

IMPACT REPORT 2021

LATEST INFORMATION
ON CALCULUS ROUNDTABLE

2019 - 2020 - 2021



CALCULUS
ROUNDTABLE



OUR DIRECTOR'S STATEMENT

When we began the organization in 2013, we came across a significant data point. We found that in the nine counties that make up the Bay Area, there were less than 100 African American students enrolled in a calculus class.

In some ways, this data was shocking but not surprising. The numbers for Latinx students were equally troubling. In a state where two-thirds of the students are of Hispanic descent and enrollment in a UC college or university is at 40%; only 3% of Latinx students are pursuing degrees in STEM subject areas. For us, these issues have stopped being anecdotal and have become a social imperative.

In the shadows of some of America's most powerful technology-based companies, we could not stand by and do nothing. Instead, we decided to see these as opportunities to make a measurable difference.

"We saw opportunities to make a measurable and meaningful impact."

We saw an opportunity to move the needle on calculus completion for minority students not because we think all students should take calculus, but because the low number demonstrates the area in which districts fall off the most in math and science proficiency for underserved students, even more so at a time when math and science proficiency is at a premium in the global workforce of the 21st Century.

"A GAME CHANGER AT OUR SCHOOL"

- School Administrator

87%

of teachers surveyed said they used CR Activities or Instructional Coaching to become better teachers

67%




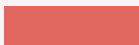
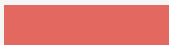
of our students engage in online classes, through recorded question answering, or participation activities.

63% OF OUR TEACHING CORE IS BILINGUAL

Research shows that when students of color have an African American or Latino teacher before the 4th grade, they are 40% more likely to graduate college.

PROGRAM OFFERINGS FOR THE YEARS 2019-2021

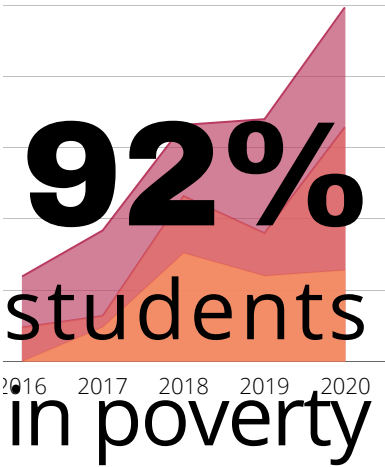
Total #
impacted

DORS	Digital One Room Schoolhouse		12,353
DPOE	Digital Ports of Entry		176
OFFRAMP	Juvenile Justice Curriculum		64 *
SBN	STEM Broadcasting Network		353 *
STEM Kits	Distance Learning Home Projects		557 *

* new programs



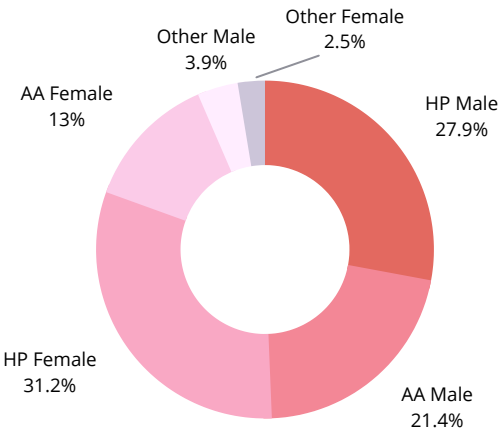
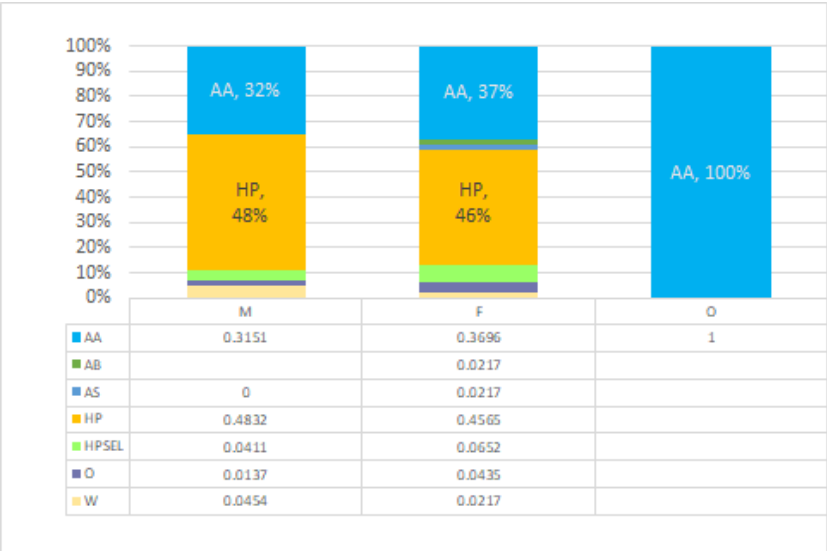
DEMOGRAPHICS



