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Research • Planning • Professional Development
for California Community Colleges

Next-Level Disaggregation:

Examining Program-Level Information, Additional Student Characteristics, and Labor Market Data

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Introduction

More than ever before, the ability of California Community Colleges (CCCs) to access a broad range of information about student progress and outcomes provides CCCs with a powerful tool with which to make decisions on how best to support and increase the success of students in meeting their educational goals. Practitioners are increasingly engaging with disaggregated data—information that is broken out by student characteristics such as gender, race, or age. However, examining data by demographic groups is only one way to dig deeper into student information. Colleges can also examine other data subsets, such as enrollment status, employment, earnings, and labor market data, to name a few.

The Power of Next-Level Data Disaggregation

This guide describes five data points that practitioners can review in the LaunchBoard and explains how colleges can use each data point to inform discussions about improving student outcomes. By integrating these discussions into processes such as program review, college strategic planning, and accreditation self-studies, practitioners can deepen the student outcomes analyses that they are already conducting. This "next-level" data disaggregation, in turn, empowers community colleges to better understand and overcome obstacles to student success.

For example, when data are cut along these additional lines, practitioners may gain important insights into ways that they can close equity gaps. Looking at demographics helps determine which groups are less successful, but this type of analysis does not give clues as to how student outcomes can be improved. Instead, a college that looks beyond race might discover that students who enroll part-time, many of whom are students of color, have a harder time completing a degree or certificate. The college could then adjust its counseling approach to inform students about the benefits of full-time enrollment as well as strengthen financial aid advising so that more students find ways to afford to take more courses.

A deeper dive into student data could also enable colleges to identify whether their offerings fully align with the particular needs of the students they are serving. For instance, if a college learned that a substantial number of students in an advanced manufacturing program had previously earned a degree or certificate, then the curriculum could be adjusted to offer an advanced track that focuses on the specific skill gains that more experienced students need in order to be successful in the workforce. By disaggregating data beyond demographics in this way, colleges gain the ability to identify factors impacting student achievement that they can influence, rather than focusing on immutable characteristics like race.

Reader's Guide

This guide is intended to introduce community college deans, directors, department chairs, and college researchers to a data dashboard that can help to deepen program review and program planning processes. In this report, you will learn about the LaunchBoard and five conversations that could be instigated by information that can be found in the tool, including:

- The types of students served by the program;
- Whether students stay continuously enrolled;
- Equity gaps;
- Related educational and career pathways;
- Employment and earnings outcomes.

Each of these "data conversations" are explored in this report, including topics that colleges could benefit from examining and questions that would be helpful to pose. The report concludes with a brief discussion of additional resources for those interested in digging deeper into these issues.

Reader's Guide

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Understanding the LaunchBoard

Purpose of the LaunchBoard

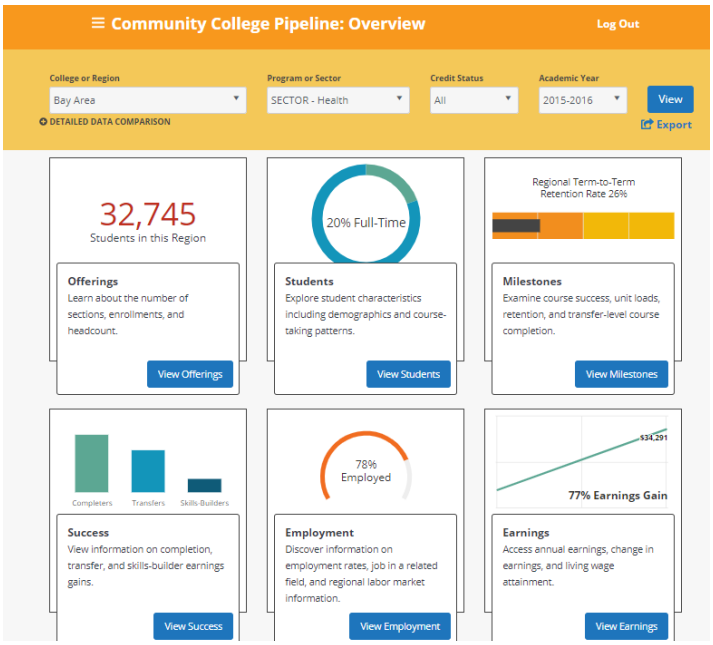
The LaunchBoard is a free statewide data system supported by the California Community Colleges Chancellor's Office (CCCCO) and hosted by Cal-PASS Plus that provides information to California Community Colleges regarding the effectiveness of their academic programs. Originally, the tool focused on career and technical education (CTE) programs, but it has been expanded to include all programs offered by California Community Colleges.

