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California's ECE & K-12 Education Policy Landscape

Erin Heys PhD, James Hawkins MPP, and Sarah Swanbeck MPP

This issue brief series is part of the California 100 initiative. The purpose of this brief is to foster conversations about the future of education in California. You may read the full report here.

Overview

In this issue brief, we walk readers through the 'facts' of California's Early Care and Education (ECE) and K-12 education policy landscape. We first lay out the descriptive characteristics of the ECE and K-12 system to get a sense of the students and organizations that are part of California's education ecosystem. The section also reviews the governing structure to understand how the state infrastructure is organized to manage and implement laws and policies. Next, we use a 'policy design' framework to review the *goals* of the ECE and K-12 systems established by education leaders, the *problems* that have been defined that need solving, and the different policy instruments that policymakers have used in recent years to improve the conditions and overall quality of California's ECE and K-12 sectors. The purpose of this brief is to provide an overview of problems in ECE and K-12 and how lawmakers currently go about solving those problems.

About California's K-12 system

Children and students served

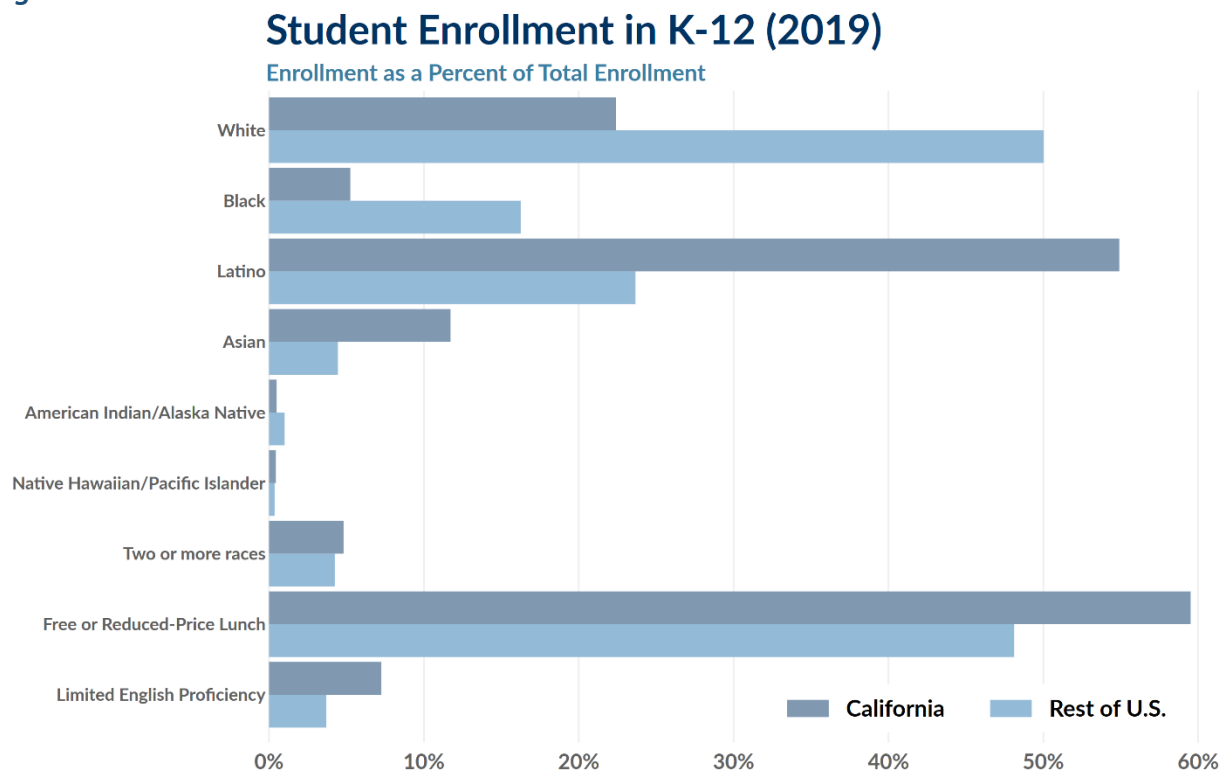
The early care and education system serves over 445,000 children annually according to the latest available data.[1] California's ECE system serves many more non-native English speaking children under the age of 5 who are first- or second-generation immigrants than the national average, and also serves many low-income children who live in families at or near the poverty level (Stipek, 2018). The K-12 system provides educational services for more than 6 million students. The K-12 system educates far more students of color and low-income students than national averages. As shown in Figure 1 below (which shows enrollment for K-12 students in California versus the US), in California over half of all students are Latino, about 22 percent are white, about 12 percent are Asian, about 5 percent are Black, and the remainder identify as other races/ethnicities. Given the diversity of students from different cultural backgrounds, California serves nearly double the percentage of students with Limited English Proficiency (LEP) than the national average[2], and at least 60 languages are spoken in California schools (Hill, 2012). An astounding 60 percent of California students are eligible for free and reduced-price

[1] Does not include enrollment in federal Head Start programs or enrollment in the state Transitional Kindergarten program.

[2] LEP was calculated using methods identified via https://www.lep.gov/source-and-methodology

lunches, a proxy for low-income status. In raw counts, this means that the state serves the highest number of poor students of any state in the country. California's student population is also unique in that there has been an uptick in special education enrollment--in 2017-18, one in eight students was enrolled in special education (about 12.5 percent), an increase of about two percent from the early 2000s, with disproportionate enrollment of low-income and Black students (Anderson & Li, 2019).

Figure 1



Source: IPUMS-USA. CCD, via Education Data Portal v. 0.14.0, Urban Institute, under ODC Attribution License.
Notes: Enrollment by race comes from CCD and encompasses all students in primary school in 2019.
Numbers for free or reduced-price lunch encompass eligibility for the program and not enrollment.

Organizational characteristics

Early Care and Education (ECE) - A fragmented group of state and federal agencies governs a variety of Early Care and Education (ECE) programs (Melnick et al., 2017). Most programs typically have a local agency in charge of administering services, like a local school district or a county agency, and there is usually a provider (such as a community-based organization, public school, or childcare provider) in charge of delivering actual services. These federal, state, and local agencies may oversee program quality, set regulations, and allocate resources; they may or may not provide program funding. The complex system of governance for the state's ECE programs has important implications for the providers of these programs. In some cases, providers may be accountable to more than one agency and have multiple sets of administrative and reporting requirements, which can be burdensome for providers with limited resources (Melnick et al., 2017). Some argue that the lack of coordinated administration over the state's ECE programs has resulted in a lack of coherent strategy for systemic

improvement (Melnick et al., 2017; Stipek, 2018). Given the number of ECE programs and the complexity of the administration and oversight of these programs, we focus here on the largest ECE programs for the state, summarized in Table 1 below. (For a full review of ECE programs, see Melnick et al., 2017 or Stipek, 2018.)

Table 1. Major ECE Programs in California

ECE Program	Description	Program Characteristics	Governance
California State Preschool Program (CSPP)	CSPP is the largest state-funded ECE program in California and provides both full- and part-day preschool for 3-4 year-olds from low-income families at or below 70% of the state median income.[3] CSPP was formed in 2008 with the passage of AB 2759, which consolidated the funding for State Preschool, Prekindergarten and Family Literacy, and General Child Care center-based programs.	CSPP is now the largest state preschool system in the country, enrolling over 136,000 children. Programs are delivered at licensed centers across the state. On average, the centers have a staff-to-child ratio of 1:8. About 70% of the State Preschool Program is part-day preschool and the remaining 30% is full-day preschool.	CSPP is primarily managed by the California Department of Education and coordinated at the local level by County Welfare Agencies and School Districts. These agencies partner with licensed childcare centers and public schools to deliver services.
Head Start California	Head Start is a federally-funded program that enrolls children ages 3-5 from low-income families, including children with disabilities. To qualify, children must either come from families with income below the federal poverty level, from families eligible for public assistance (like TANF or SSI), or the child must be in the foster system or homeless.	The program enrolls about 82,000 children statewide, with 23% of children in full-day programs, 71% in part-day programs, and 6% receiving weekly home visits. The majority of Head Start programs are delivered at centers, but a few are delivered at the family's home, in family child care homes, or through a combination of a center and home visitation. Programs for 4-year-olds have a ratio of 1:10 and programs for 3-year-olds have a ratio of 1:9.[4]	The federal Office of Head Start within the Department of Health and Human Services administers Head Start in California. This federal agency works directly with local providers, including both public and private local childcare centers, licensed family homes, and home visitors.
Transitional Kindergarten	In California, school districts are required to offer Transitional Kindergarten (TK), which is a program for children born just after birthday cutoffs for kindergarten. To be eligible, students must turn 5 between September 2 and December 2. There are no income eligibility requirements to participate in the program.	The program enrolls approximately 77,000 children between the ages of 4 and 5. Programs are delivered within public schools, with 63% of participants attending full-day transitional kindergarten and 38% attending part-day programs. There are no requirements for staff-t-child ratios, but as with	The state's Transitional Kindergarten (TK) program is managed by CDE and is overseen by school districts at the local level; TK programs are provided directly by public schools.