Our work can be found in:
46 schools
in **27 districts**
& **5 COEs**
(County Offices of Education)

90%
of our students
are African American
or Latinx

Students by Race and Gender



CLIENTS & SERVICES

Client	Data, Assessment & Accountability Systems			Data Tools & Digital Learning Spaces			Extended Learning/Afterschool program			Ethnology, Policy & Research			Teaching, Instructional Coaching & Facilitation		
Amazon Education															
Bellevue Elm (Napa, CA)															
Cabrillo USD, Half Moon Bay CA															
California Department of Education															
Chicago Public Schools															
City of Richmond, CA															
Contra Costa Community College District															
Contra Costa County Office of Education															
District of Columbia Department of Corrections															
Douglas County School District, CO															
Edmodo															
Education Trust West															
Johnson Publishing															
Kenosha Unified (WI)															
LAUSD Los Angeles, CA															
Laradeo Independent School District															
Lindsay Unified School Distrtict															
San Jose Public Library															
San Mateo COE															
Santa Clara COE															
Silicon Valley Education Foundation															
Texas A&M International University															
Ubisoft, Gaming Software															
United Way of the Bay Area															
Various charters and private schools															
West Contra Costa USD															

ENGAGEMENT IMPACT

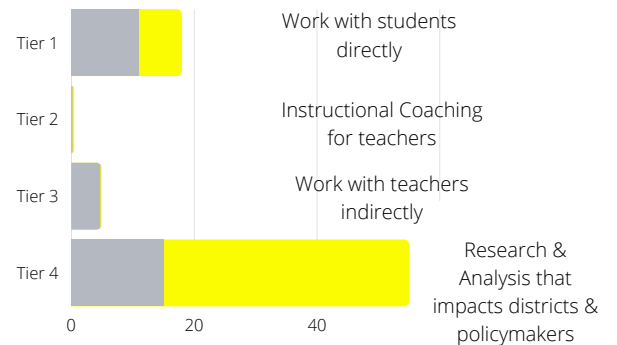
Increase in teachers taking online courses **56 +**

Increase in CR led direct instruction **243+**

Major research policy papers **7**

1:1 STEM study sessions **304**

THIS YEAR



43%

of students
have continued
from last year.





WHAT'S GOIN' ON?

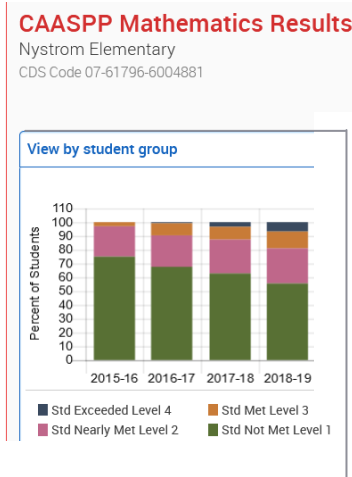
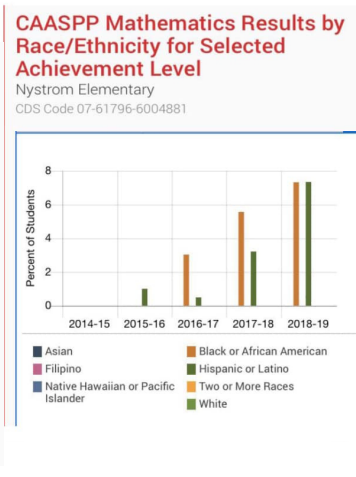
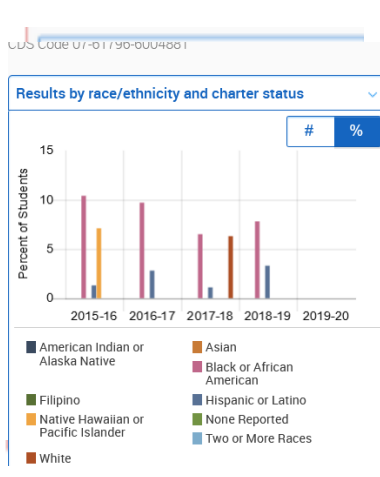
What happens when Calculus Roundtable works in one school or with one population, over time? Miraculous things.