The LaunchBoard brings together multiple data sets to provide a more holistic view of students and their progress through educational institutions and into the workforce. It expands upon data available in the CCCCO's Management Information System (MIS) by including state employment and earnings records, survey data on employment outcomes, and labor market information. It also allows users to see information at various institutional levels—college, sub-region, region, statewide—and numerous program levels including four- and six-digit Taxonomy of Program codes (TOP), sectors, all CTE programs, and all college programs.

LaunchBoard Content and Organization

The LaunchBoard includes several dashboards, which are designed to address various initiatives and student populations. The data points described in this report are all found in the Community College Pipeline (see Figure 1). This tab provides both infographics and detailed data tables on college offerings, students' educational attainment, employment outcomes, and regional labor market demand.

Figure 1. LaunchBoard Community College Pipeline

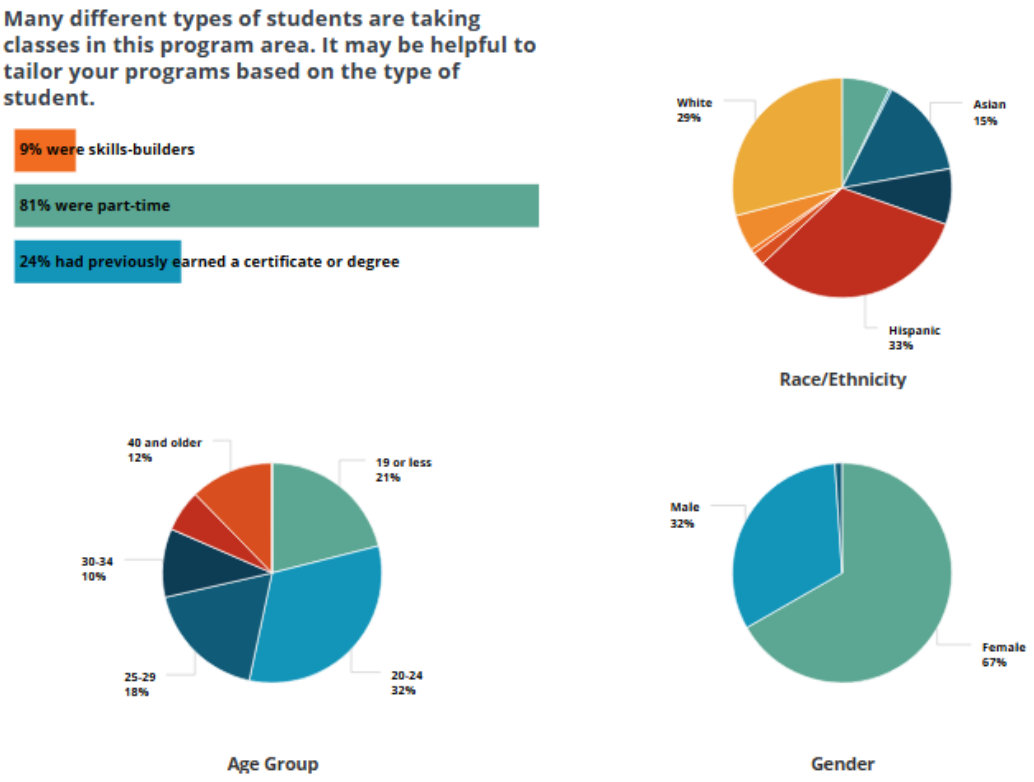


Data Conversation #1: Who Are We Currently Serving?

Given that different majors can attract vastly different types of students, it can be useful to examine program-level student demographic data as part of planning or program review processes. The LaunchBoard's Community College Pipeline provides infographics and charts that clarify who is enrolling in individual programs (such as welding or sociology) or, if selected, in broad program categories like health or education and human development. By clicking on the "Students" tile, users can see information in multiple categories, such as gender, ethnicity, age, full-time status, and previous awards, as shown in Figure 2.

In addition to common demographic information like age, gender, and ethnicity, factors like prior awards (having already earned a community college certificate or degree or a four-year degree) provide a better sense of how community college enrollment fits into students' broader educational and career trajectories. The prior awards factor is particularly important for CTE programs, which often employ strategies like stackable certificate pathways that help workers retrain in response to changing job markets.

Figure 2. What Types of Students Are Enrolled?