[3] For full-day preschool, the parents need to be employed, looking for work, or in some kind of vocational training program; children may also be eligible if parents are homeless or incapacitated.

[4] *Early Head Start* is also part of Head Start and specifically targets low-income, pregnant women, infants, and toddlers. The program enrolls an additional 16,000 children and 600 pregnant women. The income eligibility requirements are similar to those of the main Head Start program. Staff-to-child ratios for Early Head Start centers is 1:4, while family child care home ratios vary based on the number of caretakers and the mix of the children's ages who are served by the program. For more information, see Melnick et al., 2017.

		kindergarten classrooms, there is a maximum of 31 students per class.[5]	

K-12 **-** There are over 10,000 K-12 public schools in California that are organized into over 1,000 districts with some districts serving only elementary grades, others serving only high school grades, and unified districts that serve students in the K-12 grade span. District size varies greatly, with some districts enrolling fewer than 250 students and others like Los Angeles Unified enrolling hundreds of thousands of students (Legislative Analyst's Office, 2019).

Within traditional public districts are a variety of school types, and a growing and active charter school sector that now enrolls about 11 percent of all K-12 students.[6] Private schools are also part of the K-12 education landscape--there are now roughly 2,600 private schools serving about 471,000 students in 2020-21. Within the public K-12 sector, the state currently oversees several virtual charter and virtual public schools, with students across the traditional K-12 public school system enrolling in about 600,000 online courses in the 2015-16 year alone (Evergreen Education Group, 2015). The state has the largest teaching force in the country, employing nearly 320,000 teachers in 2019-20. Like other states, the majority of teachers in California are white and female; about 21 percent of the teaching force is Latino and just 4 percent is Black and 6 percent Asian.

California's K-12 organizational resources--such as class sizes and student supports--tend to lag compared to national averages. A recent report from Policy Analysis for California Education (PACE) found that the student-to-teacher ratio in 2020 was 22:1 compared to a national average of 16:1; the report also found that California schools employ fewer guidance counselors or librarians than national averages (Hahnel, Hough, & Willis, 2020). However, these organizational conditions have been found to improve over the years since the state began allocating more resources to English Language Learners and other disadvantaged students with the landmark Local Control Funding Formula (Chen & Hahnel, 2017).

Teacher salaries in California, on the other hand, are among the highest in the nation at $84,531 in 2019-20, which puts the state second in a recent ranking of education salaries across the 50 states. While this may seem like California is ahead of the curve in funding teacher salaries, an analysis of teacher compensation across the U.S. found that there are significant "teaching penalties" across all states for people who choose to enter the profession (Baker, Di Carlo, & Weber, 2019). In California, teachers make an average of 22-25 percent *less* than those employed in comparable non-teacher professional positions (depending on age). See the Finance paper for more information on this topic.

The state's infrastructure for governing the K-12 system is complex. At the state level, the California Department of Education (CDE) is the central organizing body for K-12 and oversees the diverse public elementary, secondary, and adult education school systems across the state.[7] Together with the State Superintendent for Public Instruction, the CDE is responsible for enforcing education laws and regulations, and for improving and reforming public education to

[5] Classrooms are regulated just as public kindergarten classrooms are. Programs use a modified kindergarten curriculum appropriate for slightly younger-aged children.

[6] Charter schools are publicly funded schools operated by third parties rather than the state, and function within a marketplace environment where parents and students can choose where to enroll.

[7] CDE also oversees some preschool and childcare programs.

meet the state's broader K-12 education goals. The 11-member State Board of Education operates separately from the CDE and is responsible for establishing statewide policies for academic standards, curriculum, instructional materials, assessments and accountability.

There is also a California Commission on Teacher Credentials, which is a commission part of the executive branch of the California State Government that sets statewide standards for teachers, such as teacher licensing, credentialing, and permit requirements; the commission also plays an important role in the accreditation of teacher training programs offered at higher education institutions across the state. The commission also enforces professional practices of educators and manages the discipline of credential holders when necessary. The Office of Public School Construction is part of the state Department of General Services and administers funding for the construction of the state's public schools.

At the county level, 58 County Offices of Education (COEs) manage districts, with one statewide organization managing all the county offices, the California County Superintendents Educational Services Association (CCSESA). COEs are responsible for approving district budgets, providing technical assistance, and provide a range of other services to students and teachers in the county. Drilling down to the district level, local school boards are responsible for governing public school districts.[8]

ECE & K-12 goals

Education goals are important to understand because they can set clear objectives and provide a guiding orientation to educators and administrators across the system about expectations. Goals can be short-term and focus on issues like student achievement and graduation rates, or they can be long-term and address loftier goals such as democratic citizenship and social mobility.

ECE goals **-** While both the general education code provisions and the elementary and secondary education code outlines in great detail the structure, funding streams, and categorical programs intended for early childhood education, no explicit statewide goals are listed for early childhood education. Rather, the California Department of Education has developed Preschool Learning Foundations that outline the knowledge and skills young children are expected to learn in three volumes (published in 2008, 2010, and 2012).[1] These volumes include the following goals: the development of democratic competencies, personal autonomy, the development of healthy personal relationships, and skills acquisition. One must search for these goals within the text, however, because they are not explicitly stated. Beyond the goals outlined in the Preschool Learning Foundations, no explicit goals exist for infant and toddler care, leading some researchers to call for stronger alignment between the ECE programs and the first years of elementary education (Koppich & Stipek, 2020).

K-12 goals **-** The California State Board of Education (SBE) defines the vision for K-12 on their website: "All California students of the 21st century will attain the highest level of

[8] Note that California's school boards have a long history of local control, and the state typically has limited authority to stimulate deep implementation of statewide policies at the local level. The state's limited authority is also compounded by the fact that the K-12 system is the largest in the nation, with a complex network of over 1,000 school districts serving over 10,000 schools, making it difficult for centralized policies to systematically take root.

academic knowledge, applied learning and performance skills to ensure fulfilling personal lives and careers and contribute to civic and economic progress in our diverse and changing democratic society". The Board also details three specific goals for the education system: 1) to adopt and support rigorous academic content and performance standards in the four major topic areas across K-12; 2) to ensure that all students are performing at grade level at the end of each academic year, and to advocate for students that are not performing at grade level; and 3) to maintain policies that assure all students receive the same nationally-normed and standards-based assessments in grades 2-11.

Arguably, the statewide goals for K-12 education extend beyond the SBE website into the state's accountability system and dashboard, which includes goals like parent and family engagement, school climate, and student engagement alongside student academic achievement. Educational goals in K-12 education are also set locally by local school boards, especially with the introduction of the Local Control Accountability Plans that are integrated into the state accountability system.

Problem Definition

ECE problem definition: Access to high-quality subsidized programs

The major policy problem in ECE is limited access to high-quality, subsidized childcare seats for low-income children, which is largely caused by funding constraints. Many more children in California are eligible for state-subsidized programs than the actual number of seats funded, posing an important access problem. For context: in 2015-16, just under 1 million children below the age of 5 were eligible for California's state-funded programs, but only about one-third of those children actually enrolled in any state programs that year. This issue is even more concerning for children who live in poverty or near the poverty line. Researchers from the Learning Policy Institute found that nearly 650,000 children at or near the poverty line did not have access to ECE programs in 2015-16, despite being eligible. Moreover, large discrepancies between eligibility and enrollment exist by race, and by region of the state. Despite efforts from the Newsom Administration and state lawmakers to provide more childcare seats in recent state budgets, the latest 2020 "State of Preschool" report from researchers at the National Institute for Early Childhood Education Research found that the state is still short about 300,000 seats for the state's low-income 3 and 4-year-olds to attend high-quality, full-day preschool, amounting to a funding shortage of about $4.5 billion. In total (not taking into account the income level of children), they estimate that the state is short about 575,000 seats to provide universal high-quality, full-day preschool for all of the state's 3- and 4-year-olds.

