



Career and Technical Education Credentials in Virginia High Schools: Trends in Attainment and College Enrollment Outcomes

In Virginia, there has been a long-term effort to increase the number of graduates who earn career and technical education (CTE) credentials. These CTE credentials are intended to provide high school graduates with additional preparation for college and careers. In 2013, the Virginia legislature added a CTE credential requirement to the Standard diploma for students who entered grade 9 for the first time in 2013 or later. The policy focuses on Standard diploma graduates, who are less likely to enroll in, persist in, or complete college than graduates who earn Virginia's other main diploma, the Advanced Studies diploma. In addition, this new policy is part of the state's efforts to eliminate racial and socioeconomic inequities in Virginia public schools, as graduates who are Black or Hispanic, who are English learner students, who are in economically disadvantaged circumstances, or who receive special education services are more likely than other groups of graduates to earn the Standard diploma. At Virginia CTE leaders' request, the Regional Educational Laboratory Appalachia conducted a descriptive study of attainment rates of CTE credentials, completion rates of CTE programs of study, and college enrollment rates from 2011 to 2017, the years before and after the policy change. Education stakeholders can use the results of this study to inform their policies.

Key findings

- **The percentage of Standard diploma graduates who earned at least one CTE credential increased from 23 percent to 91 percent between 2011 and 2017.** The increase in the attainment rate of CTE credentials was largely driven by an increase in the percentage of these graduates earning broad CTE credentials. The limited evidence available suggests that these CTE credentials have limited value in the labor market and that professional licenses, which had almost no increase, may have greater value in the labor market.
- **Between 2011 and 2017, the attainment rate of CTE credentials for Standard diploma graduates increased for all groups of graduates, including groups based on demographic characteristics, federal program participation, and academic achievement.** The increases were not even across groups of graduates. The largest increases were among Black and Hispanic graduates, graduates who were not proficient in writing, and graduates designated as gifted. If graduates earn CTE credentials that employers value, the policy could promote more equitable college and career outcomes.
- **Between 2011 and 2017, there were decreases in the percentage of Standard diploma graduates enrolling in college.** During this time, changes in student demographics and changes that increased the availability of postsecondary noncredit credential programs in Virginia's Community Colleges may have reduced Standard diploma graduates' enrollment in credit-bearing programs. These changes may have influenced student achievement and enrollment patterns. As a result, it is critical to engage in additional research to understand whether the policy is benefitting students as intended.