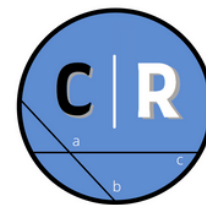




CALCULUS ROUNDTABLE IMPACT REPORT

2021/2022

WWW.CALCROUND.ORG
@CALCROUND



Our Vision

Imagine a world where every child was recognized for their precious humanity, where children learn to maximize their passion and turn that passion into academic excellence. Imagine a world where educational outcomes are not based on a family's zip code.

Imagine how much higher we could soar in math and the sciences if we realized and nurtured the ingenuity and imagination of ALL young people and supported them with a community, family, and academic framework of trust and consistency.

Imagine if teachers learned from the students as much as the students learned from the teachers. Imagine if the community and community leaders' experiences were embedded in the curriculum. Where the education of one family member is sustained for generations.

Education is a human right and a force for sustainable development and peace. It is the most powerful weapon to end the war, cure poverty, end hunger, and create social justice among people.

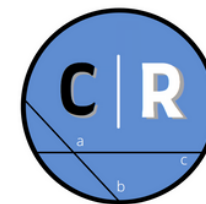
Our Mission:

To accelerate math and science learning for students; particularly for students of color.

Our Objective:

To give all students an understanding of the world through the lens of the scientific method. We aim to help students see that their future lives are not decided at random but through focused effort. We believe that one way to realize our vision is by creating lifelong learners of science and math, leading to sustainable career pathways for undeserved youth to ultimately find opportunities in STEM-related fields and, more importantly, have the confidence of accomplished.





WHERE WE ARE NOW

Building bridges is often considered the pinnacle of engineering.

For us at Calculus Roundtable, building bridges means connecting students of color with math and science skills.

We help kids identify their strengths by exploring their talents and interests from a young age. By improving skills, students get the knowledge and ability to grow those skills over time. We are improving student success rates in education and life. And we proved that last year.

Within a short time, we delivered virtual classrooms with engaging STEM curriculum to students at home-- where these students, over the year, showed tremendous growth (vs. significant losses in most schools) in the learning of academic standards. Thereby we gained the trust of recognized and nontraditional educational pipeline leaders like county offices of education, STEM industry leaders concerned about diversity, education policy groups, academic institutions of higher learning, and strategic NGOs and nonprofits.

Never before have we displayed such dynamism as an organization, working together as one team with one goalkeeping student learners focused on success.

The expertise of our college fellows-- themselves students of technology and engineering became indispensable when we needed to quickly develop new procedures and protocols to deliver educational content to students at home vs. in the classroom. We used different ways to communicate with our students like social media, "crowd-sourced" lesson planning, text messaging, interactive response assessments, 1:1 tutoring, to fully engage all students. We built a bridge from the old classroom to a "new normal" in education.

We delivered STEM courses, STEM kits, hands-on science activities for all ages, professional development, and education research across the country. We taught STEM courses in English and Spanish to over 900 students in schools, community centers, and homes in Wisconsin, Florida, and Texas but mostly in schools and districts across the Bay Area of California. We made good use of digital tools and technologies for our clients and our efficiency. We assimilated what it means to be a sustainable organization.

As a result, we successfully mastered a year characterized by a volatile American learning environment.

We have restructured the professional development we offer to align with the flexibility schools need.

We have increased our strategic partnerships with community organizations like the Hispanic Foundation of Silicon Valley and 100 Black Men of Silicon Valley with institutions of higher learning like National University and Texas A&M International University, creating an even stronger footprint in teacher credentialing.

In all these endeavors, trust is an essential element. Thank you to our customers, parents, partners, funders, and colleagues who have placed their trust in Calculus Roundtable.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jon Hill'.

IT'S AMAZING HOW IN ONE YEAR, THE
GLOBAL LANDSCAPE HAS TRANSFORMED



Spotlight on: Making change in our community



When the pandemic struck, Calculus Roundtable was well-positioned to take our technology 100% online - we started providing virtual classes in less than one week. We worked to reach students through their devices and on their schedules. We're always looking for ways that we, as educators, can support parents and children who may be struggling with anxiety, depression, trauma, fear, food insecurity, or homelessness as a result of the current crisis.

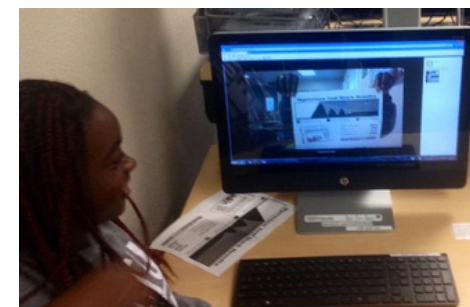


*Based on the 2020-21 California Department of Education
Free and Reduced Lunch data*

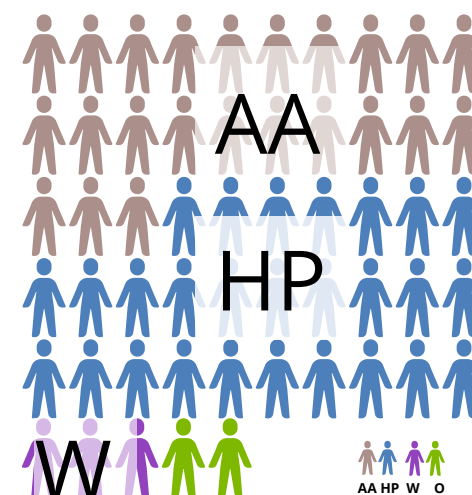


Our diversity in STEM Fellows plays a pivotal role in connecting with K-12 students at the individual level and helps improve their K-12 STEM education. Our fellows are from the fields of engineering, physics, biomedicine, environmental science, and software engineering. They have joined our organization to contribute their talents to serve over 2,000 Bay Area young people in elementary, middle, and high school along with teaching and mentoring incarcerated youth in Alameda and Contra Costa counties.

