

Mission and Impact Brief



KIDSPARK
EDUCATION

About Kid Spark

WHY WE EXIST

Kid Spark's core mission is addressing persistent STEM education disparities, focusing on empowering girls, low-income youth, and children of color. Our aim is to close the STEM opportunity gap by fostering early and continuous STEM learning, countering the prevalent lack of STEM education, notably in underserved communities.

Early exposure to STEM is pivotal, influencing children's decisions regarding STEM paths by grade 3 or 4. This exposure disparity often deters underserved youth from pursuing STEM, resulting in a loss of talent and creativity across generations. Kid Spark strives to disrupt this pattern by consistently providing STEM education from pre-K to 8th grade, aiming for transformative change in formal and after-school education.

WHAT WE DO

Kid Spark was founded on a transformative approach to STEM education, marrying progressive learning with hands-on experiences. Developed over fifteen years of research and classroom application, this method has proven highly effective in schools and after-school programs across the US.

Our programs are tailored to instill fundamental STEM fluencies in young learners, progressively building on their knowledge each year from elementary through middle school. By the time Kid Spark students reach high school, foundational STEM skills come as naturally as reading, and comfort with STEM is part of their identity.

Kid Spark prioritizes ease of adoption and affordability to overcome barriers that hinder STEM integration in elementary and middle school education. We ensure our program is user-friendly for educators regardless of their STEM background. As our network grows, we recognize persistent financial constraints in some schools. To address this, our STEM Equity Grants Initiative provides free or reduced-cost access to Kid Spark for U.S. Title 1 schools, promoting equal opportunities in STEM education.






OUR IMPACT

Kid Spark's products and programs have a widespread reach, utilized in schools and informal learning centers across all 50 states and globally. Our STEM Equity Grants Initiative has already impacted over 20,000 children, with numbers steadily increasing each year.

Since 2009, Kid Spark has collaborated with educators and researchers at the University of California-San Diego, Pittsburg State University, and the University of San Diego to ensure that the Kid Spark program is effective in helping children increase their STEM skills, knowledge, confidence, and curiosity.

Over the past five years, our research has focused on the impact of the program. We know without question that Kid Spark works.

-  **Elementary school children who participate in Kid Spark's STEM program, especially girls, report a dramatic increase in how much they like or love engineering.**
-  **Teachers using Kid Spark's program report that their students substantially increase learning of STEM concepts and show increases in curiosity and creativity.**
-  **Educators report significant increases in their own comfort with teaching STEM.**

We continue to test our assumptions and push ourselves to do more.

OUR GOAL

Meeting our audacious goal – to provide STEM learning to 300,000 children in underserved communities by 2027 – means not only increasing our current reach significantly, but also continuing to influence and strengthen elementary STEM culture in the United States and beyond.

As one of the nation's experts in early STEM education, we are uniquely positioned to help shape how the education and STEM communities think about STEM learning: to increase the emphasis on an early start and continued engagement, and to lead the way in design research and innovation.

We are one of the few organizations in the country focused on STEM education for the youngest learners in BIPOC, rural, and low-income communities, and we continue to break down barriers for educators in those communities and to work to earn the trust they offer us.

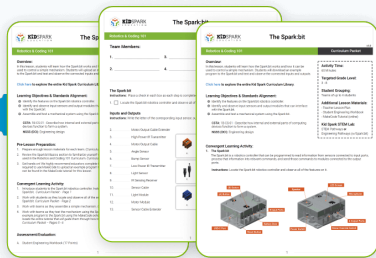
We are creating new gateways for children to learn and love STEM, ranging from expansion into informal education settings to forming strategic partnerships that help us connect with new communities in innovative ways. The opportunities are as diverse as the potential applications of STEM itself.

Partnership Opportunities

OPPORTUNITY 1: Support Our STEM Equity Grants Initiative

The STEM Equity Grants Initiative provides hands-on STEM education to elementary and middle school students who are traditionally underrepresented in access to STEM, helping them develop skills and mindsets that improve their academic and social-emotional outcomes, and increase opportunities for success in the 21st century.

