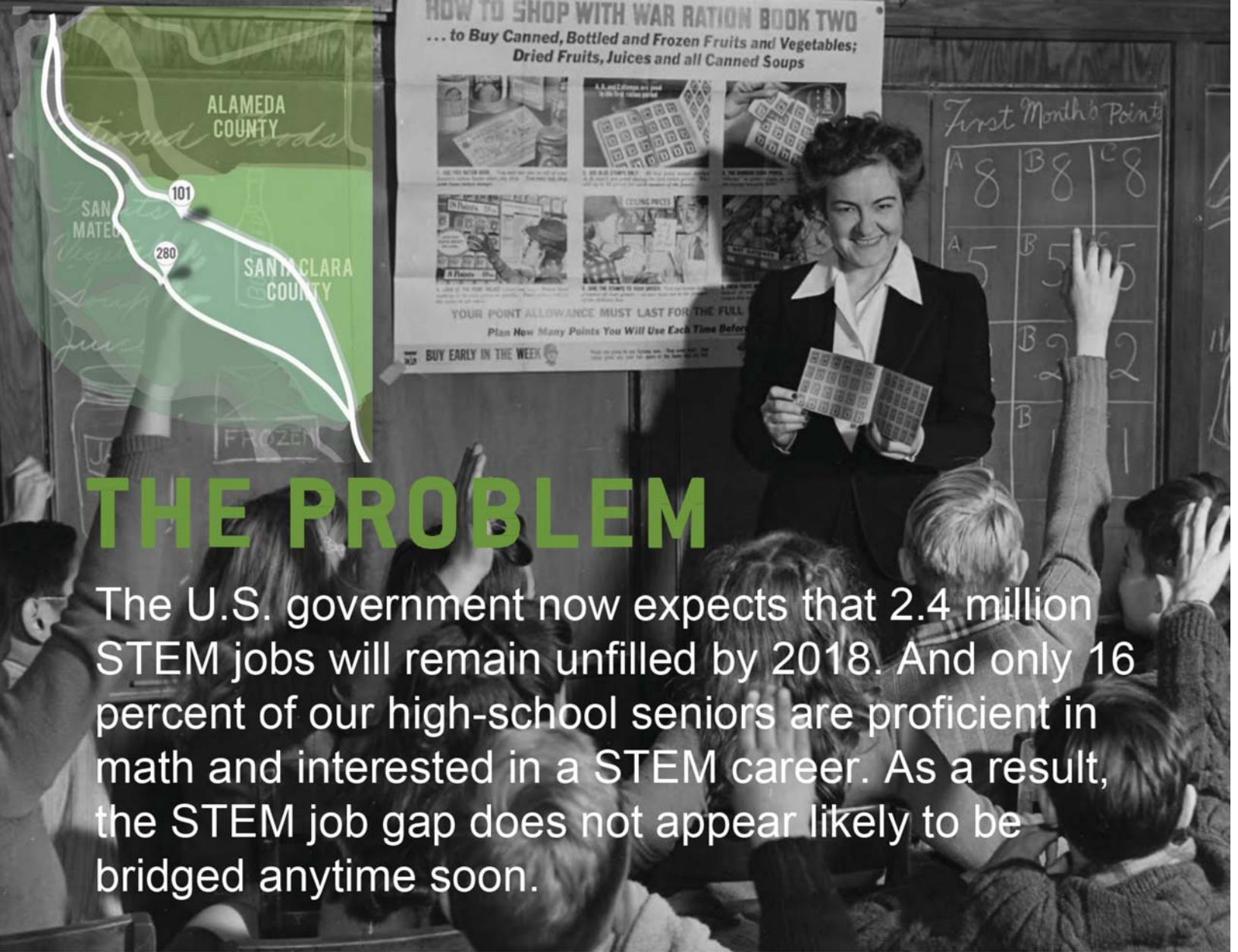




SV[e]F

SILICON VALLEY
education
FOUNDATION

ELEVATING ACHIEVEMENT THROUGH INNOVATION.



THE PROBLEM

The U.S. government now expects that 2.4 million STEM jobs will remain unfilled by 2018. And only 16 percent of our high-school seniors are proficient in math and interested in a STEM career. As a result, the STEM job gap does not appear likely to be bridged anytime soon.



WHO WE ARE

SVEF is dedicated to ensuring all students are college and career ready, specifically in the critical areas of science, technology, engineering and math (STEM).