Once colleges have a clearer understanding of program participants, disaggregated data gathered from the LaunchBoard could be used to discuss numerous issues, including the following:

- *Scheduling*: If a significant number of students are older, part-time, or hold prior awards, colleges may want to evaluate whether courses are being held at times that are convenient for people who are working while attending college.
- *Enrollment policies*: If many students hold prior awards, and your college doesn't exempt students with degrees from participation in Strengthening Student Success Program (SSSP) activities such as orientation and educational planning, colleges can request a program-specific exemption so that matriculation requirements don't become a barrier to enrollment.
- *Marketing and outreach*: By examining the types of students who are—or are not—enrolling in specific programs, colleges can target their marketing efforts, such as expanding outreach to underserved communities or increasing the visibility of programs for younger students.
- *Support services*: If a large number of students are part-time, colleges can consider ways to ensure students have access to financial aid and other supportive services, which reduces barriers to full-time enrollment and increases retention rates of those who must enroll part-time.
- *Program content*: Colleges may wish to create multiple tracks within a program to address the needs of various types of learners. For example, if students are split between younger and older age brackets, this may signal the need for two pathways: one for those just becoming acquainted with higher education and another for students who are enrolling in college to change careers. Discovery of distinct patterns among subgroups might call for differential instruction or creating separate courses that are tailored to the needs of distinct student pathways.

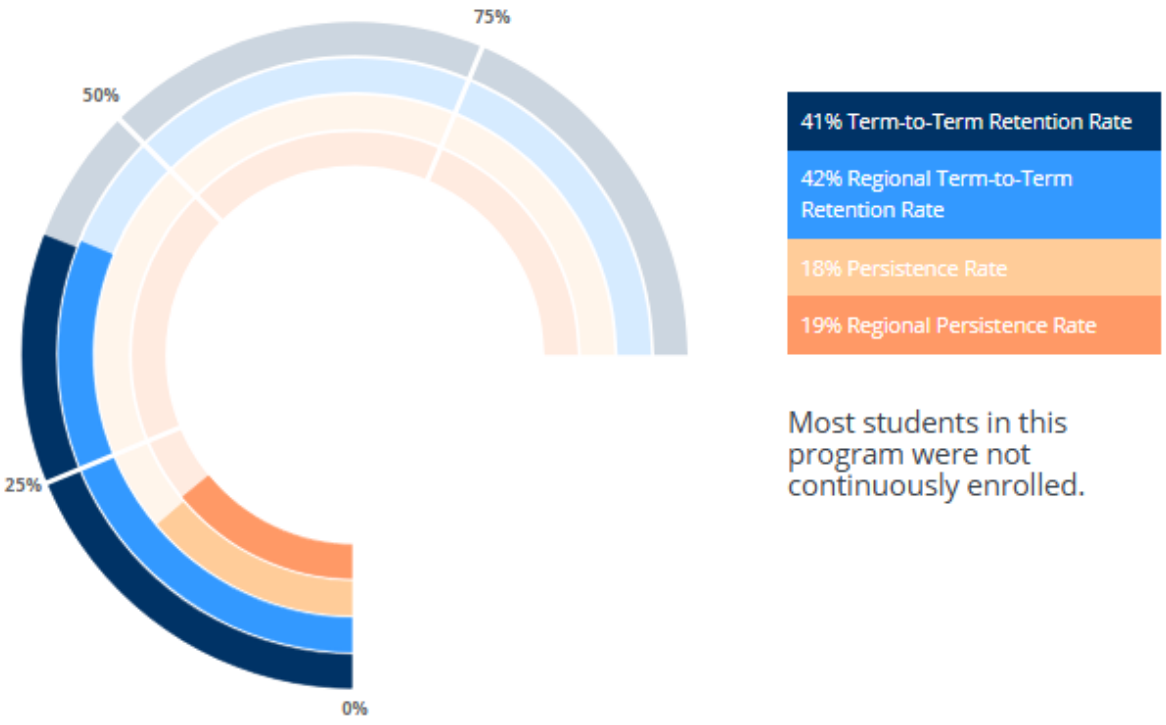
Learn more about how the LaunchBoard relates to other Chancellor's Office tools:

bit.ly/ccccodashboards

Data Conversation #2: Are Students Able to Stay Enrolled?

Colleges frequently examine retention and persistence rates at the college level, but it can be helpful to disaggregate results by looking at which programs are most effective at helping students stay continuously enrolled. Figure 3 shows a report in the LaunchBoard Community College Pipeline, in the "Milestones" tile, that documents whether students in a business administration program who enrolled in the fall returned to college in the spring, as well as how many were continuously enrolled for three terms. This information is displayed for retention and persistence at the college, as well as whether students enrolled in another college in the same region.

