

Applied Materials Education Initiative 2001-2013

The Impetus for the Applied Materials Education Initiative

Traditionally, Applied Materials supported education in Silicon Valley through an open grant application process. Although the grants and their receiving organizations had merit, there was not a system in place to assess the effectiveness of the Company's philanthropy or to determine any cumulative effect or measurable improvement.

In 2001, Applied Materials commissioned Collaborative Economics to conduct an independent study of educational need in Silicon Valley. The resulting data revealed pockets of schools in low-income neighborhoods throughout the region where students were performing significantly below their peers in more affluent school communities. Furthermore, these same schools had the highest percentages of teachers with minimum or inadequate professional credentials and specialized training to meet the needs of their students.

In response Applied Materials launched its Education Initiative to focus on two high needs communities in San Jose with the largest concentration of underachieving students in the region – the downtown core and the east side. The stated goal was to increase the number of students who graduated from high school with the skills, requirements, and motivation to succeed in college. Attaining this goal would require addressing the inequitable achievement gap between higher performing White and Asian students and their Latino and African American peers.

Outlook for Students in California and Silicon Valley

California's six million public school student population is increasingly diverse, with Latino students now making up the largest student group. More than one in five children in the State live in poverty, and nearly half of all elementary, middle school, and high school students participate in the federal free and reduced-price meal programs offered in schools to students from low-income families. Additionally, one quarter of California's grade K-12 students are English learners.¹

Statewide California's 8th graders are performing 48th out of 50 states, and low-income students are performing 49th out of 50 states on the National Assessment of Educational Progress (NAEP) of mathematics.² On California's own standards-based tests, poor students, Latino students, and English learners are over-represented among students scoring at the lowest levels and underrepresented among the highest levels. Other important measures of student achievement disparities are similarly distressing – including high school dropout and graduation rates and completion rates of college preparatory courses required for eligibility to four-year universities.³ In a state where career success increasingly demands a college degree, only 5% of Latino students graduate from college within 6 years of completing high school.

¹ EdSource

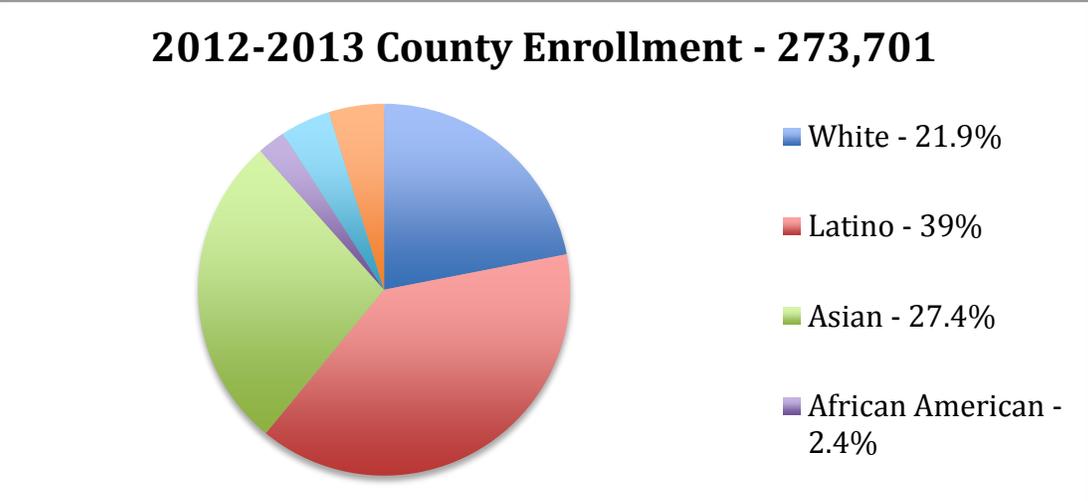
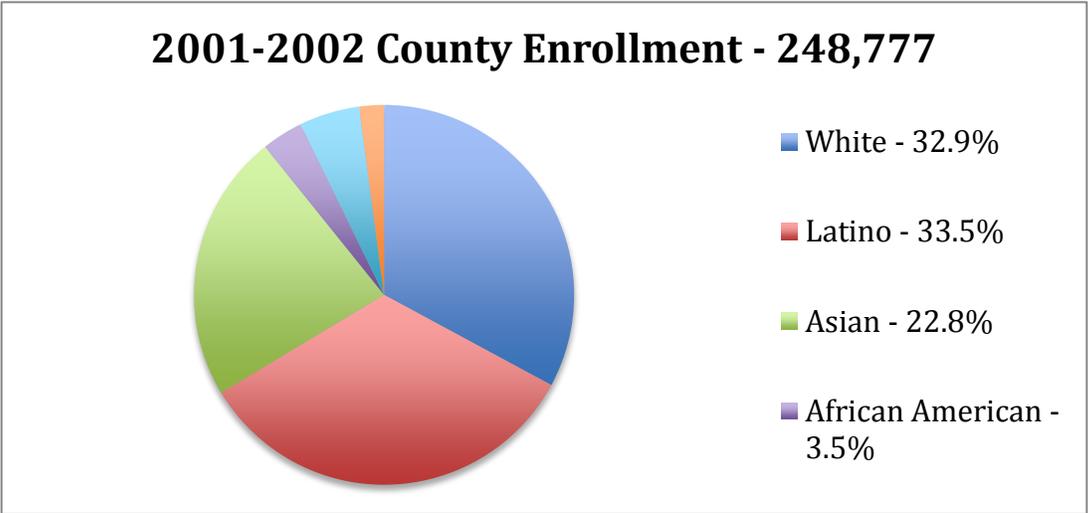
² National Assessment of Educational Progress, 2011 Mathematics Assessment

