



July 2024

Two Bit Circus Foundation

Annual Report FY 2023-2024

Prepared by

Kellye Ross, Director of Development Dear Friends of the Foundation,

This year has been busy and the team has been up to the task! We are a smaller team post pandemic but the staff that remains has outdone themselves. I couldn't be prouder of what we have accomplished together!

I want to thank everyone of you who volunteered, supplied us with donations of materials for the STEAM Lab Makerspaces and funds to help with schools that need one but don't have the funds to buy one. A huge thank you to our Board for both the financial support and the encouragement and ideas that keep us all motivated.

We hit some big milestones. We have grown in the past 10 years from three staff members (one part time) in 2013 to 15 full time staff and 20+ facilitators. After a decade of building our STEAM Labs one school at a time with an average of 30-35 a year, in the spring or 2023 LAUSD ordered 73 new labs for the lowest performing schools in the district. Then, LAUSD ordered another 72 new Labs this spring, along with 2.0 fabrication upgrades to last year's labs! We are now partnered with LAUSD to conduct professional development throughout the year, and are in talks to start a new series of programs in the classroom. We produced mini STEAM carnivals for individual schools, and large events for school districts, totaling 5 STEAM Carnivals this year. In fact, this was our 7th year hosting a STEAM Carnival for the Hawthorne Unified School District. And, my personal favorite in this past year was the celebration of Caine's (of Caine's Arcade) graduation from California State University at Dominguez Hills.

The Foundation is facing some challenges that we hope to overcome this upcoming year with your support. Our warehouse team is working in a space that is 10% the size we had before the pandemic. And while I couldn't be prouder of our staff that continues to fulfill our orders on time and at the quality that our partner schools deserve, we are seeing an increase in demand and need to accommodate growth. We are planning to buy a building in the near future to build our capacity and get back to offering teachers a place to pick up materials. What's more, in the upcoming year our curriculum team will be rolling out new classroom programming with our STEAM Labs. The 2024-2025 season will be a period of growth and expansion as we bring STEAM to every school in the LA area!

As you can imagine, the purchase of a building and expansion into more schools will bring a greater need for support both financially and in labor as we rebuild our warehouse in a new home. We may face challenges, but I'm encouraged everyday by how many people are impacted by our programs and how many of you have helped us get here. In a world where people can get divided over the issues of the day, I am touched that we can come together as a community to help impact the way we educate the next generation.

Thank you again for believing in our mission and your ongoing friendship. Let's work together to encourage entrepreneurial attitude in students while instilling a strong sense of our responsibility to the environment.

Again, thank you for inspiring us with your support...

Dr. Leah Hanes,

CEO of the Two Bit Circus Foundation

OUR MISSION

We serve children in all economic situations by creating learning experiences to inspire entrepreneurship, encourage young inventors, and instill environmental stewardship. Imagine a giant circus tent for creative play, making, curiosity, imagination, and community. That's us!

OUR VISION

We imagine a world where creativity, entrepreneurship, and environmental stewardship are core social values nurtured in schools, homes, and communities everywhere, where all children are empowered to be creative thinkers and doers, and encouraged to make their very best ideas happen.

THE NEED FOR S.T.E.A.M POWER!

- STEM/STEAM jobs earn double the national median average!1
- STEM jobs growing 2x faster than all other occupations by 2031!1
- Only 20% of STEM college students feel their K-12 education prepared them extremely well for their STEM college courses.

Careers in STEAM are at the forefront of economic and societal development. The US Department of Labor reports that over 50% of the job market demands some degree of technological skills, which will rise to >77% within the next decade. Skill sets learned through STEAM education include critical thinking, problem solving, creativity, and collaboration- all of which are critical to career success and wage earning. However,



a real gap persists in STEAM education, predominantly affecting low-income, Black, and

<u>Latino students</u>. This disparity is not just a matter of academic achievement; it is a barrier to equitable opportunity in our society and workforce.