Figure 3. Are Students Continuously Enrolled?



Information on student persistence can be used to investigate ideas such as the following:

- *What types of challenges prevent students from staying enrolled*: Interviews with students and counselors can help determine whether factors such as life challenges, scheduling, financial aid, or lack of clarity about program requirements are at play, to inform retention strategies.
- *Characteristics that are common across programs with stronger retention patterns*: By learning more about programs that are keeping students, practitioners can identify effective practices that can be scaled.
- *Implications of persistence rates for enrollment management*: Administrators can leverage LaunchBoard data to inform strategic enrollment management plans that address ongoing participation at the program level, as well strategies for recruiting new students into programs with strong persistence rates.

Find out about strategies that can help students stay enrolled: http://bit.ly/LB_videos

Data Conversation #3: What Types of Equity Gaps Exist in My Program?

In order to determine how to close equity gaps, it can be helpful to go beyond college-level equity profiles to identify how these gaps affect individual programs. As shown in Figures 4-7 on the following pages, the LaunchBoard Community College Pipeline includes a number of equity charts that can be run at the program, sector, all-CTE, all non-CTE, and all-college levels for gender, ethnicity, and age categories, including the following:

- *Equity gaps in access* can be identified by comparing the proportion of students in a demographic category who enroll in the program to the proportion of overall enrollments (this information can be found in the "Students" tile).
- *Equity gaps in completion* can be determined by comparing the proportion of students in a demographic category who earn a certificate or degree in the program to the proportion of students in that category who enroll in the program (this information can be found in the "Success" tile).
- *Equity gaps in transfer* can be discovered by comparing the proportion of students in a demographic category who transfer to a four-year institution in the program to the proportion of students in that category who enroll in the program (this information can be found in the "Success" tile).
- *Equity gaps in earnings* can be identified by comparing the annualized earnings of students in various demographic categories (this information can be found in the "Earnings" tile).

In addition to displaying outcomes for each group and the extent of the outcomes gap(s), users can hover the computer mouse over each category to determine how many students would need to meet the outcome in order to close the equity gap. For example, a chart might reveal that even though Hispanic and White students are both under-enrolling in information technology (IT) programs when compared to overall college populations, the size of the gaps is quite different. The gaps could be closed by recruiting three additional White students and 150 additional Hispanic students. To address the substantial gap in Hispanic students, the college might, for example, focus on ensuring its Puente program was addressing IT pathways as an equity strategy.

Figure 4. Are There Equity Gaps in Access?

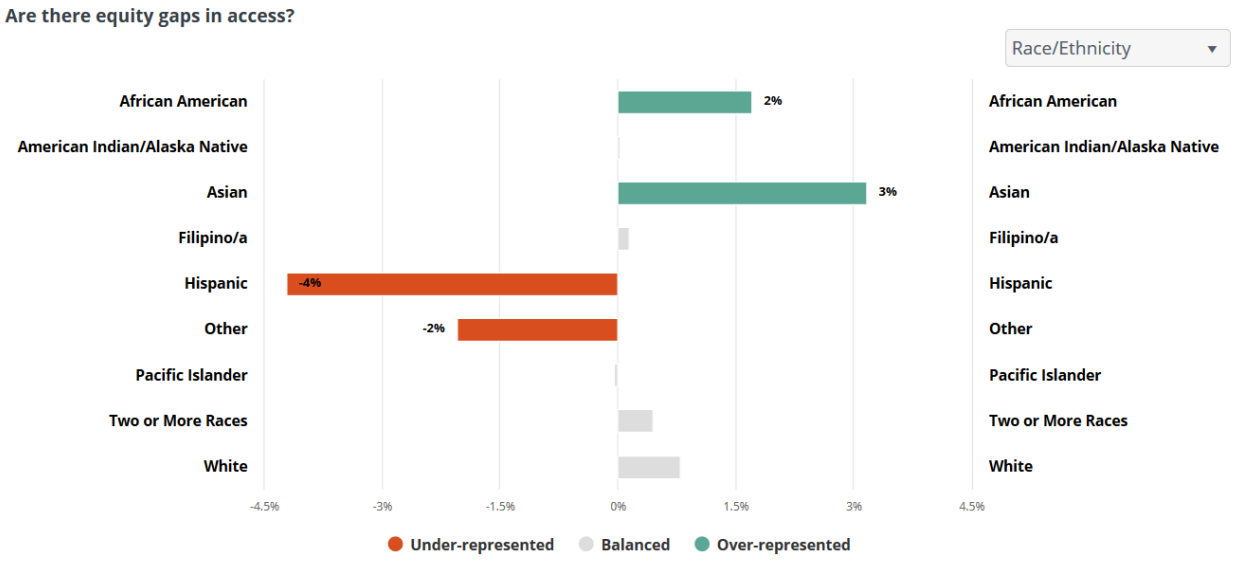


Figure 5. Are There Equity Gaps in Completion?