Of additional concern is the fact that many children are enrolled in low-quality programs. The overall quality of an ECE program is extremely important, since high-quality programs improve kindergarten preparedness and later academic achievement in middle and high school. Among the characteristics of high quality programs, as defined by researchers at Rutgers University, are whether early childhood programs have standards, curriculum supports, and appropriate class sizes and staff-to-child ratios, and whether teachers and staff have appropriate degrees and training. Research shows that enrollment in high-quality early childhood programs may provide the biggest 'bang for buck' for improvements in K-12

achievement, long-term life outcomes, and overall returns to society. Yet a recent study that was part of the statewide Getting Down to the Facts initiative found a significant skills gap in California's children at kindergarten entry, suggesting socioeconomic disparities in educational success emerge early on in students' lives. Underinvesting in ECE quality also has consequences for ECE educators who are vastly underpaid in comparison to K-12 teachers, leading to high turnover rates and difficulty attracting and retaining high quality teachers in the profession.

K-12 problem definition: Academic outcomes, the achievement gap, and college and career readiness

For decades, lawmakers in California have identified a clear policy problem in K-12 education: student achievement on standardized English and math tests is lagging in comparison to national averages, and there is an unacceptable achievement gap on standardized exams between white, Asian, Black, Latino, and low-income students. This has become a concerning problem for policymakers since academic achievement is an indication of educational opportunities that shape an individual's life trajectory. Success in the K-12 system has been correlated with later life outcomes such as college attainment, adult income and employment, physical and mental health, and whether or not an individual engages with the criminal justice system (Heckman, Stixrud, & Urzua, 2006; Greenstone et al., 2012). Discrepancies in student achievement by race/ethnicity and income are especially concerning since they often represent broader inequalities found in society; education policy intends to design education systems that can provide equal educational opportunities for students regardless of identity, ability, or socioeconomic background.

Academic outcomes

To get a sense of the scope of California's student academic achievement problem, we narrow in on California's K-12 student performance in comparison to other states using data from The Educational Opportunity Project at Stanford University, which reconciles differences in inter-state testing regimens. In Figures 2 and 3, we plot the distribution of state achievement scores from the Stanford Education Data Archive (SEDA) for 2009 and 2018 for math and reading among fourth graders. Despite making marginal gains in both subjects between the two time periods, the data shows that California ranks near the bottom of all states for fourth graders in both subject areas in 2018: fifth from the bottom for reading and third from the bottom for math. Furthermore, since 2009, California has only made marginal progress on reading scores compared to other states -- moving from second from the bottom to fifth from the bottom. Conversely, since 2009, California's ranking in math actually fell: it moved from sixth from the bottom to third from the bottom.

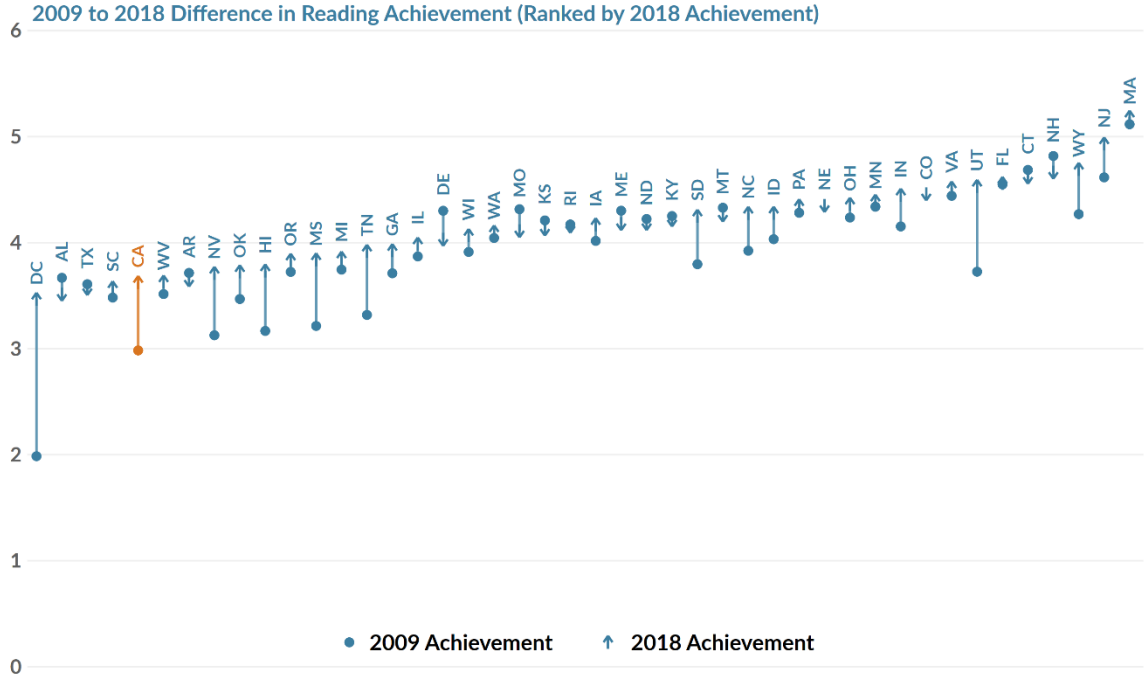
Achievement Methodology

The Stanford Education Data Archive (SEDA) publishes data containing what is perhaps the best apples-to-apples comparison of achievement data in the U.S. Researchers undertake a number of statistical procedures to make inter-state data comparable, which is otherwise essentially incompatible due to differences in state-based achievement tests and state-based achievement scales. This includes using mean outcomes from the National Assessment of Education Progress (NAEP) test, which randomly selects a sample of students in each state who take the test in a given year, to rescale all state-based achievement data based on the same test/grading metric. The result of their systematic methodology for comparing student learning outcomes across the U.S. is a unified metric indicating the extent to which students score at/below/above the national average for their grade level. For instance, a score of 4.0 on the SEDA metric shows that students are scoring at the national average for fourth graders (math or reading). This scale applies to all grades -- meaning it could indicate, for example, third graders or eighth graders scoring at a fourth grade reading level. In other words, the scale offers a measure of how far ahead or behind students are in a particular state (or other geographic area) relative to the national average. (It is important to note that this scale is not an absolute measure of academic performance but a relative one.)

Figure 2

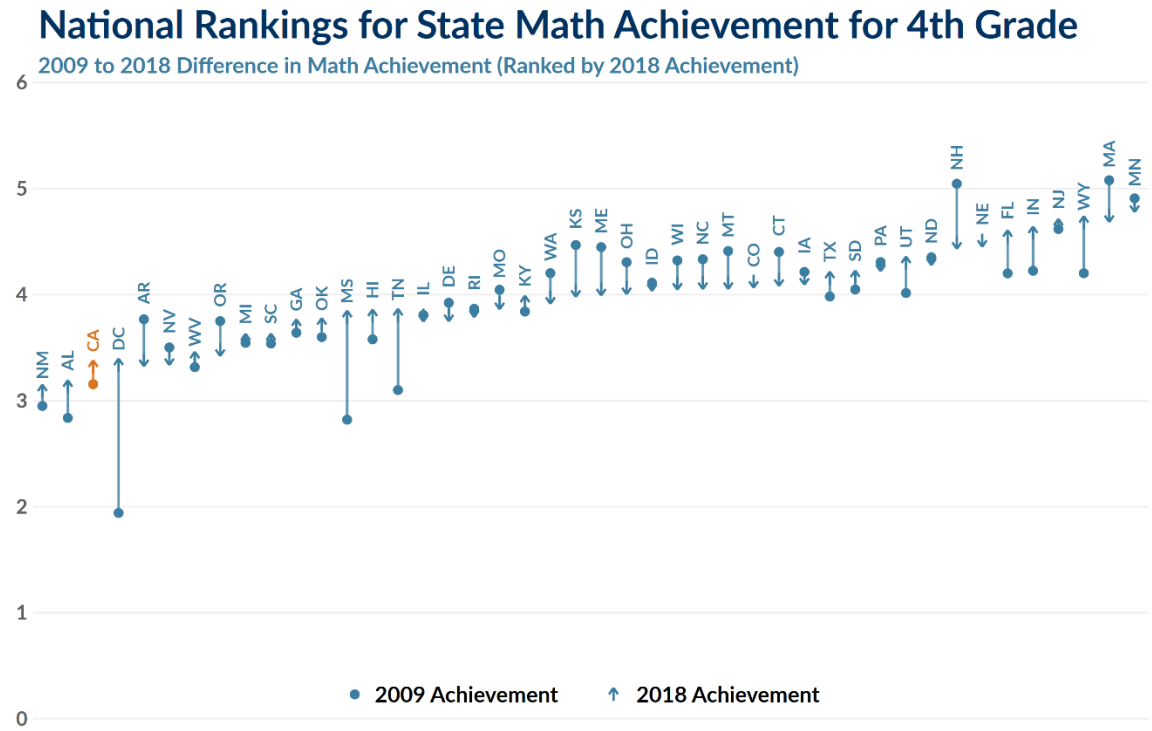
National Rankings for State Reading Achievement for 4th Grade

2009 to 2018 Difference in Reading Achievement (Ranked by 2018 Achievement)



Source: Stanford Education Data Archive (Version 4.1).
Notes: An achievement score of 4.0 is equal to the national NAEP average for 4th grade. A one unit increase in the achievement metric is equivalent to the mean per-grade increase in achievement between 4th and 8th grade.

