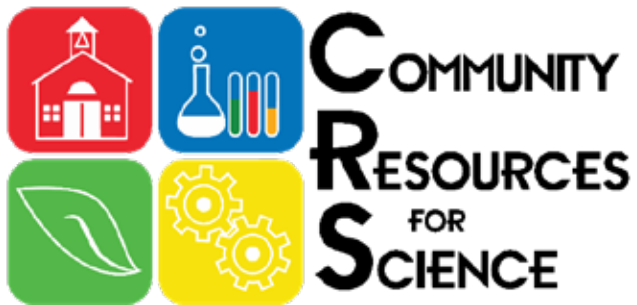




2021 ANNUAL REPORT



Community Resources for Science

*Empowering teachers and scientists to engage &
inspire young learners*

1611 San Pablo Ave., Suite 10 B
Berkeley, CA 94702
(510) 527-5212

For more information, email us at
community@crscience.org

www.crscience.org

EIN: 94-3262587



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ABOUT COMMUNITY RESOURCES FOR SCIENCE

OUR MISSION

Community Resources for Science empowers teachers and STEM professionals serving schools in historically marginalized communities to activate TK-8 students' curiosity about the world, foster critical thinking, and inspire children to imagine future career pathways.

We envision a community of educators, scientists, families and partners working together to build school cultures that equip all children to explore the world around them and build the skills needed to become innovators, problem solvers, environmental stewards, life-long learners and leaders.

CRS leads a dynamic network, fostering relationships and collaborations that leverage expertise and resources to transform science teaching and learning toward greater equity, opportunity, and success for all students.

Celebrating 25 Years of Impact

Since 1997, Community Resources for Science has spurred transformation of science teaching and learning in East Bay schools through partnership, programs, and support. As a result:

- Elementary and middle school students, particularly in underserved communities, have more excellent hands-on science learning experiences within school cultures that value STEM teaching and learning.
- Students become engaged in exploration of the natural and designed world, making meaning, and learning about STEM fields and careers.
- Teachers gain confidence, skills, enthusiasm, and tools they need to strengthen science teaching.
- STEM professionals develop their skills communicating about science and their understanding of the importance of early science education, thus, increasing scientific literacy in the community, and serving as inspiring role models
- Organizations involved with science and education work together and become stronger partners for teachers and schools.



Mentors returned for in-person 7th grade support



Oakland Port, Airport, and FAA employees led virtual Aviation Day lessons for hundreds of 5th graders

Early science is a game changer for students because it captures their hearts and inspires their minds to grow beyond the walls of the classroom!

—Principal, San Leandro School District

MESSAGE FROM CRS LEADERSHIP

Keep joy front and center.

—100kin10, *Reigniting Joyful, Rigorous, and Equitable Foundational Math Learning*, (May 2021)

Teaching is about meeting the moment, and 2021 was defined by a seemingly never-ending series of new challenge moments to meet.

Throughout the year, Community Resources for Science worked to be as nimble as the teachers we serve. While keeping focused on our North Star of ensuring all children have access to science learning opportunities and inspirational role models in school as a matter of equity, we adapted our programs, services and supports in real time to meet teachers' and schools' rapidly-changing needs.

In our 25 year history, no year has required greater responsiveness and creative flexibility than 2021. Fortunately, that adaptation is baked into the very DNA of CRS. From full remote learning in January, schools moved throughout the year back to limited in-person learning, hybrid learning, and a Fall reopening with hope but also with many new and evolving pandemic challenges.

Through it all, CRS has maintained robust services and supports for teachers, presented impactful scientist-led outreach for 20,000+ K-8 students,

Students are like sponges in the way they absorb information about the world. They are fascinated to learn how gravity and motion work, how energy is conserved and transferred, and how humans have caused climate change. CRS's support, especially matching university experts with classrooms, has been invaluable in inspiring future scientists. Thank you CRS for all the resources & support you have provided during the pandemic and throughout the years.

—Berkeley 5th Grade Teacher

and provided leadership for a network of partners leveraging our collective resources and expertise to strengthen science teaching and learning.

