

Final Evaluation of Community College Bachelor's Degree Pilot



Executive Summary

Background

Legislature Created Bachelor's Degree Pilot for Community Colleges. State law authorizes the California Community Colleges (CCC) to award associate degrees, generally limiting the awarding of more advanced degrees to the state's universities. As an exception to this rule, Chapter 747 of 2014 (SB 850, Block) authorized CCC to offer bachelor's degrees on a pilot basis at up to 15 community colleges. The degrees were required to be in subject areas that addressed unmet workforce needs in the region. Additionally, CCC had to consult with the California State University (CSU) and the University of California (UC) in selecting programs, and CCC was not to approve a program that duplicated instruction already offered by the universities. The programs selected for the pilot were to begin no later than the 2017-18 academic year.

Pilot to be Evaluated. Chapter 747 directed our office to conduct an interim evaluation of the pilot by July 1, 2018 and a final evaluation by July 1, 2022. We published our interim evaluation in December 2017. Subsequent legislation moved the date for the final evaluation up to February 1, 2020. This report reflects our final evaluation.

Assessment

Some Programs Show Signs of Meeting Workforce Objectives. Assessing whether programs met industry needs was difficult based on the information provided by colleges in their initial applications. Generally, colleges provided documents citing broad support for the proposed programs with little concrete evidence of the benefits to employers. To better assess whether the programs were meeting workforce objectives, we met with college administrators and faculty, students, and industry representatives. Based on our review, we concluded that 7 of the 15 programs showed signs of meeting workforce needs. For most of these seven programs, we found that graduates were better prepared for specific industry positions and required less on-the-job training than other qualified candidates. For 8 of the 15 programs, we found little evidence that the programs addressed workforce needs. In most of these cases, we found that graduates were using their bachelor's degrees to enter management positions where a bachelor's degree is a minimum requirement. We found little evidence that graduates from these pilot programs were better prepared to fill these positions compared to those with other bachelor's degrees or that pilot program graduates were helping employers fill hard-to-staff positions.

Programs Provide Several Benefits for Students. The most common benefit of the pilot cited by students was the relatively low cost of attending the community college bachelor's degree programs. In a survey conducted by the pilot community colleges, 51 percent of respondents stated they would not have pursued a bachelor's degree if their community college program had not been offered. The pilot programs particularly benefited students with an associate degree in the same major and related work experience in the industry. Obtaining a bachelor's degree in the same major often made for an easier educational pathway. Because these programs do not have an equivalent degree at CSU, students transferring to CSU must declare a new major and often must take additional major-specific coursework to complete their degrees.

No General Concern With Academic Quality. We found no notable issues with the academic quality or rigor of the pilot programs. The programs have been designed to teach concepts and skills that would be immediately relevant in related industries. Furthermore, all programs have been accredited by the CCC regional accrediting body and, if applicable, have obtained third-party accreditation required by industry.

Concerns With Small Size of Programs. Though the pilot programs are providing some benefits to students, we are concerned with colleges operating relatively small programs, particularly six programs that averaged less than 15 students per cohort. The enrollment for these programs is far below the projections included in colleges' applications. Low enrollment levels after three or four years of operation suggests student demand for bachelor's degrees in the particular fields selected is limited. In addition, colleges operating small programs likely are incurring higher per-student costs, as the student-to-faculty ratio is a principal driver of costs.

Concerns With Accelerated Review and Limited Consultation. We identified several concerns with the application review process, primarily due to the accelerated time line set by the CCC Chancellor's Office—about one month for colleges to submit applications and one month for the pilot programs to be selected. To meet these expedited time lines, colleges were not required to have completed all the typical local curriculum development and review processes. Moreover, the CCC Chancellor's Office and application review team did not have sufficient time to validate the information submitted and assess the workforce value of the proposed degrees. We also identified several concerns regarding CCC's consultation with CSU. Most notably, the CCC provided CSU with little information about the programs and requested feedback within three business days.

Legislative Options

More Effective Options Likely Exist for Meeting Key Workforce and Student Objectives. Given many of the programs selected for the pilot are not meeting workforce objectives and remain small, we think several more promising options exist. In particular, we think the Legislature could consider two options—both of which would better address workforce needs and serve more students across more occupational fields. One option is for the Legislature to encourage the development of shorter training programs linked with industry needs. Such training could be particularly effective for employees that already have an associate degree and considerable technical skills, but may need additional training to be promoted to supervisory positions. Another option is to improve alignment between CCC and the universities, particularly CSU, to increase the number of CCC students who ultimately obtain a bachelor's degree and reduce the amount of time students take to obtain their degree. Several effective models currently exist. For example, the Tri-County Nursing Pathway in southern California allows students to concurrently enroll in CSU courses while still completing their associate degree coursework.

If Keeping and/or Expanding Programs, Consider Improvements in Several Areas. Given some of the benefits of the pilot cited by students, the Legislature may instead want to consider retaining or even expanding the pilot programs. If the Legislature were to make existing programs permanent and/or authorize new programs, we encourage it to make several improvements to help ensure the programs better meet workforce demands. Specifically, we encourage the Legislature to consider requiring programs to (1) meet certain enrollment and graduation targets to continue operating and (2) provide more concrete evidence demonstrating workforce need. We also encourage the Legislature to consider requiring a longer time line for reviewing applications, a clearer process for consultation with CSU, and more detailed fiscal accounting guidelines.