Figure 3



Source: Stanford Education Data Archive (Version 4.1).
Notes: An achievement score of 4.0 is equal to the national NAEP average for 4th grade. A one unit increase in the achievement metric is equivalent to the mean per-grade increase in achievement between 4th and 8th grade.

In Finance Appendix Figures A1 and A2 we show the same SEDA achievement data but for sixth graders in 2009 and 2018. Overall, California sixth graders perform better in math and reading than their fourth grade counterparts relative to the grade- and subject-specific national average. This data alone does not necessarily mean that the California school system performs better as students reach higher grades, since the data does not follow the *same* students over time. However, the SEDA data provides at least descriptive evidence that suggests the California school system, for grades four through six, is providing relatively better outcomes for students as they age when compared to the nation as a whole (older students are performing better than younger students). California students may start lower in the state distribution on average as fourth graders, but they generally move up the state-by-state rankings between fourth and sixth grades.[9]

Achievement gap by race/ethnicity and socioeconomic status

Sean Reardon, a professor at Stanford University, and colleagues have undertaken a deep dive of the SEDA data (among other datasets) to report academic achievement by race/ethnicity and socioeconomic status over time in a statewide *Getting Down to Facts* report

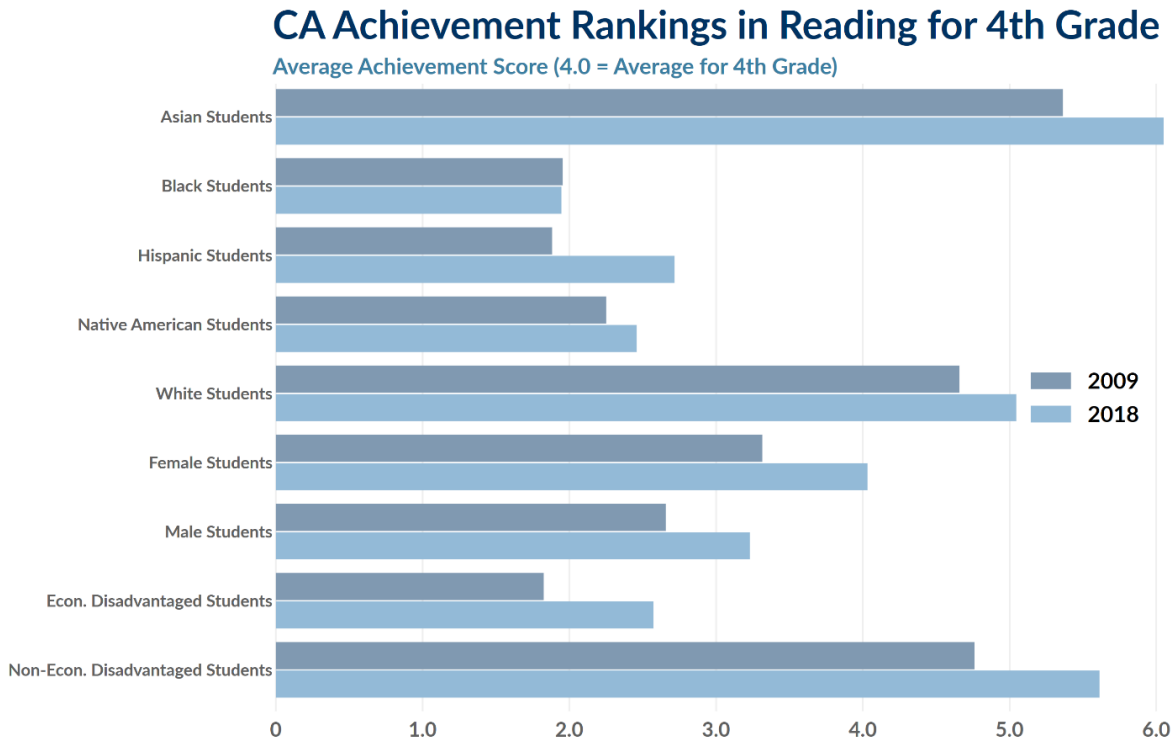
[9] For instance, CA and DC had similar fourth grade achievement scores for math in 2018 according to the SEDA data, with DC one rank ahead of CA in that year. Sixth graders in 2018 in California, however, outranked the equivalent math cohort in DC. Again, this analysis does not follow the same students over time so it is not definitively suggesting that either school system provides better outcomes. However, this finding aligns with the Reardon et al., 2018 *Getting Down to Facts* report.

(Reardon et al., 2018); we briefly review their main findings here. The researchers find large disparities between academic achievement in California versus the US when broken down by district socioeconomic status. Students located in high-income districts in California are roughly on par with the national average for reading and math scores; however, students in low- and moderate-income districts in the state fall nearly a full grade level behind their national counterparts. The researchers find a similar pattern when comparing academic performance within each racial/ethnic group: the White-Black and White-Hispanic achievement gaps are about a half grade level larger in California than the national average. However, when breaking down the achievement gap by both race and SES, the researchers found that California is about on par with the national average.[10] Importantly, the Stanford group found that gaps in student achievement by SES and race appear before students even enter kindergarten. In 2010, the researchers found that students in low-income districts lag about a half standard deviation behind the US average in both reading and math achievement, suggesting that inequalities in academic achievement evolve before children reach the door to elementary and middle schools.

In Figures 4 & 5 below, we analyzed the latest SEDA data to look at 4th grade reading and math achievement for only California students over time, broken down by race and socioeconomic status. As shown in Figure 4, fourth grade reading scores have generally improved from 2009 to 2018 for all students, with the largest gains made by Hispanic, economically disadvantaged, and non-economically advantaged students, and the least progress was made by Black and Native American students. However, only four of the groups shown on Figure 4 meet or exceed national NAEP average test scores in 2018—white, Asian, female, and non-economically disadvantaged students. Figure 5 shows achievement progress made in fourth grade math over time, which was not as significant as the reading gains. As seen, non-economically advantaged students made the largest gains from 2009 to 2018, and incremental progress was made for Asian, Hispanic, white, female, male, and economically disadvantaged students. Progress was actually lost between the two periods shown for Black and Native American students. Similar to the reading scores, only Asian, white, and non-economically disadvantaged students meet or exceed national NAEP average math test scores.

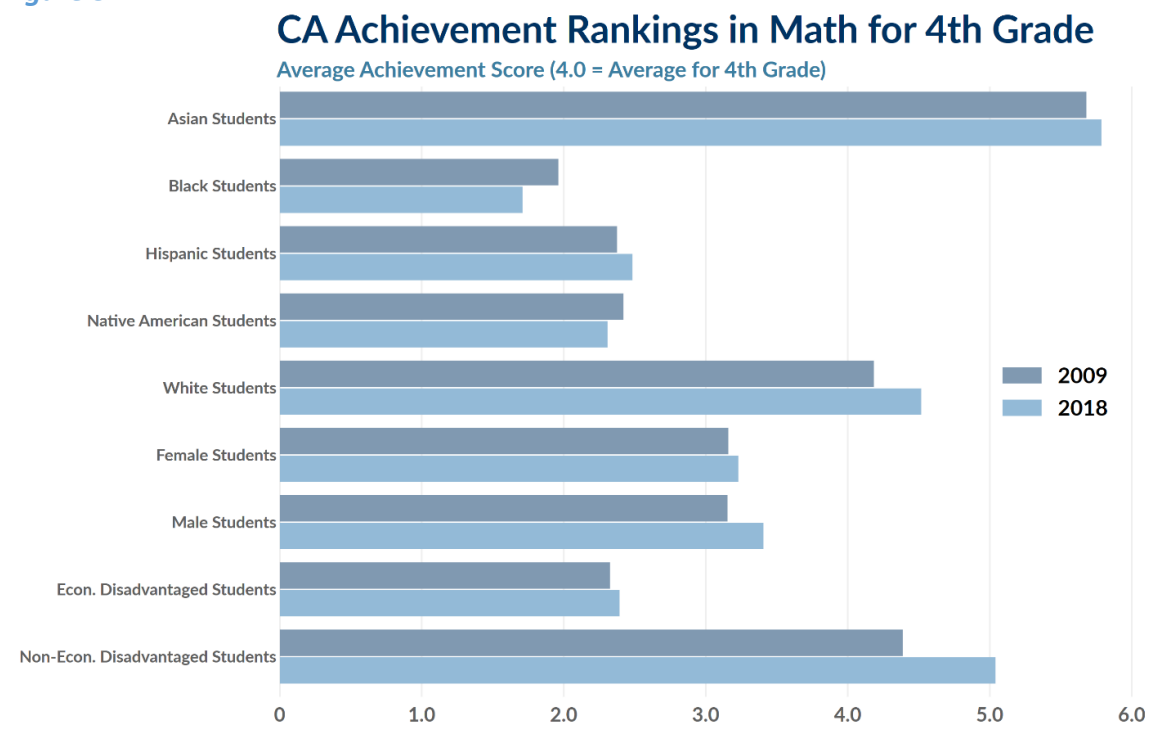
[10] The researchers also analyzed student performance by ELL status and urbanicity; for more information, see the *Getting Down to Facts* report (Reardon et al., 2018).