Bringing inspiration, fostering a sense of belonging, and harnessing curiosity for exploration and discovery have been the hallmarks of our work since 1997. As this Report highlights, in 2021, CRS leaned into these strengths to reach new heights.

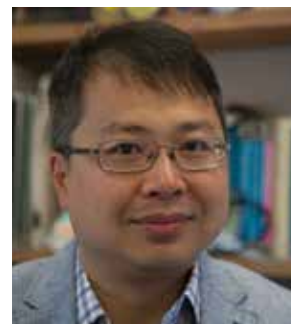
- CRS celebrated a major milestone of reaching 200,000 students through our scientist-in-the-classroom outreach programs.
- We engaged hundreds of teachers in professional development, including a robust focus on building climate and environmental literacy.
- We collaborated with partners for a wide range of teacher-focused programs and resources to meet identified needs.
- And, we brought even more inspirational, joyful moments of science and engineering learning to life – in person and over Zoom – for thousands of young learners.

The children entering Kindergarten this year will graduate from high school in 2034. They may not all become rocket scientists or computer engineers, but they need to become innovators, leaders, environmental stewards, and scientifically literate members of the community.



Teresa Barnett

Teresa Barnett
Executive Director



Alan Poon

Alan Poon
Board President

ADDRESSING CRITICAL CHALLENGES

National and state leaders issue urgent call to action.

100%

of K-12 students need more science learning opportunities according to recent reports from National Academies of Science and Engineering, and the California Association of Science Educators. Science literacy for all students is an urgent, national priority.



Science is too often missing from elementary schools.

85%

of CRS member teachers expressed concern that science teaching at their schools has declined or disappeared during the pandemic. Many students are now receiving little or no hands-on science instruction.



STEM exposure in early grades is critical.

OVER

80%

of scientists and engineers say their interest was sparked by learning experiences by age 12 (K-6 years!). The absence of science in school perpetuates inequity and contributes to a widening opportunity gap for underrepresented students.



Teachers need training, partners, and support to teach science well.

ONLY

25%

of 4th graders had teachers who say they teach science inquiry. 85% of teachers want more science training, including opportunities to learn from STEM professionals.

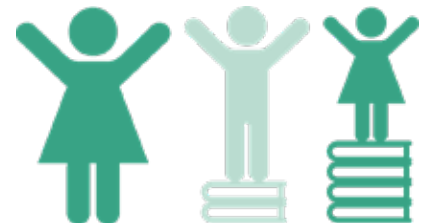


Students of color are missing key learning experiences.

FEWER THAN

20%

of students of color are receiving the robust science education that prepares them for success on meeting science standards. Statewide, 30% of students scored proficient or above in science; only 14% of African American and 18% of Latino students did.



TRANSFORMING SCIENCE TEACHING & LEARNING

2021 PROGRAM SERVICE HIGHLIGHTS

2,000+
K-8 TEACHERS
SUPPORTED

20,000 +
STUDENTS REACHED
WITH
OUTREACH PROGRAMS

750+
SCIENTISTS &
ENGINEERS
ENGAGED



75%
OF SCHOOLS
SERVED ARE
TITLE 1*

MORE SCIENCE
LEARNING FOR
45,000
STUDENTS



*An indicator of serving a high percentage of low-income students

In Spring 2021, CRS teacher members indicated CRS programs and support had these significant impact on their students' learning:

Science is an essential tool for solving the greatest problems of our time and understanding the world around us...Yet, science education is not the national priority it needs to be, and states and local communities are not yet delivering high quality, rigorous learning experiences in equal measure to all students from elementary school through higher education.

— National Academy of Sciences, Call to Action for Science Education: Building Opportunity for the Future

98%
learned new science
concepts

96%
gained new
interest in science

95%
communicated
ideas & observations
with others

95%
connected learning
to life experiences

INSPIRING STUDENTS



CELEBRATING 200,000 SEEDS OF INSPIRATION

2021 brought a major milestone for CRS: over 200,000 students have participated in authentic science and engineering learning experiences in our outreach programs. We celebrated the teachers, scientists, and community partners who have helped us plant the seeds of inspiration, engaging the students in creative, hands-on scientific lessons to connect them with science in their daily lives.