A young boy with dark hair, wearing a red and blue striped shirt, is sitting at a desk and smiling at a computer monitor. The background shows a classroom environment with other students and computer equipment. The text is overlaid on this image.

VISION

To transform Silicon Valley into a model for enhancing public education.

MISSION

To leverage partnerships and resources for enhancing public education, so all students can realize their full potential.

WHAT WE DO



ADVOCACY

A-G DEFAULT
CURRICULUM

EAST SIDE ALLIANCE
COMMON CORE



PROGRAMS

ELEVATE [MATH]

49ERS STEM
LEADERSHIP INSTITUTE
(SLI)



INNOVATION

LEARNING
INNOVATION HUB
(iHub)

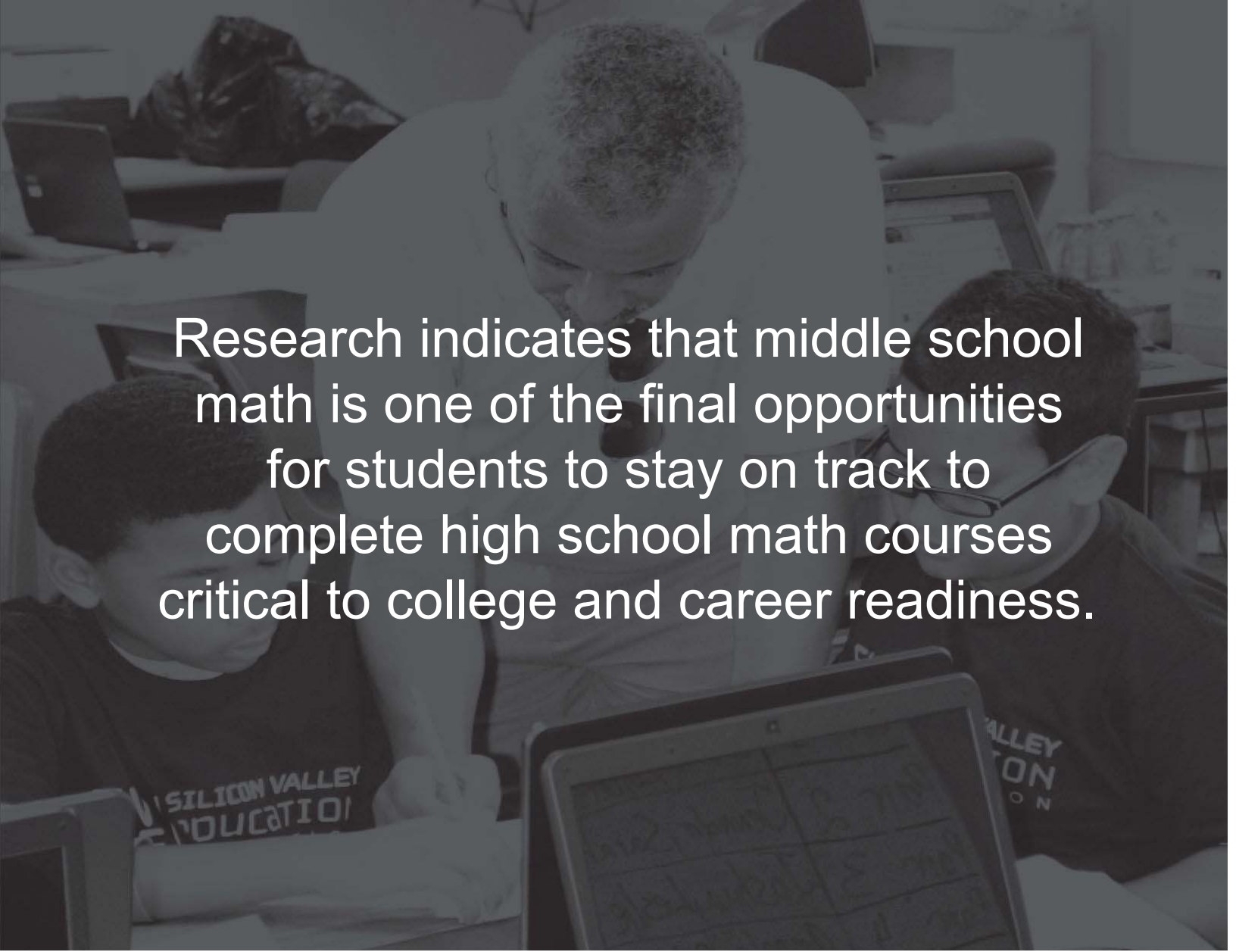
EDUCATION
TECHNOLOGY

TEACHER
INNOVATION GRANTS



Elevate [Math]

Elevate [Math] is an intensive summer intervention program that prepares targeted incoming 6th to 10th graders for success in their next-level math courses.