INTRODUCTION

State law authorizes the California Community Colleges (CCC) to award associate degrees, generally limiting the awarding of more advanced degrees to the state's universities. As an exception to this rule, Chapter 747 of 2014 (SB 850, Block) authorized CCC to offer bachelor's degrees on a pilot basis at up to 15 community colleges. Chapter 747 directed our office to conduct an interim evaluation of the pilot by July 1, 2018 and a final evaluation by July 1, 2022. We published our interim evaluation in December 2017. Subsequent

legislation moved the date for the final evaluation up to February 1, 2020.

This report reflects our final evaluation. This report has four sections. We first provide relevant background on the pilot, then review available data on student participation and outcomes in the pilot. In the next section, we provide our assessment of the pilot. In the final section, we provide alternatives to the pilot as well as potential improvements were the Legislature to retain or expand the pilot.

BACKGROUND

In this section, we provide background on the role of each segment in undergraduate education, describe the key components of the community college bachelor's degree pilot, and discuss the main differences in the CCC programs selected for the pilot relative to public university programs in related academic areas.

Certain Aspects of Undergraduate Education Assigned to Community Colleges and Universities. The Donahoe Act—Chapter 49 of 1960 (SB 33, Miller)—directed CCC to offer instruction “through but not beyond” the first two years of college, with CCC programs culminating in industry certificates, associate degrees, and/or transfer to universities. By comparison, the act assigned both lower and upper division coursework to the state's two university systems—the California State University (CSU) and the University of California (UC). In the ensuing years, the Legislature added other CCC statutory responsibilities, including noncredit instruction (such as adult basic skills, English as a Second Language, and citizenship courses), community enrichment (such as parenting courses), and dual enrollment (whereby high school students may enroll in college courses).

Chapter 747 Created Exception. In a departure from the segments' longstanding missions, Chapter 747 authorized the CCC bachelor's degree pilot. Specifically, the legislation specified

that the CCC Board of Governors could select up to 15 colleges to offer bachelor's degrees in particular subject areas. **Figure 1** (see next page) summarizes the key components of the pilot. Most importantly, the subject areas had to address unmet workforce needs in the region. Additionally, CCC had to consult with CSU and UC in selecting programs, and CCC was not to approve a program that duplicated instruction already offered by the universities. Statute, however, did not provide detail on exactly what consultation meant or how the consultation process was to be structured. To participate, colleges also had to agree to continue fulfilling their other statutory responsibilities. The programs selected for the pilot were to begin no later than the 2017-18 academic year, and students who enrolled in the programs were to complete their bachelor's degrees by the end of the 2022-23 academic year. Subsequent legislation allowed colleges to enroll new students as late as the 2022-23 academic year and extended the sunset date by three years (until July 2026).

Chapter 747 Set Forth Corresponding Application Requirements. Chapter 747 specified the information a district had to submit when applying to participate in the pilot. The district was required to:

- Document unmet workforce needs and justify the need for the proposed four-year degree.

- Document its consultation with CSU and UC regarding collaborative approaches to meeting regional workforce needs.
- Describe the proposed degree program’s curriculum, faculty, and facilities.
- Provide enrollment projections.
- Provide a plan for administering and funding the program.
- Develop a policy requiring all potential students who wish to apply for a fee waiver to complete and submit a federal financial aid application (or a corresponding state application for certain noncitizen students).

CCC Approved 15 Programs.

Figure 2 lists the programs approved by the CCC Board of Governors. Our interim report provides greater detail regarding the program selection process. Ten of the pilot degree programs began enrolling students in 2016-17 and all 15 programs enrolled students in 2017-18.

Programs Add Broader Skills to Complement Technical Associate Degree Training.

The upper division curricula of the pilot bachelor’s degree programs primarily include courses that teach broader skills—such as management and communication—that complement the technical skills students learned in their associate degree programs. With these additional skills, students with a bachelor’s degree are expected to think critically and creatively on the job,

Figure 1

Key Components of Pilot

- ✓ **Basic Requirements**
 - Selected programs must address unmet workforce needs in the region.
 - CCC Chancellor’s Office must consult with the state’s public university systems in selecting programs.
 - Selected programs cannot duplicate instruction already offered by one of the state’s public universities.
- ✓ **Core Objectives**
 - Selected programs must help (1) maintain the state’s economic competitiveness, (2) meet workplace demand for higher levels of education in applied fields, and (3) address unmet student demand for education beyond the associate degree in certain disciplines.
 - Selected programs also could give place-bound students and more military veterans the opportunity to earn bachelor’s degrees.
- ✓ **Funding**
 - Colleges receive the same amount of state funding per full-time equivalent student enrolled in the upper division courses as other CCC credit courses.
 - Colleges charge students taking the upper division courses the general course enrollment fee of \$46 per unit plus a supplemental fee of \$84 per unit (for a total fee of \$130 per unit).
- ✓ **Financial Aid**
 - Colleges provide financially needy students with a California College Promise Grant (previously called a Board of Governors Fee Waiver) covering the general course enrollment fee, but not the supplemental upper division course fee.
 - The state fully covers upper division fees for CCC Cal Grant recipients.