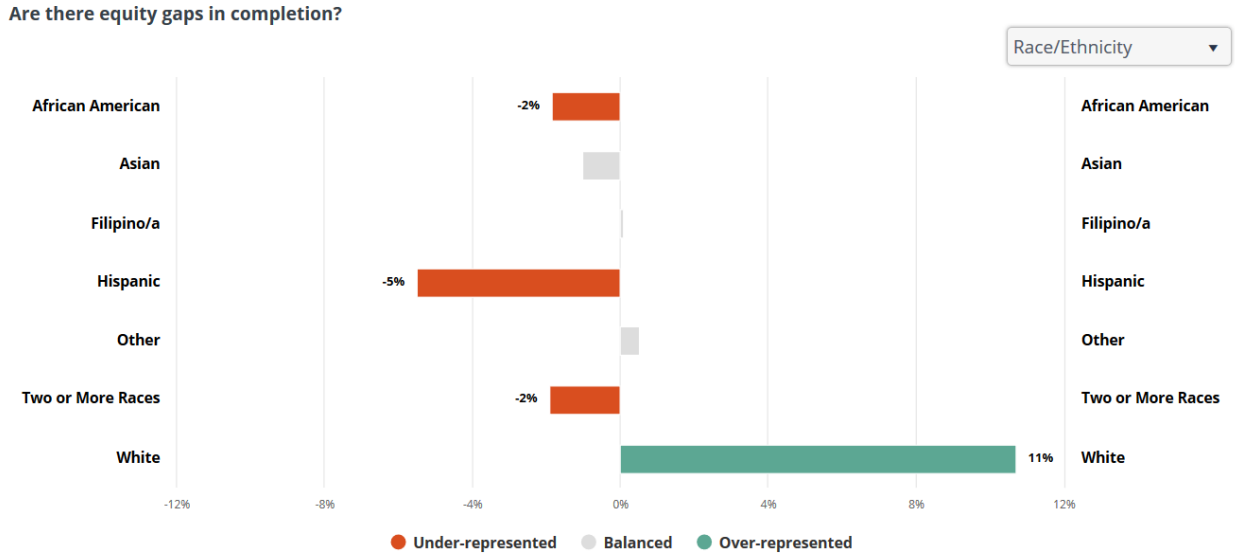


Figure 6. Are There Equity Gaps in Transfer?

