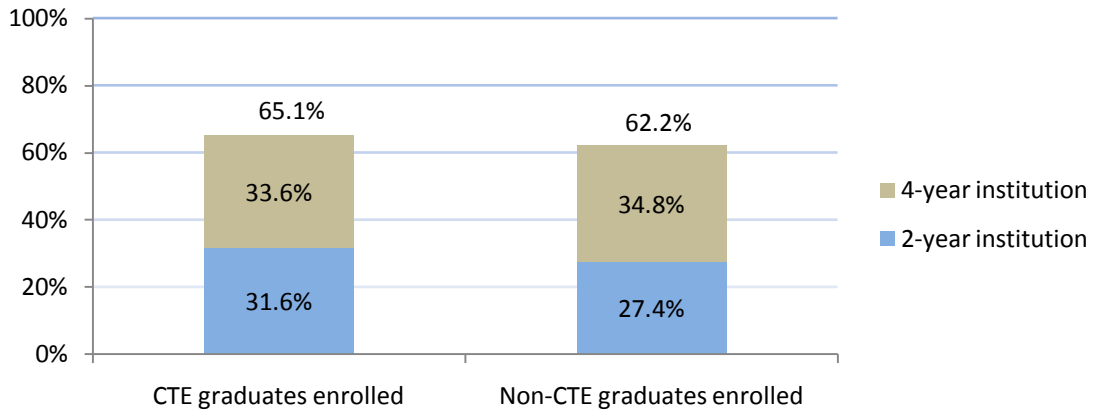
CAREER AND TECHNICAL EDUCATION: POSTSECONDARY OUTCOMES OF THE CLASS OF 2010

Department of Research and Evaluation
AUSTIN INDEPENDENT SCHOOL DISTRICT

The Career and Technical Education (CTE) program provides opportunities for students to acquire 21st century academic and technical skills needed for entry into the global workforce and/or postsecondary education. This report assesses whether significant differences existed in the postsecondary enrollment or employment of 2010 graduates, based on their CTE participation and industry certification status. Of the 4,073 graduates in the Class of 2010, 852 (21%) were CTE graduates and 205 (5%) had earned industry certifications or licenses during the 2009–2010 school year. The demographics of CTE graduates differed from those of non-CTE graduates in the following way: a significantly higher percentage of CTE graduates were minority (70.2%) and/or economically disadvantaged (52.3%), compared with non-CTE graduates (62.5% minority and 42.5% economically disadvantaged).

Did the postsecondary education outcomes of CTE and non-CTE graduates differ?

Figure 1. No significant difference existed between CTE and non-CTE graduates regarding enrollment in a postsecondary institution, nor did significant differences exist in enrollment in a 2-year or 4-year institution between CTE and non-CTE graduates, in contrast with results for the Class of 2009 (Pazera, 2009).



Source. National Student Clearinghouse, AISD enrollment and graduation data prepared by DRE

CTE Graduates

The graduates in this study were considered CTE graduates if they took an upper-level course in a CTE sequence of two or more courses for three or more credits, or they followed such a sequence and it included a Tech Prep course (i.e., with articulated credit at the postsecondary level) during their senior year of high school. Taking an upper-level CTE/Tech Prep course resulted in these students being categorized as a CTE level 2 or 3. Level 2 and 3 graduates were chosen as a unit of study for CTE program evaluation because the sequential course of study provided them with a foundation for a career, as opposed to CTE level 1 students, who took random CTE courses, and CTE level 0 students, who did not take any CTE courses in their senior year. Any graduates not identified as level 2 or 3 in their senior year were considered non-CTE.

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The results in Figure 1 indicate the majority of CTE graduates chose to continue their education after high school. This outcome is consistent with the current philosophy of CTE. Because nearly two-thirds of the jobs created in the U.S. by 2018 are expected to require some postsecondary education (Carnevale, Smith, & Strohl, 2010), CTE programs around the country are adapting to meet the nation's needs (National Association of State Directors of Career Technical Education Consortium, 2010). Most CTE programs offered in AISD have some courses articulated to colleges locally or statewide, meaning students can become eligible for college credit by taking these CTE courses in high school.

