P-TECH Grades 9–14 Schools Increase Degree Attainment for Young Men

SEE THE REPORT

Nationally, young men lag behind young women in college enrollment and degree attainment.[1] The first rigorous evaluation of the P-TECH Grades 9–14 school model finds this educational approach may improve college success for young men. The study, which looked at the first seven P-TECH schools in New York City, found large effects on postsecondary degree attainment, particularly for male students. The findings add to a growing body of research showing positive impacts for young men who take career and technical education (CTE) courses.[2]

About the study

- Examined the **first seven** P-TECH Grades 9–14 schools in New York City.
- Looked at **students admitted from 2013 to 2017** over 4 to 7 years, starting in Grade 9.
- Considered **impacts**, **implementation**, and **cost** of the P-TECH model.
- To analyze outcomes, compared students who won lotteries to attend P-TECH schools **(P-TECH group)** with those who did not **(comparison group)**.

Key Outcomes

The P-TECH group was more likely than the comparison group to

Earn **CTE credits** during high school.[3]

+2.19 CTE credits

Participate in **internships** during high school.

+38 percentage points

Dual enroll in a **college-level course** during high school.[3]

+26 percentage points

Earn a **postsecondary degree** after 3 years of postsecondary education.

+5 percentage points

Role of Gender

Results among **young men** were the primary drivers of these outcomes, suggesting the P-TECH model supports male students better than other kinds of high schools.

Seven years after entering high school, **13 percent of young men in the P-TECH group** had earned an associate's degree, compared with **3 percent in the comparison group**.

Female students in both groups earned college degrees at similar rates.

Role of the Pandemic

Even during the height of the COVID-19 pandemic, **participation in work-based learning** activities was much stronger in the P-TECH group than in the comparison group.

About the P-TECH Grades 9–14 Schools in New York City

6-year program: 4 years high school + 2 years postsecondary

PARTNERSHIPS

Each P-TECH high school has a college partner and at least one employer partner.

Each P-TECH high school focuses on science, technology, engineering, and math (STEM) career fields where there is a strong demand for workers at every level of experience.

STEM FOCUS

WORK-BASED LEARNING

Students participate in a career-development sequence in alignment with the academic curriculum; this sequence includes professional mentoring, job shadowing, internships, and more.

Students earn high school diplomas in 4 years and industry-aligned, cost-free associate's degrees within 6 years.

CREDENTIALS

Admissions: Open enrollment/random lottery

Recommendations for Policy and Practice

Clarify the goals of the P-TECH model.

Be clear up front about the P-TECH goals, which may vary by school, to help students, families, and education leaders make decisions.

Set clear expectations for employer partners.

Ensure that employers, who play a major role in the P-TECH model, have a clear understanding of the expectations and goals related to work-based learning activities.

Monitor and ensure equitable access.

Monitor for equity in students' access to college and career opportunities that may be limited.

Ensure support for struggling students.

Help students complete the core components of high school to increase participation in accelerated or specialized opportunities.

[1] Conger, D. (2015). High school grades, admissions policies, and the gender gap in college enrollment. *Economics of Education Review, 46*, 144–147; Conger, D., & Long, M. C. (2010). Why are men falling behind? Gender gaps in college performance and persistence. *Annals of the American Academy of Political and Social Science, 627*(1), 184–214; Fortin, N. M., Oreopoulos, P., & Phipps, S. (2015). Leaving boys behind: Gender disparities in high academic achievement. *Journal of Human Resources, 50*(3), 549–579.

[2] Kemple, J. J., & Willner, C. J. (2008). Career Academies: *Long-term impacts on work, education, and transitions to adulthood.* MDRC; Brunner, E. J., Dougherty, S. M., & Ross, S. L. (2023). The effects of career and technical education: Evidence from the Connecticut Technical High School System. *Review of Economics and Statistics, 105*(4), 867–882; Theodos, B., Pergamit, M. R., Hanson, D., Edelstein, S., & Daniels, R. (2016). *Embarking on college and career: Interim evaluation of Urban Alliance.* Urban Institute, although the positive results were not found in a longer term follow-up study of the same program.

[3] In New York City, 1 credit equates to 1 semester of course work.

IES Institute of Education Sciences

CTE Career & Technical Education RESEARCH NETWORK

mdrc BUILDING KNOWLEDGE TO IMPROVE SOCIAL POLICY

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