To celebrate the stories of these leaders in science engineering during a challenging year, we invited many of our teachers and volunteers to share with us the moments of curiosity and wonder that led them into STEM education. All of them noted a pivotal moment of inspiration growing up that continues to 'sprout' their interest in engaging students in science and create an environment of exploration and discovery, whether virtual or in-person, so that every student can experience the joy in an "Aha!" moment when learning about the science phenomena around them.

We look forward to working with them to plant the next 200,000 seeds of inspiration!

CRS has provided kids in our district a chance to touch and hold and see things, whether it's a brain, a seed, or a cart on a ramp. I really appreciate CRS for really bringing science and examples to our kids.

I think the moment that kids see themselves as people that ask questions and think creatively is immensely important...I think it's particularly important to show students who haven't had that representation that they are also awesome scientists.

— District Science Coach

— BASIS Volunteer

EMPOWERING TEACHERS

CRS is such an amazing central source of information and support for science teachers in our district. CRS is so responsive to teachers' needs...and as a result they have such a big impact on science education in the Bay Area.

— District Science Coach

ONE SIZE DOES NOT FIT ALL

Teachers are not a monolith, and programs to support their professional work and growth must be flexible and personalized to meet the unique needs of individual teachers, schools and districts.

Our innovative, effective and award-winning work to empower educators to strengthen science teaching and learning for their students embraces this approach of customization paired with wrap-around, long term partnership. We 'push out' timely information that our teachers call a 'regular drumbeat, reminding us to teach science – and providing the support we need to do it well.'

Together our scientist-in-the classroom programs, on-call support, and wide array of professional learning workshops ensure teachers have opportunities themselves to be curious and explore. As they rekindle their own excitement about the process of discovery, they become even more determined to provide their young learners with authentic science learning too.

We recognized and celebrated teachers going 'above and beyond' to ensure their students met STEM role models, explored the world around them, and discovered the science in their daily lives.

Thank you for being our lifeline during this extended closure. While we can't welcome classes into our building right now, we are working hard to share amazing science activities, lessons, videos, and live programs with teachers and families. CRS is an effective partner in making sure teachers know what we have to offer, even though it continues to change frequently!

In 2021, as educators across the country struggled with pandemic impacts, CRS made sure teachers in our East Bay network had up-to-date information about everything from grants and virtual field trips, science center offerings, and where to find lessons and materials. We maintained carefully curated webpages of the most sought after information, and offered a range of customized professional learning opportunities.

BUILDING CLIMATE LITERACY

Teachers were particularly eager for workshops focused on building their students' climate and environmental literacy, focusing on the intersecting challenges of the pandemic, social injustices, and our growing climate crisis.

How to impart hope and solution-focused learning for their students remains a key concern, and CRS led a coalition of partners sharing resources that teachers can put to immediate use – from gardening to clean air, from energy conservation to water quality, and much more.

From citizen-science to student action projects, teachers are discovering new ways to engage students in understanding the environment and improving their communities.

MOBILIZING SCIENCE PROFESSIONALS

Scientists and engineers are powerful partners for teachers and inspirational role models for children. Our two main outreach programs, BASIS (Bay Area Scientists Inspiring Students) and Be a Scientist middle school mentoring, prepare scientists and other STEM professionals to be effective in communicating about their own research and career pathways, dispelling stereotypes, and in leading students to experience “ah-ha moments” that have lasting impact.

During "normal" times, bringing amazing, talented scientists right into the classroom to interact with kids and laugh together at corny jokes and share stories about pets and playing soccer, has a lasting impact. Beyond the learning that happens during the carefully developed lessons exploring the phenomena, kids make connections to their daily lives -- from weather and bugs to electricity and space, and so much more.

