

California math scores the past ten years

EdSource's daily email newsletter delivers free updates on key education issues, reforms and innovations right to your inbox. By submitting this form, you are granting: EdSource, 436 14th Street, Oakland, California, 94612, United States, permission to email you. You may unsubscribe via the bottom of every email. (See our Email Privacy Policy for details.) Emails are serviced by Constant Contact. Fast Facts Question: What are the long-term trends in student achievement in reading and mathematics? Response: Since the 1970s, the long-term trends in student achievement in reading and mathematics achievement in reading and mathematics achievement in reading and mathematics. of 9-, 13-, and 17-year-olds enrolled in public and private schools.1 Five decades of results offer an extended view of student achievement in reading and mathematics assessments for age 9 students to examine student achievement during the COVID-19 pandemic.2 This Fact Fact focuses on these results. For recent findings for age 13 students, see NAEP Long-Term Trend Assessment Results: Reading and Mathematics. Average scores for age 9 students in 2022 declined 5 points in reading and 7 points in mathematics compared to 2020. This is the largest average score decline in reading since 1990, and the first ever score decline in mathematics. Average reading and mathematics are a five selected percentiles to show the progress made by lower- (10th and 25th percentile), middle- (50th percentile), and higher- (75th and 90th percentile), and higher- (75th and 90th percentile), middle- (50th percentile), middle- (50th percentile), and higher- (75th and 90th percentile), middle- (50th percentile), middl students declined more than scores for higher-performing students compared to 2020. All students who took the long-term trend assessments in 2022 were asked if they ever attended school from home or somewhere outside of school for any duration during the last school year (2020-21) because of the COVID-19 pandemic. Seventy percent of 9-year old students recalled learning remotely during the last school year, while 19 percent reported they did not learn remotely, and 11 percent did not remember. Of the 70 percent of 9-year-olds who learned remotely during the 2020-21 school year, higher performers (those at or above the 75th percentile) had greater access to a desktop computer, laptop, or tablet all the time; a quiet place to work available some of the time; and a teacher available to help them with mathematics or reading schoolwork every day or almost every day compared to lower performers (those below the 25th percentile). Percentage of 9-year-old students who recalled experiencing remote learning in 2020-21 school year in NAEP long-term trend reading, by selected percentiles and by selected survey questionnaire variables: 2022 NOTE: Although rounded data. This figure is reproduced from the original report. To view the "full question" links, please visit the report, which is hyperlinked in the SOURCE box, below. 1 Long-term trend NAEP results may differ from the main NAEP results presented in other National Center for Education Statistics (NCES) publications. The long-term trend assessment measures a consistent body of knowledge and skills over an extended period, while the main NAEP undergoes changes periodically to reflect current curricula and emerging standards. In addition, several changes were made to the long-term trend assessment in 2004 to align it with current assessments. This included allowing accommodations for students with disabilities and for English learners. These changes have been carried forward in more recent data collections. Despite these changes to the assessment, the trend analysis is still valid. 2 Since the 1970s, the NAEP long-term trend assessments have been administered to monitor the academic performance of students across three age levels (9-, 13-, and 17-year-old students). This Fast Fact focuses on the comparison of age 9 students (typically in grade 4) between 2020 and 2022. A report summarizing results for 9-year-old students across all administrations back to the early 1970s will be released in the spring of 2023, along with results for 13-year-old students. For the latest NAEP long-term trend results for 13-year-old students across all administrations back to the early 1970s will be released in the spring of 2023, along with results for 13-year-old students. Trends from the Condition of Education (COE) 2022. For the latest NAEP long-term trend results for 17-year-olds, see Reading and Mathematics Score Trends from COE 2016. SOURCE: 2022 Age 9 Long-Term Trend Reading and Mathematics Highlights Report. (2022). U.S. Department of Education, Institute of Education Sciences. Retrieved September 12, 2022, from . Related Tables and Figures: (Listed by Release Date) 2022, Condition of Education 2022: Reading and Mathematics Score Trends 2022, Digest of Education Statistics 2021, Table 221.85. Average National Assessment of Educational Progress (NAEP) reading scale score, by age and selected student characteristics: Selected years, 1971 through 2020 2022, Digest of Education Statistics 2021, Table 222.85. Average National Assessment of Educational Progress (NAEP) mathematics scale score, by age and selected student characteristics: Selected years, 1973 through 2020 2021, Digest of Education Statistics 2020, Table 221.10. Average National Assessment of Educational Progress (NAEP) reading scale score, by