LONG TERM ENGAGEMENTS

CR was asked to help improve math results for African-American students at Nystrom Elementary, in Richmond, CA

Nystrom has one of the highest poverty rates in the state

So, what happened when we worked with **80%** of the African-American population?



First the
suspension
rate went
down

Then math
scores for
African-American
students
went up

Then overall
math scores
for the entire
school
increased

County

View Table Data	2015-16	2016-17	2017-18	2018-19	2019-20
CAASPP Mathematics Results by Race/Ethnicity for Selected Achievement Level					
American Indian or Alaska Native	11%	11.99%	16.31%	18.88%	N/A
Asian	5%	4.95%	5.38%	5.68%	N/A
Black or African American	3%	3.15%	2.9%	2.56%	N/A
Hispanic or Latino	8%	8.26%	8.91%	9.4%	N/A
Native Hawaiian or Pacific Islander	8%	7.7%	7.68%	7.4%	N/A
Two or More Races	33%	35.08%	36.24%	36.47%	N/A

District

View Table Data	2015-16	2016-17	2017-18	2018-19	2019-20
CAASPP Mathematics Results by Race/Ethnicity for Selected Achievement Level					
American Indian or Alaska Native	13%	8.82%	6.45%	18.92%	N/A
Asian	3%	3.15%	2.9%	2.56%	N/A
Black or African American	3%	3.15%	2.9%	2.56%	N/A
Hispanic or Latino	4%	3.88%	3.7%	4.17%	N/A
Native Hawaiian or Pacific Islander	10%	7.84%	1.94%	5.05%	N/A
Two or More Races	17%	14.92%	18.96%	16.96%	N/A

Calculus Roundtable School

View Table Data	2015-16	2016-17	2017-18	2018-19	2019-20
CAASPP Mathematics Results by Race/Ethnicity for Selected Achievement Level					
American Indian or Alaska Native	Redacted	Redacted	Redacted	Redacted	N/A
Asian	8%	6.25%	7.69%	11.54%	N/A
Black or African American	3%	3.15%	2.9%	2.56%	N/A
Hispanic or Latino	8%	8.26%	8.91%	9.4%	N/A
Native Hawaiian or Pacific Islander	8%	7.7%	7.68%	7.4%	N/A
Two or More Races	33%	35.08%	36.24%	36.47%	N/A

11.54%

PERSONAL IMPACT



When the first Yemeni families arrived in the Bay Area they were fleeing one of the greatest humanitarian crises of our times. The Yemeni civil war in 2016 caused the death of an estimated 100,000 people in Yemen, including 18,500 civilians.

3.6 million people have been uprooted as a result of this conflict. Some children found their way into our program in many Bay Area communities. Giving them math and science activities that celebrated their Arabic culture gave them a sense of hope that no scantron could bring.



Many girls who at a young age, love science often lose interest in middle school. CR has a particular focus on this problem by bringing girls to meet scientists in their labs. These girls from Clairmont Middle School in Oakland are meeting at the UC Berkeley's School of Paleontology to spend a day with Dean White (r) .

Calculus Roundtable organizes its students into cohorts. Each class and workshop represents a different group of students. Continuing students can end up in multiple cohorts over time. This helps us track their progress and ascension into higher math and science classes. Here are a few stories from cohorts past and present.



We started in Richmond five years ago as part of President Obama's My Brother's Keeper Initiative (an honor I will always cherish).

People thought we were crazy to start an engineering and physics early education program in one of the Bay Area's toughest public housing projects. To everyone's surprise, 40 parents came to the launch and supported us every step of the way. Sure, we had a few lockdowns and had to walk over yellow tape every once in a while, but the kids loved it and grew. Five years later, we're in 17 schools in Contra Costa County.

Some of the same kids we worked with in public housing 5 years ago are now attending a Richmond school that has some of the fastest-growing math scores for African American students in the state.

Today, one of these young techies from the early days will run the official live stream for our international Black Techathon (BYTES), scheduled to be broadcast here and in 3 African countries, later this month.



REMOVING THE DISTANCE IN DISTANCE LEARNING

The STEM Broadcasting Network gives schools a choice of online classes, both live and recorded, that engage students' imagination and love of learning.