³ Ed Trust West

While Silicon Valley students overall score somewhat better than the state results, the trends for the lowest performing groups remain the same. In 2012, less than 24% of Silicon Valley Latino students who *graduated* from high school completed the eligibility requirements for California’s four-year public universities.⁴ And fewer still enrolled in college, let alone completed degrees.

Santa Clara County Public School Enrollment Changing Demographics

The Applied Materials Foundation’s investments in education are concentrated in the City of San Jose, which is the largest municipality in Santa Clara County and also has the greatest concentration of low-income and underachieving students. Latino students are the largest and fastest growing group of students in the County, and their educational outcomes dismally follow the statewide trends.⁵

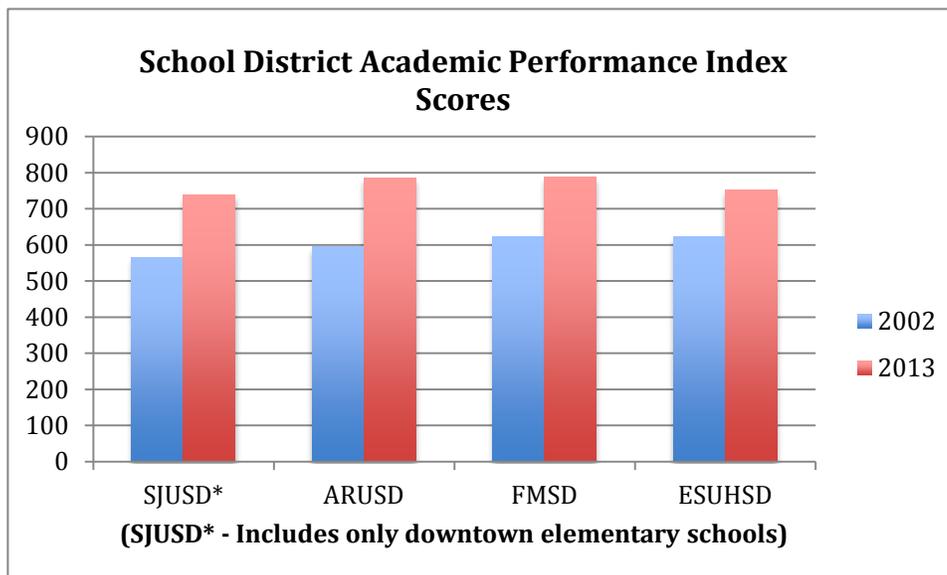


⁴ California State Department of Education, DataQuest

⁵ Ibid.

Investing in School Districts with the Highest Percentage of Latino Students

In response, Applied Materials and the Applied Materials Foundation have developed trusting partnerships over the past twelve years with the four school districts with the highest concentrations of students most in need of additional support to be successful in a global economy and the career opportunities that are available in Silicon Valley. Collectively, these four school districts – **Alum Rock Elementary (ARUSD)**, **East Side Union High School (ESUHSD)**, **Franklin McKinley Elementary (FMSD)**, and **San Jose Unified (SJUSD)** school districts serve almost 83,000 students who are predominantly low income, underperforming, and English language learners. The Applied Materials Foundation (AMF) has supported district initiatives to improve teacher effectiveness and develop instructional leadership capabilities. All four districts have improved student achievement and are approaching the California state standard for successful schools – a score of 800 on the annual Academic Performance Index.⁶