90%
are
African American
or Latinx



The STEM Broadcasting Network brings live and recorded classes to homes, classrooms and libraries in group or 1:1 settings. We provide a variety of topical subjects and experiences that interest and engage students of all levels.



Based on 2020-21 CR actual student enrollment

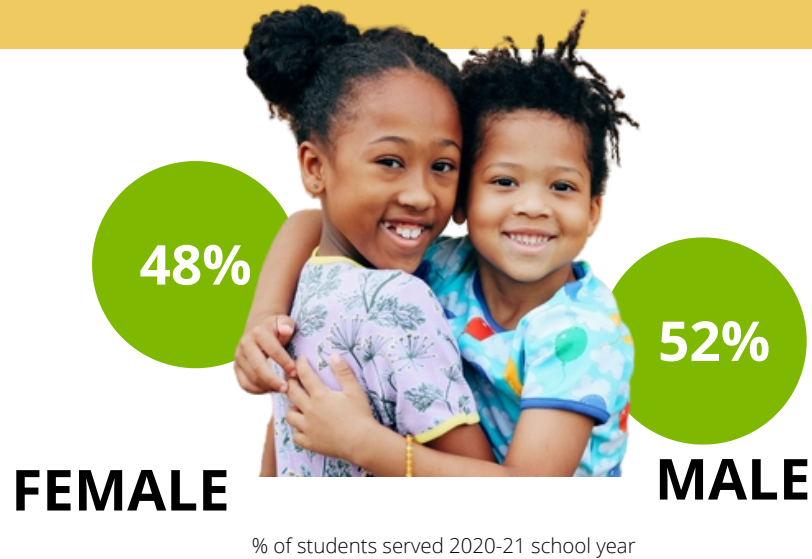
WHO WE SERVE

"I learned as much from the students as they learned from me."



4:1

STUDENT TO INSTRUCTOR RATIO

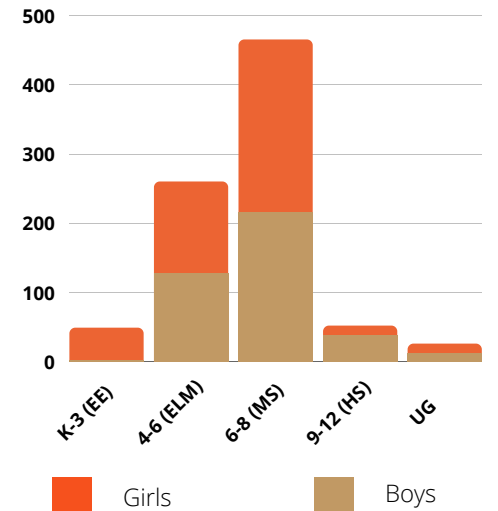
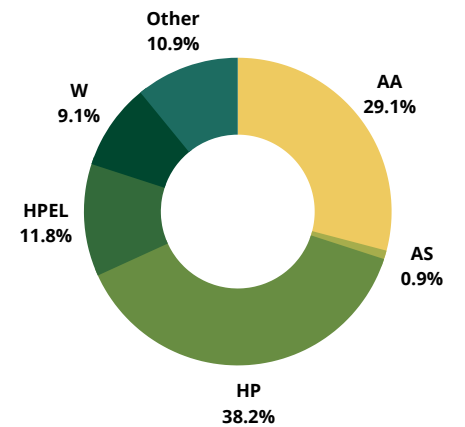


2 OF THE TOP 5

ELEMENTARY SCHOOLS
IN THE BAY AREA
WITH THE
HIGHEST GROWTH RATES IN MATH SCORES
ARE CALCULUS ROUNDTABLE SCHOOLS

CR is one of the most impactful STEM organizations for minority students and students from underserved populations. In 8 years we've worked with over 100 schools and over 20,000 students.

We serve a diverse mix of students at all levels of public education.

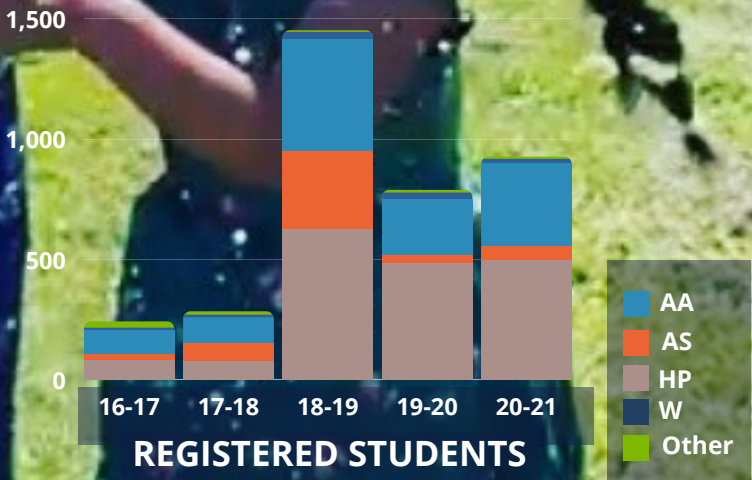


STUDENT DEMOGRAPHICS 2020-21

946
Students served

37%
Live in homes where English is not the primary language

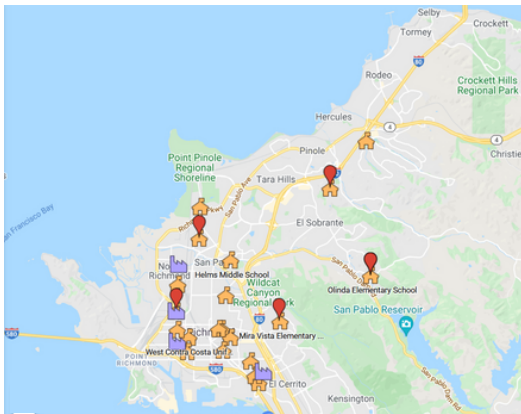
84%
Received free or reduced lunch



Our Footprint

In our 8 years, Calculus Roundtable has helped **20,000 public school students** to learn, comprehend, and enjoy math and science. We've worked with 47 schools and districts, 5 County Offices of Education, community centers, and libraries to deliver fun, engaging, and rigorous STEM activities.