MONTHLY AVG. STUDENT ENGAGEMENTS

In a pre and post evaluation of failing summer school students, out of a cohort of 284 students

Standardized test
score increased by

27%
Points

AVG. NUMBER OF 1-ON-1 SESSIONS: **102**

AVG. NUMBER OF STUDENTS
COMPLETING ONE OR
MORE **DORS** ACTIVITIES : **243**

7:1 Mentor to Student Ratio

3 OF THE TOP TEN

ELEMENTARY SCHOOLS
IN THE BAY AREA
WITH THE

HIGHEST GROWTH RATES IN MATH SCORES
ARE **CALCULUS ROUNDTABLE SCHOOLS**

MEDIA COVERAGE



WHAT FOLKS ARE SAYING

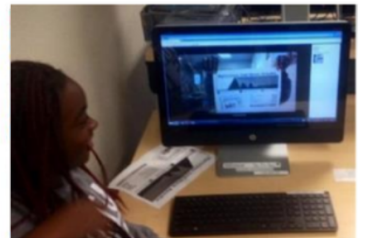
"What parents have been waiting for..."

ABC Channel 7



"Possibly, the future of education"

The Mercury News
The Newspaper of Silicon Valley



A promising practice in closing the achievement gap

ED TRUST WEST



Awarded

The Special Congressional Recognition Award for our work,

"Bringing STEM Education to Communities of Color"

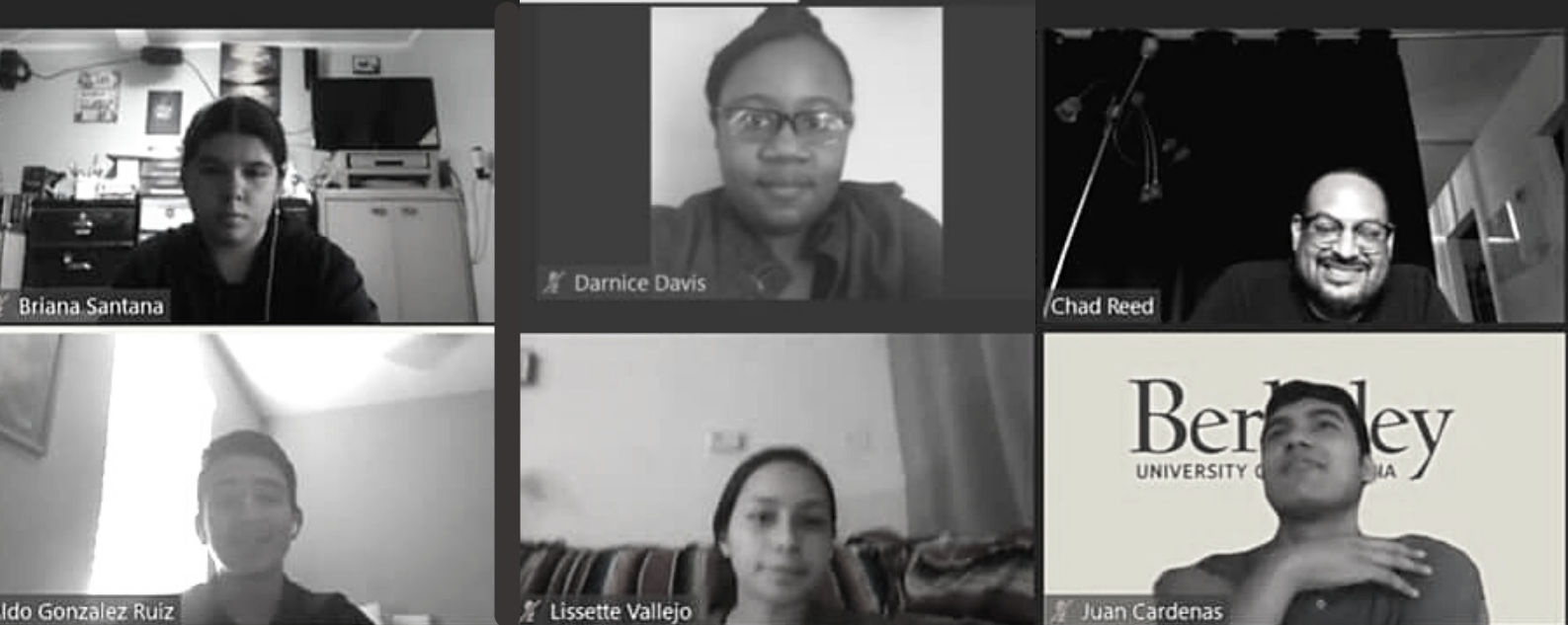
"A **game changer** at our school"