Select schools will receive a cost-free Kid Spark STEM program which includes:



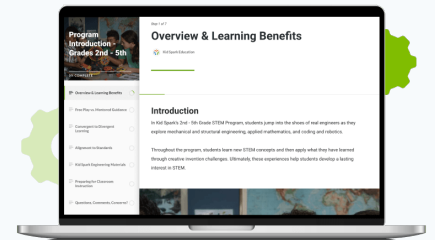
CURRICULUM

A progressive, engineering and computer-science based curriculum including teacher lesson plans, student workbooks, design challenges, evaluation rubrics, interactive coding tutorials (2nd-8th Grade only), and unit assessments.



STEM LABS

Kid Spark STEM Labs feature diverse, reusable engineering and robotics materials that effortlessly cater to various STEM concepts across multiple grade levels. These materials are sturdy, user-friendly, and perfect for collaborative learning and invention.



PROFESSIONAL LEARNING

Kid Spark specializes in transforming educators into confident STEM mentors. Through targeted training and support, we ensure that educators not only gain expertise but also the confidence to implement impactful STEM learning in their classrooms or informal spaces. Kid Spark is committed to ensuring ongoing program success by providing continuous support each year.

Since we launched the initiative in 2021, over 200 elementary schools across the country have requested our programs for their students. We've been able to fund about 10% of the applications we receive, reaching over 20,000 children. **We're both proud of this number and consider it far too small.**

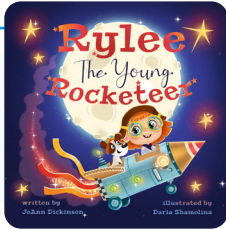
Our goal is to provide 26 grants by the end of the 2024–2025 school year and to continue opening applications beyond the classroom setting. That means doubling access to Kid Spark through the STEM Equity Grant Initiative for Title 1 schools and opening opportunities for children attending after-school and summer school activities. It also means doubling the number of corporate, foundation, and individual partners who support us.

HOW YOU CAN HELP: Support Kid Spark's STEM Equity Grants Initiative

The cost of awarding a STEM Equity Grant to a school or informal educational setting (e.g., after-school, summer school) ranges from \$5,000 - \$16,000. Every contribution has a direct and meaningful impact on students. We are looking for partners who can match our commitment. Contact us to sponsor an existing school/district in our database, or to sponsor a school/district in your community.

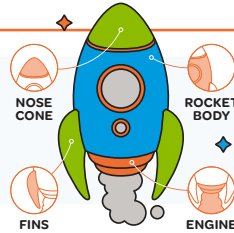
OPPORTUNITY 2: Help Foster 21st-Century Literacy with Storytime Inventing

Kid Spark Education is excited to introduce Storytime Inventing, a pioneering initiative that transforms early childhood literacy. This innovative program, scheduled for an early 2025 release, combines literature with hands-on engineering to ignite a love for learning and foster positive STEM identities, inventive mindsets, and literacy development in young students. Through Storytime Inventing, children will not only enhance their reading skills but also explore STEM concepts, creating a lifelong passion for discovery and invention.



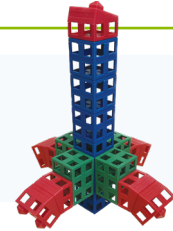
Step 1 - Read

Educators and mentors engage children with popular children's storybooks, either through interactive read-aloud sessions or independent reading. Each story serves as a catalyst for exploration and imagination.



Step 2 - Learn & Explore

Building on each book's theme, children are introduced to STEM concepts and creative ideas inspired by the narrative. Children are guided through interactive learning journeys, uncovering the connections between literature, STEM, and language skills.



Step 3 - Invent

Using Kid Spark engineering materials, children apply their understanding of STEM concepts to invent something unique. These hands-on experiences reinforce learning and cultivate critical thinking, problem-solving, and language development skills.