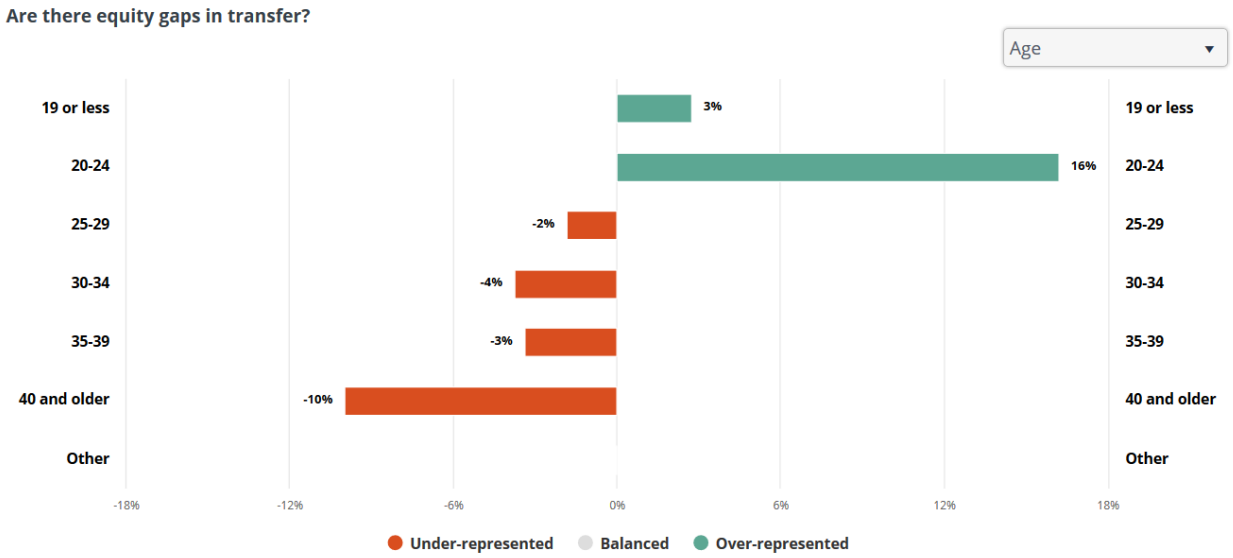
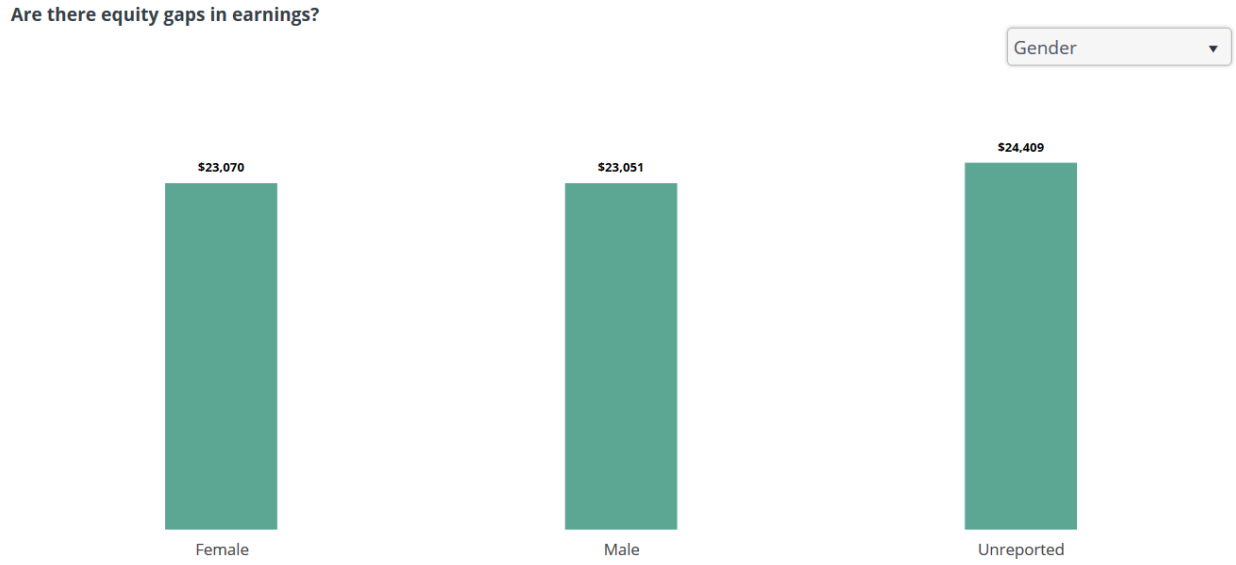


Figure 7. Are There Equity Gaps in Earnings?



The LaunchBoard's equity gaps information could also be used to discuss issues such as the following:

- *Factors that influence the relative size of equity gaps*: Practitioners can focus on the populations that are experiencing the most significant gaps, as well as noting which under-represented groups are successful and tap into the expertise of faculty, counselors, and students to determine the most common causes and likely solutions.
- *Recognizing what is working*: In addition to identifying where there is room for improvement, colleges could find out more about programs that do *not* have equity gaps and share their successful approaches in venues like teaching and learning centers or college flex days.

View a two-minute video on the LaunchBoard equity reports: bit.ly/equitygapvideo

Data Conversation #4: How Does My Program Fit into Longer-Term Pathways?

Regardless of the specific pathway a student is pursuing—whether a short-term certificate, a degree, or transfer to a four-year institution—the vast majority of students expect their education to prepare them for a career or occupation. Therefore, it is important to disaggregate labor market information to understand how specific programs relate to broader career pathways.

In the "Employment" tile, the LaunchBoard Community College Pipeline provides information on the number and types of regional job openings for almost all community college program areas, including non-CTE programs. This information is broken out by the expected level of educational attainment, including middle skills jobs that can be obtained after attending community college and jobs that require a bachelor's degree, as shown in Figure 8. For example, the chart might show that there are jobs available to students with a certificate or an associate's degree in accounting, as well as options for students with a bachelor's degree.

Figure 8. What Are the Projected Job Openings in the Region?



Job opening figures are based on projections developed by Economic Modeling Specialists International (EMSI), a leading provider of labor market information. These jobs are mapped to TOP codes by the Centers of Excellence for Labor Market Research using guidance provided by the federal government and California Community College practitioners.

