Does occupational training pay off for students?

A look at community college noncredit programs in Texas.

Peter Riley Bahr, Ph.D.
Strada Institute for the Future of Work

Rooney Columbus, Ph.D.
E&E Analytics

strada INSTITUTE FOR THE FUTURE OF WORK

BACKGROUND

About two out of every five undergraduate students are enrolled in community colleges, seeking degrees or certificates, upskilling for their current career, or retooling for new careers through for-credit programs and courses. Community colleges also serve millions of students each year through noncredit programs. Many of these noncredit programs provide occupational training — offering an alternative route to upskilling or reskilling and often preparing students for a professional certification or license needed to secure employment or advance in a specific field.

Despite the high level of demand for noncredit occupational training, until now we have been unable to say with confidence that the training pays off for students. Are students rewarded for their investment through higher wages or a better chance of securing stable employment?

The recent enactment of Workforce Pell Grants for short-term occupational training places a particularly fine point on the need to answer this question.

A study recently published in Educational Evaluation and Policy Analysis addresses the question, analyzing wage growth following occupational training in community college noncredit programs. This brief highlights the key findings of that study and implications for education and workforce policy with special attention to the implementation of Workforce Pell and Workforce Innovation and Opportunity Act reauthorization.

Source:

Bahr, Peter Riley and Rooney Columbus (in press). "Labor Market Returns to Community College Noncredit Occupational Education." *Educational Evaluation and Policy Analysis* (first published November 17, 2025). https://doi.org/10.3102/01623737251360029

FINDINGS

Earnings gains from occupational training in community college noncredit programs are robust.

A typical student in Texas noncredit workforce programs enrolls in just 92 hours of training — roughly the equivalent of one three-credit course. Yet, workers in Texas who complete noncredit occupational training see average earnings gains of more than $2,000 per year (adjusted for inflation) within two years after training. Even two years later, trainees remain almost 4 percentage points more likely to be employed. When individuals who were unemployed are included in the analysis of wage growth, average gains are nearly $4,000 per year by two years after training, reflecting the combined effects of training on both wages and the likelihood of being employed.

What does this mean?

The provisions of Workforce Pell require that qualifying programs prepare students to pursue a certificate or degree and provide academic credit toward that certificate or degree program if a student chooses to enroll. As rules for the implementation of Workforce Pell are crafted, it will be important for policymakers and institutional leaders to ensure that noncredit occupational training programs that yield strong earnings and employment gains are not inadvertently excluded from qualifying for funding.

Data and Methods

Data Source
Longitudinal, student-level, administrative data from the Texas Higher Education Coordinating Board, matched with quarterly earnings records collected by the Texas Workforce Commission.

Sample
128,138 students who enrolled in noncredit occupational training for the first time between fall 2011 and fall 2014. The sample was restricted to students aged 23-60 years who reported a valid Social Security number, who did not enroll in credit courses for at least 5 years before and after enrolling in noncredit training, and who had at least 4 quarters of non-zero earnings both before and after enrolling in noncredit training.

Analytical Method
Individual, fixed effects, linear regression analysis of inflation-adjusted earnings on noncredit training, adjusting for age, time, economic shocks, time-constant unobservable characteristics, and other factors.

Topline Numbers

$2,014	Workers' average growth in annual earnings two years after completing training.
5.6 Percentage Points	Increase in the chances of being employed in the quarter after completing training.
$3,895	Average growth in annual earnings two years after training, including individuals who moved in or out of the workforce.
3.8 Percentage Points	Increase in the chances of being employed two years after completing training.
92 hrs.	Average length of training completed by students in noncredit workforce programs.
19 %	Share of noncredit occupational training that exceeds 150 hours in length.