sex, race/ethnicity, and grade: Selected years, 1992 through 2019 2021, Digest of Educational Progress (NAEP) reading scale score and percentage of students attaining NAEP reading achievement levels, by selected school and student characteristics and grade: Selected years, 1992 through 2019 2021, Digest of Educational Progress (NAEP) reading achievement levels, by grade and selected student characteristics: Selected years, 2005 through 2019 2021, Digest of Educational Progress (NAEP) reading achievement levels, by grade and selected student characteristics: Selected years, 2005 through 2019 2021, Digest of Educational Progress (NAEP) reading achievement levels, by grade and selected student characteristics: Selected years, 2005 through 2019 2021, Digest of Educational Progress (NAEP) reading achievement levels, by grade and selected student characteristics: Selected years, 2005 through 2019 2021, Digest of Educational Progress (NAEP) reading achievement levels, by grade and selected student characteristics: Selected years, 2005 through 2019 2021, Digest of Educational Progress (NAEP) reading achievement levels, by grade and selected student characteristics: Selected years, 2005 through 2019 2021, Digest of Educational Progress (NAEP) reading achievement levels, by grade and selected student characteristics: Selected years, 2005 through 2019 2021, Digest of Educational Progress (NAEP) reading achievement levels, by grade and selected student characteristics: Selected years, 2005 through 2019 2021, Digest of Educational Progress (NAEP) reading achievement levels, by grade and selected student Digest of Education Statistics 2020, Table 222.10. Average National Assessment of Educational Progress (NAEP) mathematics scale score, by sex, race/ethnicity, and grade: Selected years, 1990 through 2019 2021, Digest of Educational Progress (NAEP) mathematics scale score and percentage of students attaining NAEP mathematics achievement levels, by selected school and student characteristics and grade: Selected years, 1990 through 2019 2021, Digest of Education Statistics 2020, Table 222.20. Percentage of students at or above selected National Assessment of Educational Progress (NAEP) mathematics achievement levels, by grade and selected student characteristics: Selected years, 2005 through 2019 Other Resources: (Listed by Release Date) 2022, 1970-2022 Trends (Long-Term Trend Assessment) 2022, National Assessment of Educational Progress (NAEP): This site provides access to publications and data on the reading, mathematics, science, writing, history, civics, geography, and arts achievement of U.S. students. 2021, Explore NAEP Long-Term Trends in Reading and Mathematics and Science 2019, 2019 NAEP Mathematics and Reading Assessments: Highlighted Results at Grades 4 and 8 for the Nation, States, and Districts 2024 NAEP results in math and reading scores for students in grades 4 and 8, show that while California has made some progress in catching up to the national average, more work remains. The NAEP, administered by the National Center for Education Statistics housed in the U.S. Department of Education, is the largest and longest-running nationally representative snapshot of how students in grades 4, 8 and 12 are doing in various subjects. It is given to representative samples of students in each state. The NAEP annually garners national headlines as policymakers, journalists and researchers sift through the data to draw conclusions about students' educational progress. This attention has only increased post-pandemic. While many hoped for scores closer to those from before the pandemic, performance has continued to remain stagnant. The NAEP is scored on a 500-point scale and is reported using three categories: Basic, Proficient and Advanced. Each category measures a student's mastery of the test's prerequisite knowledge and skills related to academic performance in the grade tested. The NAEP uses a scoring and reporting system that is not directly comparable to the California Assessment of Student Performance Progress in closing the gap between state and national averages. For instance, in 2003, there was a 10-point gap between California's average fourth-grade reading score (206) and the nation's average (216). In 2024, that gap closed to 2 points. That same year, the gap between California and the nation's eighth-grade average math score was 12 points; in 2024, the gap closed to 3. Though the state is catching up, California's average still trails national averages in every tested NAEP domain. California's average scores in math were 233 in grade 4 and 269 in grade 8; compared to the national averages of 269 for fourth graders. For both grades, California scored in the lower half of states. California's average reading scores were 212 in grade 4 and 254 in grade 8. These are also below the national averages of 214 for fourth-grade students and 257 for eighth graders. Fourth-grade students in California scored lower than those in 13 others. For eighth grade, the state scored lower than 18 others. Disparities between student groups Similar to this year's CAASPP scores, it is clear that racial achievement gaps in California persist and that historically disadvantaged students are not being adequately served by the state. For instance, in math, there was a 33 percent gap between African American and white students who scored at or above Basic, the lowest achievement category, in fourth-grade mathematics and a 7-point gap in eighth grade. Only 1 percent of Black