Education Insights Center
Advancing Research and Policy
for K-12 and Postsecondary Education

California's Education Systems: A Sum of the Moving Parts

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A Primer for the California Education Policy Fellowship Program

SACRAMENTO STATE

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Preface

Dear EPFP Fellows:

We commissioned this working paper for the California Education Policy Fellowship Program (EPFP) because we had a hard time finding one current source that integrates major imperatives and initiatives in all of California's public education systems, K-16. We intend for this paper to provide a baseline of information for Fellows, and to be provocative and generate discussion within the program. Thad wrote the paper for EPFP's inaugural year in 2016-17 and updated it annually, based on feedback from Fellows.

In addition to sparking conversations within EPFP, we think it is important to have a document that provides context for the state's major education reforms—and that makes sense of them with regard to their potential effects on students across systems. California's K-12 and higher education systems are undertaking some of the most ambitious education reform experiments in the country. These include:

- In K-12 schools: the Local Control Funding Formula, Common Core Standards, Next Generation Science Standards, the California Assessment of Student Performance and Progress (CAASPP), and a new accountability system.
- In the California Community Colleges: the Student Equity and Achievement Program (which integrates the Basic Skills Initiative, the Student Equity program, and the Student Success and Support Program), the Institutional Effectiveness Partnership Initiative, Guided Pathways, and the revamping of remedial education under AB 705 (Irwin, Statutes of 2017, Chapter 745).
- In the California State University (CSU): the CSU's Graduation Initiative 2025 and its executive orders regarding the transformation of developmental education and general education.

We hope this paper will spark discussion and action in pursuit of California's vision for its public education systems and equitable opportunities and outcomes for students.

Sincerely,

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Introduction – Education in a Land of Poverty amidst Plenty

The gap between the rich and the poor in the United States is growing, and California is leading the way. The Golden State is home to more of the "super rich" than any other state (Pastor & Braun 2015), and yet Californians, on average, have become poorer since the turn of the century. With cost of living taken into account, California now claims the nation's highest rate of poverty (Fox 2017).

- Median household income has increased in real dollars recently (from $63,500 in 2010 to $67,700 in 2016), but has not caught up to its level in 2000 ($68,500) (NCES 2017).
- Rates of unemployment have come down, but they vary substantially by region, ethnicity, and age. The most prosperous counties had unemployment rates of less than 3 percent in July 2018 (Marin, Napa, San Francisco, Santa Clara, and Sonoma), while the residents of other counties suffered from double digit rates (11% for Colusa and 19% for Imperial) (EDD 2018).
- Middle- and low-income Californians are being priced out of rental as well as home ownership markets. In the San Francisco Bay Area, renter income dropped 7 percent from 2000 to 2014, while rents increased by 24 percent (Levin & Christopher 2017).
- Children are being hit hard by these economic trends. The share of students in public schools who qualify for free or reduced lunch increased from 47 percent in 2000-01 to over 60 percent in 2017-18 (CDE DataQuest 2018).

California's disparities extend beyond economic factors. Based on health status, educational attainment, and income, California has been called the "most unequal state," with the nation's highest- *and* lowest-scoring congressional districts in terms of the overall well-being of residents (Luhby 2015, 1; Burd-Sharps & Lewis 2015). Life expectancy of residents in the Silicon Valley's congressional district 18 (from Palo Alto to San Jose) is 84 years of age. About 150 miles away, the San Joaquin Valley's congressional district 21 (Kings County and portions of nearby counties) is an agricultural powerhouse, but life expectancy there is six years lower. About 60 percent of residents in the Silicon Valley have a bachelor's degree, compared with 8 percent in the San Joaquin Valley (Burd-Sharps & Lewis 2015, 9-10).

California is also the most diverse state, and its poverty levels vary widely by ethnic group. Latinx represent about 39 percent of the state population generally, and 54 percent of its K-12 school population. Non-Latinx whites make up 37 percent of the state population (U.S. Census 2017). About 44 percent of California's households speak a language other than English at home, which is more than twice the national average (21%). Latinx in California are about twice as likely as non-Latinx whites to be below the federal poverty threshold (14% vs. 7%), and about 17 percent of blacks are living in poverty (Kaiser 2017). These figures do not account for the higher costs of living in California.

In a state in which increasing numbers of families experience poverty amidst plenty, California's schools, colleges, and universities have the potential to serve as engines of economic and social mobility, and as drivers of community and civic growth. Current factors associated with these roles include:

Helping individuals and families escape poverty and enjoy the benefits of well-paying careers.

- Not everyone needs a bachelor's degree, but those seeking a middle-class standard of living need some form of postsecondary education or training.[1] Automation and other factors have eliminated many low-skilled jobs in traditional blue-collar industries; many jobs that remain in the traditional trades now require at least some mid-level skills, which in the U.S. are typically taught in community college or the military. In addition, much of the job growth has been in technology, finance, and the service industries (such as healthcare, business, education, and leisure and hospitality). The well-paying jobs in these industries require evidence of at least mid-level skills, or an associate's degree or higher. In addition, people in the workforce across the spectrum of roles must be able to learn and adapt in order to update their knowledge and skills as industries and market conditions change. (Carnevale et al. 2017; Finney et al. 2014).
- The more education a person has, the greater the prospects of being employed and having a job that can support a family. Wages for college graduates vary substantially, but, on average, the earnings gap for young Americans (ages 25 to 32) with a bachelor's degree, compared with those who have only a high school diploma, is about $17,500 annually; this gap has been widening for the past half-century. (Tierney & Rodriguez 2014; Kurtzleben 2014).
- Educational attainment is also correlated with a range of benefits beyond work. Individuals with higher levels of education tend to be healthier and to live longer. Having less education, conversely, is linked with lower health outcomes, including infant mortality, heart disease, diabetes, smoking, alcohol consumption, and self-reported poor health. These correlations hold across ethnic groups. (Egerter et al. 2009; Fletcher & Frisvold 2009).

Diversifying and strengthening the workforce and economies of communities, cities, and regions.

- The shift from low-skilled to middle- and high-skilled careers is part of a national trend and is not likely to subside. Many regions in California are facing long-term shortages of middle-skilled workers, including the agriculture industry in the Central Valley. Middle-skill careers account for about half of the state's labor market, but only 39 percent of workers in California are trained to this level. A community's

[1] This paper uses "postsecondary education," "college," and "higher education" to refer to all education or training beyond high school, including public and private options, vocational and academic programs, and a range of programs that offer badges, certificates, associate, and bachelor's degrees.

ability to remain on the cutting edge of technological change depends on its ability to educate its diverse populations for middle-skill jobs as well as for positions that requite a bachelor's degree or higher. (NSC 2017).

Reinforcing California's democratic and civic institutions.

- Educational attainment contributes to a democratic society by providing social and economic opportunity across population groups. It also contributes to an informed electorate and to better consumer decision-making. This is particularly important at a time when the electorate is increasingly polarized and when the boundaries between news, social media, and promotion are blurred. People with higher levels of education are more likely to contribute to society, including by paying taxes, voting, and volunteering (File 2015; BLS 2016).

While education can serve these roles in supporting individual opportunity and economic and civic growth, the evidence is mixed as to whether education is serving these purposes well today. Based on national and international studies, researchers report that even though a college degree *can* be a ticket out of poverty for individuals, upward mobility has stalled for the population generally in the United States. That is to say, there remains some movement across income categories, but most children born into an income group tend to stay there—and the gaps between the top and the bottom earners are widening (APM Reports 2018). In examining outcomes associated with access to and success in higher education, income-related gaps are large and growing (Haveman and Smeeding 2006). In addition, factors such as parental income contribute much more than education does to children's earning potential (Gregg et al. 2017). Yet the type of institution appears to affect economic mobility. For students who get into and attend a highly selective college or university, their *earnings potential* appears to be higher across all income groups, compared with those students who attend broad-access institutions. But public four-year universities (selective and non-selective) appear to have a smaller *earnings gap* between low- and high-income earners ten years after enrollment, compared with for-profit and private not-for-profit institutions (Chakrabarti & Jiang 2018).

California is the nation's largest and most diverse state. If its educational institutions are to assist in addressing the state's significant disparities and advancing economic growth and civic stability, then schools, colleges, and universities will need to help all students reach their educational goals. The next chapter examines key indicators of student progress and completion in California's schools, colleges, and universities. Chapter 2 provides a brief overview of the governance structure of California's education systems and the challenges that this structure presents. Chapter 3 explores California's options to understand and improve all students' opportunities to reach their educational goals across education systems.

Chapter 1 – A 21st Century Imperative: Supporting All Students in Meeting their Educational Goals

In a state that harbors extreme wealth and poverty, where the gap between haves and have-nots is larger than in any other state, the opportunity to pursue education or training beyond high school remains one of the best tickets into the middle-class and well-paying careers. But how well are the state's systems of public education helping all students meet their educational goals? Over the past decades, each of the systems has seen improvement in some student outcomes. Across a range of indicators, however, there appears to be a key factor that is dampening broader and deeper improvement statewide: gaps in opportunity across ethnic groups. Why are these disparities likely serving as drivers for state educational performance?

- California's gaps in opportunity among ethnic groups are persistent across educational measures and across time. As this chapter documents, these variations are not one-time blips.
- With 54 percent of the K-12 school students, California's young Latinx will likely serve as a bellwether for change in state education performance. Based on the sheer numbers, it is likely that as Latinx fare in achieving their educational goals, so too will California fare in providing educational opportunity, developing its competitive workforce, and strengthening its democratic institutions.

This chapter provides a brief introduction to California's education systems, and then examines outcomes across students' educational journey from K-12 education to college completion.

California's Systems of Public Education

Early childhood education.

California assists low-income families in participating in early childhood education, but childcare is expensive in the state and about 40 percent of children ages three to five do not enroll in preschool or kindergarten (Stipek 2018). About 11 percent of the state's three-year olds and 37 percent of its four-year-olds enrolled in the California State Preschool Program (CSPP) in 2016-17. CSPP provides full- and part-day preschool for three- and four-year-olds with family incomes at or below 70 percent of the state median income (Lowenberg 2018). In addition, some low-income families qualify for childcare funded by CalWORKs (California Work Opportunity and Responsibility to Kids), but most of these programs are unlicensed and therefore not required to meet any educational standards (Stipek 2018).