PROJECTS IN CONTRA COASTA COUNTY



LOCATION OF CURRENT PROJECTS



OTHER PROJECTS

FLORIDA

- Ft. Lauderdale

TEXAS

- Houston Film Festival
- Laredo Independent

WISCONSIN

- Kenosha

923 HITS

Students logged in to the
STEM Broadcasting Network
between
January 10 to August 1, 2021

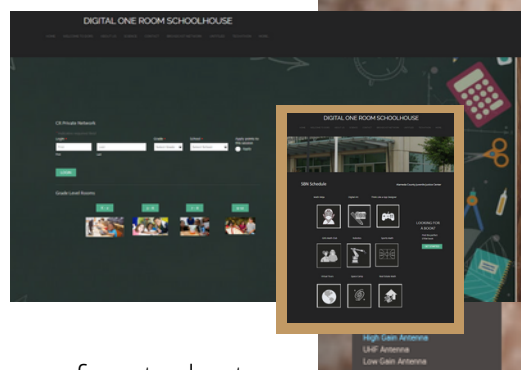
This year we introduced the STEM Broadcasting Network, allowing teachers to bring our live and pre-recorded programs into their classrooms.

Our STEM Partners:

Bristol Myers Squibb™



UBISOFT™



Secured login screens for students

THE STEM BROADCASTING NETWORK





DIVERSITY IN STEM FELLOWSHIP

In our 8 years Calculus Roundtable has **served over 20,000 public school students** learn comprehend and enjoy math and science. We've worked with 47 schools and districts, 5 County Offices of Education, community centers and libraries to deliver fun engaging and rigorous STEM activities.

Our fellowship program provides opportunities for post-secondary students of color that are majoring in science, technology, engineering, and math.

Our fellows are studying in some of America's most elite Colleges and Universities.

This year **14** college students began their two year fellowship.

Since the fellowship began in 2018 **40%** of our fellows have gone on to teach or find careers in the STEM industry

Conducted

152

ENGLISH LEARNER
CODING CLASSES

Tutored

4,680
INSTRUCTIONAL
HOURS

67%

OF OUR STEM FELLOWS
SPEAK SPANISH

Conducted

300

1:1 SESSIONS






12:1
Student to
STEM Mentor
Ratio

YEAR IN REVIEW




LAM Research volunteer, Albert Wright teaches students about semi-conductor chips and how they're viewed through a micronometer




Our online Coding Class is an early success.

July 2020



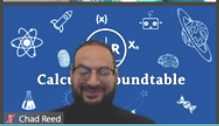
Contra Costa County Office of Ed hires us for math articulation.

Sept 2020



West Contra Costa Unified Purchases 14 DORS Lic. \$\$

Nov 2020




STEM Broadcasting Network starts in earnest.

Jan 2021



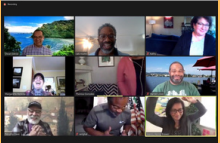
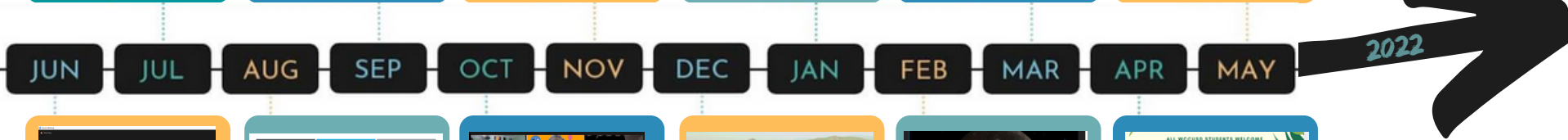
Top 50 Colleges in STEM for Latinx Students released.

Mar 2021




Schools begin in-class instruction.

May 2021



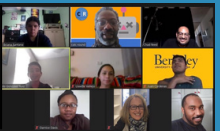
CR board annual retreat goes virtual.

June 2020



Bristol Meyers Squibb supports our college pipeline.

Aug 2020




Diversity in STEM Fellows begins.

Oct 2020



First Central Valley program in Lindsay, CA.

Dec 2020



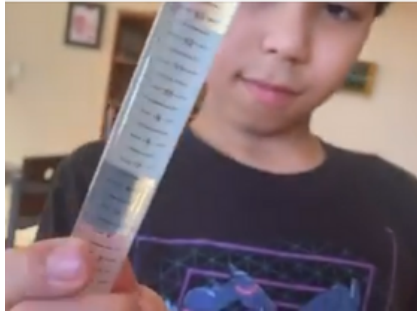
International Black Youth Techathon.

Feb 2021



Virtual Springbreak takes kids around the world.