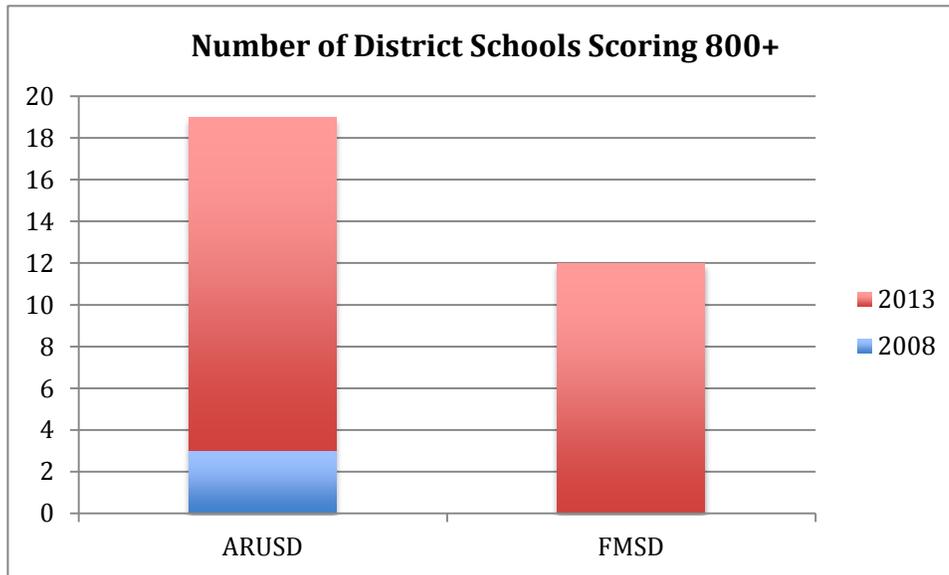
Partners in School Innovation

In addition to supporting school districts directly, the Applied Materials Foundation has invested in the proven non-profit organizations that work collaboratively with schools and districts to improve teaching and learning. AMF has supported Partners in School Innovation in San Jose Unified and most recently in Alum Rock, and Franklin McKinley School districts. This partnership was recognized in June 2013, when Partners in School Innovation was awarded the Annual Excellence award by the **Committee Encouraging Corporate Philanthropy** at the CECP Summit in New York City.

<http://blog.appliedmaterials.com/closing-the-achievement-gap>

⁶ California Department of Education, DataQuest

Partners in School Innovation has worked intensively in Alum Rock and Franklin McKinley school districts for the past five years, with support from AMF. During that time, both districts dramatically increased the number of schools that achieved the state target of an API score of 800.⁷ One school in particular – Ceasar Chavez Elementary which was on the list of worst 5% of school in California – improved its API score from 623 in 2008 to 823 in 2013.



San Jose Unified School District Strategic Plan

In 2012 San Jose Unified developed an ambitious five-year strategy called OPPORTUNITY 21, which focuses on five main objectives. The Applied Materials Foundation has partnered with the District in support of Objective 4: *Attract and recruit, support and retain a highly effective and diverse workforce*. In May 2013, the District and the San Jose Teachers Association agreed on a landmark new teacher contract with the following groundbreaking elements:

- Overhaul the teacher evaluation system to include peer evaluation, increased transparency and more actionable feedback to help teachers grow.
- Better align compensation to demonstrated effectiveness, and develop career pathways that allow teachers to take on leadership roles, mentor, and advise their peers
- Increase flexibility for schools to customize the learning experience for students by allowing schools to opt out of certain contract provisions with the support of 75% of the teaching staff⁸

According to the new agreement, teachers’ pay will be based upon teaching skill rather than college credit and length of service. Notably, it will create a career ladder for

⁷ California Department of Education, DataQuest

⁸ San Jose Unified School District, Opportunity21 2012-2013 Annual Report

outstanding teachers and put in place a mechanism for remediating less effective teachers.⁹

Non-Profit Organizations Supporting School Improvement

Working alongside school district colleagues, high quality organizations are contributing to the improvement in educational outcomes.