students reached the Advanced designation in fourth-grade math and 32 percent in eighth grade. Comparatively, 24 percent of Asian students were designated as Advanced in fourth-grade math and 32 percent in eighth grade. economically disadvantaged and those who are not. In fourth-grade math, there is a 30-point average score disparity between these student groups (222 versus 252). In eighth-grade math, there is a 31-point average score difference (231 versus 200); in eighth-grade reading, there is a 28-point average score difference. In addition to racial and economic achievement gaps, national averages mask disparities between high- and low-performing students, which are widening. As EdSource reports, for example, in fourth-grade reading, scores in the 90th achievement percentile (students in the highest performing group) fell by 1 points. However, scores for students in the 2019 and 2024, and scores in the 75th percentile fell by 3 points. However, scores for students in the 2019 and 2024, and scores in the 75th percentile fell by 3 points. survey for students to assess their access to educational opportunities. This survey data is self-reported. However, there were striking similarities when comparing statistically significant differences between the educational opportunities of the highest- and lowest-performing students). Students who performed below the 25th percentile were more likely to miss more school days, have less confidence that their teachers believe in their abilities to succeed than students who performed at or about the 75th percentile. Students who performed below the 25th percentile also were much less likely to express confidence in their reading or math skills. For example, in eighth-grade math, when asked to grade their confidence on a scale of low, moderate confidence. Seventyfour percent of students at or above the 75th percentile expressed high confidence. These survey results may provide insight into the significant disparities among student groups. For more information on education data, visit CSBA's Research and Educational Policy Development at csba.pub/Research. Students in a Fresno Unified classroom. Credit: Fresno Unified / FlickrThis story was updated at 4:25 pm with more details on the assessment results. California students made some progress toward regaining their pre-Covid levels of achievement with incremental increases in English language arts, math and science scores last school year, according to state data released Wednesday. English language arts test scores overall increased slightly, from 46.7% of the state's students meeting or exceeding proficiency standards in 2023 to 47% in 2024. Math and science scores also edged up incrementally, with 30.7% of students in both subjects meeting or exceeding proficiency standards compared with 30.2% the year before. Smarter Balanced tests are given to students in third through eighth grades and in 11th grade. They are part of the California Assessment of Student Performance and Progress (CAASPP), which also includes the English Language Proficiency Assessment. Last school year was the third year students returned to school since the Covid pandemic pushed schools into distance learning and caused dramatic declines in test scores after years of progress. In 2019, more than half of California students, 51.7%, met or exceeded state standards in math. Linda Darling-Hammond, president of the State Board of Education and an adviser to Gov. Gavin Newsom, said she found reason for encouragement in the scores. She said that the overall gains were consistent across grades and for Latino and Black students, "California's public schools are making encouraging gains in all of the key subject areas, and these gains are largest for our most vulnerable groups of students," Darling-Hammond said in a statement. "Our governor and the Legislature have, in recent years, prioritized ... accelerating learning and equity: community schools, expanded learning time, transitional kindergarten, and investments in literacy and math. Those efforts are paying dividends." tests than students overall — a change from initially after the pandemic. Low-income students' scores in English language arts increased 1.5 percentage points over the previous year, with 36.8% meeting or exceeding standards - a 1.4 percentage point increase in each. Darling-Hammond attributes the academic improvement to billions of dollars in federal and state assistance directed to students with the most needs. She acknowledged it's not possible to tease out the impact of the state's expanded after-school learning program relative to money spent on community schools or literacy coaches. But it's apparent that the combined money is making a difference; for families experiencing evictions and illnesses in high-poverty neighborhoods, the pandemic isn't over, she said. "My heart goes out to those in the schools that deal daily with these issues," Darling-Hammond said. This narrowing of the performance gaps occurred even though the proportion of low-income students in California has grown significantly in the last seven years, from 58% to 65%, Darling-Hammond said. And the numbers of homeless and foster children are up too, she said. After looking at the same state data, however, the nonprofit advocacy group Children Now expressed alarm. "California's lack of progress in closing the education achievement gap over the past 10 years is completely unacceptable," it said in a statement. "We have made almost no progress for our