

STEM LIBRARY LAB

CASE FOR SUPPORT





What if every child in New Orleans had a teacher with the talent and tools to inspire them to discover their passion for STEM and pursue a brighter future?

With a mission to foster high-quality active learning by equipping teachers to inspire students, *STEM Library Lab is bringing this vision to life.*

STEM Library Lab serves as a leading convener in the Greater New Orleans Science, Technology, Engineering, and Mathematics (STEM) ecosystem, working hand-in-hand with local educators to eliminate the barriers that prevent schools from providing the highest caliber of STEM instruction. Since its founding, STEM Library Lab has grown from a small pilot program to a flourishing 501(c)(3) organization, serving 83 regional schools and 500 teachers to date with innovative programming that promotes equitable access to STEM resources and equipment. With the only K-12 STEM equipment lending program in the area, and with an exclusive focus on working with and supporting educators – using the region’s teachers as the lever to generate broader impacts – STEM Library Lab is unique amongst other nonprofits in the local STEM space.

Most recently, the organization took a major step forward, moving its operations into a permanent home, known as the STEM Ecosystem Hub. More than just a physical facility, the STEM Ecosystem Hub is poised to serve as *the* space for connecting educators with nonprofits in the STEM sector – a space that promotes equity by ensuring that *all* local classrooms have access to the physical and intellectual STEM resources that students need to thrive.



Building on its success to date, the leadership of STEM Library Lab is preparing to launch an \$400,000 campaign to complete the build-out of the STEM Ecosystem Hub.

Campaign investments will magnify STEM Library Lab’s outputs and outcomes, dramatically broadening the organization’s reach while bolstering the capacity of STEM education nonprofits across Greater New Orleans.

STEM LIBRARY LAB: A CATALYST FOR EDUCATIONAL EXCELLENCE

Founded by two former teachers, STEM Library Lab’s work is rooted in the experiences of local educators and the challenges they face in deploying high-quality active STEM learning activities. STEM Library Lab launched in 2017, operating from an 800-square-foot space within Bricolage Academy, a public charter school in Orleans Parish. The organization initially functioned as a lending library, offering STEM equipment on loan for local math and science teachers. Over the years, STEM Library Lab has expanded in response to growing community need, implementing a cadre of core programs that help bring active STEM learning opportunities to life in local K-12 classrooms.




In 2021, with the support of the Joe W. and Dorothy Dorsett Brown Foundation and other lead donors, STEM Library Lab moved its operations into the STEM Ecosystem Hub, a new, independent 12,000 square-foot building that houses the organization’s current programming, with space to launch and expand new collaborative programming in the upcoming years.



STEM Library Lab is governed by a diverse and representative Board of Directors that is composed of seasoned K-12 and postsecondary educators, trusted voices in the business community, and financial professionals. The organization is staffed by a team of six employees including former teachers, a youth specialist, and a former librarian.