Figure 4



Source: Stanford Education Data Archive (Version 4.1).
Notes: An achievement score of 4.0 is equal to the national NAEP average for 4th grade. A one unit increase in the achievement metric is equivalent to the mean per-grade increase in achievement between 4th and 8th grade.

Figure 5



Source: Stanford Education Data Archive (Version 4.1).
Notes: An achievement score of 4.0 is equal to the national NAEP average for 4th grade. A one unit increase in the achievement metric is equivalent to the mean per-grade increase in achievement between 4th and 8th grade.

College and career readiness – High school completion rates

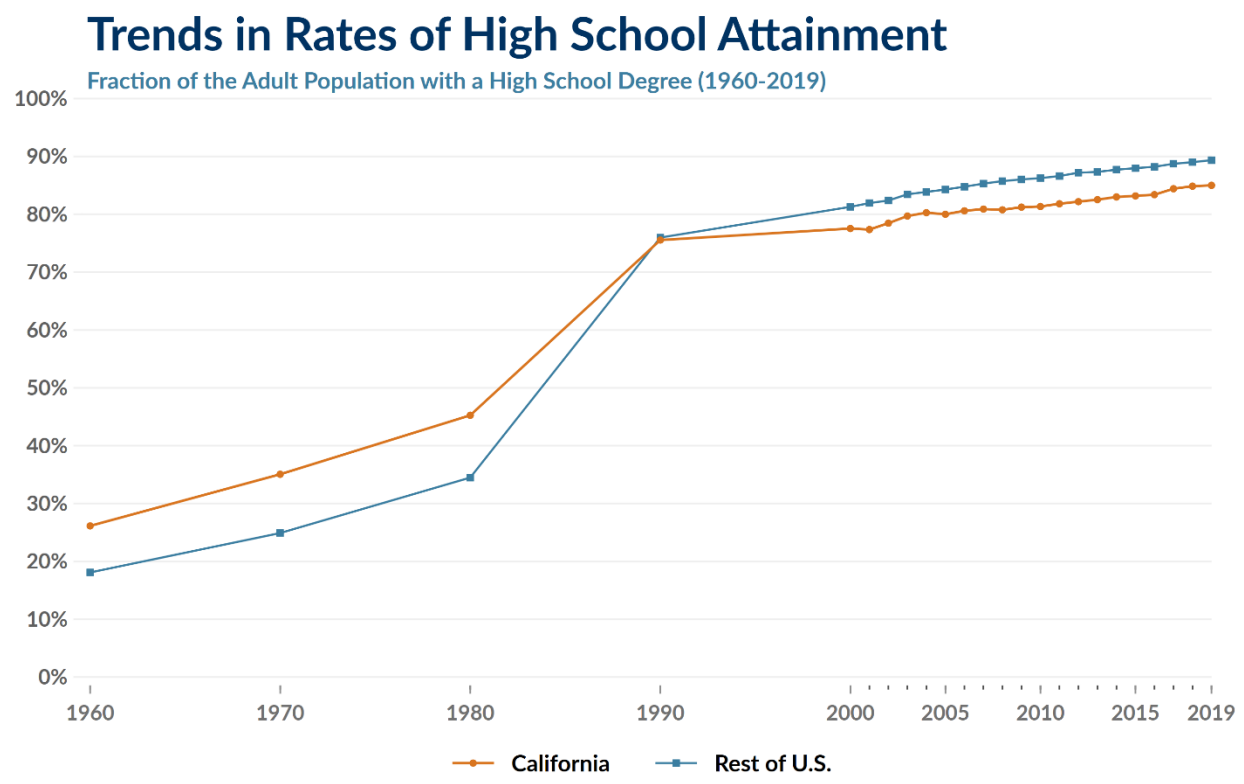
In recent years, policymakers have turned to focus on indicators of 'college readiness' in the K-12 environment to strengthen the cradle to career pipeline and prepare more students with skills and degrees to meet the demands of California's "skills gap", the difference between the number of people with degrees and labor market demand (Hanak & Baldassare, 2005). The good news is that California has seen improvements in high school attainment and other key indicators of college readiness such as A-G course completion. As shown in Figure 6 below, California's rates of high school attainment have greatly improved since the 1960s, and in recent years has steadily climbed to reach 85 percent of all adults holding a high school degree in 2019.[11] The national average has increased over time as well, and began outpacing the California rate beginning in 1990 – reaching an attainment rate in 2019 of 89 percent. Despite this progress, all states have made progress to improve high school attainment rates, and California actually ranks last among all other states in improvements made to high school attainment from 1960 to 2019 (see Finance Appendix Figure A3).

Of special note: High school *dropout* rates are also concerning when compared to a national average. In the latest year of data available (2020), California had a statewide dropout rate of 8.9 percent, compared to a national average of 5.1 percent. Dropout rates are considerably higher in California for Black and Latino students and students who are economically disadvantaged, such as homeless and foster youth.

[11] It is important to note that there are discrepancies in comparing rates of high school attainment across states, due to different state graduation requirements. For example, California requires two years of math instruction, three years of English, and two years of Science, whereas other states typically require more courses in each subject (Gao, Lopes & Lee, 2017). For several years, California also required a high school exit exam that was eliminated in 2017, with retroactive diplomas awarded to any student who met all other graduation requirements after the test became mandatory in 2004.

There are also different ways of measuring high school graduation. In Figure 6, we are showing the fraction of the overall adult population with a high school degree in a given year. An alternative measure of high school graduation—the adjusted cohort graduation rate--shows the fraction of each senior high school cohort that graduates within a given year. To see how California compares to other states in 2018-19 on this alternative measure, see the National Center for Education Statistics website.

Figure 6



Source: IPUMS-USA.
Sample: Adult non-institutionalized population.

In Finance Appendix Figure A4, we show the breakdown of high school attainment rates by race, over time. As shown, in 2019 there were some major discrepancies by race/ethnicity. White students had the highest attainment rates at roughly 95 percent, while Latino students lagged about 25 percentage points behind, and Black, other, and Asian students hovered around 90 percent attainment rates. On a bright note, attainment rates have improved for all race/ethnicities since 2010, with the largest gains made by Latino students.

College readiness - A-G course requirements

College readiness has also improved in the proportion of students in California who have completed their A-G coursework, which are requirements for admittance to the UC and CSU systems. The A-G requirements are a set of courses in seven topic areas offered across California schools that have been approved as college preparatory courses by the UC system; students must complete yearlong courses in English, mathematics, laboratory science, world language, visual and performing arts, and college-preparatory electives.[12]

[12] Students may also meet UC/CSU requirements by completing college courses in programs such as dual enrollment, or by earning qualifying scores on Advanced Placement exams.

An analysis of A-G courses from the Public Policy Institute of California (PPIC) found that in 2015, 43 percent of high school graduates had completed the requirements, a modest increase from rates seen in the early 2000s (Gao, 2021). However, the report also found that there are large differences in the demographics of students who complete the requirements, with Asian and white students completing at much higher rates than minority or economically disadvantaged students. PPIC has also found that A-G completion varies greatly by geographic region--overall, districts in urban and suburban areas have higher A-G course completion rates than districts in rural areas and small towns. Although California does not require these courses in order to graduate, some districts such as Los Angeles Unified, San Jose Unified, Oakland Unified, San Diego Unified, and San Francisco Unified are beginning to include them as part of their graduation requirements, but with mixed results for college preparedness (Betts, Zau, Bachofer, 2013).[13]

Alternative pathways to college readiness

The state offers a variety of programs students can take advantage of while still in high school to make progress toward a college degree:

Dual enrollment allows high school students to take college courses, and experienced growth during the pandemic. In 2016, the legislature passed AB 288, the College and Career Access Pathways partnership, which expands access to dual enrollment for students from historically underrepresented groups.

