The Interplay of CTE Credit-Taking, Occupational Program Choice, and Full-Time Work Directly After High School: Addressing the Policy-Driven School-to-Work Perspective

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ABSTRACT

We examined the impact of secondary Career and Technical Education (CTE) credit-taking on students attaining full-time employment following graduation from high school in the United States, and whether such credit-taking impacted students entering employment in a related field. We focused on occupational programs, and we used four levels of CTE credit-taking (Aliaga, 2023). Similarly, we examined the impact of job-related school strategies on full-time employment and working in a related field. This study was conducted using data from the United States High School Longitudinal Study of 2009. We found that different levels of CTE credit-taking do predict working full-time after school, depending on the occupational program, and they also predict working in a related field.

KEYWORDS
Career and technical education, high school, full-time employment, labor market, occupational programs, credit-taking, school-to-work

Ever since its inception, one of the policy goals of career and technical education (CTE)/vocational education in the United States has been to provide instruction to students that would allow them to work in an occupation and earn a living and, in doing so, to reduce the job and skills gaps in business and industry, thus supporting the economy and the communities. A critical characteristic was that “such education should be fit for useful employment” (Smith-Hughes Act, of 1917, Sec. 10). Consequently, “a key measure of the effectiveness of vocational programs is how well they prepare students for work” (Boesel et al., 1994, p. 87), a purpose that has continued to exist even in changing times (Rojewski & Hill, 2014).

The CTE role expanded towards the end of the 1990s to also prepare students “concomitantly for employment and higher education” (Lynch, 2000, p. 158). Nevertheless, even while pursuing a postsecondary degree also became an attainable option for CTE students (Aliaga, Kotamraju, & Stone, 2012), CTE still remained the primary path to prepare students for work and to seek employment immediately after high school graduation.
Notwithstanding the academic and career options available to high school students, about 14% of all graduates in the Class of 2013 in the United States, including CTE credit-taking students, entered the workforce on a full-time basis immediately after completing high school (Dalton, Ingels, & Fritch, 2015), without enrolling in college.

For years, research has been conducted on the impact of CTE on students’ postsecondary work trajectories, but they have focused chiefly on CTE students obtaining employment (Cowan et al., 2019), their earnings and wages (Bishop & Mane, 2004; Griffith & Wade, 2001; Mane, 1999; Panel, N. I. A., & Education, 2004), or on labor force participation rates or unemployment (Holzwart & Liu, 2020; Mane, 1999).

Research is minimal, however, on the connection between the CTE credit-taking on the occupational programs students take in high school and their full-time employment directly after graduation. In other words, if one of the policy goals of the CTE federal funding legislation in the United States is to prepare students also for work, are those policies meeting that goal? Are students being prepared so they can take on full-time employment following their graduation from high school? Are high schools preparing students for entry jobs, meeting the demand from business and industry? Moreover, is that preparation in high school leading to immediate full-time employment for CTE students in a related field upon graduation? Currently, no available research has examined the connection between CTE credit-taking and working full-time after high school graduation. This is a significant gap in the literature, particularly given the policies and legislation that intend to prepare students for an occupation following their graduation from high school.

Studies like this are needed because they can help explain whether there is a school-to-work connection as intended in the United States policy and legislation, particularly contained in the Strengthening Career and Technical Education for the 21st Century Act (2018) or Perkins V, and its core framework of programs of study and career pathways (Carl D. Perkins Career and Technical Education Improvement Act, 2006; Cushing et al., 2019).

The purpose of this study was twofold: first, the authors explored the impact of levels of CTE credit-taking, and involvement in other school-supported strategies, on full-time employment after high school, and second, they analyzed whether there is an impact on working full-time in the same field that those students had participated in while in high school.

The following are the research questions in this study:

1) How do the different levels of credit-taking in CTE occupational programs predict students' working in a full-time job directly after graduating from high school?
2) How do the different levels of credit-taking in CTE occupational programs predict students working full-time in a job in a related field?
3) How do additional support strategies for work impact students working full-time and working in a job in a related field?

In this study, the main focus was on the examination of the impact of CTE credit-taking on students working full-time directly after graduation from high school and whether those credits impacted working in a related field. Subsequently, the authors also analyzed the role of additional supporting strategies for work, as well as the students’ background characteristics. With that goal, the authors analyzed data from the High School Longitudinal Study (National Center for Education Statistics, n.d.) which is a national longitudinal survey conducted by the U.S. Department of Education that provides information about students’ participation in CTE and other academic indicators, as well as students’ transition to work and postsecondary education. The total sample size was 25,206 students. This study is based on two logistic regression models used to: a) analyze whether taking different numbers of CTE credits impacted students working full-time in an occupation and, b) if the amount of CTE credits they took in high school explained their work full-time in a related area—i.e., whether there is a school-to-work alignment. The authors’ analyses indicate CTE credit-taking impacts differently