Public K-12 schools.

Beyond pre-kindergarten, California's public schools enroll over 6.2 million children, nearly an eighth of all K-12 students in the United States (see Figure 1-1). About 60 percent of California's students are from low-income families, which is higher than the national average. The student population has a larger share of English learners than any other state (Tatum et al. 2014). More than half of California's students are Latinx (54%), and this share is growing.

Figure 1-1. Quick Facts about California Students, 2015-16

Description	Number	Percentage
Enrollment, K-12 public schools	6,226,737	100.0%
Students receiving free or reduced lunch	3,768,815	60.5%
English language learners	1,373,724	22.1%
Ethnicity		
Latinx	3,360,562	54.0%
White (not Latinx)	1,500,932	24.0%
Asian	551,229	8.9%
African American (not Latinx)	361,752	5.8%
Two or More Races (not Latinx)	192,146	3.1%
Filipino	156,166	2.5%
None Reported	38,810	0.6%
American Indian or Alaska Native	34,704	0.6%
Pacific Islander	30,436	0.5%
Total	**6,226,737**	**100.0%**

Source: CDE DataQuest 2016.

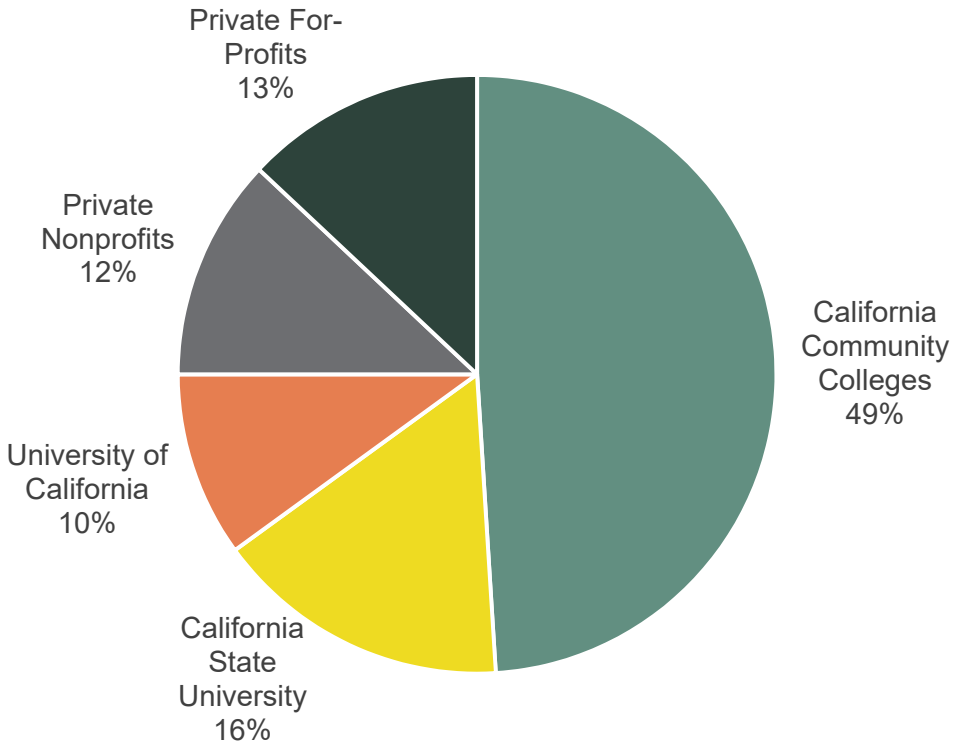
Higher education.

California's public and private colleges and universities enroll about 2.4 million full-time-equivalent (FTE) students annually. Roughly three-quarters of this enrollment is in public institutions (see Figure 2-4).

- *The California Community Colleges* (CCC) comprise the nation's largest higher education system. In 2015-16, 1.2 million FTE students were enrolled at 113 community colleges—about half the state's FTE students. Head-count enrollment at the community colleges exceeds 2.2 million.
- *California State University* is the nation's largest university system and serves approximately 394,000 FTE students on 23 campuses.
- *The University of California*, the state's primary academic research institution, enrolls about 254,000 FTE students on its 10 campuses and various medical centers.
- *Private nonprofit colleges and universities* enroll about 306,700 FTE students at 178 institutions.
- *Private for-profit colleges and universities* enroll about 319,900 FTE students at 1,071 institutions (LAO 2016).

In addition, California offers a range of adult education programs through its K-12 schools. Workforce investment boards (operated by the state Employment Development Department) facilitate and promote regionally based career development and training opportunities.

Figure 1-2. Three-quarters of California's College Students Attend Public Institutions



Note: Based on FTE enrollments. Includes graduate students.
Source: LAO 2016.

A Snapshot of California's Educational Outcomes

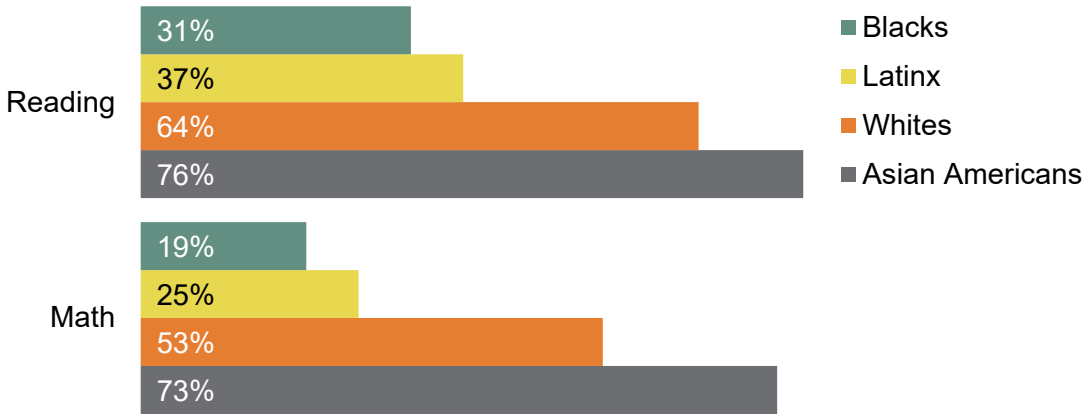
Compared with other states, California's children begin kindergarten with relatively large learning gaps, which has been attributed in part to a lack of access to affordable, high-quality early childhood education (Stipek 2018). California overhauled its K-12 education system over the past decade, beginning with the adoption of the Common Core State Standards for math and English language arts in 2010 and new state standards in science in 2013. Also in 2013, California adopted the new Smarter Balanced assessments, which are aligned with the new standards. These assessments fall under the broader name California Assessment of Student Performance and Progress (CAASPP), which also includes the California Alternate Assessments and the state's standards-based tests in Spanish. California shifted greater decision-making to local school districts by adopting new funding mechanisms and local accountability processes in 2013, including a new data dashboard to report and share local performance, implemented in fall 2017.[2]

[2] Chapter 2 describes these changes in K-12 education in greater depth.

It is too soon to know the full outcomes of these major reforms of K-12 education. Based on longer-term results compiled by the National Assessment of Educational Progress (NAEP), however, California's scores on reading and math for fourth and eighth graders have improved significantly. Although the state's scores remained below national averages, California gained ground in both math and reading since 2000, but particularly since 2015 for eighth graders. The scores for California's black and Latinx students, however, remained below those for white students over the past two decades, with no significant narrowing of these gaps statistically. Low-income students also scored lower than their peers, with no significant narrowing of this gap (NAEP 2018).

In examining the state's own Smarter Balanced assessment results, the scores have been relatively flat over its three years of implementation. In 2017, about half of students across grades 3 to 11 (49%) met or exceeded the standards in English language arts and 38 percent did so in math. All ethnic groups have seen slight gains over the past three years, but substantial gaps remain (see Figure 1-3) (Fensterwald 2017).

Figure 1-3. Smarter Balanced Assessment Results: Percentage of Students Meeting or Exceeding Standards, by Ethnicity, 2017



Notes: Scores are statewide for all tested grades.
Source: Fensterwald J. 2017. Average scores flat in 3rd year of California's Common Core-aligned tests. EdSource. September 27.

California's high school graduation rate improved gradually over the past few years, tracked closely with national trends, and remains slightly below the U.S. average. There are substantial gaps by ethnicity and income, based on state data (see Figure 1-4). Latinx account for about half (52%) of the high school cohort and about two-thirds (66%) of low-income students in the cohort. Whites account for a quarter (25%) of the high school cohort and for 14 percent of the low-income cohort.

Figure 1-4. High School Graduation Rates, by Ethnic Group and Low-Income Status, 2016-17

Notes: Low-income, in this case, is defined as qualifying for free or reduced price lunch. The state averages for the low-income cohort and the general high school cohort were 79 percent and 83 percent, respectively.
Source: CDE DataQuest 2018.

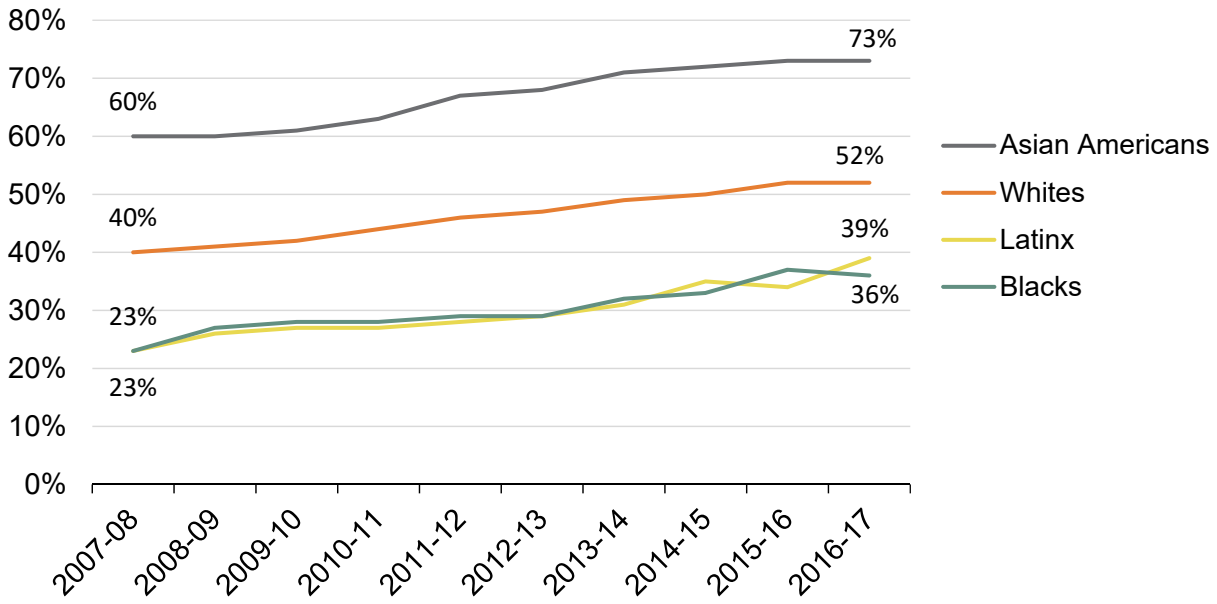
College and career readiness.