A grayscale photograph of a classroom scene. An older male teacher with glasses is leaning over a desk, pointing at a tablet held by a student. Two other students are seated at the desk, looking at the tablet. The student on the left is wearing a dark t-shirt with 'SILICON VALLEY EDUCATION' printed on it. The student on the right is wearing a dark t-shirt with 'SILICON VALLEY EDUCATION' printed on it. The tablet screen displays a math problem involving a grid of numbers. The background shows a typical classroom setting with desks and papers.

Research indicates that middle school math is one of the final opportunities for students to stay on track to complete high school math courses critical to college and career readiness.

Elevate [Math]

PROVEN RESULTS

Doubled

the level of algebra
readiness among
participating students in
only 19 days.

2^x

more effective than
similar
intervention programs

From an independent study conducted by
WestEd — the regional education laboratory of
the U.S. Department of Education.



Elevate [Math]

COMPONENTS FOR SUCCESS

19



PROGRAM DAYS
IN MIDDLE SCHOOL
6TH, 7TH, 8TH

OR

24



PROGRAM DAYS
IN HIGH SCHOOL
9TH, 10TH



MORE THAN 30 HOURS OF
COMMON CORE ALIGNED
PROFESSIONAL
DEVELOPMENT FOR
TEACHERS



COLLEGE
AWARENESS AND
DEMONSTRATIONS
OF REAL WORLD
APPLICATION OF
STEM SKILLS & MATH
PRACTICES

75-125

HOURS OF
INSTRUCTION



CURRICULUM
DESIGNED BY A TEAM
OF EDUCATION
EXPERTS

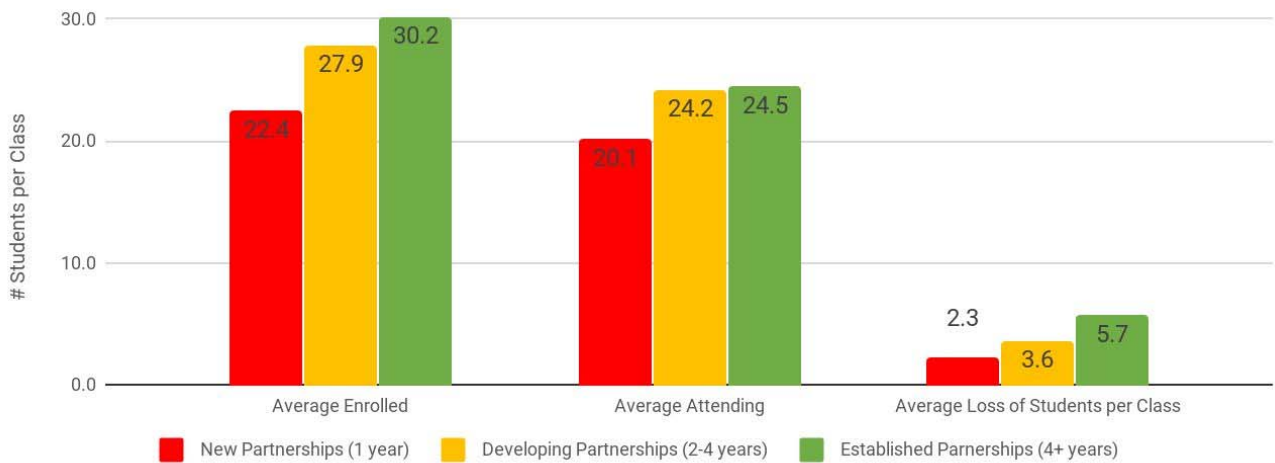
FY17 [Highlights]

- Program Impact to date
 - 13,000 students served
 - 650 teachers trained
- Implemented Elevate [Math] 6 program
- [Extensive Media Coverage](#)
- Validation study with WestEd
- Successful Elevate satellite programs
 - Monterey County Office of Education
 - Sacramento County Office of Education
- On average, students showed at least a 50% growth on pre/post assessments in each grade level

[FY17] Status

# of Classes	# of Students Enrolled	# of Students Attending	Average Attendance	% Completing @ >75%
134	3,614	2,996	80%	72%

2017 Average # of Students per Class



* As of 6/31/2017



49ERS STEM LEADERSHIP INSTITUTE (SLI)

SV[e]F

SILICON VALLEY
education
FOUNDATION

49ERS
FOUNDATION



FUTURE LEADERS

By providing multi-year, year-round STEM opportunities and support to cohorts of high-performing SCUSD students at two fabrication laboratories and campuses, SLI will equip generations of students with the skills and knowledge to excel in STEM degrees and professions.

