

Spotlight on Student Achievement: Analyses of Statewide Assessment Data in Math in Common Districts

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This report is part of a series summarizing learnings from the five-year Math in Common (MiC) initiative. During MiC, teams from 10 diverse California school districts engaged in learning about and sharing best practices for implementing the Common Core State Standards for Mathematics (CCSS-M) in grades K–8.

With several years of data available from the California Assessment of Student Performance and Progress (CAASPP, administered since 2015), trends in student achievement scores are emerging. Across the state, the progress of student CAASPP achievement in mathematics since 2015 is slow and lags behind student achievement in English language arts. Statewide achievement data for English learners, and for some other California student subpopulations, have been particularly disappointing.

Findings on Student Achievement

Our report describes three levels of analyses that WestEd conducted:

ANALYSES OF CAASPP MATHEMATICS ACHIEVEMENT AT THE DISTRICT LEVEL

We examined the percentages of students meeting or exceeding the CAASPP achievement standard over time (between 2015 and 2018).

- The average achievement of the MiC districts was comparable to that of other California districts.

ANALYSES OF CAASPP MATHEMATICS ACHIEVEMENT AT THE SCHOOL LEVEL

We conducted regression analyses predicting school-level achievement gains between 2016 and 2018.

- Relative to schools in other districts in the state, an increasing percentage of MiC elementary schools performed better than predicted on the CAASPP between 2016 and 2018.
- At the middle-school level, the percentage of MiC schools performing better than predicted remained mostly the same across years.
- MiC elementary and middle schools that were at the middle two CAASPP achievement levels in 2015 were more likely to perform better than predicted on the CAASPP in subsequent years.
- The percentage of the lowest-performing MiC elementary schools that performed better than predicted increased from 2016 to 2018.

ANALYSES OF CAASPP MATHEMATICS ACHIEVEMENT AT THE STUDENT-COHORT LEVEL

We analyzed student-cohort data showing how students in MiC districts progressed over three years (2015–2017), compared to their peers across the state.

- Analyses showed substantial variation in achievement across the MiC districts for both the elementary school and middle school student cohorts.
- However, every MiC district showed growth that was greater than the state average for at least one annual growth period (growth between 2015–2016 or between 2016–2017) or student group (all students or English learners).

- Achievement for English learners in MiC districts was lower than for all students in MiC districts, but in most MiC districts, English learners showed stronger gains from 2015 to 2017 than the statewide average for English learners.
- For both the elementary and middle school cohorts in most MiC districts, the achievement gap between English learners and English speakers was not closing; indeed, in most of these districts, it was increasing.

Recommendations for the Field

There are signs that some MiC districts have accelerated student achievement on the CAASPP in mathematics somewhat faster than the average statewide improvement pace. But even with hints of positive impacts from the MiC initiative in some of the MiC districts, scores are still low. In light of these findings, we offer a few recommendations for the field.

- **Remain patient.** It may take a long time for CCSS-M–inspired shifts in instruction to impact student achievement, and future positive achievement will likely depend on how well districts sustain learning and build capacity for further improvement. We must remain patient about the disappointing early CAASPP results, and continue to support educators in persevering to make steady, positive changes.
- **Support districts to dig into their CAASPP data.** We analyzed CAASPP data for the 10 MiC districts in ways that sparked new conversations and actions around improvement. This work helped participants better understand how their investments were paying off for teachers and students. We believe that when district leaders get better at using data to understand, describe, and share the impacts of their improvement initiatives, they can make better decisions to improve student achievement.
- **Use CAASPP data to facilitate learning across districts.** MiC illustrated how using common achievement measures such as CAASPP results could facilitate learning across a community. MiC district teams frequently dug into their student achievement data in collaborative cross-district settings. This enabled districts to understand their progress, hear about others' progress, and reflect on the effects of their improvement activities. Opportunities for cross-district sharing could help all districts implement standards.
- **Consider leveraging state resources to facilitate districts' ability to track individual student progress.** Many districts do not have the analytic support to conduct cohort analyses of their own student data. We wonder whether the state could use the California Department of Education's CAASPP reporting portal to enable districts to track the progress of individual students, which could help districts to better identify achievement gaps, connect achievement to interventions, and learn from other districts about what works to improve student achievement.

WHAT IS MATH IN COMMON?

The Math in Common initiative provided funding to 10 school districts to support their efforts to implement the CCSS-M. With support from California Education Partners and WestEd, the 10 districts were organized into a community of practice, to accelerate their learning about standards implementation. The best practices identified by the community of practice are intended to be shared broadly to support standards implementation and math improvement in all California districts. For more information about the Math in Common evaluation, see <https://www.wested.org/project/math-in-common-evaluation/>.

WESTED'S EVALUATION

WestEd's formative evaluation over the five-year initiative period draws on an array of data sources, including annual surveys of teachers and administrators, focus groups on topics of interest, classroom observations, district grant reports, student achievement data, and observations of learning events held across the five years. This report draws upon CAASPP mathematics achievement data from publicly available sources, as well as upon achievement and student demographic data gathered from MiC district partners.