California includes a college/career indicator (CCI) as part of its new accountability system for K-12 education. The state is still implementing the measure, but two components are available statewide. The first is the performance of 11th graders on the Smarter Balanced assessments, which the CSU and many community college campuses have agreed to consider in determining readiness for college-level work. Scores in both math and English language arts increased over the past few years, but also show that substantial work remains to prepare high school graduates for college and careers, particularly in math.

- *Math*: 32 percent of 11th graders met or exceeded the standards in math in spring 2017 (up from 29% in 2015).
- *English language arts*: 60 percent of 11th graders met or exceeded the standards (up from 56% in 2015) (CDE 2017).

A second component of the CCI is the completion of the "a-g" course sequence in high school, which is required for admission at UC and CSU. The share of high school graduates who complete this sequence has increased substantially over the past decade, from 36 percent in 2007-08 to 47 percent in 2016-17. Latinx students made the most progress during this period, which reduced the gap between Latinx and Asian Americans and between Latinx and whites somewhat on this measure (see Figure 1-5). Significant variation remains, however, by ethnicity and by region, with students from urban counties more likely than those from rural counties to complete college preparatory courses (CDE DataQuest 2018).

Figure 1-5. The Share of High School Graduates Completing UC and CSU Course Requirements



Source: CDE DataQuest 2018. 12th grade graduates completing all courses required for UC and/or CSU entrance.

Another sign of postsecondary readiness, traditionally, was the percentage of incoming college students required to take remedial, or developmental, courses, but this proxy for readiness is changing, given evidence demonstrating that the tests were not valid and were replicating societal inequities. The CSU has retired the assessments that had been used for determining if a student is prepared for college-level work, and both the community colleges and the CSU are in the process of broadening the measures they consider for placement—to include high school grades, for example. Community college and CSU campuses and departments are also transforming their entry-level courses and curriculum in English and math, to provide more incoming students with supports within college credit-bearing courses, rather than requiring them to enroll in separate remedial courses whose credits do not count toward their college completion (for more information, see Chapter 2).

Postsecondary participation.

California has a long-standing commitment to provide low-priced access to postsecondary education through its community colleges (compared with states nationally, though California's cost of living is challenging for college students). Largely as a result of this commitment, the state's college participation rates have been high historically and remain above the national average. About 40 percent of young adults in California were enrolled in postsecondary education in 2015, which ranked 10th in the nation. This percentage has held fairly constant since 2009 (NCHEMS 2017). However, there are significant gaps in postsecondary participation in California by region, income, and ethnicity. For example, college participation

among 18- to 24-year-olds is substantially higher for Asian Americans and whites, compared with Latinx and blacks (CRB 2013).

In addition, Latinx and blacks are disproportionately represented in community colleges rather than four-year institutions. Almost two-thirds of Latinx first-time freshmen (65%) enroll in a community college, compared with 16 percent in CSU and 6 percent in UC. For blacks, 62 percent enroll in a community college, 18 percent in a for-profit college, and 11 percent in CSU and 4 percent in UC (CCO 2015b; CCO 2015c). Through their transfer function, the community colleges serve a key role in providing students with access to baccalaureate degrees. Students who begin at a community college intending to transfer, however, are less likely to earn a bachelor's degree than those who start at a four-year university (PPIC 2017).

Capacity at the public colleges and universities.

Demand for postsecondary education increased over the past two decades despite sharp rises in tuition and in the cost of living in California, and increasing numbers of high school graduates are meeting eligibility requirements at UC and CSU. As the number and share of high school graduates eligible for and planning to enroll in postsecondary education continues to increase, California's public university systems are facing substantial challenges in providing sufficient spaces for these students while also holding to the limits to their enrollment pools set forth in California's Master Plan for Higher Education (1960), the document that has guided the state's overall approach to postsecondary education for almost 60 years. In the community colleges, headcount enrollments have declined 22 percent since their height at the start of the recession, from over 2.9 million in 2008-09 to less than 2.3 million in 2017-18 (CCCCO Data Mart 2018).

The Master Plan calls for UC to draw from the top eighth (12.5%) of graduates and for CSU to draw from the top third (33.3%), but both systems appear to be surpassing these guideposts. According to a recent study, the UC is now drawing from the top 14 percent of high school graduates, and the CSU is drawing from the top 41 percent, which means that these percentages of high school graduates meet the minimum eligibility requirements for admission to the systems (Silver et al. 2017). Both systems face challenges in serving the graduates who meet their eligibility requirements. UC redirected 30,000 qualified freshmen to UC Merced from 2012 to 2015, but fewer than 600 of those students enrolled there (PPIC 2016b). At the CSU, many campuses and degree programs have declared themselves "impacted" over the past decade, a policy that enables these programs to limit enrollments, which affects university access for underserved students.[3] Due to these policies, the CSU turned away more than 139,000 eligible students from 2009 to 2014 (CCO 2015a).

The Master Plan identifies the community colleges as the primary point of entry into higher education for Californians. The community colleges offer access to all state residents, but they do have pre-requisites for enrollment in credit-bearing, college-level courses, and they have

[3] For the impacted programs at the CSU, see https://www.calstate.edu/sas/documents/impactedprogramsmatrix.pdf.

limits in many programs, such as nursing. During the recession, community college enrollments dropped precipitously as state budget cuts and other factors squeezed students out of courses and programs (Bohn et al. 2013). Enrollments have not recovered, with headcounts hovering at about 2.3 million students since 2012-13.

Students in all three public systems (but particularly at the community colleges and the CSU) face challenges in getting into the courses they need to graduate on time, due to limited course availability. Students consistently report that course availability presents a major challenge to their educational plans (Moore & Tan 2018), but empirical studies are lacking in this area.

For transfer students, the Master Plan sets minimum admission standards at UC and CSU. Based on these standards, UC has been admitting all eligible transfers (though not necessarily to the campus of choice). The CSU has been denying admission to 13 percent of eligible transfers, stating that this is due to inadequate state funding (LAO 2016).

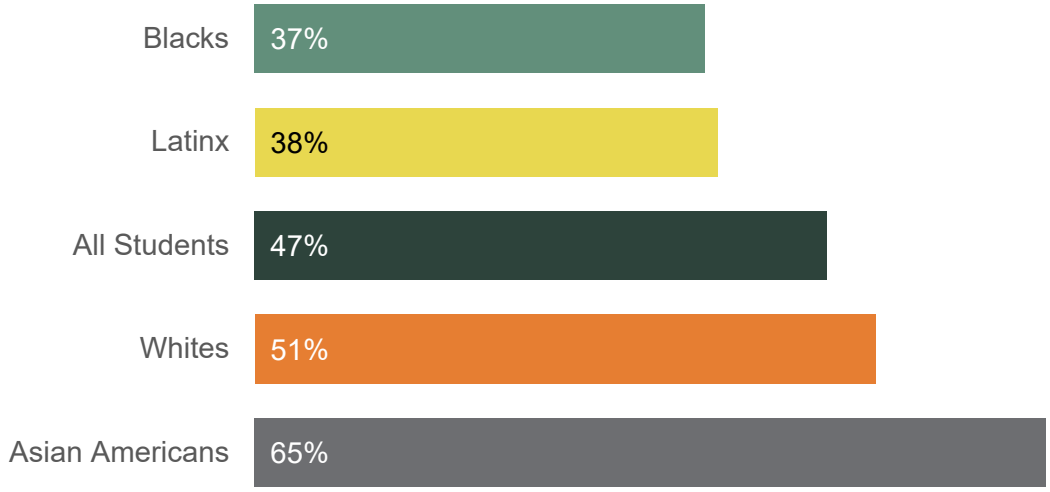
Rates of postsecondary completion.

To improve student learning and timely completion of degrees, both the CCC and the CSU have implemented several systemwide initiatives. At the community colleges, these include the Student Equity and Achievement Program (which integrates the Basic Skills Initiative, the Student Equity program, and the Student Success and Support Program), the Institutional Effectiveness Partnership Initiative, Guided Pathways, and the revamping of developmental education. The CSU implemented an initiative to increase graduation rates in 2009, and again in 2016. The more recent effort, called Graduation Initiative 2025, set an ambitious target to almost double the four-year graduation rate, to 40 percent by 2025.

In California, six-year graduation rates for first-time, full-time students seeking a bachelor's degree in public four-year institutions rose from 59 percent in 2000 to 66 percent in 2015. Three-year completion rates for those seeking an associate's degree at a public community college declined during this period, from 43 percent to 38 percent. On both measures, which are based on data collected nationally, California performed above the U.S. average in 2015 (NCHEMS 2017).