60

A NEW
COHORT
OF 60
STUDENTS
WILL BE
ENROLLED
EACH YEAR
EVERY YEAR

2015	2016	2017	2018	2019	2020
------	------	------	------	------	------

WHAT MAKES A STEM LEADER?

RISK TAKING	CURIOSITY	PASSION
CREATIVITY	LEADERSHIP	INITIATIVE
COMMUNICATION	DETERMINATION	COLLABORATIVE SPIRIT

ACADEMIC EXCELLENCE

SLI Status (Summer: June - August)

Accomplishments

- Strengthening STEM
 - ~800 hours summer teacher PD/planning (articulation across grades, contents, sites)
 - 5 Field trips (Exploratorium, California Academy of Sciences, Computer History Museum, NASA, NVIDIA)
 - 15 Guest Speakers (teambuilding consultant, student workshop leaders, BoA interns)
 - Modified Elevate Math course (CC Math 6 transition into Algebra 1 for 7th graders)
- STEM Leadership
 - Fall competition/challenge kick-off (Exploravision, FIRST Lego League, FIRST Tech Challenge)
 - 3 Full Weeks of Workshops (computational thinking, hand/power tools, design thinking, core values, TinkerCad, Fusion 360, Inkscape, infographics, iMovie, digital citizenship, project management, circuits and electrical engineering, etc)
 - ~120 Volunteer Hours (9th/10th graders assisting with 7th grade Elevate Math)
 - Play at Piper partnership (Raspberry Pi computer kits, SLI students as junior developers)
- Youth Development
 - >20,000 student hours (summer session, extended hours, open lab)
 - 2 Open Houses (SCHS, CMS)
 - Multiple SEL workshops per grade level (counseling, teambuilding consultant, advisory)
- Other
 - New SLI staff (Program and Technology Manager, Program Assistant, 4 content teachers)
 - 7th - 10th grade joint session with 240 SLI students (PlayWell Teknologies)
 - Tuesday Night Football fundraiser (8th grade)
 - SLI/SCUSD Collaboration (curriculum, partnerships)

SLI Status (Fall: September - November)

Additional Challenges/Projects

- Onboarding of new staff members and alignment with returning staff members
- Mission/Strategy revisit (shifting priorities/lessons learned through first half of program scale-out) and revising of full six-year model
- Community component of Fab Lab Santa Clara High School (SLI, SCHS, SCUSD, Santa Clara)
- Networking and collaboration within informal ed, MakerEd, and non-profit communities; sharing lessons learned and deeper collaboration with others outside of SLI
- Revisiting literature, compiling new research, and utilizing consultants to inform program growth and documentation
- Deeper and longer term relationships with industry and partners
- Creation of Advisory Board



SV[e]F

SILICON VALLEY
EDUCATION
FOUNDATION

Coming Up: fall competition season (Exploravision, FIRST Lego League, FIRST Tech Challenge), Pioneers and Purpose



iHub

LEARNING INNOVATION HUB

iHub connects Education Technology (EdTech) entrepreneurs, educators, and researchers to facilitate collaboration and product feedback for optimal decisions to integrate technology tools and solutions in our classrooms.