Early-college high schools allow students to take courses to earn both a high school diploma and an associate's degree.

Middle-college high schools allow students to earn up to 60 college credits while also earning a high school diploma. The program is targeted to students who are not on track to college but show promising potential.

Career and Technical Education (CTE) offers another alternative pathway for high school students. Students enrolled in these pathways can prepare for careers after high school or continue their CTE pathway at a community college. In the 2016-17 year, about 45 percent of high school students enrolled in a CTE, and 35 percent of CCC students.

Strategies for system improvement

Two competing policy 'logics' to improve the education system are currently at play California. The two logics-- a market-based approach and a continuous improvement approach--use very different policy instruments to address education improvement; below we briefly review the competing logics and tools used for school improvement in California's higher education environment.

[13] It is also somewhat concerning that the UC system has been given authority to determine which courses across the K-12 system qualify as an A-G course since the K-12 and higher education segments have mutually exclusive governing systems. Moreover, UC makes A-G course requirement decisions without approval from the CSUs, when CSUs also use A-G as a signal of college preparedness.

Market logics

Education policy rooted in 'market logic' has evolved over the last several decades and leverages a variety of policy instruments. Most notably, market logic has fostered 'educational choice', especially in K-12 education. The theory of action behind the educational choice approach to school improvement is straightforward: Education organizations would improve if they existed in a marketplace setting where the forces of competition would make schools more efficient and effective. In this setting, students and families would be better off if they could access a variety of educational options to find a school provider that meets the unique needs of students (Chubb & Moe, 1990). Over the last few decades, states have engaged in a variety of 'public-private partnerships' that enable a broader set of school choice options funded by public dollars. In K-12, this has primarily meant the expansion of charter schools, which operate privately but are publicly funded. In ECE, California has experienced growth of a variety of private providers that parents can choose from for childcare, special education, and preschool services, often subsidized with public dollars. In higher education, the state has seen the rise of a variety of private nonprofit and for-profit postsecondary entities that operate independently from the state but are subsidized via state student financial aid programs.

Alternatively, market logics have been applied to policy designs that are implemented directly in traditional public school environments. For example, accountability policies, teacher evaluations, financial incentive programs, or 'turnaround strategies' for school improvement are rooted in policy design principles that focus on the outputs of public policy rather than the inputs. In other words, such policies try to motivate changes to the behavior of educators by orienting them toward outcomes such as student achievement, often with the coercive forces of sanctions rather than financial or technical support (Mintrop, 2018).[14] Below, we provide a brief review of market-based policies at play in California's K-12 policy strategies.

Education Choice K-12

Over the last several decades, policymakers, activists, and parents alike have encouraged the development of marketplace alternatives in K-12 schools to provide an array of choices of where to send children to school. Across the U.S., states have experimented with different policy instruments to expand school choice to parents and students in both private and public school settings. Policies that promote private school choice include education savings accounts, school vouchers, and tax credits. Public school choice programs include enrollment at charter and magnet schools, inter/intra-district public school 'open enrollment' programs, and different forms of homeschooling and online learning. Below, we narrow in on two major choice programs leveraged in California's ECE and K-12 sectors—vouchers and charter schools.

Vouchers –In the case of California, lawmakers have leveraged vouchers for some early care programs, which are cash transfers typically designed to support low-income working parents or parents enrolled in school. California provides vouchers for families to obtain access

[14] Much of the advances in such policy designs stem from public choice and principal-agent theories developed in the field of economics (Tolofari, 2005), which is why this set of policies is referred to as 'market logics'.

to childcare vendors through the Alternative Payment program.[15] Families can use the voucher to select from a variety of privately or publicly operated child care programs.

Charter schools - Lawmakers in California have primarily facilitated the growth of educational choice programs by supporting charter schools, which shift the institutional conditions of K-12 schools to a marketplace environment where schools compete for students and act within a deregulated environment (Chubb & Moe, 1990). In this setting, charters are publicly funded but are operated by third-party vendors rather than public employees that in theory gives charters more flexibility to create unique organizational conditions to facilitate innovation in teaching and student learning (Lubienski, 2003) while also responding to competitive market forces that improve school efficiency and effectiveness (Chubb & Moe, 1990).

California has a robust and growing charter sector that currently enrolls about 11 percent of all K-12 students, with about 1,300 charter schools and seven all-charter school districts located in 54 of the state's 58 counties. Charter schools operate independently from a public school district (even if they are considered part of the district) and the relationship is established with a contract between the county or district. In some cases, the State Board of Education approves and oversees charters instead of the district. According to the state's education code, charters cannot charge fees for admission or discriminate against enrolling students based on race/ethnicity, religion, nationality, disability or other characteristics; charters must also admit all students who wish to attend the school, but if the school is at capacity, charters hold lotteries for admittance (CSBA, 2020).

There are three main ways that charters are different from traditional public schools: 1) charters typically have their own operating boards, 2) charters can choose to receive funding through local county offices of education or through their local authorizer, and 3) charter schools are free from many of the state statutes and regulations that apply to school districts (CSBA, 2020). However, charter schools must comply with state standards and assessments,

California's charter school environment

There are a wide range of charter schools--the majority are new 'start-ups' initiated by parents, activists, educators, or other stakeholders, and about 15 percent are conversions of pre-existing public schools. About 75 percent of charters operate in traditional brick and mortar settings, and the remainder are either partially or fully online, virtual, or a form of independent study. Some charters are single 'stand-alone' schools and others belong to networks of 'charter management organizations' operating throughout the state and/or nationally; for example, the Knowledge is Power Program or Aspire Public Schools.

There are a vast array of charter schools in the state designed to meet students' unique learning needs. Some charters focus on foreign languages, STEM, the environment, or the arts, while others connect students to apprenticeship programs or local community colleges. Charters commonly experiment with different organizational forms, such as Montessori models, non-classroom-based instruction, or integrate technology into the classroom as a primary learning modality.

[15] The majority of voucher recipients in the Alternative Payment program are also enrolled in the state's welfare program, CalWORKS (California Work Opportunity and Responsibility to Kids).

accountability policies, and all charter school teachers must have a Commission on Teacher Credentialing certificate.

As a whole, California lawmakers have generally been friendly to charter school growth, which is reflected in a generous cap of allowed charters in the state (currently at 2,250--the state is nowhere close to meeting this threshold), and the cap grows by 100 schools each year. The state also has more charter schools and more students enrolled in charters than any other state. There is a powerful school choice advocacy network and Charter School Association that champions the growth of charters statewide. For the most part, charters maintain the autonomy established in their founding contract and self-regulate through their governing boards. However, over the last few years, there has been a movement in the state legislature to revamp the state's charter school laws to improve transparency, public accountability, and school quality among the autonomous organizations. In 2019, leaders of the state's public school system in partnership with the California Charter School Association established landmark legislation:

- AB 1505 - The law revamps laws covering approvals, renewals, and appeals of charter school denials, and more tightly regulates teaching credentials for charter school teachers. The bill also permits school boards and county offices of education to consider the financial impact of charter schools as a factor in whether or not to establish a new charter school, and placed a two-year moratorium on the spread of non-classroom based charter schools.
- AB 1507 – The law removes exemptions that charter schools must operate within the geographic boundaries of their authorizing district.
- SB 126 – The law increases transparency of charter schools by requiring them to public records and open meeting laws.

Concerns for the K-12 school choice movement

The school choice movement in California has broadened consumer choice and has been very successful at creating innovative models of schooling that may otherwise be difficult to create within the confines of traditional public school rules and regulations. However, research on charter schools' effectiveness at raising student test scores is mixed (Cohodes & Parham, 2021), especially by type of charter school organization--whether brick-and-mortar or online (Fitzpatrick, Berends, Ferrare, & Waddington, 2020), whether charters use strict 'no excuses' policies or not (Cheng, Hitt, Kisida, & Mills, 2017), or whether charters operate within charter management organizations or as standalone organizations (Gleason, Tuttle, Gill, Nichols-Barrer, & Bing-ru Teh, 2014; Dobbie, & Fryer, 2011). Beyond test scores, decades of research have drawn out equity (Miron et al., 2010; Scott et al., 2017) and quality concerns (Cohodes & Parham, 2021) of the internal teaching and learning practices that can manifest in organizations that operate autonomously from the public domain.