- The **New Teacher Center** is supporting teacher effectiveness in schools in Alum Rock and East Side Union High School District. The results of their collaboration were highlighted in a Wall Street Journal article in December 2012.
<http://blog.appliedmaterials.com/investing-in-teachers>
The Applied Materials Foundation also supports the work of the New Teacher Center (NTC) in other communities where the Company has a presence – Austin, Texas, Kalispell, Montana, and Portland, Oregon. NTC’s progress in Portland was featured in the Portland Tribune in September 2012.
<http://www.newteachercenter.org/news/portland-tribune-features-ntcs-work-oregon-department-education-and-portland-public-schools>
AMF has partnered with the New Teacher Center for more than a decade, which illustrates the Company’s strategy of long-term investments that are necessary to bring about lasting educational improvement.
<http://www.newteachercenter.org/blog/how-partnership-one-corporate-foundation-improving-student-learning>
- **Teach For America** (TFA) has greatly increased the deployment of its effective teaching corps in AMF target school districts. There are 171 TFA corps members teaching in San Jose schools, the largest cohort of the 415 Bay Area teachers. AMF also supports Teacher for America in Phoenix, Arizona.
- Engaging and empowered parents is an important part of achieving improved educational outcomes. The Applied Materials Foundation is supporting two organizations that work directly with parents – People Acting in Community Together or **PACT** and **Somos Mayfair**, in San Jose.

Focusing on Middle School Education

The Applied Materials Foundation Education Initiative employs an educational pathway strategy to achieve the ultimate goal of increasing the number of students who graduate from high school well prepared for college. The strategy tracks critical leverage points along students’ academic trajectory:

- **Kindergarten Readiness** – Entering school ready to learn
- **Third Grade Literacy** – Reading on grade level by the end of third grade
- **Middle School Mathematics** – Completing Algebra by eighth grade
- **College Prep Courses** – Following a sequence of courses in order to be eligible for California’s public four-year universities (Referred to as the A-G Sequence)

The success in middle school years is especially important and also the time period in which more and more students fall behind. Therefore, AMF has invested in traditional

⁹ San Jose Mercury News, May 25, 2013

public schools, charter public schools, and effective non-profit organizations that are committed keeping students on track and accelerating their academic achievement.

Out of School Time Support

In addition to supporting the improvement of instructional practices within schools, The Applied Materials Foundation has supported programs that provide students with extra instruction and opportunity before and after school and during the summer. These programs measure their impact on the students they serve and share the goal of preparing them for success in college:

- Breakthrough Silicon Valley** – In 2013, Breakthrough Silicon Valley (BSV) expanded its reach and established a new program in east San Jose, in collaboration with Franklin McKinley School District, enabling them to eventually double the number of students served in the two regions of San Jose. AMF supported the establishment of a two new affiliates of the national Breakthrough program in 2002, and both the San Jose program and a program in Austin, Texas continue to enable scores of students to pursue their college dreams.

Breakthrough Students	Breakthrough Results
86% of students will be first generation college students	91% enroll in geometry by the 9 th grade, compared to the national average of 27%
96% are students of color 60% speak English as their second language	100% of high school students are enrolled in rigorous college prep courses, compared to 28% of low-income students nationwide
76% receive free or reduced price lunch 64% attend an low performing school	100% are on track to attend four-year universities. Regionally in Silicon Valley, fewer than 25% of Latino students are eligible
65% live in gang impacted neighborhoods	82% of 10 th -12 th grade students are enrolled in two or more honors, AP or IB courses

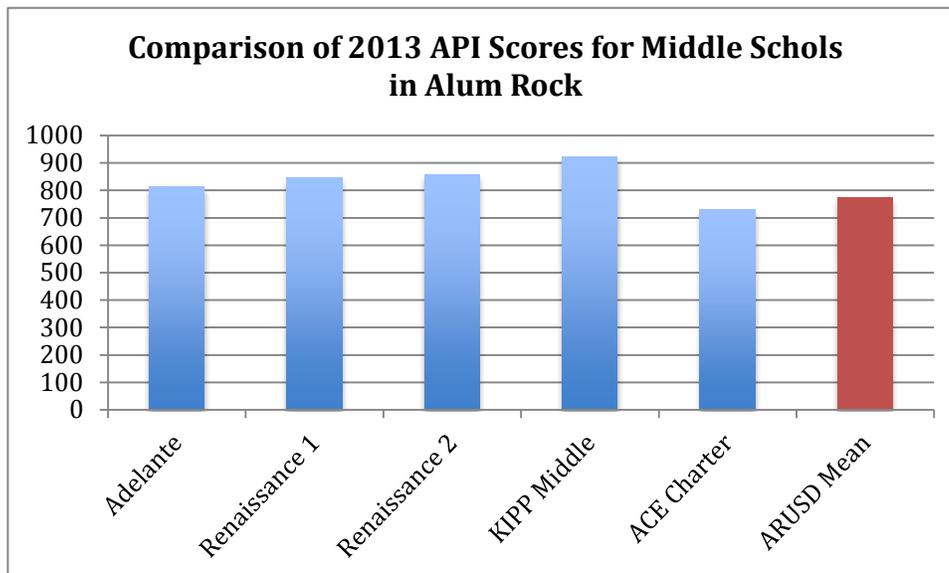
- Overfelt High School Summer Bridge Program** – Far too many middle students transition into high school without the necessary skills, course preparation, or motivation to pursue a college prep course of study. AMF directly supported a summer program at Overfelt High School in East San Jose in 2013, which served a record number of 250 students who completed the program, 63% of the incoming class. The students significantly improved in both math and English, which will enable them to begin high school on track for college and genuinely engaged.