The gap was exacerbated by the learning loss caused by the COVID-19 Pandemic. In many communities, students fell behind more than 1.5 years in math, and recovering from these losses has proved challenging. Recent research from Michigan State University found that *project-based learning, like the activities made possible by our STEAM Lab Makerspace program, is an effective remedy for learning loss*. Without exposure to project-based STEAM education, these students will lag further behind in critical thinking, problem-solving, and technological literacy—skills that are essential in almost every modern profession.

1U.S. Department of Labor, STEM Day: Explore Growing Careers, 2022 2*https://commons.erau.edu/cgi/viewcontent.cgi?article=1218&context=discovery-day

WHO WE ARE AND WHAT WE DO

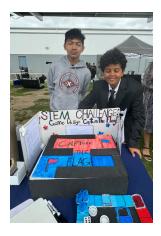
Two Bit Circus Foundation (2BCF) is a 501(c)(3) non-profit educational organization that inspires environmental stewardship and invention by using creative play to teach science, technology, engineering, art, and math (STEAM) principles to kids in all economic situations. To do this, 2BCF relies on the donations of LA manufacturers of upcycled materials that are repackaged for programs in schools, libraries, and after-school programs.

We do this in a way that is creative and fun for kids. Why?

Research shows that incorporating humor and play into STEAM learning increases student engagement, retention of information, memory, and instructor-student rapport.







OUR PROGRAMS

We serve Pre-K through 12th grade students, primarily from low-income communities of color. Focused on cultivating the next generation of inventors, 2BCF trains teachers through professional development and our STEAM programs lead kids in projects that showcase the many fun approaches to STEAM. What's more, 70% of our program materials are donations from manufacturers, and are sustainable for the environment.









OUR TEAM

We are a passionate group of educators, inventors, and industry professionals who love STEAM education and our community's kids! With a combined teaching experience of over 50 years, 2BCF uses its expertise, experience, and education to design fun learning experiences and games that build confidence and enthusiasm in students as they learn.



OUR COMMUNITY

We are made up of students, teachers, and STEAM education enthusiasts primarily in Southern California, but virtually, all over the world. Our network of Creativity Chapters exists in over 80 countries, but our primary geographic area is Los Angeles, CA. LA County alone has 785 Title 1 schools. The L.A. Unified School District, which has nearly 600 high-poverty campuses and over 600,000 students, has been our long-time partner. These schools face great challenges in implementing project-based learning standards due to insufficient resources, and also have higher concentrations of groups that are underrepresented in STEAM careers. 2BCF programs are in 25% of LAUSD schools and counting! The racial make-up of our students is 53% Hispanic, 31% Black, 9% White and 6% Asian.



OUR SUPPORTERS

We include teachers, students, advocates for children, environmentalists, artists, corporations, other non profit organizations, and even kids! From all walks of life, people throughout LA, and even all over the world love STEAM and support our foundation. They have been very generous in the past year, granting us their support through donations, volunteering, and attending our events. We have also received over \$225,000 in corporate donations, and nearly \$190,000 in grant funding. We are so grateful for each and everyone of those who showed their generosity by supporting 2BCF!





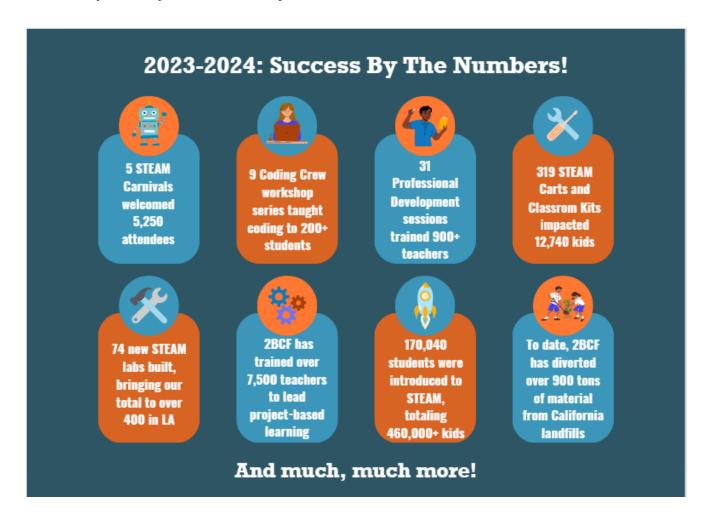






OUR SUCCESSES: Year In Review

This past fiscal year saw amazing growth, outreach, and learning in our LA community, and beyond. **Here it is by the numbers:**