INNOVATION



DISTRICT READINESS

Focus on personalized
learning improves
student outcomes

New opportunities like
computer science
education meet
student needs



CHANGE MANAGEMENT

Culture of evaluation &
innovation supports
technology strategy
and use

Networks and learning
science increase
district capacity



RESEARCH & EVALUATION

Data analysis
determines what is
working and for whom

Information flows
reduce district risk



INNOVATION

1



FUNDING

Bond Raised for
district capital and
technology upgrades

2



INFRASTRUCTURE

Tech Assessment
tool for districts

3



ADOPTION

Edtech Pilots
PwC Report

iHub At-a-Glance

Edtech Product
Evaluation

Edtech
Assessments

Edtech Pilots

Computer Science

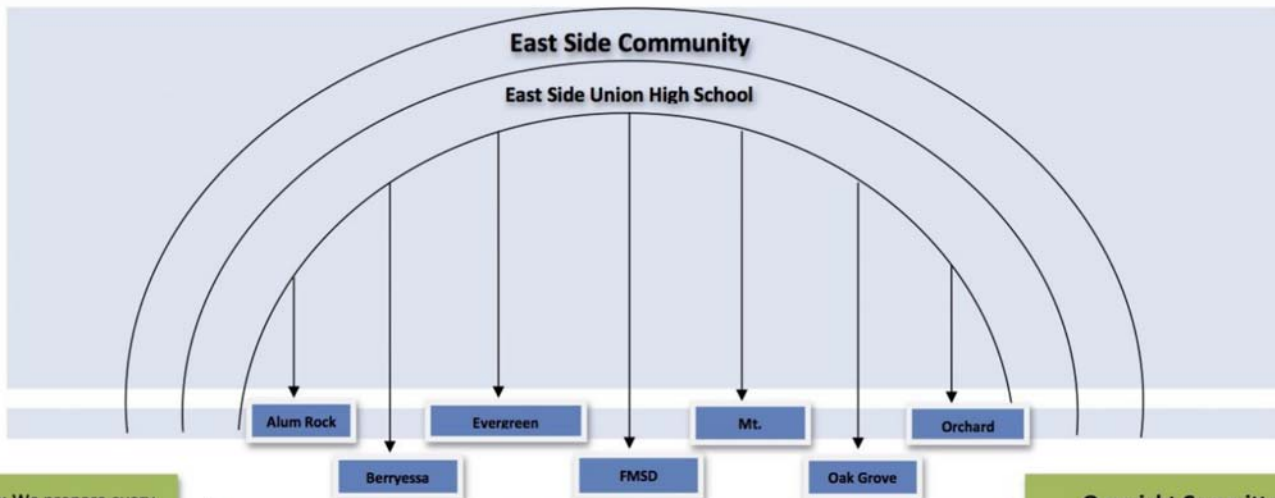
Internal Learning and Improvement



ESA

East Side Alliance is comprised of ESUHSD and 7 feeder districts, that combined serves over 85,000 students.

EAST SIDE ALLIANCE



Vision: We prepare every student for a lifetime of success.

PARTNERSHIPS

1. ESA partner districts, SVEF, SJSU, Evergreen Valley College signed MOU
2. SVCF, Applied Materials, Shortino Family Foundation, JP Morgan Chase
3. Collaborative Partners

85,000 Students

Demographics: 50.1 % Hispanic 28.0 % Asian 8.8 % White 3.5 % African American

Goals:

- Increase the number of students completing the A-G requirements in the ESUHS
- Accelerate the A-G completion rates of Hispanic and African American students
- Increase the number of students successfully completing grade 8 Algebra, HS Integrated Course I & Common Core 3
- Increase enrollment and success in Calculus
- Increase enrollment and success in advanced placement classes

East Side Alliance Priorities

College/Career: Students prepared for post-secondary education (A-G)
Common Core: Successful implementation of CCSS
East Side Promise: Develop a PreK-16 articulated system

Oversight Committees

Advisory Steering Committee

1. District Board Representation
2. Superintendents
3. Union Representation
4. Silicon Valley Education Foundation
5. San Jose State University
6. Evergreen Valley College
7. Santa Clara COE
8. Community Leaders
9. Funding Organizations

Operations Committee

1. Assistant Superintendents
2. Teacher Leaders
3. Union representation
4. Santa Clara COE
5. Professional Development Providers (Invited)

Students Roadmap to Success: Spartan East Side Promise

Key Transition Years

Academic

- Participates in First Year Seminars (Academic & Social)
- Calculus/Statistics
- Successfully Completes Courses Required to go to College (A-G)
- AP Course: ≥ 3
- Takes 4 years of math: Senior Year Math
- SBAC: Meets standards Grade 11
- Passes at Least 5 9th Grade Courses with No Failing Grades
- Masters Algebra 1/CCS1/Integrated 1
- Interventions: Elevate [Math]
- Is at Reading/Math Level by 4th Grade
- Participates in Full Day (vs. half day) Kindergarten
- Participates in High Quality Preschool/TK
- Develops Letter Knowledge, Reading Sensitivity, and Number Sense
- Uses Exploration and Discovery to Understand Surroundings
- Responds to Parent/Caregiver High Quality Talking, Reading, and Singing