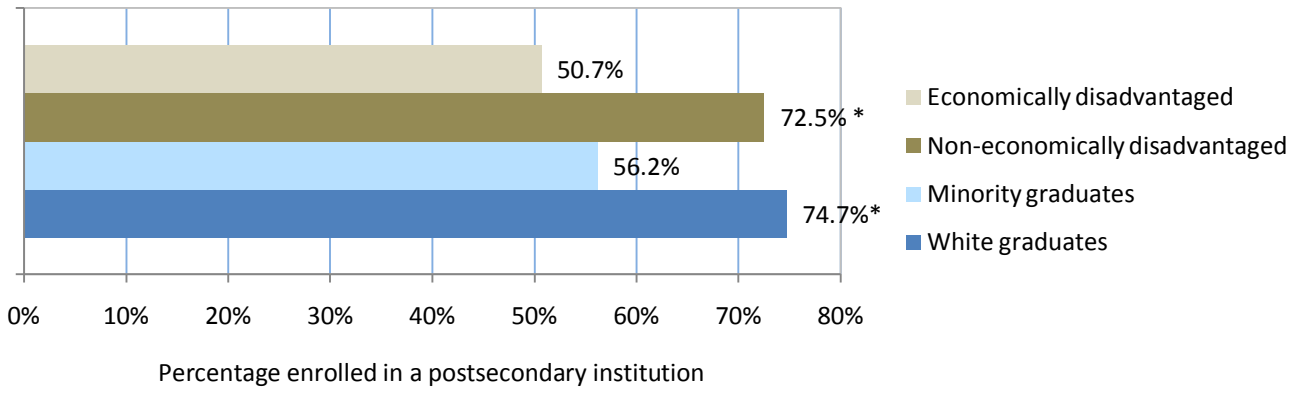
Although the college-going rates were the same for CTE and non-CTE graduates for both 2-year and 4-year institutions, it might be expected, given the technical nature of CTE programs, that the choice of postsecondary school would be different for CTE and non-CTE graduates. However, postsecondary enrollment choices were largely the same for the majority of CTE and non-CTE graduates enrolled.

Table 1. Over 60% of CTE and non-CTE graduates attended the same top 5 colleges.

Rank	School	Percentage of enrolled CTE graduates attending	Percentage of enrolled non-CTE graduates attending
1	Austin Community College	44.3%	39.8%
2	Texas State University	12.3%	7.5%
3	University of Texas at Austin	9.2%	7.1%
4	University of Texas San Antonio	5.2%	4.9%
5	Texas A & M University	2.3%	4.1%

Source. National Student Clearinghouse, AISD enrollment and graduation data prepared by DRE

Figure 2. Considering all graduates in the Class of 2010, a significantly lower percentage of minority graduates and economically disadvantaged graduates enrolled in a postsecondary institution, compared with White graduates and non-economically disadvantaged graduates, respectively.

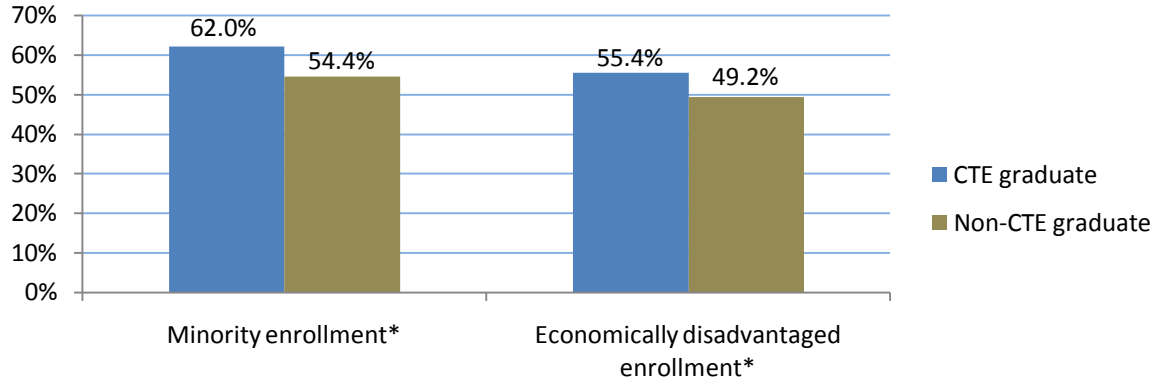


Source. National Student Clearinghouse, AISD enrollment and graduation data prepared by DRE

* Difference is significant at $p < .01$.