But during this pandemic, we have seen the impact of those human connections magnified to even greater impact. Students and teachers value BASIS and Be a Scientist interactions even more.

In 2021, CRS mobilized hundreds of UC Berkeley graduate students and professionals from local STEM industry. More than 800 diverse, caring and thoughtful STEM role models shared their love of learning and problem-solving, reaching more than 20,000 K-8 students.

Over the course of the year, lessons and mentoring took place in many formats, from fully virtual, to hybrid, to in person. Many of these scientists also engaged with teachers during our professional development workshops, sharing information about cutting edge research and helping teachers map out effective strategies for covering complex topics.

From the beginning students were excited to interact with our scientist. Because she spoke Spanish she connected immediately with students. She was also friendly and prepared her lessons with plenty of images, which included animals and cool places. Because of our scientist, I believe more students, including girls, are interested in science as a career choice.

—Oakland Teacher



Student explores garden using science notebook.



You've planted seeds of inspiration that may someday blossom into future scientists, engineers, environmental stewards, scientifically literate citizens, curious tinkerers, & creative thinkers who will all contribute to our shared community.

— 3rd Grade Teacher

Connecting: Scientists and Students

Fostering Inclusion and Belonging

The CRS mentors volunteer their time because they are motivated to provide the message to children that “you belong in STEM.” They want to foster a sense of inclusion and encourage children to imagine how their own interests might lead them to fascinating future careers.

To deepen engagement during distance and hybrid learning, CRS also placed dozens of scientists as Science Ambassadors, making multiple visits to the same class and co-developing presentations with teachers to integrate across lessons.

Representation in Science Stories

Many BASIS teams developed new lessons incorporating storybooks about notable scientists of color, including astronauts, botanists, geologists and many other fields that excite children. CRS worked with funders to distribute thousands of these books to children and schools, to diversify the face and story of science students have to choose from when selecting ‘books about scientists’.

Iterating Our Science Supply Chain

Science experiments and engineering challenges require lots of hands-on explorations with actual materials. So, throughout 2021, CRS implemented strategies to ensure materials made it to students – at home or at school. From socially distanced kit assembly lines, to carefully choreographed pick-up days, to mail distribution, the CRS team pivoted as needed to keep a steady stream of books and science learning supplies heading out to teachers and students.

I hope to inspire children who come from backgrounds that are underserved in STEM. Growing up as a young Latina I never saw people like myself in STEM or thought it was for me. I want to be a role model so young students are excited about STEM.

— BASIS Volunteer

ENGAGING COMMUNITY SUPPORT

2021 FOUNDATION, AGENCY & CORPORATE FUNDERS

Arthur Rock Foundation
Wareham Development and Richard Robbins
Berkeley Public Schools Fund
The Crescent Porter Hale Foundation
Callison Foundation
Dean and Margaret Leshner Foundation
Renegade.Bio
Morris Stulsaft Foundation
Clorox Company Foundation
Bayer Health Care
KLA Foundation
Clif Bar Family Foundation
Lawrence Berkeley National Laboratory (LBNL)
Grifols

Genentech
Joseph and Mercedes McMicking Foundation
Port of Oakland
The Lowell Berry Foundation
MAI Construction
In Dulci Jubilo, Inc.
Oakland / Berkeley Association of Realtors
Bernard E. & Alba Witkin Charitable Foundation
East Bay Municipal Utilities District
Matson Foundation
Associated Students University of California
Seyfarth Shaw Charitable Foundation
Costco Wholesale

*Thank you to these employers who matched employee contributions in 2021:
Apple, Bank of America, Bristol Meyers Squibb, Clorox Company, Clif Bar, Wells Fargo*

CRS Board Members and individual donors contributed over 15% of CRS organization operating budget.



Students answer questions during virtual BASIS lesson.

CRS has tailored the lessons...so our employees...can share their love for aviation, engineering, and environmental science with students and their career paths. This outreach is important... representation is vital and it's a game changer for students to know there are employees that look like them, grew up in their community, and have a passion for engineering and science.