Apr 2021



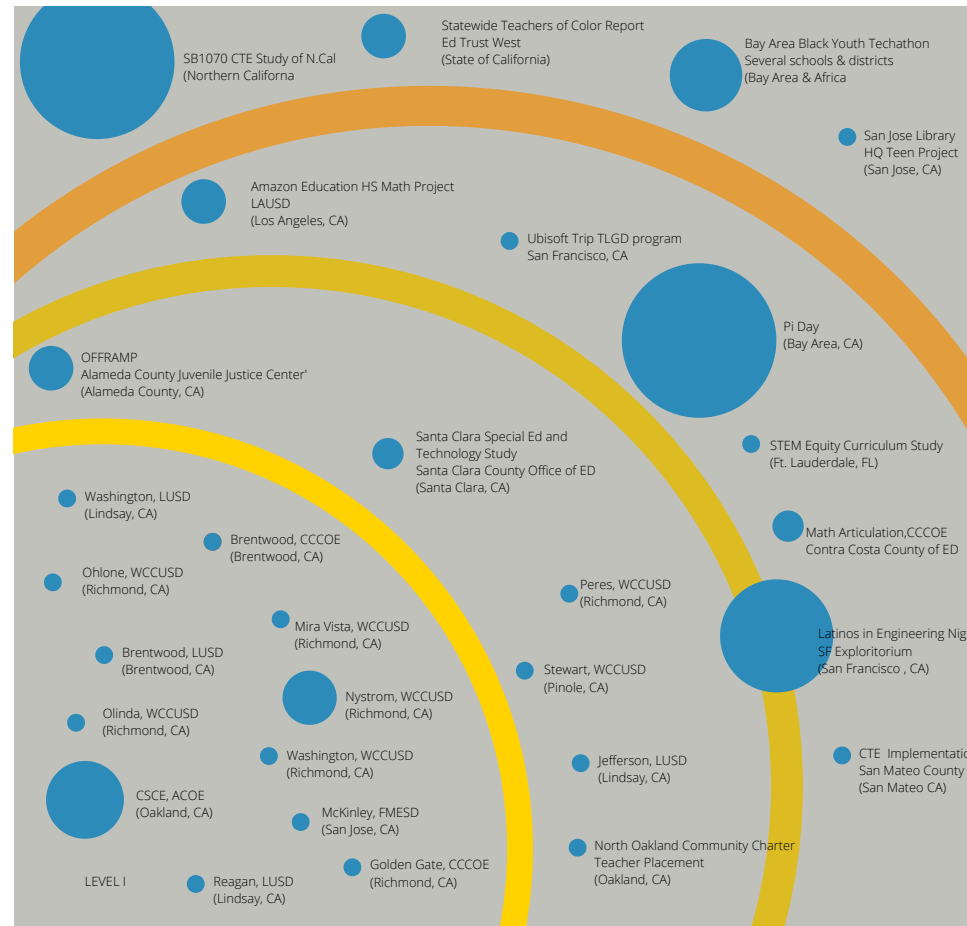
OUR IMPACT

Tier 4

Tier 3

Tier 2

Tier 1



We define positive impact as “turning the curve” (or beating the data baseline) on a community indicator of wellbeing or a program performance metric that answers “are our customers/clients better off as a result of our efforts?”

This is why impact measurement is so important. It helps us see the effects of our strategies to reinforce what is working and change (or eliminate) what is not.

With the broad range of services we provide, it's essential to know who is impacted by our efforts and how they are impacted. Here is how we quantify our analysis; Level 1 is a direct impact on individual students; Level 2 is a step removed with professional development to teachers on how to teach learners; Level 3 are usually consultancies, cottage engagement that when implemented will impact a large number of students and possibly multiple school districts; Level 4 affect entire systems or whole states.

Impact reporting is how we measure if our mission is serving individuals and communities.

1. The program-level impact is the impact that individual services have on the people who directly participate in them.
2. Population-level (or community-level) impact is the impact that many different partners, working in collaboration, have on a specific population (community, town, state. etc.)



RESULTS OVER TIME

One School Results

After five years of test scores with over 75% of African-Americans scoring far below proficient Calculus Roundtable was asked to come in and work specifically with African-American students at Nystrom Elementary, in Richmond.

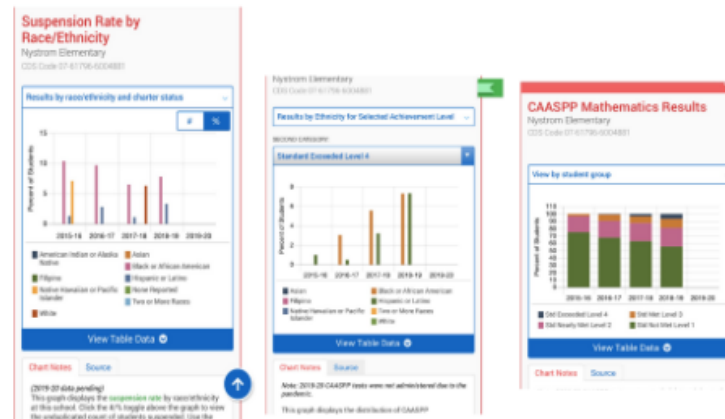
We installed fun but rigorous math activities the students loved

Suspension rates went down

Afterschool participation went up

In class test scores began to rise

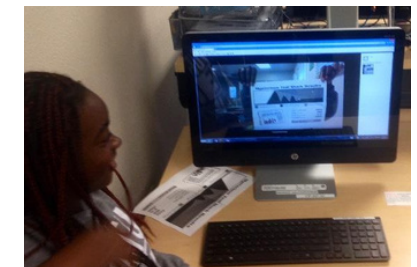
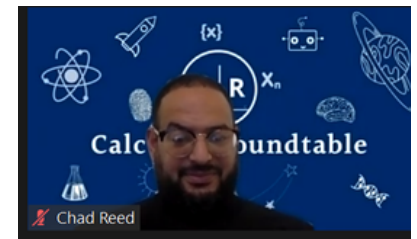
At the county level, the results for African-Americans in math were very low. At the district level, the results were even lower. But at the school level where Calculus Roundtable has been implemented **growth was double** the county rate and was **quadruple the district rate of growth**.