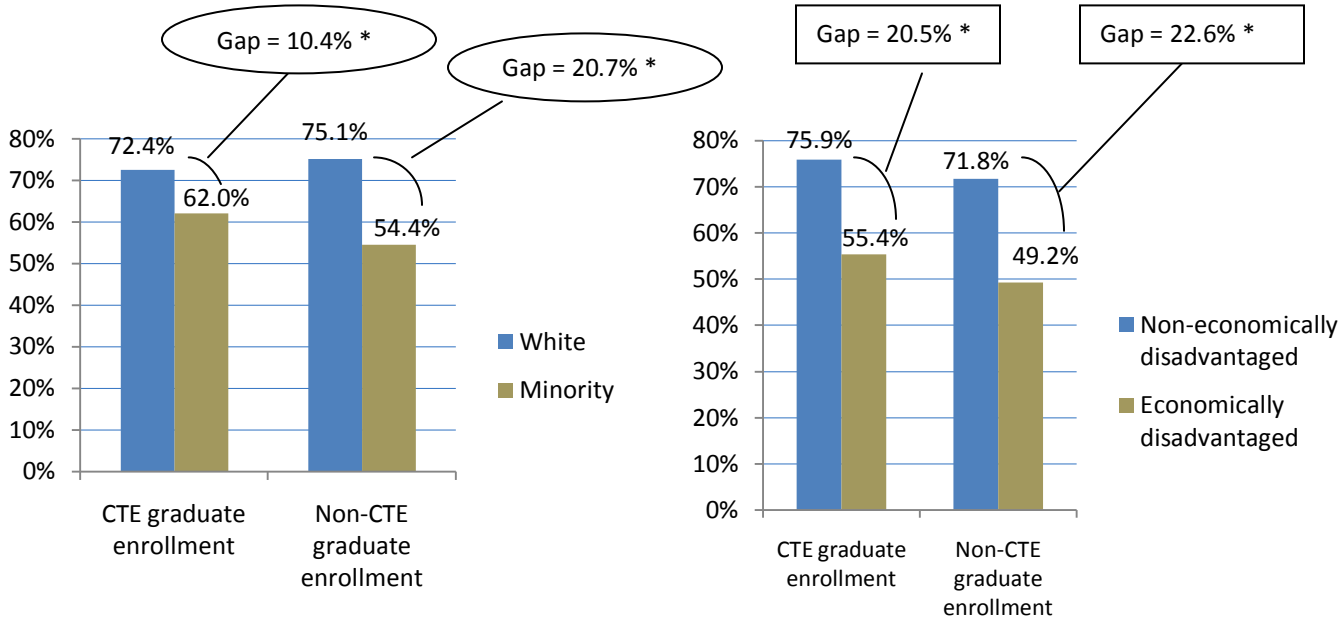
Given the lower enrollment rates of minority and economically disadvantaged graduates and the concentration of these groups in CTE, one might expect a significantly lower postsecondary enrollment rate for CTE graduates. However, as shown in Figure 1, this was not the case.

Figure 3. Postsecondary enrollment outcomes for minority and economically disadvantaged graduates were significantly better if they were CTE graduates.



Source. National Student Clearinghouse, AISD enrollment and graduation data prepared by DRE
Note. All non-White students were classified as minorities.
* Difference is significant at $p < .01$.

Figures 4a and 4b. Although an enrollment gap existed between White and minority and between economically disadvantaged and non-economically disadvantaged graduates, these gaps were significantly smaller for CTE graduates.



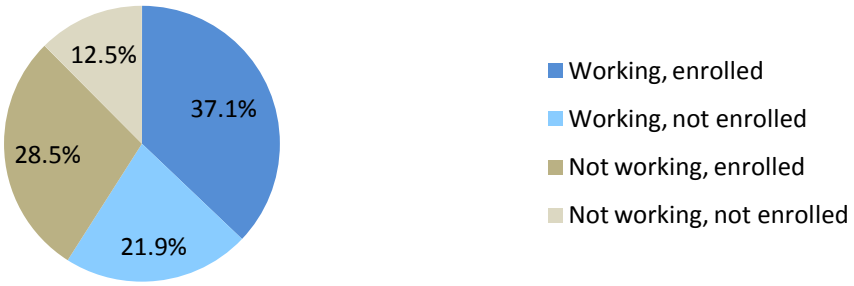
Source. National Student Clearinghouse, AISD enrollment and graduation data prepared by DRE
Note. No significant differences existed in enrollment between White CTE and non-CTE graduates, and non-economically disadvantaged CTE and non-CTE graduates.
* Difference is significant at $p < .01$.