The LaunchBoard's labor market information could be used to discuss issues such as the following:

- *How existing offerings fit into stackable middle skills pathways*: Colleges can determine whether their programs teach skills that are associated with specific middle skill occupations in their region and how certificates and degrees within this pathway help students move up a career ladder. This information can inform conversations with employers about aligning program content with a range of job opportunities.
- *Advising students on how short-term programs connect to longer-term educational and career pathways*: Identifying specific occupations that students might be eligible for if they completed a bachelor's degree can be an important factor in advising for CTE students, so they understand how pursuing a short-term certificate can be the first step toward transfer as well as more plentiful job opportunities, particularly if they fulfil general education requirements.
- *Aligning transfer pathways to the job market*: When practitioners are aware of the bachelor's degree jobs that are aligned with their programs—whether in CTE or general education programs—they can work with transfer partners and employers to ensure the right skills are embedded into both two-year and four-year programs and they can help students understand what they need to do to attain their career goals.

Learn more about using labor market information: bit.ly/uselmi

Data Conversation #5: Which Pathways Are Improving Employment and Earnings?

Colleges need to disaggregate employment and earnings data at the program level for program review, accreditation, and federal gainful employment reporting. The LaunchBoard Community College Pipeline includes several reports that provide this information.

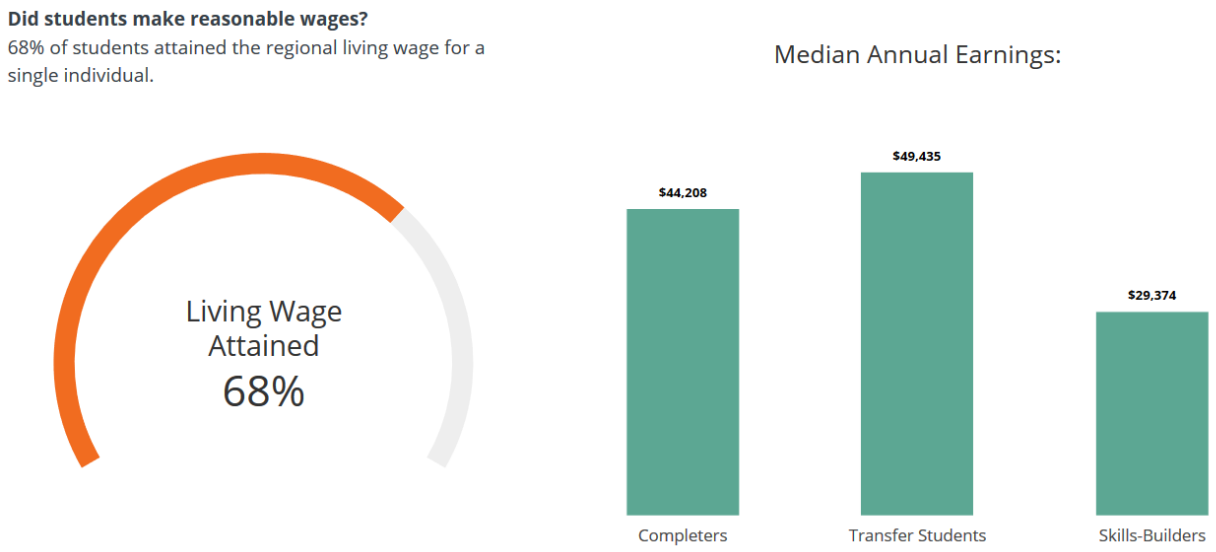
The first report is accessed by clicking on the "Employment" tile, which allows users to see how many students were employed one year after they left the community college system and whether this job was closely related to their field of study (see Figure 9).

Figure 9. Are Students Getting Jobs?