First the suspension rates went down

Then math scores for African-American students went up

Then overall math scores increased for all students



Afterschool Coordinator, Chad Reed with Nystrom student conducting rollercoaster engineering exercise

| View Table Data | | | | | | View Table Data | | | | | | View Table Data | | | | | |
|---|---------|---------|---------|---------|---------|---|---------|---------|---------|---------|---------|---|----------|----------|----------|----------|---------|
| CAASPP Mathematics Results by Race/Ethnicity for Selected Achievement Level | | | | | | CAASPP Mathematics Results by Race/Ethnicity for Selected Achievement Level | | | | | | CAASPP Mathematics Results by Race/Ethnicity for Selected Achievement Level | | | | | |
| | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
| American Indian or Alaska Native | 11 % | 11.99 % | 16.31 % | 18.88 % | N/A | American Indian or Alaska Native | 13 % | 8.82 % | 6.45 % | 18.92 % | N/A | American Indian or Alaska Native | Redacted | Redacted | Redacted | Redacted | N/A |
| Black or African American | 5 % | 4.95 % | 5.38 % | 5.68 % | N/A | Black or African American | 3 % | 3.15 % | 2.9 % | 2.56 % | N/A | Black or African American | 8 % | 6.25 % | 7.69 % | 11.54 % | N/A |
| Hispanic or Latino | 8 % | 8.26 % | 8.91 % | 9.4 % | N/A | Hispanic or Latino | 4 % | 3.88 % | 3.7 % | 4.17 % | N/A | Hispanic or Latino | 2 % | 1.61 % | 1.33 % | 2.63 % | N/A |
| Native Hawaiian or Pacific Islander | 8 % | 7.7 % | 7.68 % | 7.4 % | N/A | Native Hawaiian or Pacific Islander | 10 % | 7.84 % | 1.94 % | 5.05 % | N/A | Native Hawaiian or Pacific Islander | Redacted | N/A | N/A | N/A | N/A |
| Two or More Races | 33 % | 35.08 % | 36.24 % | 36.47 % | N/A | Two or More Races | 17 % | 14.93 % | 10.00 % | 16.05 % | N/A | Two or More Races | Redacted | N/A | N/A | N/A | N/A |

11.54%



STUDENT ENROLLMENT

| Program | DORS | DPOE | Fellowship | SBN | Research | PD |
|-------------------------|--------------------|------------------------------------|--|-----------------|---------------------------------------|---------------------------------------|
| Program description | K6 STEM activities | MS HS college and career readiness | College students of color in STEM fields | Online platform | Systems Analysis & Education Research | Professional Development for teachers |
| Student enrollment 2021 | 543 | 313 | 16 | 923* | N/A | 25 |
| Mentor involvement 2021 | 22 | 37 | 8 | -- | -- | -- |

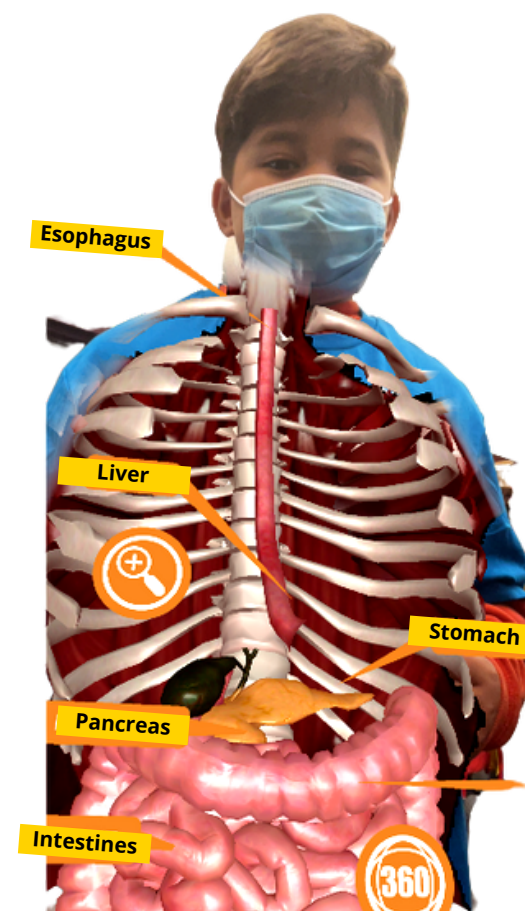
PROGRAM OFFERINGS FOR THE YEARS 2019-2021

| | | 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 * |

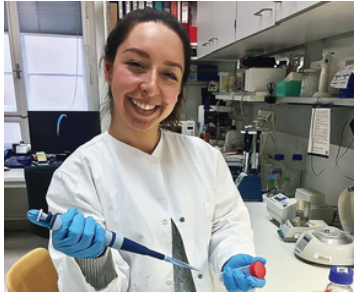
* new programs

"I wished I could go back to school myself"

Principal Daniel Dennedy Frank
Franklin-McKinley Unified

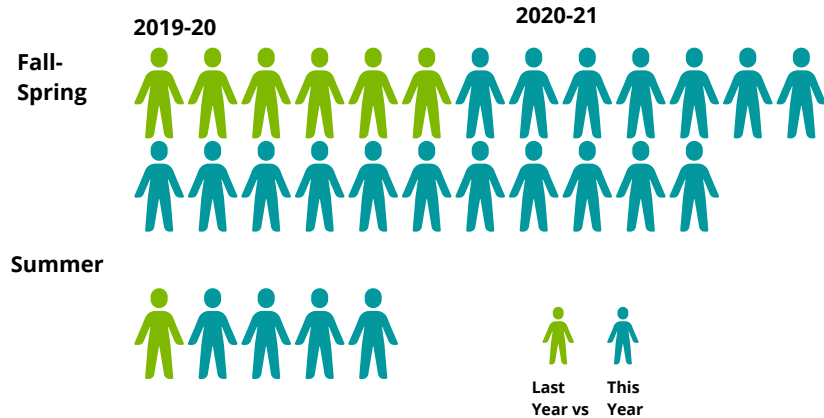


Summer school student wearing a special t-shirt that turns 3D with an app, revealing the inner-body

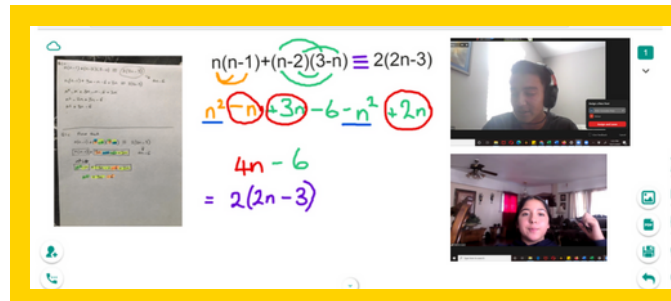


OUR GROWTH

Increase in the number of students over last year



"I never knew science and math could be so much fun"