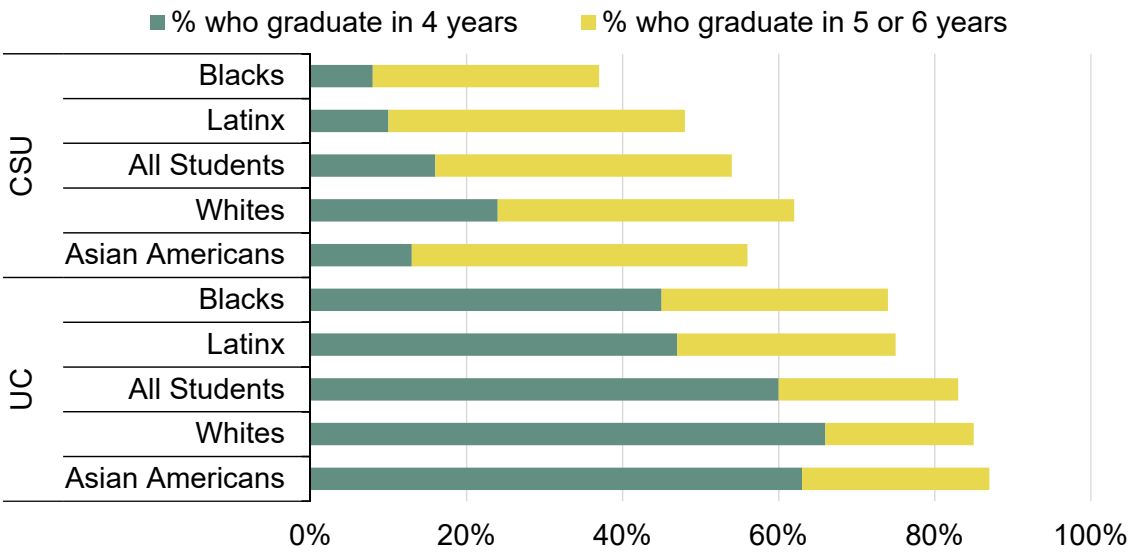
The lower completion rates in the CCCs, compared with the CSU and UC, have important implications for educational equity and educational attainment for Californians overall, since about half of Californians begin postsecondary education in the community colleges, and the colleges are the main higher education point of entry for Latinx and black students in California. In addition, there are significant gaps in completion rates by ethnicity in each of the systems. Figure 1-6 draws from data from the CCC Chancellor's Office, which uses six-year rates to measure completion of one- and two-year degrees, rather than the three-year rates used nationally. Figure 1-7 is based on data from the CSU and UC. At the CSU in particular, the four-year completion rates are below comparable institutions nationally and helped to spur the CSU to implement its systemwide initiative to increase graduation rates.

Figure 1-6. Six-year Completion Rates at the California Community Colleges (2014), by Ethnicity



Notes: The CCC Chancellor's Office includes as completions all certificates, degrees, and transfers by 2013-14, for first-time freshmen entering in 2008-09 who earned a minimum of six units and attempted any math or English course within the first three years.
Source: Campaign for College Opportunity (CCO) 2015b, p. 20.

Figure 1-7. Four- and Six-year Completion Rates at CSU (2014) and UC (2013), by Ethnicity



Notes: For CSU, 4-year outcomes are from fall 2008 to 2011-12 and 6-year outcomes are from fall 2008 to 2013-14. For UC, 4-year outcomes are from 2007-08 to 2010-11 and the 6-year outcomes are from 2007-08 to 2012-13.
Source: CCO 2015b, pp. 21, 23.

College affordability.

Through its historic low-tuition policies and student financial aid programs, California has a tradition of providing low-priced access to postsecondary education, compared with other states. The state has decreased its per-student funding of higher education over the past decades, however, and tuition and fees have nearly doubled over the past 20 years (in inflation-adjusted dollars). In turn, the share of college costs borne by students and families has increased substantially, particularly at UC (LAO 2014; LAO 2016). These state trends are in line with national ones that are shifting the burden of paying for college to students and families:

- Students and families now pay the majority of education-related institutional costs for higher education (Desrochers & Hurlburt 2013).
- Pell grants, the federal need-based student aid program, covered about half the cost of attending a four-year public college in the 1980s; now they cover less than 30 percent (TICAS 2018a).
- Students are taking on substantially more debt nationwide, with average debt increasing from $17,350 in 2000 to $29,650 in 2016 (TICAS 2018a).

Although California's average tuition rates at its public universities and community colleges remain below the levels in most other states for comparable institutions (PPIC 2016b; NCHEMS 2017), tuition comprises only one component of college affordability. Students and families must also factor in other costs, including room and board, which are higher in California. Median rent, in particular, has increased substantially over the past few years, and more students are facing homelessness and food insecurity. UC campuses now have the highest total costs of attendance in the nation, relative to comparable public research universities. In total cost of attendance, CSU campuses and the community colleges are now more expensive than peer institutions in most other states (LAO 2016). Because of the availability of higher student aid funding at the four-year institutions, the total net price of attendance is actually lower for low-income students at many UC and CSU campuses, compared with community colleges in the same region (TICAS 2019).

California's students take on lower debt burdens, compared with their peers in other states; California's average student debt level for the Class of 2017 was $22,785. But the state average masks significant variation by income and ethnicity. In particular, affordability challenges—including the growth of housing and food insecurity—disproportionately affect low-income and underrepresented students and contribute to inequities in college enrollment, progression, and graduation (TICAS 2018a, 2018b).

A constrained educational pipeline.

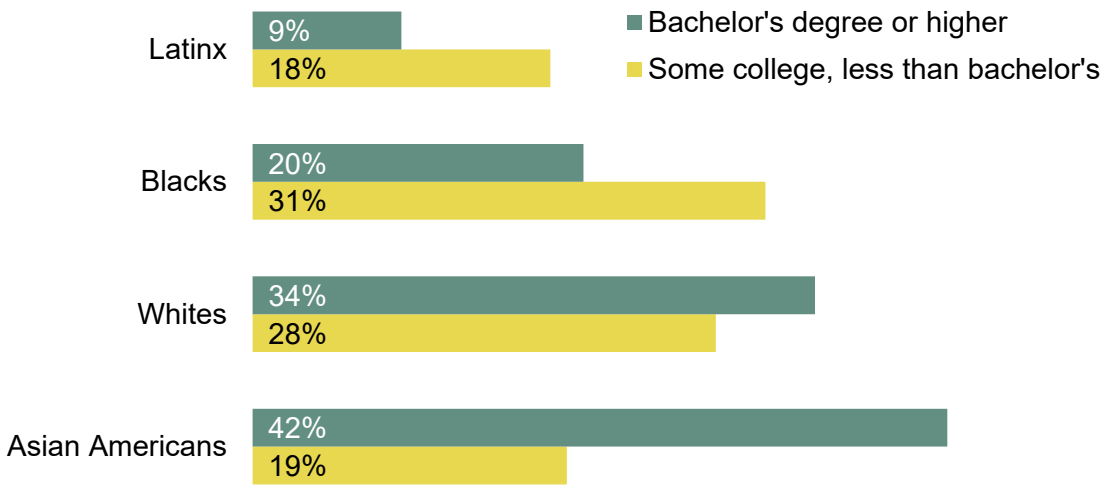
California does not have a longitudinal student data system to track student outcomes across its public systems of K-12 and higher education. Based on data that are available from 2011, it appears that substantial numbers of students are not completing their goals for education and training beyond high school. That is, larger numbers of high school students are completing the eligibility requirements for postsecondary education, they are enrolling in a community college or a university, and they are incurring debt in college, but many are not completing an associate's or bachelor's degree in a timely manner. For every 100 9th graders entering high

school, about 82 graduate from high school, 52 enter college right after high school, and 22 complete an associate's degree within three years or a bachelor's degree within six years (College Futures Foundation 2017a).

Educational attainment.

College degree attainment rates in California, as with the other measures examined in this chapter, vary significantly by ethnic group, and Latinx and blacks are seriously underrepresented in the share of adults with baccalaureate degrees (see Figure 1-8).

Figure 1-8. Educational Attainment Rates in California, by Ethnic Group, 2016



Note: Rates for blacks, whites, and Asian Americans are for non-Latinx.
Source: U.S. Census. 2016. Current Population Survey: CPS Table Creator. Table created and retrieved 9/27/16 at http://www.census.gov/cps/data/cpstablecreator.html.

Conclusion

Students' educational opportunities and outcomes are improving on some measures in California, but the state once known for its top-notch K-12 schools and its low-cost, high-quality colleges and universities has clear problems in key areas of student learning, progression, affordability, completion, and educational attainment. Many of these outcomes are based on statewide averages, which mask significant disparities by ethnicity and other factors. California's public schools, from kindergarten to high school, have work to do to ensure equitable opportunities for all students to become ready to succeed in their chosen path after high school. Substantial work lies ahead for the community colleges in helping more students attain a certificate or degree—or transfer to a four-year institution—in a timely manner. The public university systems face challenges in increasing their capacity to serve more students (including transfer students), opening up spaces in impacted areas, and improving completion rates—while containing costs. All colleges and universities in the state also face challenges in making college affordable for low-income students, particularly as prices for housing, food, and transportation continue to climb.

Chapter 2 – Structures from the 20th Century: California's Disconnected Education Systems

In light of California's challenges in improving educational opportunities and outcomes for all who live in the state, which governance structures exist within K-12 and postsecondary education to provide leadership in setting, monitoring, and achieving statewide goals? As this chapter briefly examines, California's current arrangement can best be described as a distributed and disconnected set of governance structures. The state defers decision-making primarily to local school districts and county offices of education at the K-12 level and to each of the public college and university systems at the postsecondary level. Most school districts and each of the three higher education systems have substantial institutional strengths to draw from. They have been empowered by California's approach to build on those strengths, though with limited state resources and other supports. The state offers some guidance to each system but does not provide an overarching vision for coordination and planning across the systems. The systems also lack strong incentives and consistent funding to work together to identify and meet the educational and workforce needs of Californians.

College Designed for the Few

As with most states, California's governance structures for K-12 and postsecondary education were developed over several generations and primarily during an era in which the majority of high school students did not have access to college. Beginning in the 1960s, several states, including California, built or expanded their public community college systems as a lower-cost model (compared with research institutions) for increasing postsecondary access. At the federal level, the passage of the Higher Education Act in 1965 was crucial in expanding access to postsecondary education in the U.S., as it extended need-based financial aid to the general population for the first time (Eaton 1997).