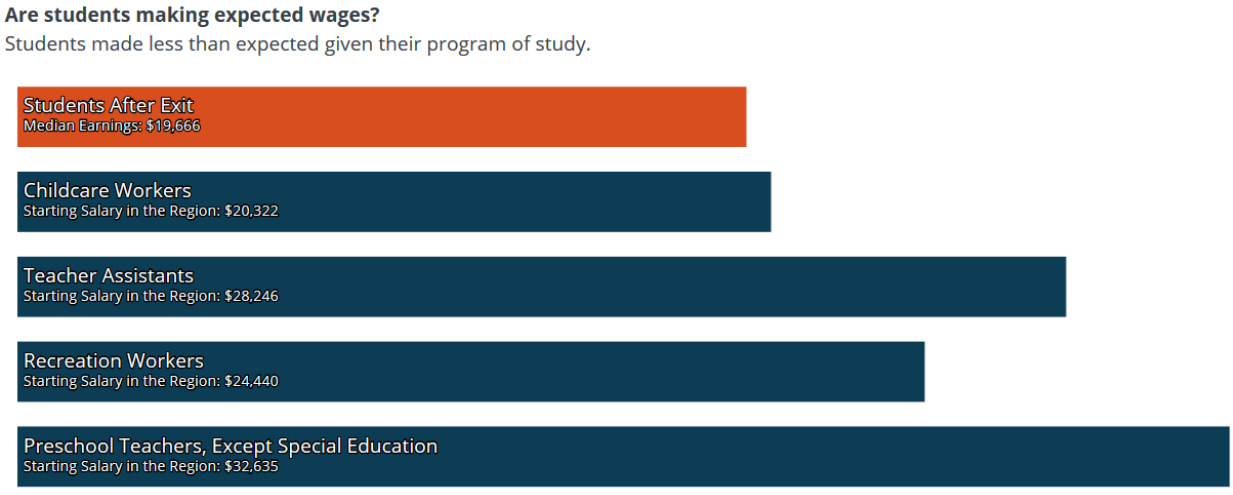
The second report can be accessed by clicking on the "Earnings" tile, which allows users to access a chart that shows students' earnings one year after they exited the community college system, as well as whether their post-college salary meets the regional living wage (see Figure 10 on the following page). Earnings data is broken out by completers (students who earned a community college certificate or degree), transfer students, and skills-builder students.

Figure 10. How Much Money are Students Making?



In the "Earnings" section, users can also see the types of salaries that employees in the region earn for related occupations, shown in comparison to earnings secured by former students in the selected program (see Figure 11). For example, the chart may show that early childhood education students are making nearly the expected wages for childcare workers, but could make considerably more if they were employed as preschool teachers.

Figure 11. Student Earnings Compared to Earnings in Related Occupations



These employment and earnings data can be used in conversations about college practices, such as:

- *Determining which program pathways lead to positive employment outcomes*: By disaggregating employment and earnings data by completion type, practitioners can gain an understanding of the relative outcomes for certificate, degree, and skills-builder pathways, which can be useful in framing conversations with regional partners, employer advisory councils, advising, scheduling, and marketing.
- *Whether students are learning the skills that are most important to employers*: If many students are earning less than what is expected for a related occupation, practitioners could interview former students and employers to find out more about the skills that best position workers for available jobs.
- *The types of supports students need to get a job in their chosen field*: If skills taught in programs are on-target for employer needs but access to job markets poses a challenge, practitioners could discuss ways to partner with area employers, workforce development boards, and community organizations to better transition students to jobs.
- *Strategies for moving students up to a living wage*: If students increase their earnings, but these earnings fall below the living wage threshold, practitioners could discuss how to build stackable pathways that enable students to move from low-level to higher-paid jobs or if programs should shift which occupations they are preparing students for.

View an infographic on the sources of employment data in the LaunchBoard: http://bit.ly/understandemployment

Additional Resources

The five data-based conversations described in this paper are just an introduction to what can be done with the LaunchBoard. For instance, users can click on the "Detailed Data" option in each section of the Community College Pipeline to dig deeper into nearly 100 metrics. Users can view outcomes that are disaggregated across numerous student categories, examine time trends, and compare their program to other colleges, regional medians, or statewide totals.

Users can also access the Strong Workforce Program dashboard to home in on the metrics associated with the Strong Workforce Program incentive funding and see how their college compares to programs in the sub-region, region, and state, as well as disaggregated results. In addition, the LaunchBoard includes dashboards that provide information on K-12 to community college transitions in CTE programs and tracks whether students are making progress in their first year key performance indicators associated with the California Guided Pathways initiative.

With such robust, disaggregated information already prepared, colleges can devote their time to discussing student outcomes and determining ways to ensure all students attain their college and career goals.

Want to find out more about the LaunchBoard?

Log into the LaunchBoard, or request a log in, at: http://www.calpassplus.org/launchboard

Infographics, short videos, and briefs on the LaunchBoard, its data sources, and how to use the tool are embedded into the LaunchBoard site.

Research and Planning Group for California Community Colleges

The Research and Planning Group for California Community Colleges (RP Group) strengthens the ability of California community colleges to discover and undertake high-quality research, planning, and assessments that improve evidence-based decision-making, institutional effectiveness, and success for *all* students.

LaunchBoard

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