The rapid spread of charter schools have also led to fears that charter school proliferation may affect district budgets by shifting funding away from traditional public schools (Blume, 2016). In a study of California charter school finance, Paul Bruno (2019) found that charter enrollment is associated with lower per pupil spending in traditional public schools and reduced fiscal health, although the effects were smaller than what has been reported in other states, likely due to California's unique school funding rules. Research in other states has found that public school districts may struggle financially in response to charter competition to reduce their fixed costs, such as closing schools or selling off land and buildings, or they may face challenges to reduce overall expenditures at the same rate revenue is reduced due to declining enrollment (Ladd & Singleton, 2017; Arsen & Ni, 2012).

Other K-12 policies using market logics

Accountability policy - As early as the 1990s, several states—including California—began experimenting with standards-based accountability policies for schools.[16] Accountability is a policy tool to hold schools responsible to a governing body, often with the use of sanctions or rewards to motivate behavioral changes (Figlio & Loeb, 2011). In California, lawmakers passed the Public Schools Accountability Act in 1999, which established an 'Academic Performance Index' that was used to rate the performance of the state's schools using student performance on the state's basic skills testing program, and to identify high-performing schools with rewards and underperforming schools in need of intervention.

This state law was trumped in 2002, when the federal government passed the No Child Left Behind (NCLB) act, a national school accountability policy that extended the federal government's reach to all public schools in the country.[17] Among the law's requirements, NCLB specified that all states were required to test students in reading and mathematics in grades 3-8 and once in high school, set ambitious goals for all students to reach 100 percent proficiency by 2014, and set in place consequences for schools that did not improve over time (Figlio & Loeb, 2011). For several years following the passage of NCLB, evidence surfaced that the policy design had unintended consequences for school professionals and student learning (for example, see Au, 2007; Darling-Hammond, 2007; Mintrop & Sunderman, 2013).

In response, in December 2015, Congress and then President Obama implemented a more flexible accountability policy design by passing the Every Student Succeeds Act (ESSA). Under ESSA, states are still required to test students, set centralized goals for student achievement, and intervene in the lowest performing schools, but states have much more flexibility to select policy designs and tools to achieve these aims. The new accountability system includes measures for chronic absenteeism, student suspension and graduation rates, college and career readiness, as well as performance in math and English. [18]

Financial incentives, teacher evaluations, and turnaround strategies - Other market-based policy instruments that have been in use throughout California's K-12 schools include the use of financial incentives, teacher evaluations, and turnaround strategies to improve school and student performance.[19] Over the last decade, the federal government has incentivized many of these policy instruments at the state-level through federal grants, such as the Race to the Top grant, Investing in Innovation (i3) grants, and the Teacher Incentive Fund. In order to

[16] California's experimentation with different forms of accountability (aside from standards-based accountability) date back even further to the 1970s. For a review, see Kirst, 1990.

[17] NCLB reauthorized the Elementary and Secondary Education Act (ESEA) originally enacted in 1965.

[18] The direction California has taken with ESSA was built on the accountability component of the Local Control Funding Formula (LCFF) passed by lawmakers in 2013, which required a new statewide accountability system based on ten priority areas rather than a single index or test score. For more information, see the 'continuous improvement' logic below.

[19] For a review of these strategies and their effectiveness, see Trujillo & Renee (2012); Sunderman, Coghlan, & Mintrop (2017); Chiang et al. (2017).

receive funding for these programs, school districts and state agencies in California submitted competitive applications to the federal Department of Education.[20]

Big data - Lastly, the origins of market-based policy instruments lead back to technology developments that offered lawmakers the ability to manage and store 'big data' on public programs including education (Tolofari, 2005). Data systems have been used in state accountability policies, and have provided a tool for lawmakers to monitor school performance and intervene if necessary. California lawmakers continue to invest in recent advances in data software and data management capabilities. In 2019, the legislature passed a bill to establish a 'Cradle-to -Career' data system that would collect data on education, workforce, financial aid, and social service information to be shared with lawmakers, educators, researchers, and the general public, and the system was funded in the 2021-22 budget package.

'Continuous improvement' logics

Continuous improvement is the idea that schools can improve when they become learning organizations. In a continuous improvement environment teachers and school leaders continuously innovate and evaluate school improvement efforts to improve desired outcomes (Bryk, 2021; Darling-Hammond & Plank, 2015; Furger, Hernandez & Darling-Hammond, 2019; Loeb & Plank, 2008; Plank, O'Day, & Cottingham, 2018). Continuous improvement has origins in other industries such as health care, business, and manufacturing, but was adapted and integrated in the field of education over the last several decades (Park, Hironaka, Carver, & Nordstrum, 2013). In a nutshell, the theory of action guiding the continuous improvement logic is that student learning outcomes improve when education organizations have a foundation of adequate resources and when educators and administrators are adequately supported with professional capacity building; when these conditions are met, educators and administrators can then develop professional learning networks to improve instruction and student learning.

Public policy has an important role to play, but the state role is one that helps education organizations improve performance instead of taking on a top-down compliance or disciplinary role (Plank, O'Day & Cottingham, 2018). State departments and governing organizations can help illuminate problems in education organizations (often in the form of data systems and accountability), but allow relevant local actors space to reflect on the inner-workings of education environments and collaborate on problem solving. Once problems are identified in schools and districts, state lawmakers can provide important financial support by investing in high-quality professional development and technical assistance capacity with the longer-term aim to foster professional and networked improvement communities (Mehta, Schwartz, & Hess, 2012).

The model is not unique to California and has been leveraged over time in international education contexts (Hopkins, Hargreaves, Lieberman, & Fullan, 2005; Darling-Hammond, 2010; Hatch, 2021). It is important to note that the continuous improvement logic is not exclusive to

[20] California lawmakers have been hesitant to implement these market-based reforms at the state-level and instead, consistently show preference to use policy instruments from the continuous improvement logic (described below). There is also strong resistance from the state's California Teachers Association to implement statewide teacher evaluations since they argue that the teaching profession should be internally regulated rather than monitored by external actors.

traditional public education settings; for example, the California Charter School Association is a member of the state Alliance for Continuous Improvement.

California's unique K-12 public education innovation environment
Many of California's public K-12 districts have become national leaders of the continuous improvement movement, and have created vast networks of collaborative, professional organizations of teachers, school leaders, education researchers, and other stakeholders that innovate to improve the education system. The state's K-12 school districts have experimented with continuous improvement in the following ways:

California has a network of eight innovative 'CORE districts' located in urban areas across both northern and southern California that collaborate to improve student achievement across districts. District leaders, alongside teachers, school employees, and researchers work together to identify promising school improvement practices that can be shared and scaled among the 8-district network that serves more than 1,800 schools and over one million students.

State lawmakers established its first ever Collaborative for Educational Excellence (CCEE), a statewide agency that works with county offices of education, district offices, schools, and teachers to deliver technical assistance and professional development; they serve as a strategic thought partner across districts to work toward school improvement.

California is also home to many innovative reforms that are taking root throughout the state and nationally. For example, Community schools are a holistic approach to meeting students' whole needs, and provide an array of academic and basic needs programs and services for students and their families. Research-practice partnerships have also become a popular way for educators, school leaders, and researchers to collaborate over time on school improvement--see for example this partnership established between Stanford researchers and nine local school districts. Lastly, more school leaders are using advances in design theory for school improvement, which is a disciplined process that helps practitioners identify, test, and refine solutions to pressing problems.

Continuous improvement in ECE & K-12 education

Below, we briefly review three strategies used by California legislators in recent years to implement the continuous improvement logic in the state's ECE and K-12 system as a strategy to improve student achievement for all students. The strategies include: 1) Investing in high quality teachers; 2) Investing financially in the education system and offering more spending flexibility at the local level; and 3) leveraging needs-based accountability policy to monitor school conditions and student outcomes, and to provide targeted, needs-based support.

Strategy #1: Invest in high-quality educators -Decades of research has shown that high quality teachers are essential to improving student achievement (Goldhaber & Hansen, 2013; Kane & Staiger, 2008; Rockoff, 2004). Teachers can also impact socioemotional outcomes in the classroom that facilitate students' growth-mindset and self-efficacy (Loeb et al., 2018; Ruzek, Domina, Conley, Duncan, & Karabenick, 2015), and high quality teachers have also been shown to have an impact on students' long-term outcomes like lifelong earnings, college-going rates, and retirement savings (Chetty, Friedman, & Rockoff, 2014).