Black and Latino students, who make up more than 60% of California's TK-12 student population, since the start of the Local Control Funding Formula and associated accountability system a decade ago." Additional protections are needed, Children Now stated, "to ensure the equity-focused funding formula) goes to the schools and students most in need to close our state's unconscionable achievement gap." and districts showing gaps in proficiency. California school districts have received record levels of one-time and ongoing funding since the start of the Covid pandemic. But the last \$12.5 billion in federal pandemic relief — 20% of which was required to be spent on learning recovery — had to be spent by last month. California schools are getting creative to continue to fund positions and other support once funded by Covid dollars, said Alex Traverso, spokesperson for the California State Board of Education. Some schools in San Diego County, for example, are funding counselors and social worker positions, once paid for with federal Covid dollars, with the community schools dollars. "So I think as much as we can, we are trying to find strategies and techniques that can keep these programs moving forward and keep student achievement on the rise," Traverso said. The gap in proficiency between disadvantaged and non-disadvantaged students remains daunting in 2023-24: 29.3 percentage points in English language arts and 30.2 percentage points in math — about 1 percentage point smaller than in 2022-23. An analysis of third-grade reading by David Scarlett Wakelyn, a partner with Upswing Labs, a nonprofit that works with school districts to improve reading by David Scarlett Wakelyn, a partner with Upswing Labs, a nonprofit that works with school districts to improve reading by David Scarlett Wakelyn, a partner with Upswing Labs, a nonprofit that works with school districts to improve reading by David Scarlett Wakelyn, a partner with Upswing Labs, a nonprofit that works with school districts to improve reading by David Scarlett Wakelyn, a partner with Upswing Labs, a nonprofit that works with school districts to improve reading by David Scarlett Wakelyn, a partner with Upswing Labs, a nonprofit that works with school districts to improve reading by David Scarlett Wakelyn, a partner with Upswing Labs, a nonprofit that works with school districts to improve reading by David Scarlett Wakelyn, a partner with Upswing Labs, a nonprofit that works with school districts to improve reading by David Scarlett Wakelyn, a partner with Upswing Labs, a nonprofit that works with school districts to improve reading by David Scarlett Wakelyn, a partner with Upswing Labs, a nonprofit that works with school districts to improve reading by David Scarlett Wakelyn, a partner with Upswing Labs, a nonprofit that works with school districts to improve reading by David Scarlett Wakelyn, a partner with Upswing Labs, a nonprofit that works with school districts to improve reading by David Scarlett Wakelyn, a partner with Upswing Labs, a nonprofit that works with school districts to improve reading by David Scarlett Wakelyn, a partner with Upswing Labs, a nonprofit that works with school districts to improve reading by David Scarlett after the pandemic. Third grade is a benchmark year for achieving fluency. In 2018-19, the last year before the pandemic, 48.5% of California students were proficient or advanced; in 2023-24, 42.8% were, a drop of 5.7 percentage points. In the past three years, reading scores rose less than 1 percentage point. Other states that take the Smarter Balanced assessments followed the same pattern, including Oregon, Nevada and Delaware, whose scores were below California before the past three years. None of the nation's 10 largest states have bounced back to where they were before the pandemic, Wakelyn found. But in four "bright spot" states — Mississippi, West Virginia, Louisiana and South Carolina — reading scores increased by 3 to 5 percentage points each of the past three years and are now ahead of where they were before the pandemic. The state leadership in Louisiana, he said, has long focused on adopting high-quality instructional materials and giving teachers deep professional learning opportunities in the new curricula, he said. Smarter Balanced test results divide student scores into four achievement levels, but this year the names of the levels have changed. Instead of "not meeting standards," "standards nearly met," "standards met" or "standards exceeded," they are now "advanced," "proficient," "foundational" or "inconsistent." Fewer English learners tested as proficient on the summative English learners who tested as proficient went down from 16.5% in 2023 to 14.6% in 2024, while the percentage of English learners who had the most basic level of English increased from 20.33% to 23.93%. Students classified as English learners have to take the summative ELPAC every year until they achieve proficiency. There are four levels of proficiency. developed," and "well developed." Shelly Spiegel-Coleman, strategic adviser to the Californians Together, a nonprofit organization that advocates for English learners, said it is difficult to know what these numbers mean, because they could be due to a change in the demographics of English learners. For example, the increase in the percentage of students with the most basic level of English could be due to an increase in students who recently arrived in the U.S., she said. In addition, there is no information