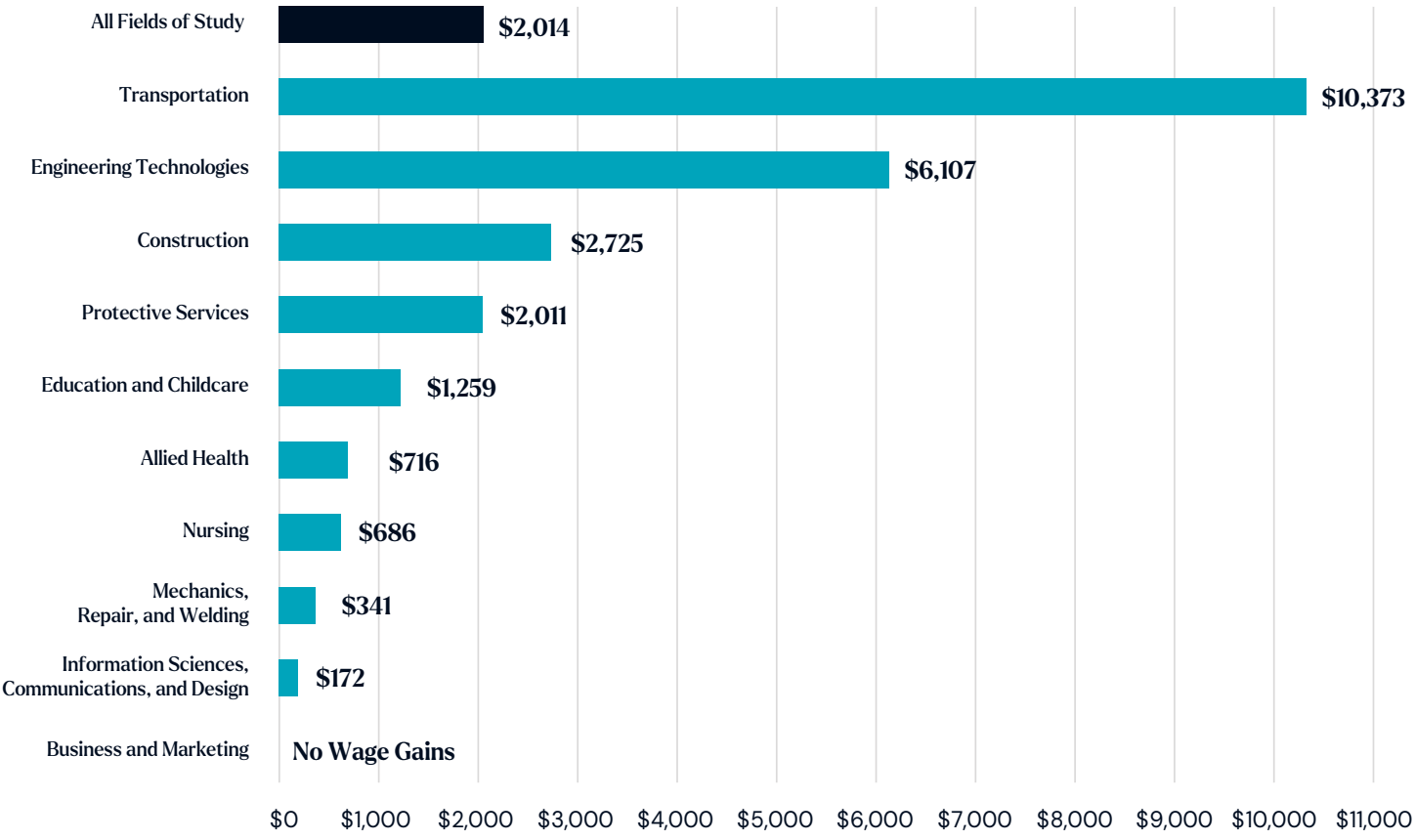
Earning gains differ markedly by field of study.

Students in transportation-focused programs, such as commercial driving, see above-average earnings gains. Students in engineering technology programs, such as occupational safety and health or petroleum technology, also experience strong wage growth, as do students in construction training, such as power transmission installation or plumbing technology. Longer training programs of 300 hours or more in nursing and protective services see above-average earnings gains as well. However, students in business and marketing; information sciences, communications, and design; and mechanics, repair, and welding generally do not see meaningful earnings gains even five years after training.

What does this mean?

Not all programs are created equal. Policymakers should consider using data on wages and employment, such as earnings growth, to ensure that Pell-eligible programs are in high-skill, high-wage, in-demand fields, or otherwise meeting the hiring requirements of potential employers as required in the law.

Average increase in annual earnings at two years after training, by field of study



Can programs have low wage gains yet still be aligned with employers' needs?

Yes. Some types of noncredit training programs are designed to help workers maintain the professional certifications or licenses needed to keep their jobs and carry out their work safely rather than to advance in or start a new job. One example is the annual continuing education required in many states to maintain a nursing license.

Policymakers need to be aware that these types of training can be closely aligned with employers' needs and broader social goals — like ensuring public health and workplace safety — yet not result in wage growth. Other measures of alignment should be considered in these cases.

