

# Stepping Up To Algebra



Preparing middle school students throughout Silicon Valley to succeed in algebra

## Davis Intermediate School: Raising Student Proficiency and Confidence



In the summer of 2011, Davis Intermediate School in San Jose partnered with the Silicon Valley Education Foundation (SVEF) to

prepare 70 incoming eighth graders for success in algebra. This is the fourth year that the Oak Grove School District offered Stepping Up To Algebra (SUTA), a 75-hour program designed to help students master critical math skills and complete Algebra I in eighth grade. Overall, SVEF served 1000 students in 15 Santa Clara County school districts during the summer of 2011.

Stepping Up To Algebra incorporates a unique combination of standards-based math curricula, as well as interactive technology tools and educational games. Students experience a strong college-bound focus through field trips to area universities and college information sessions with their parents, as well as exposure to their teaching assistants, who are college students.

Brief interviews with students in teacher Holly Brown's class described how the SUTA program changed their attitudes and confidence about math.

### Empowered for College and a Medical Career

Esmeralda Castellanos, 13, struggled with math in seventh grade and was not too thrilled about spending her summer studying algebra for four hours



a day. "When I first found out about the Stepping Up To Algebra program, I said, 'Oh math, I don't want to go!' But I decided to... and I'm so glad I did. My teacher, Ms. Brown, challenged me and now I can figure out the problems. We used puzzles

and other ways to solve problems."

With this new confidence in math came new aspirations. Esmeralda, who is being raised by a single dad, wants to be the first in her family to go to college, and she would like to inspire her twin sister to follow in her footsteps. "I want to go to Stanford and become a pediatrician and eventually open up my own practice."

### Invest in Public Education

Silicon Valley Education Foundation focuses on raising student performance in the critical areas of math and science. To learn more about SVEF, our educational programs and how you can help support public education, visit [www.svefoundation.org](http://www.svefoundation.org).

## Algebra Challenge Drives Student to Success



Like many students who enroll in Stepping Up To Algebra, Katalina Huerta entered the program feeling math was not her best subject. “I honestly didn’t understand math until I started taking this [SUTA] program,” she said. But her teacher, Ms. Brown, constantly tested her with puzzles, hands-on work and computer programs that coaxed her to see problem solving in a different way. “I thought I would never be able to figure out how to solve problems. When I do, I feel like I’ve succeeded. I like that Ms. Brown or one of the TAs [teaching assistants] is always there to help.”

Katalina is looking forward to taking Algebra I in eighth grade, and after high school she wants to attend Santa Clara University and become a doctor.

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## Mastering Algebra Gives Student a Solid Start

Dominic Galdamez did not mince words in describing his math ability before he took Stepping Up To Algebra: “I sucked at it. I didn’t like it, and I didn’t want to be here [summer school].” All that changed after he began the program and was able to get one-on-one help from teacher Holly Brown and her teaching assistant. One of them was always available when he needed support.

Before the program, Dominic struggled with fractions. But after a few days in the class, he began to understand them. Now, he seems so comfortable with fractions that he laughs about how they once stumped him. Dominic is the oldest child in his family, and he wants to be a role model for his younger sisters by being the first one to go to college. “I want to graduate from college and get a job so I can buy my mom a car.”



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## Math Program Engages Students with Technology



Teaching Assistant Alex Tani, a student at the University of California, Merced, who is pursuing a career in education, described the dramatic improvement he saw among students. “We began by using rulers for basic math, then we pushed on to fractions and decimals. There has been nothing but progress. It’s so interesting because at the beginning of each school day you see them struggle, but, amazingly, by the end of each day they seem to have mastered the concepts.”

Alex believes one of the most effective teaching resources in the curriculum is technology. “You have to constantly engage the students with a number of activities in order to keep their attention, such as puzzles, partner games and computer math games.”

## Silicon Valley Education Foundation Raises Math Achievement

In its fourth year, SUTA is a proven program, one that has helped over 2,000 students be successful in math. Pre- and post-test assessments from 2008 through 2011 have reported double-digit growth in students’ math proficiency. By providing a year-round program focused on mastering critical math skills, SVEF helps prepare more students for success in high school, college and careers. Read more about how SUTA is helping students improve their math skills and raising their college aspirations at [www.svefoundation.org](http://www.svefoundation.org).