End of Year giving

Our End of Year Giving Campaign for 2023, Season of Giving, raised \$27, 099. Thanks to the donations of our supporters and the matching gifts of our generous board of directors, we supplied 36 STEAM classroom kits to Title I schools to provide quality education to 1440 students! Our team gives a huge thanks to everyone who gave.

FUNancial Literacy Carnival

We held our first pilot program of the Wells-Fargo-funded FUNancial Literacy Carnival at the Hawthorne STEAM Carnival on April 13th. The financial literacy event leveraged the enthusiasm of over 20 high school volunteers, who, wearing thematic costumes like "LiveStock Broker" and "Debt Monster," effectively engaged young attendees in financial literacy learning through carnival games such as wiffle ball and plinko. This innovative approach facilitated the introduction of fundamental financial concepts in a manner that was both entertaining and educational. 92% of respondents acknowledged enhanced money management knowledge, and all respondents affirming the enjoyment of the game. We are working on a standards-aligned version that can be used in high school economics classes to empower the teens as peer teachers.





OUR PARTNERS

Special thanks to all of our corporate sponsors who have granted us funding and support throughout our last fiscal year.



























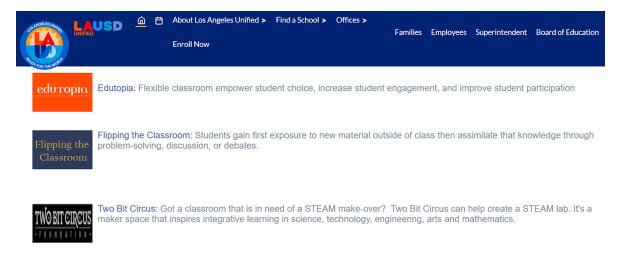


LOOKING AHEAD

Expanding Partnership with Los Angeles Unified School District (LAUSD)

The success of the growing professional development programs alongside the STEAM Lab Makerspace have catapulted us into the new fiscal year with LAUSD returning with a new order of SLMs as well as more professional development and curriculum. In addition, many existing LAUSD STEAM Labs will be upgraded to our Fab Lab, a 2.0 fabrication expansion, complete with professional development to train teachers how to use them. The fabrication lab upgrade enhances the SLM allowing students to create their own custom parts and projects using state of the art manufacturing tools, including 3D printers, laser cutters, and CAD software.

Our in-school programs are going strong and attracting growing interest from our school partners. This quarter, we completed one of our longest-running in-person programs at Playa Vista Elementary, focused on STEAM projects over a 6-week period. The team is working diligently to create long-term programs that extend over multiple days to enhance learning and align to schools' requests for programs to be rigorous and standards-aligned. The team remains focused on using best teaching practices and student-centered programming to train our staff and facilitators.



^{*}LAUSD Innovation Office internal newsletter: https://www.lausd.org/Page/12823#spn-content

Growing our Coding Crew Program (Training Kids to Teach Each Other)

One of our newest and most exciting programs is Coding Crew: a unique program where middle school students teach their younger counterparts coding using MIT's Scratch platform. Coding Crew workshops culminate in a Community Arcade Day, inviting the community to engage with and appreciate the students' coding projects. Our Coding Crew program has been in schools, after school, and summer programs across the Los Angeles area and in other states in the US, serving over 200 students in the last quarter alone. 90% of our Coding Crew partners are Title 1 schools or afterschool programs serving a high percentage of students from low-income families. And the results have been amazing! According to our post program surveys, our



teachers saw improvement in students' ability to work collaboratively in teams, an increase in confidence, improvement in students' empathy towards peers, greater student leadership, and an increase in student interest in exploring coding further.