Figure 2

15 Approved Bachelor’s Degree Programs

Program	Community College(s)
Airframe Manufacturing Technology	Antelope Valley
Automotive Technology	Rio Hondo
Biomanufacturing^a	Mira Costa and Solano
Dental Hygiene^a	Foothill and West Los Angeles
Equine and Ranch Management	Feather River
Health Information Management^a	San Diego Mesa and Shasta
Industrial Automation	Bakersfield
Interaction Design	Santa Monica
Mortuary Science	Cypress
Occupational Studies	Santa Ana
Respiratory Care^a	Modesto and Skyline

^a Programs approved at two colleges.

find efficient ways to conduct technical work, assist colleagues in solving problems as they arise, and manage large-scale projects.

Programs Directly Relate to Specific Industry Occupations. Compared to related degrees offered at CSU and UC, the bachelor’s degrees offered by the CCC pilot programs tend to focus on more practical industry applications. Take for example the biomanufacturing program offered at two community colleges (Mira Costa and Solano).

Compared to students who major in biology or biotechnology at CSU or UC, students in the CCC biomanufacturing pilot program take fewer advanced science courses (such as those designed to teach advanced research techniques). Instead, the CCC biomanufacturing curriculum includes courses in regulatory compliance and quality control. This CCC curriculum is designed to prepare students to work in a manufacturing facility that produces biological products with little on-the-job training required.

STUDENT PARTICIPATION AND OUTCOMES

In this section, we provide information about the students in the pilot and their outcomes. We obtained data from the CCC Chancellor’s Office on student demographics, use of financial aid, course success rates, and graduation rates. We asked the colleges in the pilot to review this data for accuracy. The participation data we report in this section is for the first three cohorts of students (2016-17 through 2018-19), while the outcome data is for the first two cohorts. We also reviewed

the results of a survey that the community colleges in the pilot administered to recent graduates.

Students

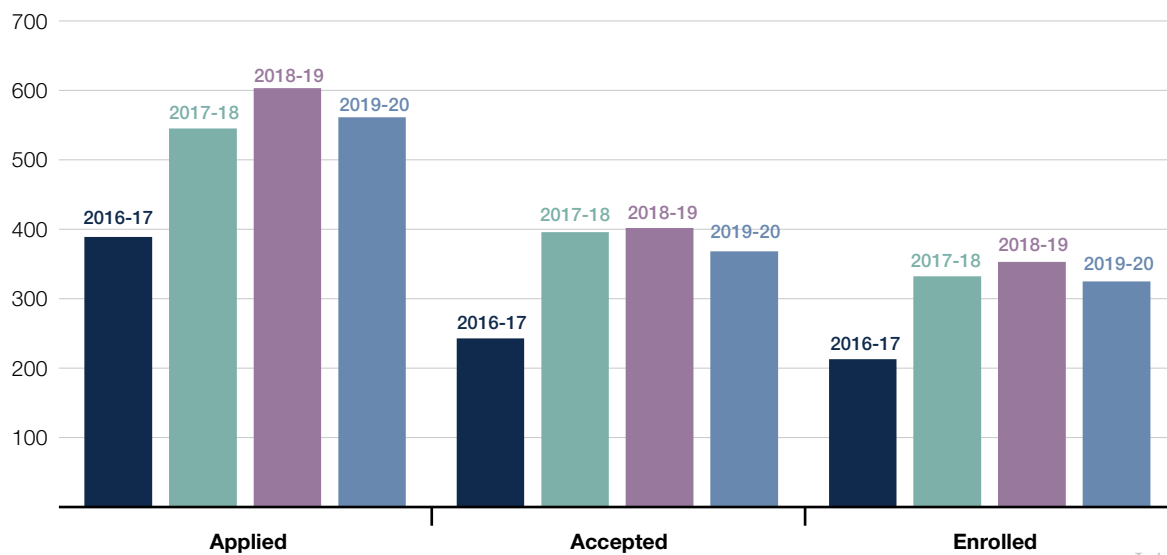
Number of Participating Students Grew Over First Few Years but Remains Small.

Figure 3 shows the total number of new students who applied, were accepted, and enrolled in the pilot programs by academic year. The numbers increased notably in the second year, when all

Figure 3

Program Participation Has Grown but Remains Small

Number of Students



15 programs began operating. The numbers increased slightly in the third year, before dropping slightly in the fourth year. The numbers for 2019-20, however, may increase if programs serve additional students during the spring semester. At the peak overall participation level (in 2018-19), the 15 programs together enrolled 350 new students, along with 349 returning students (for total enrollment of 699 students). This enrollment level is very low within the context of the state's higher education system. By comparison, the 15 community colleges participating in the pilot enrolled a total of 386,000 students in 2018-19, while the CSU system enrolls almost 270,000 junior and senior students .

