



Research Round-Up | January 15, 2025

Alauna S. McGee, Region 3 Research Commissioner

Edmunds, Julie, Fatih Unlu, Brian Phillips, Bryan Hutchins, and Christine Mulhern. (2022). CTE-Focused Dual Enrollment: Participation and Outcomes. (EdWorkingPaper: 22-692). Retrieved from Annenberg Institute at Brown University: <https://doi.org/10.26300/03wk-r054>

This study focused on participation and outcomes related to CTE dual enrollment courses, specifically for students enrolled in the Career and College Program (CCP) - the statewide dual enrollment program in North Carolina (NC). The authors noted that their study is the first to examine a statewide CTE dual enrollment initiative. It was funded by a grant awarded to the University of NC at Greensboro by the Institute of Education Sciences (within the US Department of Education). The study sought to (1) explore the impact of student completion of CTE dual enrollment courses on secondary and postsecondary outcomes and (2) uncover whether differences exist for particular student populations. Their research questions were as follows:

- RQ1:** What are the characteristics of students participating in North Carolina's CTE Dual Enrollment Pathway?
- RQ2:** Do high school outcomes, including graduation rates, GPA, and college credits earned in high school, differ between students participating in the CTE Dual Enrollment Pathway and similar non-participating students?
- RQ3:** Do enrollment rates in postsecondary education differ between students participating in the CTE Dual Enrollment Pathway and similar non-participating students?
- RQ4:** To what extent do results differ by student characteristics such as gender, race/ethnicity, and economically disadvantaged status?

Using data from the NC Department of Public Instruction, the University of NC System, the NC Community College System, and the National Student Clearinghouse, they tracked the dual enrollment participation of seven cohorts, beginning with 11th-grade students during 2012-2013 and ending with 11th-grade students in 2018-2019 - totaling over 600,000 students. They examined the following data points for those students:

- college credits earned by the end of 12th grade
- high school diploma achievement
- final high school GPA
- enrollment in an NC public postsecondary institution

Overall, the study found that enrollment in CTE courses was positively associated with (1) college credits earned in high school, (2) graduation from high school, and (3) enrollment in college within one year after high school. More specifically:

- Students in CTE pathways were statistically significantly more likely to graduate from high school than students who did not.
- There was a positive relationship regarding postsecondary enrollment at two-year institutions and a negative relationship regarding postsecondary enrollment at four-year institutions for students who took CTE courses.



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Regarding differences according to particular student characteristics, findings suggested some disparities in CTE course enrollment among subgroups, but not necessarily to the same extent as in broader dual enrollment research.

- The percentage of female students who enrolled in CTE courses was higher than males.
- Among Black, Hispanic, White, Asian, and Native American students:
 - White students were most likely to enroll in a CTE course; Asian students were the least likely.
 - The % of Black and Native American students was also below the overall average of students who took CTE courses.
 - The % of Hispanic students enrolled in CTE courses matched the overall average of students who took CTE courses.
- The % of economically disadvantaged students who took CTE courses matched the overall % of students who took CTE courses.

Given the results, one of the most compelling implications for practitioners is that this study could help dispel the myth that students who take CTE courses are not college-bound. Additionally, it could induce conversations between two-year and four-year colleges about transfer agreements tailored to dual enrollment students.