Since the 1960s, enrollments continued their upward climb nationally and in California, and participation rates and college-going rates increased substantially. At the start of the 20th century, about 2 percent of young adults (ages 18 to 24) were college students in the U.S. This number rose to 15 percent by 1949 and to 26 percent by 1970. In 2014, 40 out of every 100 young adults were in college (NCES 2015d). As to college-going rates, less than half (45%) of high school graduates in the U.S. enrolled in a two- or four-year college immediately after high school in 1960. In 2014, about two-thirds (68%) did so (NCES 2015c). A recent survey of high school students in the U.S. suggests that almost 9 of 10 (87%) plan to attend some form of postsecondary education (EdSource 2015).

There remain wide gaps in college access by ethnicity, but enrollments have expanded for all groups (NCES 2010). From 1970 to 2005, for example, the proportion of college students from nonwhite ethnic groups more than doubled. The largest percentage increase during this period was among Latinx, Asian Americans, and Pacific Islanders, but all groups of color saw growth as the share of whites declined—while stratification by ethnicity across different types of institutions remains (Brock 2010). During the past 20 years, postsecondary enrollments have also become older, as more working adults return to college to obtain a certificate or degree. About two of ten undergraduate students now attend part-time. Increasing numbers of

students attend more than one college or university on their way to seeking a certificate or degree.

As access of higher education increased and became more diverse, education governance structures in most states, including California, did not change significantly. Disconnected systems of K-12 and postsecondary education have created barriers that make it more difficult for students to progress from high school to college, from community college to four-year institutions, among colleges and universities, and through college and into the workforce—particularly for traditionally underserved students. These barriers include mixed signals to students, multiple and confusing assessments, disconnected curricula and program requirements, loss of credits across institutions, and lack of cross-sector data to understand student progress (Kirst & Venezia 2017; Lewis et al. 2016a; Venezia et al. 2010; Venezia et al. 2003). These disconnects also make it difficult to track student progress and challenges, and thereby assess how well programs serve students across systems.

In California, each of the public systems—the K-12 schools, the community colleges, the CSU, and the UC—has its own governance structure that provides some incentives for that system to meet its own goals, but offers few incentives for the systems to develop, track, or meet cross-system goals. The only state entities that can be said to exercise authority across the education systems are the Legislature and the Governor, primarily through their finance and legislative authority, and these powers are limited by the State Constitution (particularly with regard to the UC). California's efforts to meet the needs of students as they progress toward their educational goals across systems occur in relatively ad hoc and limited ways. As the remainder of this chapter demonstrates, the state lacks an overarching vision and coordinating structure across education systems.

K-12 Education

Dual system of state governance.

The California State Constitution requires that a state Superintendent of Public Instruction be elected by voters at each gubernatorial election. The position is nonpartisan and is responsible for leading the California Department of Education and executing the policies of the California State Board of Education, which is the statewide policymaking body with oversight over K-12 academic standards, curriculum, instructional materials (K-8 only), assessments, and accountability. The state superintendent is the executive officer and secretary of the State Board, but is not its president nor a voting member. The State Board has 11 members, all of whom are appointed by the governor to four-year, staggered terms, except for a student member, who serves a one-year term.

Since 1919 when this two-headed system of governance was formalized, there have been periods of sustained conflict between the elected state superintendent and the appointed State Board. During the 1980s, for example, Bill Honig served as state superintendent (a Democrat, though the position is nonpartisan), and George Deukmejian, a Republican, served as governor. Most members of the State Board at the time were Republicans, and there were public disagreements between the Board and the superintendent about adequate financing of education and the role of the superintendent in making education policy—with the State Board

taking the latter issue to court. Further conflicts arose during the governorship of Pete Wilson (1991 to 1999) regarding the authority of each entity (Haberman 1999).

Despite multiple attempts to reform California's K-12 governance over the past century, the double-headed structure remains intact, partly due to the challenges of gaining political support to amend the State Constitution. Recent governorships, however, have seen greater cooperation over policy. During the recent two terms of Edmund G. "Jerry" Brown, Democrats controlled the Legislature and the governorship, a Democrat (Tom Torlakson) served as state superintendent, and most of the members of the State Board were Democrats and Brown appointees. State leaders took advantage of this window of opportunity to implement significant changes in education policy. These reforms were driven by the State Board and its president, Michael Kirst, the Legislature, and the governor—and administered by the state superintendent.

State policies in transition.

Recent statewide reforms have altered California's K-12 education landscape by removing state mandates and shifting control to school districts—through new standards, assessments, and local finance and accountability mechanisms. The state may have underestimated the capacity building needed at the regional, county, and district levels to effectively implement the changes. In addition, at a time when the state needs to improve educational outcomes for all students (see Chapter 1), many have questioned the extent to which local fiscal decisions and local accountability mechanisms will lead to more equitable outcomes, either locally or statewide (Ed Trust West 2017; KPCC 2017; Hill & Ugo 2015).

New state standards. The State Board of Education adopted the Common Core State Standards for math and English language arts in 2010, and instructional materials were approved by the State Board in 2014 and 2015. The State Board adopted the Next Generation Science Standards in 2013 and adopted newly revised CTE Model Curriculum Standards the same year. The Common Core State Standards are ambitious; they reduce the number of topics required to be taught in each grade and they emphasize conceptual understanding and real-world problem solving. The state has provided implementation support, but some teachers reported challenges in developing instructional strategies for all the concepts contained in the standards, including preparing high school students for college (Warren 2013; Lewis et al. 2016c).

New state assessments. The adoption of a new statewide assessment system aligned to the new state standards was approved by California Legislature in 2013. The Smarter Balanced assessments were first administered in spring 2015 to more than three million students in grades 3 to 8 and 11. They are now part of the broader CAASPP, which also includes the California Alternate Assessments and the state's standards-based tests in Spanish. The State Board has worked with the public postsecondary systems to encourage them to accept proficiency on the 11th grade assessments as evidence that a student is ready for college-level coursework, and most community college and CSU campuses have agreed to do so (SBAC n.d.).

Shift to local control of finances. From 1978 to 2013, California took steps that had the effect of centralizing funding and accountability of public schools at the state level:

- *Proposition 13*. In 1978, voters limited property tax revenues in California by passing Proposition 13 as an amendment to the State Constitution. Property taxes paid by individuals and businesses dropped by 60 percent statewide in the first year of passing Prop. 13 (Taylor 2016), which significantly decreased public funding for schools and community colleges. Prop. 13 also shifted the burden of financing public schools from local governments to the state general fund (Haberman 1999).
- *Proposition 98.* In 1988, voters passed Proposition 98 (also an amendment to the State Constitution) to establish a minimum annual funding level for K-14 schools (K-12 schools and community colleges). The funding level increases annually based on K-12 attendance and growth in the economy. Proposition 98 shifted local revenues from property taxes to a special state fund to support schools statewide. It also affected higher education by further differentiating funding for community colleges from funding for the university systems.
- *No Child Left Behind.* In 2001, the U.S. Congress passed No Child Left Behind, which mandated states to increase their accountability of K-12 schools, through greater emphasis on standardized tests and the determination of "adequate yearly progress" (AYP). These and other efforts contributed to centralizing educational accountability at the state level in California.

In 2013, California began reversing these centralizing trends with the passage of the Local Control Funding Formula (LCFF). LCFF attempted to simplify the state's funding allocation, make education funding more equitable across districts, and give school districts increased flexibility in deciding how to allocate resources. The formula increased funding to districts serving large numbers of English learners, foster youth, and low-income students. There are concerns, however, as to whether the additional funding that districts receive for high-needs students actually reaches those students, since fiscal control and accountability mechanisms are driven locally (Ed Trust West 2017; KPCC 2017; Hill & Ugo 2015).

Shift to local control of accountability. The Legislature, in passing the new funding formula, also included a new Local Control and Accountability Plan (LCAP), to give school districts and their local communities (including parents) a greater voice in identifying student performance goals and how to achieve them. The idea is to shift from a compliance to a continuous improvement model of accountability. Districts submitted their first plans in 2014. The state updated the LCAP in 2017-18, and included a new requirement that districts identify and describe wide achievement gaps and how the district plans to address them. The state established the California Collaborative for Educational Excellence (CCEE) as a public agency to assist school districts, county offices of education, and charter schools in developing and achieving their accountability goals. However, many districts and county offices of education need additional guidance and capacity building in strategic planning and data-informed decision making in relation to the state's priority areas (Fullan & Rincón-Gallardo 2017; PPIC 2016c; Lewis et al. 2016b).

State dashboard. In addition to the LCAP, the state has adopted a new California Accountability Model and School Dashboard to report and share local performance statewide. Local performance is reported as multiple measures through a new California School Dashboard, rather than as the previous Academic Performance Index (API). The dashboard was implemented in fall 2017 and includes six state indicators (graduation rate, academic performance, suspension rate, English learner progress, college and career preparation, and chronic absenteeism) as well as several local indicators. Outcomes on each of the state measures are comparable across school districts and reflect both current status and change over time. The adoption of multiple measures for understanding school performance has been commended by many educators, but the framework has also been criticized for its complexity, including the difficulty of finding the performance of different students (Billy & Smith 2018).

Funding levels remain below national average. Per-pupil spending in California has increased over the past several years, but remains below the national average (NCES 2015b; Imazeki et al. 2018). If California's figures were adjusted for its high cost of living, they would be even lower in relation to other states. While the state's new funding formula seeks to increase the equity of public school financing, it does not address its adequacy. The authors of *Getting Down the Facts II* report that California's funding of K-12 education is inadequate; they estimate the shortfall to be almost a third (about $22 billion) of total state funding on schools, if California is to attain its own policy goals (such as ensuring that all students reach proficiency). The authors also find that rising and locked-in costs associated with pensions, special education, and facilities could destabilize public education in California, and are likely to worsen inequities if they are not addressed (Imazeki et al. 2018).

Postsecondary Education

A patchwork of system governance.

