

The Impact of Career and Technical Education on Postsecondary Outcomes in Nebraska and South Dakota

Education leaders are becoming increasingly interested in career and technical education (CTE) as a means to provide students with the academic and technical skills needed to succeed in life after high school graduation. CTE programs in high school offer courses aligned to specific career fields such as manufacturing or education and training. As state education agencies continue to expand and integrate CTE programs, research plays an important role in illuminating the impact of student participation in CTE programs on education outcomes. The Nebraska Department of Education and the South Dakota Department of Education partnered with the Regional Educational Laboratory Central to explore the short- and longer-term education impacts of CTE participation among students in Nebraska and South Dakota who become CTE concentrators. A CTE concentrator is a student who takes a sequence of two or three CTE courses aligned to a specific career field such as manufacturing or education and training.

The study team used a quasi-experimental design (that is, a study design that does not assign students to groups randomly) to compare the education outcomes of CTE concentrators and non-CTE concentrators who had similar demographic characteristics and grade 8 state assessment results. To examine the impact of being a CTE concentrator on high school graduation, postsecondary enrollment and completion, and type of postsecondary award attained, the study included data collected for students in Nebraska and South Dakota whose four-year expected high school graduation year was between 2012/13 and 2016/17.

Key findings

- **CTE concentrators were more likely than non-CTE concentrators to graduate from high school on time and to enroll in postsecondary education.** CTE concentrators were 7 percentage points more likely than non-CTE concentrators to graduate from high school on time. CTE concentrators also had a 10 percentage point greater likelihood of postsecondary enrollment within two years of their expected high school graduation year and an 8 percentage point greater likelihood of postsecondary enrollment within five years. Postsecondary enrollment included being enrolled full- or part-time in a professional certificate program, a diploma-granting program, or a two-year or four-year institution.
- **CTE concentrators were more likely than non-CTE concentrators to earn any kind of postsecondary award within two years of and within five years of their expected high school graduation year.** CTE concentrators were 2 percentage points more likely than non-CTE concentrators to earn any kind of postsecondary award within two years of their expected high school graduation year and 3 percentage points more likely to do so within five years.
- **CTE concentrators were more likely than non-CTE concentrators to attain a postsecondary award up to an associate's degree within five years of their expected high school graduation year but 1 percentage point less likely to attain a bachelor's degree or higher.** CTE concentrators were 4 percentage points more likely than non-CTE concentrators to attain a professional certificate, diploma, or associate's degree as their highest postsecondary award within five years of their expected high school graduation year. CTE concentrators were 1 percentage point less likely than non-CTE concentrators to attain a bachelor's degree or higher within five years.