on three domains: 1) student achievement, 2) school progress, and 3) closing the gaps. CCMR indicators account for 40 percent of the weighted performance of high school campuses, K-12 campuses, and school districts in the student achievement domain. The Dallas ISD CCMR score increased from 74 in 2018 to 86 in 2019 representing an improvement in the performances of district students on CCMR indicators. The 2019 Dallas ISD CCMR score (86), based on 2018 annual graduates, was lower than Austin ISD (94), Houston ISD (91), and San Antonio ISD (90). Fifty-seven percent (57%) of 2018 Dallas ISD graduates were college, career, or military ready which was lower than Austin ISD (77%), Houston ISD (63%) and San Antonio ISD (61%).

The Performance-Based Monitoring Analysis System (PBMAS) is an automated data system that reports annually on the performance of school districts and charter schools. Program area performance indicators are analyzed and assigned numeric performance levels ranging from zero to three with higher numbers signifying areas of concern. Dallas ISD received performance levels of three on some CTE Special Education STAAR EOC passing rate performance indicators in 2016, 2017, and 2018. While passing rates have increased on every STAAR EOC exam over the past three years, the performances of special education CTE students are significantly lower than other CTE students.

What were the performances of CTE students on STAAR EOC exams?

The percentages of CTE coherent sequence students who reached the Approaches+ standard were lower than non-CTE coherent sequence students (CTE elective and non-CTE) on *Algebra I EOC* (-16.8 percentage point difference), *English I EOC* (-11.8 percentage point difference), *Biology EOC* (-5.1 percentage point difference), and *English II EOC* (-1.5 percentage point difference) (Figure 1). A higher percentage of CTE coherent sequence students reached the Approaches+ standard than non-CTE coherent students on *U.S. History EOC* (4.0 percentage point difference). Between the 2016-17 and 2018-19 school years, the percentage of CTE students at Approaches+ decreased on *Algebra I EOC* (-7.9 percentage points), *English I EOC* (-6.9 percentage points), and *Biology EOC* (-5.5 percentage points). The percentage of CTE coherent sequence students at Approaches+ increased slightly on *U.S. History EOC* (1.2 percentage points), and *English II EOC* (0.1 percentage points).

Figure 1: Percentages of Students at STAAR EOC Approaches+ Standard: 2018-19



Source: District STAAR EOC file dated June 4, 2019. District CTE status file dated January 24, 2019.

Note: CTE = Career and technical education. STAAR EOC = State of Texas Assessments of Academic Readiness End-of-Course. CTE students reflected CTE students who enrolled in a coherent sequence of courses and excludes students who enrolled in CTE electives.

What associate degrees were awarded to CTE students in 2018-19?

More graduating grade 12 ECHS students received an associate degree in the fall and spring of 2018-19 ($n = 232$) than ECHS students in the fall, spring, and summer terms of 2017-18 ($n = 197$) and 2016-17 ($n = 177$). More associate of science degrees were awarded to ECHS students ($n = 186$, 80.2%) than associate of arts ($n = 26$, 11.2%) or associate of applied science ($n = 20$, 8.6%) degrees. Students at Garza received the highest number of associates degrees ($n = 79$, 34.1%) in 2018-19 followed by Samuell ($n = 52$, 22.4%), Gilliam ($n = 41$, 17.7%), Lassiter ($n = 40$, 17.2%), and Spruce ($n = 20$, 8.6%).

What were the college enrollment rates for the Dallas ISD class of 2018?

Overall, 8,126 students graduated from Dallas ISD high schools in 2018. A total of 4,077 students (50.2 percent) enrolled in either a two-year or four-year college by the fall semester after graduating from Dallas ISD. CTE coherent sequence graduates enrolled at two-year colleges at a higher rate (28.4%) than CTE elective graduates (19.8%) or non-CTE graduates (16.9%). A higher percentage of non-CTE graduates enrolled at four-year colleges (36.9%) than CTE elective graduates (32.9%) or CTE coherent sequence graduates (23.3%).

Recommendations

- **Communicate the importance of entering grade nine endorsement data with appropriate campus-based staff.** Endorsement selection data helps stakeholders understand the fields and CTE programs chosen by students. Unfortunately, this

data could not be used in this evaluation due to missing data. CTE Department staff should communicate the importance of entering endorsement selection data into PowerSchool with appropriate campus-based staff.

- **Examine the decrease in the number of industry-based certifications that were earned between the 2017-18 school year and the 2018-19 school year.** The number of reported industry-based certifications earned by Dallas ISD students in 2018-19 was 4,652. This represented a 9.1 percentage decrease in the number of certifications earned in the district from 2017-18 ($N = 5,117$). Program staff should explore explanations for this decline.
- **Work with the special education department to boost CTE special education academic achievement.** The performances of CTE special education students were significantly lower than other CTE students on STAAR EOC exams. This has resulted in the Dallas ISD PBMAS CTE program area receiving performance levels of three and four on the CTE Special Education STAAR EOC passing rate performance level indicators over the past three years. Addressing this gap would improve Dallas ISD performance on state accountability reports.

References

- Grimberg, N. (August, 2019). 2017-18 Evaluation of Early College High Schools. Dallas, TX: Dallas Independent School District.
- Grimberg, N., Lorenz, A., & Mejan, M. Watson, C. Turner, H (October, 2018). 2017-18 Evaluation of Career and Technical Education. Dallas, TX: Dallas Independent School District.
- Turner, H., Sanguras, L., & Barton, L.M. (September, 2017). 2016-17 Evaluation of Career and Technical Education: Final Report. Dallas, TX: Dallas Independent School District.

An electronic version of this report as well as the full 2018-19 report can be found at www.dallasisd.org/Page/888. For more information, please contact Program Evaluation at evaluation@dallasisd.org.

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