HOW YOU CAN HELP:

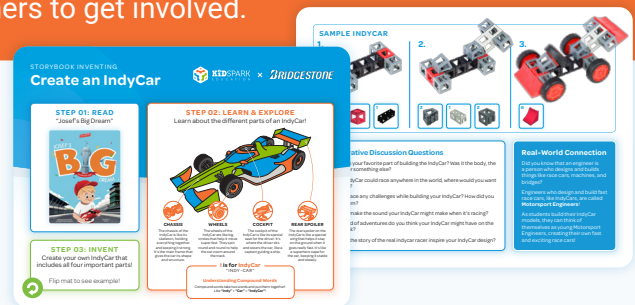
Kid Spark Education extends an invitation to potential partners to collaborate and support Storytime Inventing nationwide. Various avenues are available for organizations, universities, nonprofits, foundations, businesses, individuals, or others to get involved.

Support Curriculum Development:

Kid Spark Education is actively designing dozens of Storytime Inventing lessons/activities. Partners are encouraged to propose and provide financial support for additional sponsor-themed activities/lessons.

Support New Product Development:

Kid Spark is currently designing new student engineering components for Storytime Inventing in order to better serve a more diverse range of learners, including children with disabilities. The total cost for engineering and tooling exceeds \$100,000, and contributions to support developing these new student engineering materials are pivotal.



WHEEL



AXLE



BRACE



HINGE



Support Research:

Kid Spark Education is assembling a team of educators and researchers from university partners who will contribute expertise, design, and evaluations to this innovative literacy-with-invention approach to 21st century literacy. Funding support for research costs is critical and will further expand the reach of Storytime Inventing nationwide.

OPPORTUNITY 3: Open new gateways for STEM Learning

Strategic partnerships are a core strategy for our goal of expanding elementary and middle STEM education nationwide. **For example:**

- Through a partnership with **East Coast Migrant Head Start**, we are providing STEM education programming to 15 locations across Florida, with plans to expand to an additional 30 sites by the end of 2024.
- With the **Cal Ripken Sr. Foundation**, Kid Spark Education has helped support more than 500 STEM Centers at underserved schools across the United States.
- Kid Spark Education and **Special Olympics of Washington** are piloting our STEM program in inclusive classrooms, where students with and without intellectual and developmental disabilities learn side by side.
- In May 2024, Kid Spark opened a state-of-the-art Storybook Inventing exhibit at the **San Diego Children's Discovery Museum**. This exhibit provides a unique opportunity to offer children and their caregivers an innovative learning experience that seamlessly blends reading with hands-on inventing.
- In Delaware, Kid Spark is providing programming to 26 **21st Century Community Learning Center** sites across the state.
- Since 2023, Kid Spark Education has been a Coalition Partner with **Million Girls Moonshot**, a movement of the STEM Next Opportunity Fund, which leverages a large network of like-minded partners to provide STEM access opportunities to millions of girls and other underrepresented youth around the country.
- Since 2022, Kid Spark Education has partnered with **TC Energy** to support our STEM Equity Grants Initiative. The partnership has seen the successful implementation of STEM programming in 5 underserved schools, with plans to expand to 8 additional schools. We are also working together to create energy-themed curriculum, which will help inspire students to envision themselves as future stewards of sustainable practices in the evolving energy landscape.
- Kid Spark Education is partnering with **Bridgestone Americas Trust Fund** to support the STEM Equity Grants Initiative, implementing programs in 3 underserved schools across 3 states.

HOW YOU CAN HELP: Partner with Kid Spark

We're committed to partnering with organizations that are dedicated to providing STEM opportunities for children in underserved communities. **We are seeking corporate, nonprofit, and other peers to leverage their strengths with ours — and expand STEM learning opportunities for children nationwide.**





KiD SPARK
E D U C A T I O N

For partnership inquiries, please contact:
partner@kidsparkeducation.org