

## Career education can improve economic mobility and meet workforce needs

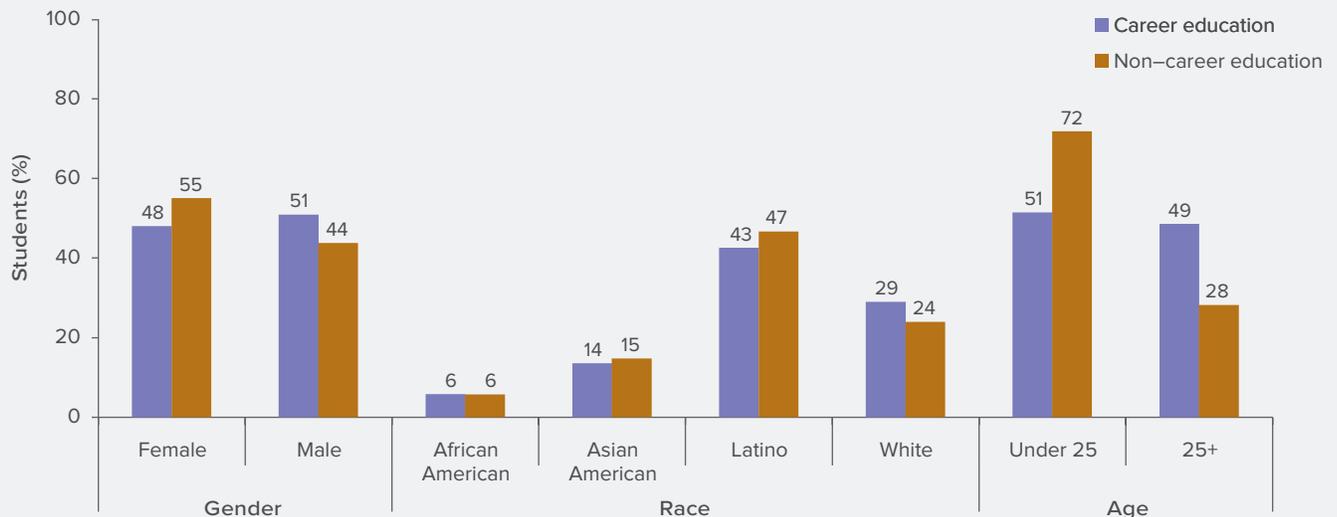
About 30 percent of California’s future jobs will require some training beyond high school but less than a four-year college degree. And in today’s economy, jobs that offer family-supporting incomes often require some postsecondary education. Career education prepares students for these “middle-skill” jobs by providing occupation- and industry-specific training. Career education is especially important for low-income workers, offering them a path toward upward economic mobility. Californians seem to be aware of these realities: PPIC Statewide Surveys consistently find that more than 95 percent feel that it is important for the state’s community colleges to offer career education.

Career education is getting renewed attention from policymakers interested in improving students’ economic outcomes and addressing California’s workforce needs. Recent investments at the state and national levels have focused on expanding and improving career education programs. Since 2014, California policymakers have directed more than \$1 billion toward developing and expanding career education in both the K–12 and community college systems. In 2016, the state created the Strong Workforce Program, which allocates \$248 million annually to support advancement of career education programs across the California community college system. Given the importance of career education, it is critical to ensure the success of these efforts by identifying and expanding effective approaches.

## Most students pursuing career education in California attend a community college

- The community colleges enroll hundreds of thousands of career education students each year.**  
 More than a quarter of total enrollment in community colleges is in career education programs, which award about 40 percent of all community college credentials. Annually, more than 300,000 full-time-equivalent (FTE) students are enrolled in career education throughout the system—and accounting for students who attend part-time increases that number dramatically.
- Many career education students are older than traditional college age.**  
 The career education student population is similar to the overall community college population in terms of gender and race/ethnicity, but there are age differences. Half (49%) of those who pursue career education are age 25 or older, compared to only 28 percent of students enrolled in other community college courses.