Course	# Attended	Retention Rate	Pass Rate
Math Acceleration	50	90%	93%
English Acceleration	50	90%	91%
Algebra I	91	85%	80%
Geometry	83	93%	90%

- **ALearn** – A regional, non-profit program provides math support to middle school students and develops college readiness during the summers and before and after school in Alum Rock and Franklin McKinley school districts with support from the Applied Materials Foundation. The program measures its results in terms of retention and percentage increase in middle school math content mastery.
- **City Year** – AMF supports a City Year team at Mathson Middle School in East San Jose, where 76% of students are eligible for free and reduced lunch and 50% are English language learners. The Americorps team works side-by-side with the school’s teachers during the day and then provides an additional 5.25 hours per week of extended learning time for students. With a focus on school attendance, behavior, and course performance, City Year is helping students stay on track for success in high school.

Charter and Small Autonomous Schools

Because the needs are so great at the middle school level, the Applied Materials Foundation has also supported small autonomous within the Alum Rock school district and select charter schools. These schools have consistently outperformed traditional public middle schools and given parents a choice of schools for their children.¹⁰



Increasing Impact through Collaboration

The Applied Materials Foundation engages with other funders and non-profit organizations in order to leverage investments and increase the impact on educational outcomes.

¹⁰ California Department of Education, DataQuest

Silicon Valley Education Foundation and the East Side Alliance – In east San Jose, students attend seven elementary school districts in grades K-8 and then enroll in one of the high schools of the East Side Union High School District. Through a grant to the Silicon Valley Education Foundation, AMF has fostered a new collaboration among the eight school districts. The districts have signed a Memorandum of Understanding officially establishing the East Side Alliance, which will enable them to work together to insure that students have an excellent and seamless education. To date, the Alliance has yielded system wide adoption of the college going course sequence, agreed upon common placement protocols for the transition from middle to high school, and cross-district planning for the implementation of the new California standards and assessment program.

Silicon Valley Community Foundation (SVCF) and the Common Core State Standards (CCSS) Initiative – SVCF has launched an ambitious effort to encourage districts to collaborate on the complex implementation of the new national United States educational standards that are benchmarked against the best practices worldwide. The Applied Materials Foundation has consulted with SVCF on the design their Common Core initiative and is also supporting the new standards implementation with complimentary grants. The Applied Materials Foundation has granted more than \$700,000 to support three of the eight school districts in the East Side Alliance, which is the only collaboration in Santa Clara County that received funding from the Silicon Valley Community Foundation’s initiative.
<http://www.siliconvalleycf.org/content/common-core-grantees-2013>

Cisco, Shortino Foundation, and Other Funders – The Applied Materials Foundation regularly shares information and best practices with other corporate funders and private foundations. In the Alum Rock Community, AMF has coordinated grant making with Cisco and the Shortino Foundation in order maximize investments. In addition, Cisco and AMF convened twenty plus funders to a meeting in November 2012 to explore how education funders might work together in the future.

Advocating for Educational Excellence and Equity

Finally, Applied Materials and the Applied Materials Foundation participate in regional efforts to advance education:

- **San Jose/Silicon Valley 2020** – A regional effort to improve education so that all students are performing on grade level by the year 2020, launched by mayor of San Jose and the superintendent of the Santa Clara County Office of Education
- **Santa Clara County Children’s Agenda and Vision Council** – A cross sector collaboration that every child in the County is “safe, healthy, successful in learning, successful in life.” The community initiative holds an annual Children’s Summit to highlight critical issues impacting the County’s youth.
- **Partnership for School Readiness** – Funders group dedicated to enabling all children in the region to receive adequate preparation for elementary school.
- **College Day** – A community effort to encourage all children in Santa Clara County to aspire for a college education. The Applied Materials Foundation was the founding and continuous sponsor of this annual event, during which Applied Materials employees visit schools to describe their own college experiences.

The success of the Applied Materials Foundation Education Initiative and grantees was featured in 2013 on the **Boston College Center for Corporate Citizenship** blog and in a **Wall Street Journal** article.