

# Indiana and Minnesota Students Who Focused on Career and Technical Education in High School: Who Are They, and What Are Their College and Employment Outcomes?

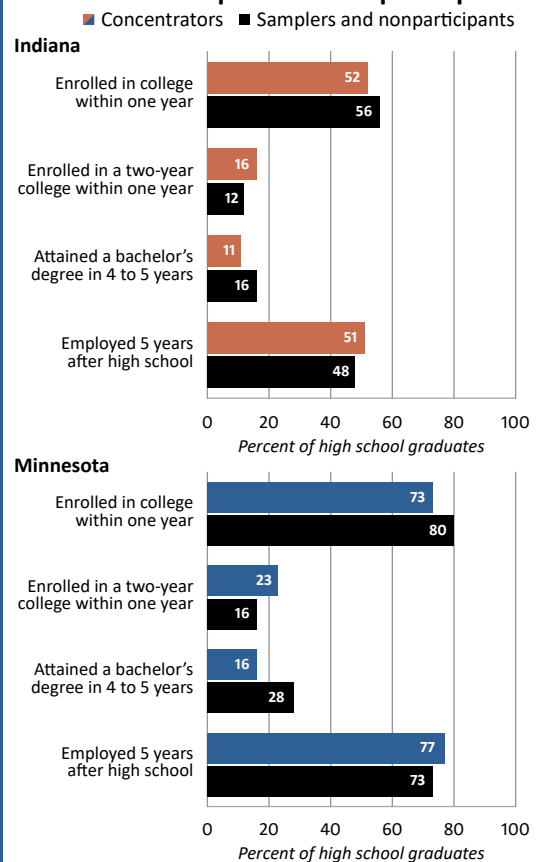
In Indiana and Minnesota, career and technical education programs are intended to provide pathways to both postsecondary education and careers after high school. Each state’s education agency, higher education agency, and workforce agency collaborated to develop career and technical education courses. These agencies partnered with the Regional Educational Laboratory Midwest to examine whether high school graduates in each state who completed a large number of career and technical education courses in a single career-oriented program of study (concentrators) had different college and workforce outcomes from graduates who share many of the same characteristics but completed fewer (samplers) or no career and technical education courses (nonparticipants). The findings from the study can inform states’ efforts to develop career and technical education programs and increase participation among other students.

## Key findings

- In both states male graduates, graduates who received special education services, and graduates who were not proficient in reading in grade 8 were more likely than their peers to be concentrators, and the percentage of graduates who were nonparticipants was higher in schools in urban and suburban areas than in schools in towns and rural areas.
- In both states concentrators were less likely than similar samplers and nonparticipants to enroll in college within one year of high school graduation. But this finding reflects mainly enrollment in four-year colleges; concentrators were more likely to enroll in a two-year college. Concentrators earned a bachelor’s degree at a lower rate than similar samplers and nonparticipants (see figure).
- In both states concentrators had higher employment rates and earnings during the five years after high school graduation than similar samplers and nonparticipants (see figure).

Educators and guidance counselors can use these findings to communicate with students and families about the benefits and drawbacks of becoming a concentrator, and state agency staff can use the findings to examine whether students have equitable access to career and technical education course opportunities.

### Career and technical education concentrators had different college enrollment rates and employment rates than similar samplers and nonparticipants



Note: All differences between concentrators and similar samplers and nonparticipants are statistically significant at  $p < .05$ . The sample includes students who graduated from an Indiana public high school between 2013/14 and 2017/18 or a Minnesota public high school between 2012/13 and 2017/18. Percentages are from regression models that adjusted for the background characteristics of graduates and their high schools.

Source: Authors’ analysis of data provided by the Indiana Performance Management Hub and the Minnesota Statewide Longitudinal Education Data System.