Size of Programs Varies Somewhat. In 2018-19, the number of applicants to the 15 programs participating in the pilot ranged from 13 (Shasta College and Antelope Valley College) to 135 (Foothill College), with an average of 40. The size of the incoming cohort ranged from 8 (Antelope Valley College) to 73 (Foothill College), with an average of 24 enrolled students. The participation trends over time also varied by program. Three colleges had more applicants and newly enrolled students in 2018-19 compared to the first year of operation, while five colleges experienced reductions in both applicants and new enrollments. The remaining seven colleges had no notable change in applicants or enrolled students over that period.

Some Programs Have Had Very Limited Student Interest. Of the 15 pilot programs, 6 have had average incoming cohorts of less than 15 students. In our conversations with colleges, administrators and faculty provided several reasons for low enrollment. In one case, a college created its associate degree program concurrently with its bachelor's degree program and thus did not have a natural pipeline of students to matriculate into its upper division courses. In another case, the pilot program required a certain industry certification as a prerequisite, such that students had to obtain work experience

before they could apply to the bachelor's degree program. Though these types of reasons suggest programs might be able to grow in the future, all programs reported wanting to be larger now. Administrators of all six programs specified they were actively looking to increase enrollment and had the capacity to enroll additional students, but their cohorts remained small.

Many Programs Made Efforts to Cater to More Students. Most colleges also have multiple online or hybrid courses to increase convenience for students, with six colleges offering fully online programs. (Included in the six are the two dental hygiene programs, which offer both a fully online track and an in-person track.) Several other colleges modified their schedules to avoid conflict with students' work obligations—for example, by scheduling in-person courses only a few times per week and/or holding most classes in the evenings or on weekends.

Programs Have Higher Proportions of White and Asian Students. Figure 4 compares the race/ethnicity of students enrolled in the bachelor's degree pilot programs with overall enrollment at the colleges participating in the pilot. The pilot programs have much higher proportions of white and Asian students, with a much lower proportion of Latino students. For example, 47 percent of all students at the pilot colleges were Latino, whereas 29 percent of students participating in the pilot programs were Latino. The differences are somewhat less pronounced when comparing pilot program students with transfer students from the 15 participating colleges. The last column of Figure 4 shows these data. For example,

Figure 4
Higher Proportion of Pilot Program Students Are White or Asian

	Pilot Programs	Overall Student Body at Pilot Colleges	Transfers From Pilot Colleges
White	36%	25%	31%
Latino	29	47	39
Asian	21	13	18
Black	5	6	4
Other	6	5	5
Unknown	2	6	3

39 percent of transfer students at the pilot colleges are Latino.

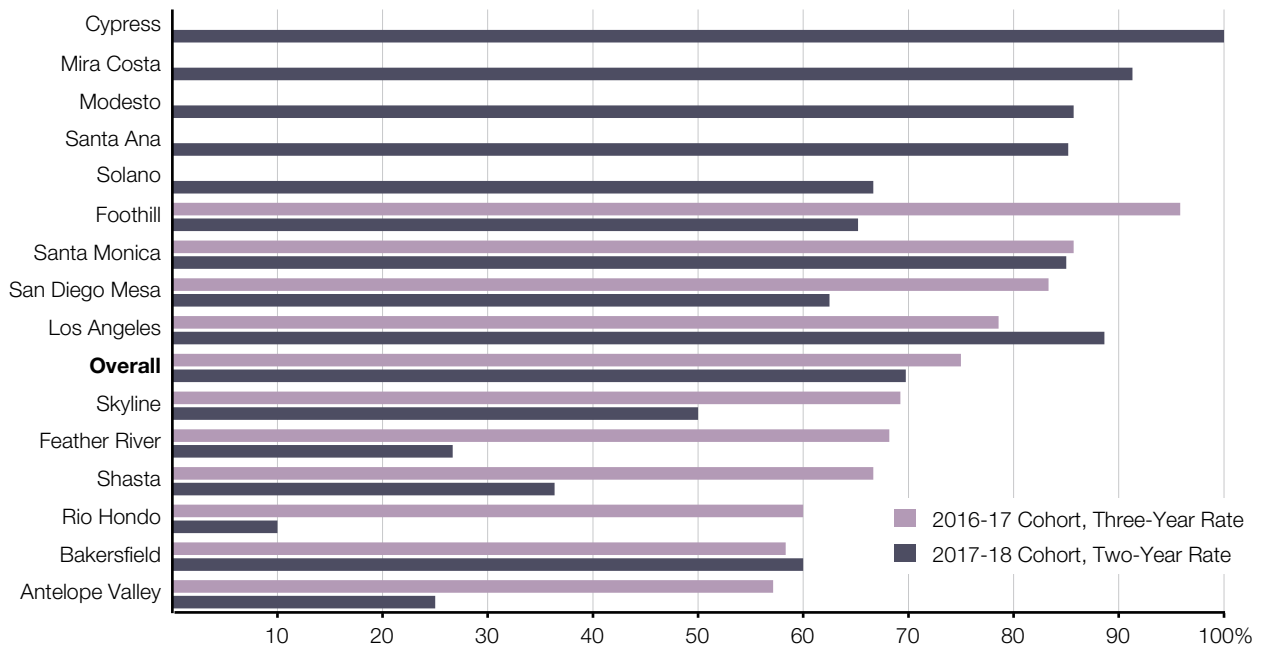
Almost Two-Thirds of Students Receive Some Financial Aid. Of the 2017-18 incoming cohort of bachelor’s degree students, 63 percent received a Board of Governor’s fee waiver in their first year. This share is similar to the share of all full-time CCC students receiving fee waivers (62 percent) and notably higher than the share of all CCC students receiving fee waivers (40 percent). About one-third of bachelor’s degree students received grant aid—primarily from federal Pell Grants or the state’s Cal Grant program. Of students in the 2017-18 cohort, 15 percent received student loans. This is a decrease from the 2016-17 cohort, where 20 percent received students loans. The shares of students receiving loans are substantially higher than for CCC students overall (2 percent) but substantially lower than for university undergraduates (about one third).