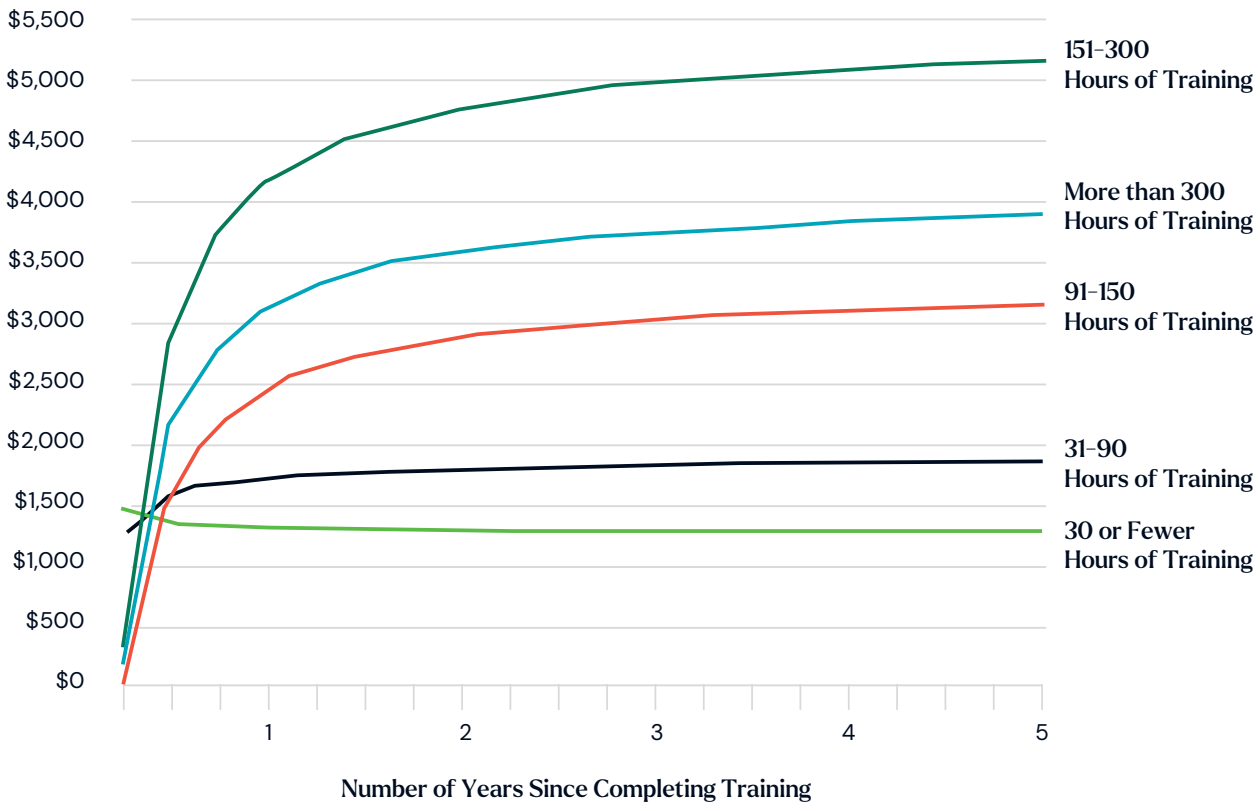
Longer training programs tend to pay off better than shorter programs, but earnings gains unfold over time.

Overall, wage growth following training programs that exceed 150 hours in length is substantially greater — as much as three times greater — than that of training programs that are 90 hours or less. However, earnings gains in the first several quarters after training, especially gains from longer training programs, typically do not reflect the total wage growth that students will experience. By two years after training, wage growth begins to level off and more closely approximate the overall gains from the training.

What does this mean?

Regarding policy discussions about WIOA reauthorization, WIOA uses earnings and job placement data to measure program outcomes, but policymakers should consider the timing of those measures. Our research shows that earnings gains resulting from training emerge over time and may not be fully evident even two years after the training is completed.

Average increase in annual earnings by time since training and duration of training



Note: The lower wage growth among workers who completed more than 300 hours of training, relative to workers who completed 151–300 hours of training, should be interpreted cautiously. Workers in the longest training programs of 300-plus hours accounted for less than 6 percent of the sample.

The paths from noncredit training to credit-based degree and certificate programs continue to be limited and problematic.

Research shows that, in most states, most students in noncredit occupational training do not continue into credit-based degree or certificate programs. This represents a missed opportunity to engage individuals who are seeking workforce-relevant education in longer-term, higher-return programs. One barrier is that the path from noncredit training to credit programs in the same or related fields of study often is not clear. Policymakers should consider defining what it means for a noncredit training program to lead to a credential that is "stackable" and "portable across employers," as required in Workforce Pell.

In addition, when opportunities exist for students to transfer their learning in noncredit programs into progress toward a credit-based degree or certificate, colleges should make those opportunities more apparent and easily navigable for students. If students know at the outset of training that they can make progress toward a degree or certificate, this knowledge could be influential in their decisions to continue in college.

For workers and students thinking about enrolling in noncredit occupational training, look past the marketing of a program and ask the college for information about:

1. what occupational doors the training opens,
2. the professional certifications or licenses for which the training may prepare students,
3. the employment and wage outcomes of students who complete the training,
4. whether the training is part of a larger sequence of progressively more advanced courses from which students can benefit, and
5. whether the training counts toward college credits that can be applied to a college certificate or degree.

Weigh the answers to these questions against the costs of enrolling, the time involved in completing the training, and the time and cost of credit-based programs in the same field.

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For more information:
Peter Bahr at peter.bahr@strada.org

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