### CAREER EDUCATION STUDENTS ARE DIVERSE BUT TEND TO BE OLDER



SOURCE: California Community College Chancellor’s Office MIS Data Mart.

NOTES: Shares reflect full-time-equivalent enrollment in courses that are defined as vocational by the Chancellor’s office. Non-career education enrollment reflects the difference between total enrollment (credit and non-credit) and career education enrollment.

- **Most career education students enroll in six key disciplines.**

The six largest career education disciplines (those with the most FTEs) in the community college system are business and management (e.g., accounting), engineering and industrial technologies (e.g., construction trades), health (e.g., nursing), family and consumer sciences (e.g., child development), public and protective services (e.g., administration of justice), and information technology (e.g., computer networking). The number of FTEs enrolled in each discipline ranged roughly between 29,000 and 54,600 students for the 2017–18 academic year.

- **Career education completion rates are low—but they are higher than overall completion rates.**

Only about half (55%) of the students who enroll in career education programs end up with a degree, certificate, apprenticeship, or transfer-related outcome within six years. However, completion rates in career education programs are higher than for the overall student population and have improved in recent years, particularly for older students and Latino students.

- **Completion rates vary across demographic groups.**

Asian American career education students have the highest completion rates (62%). Completion rates among Latino students are the same as for whites (55%) in the most recent available data, while rates for African American career education students are lower (47%). There are stark differences in completion rates across age groups, with older students less likely to complete programs. The fact that only 45 percent of career education students age 25 or older complete programs suggests that they may need additional support.

- **For-profit college enrollment has declined.**

For-profit colleges also provide career education, but enrollment in for-profit colleges has dropped considerably over the past decade as a result of several school closures and increased scrutiny from federal and state lawmakers. However, there could be an uptick in for-profit career education enrollments due to the recent repeal of federal rules that required career programs to prove that their graduates can find “gainful” employment in order to maintain access to federal financial aid.

## Career education credentials from community colleges improve earnings

Most students who complete career education credentials from California community colleges do see higher earnings. But there are sizable differences in wage returns; the length of the program (the number of units it requires) and the field of study matter greatly.

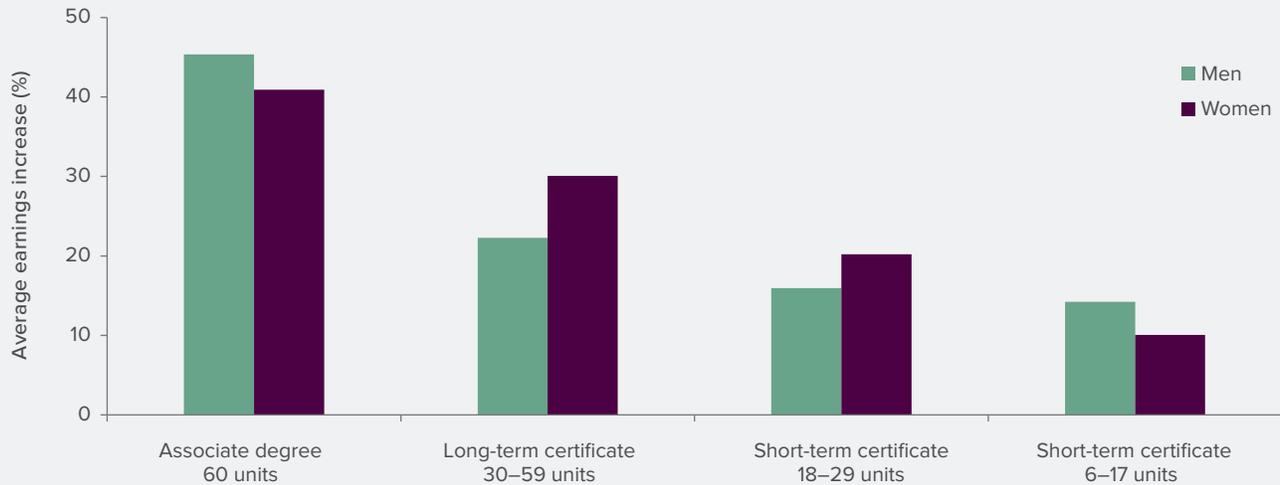
- **Both men and women see sizable returns to completing career education programs.**