Outcomes

Overall Graduation Rates Better Than Those of CSU Transfer Students. Figure 5 shows graduation data for the bachelor’s degree pilot programs. For the ten programs that began in 2016-17, the overall three-year graduation rate is 75 percent, somewhat higher than the graduation rate for CCC students who transfer to the CSU system (70 percent). For the cohort of students that began in 2017-18 (which includes all 15 programs), the two-year graduation rate is 70 percent—30 percentage points higher than the CSU transfer rate (41 percent). As the figure shows, graduation rates vary by program. The three-year rates for the 2016-17 cohort vary from 57 percent (Antelope Valley College) to 96 percent (Foothill College). The two-year rates for the 2017-18 cohorts vary from 25 percent (Antelope Valley College) to 100 percent (Cypress College).

Figure 5

Graduation Rates Vary Across Programs



No Official Data on Labor Market Outcomes.

The CCC system tracks the earnings of its students by linking CCC student data with wage information collected by the state's Employment Development Department (EDD). Linking this data is not typically completed until two years after a student exits the community college system. At the time of this publication, the most recent data available is for students who exited the community college system in 2016-17. As a result of this lag, no statewide earnings data is available for graduates of the pilot programs.

Survey of Graduates Shows Some Promising Employment Outcomes. Given the lack of available EDD data, the 15 pilot colleges

administered a survey of their graduates that primarily focused on employment, earnings, and student loan debt. The information is self-reported. The response rate was high (79 percent). On average, students who graduated in 2018 reported their current annual salary (as of September 2019) to be \$28,000 higher than their salary prior to enrolling in their bachelor's degree programs. For students who graduated in 2019, their current annual salary was on average \$12,000 higher than prior to enrollment in the pilot programs. Two-thirds of graduates also reported that their bachelor's degree helped them to obtain their current position. Further data collection would be needed to confirm these results, but they suggest positive outcomes for recent graduates.

ASSESSMENT

In this section, we provide our assessment of the pilot. Our assessment builds upon the findings from our interim report. To further our analysis, we reviewed the additional data from the CCC Chancellor's Office and colleges as well as visited all 15 programs. During our site visits, we met with faculty, administrators, students, and industry representatives. Below, we focus first on how well the pilot is meeting its core workforce and student objectives. Based on our review, we concluded the pilot was only partly meeting these objectives. We then turn to our assessment of the pilot's program selection and financing—highlighting concerns in each of these two areas.

Workforce Objectives

Information Provided by Applicants Was Inadequate for Determining Whether Workforce Need Exists. To justify the need for their proposed bachelor's degree programs, community colleges submitted summaries of discussions with local employers, testimonials from employers, position statements from professional associations and accrediting bodies, and/or related licensing requirements. These documents generally cited broad support of the programs without providing any concrete evidence that employers were having difficulty filling related positions, were willing to pay

bachelor's degree holders more than those with an associate's degree, or that employers would prefer job candidates with the proposed bachelor's degree over other related bachelor's degrees. Without more concrete information demonstrating industry need, the likely workforce benefits of the pilot programs cannot be analyzed easily and consistently.

Some Programs Show Signs of Meeting Workforce Objectives. Given colleges were not asked to provide more concrete evidence of workforce demand when attempting to justify their bachelor's degree programs, we reached out to college administrators and faculty, students, and industry representatives to develop our own assessment of whether the pilot programs were meeting workforce needs. In particular, we looked for information in our interviews that showed (1) program graduates were filling hard-to-staff positions that required the training provided by the bachelor's degree, (2) employers were willing to pay bachelor's degree holders higher wages than employees with an associate degree to work in the same position, and (3) program graduates were better prepared and required less on-the-job training than other qualified candidates with a bachelor's degree in a different field. **Figure 6** shows our assessment of each program. Based on

our review, we concluded that 7 of the 15 programs met at least one of these criteria. Of the seven programs, most were meeting the third criterion—better preparing students such that they required less on-the-job training.

