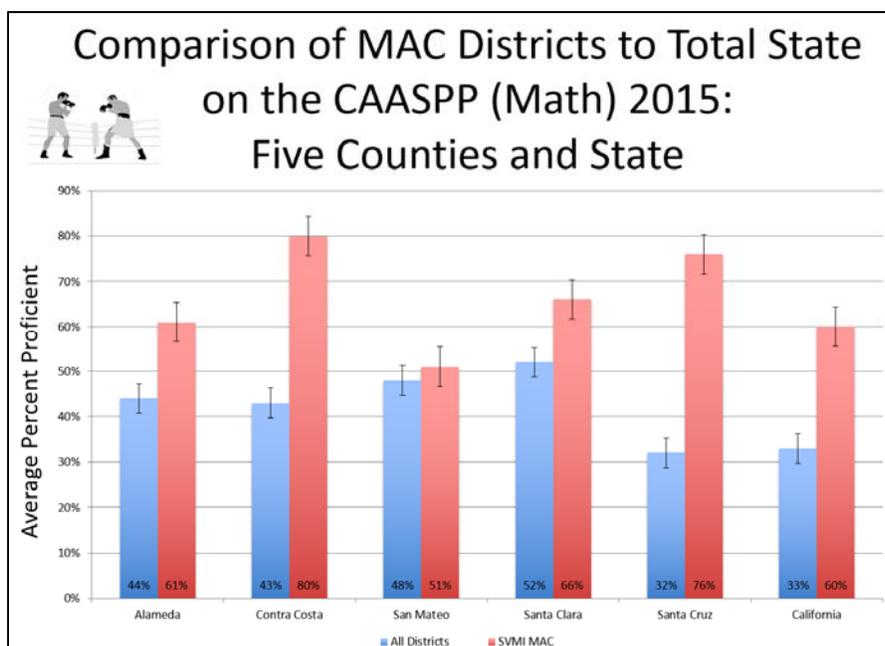


In spring 2016, 35 California school districts administered a unique mathematics performance task assessment to 24,400 students. Then they succeeded in surpassing the state average on California's mathematics assessment by 27 percent!

What are these districts doing to reach these heights? They are using Silicon Valley Mathematics Initiative's (SVMI) MAC/MARS program, professional development, and formative and summative performance tasks. And, they are managing and scoring the paper-based assessment through a software-as-a-service (SaaS) called qAssess.



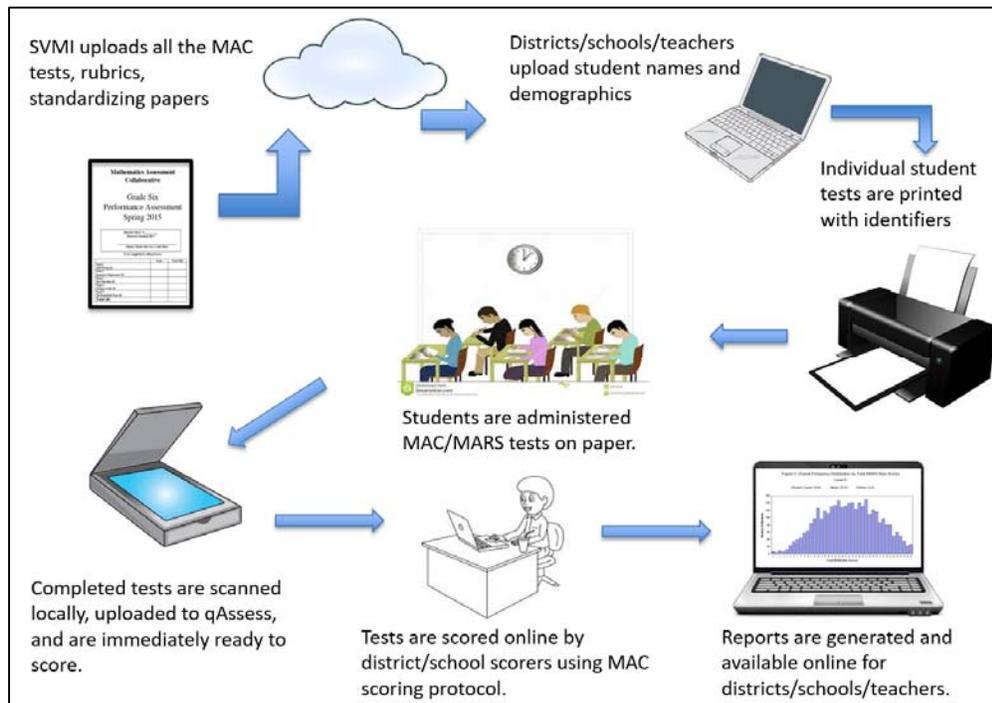
Since 1996, through the Mathematics Assessment Collaborative (MAC), SVMI has supported school districts and charter schools in a comprehensive effort to improve mathematics instruction and student learning. The SVMI MAC resources include:

- Professional development: summer institutes and math workshops throughout the school year
- Lesson study: a project of learning from student work
- Problems of the month: school-wide problem solving
- Math Talks: promoting classroom discourse and conceptual understanding
- Math coaching: math network meetings and workshops for coaches and principals
- Use of the MAC/MARS Performance Tasks available for kindergarten through Algebra 2/Trigonometry and Integrated 3 in English and Spanish

