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EFP Takeaways

CTE Teacher Licensure and Long-Term Student Outcomes

Background

Prior studies find that students' placement with certain types of teachers can lead to sizable differences in students' future earnings. These studies have focused on traditional academic classes and have not examined career and technical education (CTE) teachers. Bingjie Chen, Shaun Dougherty, Dan Goldhaber, Kristian Holden, and Roddy Theobald provide the first empirical evidence that links characteristics of CTE teachers to long-term student outcomes. Their work is published in vol. 18, issue 2 of *EFP*.

The Study

The authors use longitudinal data from Massachusetts that link high school course-taking records in career and technical education (CTE) to high school and postsecondary student outcomes. They select Massachusetts both due to unique CTE licensure requirements that involve subject performance tests and due to the availability of panel data that links to students to their teachers and longer-term outcomes.

For more details:

- View the [full issue](#).
- See the [full article in *Education Finance and Policy*](#).
- [Sign up here to receive future *EFP Takeaways*](#).
- Summary of:
Chen, B., Dougherty, S., Goldhaber, D., Holden, K., & Theobald, R. (2023). CTE Teacher Licensure and Long-Term Student Outcomes. *Education Finance and Policy*, 18 (2): 253-276.

Findings

Most notably, the authors find that CTE teachers who received better scores on subject performance tests required for licensure tend to have students with higher longer-term earnings than CTE teachers who received lower scores on these tests, controlling for other factors.

As shown in the figure below, a 1 standard deviation increase in teacher performance on these tests is associated with an approximately \$1,000 increase in average expected earnings for the teacher's students 5 years after their expected graduation date. This provides evidence that the skills of CTE teachers, as proxied by their scores on the state's performance licensure tests, have meaningful predictive power for their students' postsecondary outcomes.

Figure. Relationships between CTE teacher subject performance licensure test scores and student earnings five years after expected high school graduation

