**Understanding How Workforce Pathways Shape College Outcomes and Earnings Gains**

Workforce training programs yield some of the highest earnings for community college students, particularly when programs are aligned with industry needs and growing job sectors. The California Community Colleges Chancellor’s Office makes these benefits visible through tools like the Salary Surfer. However, in most conversations about community college success, the emphasis is on completion of degrees and college certificates, which can be low in career and technical education programs. But if we only look at graduation rates, we may miss important ways that community colleges strengthen both individual earnings and the state economy. That’s because there are many different career training pathways and types of students who are pursuing this kind of education.

For some students and some fields, traditional educational programs—meaning ones that include a number of sequenced courses over several years—are the best bet. For example, traditional programs work well for students coming straight out of high school who need to build a solid base of skills, or for those pursuing complex skill sets such as health or aviation. These pathways make a real difference in students’ earning power and future career opportunities, leading to family-sustaining wages that can help move people out of poverty. For example, California community college students who earn a certificate in diagnostic medical imaging make a median wage of more than $73,000, up from about $13,000 before starting community college. Aircraft maintenance students who earn an associate’s degree more than double their earnings, from making about $20,000 to over $44,000.

However, community colleges also serve students who have already been in the workforce. These students may have associate’s or bachelor’s degrees, third-party or community college certificates, or significant work experience without a credential. Returning students need to fill in missing skills rather than starting from scratch and can do so by either taking a few courses or participating in certificate programs that can be completed in a year or less. This trend has been growing steadily for the last thirty years. Certificates have become so popular that they are now the second-most common higher education credential in the United States, behind bachelor’s degrees but ahead of associate’s degrees. The California community college system—the nation’s largest workforce training provider—offers career and technical education certificates in 142 fields of study, two-thirds of which can be earned within a year.

Some workforce training pathways lead to credentials offered outside of community colleges, such as early childhood education. Students take short sequences of courses, which are aligned with state licensure exams and allow them to work in a daycare center or start their own pre-school. Students see earnings gains of 6% after 18 credits—a pretty good return on investment when you consider these students took just six courses and had tuition costs of under $1,000. Other, higher-wage fields see even more dramatic returns. Administration of Justice students, such as police officers who take courses at a community college to earn a Peace Officer Standards and Training certificate, see earnings increase 20% after 18 units.

Recent research by Peter Riley Bahr found that one in seven first-time students take six or fewer units—that’s two classes or less—and the majority of these students are enrolled in career and technical education. They also have extremely high course-success rates. On average, they pass 93% of their classes, which means they are mastering the content being taught. Plus, many of them see earnings gains after just 6 units. In some fields, like water & wastewater technology, returns are as high as 17%.

If you look at career and technical education programs in California community colleges, you’ll see evidence of these many different pathways—sometimes even in the same discipline. For example, in information technology, colleges might offer an associate’s degree in computer software development that helps young people move into jobs requiring coding skills or prepare them for more advanced computer science degrees. The same college might also offer short-term certificates designed to help IT professionals learn new skill-sets like game programming or mobile application development. Some of these short-term options might lead to a community college certificate that is not counted in statewide success metrics because it is too short, but can help workers advance up the wage scale. Other course clusters might enable workers to pass third-party exams like Cisco or Adobe certifications.

All of these programs have a positive impact on the employment and earnings prospects of students. However, because completion of a community college credential is the gold standard for success, students who participate in short-term training are currently counted as failures. While short term, skills-building training isn’t right for every student, it is important for an increasing number of students because of the evolving job market. Many workers are shifting from jobs that no longer exist to professions that didn’t exist when they first got their education. Increasingly, the credentials that employers are seeking for these jobs are issued by industry-sponsored entities rather than academic institutions. And, as more employers expect job applicants to be ready for work with no additional training, the burden of professional development is falling on individuals. Finally, as technology gets integrated into jobs ranging from auto repair to real estate, this means workers need ongoing training to keep their skills up.

Community colleges play a vital role in ensuring workers have these skills. Therefore, the Chancellor’s Office has adopted a broader definition of success that includes earnings outcomes for skills-builder students—non-completing students who take one or two courses to maintain and add to skill-sets required for ongoing employment and career advancement. Starting in 2016, skills-builder outcomes will be documented in the Student Success Scorecard and in statewide data tools like the LaunchBoard.

The LaunchBoard, a tool developed by the Chancellor’s Office that complements Data Mart and the Salary Surfer, documents a broad range of outcomes for all types of workforce students, include graduation, employment, and earnings gains, as well as labor market data. With access to this information, community colleges will be better positioned to strengthen success in all their career and technical education pathways.

You can find out more on the Doing What MATTERS website, including learning more about how this framework is strengthening the full array of workforce pathways, accessing research on wage gains and labor market projections, and testing out a demo of the LaunchBoard.