Non-Cognitive Factors

- Develops Time and Stress Management Skills
- Engages in Community and Campus Organizations
- Has Sufficient Financial Aid
- Develops Career Plan and Establishes Goal
- Engages in School and Community Organizations
- Demonstrates Social Emotional Competence
- Has a Clear Expectation of Going to College
- Completes 4 year high school plan
- Has a Strong Adult Figure Attachment Other Than Parent
- Adopt-A-College Program
- Exhibits Learning-Related Skills Such as Self Regulation, Social Competence, Self Esteem, and Motivation
- Kindergarten Savings Program
- Has a Parent/Caregiver who Understands Developmental Milestones
- Has a Stable Relationship with a Strongly Involved Parent or Caregiver



 **Key Transition Years**

Source: University of Cincinnati, Center for Urban Education 2006

ESA PROFESSIONAL DEVELOPMENT

[Math Symposia]

- (3) Symposia are held each school year
- Our 16th Math Symposium was held October 11
- Math Toolkit

[High School/Middle School Collaboratives]

- A continuation of the symposia model, broken into smaller cohorts of specific high schools and the middle schools that feed into them

[Elementary Collaboratives]

- Our newest addition to our PD model, for grades 3-6 teachers
- Our 1st session will be held March 7th

[PLC Facilitation]

- Ongoing opportunities for teachers to learn how to facilitate PLCs

To date, over 600 teachers have received professional development through the above models.

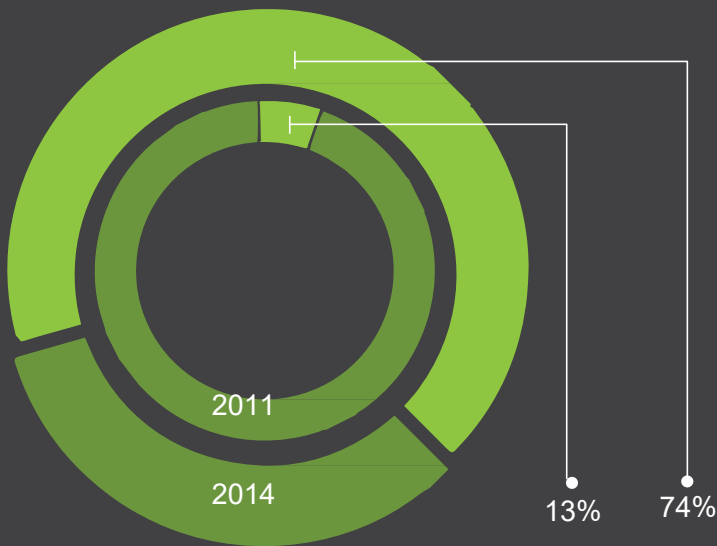


A-G

A-G refers to the high school courses required for entrance to the University of California and the California State University systems. They are so-called because there are seven general subject areas labeled “A” through “G”. These requirements should not be confused with the courses required by the state of California or individual school districts for high school graduation.

IN 2011, ONLY 13% OF SANTA CLARA COUNTY STUDENTS WERE ENROLLED IN HIGH SCHOOLS WITH AN A-G DEFAULT CURRICULUM.

SINCE THEN, SVEF HAS SUPPORTED DISTRICTS IN ADOPTING AN A-G DEFAULT CURRICULUM AND THAT NUMBER HAS GROWN TO 74%—NEARLY 60,000 STUDENTS.





How to Get Involved

- a. Funding
- b. Executive Engagement
 - i. Panels
 - ii. Advisory Boards
 - iii. Event Host Committees
- c. Volunteerism
 - i. STEM Workshops

Why Volunteer?

[For Our Students]

- Exposure to exciting STEM career opportunities
- Opportunities to see STEM as it applies outside of the classroom
- Building academic aspirations and motivations

[For Your Organization]

Opportunities for employees to inspire and mentor our next generation of STEM leaders

Fostering the volunteer spirit of your organization

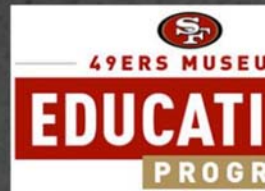
Meaningful community engagement in local schools



pwc



TEXAS
INSTRUMENTS





THANK YOU