Dr. Ida Oberman

Community School for Creative Education
(top 5 schools for growth in African American math test scores in the Bay Area)



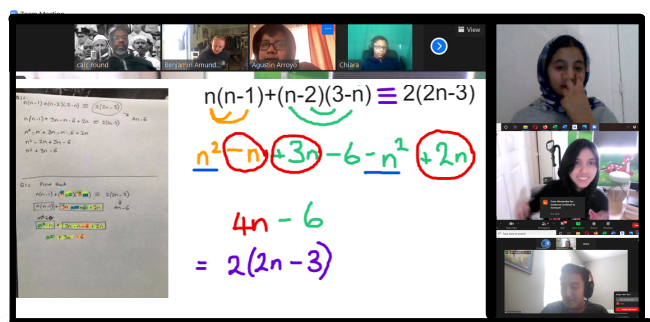
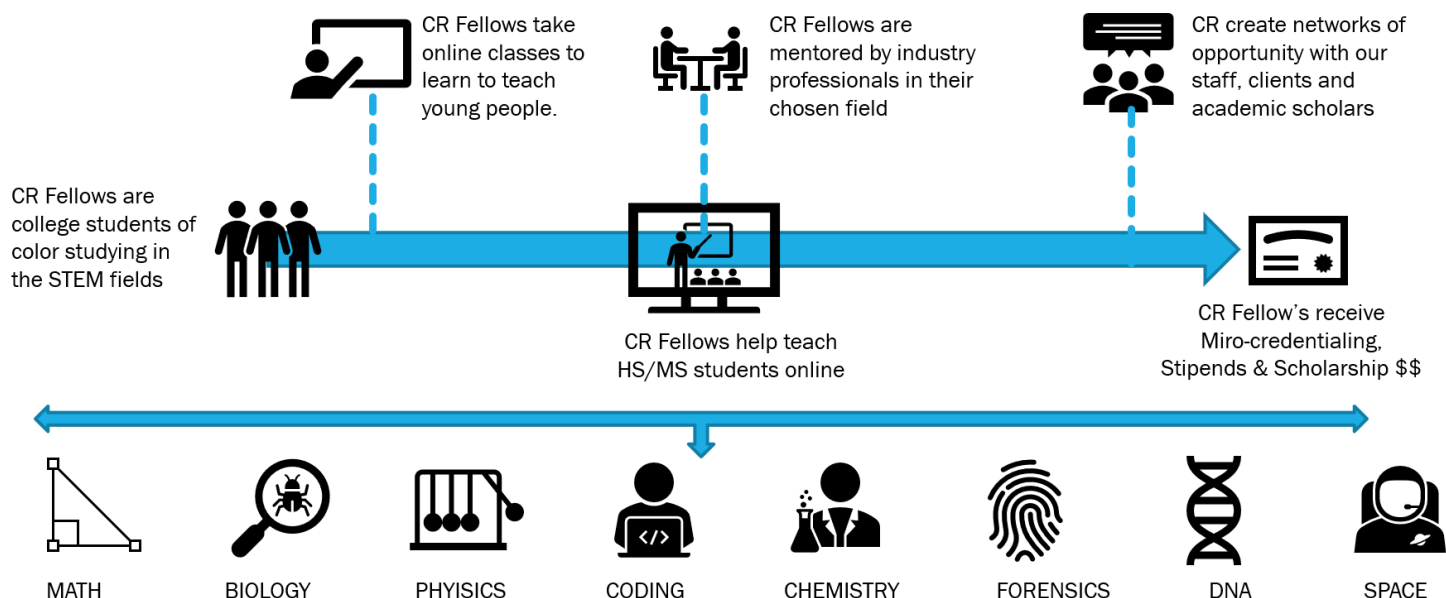
U.S. Rep. Mark DeSaulnier (D)
at Pullman Point Public Housing Development, Richmond, CA



COLLEGE PIPELINE

14 college students studying in a STEM major worked as CR Fellows teaching young people

OUR CR FELLOWSHIP PROGRAM SUPPORTS OUR KIDS & OUR CAPACITY BUILDING STRATEGY



"I learn as much from them as they learn from me"

- CR Fellow

Special Thanks to the Following



HELLMAN FOUNDATION



Olofsen Family Fund