Workforce Benefits of Other Programs Are Less Clear. For 8 of the 15 programs, we found little evidence that the programs met at least one of the three criteria mentioned above. In most cases, we found that graduates of these programs used the bachelor’s degree to enter management positions where a bachelor’s degree is a minimum requirement. In these instances, employers were willing to hire individuals with a bachelor’s degree in a wide variety of subjects. We found little evidence that graduates from these pilot programs were better prepared to fill these positions compared to those with other bachelor’s degrees or that pilot program graduates were helping employers fill hard-to-staff positions.

Continue to Have Concerns With Closing of Some Associate Degree Programs. In our interim report, we highlighted concerns with a few colleges that were discontinuing their existing associate degree programs in favor of offering only their new bachelor’s degree programs. Currently,

the two dental hygiene programs (at Foothill College and West Los Angeles College) have discontinued their associate degree programs, while the occupational studies program at Santa Ana College has expressed interest in doing so. Administrators of the two dental hygiene programs indicated that discontinuing the programs was part of a broader overhaul. Currently, an associate degree in dental hygiene typically requires over 90 units of coursework, with a bachelor’s degree requiring substantially more than 120 units. Administrators used the pilot as an opportunity to create a streamlined 120-unit bachelor’s degree program. Although we recognize the benefits to students that such a change could provide, we still have our overarching concerns that employers neither require a bachelor’s degree in this area nor pay more for students with one. Closing the associate degree programs reduces access to an existing pathway that leads to a well-paying job for students. Students living in the region who are interested in only obtaining an associate degree are now required either to travel outside of their local area to find such a program or enroll in the bachelor’s degree program and take more courses than they had intended to obtain the same entry-level position.

Figure 6

Based on Interviews, Some Programs Are Meeting Workforce Needs

College	Major	Filling Hard-to-Staff Positions	Wage Premium for Obtaining Bachelor’s Degree	Better Preparation Compared to Other Bachelor’s Degree Programs
Antelope Valley	Airframe Manufacturing Technology	X		X
Bakersfield	Industrial Automation	X		X
Cypress	Mortuary Science			
Feather River	Equine and Ranch Management			
Foothill	Dental Hygiene			
Mira Costa	Biomanufacturing			X
Modesto	Respiratory Care			
Rio Hondo	Automotive Technology			
San Diego Mesa	Health Information Management	X		
Santa Ana	Occupational Studies			
Santa Monica	Interaction Design			X
Shasta College	Health Information Management	X		
Skyline	Respiratory Care			
Solano	Biomanufacturing			X
West Los Angeles	Dental Hygiene			

For Two Programs, Benefits of Bachelor's Degree Now Less Obvious. For the respiratory care and occupational studies programs, the justification for bachelor's degree programs was primarily based on expected changes in accreditation standards, which would have made the bachelor's degree the minimum requirement for any entry-level position. These changes in minimum requirements, however, are still not certain. For respiratory care, the accrediting body is no longer authorizing new associate degree programs, but graduates of existing associate degree programs can continue to obtain entry-level positions. The exact time line for when an associate degree in respiratory care will become obsolete is not clear. In the case of occupational studies, the accrediting body voted in 2017 to make the bachelor's degree the entry-level requirement for occupational therapy assistants, but subsequently reversed its decision and voted to accredit both associate and bachelor's degree programs moving forward.

Student Objectives

Programs Provide Students With a Relatively Low-Cost Educational Option. In our conversations with students, the most common benefit they identified was the relatively low cost of attending the pilot programs. Many had considered enrolling in private programs offering the same degree, but were hesitant to do so because of the cost. In the survey conducted by the pilot community colleges, 51 percent of respondents stated they would not have pursued a bachelor's degree if their community college program had not been offered.

Programs Have Several Other Academic Benefits for Students. The pilot programs provided other key benefits to students, particularly for those with an associate degree in the same major and related work experience in the industry. These students mentioned they found the bachelor's degree coursework immediately relevant and engaging because of the close connection to what they had previously learned. Obtaining a bachelor's degree in the same area also often made for an easier educational pathway. Because these programs do not have an equivalent degree at CSU, students transferring to CSU must declare

a new major and often must take additional major-specific coursework to complete their degrees.

No General Concern With Academic Quality. We found no notable issues with the academic quality or rigor of the pilot programs. The programs have been designed to teach concepts and skills that would be immediately relevant in related industries. Furthermore, all programs have been accredited by the CCC regional accrediting body (the Accrediting Commission for Community and Junior Colleges) and, if applicable, have obtained third-party accreditation required by industry. In our conversations with current students and recent graduates, students were able to clearly articulate what they learned in the upper division coursework and could apply these concepts to specific situations in the workplace. Furthermore, the graduation rate data suggest colleges generally are providing sufficient support for students to complete their programs.

Concerns With Small Size of Programs. Though the pilot programs are providing some benefits to students, we are concerned with colleges operating relatively small programs, particularly the six programs averaging less than 15 students per cohort. The enrollment for these programs is far below the projections included in colleges' applications. Interestingly, three of these programs are fully online, so classroom and/or lab space is not a limiting factor in enrollment. Although many programs indicated they expect enrollment to increase as interested students completed lower division requirements, the low enrollment levels after three or four years of operation suggests student demand for bachelor's degrees in the particular fields selected is limited. In addition, colleges operating small programs likely are incurring higher per-student costs, as the student-to-faculty ratio is a principal driver of costs. Supporting a small program likely entails the college having to redirect funding that could have been available for other programs with greater student demand. Operating small-sized programs also likely results in a disproportionate amount of administrative time being dedicated to them.