For men who complete career education programs, wage returns range from 14 percent for the shortest-term certificate to 45 percent for an associate degree; the comparable range for women is 10 percent to 41 percent. Women who obtain long-term certificates see greater earnings gains than men (30% vs. 22%). These differences are driven largely by how students sort into different program areas. For example, larger shares of women are in health fields, while men dominate engineering and public/protective services.

- **There are big differences in earnings potential across fields of study.**

Health is clearly the most remunerative program: associate degrees nearly double future wages, and longer certificates confer 30 to 50 percent wage gains. Public and protective services offers higher returns (15% to 20% increases) for short-term certificates relative to other disciplines. Some engineering and industrial technology credentials provide returns in the 10 to 20 percent range. Credentials in information technology fields appear to offer the smallest earnings bumps, in some cases adding no value. It is also important to consider long-term earnings trajectories. For example, students who obtain credentials in early childhood education do see returns, but because wages are low for these jobs, progress toward higher income levels is slow.

## CAREER EDUCATION CREDENTIALS FROM THE COMMUNITY COLLEGES PROVIDE ECONOMIC RETURNS



SOURCE: Ann Huff Stevens, Michal Kurlaender, and Michel Grosz, "Career Technical Education and Labor Market Outcomes: Evidence from California Community Colleges," *Journal of Human Resources* 1015-7449R2 (2018; published online before print).

NOTES: Average earnings increase to career education credentials, accounting for individual factors, time trends, and enrollment. Individual wage return from a fixed-effects regression model is averaged across all career education students and weighted by the share of credentials awarded in detailed program areas (4-digit TOP codes).

- **Students who stack credentials can improve their earnings potential—but not many do so.**

About 40 percent of career education students receive short-term certificates, which can be earned in as little as one semester. While these certificates offer less wage growth, on average, than longer-term credentials, students who “stack” additional credentials in the same field can improve their earnings trajectories. Some community colleges offer stackable sequences that can move students toward broader (or more remunerative) career opportunities. But even though a majority of students who earn short-term certificates return to community colleges, only about a quarter obtain additional credentials.

## Looking ahead

Career education programs at California community colleges have the potential to increase economic mobility, particularly for students who do not earn four-year college degrees, while also responding to the state’s workforce needs. The state can increase the number of Californians who complete high-value programs by providing clear information on pathways and their payoffs and offering student supports.

**Inform student choices and program development with data and collaboration.** The Community College Chancellor’s Office provides a number of public online tools that shed light on the earnings potential of career education credentials. It is critical that these data be used to inform student decisions as well as system- or college-level decisions about courses and programs. In addition, collaboration with local employers, industry groups, and workforce agencies is essential to ensuring that career education leads to well-paying jobs.

**Encourage more students to pursue higher-value credentials.** PPIC research finds that well-designed stackable pathways facilitate completion and can lead to earnings growth, but only a small share of career education programs have such pathways. The Guided Pathways initiative, which is intended to provide students with clearer routes to employment and the support they need to get there, could help colleges develop more effective stackable sequences.

**Address student supports and services.** Because career education students tend to be older than traditional college students, they may need different types of academic and non-academic support: for example, child care and transportation assistance, and/or course schedules that can accommodate working adults. The current state budget approved

increased funding for Cal Grants aimed at non-traditional students and grants that cover non-tuition expenses for parents pursuing higher education. In addition, the new online college aims to provide flexible in-demand training.

**Track the impact of reforms.** A number of reforms at community colleges—including the new online college and Guided Pathways—have the potential to improve outcomes for career education students. But given the number of initiatives that are under way and the decentralized community college system, it is critical to gauge—and learn from—the impact of new approaches.

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