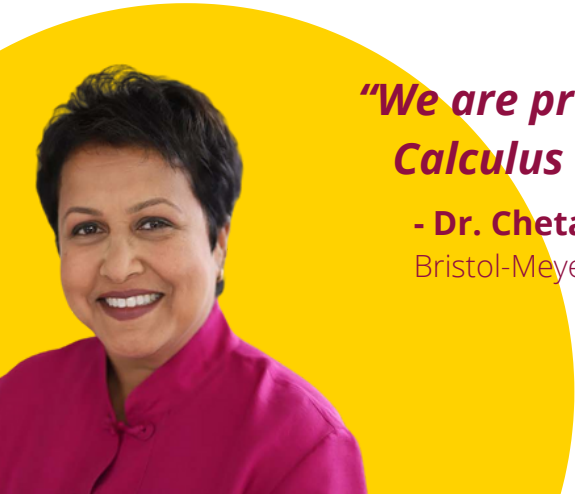
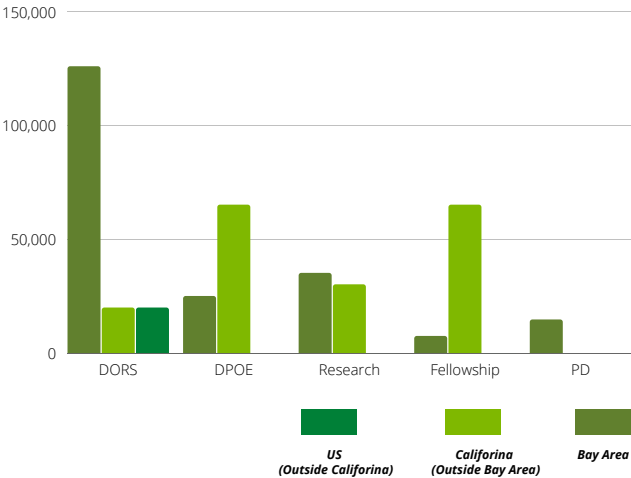
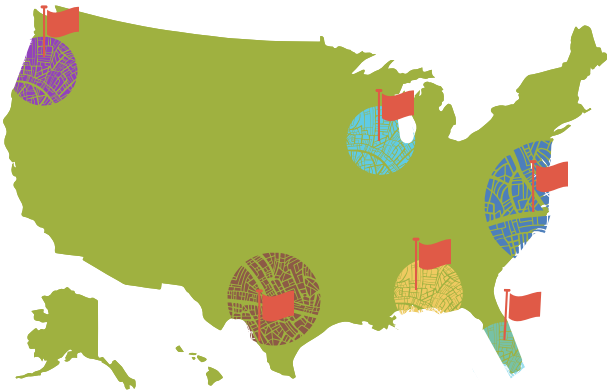
Our online engaging programming gives students confidence in learning math and science.



THE FUTURE

Expansion Plan from the West to the East

Although our concentration is in California with California students, we have begun to expand our research and impact across the country.



***“We are proud to support
Calculus Roundtable”***

- Dr. Chetana Rao
Bristol-Meyers Squibb

Expansion Locations

- Washington State
- Texas
- Wisconsin
- Georgia
- Florida
- Maryland & DC

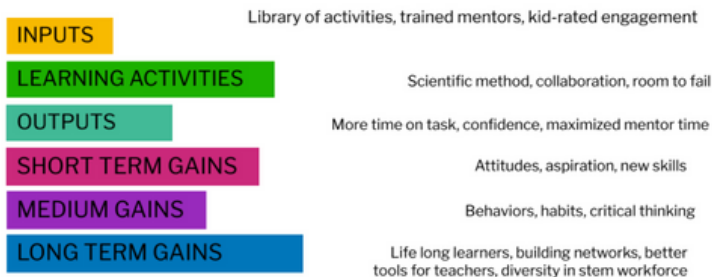


Our Theory of Change

We use a theory of change approach to beginning conducting and evaluating a program or initiative. This process sharpens the planning and implementation of an initiative. Used during the design phase, it increases the likelihood that stakeholders will have clearly specified the initiative's intended outcomes, the activities that need to be implemented in order to achieve those outcomes and the contextual factors that are likely to influence them. These are the building blocks of accomplishing the audacious goals set forth in our Mission and vision.

With a theory of change in hand, the measurement and data collection elements of the evaluation process can be facilitated.

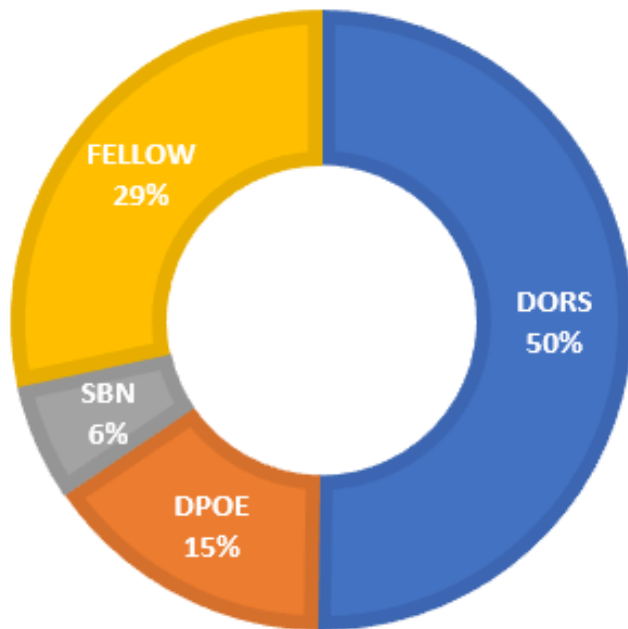
Our theory of change asks that we be as clear as possible about not only the ultimate outcomes and impacts we hope to achieve but also the avenues through which we expect to achieve them.