Program Selection

Application Review Process Was Weakened by Accelerated Time Line. Our interim evaluation of the pilot programs identified several concerns with the application review process. Most of the concerns emanated from the accelerated time line set by CCC. Colleges were given less than one month to submit applications. The CCC then reviewed applications and granted initial approval for the pilot programs within one month of receiving the proposals. To meet these expedited time lines, colleges were not required to have completed all the typical local curriculum development and review processes. Instead of fully developed programs, the application required examples or illustrations of upper division coursework for the proposed degree. The application did not require colleges to submit other information typically required for new programs, such as program goals and objectives, information about similar programs (such as programs in other states), or endorsements from an advisory committee and regional workforce consortium. Moreover, with a one-month turnaround, the CCC Chancellor's Office and application review team did not have sufficient time to validate the information submitted and assess the workforce value of the proposed degrees. Although colleges eventually received local curriculum approval as they further developed their programs, local review bodies likely would have found it awkward, at best, to delay or deny programs on curricular grounds after the Board of Governors already had approved them.

CCC Consultation With CSU Was Very Limited. Our interim report also identified several concerns regarding CCC's consultation with CSU. The CCC first requested the input of CSU after completing the scoring of applications. The CCC provided CSU with a brief description of the recommended programs and requested feedback within three business days. The CCC subsequently approved several degrees to which CSU had formally objected based on evidence

of curricular duplication. (The CCC did, however, ultimately modify the curricula of some programs to address CSU's concerns.) Because statute did not specify how consultation was to occur, the CCC's actions did not violate the law. This limited approach, however, complicated intersegmental efforts between CCC and CSU. In contrast to CSU, UC expressed no major concerns with the proposed programs and did not request additional consultation.

Financing

Supplemental Fee Does Not Appear Warranted. When the pilot was established, the general thinking was that the approved upper division coursework would be costlier than community colleges' existing lower division coursework. In contrast, we think the approved upper division coursework likely costs less. The lower division coursework associated with the existing associate degree programs often require specialized equipment and have third-party accreditation requirements that mandate low student-to-faculty ratios. This is particularly true of the health-related programs. By contrast, the upper division coursework in the pilot programs tends to be in a more traditional class setting that requires little additional equipment and can be conducted in somewhat larger class sizes.

Difficult to Draw Other Conclusions From Fiscal Data. To assess the costs associated with operating the bachelor's degree programs, we collected fiscal data from the colleges through 2018-19. Although the fiscal data submitted by the colleges improved compared with the data we received for our interim report, we continued to find inconsistencies and irregularities in the data that effectively made it unusable. We think these issues are likely a result of differences in how colleges account for their staffing costs, particularly for staff that spend only a portion of their time on the bachelor's degree program.

LEGISLATIVE OPTIONS

As evident from our assessment section, we did not find conclusive evidence that the pilot was an indisputable success. Whereas students reported some benefits of the pilot, many of the community college bachelor's degree programs were small and not clearly addressing workforce needs. Given our findings, we believe the Legislature likely has more effective ways of meeting its overarching objectives of addressing student *and* workforce needs. Below, we discuss a couple of basic options the Legislature could consider instead of continuing the pilot. Alternatively, were the Legislature to decide it wanted to retain and/or expand the pilot, we discuss several options for improving it. In particular, the options we discuss would help ensure any existing or new bachelor's degree programs at the community colleges better meet workforce demands.

Alternatives to the Pilot

More Effective Options Likely Exist for Meeting Key Workforce and Student Objectives.

We think several more promising options exist for the state to better address workforce needs and/or increase access to bachelor's degree programs. Below, we discuss two such options. One option would provide shorter industry-relevant training that does not entail completing a bachelor's degree program, while the other option would provide streamlined pathways for existing bachelor's degrees. Compared to the CCC pilot, we think either of these alternatives would have the potential to benefit a greater number of students across many more occupational fields.

Develop Shorter, Targeted Training Programs.

Rather than developing 120-unit programs that lead to a bachelor's degree, the Legislature could encourage closer partnerships between industry and colleges or universities to provide shorter training programs. Such training could be particularly effective for employees that already have an associate degree and considerable technical skills but may need additional training to be promoted to supervisory positions. The specific training would be linked to industry needs

but could focus on areas such as management, communication, and business practices. The upper division courses offered in the pilot bachelor's degree programs have focused in these areas. To serve students and employers effectively, the Legislature would want to ensure that any new short-term program be approved by accreditors and any corresponding credential be widely recognized by employers. If established, these types of shorter training programs could potentially benefit a much larger number of students with associate degrees across a much wider range of fields.

Encourage Stronger Alignment Between CCC and Public University Programs.