— STEM Industry Partner

FINANCES

STATEMENT OF FINANCIAL POSITION, DECEMBER 31, 2021

Assets

Checking and Savings	\$415,203
Other current assets	\$4,254
TOTAL ASSETS	\$419,357

Liabilities & Equity

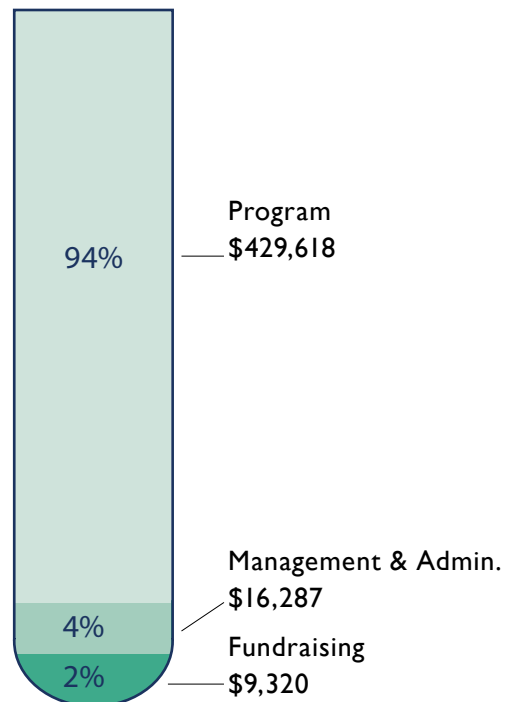
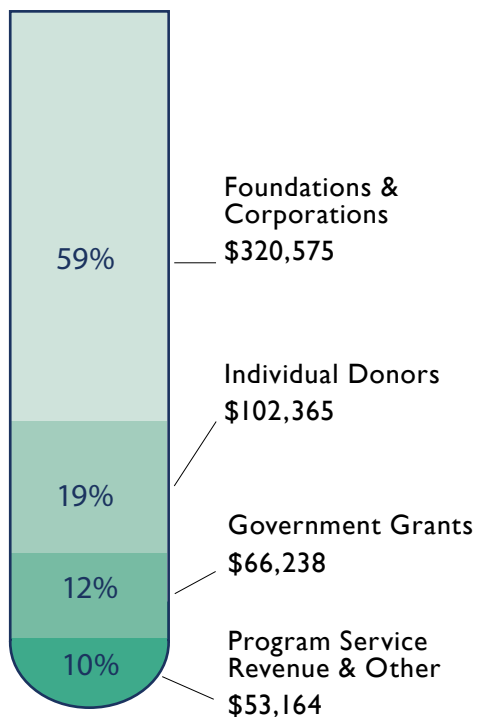
Liabilities	
Accounts Payable	\$11,106
Credit Cards	\$2,496
Other Current Liabilities	\$11,182
Total liabilities	\$74,784

Equity	
Unrestricted assets	\$42,064
Retained earnings	\$215,425
Net income	\$87,083
Total Equity	\$344,573

TOTAL LIABILITIES & EQUITY \$419,357

2021 INCOME: \$542,342

2021 EXPENSES: \$455,259



CRS TEAM & LEADERSHIP

STAFF

Teresa Barnett, CRS Executive Director
Corinn Brown, Director, Data & Teacher Services
Tyler Chuck, Associate Dir., Education Outreach & Operations
Adriana Threlkeld, Communications Manager
Greg D'Arezzo, Director, Strategic Growth Planning
Georgia Tan, Data and Digital Project Assistant
Jeremy Eddy, Private Industry Outreach Coordinator
Anais Namahoro, Program Assistant
Jeske Dioquino, Be a Scientist Program Assistant
Denise Abersold, Professional Development
Eric Havel, Professional Development



Jade Fostvedt, Campus Coordinator
Julie Fornaciari, Campus Coordinator
Betsy Mitchell, Project Coordinator
Darlene Yan, Project Coordinator

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Nicki Norman
Co-founder, Community Resources for Science

LOOKING FORWARD

Thank you so much for all you have been doing for our kids! (Our child) has been having some rough times lately, but has come back from those Be A Scientist days so happy and telling us how much he loves those activities and much more like the kid we know and love. He is so inspired in your class, and I just wanted to thank you for helping him find that focus and motivation.