The Master Plan's roles for each system. California has a distributed and disconnected governance structure for its colleges and universities, meaning that policy decisions are made primarily by each higher education system and there is no state entity responsible for statewide postsecondary planning, tracking, and policy. This structure stems from the Master Plan for Higher Education of 1960, which was created almost 60 years ago as a 15-year plan to achieve exceptional quality in postsecondary education while also establishing universal access as a statewide policy goal—the first ever (Callan 2012). The Master Plan itself is the product of historical circumstances, political compromises, education planning and aspirations, and state leadership at the time. In particular, its development was spurred by statewide needs to accommodate in a planned way the large and growing numbers of baby boomers, so that conflicts among postsecondary institutions and political interests did not dominate decision-making about new campuses and programs (Callan 2012). In seeking to achieve these aims, the Master Plan acknowledged the importance of the private colleges and universities, but focused primarily on the three public systems of higher education, for which it established distinct roles.

- *The California Community Colleges* serve as the state's primary point of entry into higher education. They offer lower-division academic courses for students interested in transferring to four-year colleges and universities; career technical education

(CTE) and vocational certificates; adult basic education; and enrichment courses. The colleges are heavily regulated by the state's education code, but the system's governance structure is decentralized. The systemwide chancellor and 17-member Board of Governors have only nominal authority to set policy and goals for the system. Rather, the colleges have a strong tradition of local control, with each of the 72 community college districts having its own faculty pay schedule, assessments, placement policies, remedial course sequences, and course numbering systems.

- *California State University* serves as the state's comprehensive four-year university, providing broad access to undergraduate students pursuing a bachelor's degree. The university also offers a large number of master's programs and teacher training programs, and a limited number of doctorate programs. The university draws from the top third of the state's high school graduates for admission. The university system is centrally governed by a 25-member Board of Trustees.

- *The University of California* is the state's primary academic research university, where undergraduate admission is highly selective and has become much more so for this generation of students. The university draws from the top eighth of the state's high school graduates, and those who wish to attend UC must have near-perfect grades and very high test scores. The university is unique among the state's education systems in having constitutional "autonomy" from the state's legislative mandates, and thereby from its education code. However, the Governor and state legislators can request that the university take actions—for example, as part of budget agreements—which then become binding if agreed to by the university's 26-member Board of Regents.

Each of the public systems has strong traditions of faculty governance over academic issues (such as admissions standards, placement assessments, and course and program requirements), though the Legislature exercises some authority over these areas for the community colleges, as do the CSU Chancellor's Office and the UC Office of the President for their respective systems.

No framework for statewide policy and coordination. The Master Plan does not provide a framework for statewide planning or policy development in higher education, and there is no state institution responsible for these purposes currently. No state entity is responsible for updating the Master Plan or determining if the state's public systems are meeting their goals for higher education. No state institution seeks to include private nonprofit and for-profit institutions into statewide planning for higher education. The private for-profit colleges have expanded rapidly and are overseen by the Department of Consumer Affairs, but this oversight has been questioned as these colleges have faced concerns about quality and they have accounted for a disproportionate share of student loan defaults (PPIC 2016b). Also, the state has not integrated career and technical education and vocational education programs into its plans for higher education generally. In short, the state has multiple higher education entities operating with little coordination: each of the three public higher education systems, the private nonprofit institutions, the private for-profit institutions, the K-12 schools' adult education programs, and

the workforce investment boards (Scott & Kirst 2017). This does not include the K-12 schools themselves, which are responsible for preparing students for postsecondary education and careers.

The California Student Aid Commission predates the Master Plan and does provide statewide policy analysis and planning on financial aid. The commission was created by the Legislature in 1955 to administer financial aid programs for students in postsecondary programs. In addition, the Legislature established the California Postsecondary Education Commission (CPEC) in 1974 to assist with statewide planning and coordination of higher education. The body advised the Legislature and gathered and analyzed higher education data, but it did not have substantial influence over the postsecondary systems. It was eliminated by Governor Brown in a line item veto to the budget in 2011, as part of his efforts to reduce costs. Brown wrote in his veto message, "While I appreciate the importance of coordinating and guiding state higher education policy, I believe CPEC has been ineffective" (Brown 2011).

Brown's comments about CPEC's ineffectiveness calls into question what kind of coordinating body could help California identify and address its goals for postsecondary education. In CPEC's last two decades, California's colleges and universities began to face new economic and demographic challenges, including constrained public financing of higher education at a time when the demand for higher education was expanding rapidly—and CPEC was not particularly effective in helping the state address the needs of students. For example, the student population was becoming much more diverse in the 1990s and 2000s, and the number of high school graduates expecting to go to college was increasing. Unlike in the late 1950s, however, the state did not develop a plan to support both access and success for the larger percentages and numbers of students. As a result of this lack of higher education planning for predictable enrollment growth and for the cyclical nature of financial downturns, the recessions of the early 1990s, the early 2000s, and 2008 brought sharp declines in college opportunity for Californians—in terms of drops in enrollment and enrollment growth, primarily at the community colleges and the CSU (Callan 2012). For statewide goals that require cross-system coordination or planning, California's disconnected higher education governance structure has proven ineffective (Finney et al. 2014; Richardson & Martinez 2009).

Proposition 209

In 1996, California voters passed Proposition 209, which amended the State Constitution to prohibit state government—including public schools, colleges, and universities—from considering race, gender, or ethnicity in public employment, public contracting, and public education. The proposition had an immediate chilling effect on applications from and enrollment of underrepresented students in the UC, particularly for black and Latinx students and especially at those campuses with the tightest admission policies: UC Berkeley and UCLA. Since the passage of Prop. 209, enrollment of out-of-state students has increased substantially at UC campuses, to help the institutions make up for declines in state investment in higher education (out-of-state students pay much higher fees). These out-of-state enrollments have the effect of further reducing ethnic diversity at the campuses (Kidder and Gandara 2015).

Recent System Policies to Address Student Needs

With no coordinating body for higher education in California, each of the public systems develops and implements policies based primarily on its own goals and in reaction to ad hoc issues that arise during the state budget process. For state priorities that can be met through actions by the individual systems, the state's governance structure functions reasonably well. Without a statewide data system, however, it is difficult to track the impacts of many system-level reforms. The sections below provide examples of some recent efforts by the broad-access public institutions—the community colleges and the CSU—to address student needs. Chapter 3 examines efforts in California to address challenges *across* the systems.

California Community Colleges. The community colleges, since the passage of the Student Success Act of 2012, have implemented several programs to improve student persistence and completion. Many of these policies have been driven by the state Legislature and the Chancellor's Office, though the colleges themselves have discretion over how they are implemented.

- The Student Equity and Achievement Program (SEAP) is a recent effort by the Chancellor's Office to integrate three programs that share the goal of increasing student success while closing opportunity and achievement gaps. This integration is part of a long-term plan by the Chancellor's Office to support the colleges in developing more cohesive strategies across their campuses to improve student learning and success. SEAP includes the following programs.
    - The Student Equity Program seeks to ensure equal educational opportunities for all students. Each college is required to develop and maintain a student equity plan, with specific goals and actions to address disparities.
    - The Basic Skills Initiative (BSI) supports equity and student success through improvement and reform of basic skills, or developmental education, courses. This includes professional development to help the colleges examine their basic skills programs and funding to encourage them to improve these courses.
    - The Student Success and Support Program (SSSP) seeks to increase student persistence and the completion of their educational objectives by improving admissions, orientation, assessment and testing, counseling, and student follow-up at the colleges.
- The Institutional Effectiveness Partnership Initiative (IEPI) shares information about and encourages the implementation of effective practices across the campuses. IEPI offers capacity building through professional development and technical support among the colleges.
- The Guided Pathways Award Program, funded by the Legislature in 2017-18, provides $150 million in one-time grants in an effort to spur all of the colleges to transform their campus structures over the next five years. Guided Pathways seeks to help colleges organize and streamline the range of their existing programs (across instructional, student support, and administrative divisions), so that all

programs are better integrated and focused on providing students with a structured educational pathway and thereby improving student outcomes.

- Community colleges are currently transforming remedial education in math and English to comply with AB 705 (Irwin, Statutes of 2017, Chapter 745), passed by the Legislature in 2017. The law's purpose is to ensure that students are not placed into remedial, or basic skills, courses that may delay or deter their educational progress, unless evidence suggests that they are highly unlikely to succeed in the college-level course. One effect of this law will likely be to decrease the number of students required to take non-credit-bearing basics skills courses, with substantial impact on the number of students of color required to take such courses. Another effect will likely be to transform how the colleges address the learning needs of incoming students.

The California State University. As with the community colleges, the CSU is working on several initiatives to improve student persistence and completion.

- Graduation Initiative 2025, launched by the Chancellor's Office in 2016, seeks to increase graduation rates substantially for all CSU students while eliminating opportunity and achievement gaps based on income and ethnicity. The initiative's overall target is to almost double the four-year graduation rate for the CSU, to 40 percent by 2025. Advisory workgroups of faculty, staff, and students are working to provide guidance in the following six areas: academic preparation, enrollment management, financial support, student engagement and well-being, data-driven decision making, and administrative barriers.
- The CSU Board of Trustees in 2017 directed CSU campuses to transform their approach to remedial education. The new Executive Order 1110 retired the use of CSU assessment exams for course placement. Under the new system, campus programs overseeing math and English courses for new students will assess new freshmen for course placement using multiple measures, including high school grades and ACT/SAT scores. Students who need additional support could be placed in "stretch" or corequisite courses that simultaneously provide remedial help and allow them to complete the general math and English credits required for graduation. These courses will count toward their degrees beginning on day one (White 2017).

As with the reforms currently underway in K-12 schools, it is too early to know the impacts of the above reforms in the community colleges and in the CSU on student learning, progress, and completion. However, graduation rates have increased gradually in the colleges and the CSU over the past decade and early results appear to be promising (Watanabe 2019).