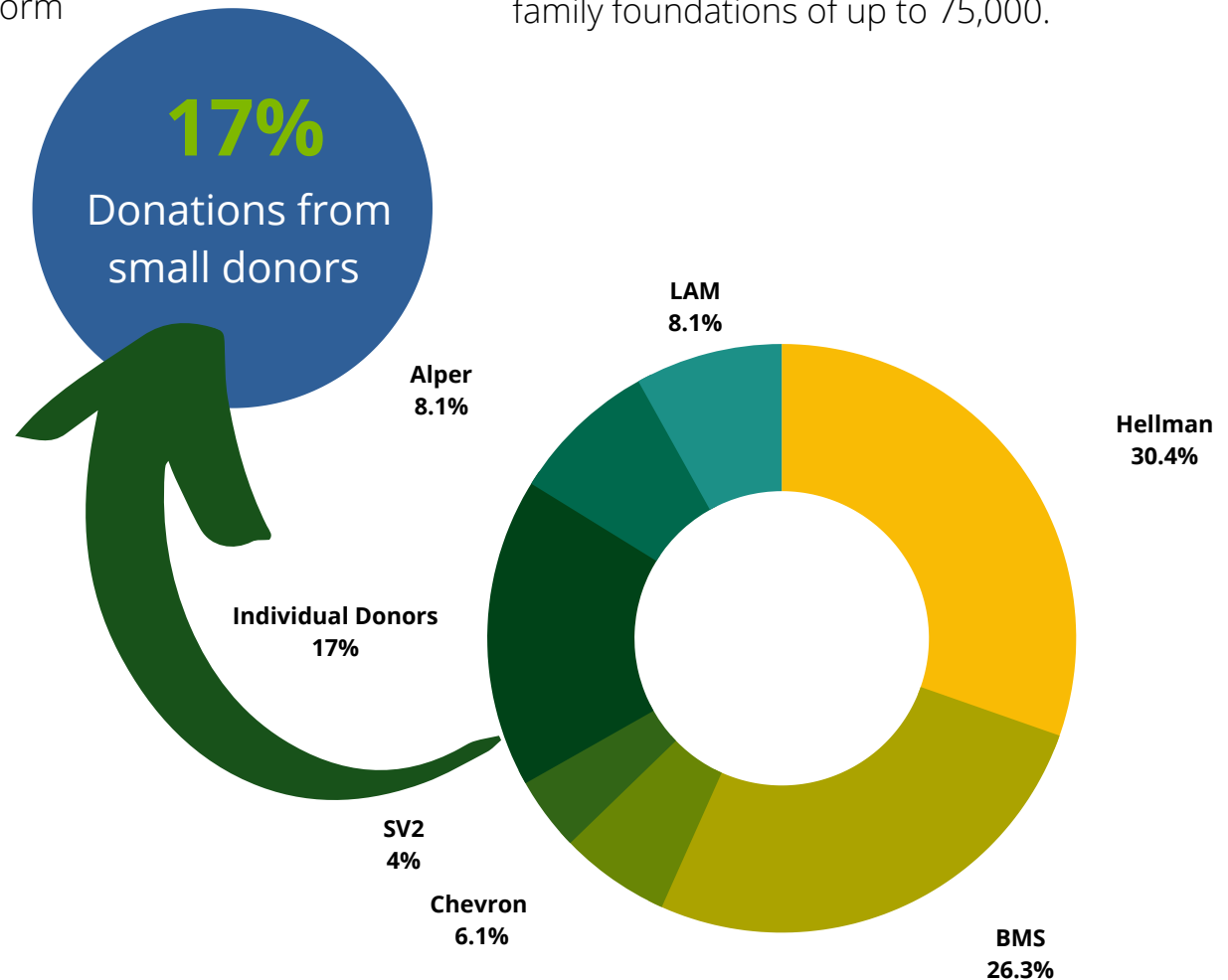
Funding Strategy

We seek philanthropic contributions to pay for our major initiatives. DORS at the elementary school level. DPOE at the college and career readiness level. Our fellowship program is at the undergrad college level. And our stem broadcasting network is the platform we use to link them all together.

We have a diverse group of funders from individual donors of \$25 to corporate and family foundations of up to 75,000.

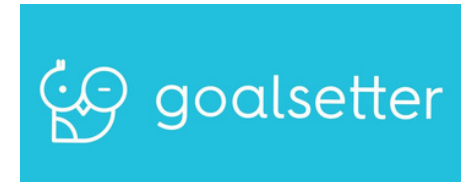


Percentage by Program



Total Donors & Contributors

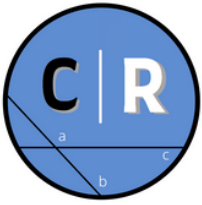
Our Partners



**"Bringing exciting programs
to our Latinx community"**
-Ron Gonzalez

*Former Mayor of San Jose
Director of the Hispanic Foundation of Silicon Valley*





Our Contributors

Corporate

Chevron
Bristol-Meyer Squibb
Lam Research
Port of Oakland

Governor - 50K (2)

Louise Hollis
Charles Parks

Director - 5K (1)

Zaretta Hammond



Students in Richmond, CA
conducting late-stage game
testing with Ubisoft

Foundation

Apler Family Foundation
Hellman Foundation
Olofsen Family Foundation
SV2 Foundation

Contributor-500 (21)

Rose Abesamis-Bell
Eva Baker
Hattie Carwell
Timothy Dave
Katherine Day
David Duprey
Tiffany Gilbert Thomas
Theresa Gonzales-Lobaco
Tim Gray
Wendy Horng Brawer
Amy Kirkman
Harold Lowe
Derek Mitchell
Lori Pardi
Ken Pergrem
Nancy Schwalen
Rachael Van Schoik
Katherine Welch
Beth Wright
Nettie Wright-Sandoval
Robin Yee-Wilson

