

Career Academies

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Career and Technical Education

The concept of career and technical education (CTE) is not complex; students learn skills that prepare them to address the needs of the labor market. "It entails skill building for careers in fields like information technology, health sciences, and advanced manufacturing."¹ At their best, high-quality CTE programs are strategic and sequenced. Students learn the basic skills necessary to receive an industry-recognized certification and develop essential competencies valued by employers, such as the abilities to communicate effectively, collaborate with colleagues, and solve complex problems. One such initiative is the Career Academies' CTE model.

Pioneered in Philadelphia in 1969, Career Academies exist in districts throughout the country, including more than 1,200 Career Academies in nearly 500 California high schools. Career Academies operate as a "school-within-a-school" structure. Each Academy has a career theme, such as health care, finance, technology, communications, and public service. Career Academy-based courses often are scheduled in blocks in the morning, leaving the remainder of the day for traditional academic course work. Career-themed courses are taught by Career Academy teachers, who come from a variety of academic and vocational disciplines. In most cases, student cohorts work with the same teachers, in both traditional and Career Academy courses, through their entire high school careers.²

Impacts on Student Outcomes

Researchers at MDRC, an education and social policy research organization in New York City, conducted a randomized control trial evaluation³ of the Career Academies' model, measuring student outcomes at the end of the students' projected twelfth-grade year.⁴ The study analyzes data from 1,400 ninth-grade students across five states⁵ and the District of Columbia who were assigned randomly to one of three conditions: enrolled in a Career Academy, waitlisted for a Career Academy and enrolled elsewhere, and a comparison group of students who neither enrolled in a Career Academy nor were placed on a waitlist. Two

additional studies measured the original cohorts' outcomes at four and eight years after high school graduation.⁶

The analyses reveal surprising results. Career Academies had much stronger effects on labor market outcomes than on academic outcomes, and on the high-risk population than on the general population. Career Academies did not show a statistically significant increase in the percentage of students who graduated from high school or obtained their GED.⁷ There were no discernible effects found for staying in or progressing through school and Career Academy students did not show increased standardized math or reading test scores.⁸

However, Career Academies did produce substantial improvements in high school outcomes for students in the highest-risk subgroup for dropping out of school.⁹ Students at highest risk of dropping out of high school who participated in a Career Academy were less likely to drop out of school¹⁰ and more likely to complete more credits toward high school graduation,¹¹ complete more academic core courses,¹² take three or more career or vocational courses,¹³ and apply to college.¹⁴ These findings suggest positive effects for those at highest risk of disengaging from school.^{15,16}

The program also produced statistically significant, positive, and sustained impacts for men on a variety of labor market outcomes. For example, men who participated in a Career Academy earned an average of 11 percent, or \$2,088, more per year than their non-Career Academy peers. In addition, through a combination of increased wages, increased hours worked, and increased job stability, men in the Career Academies' treatment group increased their real earnings by 17 percent, or \$3,731, per year.¹⁷ Women did not experience similar outcomes.¹⁸

Guiding Questions

- How could the school district initiate and expand effective CTE programs ensuring positive postsecondary outcomes that increase earning potential?
- What are the costs, if any, to state and local school districts for implementing effective CTE programs?
- On the demand side, who are the most likely employers/employment sectors for high-quality CTE graduates in the area?

Endnotes

- ¹ S. M. Dougherty, *Career and Technical Education in High School: Does It Improve Student Outcomes?* (Washington, DC: Thomas B. Fordham Institute, 2016), p. 2.
- ² J. J. Kemple and J. C. Snipes, *Career Academies: Impacts on Students' Engagement and Performance in High School* (New York, NY: MDRC, 2000), http://www.mdrc.org/sites/default/files/Career_Academies_Impacts_on_Students.pdf.
- ³ This study meets the What Works Clearinghouse (WWC) group design standards without reservation.
- ⁴ Kemple and Snipes, *Career Academies: Impacts on Students' Engagement and Performance in High School*.
- ⁵ Schools were selected as follows: one school each in Maryland, Pennsylvania, and Texas; two schools in Florida; and three schools in California.
- ⁶ J. J. Kemple, *Career Academies: Impacts on Labor Market Outcomes and Educational Attainment* (New York, NY: MDRC, 2004), http://www.mdrc.org/sites/default/files/full_49.pdf; J. J. Kemple and C. J. Willner, *Career Academies: Long-Term Impacts on Labor Market Outcomes, Educational Attainment, and Transitions to Adulthood* (New York, NY: MDRC, 2008), http://www.mdrc.org/sites/default/files/full_50.pdf.
- ⁷ It is important to note that nearly all (96 percent) Career Academy students completed secondary education within eight years of their expected graduation date, compared to 94 percent of the control group. Kemple and Willner, *Career Academies: Long-Term Impacts*. While this difference is not statistically significant, the effect size for the Career Academies was 0.27, which is considered substantively important based on WWC calculations. See WWC, *Procedures and Standards Handbook*, "Section IV. Reporting on Findings" for additional information, https://ies.ed.gov/ncee/wwc/Docs/referenceresources/wwc_procedures_v3_0_standards_handbook.pdf (accessed August 14, 2017). Further, WWC rated the program's effects on completing school as potentially positive within the WWC's dropout prevention topic area.
- ⁸ Kemple, *Career Academies: Impacts on Labor Market Outcomes and Educational Attainment*; Kemple and Snipes, *Career Academies: Impacts on Students' Engagement and Performance in High School*.
- ⁹ Kemple and Snipes, *Career Academies: Impacts on Students' Engagement and Performance in High School*.
- ¹⁰ Specifically, 21 percent of Career Academy students versus 32 percent of non-Career Academy students dropped out of high school.
- ¹¹ Among Career Academy students, 40 percent increased course completion toward high school graduation compared to 26 percent of non-Career Academy students.
- ¹² Specifically, 32 percent of Career Academy students versus 16 percent of non-Career Academy students completed more academic core courses.
- ¹³ Among Career Academy students, 58 percent completed three or more vocational courses compared to 38 percent of non-Career Academy students.
- ¹⁴ Specifically, 51 percent of Career Academy students versus 35 percent of non-Career Academy students applied to college.
- ¹⁵ Kemple and Snipes, *Career Academies: Impacts on Students' Engagement and Performance in High School*.
- ¹⁶ The authors urge caution when making inferences about causal relationships for the students who are at highest risk since the study did not test certain external factors (i.e., stronger support from teachers and peers).
- ¹⁷ Kemple and Willner, *Career Academies: Long-Term Impacts*.
- ¹⁸ Kemple, *Career Academies: Impacts on Labor Market Outcomes and Educational Attainment*.

Photo by Allison Shelley/The Verbatim Agency for **American Education: Images of Teachers and Students in Action**

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