High quality teachers, alongside school leaders and other school staff, are essential to creating the environment and conditions necessary for improved learning outcomes (Darling-Hammond, Goldhaber, Strunk, & Sutcher, 2018). California lawmakers have acknowledged the importance of teachers and teacher quality, and in recent years the legislature has made significant investments to improve the human capital pipeline of teacher recruitment, training, professional development, and retention in both ECE and K-12. For example:

- *Strengthening teacher recruitment, retention, and quality* -- The last few budget cycles have seen immense support to improve teacher quality. State lawmakers provided wage rate reform for ECE providers, and in K-12, the 2021-22 budget alone allocated nearly $3 billion in funding for programs to support teachers. This included a $1.5 billion investment in the Educator Effective Block Grant for teacher professional development, a half billion dollar investment in the Golden State Teacher Grant program to incentivize teachers to teach at low-income schools, and new investments in the state's Teacher Residency Grant Program, which pair new teachers with experienced mentor teachers. In the past, the legislature has dedicated funding to addressing the state's teaching shortage, and in the upcoming years, legislators are considering providing funding to recruit more male teachers of color and diversify the teaching force.
- *Strengthening teacher credentialing* - In 2014, the California Commission on Teacher Credentialing created a strategic plan to overhaul its standards for teachers and administrators, which was again revised in 2020. The strategic plan shows the state's commitment to educator quality, and desires to prepare teachers to teach higher-order thinking and 21st century skills. However, implementing these plans have been complicated by the state's ongoing teacher shortage and the COVID-19 pandemic.
- *Investing in teaching practices* - In the latest budget, the legislature earmarked funding to improve integrated teaching practices that focus on socio-emotional learning as well as academic and behavioral skills; state funding has also been allocated to programs to provide cultural competency training for teachers and school staff, and for school climate surveys. These investments are intended to facilitate healthy and safe learning environments for the state's diverse students.

Strategy #2: Financial investments and financial flexibility - Following the Great Recession, California's economy has performed very well and produced strong tax returns to the state General Fund, which has given state lawmakers opportunities to invest financially in continuous improvement strategies. Below, we review the major ways legislators have financially invested in ECE and K-12.

Early care and education (ECE) - Historically, California's ECE system has been vastly underfunded, with high quality ECE programs out of reach for many in the state (Gould, Whitebook, Mokhiber, & Austin, 2019). Yet in the latest 2021-22 budget package, legislators made major progress to extend ECE to all 4-year-olds by passing SB 130, a $2.7 billion investment in universal transitional kindergarten over the next 5 years. This will give all of the state's 4-year-olds universal access to TK by 2025-26, while also providing access to more basic

needs services and extending after-school programs for those enrolled in TK programs.[21] This state action also provided funding to improve the quality of TK by reducing class sizes and cutting adult-to-child ratios in half.[22] California also made a historic investment in child nutrition programs by creating a universal school meals program, providing free breakfast and lunch to the state's 6.1 million students, including those in Kindergarten. Lastly, state lawmakers provided new funding to expand access for low-income children to enroll in childcare programs and provided funding for children requiring special education in ECE programs.

New equity funding formula for K-12 - In recent years, California lawmakers created a landmark Local Control Funding Formula with an equity component that recognizes that districts servicing students from different socioeconomic backgrounds have different financial needs.[23] Prior to the LCFF, each school district was funded based on a unique revenue limit determined by a complex formula and multiplied by the district's average daily attendance (ADA); districts also received categorical (restricted) funding for over 50 programs targeted to special programs and services. LCFF eliminated the revenue limit formula and most of the categorical programs, and replaced it with base funding dependent on ADA and four student grade-levels, plus extra supplemental and concentration grants for districts serving high-need populations, including low-income students, English Language Learners (ELL), homeless and foster care youth.[24] Initially, districts received an additional 20 percent of the base rate for each high-needs student served (a 'supplemental' grant), and an additional 'concentration' grant at 50 percent of the base rate was allocated to districts serving more than 55 percent of high-needs students (Baumgardner, Frank, Willis & Berg-Jacobson, 2018). In the latest 2021-22 budget, lawmakers approved an increase of the concentration grant from 50 percent of the base grant to 65 percent.[25] Importantly, LCFF did away with several "categorical" funding programs, which gave district leaders more autonomy to manage budgets and make spending decisions (Baumgardner, Frank, Willis, & Berg-Jacobson, 2018). For more information on this topic, see the Finance paper.

Other K- 12 investments - The state has made other investments in K-12 education that work toward the continuous improvement logic. In the 2021-22 budget, lawmakers secured nearly $3 billion to enable 1,000 schools to transition to a community school model through partnerships with nonprofits and community organizations. Community schools address

[21] The bill also provides parents the option to pursue an alternative ECE program if they prefer not to enroll their child in TK. This decision was in part a nod to the ECE provider community that had concerns the new TK program would put many private providers out of business.

[22] While this is an important step to increase overall quality of TK programs, ensuring that students have equal access to high quality TK programs will be an essential student equity issue to watch in the coming years. Researchers of New York City's universal pre-kindergarten program have found large disparities in the average quality of providers experienced by black and white students (Latham et al., 2020). There are also concerns for additional teacher recruitment and training that will be required among ECE teacher shortages--especially during the COVID-19 pandemic--and concerns for the cost of expanding TK facilities to meet new demand. These concerns are in part addressed by additional funding included in SB 130 for teacher recruitment, training, and facilities.

[23] For research on this topic, see Jackson (2020).

[24] This formula is used to fund students at both traditional public schools and charter schools.

[25] The new 15 percent increase comes with a spending restriction: districts must use the money to fund new staff expenditures that provide direct services to students and reduce adult-to-student ratios.

poverty by providing wraparound services to students and their families, which research reveals can lead to better academic outcomes for students once their basic needs are met (Maler, Danlel, Oakes, & Lam, 2017). The state provided enough funding for every high-poverty school in California (schools serving 80 percent or more students eligible for free and reduced price meals) to become a community school in the next five years. In addition, the latest state budget also provided funding for student mental health, socio-emotional teaching and learning, trauma-informed instruction, and increased funding for special education students (California Department of Finance, 2021).

Strategy #3: Needs-based accountability - Alongside teacher quality initiatives and strong financial investments to improve the school learning environment for all students, the continuous improvement movement includes a unique accountability component for K-12. Like other states in the US, California was required to comply with accountability policies under the federal No Child Left Behind Act (NCLB) from the early 2000s until 2015 when federal lawmaker's replaced NCLB with the Every Student Succeeds Act (ESSA). Leading up to the passage of ESSA, California had already transitioned to a more decentralized education decision-making model in 2013 by passing the LCFF. The LCFF included its own accountability mechanism in the form of a Local Control and Accountability Plan (LCAP), which provided a tool for local districts to determine how to best invest resources across the district's schools with buy-in from communities. The LCAP included a local accountability component with multiple measures of school performance that the state also monitored. Accountability measures included not only test scores, but also measures such as student engagement, school climate, and parent involvement. State lawmakers later revised the accountability model to meet federal compliance with the federal Every Student Succeeds Act, and now the state's accountability system measures chronic absenteeism, student suspension and graduation rates, college and career readiness, as well as performance in Math and English.[26]

The intent of the new accountability model is to provide more nuance to teachers, administrators, local communities, and state actors about the internal conditions of schools, and to provide information about additional resources the school or district might need. Importantly, the new accountability model is not sanctions-based (as was the design under the previous No Child Left Behind Act); instead, California's accountability is intended to provide school districts with support based on their specific needs. For example, one way this is accomplished is by assigning the state California Collaborative for Educational Excellence (CCEE) to districts in need of improvement; the organization offers technical support and professional development to districts across the state.

The design of LCFF, the LCAPs, and the new accountability model is not without its critics. There have been growing concerns that LCAPs are too cumbersome and fail to hold districts accountable to their goals. There is also growing concern that new LCFF funds have been spent on cost pressures in district budgets—such as pensions, retiree health care, or special education enrollment increases—instead of spending the funds directly to improve services and learning outcomes for high-needs students (Alejandre & Massaro, 2016; Chen & Hahnel, 2017; Hill & Ugo, 2015; Roza, Coughlin & Anderson, 2017). This concern even

[26] See school and district-level results on the state's performance dashboard.

percolated to a state audit of LCFF, which found that the state's approach to monitoring LCFF has not ensured that funding is benefiting students as intended (California State Auditor, 2019). For more information, see the Finance issue briefs.