Supporter-100 (56)

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Kevin Michelini
Stacy Peterson Goodall
Ali Poursamadi
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Evelyn Sanchez
Maggie Schumacher
Siu Ya Scott
Troy Scott

Kamal Shah
Debra Sitton Kemmer
Ann Smith
Lee Stockwell

In-Kind

A Priori
Bio-Rad
CET Furniture
Google Foundation
Marin Cancer Center
Tech-Exchange
Ubisoft

Our Board of Directors

The Executive Committee



T. LYNN SMITH

*Aspire Public Schools
Incoming Board President*

Ms. Smith began her professional teaching career in Baltimore, MD as a high school, middle school, and debate coach teacher. Today, 'Ms.T' (as she's referred to by her students) is an administrator at Leadership Academy in East Palo Alto, CA. Ms. Smith received a Bachelor of Arts degree in Elementary Education from the prestigious teaching institution, Towson University, in Towson, Maryland.



RIJU KRISHNA

*Santa Clara County Office of Education
Acting Board Secretary*

Riju Krishna has served many roles for the Santa Clara County Office of Education, serving Silicon Valley and the San Jose area of California. In Ms. Krishna's 19 year career with Santa Clara County, she has served as a principal, coordinator and teacher of students with severe disabilities. Riju holds a Master's in Mathematics from Delhi University and teaching accreditation from National University.



HAROLD LOWE

*Community Organizer
Treasurer*

Harold is the CEO of Rising Oak, a wealth management firm. Mr. Lowe has extensive experience in educational publishing including roles as Sales Manager for Prentice Hall Publishing. Mr. Lowe has 25 years of experience in sales, marketing, financial analysis, and strategic business planning, educational publishing, technology, and the financial services industries. Harold is a scout leader, a lifelong Rotarian and serves on a number of community boards. Mr. Lowe received an MBA from the University of California, Berkeley.



WENDY HORNG-BRAWER

*Corporate Executive
Exiting Board President*

Wendy has over 25 years of corporate, government, and nonprofit experience. Over the years, she has had the opportunity to blend her learning of social justice, educational equity, and community development theory with practical knowledge and experience in her work with local NGOs, school districts, government agencies, and businesses in a way that has enhanced her experiential knowledge of communities. Ms. Horng-Brawer holds a BA in language from Michigan and a Masters in Public Administration from Columbia University.



GILES BAKER

Dolby Laboratories

Giles is the Senior Vice President of Consumer Entertainment at Dolby Laboratories, Inc. Mr. Baker leads Dolby's engagement with the broadcast industry, delivering technology and innovations. Mr. Baker leads a global team that builds complete industry solutions - from content production to distribution and playback. Previously Mr. Baker served in a business leadership role at Adobe Systems, where he lead the company's professional video software division. Giles holds an MBA from the Wharton School at University of Pennsylvania.



MICHELLE BERNARD

MSNBC

Michelle is an author, columnist and independent political analyst for television's MSNBC. Ms. Bernard is also president and CEO of the Bernard Center for Women, Politics & Public Policy, a member of the Board of Trustees of Hampton University, and a member of the Advisory Board of the American Board for Certification of Teacher Excellence. Ms. Bernard graduated from Howard University with a B.A. in philosophy and a minor in political science. She has a Juris Doctor degree from Georgetown University Law Center.



DR. LYNN COLVIN

Former Assistant Superintendent Inglewood Unified

Dr. Colvin served both as Interim and Assistant Superintendent in charge of Curriculum for the Inglewood Unified School District in Inglewood, CA. As a consultant, Lynn works with high poverty and English language learner schools and districts throughout Southern California. Dr. Colvin received her Ed.D. in Organizational Leadership from the University of La Verne.



DR. JEREMY FRANK

NASA

Dr. Jeremy Frank is Group Lead of the Planning and Scheduling Group at NASA's Ames Research Center, in Mountain View California. Dr. Frank works in the Autonomous Systems and Robotics division, building advanced prototypes for manned spaceflight mission operations, in preparation for the next generation of lunar exploration. Jeremy earned his PhD in Computer Science from U.C. Davis.



MICHELLE GRANT-GROVES

Educator

Michelle Grant-Groves has been a teacher, site and then systems administrator, coach, and coaching coordinator. Ms. Grant-Groves is the previous o-8 Coordinating Officer at Oakland USD and Equity and Instruction Program Coordinator at San Francisco USD Early Education Department. She is a seasoned facilitator and presenter and has a passion for designing professional learning programs for teachers.

Michelle has a BA in Child Development, Research and Policy, from San Francisco State University and Master's degree in P-3 Early Education from Mills College.



DR. KALPANA JAIN

Professor of Avionics & Electronics

Dr. Kalpana Jain is Vice President of Electronic Instrumentation & Technology (EIT), a leader in the aviation & aerospace engineering industry. Dr. Jain develops airport geographical systems, creates security testing & evaluation programs for Airports Authority Training programs for regulatory agencies.

Previousl, Kalpana was a professor of engineering at several major universities. Dr. Jain received her Ph.D. in Optoelectronic Materials from Delhi University.



MARGARETA HEREDIA ED.D

San Rafael City Schools

Dr. Margareta Heredia currently serves as Assistant Principal at San Rafael High School. Dr. Heredia serves over 1400 students in Marin County. She oversees and evaluates critical departments within the school, including Curriculum and Instruction, Special Education, S Dr. Heredia received both her Master's and Doctor of Education - from Mills College in Oakland, California.



Non-Profit Executive

JOEL MAKEY

Joel Mackey currently serves as a mental health counseling therapist with Bay Area Community Resources. Joel is also a practicing attorney with a practice focused on mediation, estate planning, and nonprofit law. Joel's professional endeavors extend to teaching at California State University East Bay and San Francisco State University in public administration and nonprofit management.