- Tools for Teachers: a toolkit that provides a model for teachers to learn for the daily use of formative assessments in the classroom
- Providing archived performance tasks for formative assessment in the classroom

qAssess and MAC/MARS Assessment Process

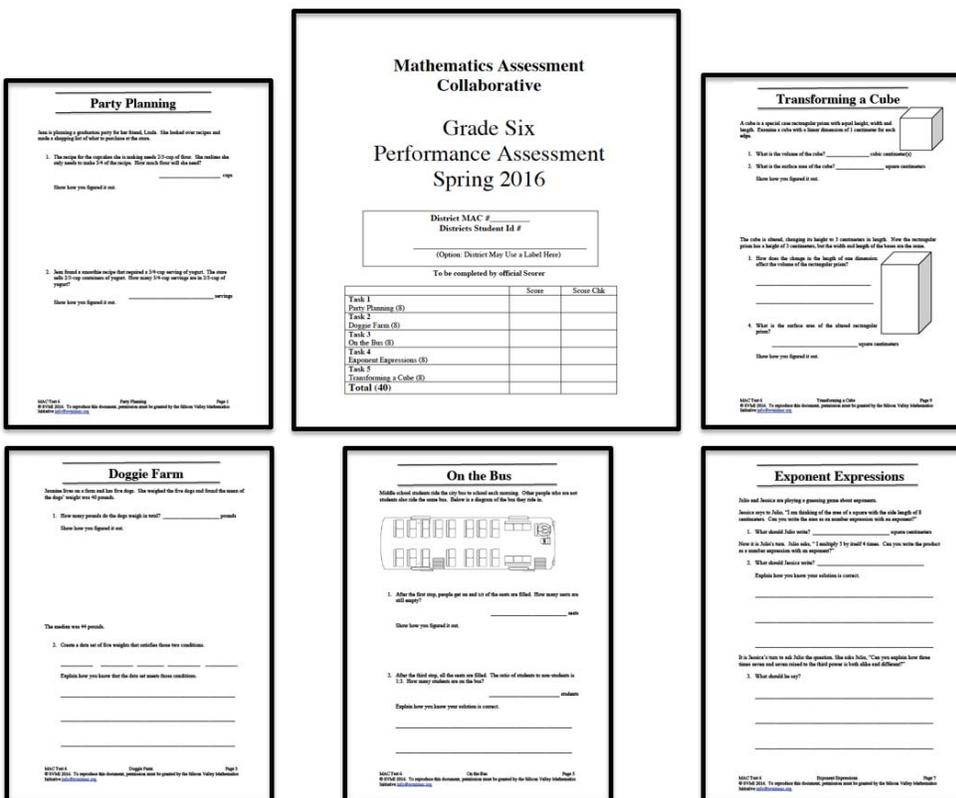
The MAC/MARS annual summative assessment is developed and field tested, and then made available to member districts in spring. Students are tested, the performance tasks are scored, and results are available prior to the State's annual test, providing information to teachers and students to prepare for the upcoming State test.



- qAssess allows administrators to choose roles and set permissions for users.
- District or school administrators have access to the summative assessment in the testing window in March, during which they upload pre-identification information, print a pre-identified test document for each student, and distribute them to classrooms.
- Students take their tests on paper and turn them in to their teachers.
- District or school administrators scan the tests on local multi-function copiers, creating PDF images of the student work.
- An Administrator logs in to qAssess, uploads the digitized student work, and qAssess processes it and prepares it for scoring.
- Scorers attend an in-person hands-on training session where they learn from trained scoring experts how to score the items and interpret the scoring rubrics. The qAssess training module provides practice tests using actual student work. Trainees score these papers and then compare their own scores to the known scores. Where scorers have

trouble interpreting the rubric, qAssess allows them to practice again until they are "calibrated" to score the items.

- From either a centralized scoring site or from the comfort of their own office or home, trained scorers login to the district's scoring queue (live digitized student papers that are awaiting scoring) and score papers until the queue is empty.
- To help ensure reliability of scoring, scoring leaders review the scores assigned by the scorers and either accept the first score, throw the paper back into the queue to be scored again (generally after retraining the scorer who originally scored it), or overwrite the score. These measures are for purposes of continued training for scorers and for validating whether scorers are trained.
- Real-time statistics of the students' scores show in online reports, including raw scores by class roster and individuals, scoring queue counts, numbers of papers scored by each scorer, etc.



District administrators, mathematics coaches, and teachers have access to many reports generated from scored data in qAssess, including:

- Real-time online individual student raw scores by MARS Task and Overall
- Individual student raw-score PDFs for printing and filing in students' cumulative work folders

**Educational Data Systems
MAC/MARS and qAssess Case Study**

- An individual Student Work Report provides images of student responses to all five MARS Tasks and the score marks and scores assigned by the scorer that can be archived and shared with students and parents during parent-teacher conferences
- Real-time school rosters by grade/MARS level that provide summary comparisons of the school's average scores to the average of all other schools in the consortium
- Downloadable Student Score File (SSF), an electronic data file of student responses that can be uploaded to the district's Student Information System

The MAC also takes advantage of custom reports and analysis for extending the reporting to parents, teachers, students, and stakeholders. These reports include

- Customized parent letters based on performance levels (cut points provided by the consortium)
- Statistical analyses and written Technical Report on the MARS results, including comparisons of schools across the district, and districts across the consortium
- A statistical comparison of MARS Task results and the California Assessment of Student Performance and Progress (CAASPP) results

More information about SVMI and the MAC/MARS program and resources, including how to become a member of the MAC, can be found on the SVMI website, at www.svmimac.org.

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