The postsecondary enrollment outcomes for minority and economically disadvantaged CTE graduates may be attributed either to their CTE program participation or to a characteristic of these students that resulted in them choosing to both participate in CTE and to continue their education after high school.

Did the postsecondary employment outcomes of CTE and non-CTE graduates differ?

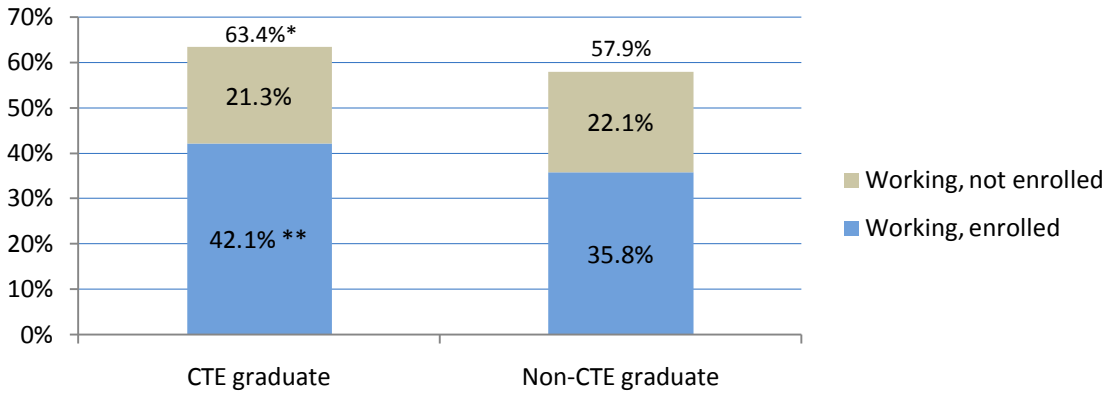
Data from the Texas Workforce Commission (TWC) documented employment of 2010 graduates from July 2010 through March 2011. Only graduates with a Social Security number reported in AISD student data systems were eligible to be located in the TWC database, leaving 3,445 (85%) of the 4,073 graduates in the analysis.

Figure 5. Almost 60% of all AISD graduates were working, and 63% of those working also were enrolled in a postsecondary institution.



Source. National Student Clearinghouse, AISD enrollment and graduation data prepared by DRE

Figure 6. A significantly higher percentage of CTE graduates than of non-CTE graduates were employed after high school.



Source. National Student Clearinghouse, AISD enrollment and graduation data prepared by DRE

* Difference is significant at $p < .01$.

** Difference is significant at $p < .05$

The higher percentage of CTE graduates working was not accounted for solely by their economic status. CTE status also appeared to play a role. Overall, a significantly higher percentage of economically disadvantaged graduates (62%) than of non-economically disadvantaged graduates (57%) were working. However, including only economically disadvantaged graduates in the analysis did not change the results: a significantly higher percentage of economically disadvantaged CTE graduates than of economically disadvantaged non-CTE graduates were working.

Did the postsecondary outcomes of industry certificate and non-certificate holders differ?

No significant difference existed in the postsecondary enrollment of the 205 graduates with industry certifications and those without (3,868): 65.4% of certificate holders were enrolled, and 62.7% of non-certificate holders were enrolled. Nor did a significant difference exist in the postsecondary employment of certificate and non-certificate holders: 65.6% of certificate holders were working, and 58.7% of non-certificate holders were working. Thus, no evidence exists that earning an industry certificate provided graduates an advantage in the job market.

Funding Sources

This report was funded by a federal Carl D. Perkins grant to the district's CTE department.

District Strategic Plan

This report speaks to goal 3, measurable outcome 8. **Goal 3**: All students will graduate college and career ready. **Measurable Outcome 8**: Postsecondary enrollment.

References

Carnevale, A. P., Smith, N., & Strohl, J. (2010). *Help wanted: Projections of jobs and education requirements through 2018*. Georgetown University, Center on Education and the Workforce. Retrieved from http://www9.georgetown.edu/grad/gppi/hpi/cew/pdfs/FullReport.pdf

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