Drops in state investment in higher education. California has historically invested heavily in higher education, but the state now spends less per student than it did 30 years ago, especially at the university systems. To a large extent, students and families have made up the difference in the lower state support, by paying higher tuition and fees. At UC, the state's highest level of funding per FTE student was $26,157 in 1987-88 (adjusted for inflation); it was less than half that ($11,294) in 2013-14. At the CSU, the peak state funding per student was $11,721 in

1981-82; it dropped to $6,552 by 2013-14. State funding for the community colleges has been steadier, partly because of Proposition 98, which guaranteed a minimum level of funding for K-12 schools and the colleges. State funding for the community colleges was $5,821 per FTE student in 2013-14 (PPIC 2016b). For each of the higher education systems, state per student funding has increased since the recession of 2008, and tuition and fee increases have leveled off since 2012-13 (LAO 2018). But this latest iteration is a repeat of a long-term cyclical revenue pattern in California postsecondary education: drops in state funding, combined with lack of fiscal planning by the postsecondary systems, result in steep tuition increases for students and families during recessions. As state funding recovers, tuition increases level off. Other long-term fiscal challenges facing the postsecondary institutions include: fixed and growing costs of employee benefits; inflexible academic cost structures; and state and institutional decision-making that function at cross purposes, without common goals or mutual accountability. These challenges, taken together, threaten the stability and strength of California's postsecondary systems to provide consistent educational opportunity (College Futures Foundation 2017b).

Conclusion

Over the last half-century, California's public systems of higher education have succeeded in expanding access to much larger numbers of students and to much more diverse populations, yet the Golden State's governance structures have not changed significantly since the Master Plan of 1960. There remains no basic means for creating statewide goals or coordinating cross-system strategies to facilitate student progress from high school to college and into the workforce, or to better address the needs of older, working adults for training. California's schools, colleges, and universities have considerable strengths to draw from. They have wide latitude to act on their own. But there are not many policy or professional incentives for them to work together to increase opportunities for education and training beyond high school, and thereby meet the long-term educational needs of all Californians.

Chapter 3 – Current Options: California's Cross-system Approaches

At a time when disparities in income and wealth are widening, California needs public education systems that work together to provide economic opportunities for all. This includes ensuring equitable opportunities for students to pursue their learning goals across high schools, colleges, and universities, including earning certificates and degrees. Increasing educational attainment requires the coordination of the public education systems in meeting students' needs from high school to and through college and into the workforce.

California has three major areas of opportunity for increasing alignment of the systems. The previous chapter identifies one such area: systemwide reforms. California's K-12 schools, community colleges, and the CSU are undertaking ambitious initiatives to improve student learning, progression, and completion, but these efforts are not connected across systems. This chapter focuses on California's two other options to increase educational attainment through cross-system approaches: the state's use of policy levers in Sacramento, and the efforts by school districts, county offices of education, and individual colleges and universities to build regional partnerships to improve transitions from high school into college, simplify transfer from community colleges into four-year universities, and improve workforce preparation.

State Policy Levers

California's Master Plan for Higher Education does not establish the means for driving common actions across the postsecondary systems or with K-12 education. The Legislature in 2013 (SB 195 Liu, Statutes of 2013, Chapter 367) established three overall goals for California higher education: to improve student access and success, to align degrees and certificates with workforce needs, and to improve the efficient use of resources. But the goals do not serve as guideposts for system action because they are vague and are not connected with performance measures (LAO 2016). The state does, however, have several policy levers that it has used in limited ways to support cross-system alignment among K-12 and higher education systems. Four primary levers are statewide data systems, alignment of coursework and assessments, state finance, and accountability (Callan et al. 2006; Kirst & Venezia 2017). These mechanisms can help achieve policy coherence between the state and the education systems, but connecting policy to practice in consistent ways—in terms of changing teaching and learning in the classroom—is more difficult to achieve and the impacts are often unclear.

Statewide data systems.

The State of California does not have a statewide data system that can track student progression across institutions and systems, although Governor Gavin Newsom, inaugurated in January 2019, has indicated that he plans to change that. According to Moore et al., California does collect large amounts of data about students in its public K-12 and higher education systems and these data, collectively, have the potential to meet some of the information needs of state policymakers, local educators, and other stakeholders. But the data are "collected and maintained in systems that are not connected, were designed for different purposes, are subject to different regulations, and often use different data definitions. As a result of these

disconnects, important information about student progress is often impossible to access, share, and use—whether at the state, regional, or local level" (2017a, 1). For example, the state cannot easily identify where the major barriers are along student pathways from high schools, through community colleges, into universities, nor can it readily quantify equity gaps by ethnicity or race along the way. It cannot determine the effectiveness of pathway programs spanning institutions, or how many students attend multiple colleges simultaneously.

Governor Newsom made the support of "cradle-to-career" education a cornerstone of his candidacy, and his first budget reflects that emphasis by increasing funding for early education, K-12 education, and postsecondary systems, including increases for Cal Grants. His proposed budget also includes $10 million to plan for and develop a longitudinal student data system to connect information about student pathways across the education systems and into the workforce. In examining other states with such data systems, Moore and Bracco (2018) found that there is no one-size-fits-all solution for where to house the data, but based on California's needs for transparency about data security, access, and use, they recommend a centralized data warehouse housed in an existing state agency, or creating a new state data agency with the mission of developing and managing the data system. A "federated" system that draws from data housed in the various education systems would be more cumbersome and would create complications for using and sharing the data. They also report that California would benefit from creating a new education coordinating body, but that the development of a longitudinal data system could be done separately.

Alignment of coursework and assessments.

California has been active in aligning coursework and assessments among K-12 schools and postsecondary institutions, and seeking to simplify transfer from the community colleges to the CSU. The implementation of Common Core State Standards and Next Generation Science Standards are efforts to increase the preparation of high school students for college. In addition, the state's Smarter Balanced Assessments serve as an indicator of college readiness in English and mathematics. High school juniors, in taking the state assessments, automatically participate in the Early Assessment Program (EAP), which provides them with early indications about their preparation for college in English and math. Students can authorize the release of their results to the community colleges and the CSU, thereby allowing those institutions to use their EAP status to provide them with direct access to college-level English and math courses without being required to also enroll in a support course.[4] Through the "a-g" course sequence offered in high school, California has identified the courses required for entry into CSU and UC.

California has also supported a variety of career readiness programs and it adopted new CTE Model Curriculum Standards, though it has not put forward a statewide definition of career readiness. Some of the programs supported by the state that offer explicit career readiness experiences include the California Career Pathways Trust (CCPT) grants, the CTE Incentive

[4] The community colleges and the CSU, as part of their transformation of developmental education, have also expanded their use of multiple measures, including high school grades, to allow students to opt out of remedial support.

Grants, the California Partnership Academies, and Linked Learning pilots. Considering the variety of these programs supported from Sacramento, educators have said that it is difficult to determine how they align with one another in practice and with the state's larger education policy context, and they have said they would prefer more guidance from the state on what constitutes career readiness (Lewis et al. 2016b and 2016c).

Transfer from the community colleges to the state's universities has long been a complex and confusing process for many students. In 2010, California enacted the Student Transfer Achievement Reform Act to simplify transfer to the CSU by creating a new degree, the associate degree for transfer (ADT). A study by the Education Insights Center (Lewis et al. 2016a) found that transfer processes have been simplified somewhat by the creation of the new degrees, but also that students were not well informed about the new degrees. For example, many community college departments created the new ADT degrees but also continued to offer associate's degrees in the same or similar fields, and students were unclear which degree they had received. The study also found that students had not consistently received the benefits that the new degrees were designed to provide. For example, some CSU-campus policies to manage enrollment had created barriers to student transfer. In some ways, the development of the ADT can be considered a case study in the need for capacity building and implementation planning after the state creates new policies across systems.

State finance.

The state has strong powers associated with appropriations in education, through explicit and implicit incentives and messages embedded in the budget. Some of the most significant incentives are driven by the state's budget formulas, which are based primarily on enrollment growth or targets for each of the systems. Proposition 98 serves to stabilize revenues for K-12 schools and community colleges, but there has been significant volatility in state fiscal support for UC and CSU during economic upswings and recessions, as well as growing dependence on tuition (College Futures Foundation 2017b, 17). Historically, higher education enrollments have suffered during some economic downturns (Martinez & Nodine 1997). In addition, the fiscal incentives embedded in enrollment formulas are not necessarily well aligned with efforts to improve student progression and completion across K-12 and higher education. In short, the state's record in using finance levers to span the divides across the systems has been limited.

In K-12 education, California has given substantial authority to school districts, through LCFF, to set their own budgetary priorities. This shift is promising in providing school districts greater latitude to meet student needs, but the impacts are unknown and advocacy groups and others have raised concerns about how to determine whether additional funding for high-needs students is being used to improve services for those students. The state now offers dual enrollment funding to both high schools and colleges, which provides some incentives for these institutions to work together to prepare more students for college. California also funds many pathway programs, workforce preparation programs, and CTE programs, which help in supporting career readiness, but many of these programs are not well integrated with academics (Koppich et al. 2017). It is not possible to assess how effective the state's investments in these programs have been, since there is no statewide data system that can

track students across K-12 schools, into and through postsecondary institutions, and into the workforce (Moore et al. 2017a).

Beginning in 2018-19, California started to phase in a performance-based funding formula for the community colleges. When the formula is fully implemented (after three years), 60 percent of the state's systemwide funding for the colleges will continue to be allocated based on enrollment (down from 100% now). Another 20 percent will be funded based on the number of low-income students in each college district. The final 20 percent will be funded based on each district's performance on measures of student success in transfer, certificate and degree completion, and wage earning (Fain 2018; CCCCO 2018).

In its budget agreements, California omitted enrollment targets at UC and CSU beginning in 2008-09 and for several years thereafter in order to provide the systems with flexibility in managing state funding reductions during the recession. The state resumed enrollment funding in 2010-11 for three years, and again in 2015-16. The state has limitations on its authority in requiring changes in university practices, but it has regularly used the budget process to negotiate with the systems to take action in key priority areas. Even in regard to the UC system, which has substantial autonomy granted from the State Constitution, the state has negotiated with the UC Office of the President through the budget process on areas such as tuition and out-of-state and in-state enrollment levels. As described in the next section on accountability, the state has used budget language to prompt or require the systems to establish, track, or share information about internal targets for student progression and completion. However, the state has not used the budget process to encourage or require actions taken in other states, such as the development of a common course numbering system across the systems or an explicit tuition policy (LAO 2017).

Accountability.