– Parent of 7th Grader

25 YEARS STRONG

For 25 years, CRS has met teachers at their individual level of need, because as each teacher grows stronger and more skilled and confident they are able to have positive impacts on the lives of current and future students. Along the way, we've measured progress, shared stories, and seen real transformation take shape. But there is so much more still to do.

This pandemic has put a bright spotlight on longstanding inequities in classrooms serving children living in marginalized and underserved communities. We're determined to bring even more STEM role models, even more learning experiences, and even more teacher supports to help pave a science-inclusive pathway forward for these students.

MOVING FORWARD TOWARD SCIENCE EQUITY

The journey of the next 25 years begins today, working to support teachers and schools as they find their way into our new post-pandemic normal. Pressures for schools to focus largely on social and emotional wellness and English language and math proficiency threaten to once again sideline elementary science, just as progress was beginning to take root. But it does not need to be that way, and CRS will continue our efforts to lead a strong network of partners to leverage resources and expertise to bring more science to more teachers and students in the coming years.

In 2022, we'll take time to celebrate the transformations in science teaching and learning we've helped to shape in the past 25 years— and what that means for the outcomes and life trajectories for young students. And, we'll begin mapping out the work of the next 25 years. What skills and experiences will today's elementary students need 25 years from now in 2047?



Science kits ready to be delivered to students.

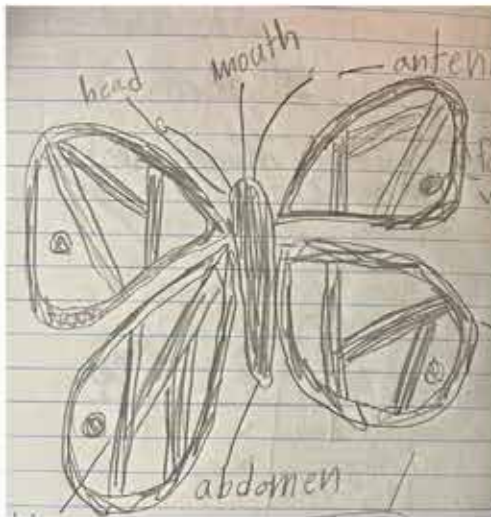
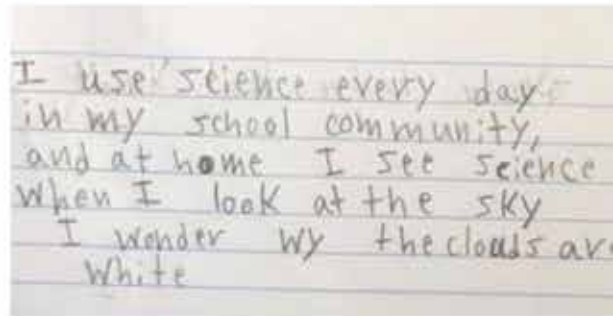


Scientists teach kindergarteners about butterflies.

For those who have been on this journey with us, we thank you and hope that you will commit to continuing your support and engagement. For those who are just discovering ways to connect with and benefit from CRS services, welcome and we are eager to get to know you!

STUDENT VOICES: INSPIRATION & IMAGINING THEIR FUTURES

**Science is stuff that makes
your brain bigger.
Science is important because
it is good for your brain.
-OUSD Student**



**I can imagine becoming a
scientist who studies metal
because I like anime with fancy
swords that are made of cool
metal.
-OUSD Student**



**Science is doing
investigations to learn
about something new.
Science is important to
learn new things!
-OUSD Student**



**I met scientists who studied
disease.
Now I want to learn more
about germs. I can imagine
becoming a scientist who
studies rocks and minerals. I
like to find rocks with cool
colors and textures
-OUSD Student**