Improving alignment between CCC and the universities, particularly CSU, could increase the number of CCC students who ultimately obtain a bachelor's degree and reduce the amount of time students take to obtain their degree. Several effective partnership models already exist. For example, the Tri-County Nursing Pathway is a partnership between Riverside City College and two CSU campuses (Fullerton and San Bernardino) that allows associate degree nursing students to concurrently obtain their bachelor's degrees. Students can enroll in CSU courses while still completing their associate degree requirements, allowing them to obtain their bachelor's degree with only six additional months of coursework. The CSU upper division courses are offered primarily as online or hybrid courses to provide greater convenience for students. CSU satellite campuses tend to work in similar ways by also providing greater convenience for students in completing their upper division coursework. The Legislature may wish to explore ways it could encourage these types of collaborations across segments to help meet student and workforce needs more efficiently and effectively. Such partnerships could not only be more cost-effective, but also benefit more students (including place-bound students) across more occupational fields, thereby having a more widespread impact.

Improving the Pilot

If Keeping and/or Expanding Programs, Consider Improvements in Several Areas.

Despite the lack of conclusive evidence that the pilot is effectively meeting its core objectives, the Legislature may want to consider retaining or even expanding the pilot programs. If the Legislature were to make existing programs permanent and/or authorize new programs, we encourage it to make several improvements, discussed below.

Require Programs to Meet Certain Criteria to Continue Operating. Specifically, we encourage the Legislature to consider requiring community college bachelor's degree programs to (1) meet a minimum threshold for its cohort sizes and (2) maintain graduation rates at or above the rates for CSU transfer students. Regarding establishing cohort size, the Legislature could start with a minimum size of 20 and reevaluate as better information on the viability of that cohort size becomes available. We also encourage the Legislature to require colleges to demonstrate their programs are meeting workforce needs. Specifically, we recommend programs demonstrate that industry partners (1) have difficulty filling certain positions that require a bachelor's degree, (2) are paying bachelor's degree holders more than those with a related associate's degree, and/or (3) are hiring candidates with the specialized pilot bachelor's degree over candidates with other bachelor's degrees. The CCC Chancellor's Office could review programs based on these outcomes annually or periodically. Requirements of this kind are typically not applied to community college programs. However, we think these requirements are reasonable given operating bachelor's degree programs is such a significant departure from the core mission of the community colleges.

Require Stronger Justification of Workforce Need. If the Legislature desires to expand the pilot to allow additional colleges to participate, we encourage it to require applicants to provide more concrete information demonstrating workforce need. We think the information required should be similar to the information required for existing programs—for example, information showing

that employers are having difficulty filling certain positions that require a bachelor's degree. We suggest this workforce-based information hold the greatest weight in the application review process. We also encourage the Legislature to require that any college authorized to offer a new bachelor's degree keep open its related associate degree program. Finally, we encourage the Legislature to require any newly approved programs to be reviewed by the CCC Chancellor's Office at specific intervals, based on the criteria we describe in the above paragraph.

Create Longer Time Line for Review and Clarify Consultation Process. We encourage the Legislature to require the CCC Chancellor's Office to use a longer application time line that gives colleges sufficient time to develop their curriculum. We also think the CCC Chancellor's Office should allow sufficient time in the review process to validate the information that colleges submit and assess the workforce value of their proposed degrees. Additionally, we encourage the Legislature to require the CCC Chancellor's Office to provide more detailed information to CSU on the proposed programs, as well as to seek feedback from CSU at several points in the approval process. We suggest clarifying that CSU's role is to assess whether the programs are duplicative of its existing programs, but it also could submit comments regarding the quality of the proposed curricula submitted by the colleges. The CCC Chancellor's Office, however, would remain responsible for rating the quality of submitted applications and making recommendations to the CCC Board of Governors for approval.

Develop More Detailed Fiscal Accounting Guidelines. To obtain more accurate and consistent fiscal data, we encourage requiring the CCC Chancellor's Office to develop regulations specifying how colleges are to account for spending on their bachelor's degree programs. This data also could be reviewed as part of community college districts' annual financial audits. Absent greater oversight and more careful review of submitted information, the Legislature will be unable to determine the cost to administer these programs.

CONCLUSION

This report is intended to provide the Legislature with guidance in deciding whether to continue allowing community colleges to offer specialized bachelor's degrees. We obtained the best data available from the 15 pilot programs and had numerous conversations with faculty, administrators, students, and industry representatives involved in the pilot programs. We concluded the pilot was only partly meeting its core objectives. Whereas some of the programs have benefited students, many have not addressed unmet workforce needs. Questions also remain about whether some programs have sufficient student demand over the long term. Given the

available data are not conclusive, we provide the Legislature with options. One set of options focuses on replacing the pilot programs with other initiatives that make completing upper division coursework more convenient. The alternatives we identify would have the potential to benefit a much greater number of students across many more occupational fields. A second set of options focuses on how to improve the pilot programs such that they are more likely to provide both student and workforce benefits. In the coming months, we can work further with the Legislature as it contemplates these options and considers how it would like to proceed.

LAO PUBLICATIONS

This report was prepared by Edgar Cabral and reviewed by Jennifer Kuhn Pacella and Anthony Simbol. The Legislative Analyst's Office (LAO) is a nonpartisan office that provides fiscal and policy information and advice to the Legislature.

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