about how many students are reclassified as proficient in English. there is a need for intentional work to enhance it." The number of students in Los Angeles Unified (LAUSD) who met or exceeded state proficiency standards in Both English language arts and 32.83% of students meet or exceeded state proficiency standards in both English language arts and math increased by about 2 points since 2023. Now, 43% of students meet or exceeded state proficiency standards in English language arts and 32.83% of students meet or exceeded state proficiency standards in English language arts and 32.83% of students meet or exceeded state proficiency standards in English language arts and math increased by about 2 points since 2023. Now, 43% of students meet or exceeded state proficiency standards in English language arts and 32.83% of students meet or exceeded state proficiency standards in English language arts and math increased by about 2 points since 2023. 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School board member Kelly Gonez said the district is committed to continuous improvement and equity. "Every day, we're showing up for our students, and it's showing results," Gonez said at a news conference in July, when the district announced preliminary scores. "I believe that we're at the tipping point of really achieving the ambitious goals that we have for our students in our school district." Nearby Compton Unified also saw improved test scores last school year. Roughly 43% of students met or exceeded math standards also rose, from just over 31% to nearly 35% this year. "Compton Unified School District has shown steady and remarkable progress in both math and English language arts, with our CAASPP scores far exceeding the state average for school districts with an unduplicated pupil count exceeding 90%," Compton Unified School District Superintendent Darin Brawley said in a statement to EdSource. Along with Compton and Los Angeles, the California Department of Education singled out Benicia Unified, Fallbrook Union High School districts for sharp gains in scores. Benecia's 8 point gain in math scores, to 53% proficiency, was led by two years of growth by Hispanic students. At 40.7% proficiency, they are the first student group in the district to exceed its pre-pandemic 2018-19 rate. Superintendent Damon Wright credited the funding of districtwide professional learning and instructional coaches as factors. Fallbrook's one-year 5.2 point gain in math bring the district almost back to pre-pandemic levels. Superintendent Monika Hazel also credits additional district-level math teaching specialists, leadership coaches and school-level instructional coaches for contributing to the improvement. The state's \$6 billion Learning Recovery Emergency Block Grant, which will continue after federal Covid relief runs dry this fall, paid for some of the positions. In the Bay Area, some districts had big test score gains, while others stayed stagnant. Benicia Unified had a 4-point gain in math. San Francisco and Oakland test scores were mostly stagnant. West Contra Costa Unified is laboring to bring its scores back to pre-pandemic levels. Since the 2021-22 school year, slightly more West Contra Costa students have tested proficiency standards in English language arts have been flat since 2021 at 32%, compared with 34.9% pre-pandemic. To help improve reading scores, the district created a 13-member literacy task force about a year ago to create a literacy plan and improve literacy instruction in the district. District officials did not respond to requests for an update on the task force's progress. Tulare Joint Union High School District in the Central Valley region had data points worth celebrating and data pointing to areas that need improvement, said Kevin Covert, assistant superintendent for curriculum, technology and assessment of the test results. Based on the 2024 tests, 53.5% of the 1,300 11th graders who took the exam met or exceeded English proficiency standards, a 2.2 point gain from the previous year. In math, 18.3% of students met or exceeded standards — an improvement of less than 1 point. "Some people want to hang their hat on an overall test score," Covert said. "We're also looking at how our subgroups are doing." The percentage of Tulare Joint Union students with disabilities meeting or exceeding standards was 12.7% in English, a jump of more than 5 points, and 3.5% in math, an improvement of more than 2 points. Though scores have fluctuated for students with disabilities, the 5.5-point gain in English is the largest percentage growth the group has made within the last decade. Though migrant students are a small population of the district's students, 63.6% met or exceeded English standards, representing a double-digit gain. Only 18.2% met or exceeded math standards, although the increase of 1.5% was higher than the overall district increase. "Our success on this test can only be as good, partly, as the instruction that's going on in the classroom," Covert said. But educators must also know where students are academically, which is harder to track in Tulare Joint Union. Fresno Unified, the state's third-largest district, is struggling to return to pre-pandemic levels of achievement of 38% proficiency and advanced in math. Superintendent Misty Her expressed confidence in the districtwide strategy known as "data chats." At Data Chats, principals and staff evaluate data and set goals, including the need for intervention, for students to progress.