This upcoming year, 2BCF has big plans for the Coding Crew Program. New program versions are being designed, including Coding Crew for TK-1st grade students using Scratch Jr., enabling parents and caregivers to learn coding with their kids. For older kids, 2BCF is planning a Coding Crew expansion for middle school and high school called RoBox. RoBox will be a "robot in a box" kit that will use peer teaching methods developed in the original Coding Crew to learn Arduino programming, and allow students to build an Arduino-controlled animatronic from upcycled materials. Finally, we are bringing Coding Crew to 100 more LAUSD schools!



Training with Music: Bringing Griffin Ed under the Big Tent

Founder Tim Griffin is turning over his education nonprofit, Griffin Education (GriffinEd) to 2BCF, and joining our board of directors! Griffin Ed creates fun music and videos that help kids master the content and vocabulary they need for success in school. We will have access to its 6 album collection, and a new 6 song album for the first release as a 2BCF/Griffin Ed Collaboration.



Bold New Social Media Across Many Platforms

As you may have noticed, 2BCF is going in a new direction with our social media. In this new season, fun new posts will include features of our staff and board members, looks behind the scenes of how we make our programs, activities for kids and kids at heart that can be done at home with found items, and more! Creating our social media posts is our newest team member: Ani Baker. Ani spent 12 years in public education as a teacher for students with mild to moderate disabilities before venturing into educational media. Check out the exciting new content she makes for us on FB, Instagram, and TikTok (@2bitfoundation)!











GET TO KNOW 2BCF

What our staff are saying...

"I'm amazed by teachers and afterschool program leaders with no coding experience, who were brave enough to go out and lead their students through the Coding Crew curriculum!"

-Mya

"My most cherished memories are seeing the curriculum come to life. Every time the curriculum is written, seeing that curriculum in the hands of teachers, and projects created by students."

-Michae

"I love being a part of the brainstorming sessions and contributing to the collective brilliant minds of 2BCF. Together we exercise the courage to believe that children can learn while having fun."

-Renee

"Connecting with classroom teachers has been so soothing to my soul, it's a world I still feel very connected to and seeing the energy they get from working with kids is inspiring!"

-Ani

What our students are saying...

"I liked how my friends helped me when I needed it and how they taught me new things that I never knew and that were pretty cool learning for the first time!"

-7th Grader, Los Angeles, CA

"I'm going to teach (coding) to my brother and sister."

-Middle School Peer Teachei Los Angeles, CA

"I had a lot of fun teaching the other kids."

-Coding Crew, Middle School Peer Teacher, South Los Angeles, CA

What our educators are saying...

"2BCF has been a part of our solution across all of our schools since the beginning. Through their generous donations, we have been able to reach out and expose thousands of students to the STEAM world. Hopefully this approach will make a difference one day in leveling the playing field of allowing black and brown communities participation in the STEM field.

-Instructional Director, LA Unified School District

"The program was wonderful. The leadership/ teacher role was beneficial to those students. They were able to take the leadership role beyond the coding crew. As we walked in the halls during regular school hours, the 5th grade students would call the 6th grade instructors by the title of teacher. This gave the teachers a sense of pride."

Middle School Program Facilitator, 75th Street Elementary School Los Angeles, CA

"I noticed significant improvement in my students' confidence level when I noticed how they were not scared about making a mistake. In the beginning of the program, I witnessed several students getting frustrated or feeling shameful seeing other students' successful projects, but toward the middle of the program, those same frustrated students showed resilience and determination to finish their projects even with asking for help from other peers."

Middle School Teacher,
Barton Hill Elementary School

"One of the biggest gains over the course of the program was that (students) were able to gain confidence, be more independent, and learn the power of working together. Some of the students in the group do not speak English, however they were able to communicate with their peers, and develop a game. At the same time, in the beginning mostly boys showed interest in the class. As the program progressed, girls began to take interest and asked to join. In one of our faculty meetings, one of the teachers approached me to tell me how excited one student was- telling her all about how she had developed a game. She felt so proud, and wanted to tell everyone about it.""

Adult Coding Crew Facilitator Bertrand Elementary, Los Angeles. CA