K-12 implemented a new accountability system, and there has been some limited awareness about higher education success indicators based on the public reporting of completion data. Regarding K-12 districts, the California School Dashboard reports progress over time on multiple measures for each school (as summarized in Chapter 2). The multiple measures associated with the college/career indicator are intended to provide incentives for high schools to address and improve the preparation of students for college. Regarding career preparation, however, the Dashboard is limited to one indicator. A report on college and career readiness by the Education Insights Center found that the teachers and administrators interviewed favored better integration of academic and career education, and better collaboration between K-12 schools and higher education to support college and career readiness, including pathway programs (Koppich et al. 2017).

California has begun to link funding to equity and to outcomes in the community colleges through a new performance-based funding model, as reported in the previous chapter. In addition, the state's budget agreements often include language requiring the higher education systems to report specific outcomes. California requires the UC and CSU to set annual performance targets and report the results on student graduation rates, degree completions, and other student measures. The community colleges share progress on performance targets

through the Student Success Scorecard, developed in 2012.[5] The state has received these performance metrics for several years from the systems, and has reported that UC and CSU graduation rates (four-year and six-year) have increased gradually over the past two decades, while completion rates at the community colleges have declined slightly (LAO 2017).

The community colleges report student results based on a range of state-funded programs, including the BSI and the SSSP. The colleges also report equity outcomes annually. These requirements for the public reporting and sharing of data about student progression and completion are promising developments over the past few years for higher education. It is likely that these forms of external attention have helped the postsecondary systems and institutions to focus on improving student progression and completion. To date, however, the increases in student progression and completion in the community colleges have been relatively minor. The Legislative Analyst Office (LAO) has recommended setting more ambitious performance targets (2017b), but this has not occurred.

Regional Partnerships and Institutional Strategies across Systems

Public and private school districts, community colleges, and universities have worked with each other for years regionally to reach common goals to advance students' educational opportunities. These partnerships can range from individual partnerships to large coalitions that include all regional education institutions and local business and civic leaders. Over the past decade, interest in regional educational partnerships has increased as a longer-term, cross-system approach to addressing California's divides among its education systems. Many such partnerships have adopted broad goals focused on students, especially to expand educational opportunity and improve student success at key points in the education pipeline. Particularly in a state as large and diverse as California, regional approaches enable education leaders to focus on the unique needs of their students within the context of local workforce opportunities. In addition, considering California's lack of a data infrastructure, its lack of statewide goals or guideposts across K-12 and postsecondary education, and its disjointed systems and distributed policy model, a regional approach affords local leaders options in working directly with each other to share student data across systems, identify barriers to student progression and completion, and take action to resolve those challenges within their own institutions.

The state and many philanthropic organizations have supported the development of regional partnerships. For example, California has provided significant funding for pathway programs and other collaborations, including CCPT, Linked Learning pilots, and dual enrollment. Several foundations have provided funding for regional partnerships, and some have developed explicit strategies to support them, including The James Irvine Foundation and the College Futures Foundation (James Irvine Foundation (n.d.); College Futures 2017).

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[5] The Student Success Scorecard is a good example of an indirect effect of state action. The development of the Scorecard was a system response to recommendations by a statewide task force, which itself was mandated by legislation.

Some studies have reported positive student outcomes from regional education partnerships in California (LB College Promise n.d.), but more research is needed. In general, regional analysis of education opportunities and outcomes, including partnerships, is a neglected field in education, and deserves greater research attention (Scott & Kirst 2017). For those participating in the partnerships, the benefits have been reported to include:

- visualizing the entire educational pipeline, from pre-kindergarten to college completion and employment;
- clarifying goals in relation to the communities they serve;
- expanding outcomes for all student populations in their community, not just those served by their institution;
- deepening engagement with industry, civic groups, and parents; and
- developing a shared sense of trust that supports inquiry, exploration, and problem-solving to improve student progression and completion (College Futures Foundation 2017).

Educational partnerships are, however, challenging to develop and sustain. Since they span across systems, it is often difficult to determine who should lead the effort and how to institutionalize the work beyond grant funding. Some do not last; others do not have long-term impacts within the institutions that participate. The work can be time-consuming for those involved, because it involves building trust, creating new networks, and communicating extensively. And it brings up inherent tensions and conflicts, based on the differing goals and vision of the institutions involved. Studies on regional education partnerships have found the following key challenges (Moore et al. 2015; Vargas & Venezia 2015):

- *Lack of system incentives for participation.* The incentives embedded in education institutions can be counterproductive to partnership development. For example, career advancement is tied to institutional benchmarks rather than cross-system work. System- and campus-level budget decisions often do not prioritize partnership work—such as paying for faculty time to develop new curricular pathways that span education systems.
- *Obtaining adequate funding.* Participants want to institutionalize their work, but existing funding sources are typically short-term and cannot sustain partnerships for the duration required to build trust and create change.
- *Building internal capacity.* Educators in each system need time to develop cross-system reforms, but such work is not in job descriptions. The work of running or participating in the partnership is typically added on to other “primary” duties that teachers, faculty, staff, and administrators are responsible for.
- *Managing relationships.* Participants have wide-ranging and sometimes conflicting expectations about the work that is needed, the time required, and the resources available. Often it is challenging to engage employers in sustained ways.
- *Identifying and obtaining technical assistance*. The lack of structural supports from the state can impede the effectiveness of regional partnerships. For example, each partnership has to create its own workarounds for data accessibility, sharing, and

use, which are time consuming and technically difficult. Regional forecasting, analysis, and goal setting have also been identified as technical support needs.

Conclusion

California faces serious challenges in substantially increasing the numbers of residents with certificates and degrees, and in closing opportunity and outcomes gaps by ethnicity. Over the past two decades, California has not taken steps to develop goals or guideposts across K-12 schools and postsecondary education, nor has it created incentives or structures for the systems to work together to adopt or track progress toward common objectives. Governor Newsom has signaled a readiness to support a cradle-to-career approach, although what that would mean for students is unclear at this stage of his administration. Given the state's distributed education policy environment, this governorship may represent an opportunity to address cross-system planning and policy development in education, with the creation of a student data system an important step.

The public schools and postsecondary education systems are taking on some reforms focused on improving student learning, progression, and completion—but most initiatives are not connected across systems. Through regional partnerships, many educators are working to improve transitions from high school into college, simplify transfer from community colleges into four-year universities, and improve workforce preparation, including through pathway programs. But these efforts are uneven across the state and are precarious where they do exist, dependent upon limited, short-term funding, well-meaning individuals, and ad hoc relationships.

To the extent that these three approaches—the use of state policy levers, the implementation of system reforms, and the development of institutional strategies across systems—can be successful in addressing California's challenges in education, they need to be aligned across K-12 and higher education. Together, they need to achieve reforms that relentlessly focused on:

- **Supporting students and their educational goals.** Too often, education policies and administrative practices address the needs and concerns of the education systems themselves. The chasms between the systems, for example, indicate how students are, too often, not central in the design. Putting students at the center of education change is imperative to achieve the outcomes needed in California.
- **Identifying and addressing gaps in opportunity and outcomes.** Disparities in opportunity across ethnic groups play a strong role in driving state education performance in California (see Chapter 1). Reducing these disparities requires understanding the diverse needs of students served; identifying the institutional barriers that affect timely progress; and adapting programs, services, and infrastructure so as to address these challenges. The work can involve examining an expanse of data—such as retention and promotion of teachers, faculty, and staff—and providing professional development to support effective approaches in serving diverse student needs. This work often requires a shift in mindset among those serving students, to ensure that all academic programs provide equitable opportunities for all students. It also requires developing metrics and policies that identify and track how well programs are serving all students.

- **Developing cohesive institutional change directed toward facilitating equitable student progress and completion.** Adding new programs that target small numbers of students is not effective enough in improving student success overall. Rather, iterative changes done in a "purposeful, consistent, and cohesive way" across the functions of an institution and focused on student success can lead to "significant improvements in student outcomes over time" (Moore et al. 2017b). Asera, Gabriner, and Hemphill (2017) refer to this as focusing on the way that various reforms and improvements fit together to enhance organizational coherence for the students who have to navigate them. Examples include the creation of pathway programs in high schools and meta-majors in postsecondary education,[6] but no matter which reforms are being implemented, they need to be connected to and aligned with a collaborative institutional approach. This requires attending to the "nuts and bolts" of lower-profile but impactful practices in facilitating students' progress, including enrollment management, curriculum and program streamlining, budgetary commitments, tenure track hiring, and data capabilities. To address systemic change, the work needs to align and integrate academic and student affairs, and other units within institutions (Dowell 2016).

The latest review of the Master Plan (there have been several during the 60 years since its creation) found it "unlikely" that the state's existing systems of higher education "can meet the needs of today's students and of tomorrow's workforce within the parameters of the Master Plan." The review also found that the most likely way forward, given the lack of education governance structure in the state, will involve crafting "seams that knit segments and campuses more closely together," with the ADT as an example (Governor's Office 2018, 2). Taken together, can the sum of the parts in California—the use of state policy levers, the implementation of system reforms, and the development of institutional strategies across systems—drive the educational changes that Californians need?

One of the benefits of having a distributed state policy environment is that it opens up opportunities for leaders at every level—statewide, systemwide, and regionally—to reach across the gaps between systems and work to facilitate student learning, progress, and completion. A drawback is that it is very difficult to have clarity and coherence, and to implement policies and practices consistently across the state. To reach beyond routine procedures and institutional networks is transformative work, both personally and professionally; we do not know where it will take us or how long it will last, and there are risks for our institutions, colleagues, and communities. Beyond this work across the systems, California also needs education leaders who can forge a new consensus about the public good in education, to create a clear vision of the goals we need to pursue.

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[6] The meta-major is a program of study that combines a range of majors in a field with similar content, (e.g., health sciences, STEM, or liberal arts). It creates a clear pathway toward a variety of degrees and careers, without requiring incoming students to select a specific major immediately upon entry.

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The California Education Policy Fellowship Program (EPFP) is a professional development program that aims to strengthen education policymaking in California. California EPFP is part of an established national program sponsored by the Institute for Educational Leadership (IEL). The California program is jointly administered by the Education Insights Center and the Center for California Studies at Sacramento State University to support the development of a new generation of skilled, informed education leaders who can develop and implement effective policy. The program brings together approximately 20 professionals over the course of an academic year to explore critical topics related to California's educational environment, and centered on the national program's three pillars of curriculum: policy, leadership, and networking.