

A black and white photograph of a young African American boy with short hair, smiling broadly. He is wearing a light-colored collared shirt. The background is blurred.

Silicon Valley Community Foundation

**closing the middle
school achievement gap
in mathematics**

Education Impact Brief

background

Silicon Valley Community Foundation is committed to solving the region's most challenging problems. One of the ways we do this is through our strategic grantmaking and by partnering with the most effective and innovative organizations to make a difference in four key areas: economic security, education, immigration and regional planning. In addition to these areas, the community foundation has also made grants through its community opportunity fund, which focuses on time-sensitive issues, community and philanthropic leadership and regional innovation. We understand that creating real impact does not happen by chance. Over the last two years we took a detailed look at the effectiveness of our grantmaking with the help of an independent, third-party evaluation conducted by LFA Group: Learning for Action. What this evaluation revealed is that with our partners, we made a significant positive impact on the lives of individuals and families, institutions and entire communities. We also learned a great deal about what works and what does not.

We are pleased to present this brief, which summarizes our results and our learning over a three-year period, from 2010-2012.



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OF STUDENTS WHOSE TEACHERS
RECEIVED PROFESSIONAL
DEVELOPMENT SIGNIFICANTLY
OUTPERFORMED THEIR PEERS

PARTICIPATED IN RIGOROUS,
SVCF-FUNDED AFTER-SCHOOL
AND SUMMER PROGRAMS IN
MATHEMATICS

STUDENTS WHO PARTICIPATED
IN THESE PROGRAMS WERE
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the challenge

The study of Algebra I is commonly recognized as a gatekeeper to the college-preparatory track. Students who take algebra by eighth or ninth grade are far more likely to take calculus in high school and pursue higher education than those who do not. Despite the many signs that point to the importance of algebra, an alarming number of students in the region do not successfully complete this course. Achievement gaps by income and race/ethnicity are quite large.

our response

Since 2009, the community foundation has made strategic investments in programs that improve mathematics instruction in the classroom through professional development of teachers, and in those that provide students who are falling behind with high quality learning opportunities after school and during the summer.

SUB-STRATEGY	GRANTS, 2010-2012	TOTAL
IN-SCHOOL	18	\$2,175,989
OUT-OF-SCHOOL	18	\$1,591,651

our impact

Student success is largely determined by teacher success. And teachers in California and the United States are far less prepared to teach mathematics than teachers in other countries.¹ Through our grantmaking, we have helped teachers improve their skills and effectiveness in the classroom.

- Over 80 percent of 161 teachers reported that both their skill at teaching algebra and their classroom practice improved as a result of the professional development training they received.
- Students whose teachers received professional development significantly outperformed their peers on standardized tests—56 percent scored proficient or higher on the Pre-Algebra or Algebra test, compared to 31 percent of students whose teachers did not have such training. About 70,000 students benefited from the training these teachers received.

Our grantees have helped thousands of students—particularly low-income students and students of color—into, or closer to, college-track high school courses

- Some 6,340 students participated in rigorous, SVCF-funded after-school and summer programs in mathematics.
- Students who participated in these programs were almost twice as likely to be on track for college as compared to similar students who did not participate.

While there is a lot we can be proud of, significant challenges remain. In 2011, we became aware that students who were otherwise prepared to take algebra courses based on their course work and their standardized test results were being “held back” and required to repeat the math course that they had successfully completed. Low-income and students of color were disproportionately being affected by these decisions. As a result, these “held back” students were left with the daunting challenge of trying to get back on track to meet entrance requirements for a four-year college, and in some cases, demotivated toward education altogether.

In 2012, we asked the Lawyer’s Committee for Civil Rights of the San Francisco Bay Area to determine whether these placement disparities were a potential violation of state and federal law. The answer, documented in the report “Held Back: Addressing Misplacement of 9th Grade Students in Bay Area School Math Classes,” was a clear and resounding yes. Read the report at siliconvalleycf.org/publications.

SVCF is committed to fixing this problem and to ensuring that districts locally and across the state make placement decisions based on policies that are transparent, fair, and supportive of student success.

(Endnotes)

¹ Research Paper, Education: Closing the Middle School Achievement Gap in Mathematics through a Combined In-School and Out-of-School Approach, 2008. Silicon Valley Community Foundation.



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About Silicon Valley Community Foundation

Silicon Valley Community Foundation makes all forms of philanthropy more powerful. We serve as a catalyst and leader for innovative solutions to our region's most challenging problems and give more money to charities than any other community foundation in the United States. SVCF has more than \$4.7 billion in assets under management. As Silicon Valley's center of philanthropy, we provide thousands of individuals, families and corporations with simple and effective ways to give locally and around the world.

Find out more at www.siliconvalleycf.org.

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