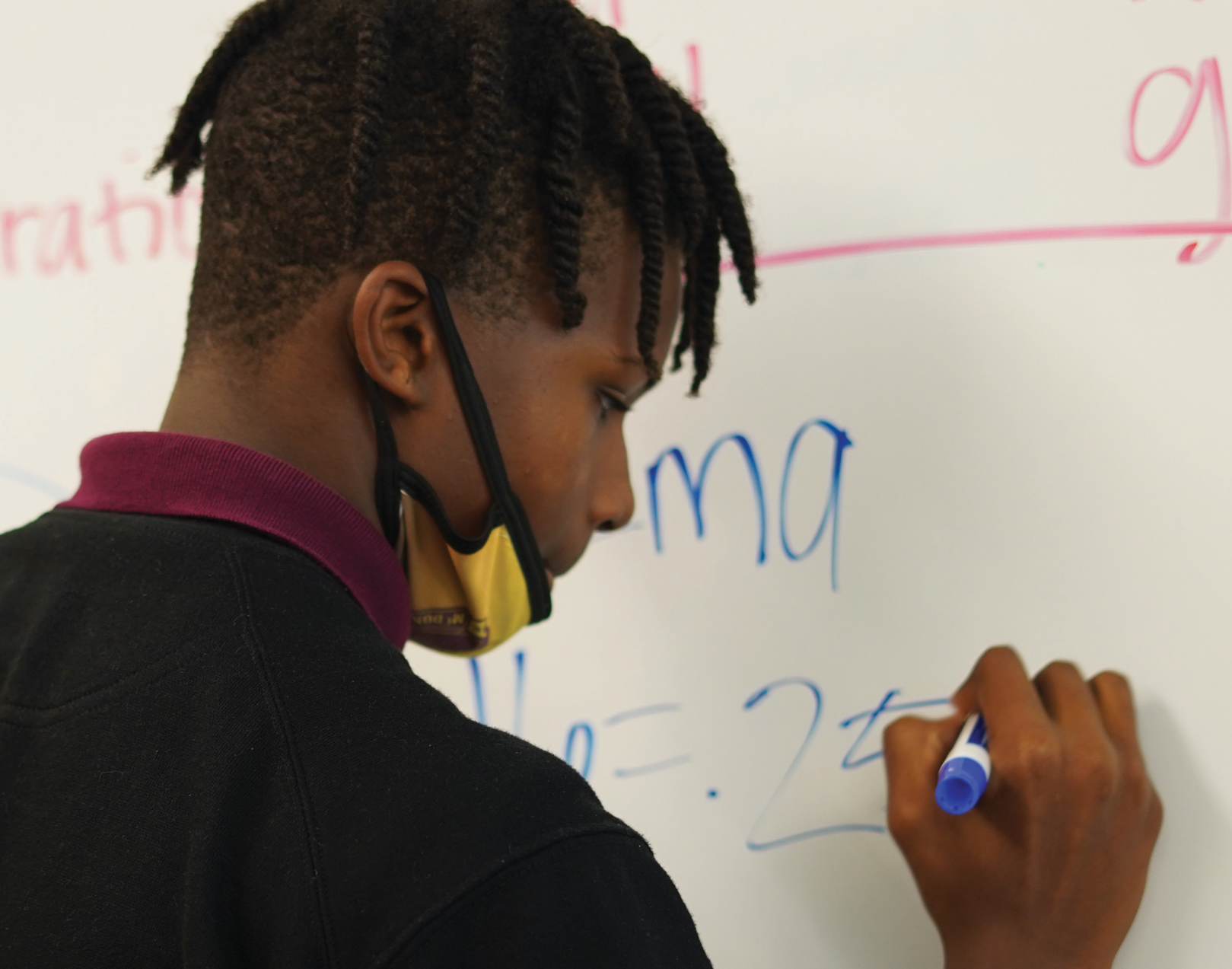
There is no other nonprofit that provides STEM Library Lab's unique combination of space, support and supplies. By providing a physical facility where teachers can convene, engage with STEM content, and network with experts in the field; by providing robust, personalized professional development opportunities tailored to the unique needs of individual schools and educators; and by providing the physical supplies and equipment that teachers need to promote excellent, active learning experiences in their classrooms, STEM Library Lab’s programming is unmatched in the region.

INNOVATIVE PROGRAMMING, IMPACTFUL OFFERINGS

STEM Library Lab was founded by and for teachers, and the organization operates five core programs which each target a specific set of challenges identified by educators in Greater New Orleans:

-  The **Equipment Lending Co-op**, STEM Library Lab’s flagship program, provides local schools and teachers with access to STEM equipment, ensuring that K-12 classrooms have the equipment and supplies necessary for active learning. A lesson plan database and reference book collection accompany the physical materials in the Co-op. Since STEM Library Lab’s founding six years ago, more than 320 teachers have borrowed from the Co-op 668 times, resulting in 4,057 new inquiry-based lessons for 16,500+ students and saving schools more than \$400,000. The majority of STEM Library Lab’s teacher borrowers work in schools that serve majority free-and-reduced-lunch students.
-  The **Teacher Free-Store** reallocates basic supplies to schools in need by repurposing in-kind donations from community members, including office supplies, organizers, furniture, and classroom decor. Teachers can select supplies for their classrooms at no cost; these are items that they would otherwise purchase out of their own pockets. Since reopening in August 2020, the Free-Store has distributed over \$165,000 in free materials to 450 teachers across 90 different schools using STEM Library Lab’s curbside pickup model. The Free-Store also features access to the organization’s Copy/Print Center, where teacher can print and laminate materials at no cost.
-  For teachers in need of planning assistance, STEM Library Lab offers **Professional Development** programming. The organization’s recently launched “Engaging Students in Louisiana Student Standards for Science (LSSS)-Aligned Instruction” is a full-

- service paid series exploring pedagogy and instructional practices for science classrooms, in partnership with New Schools for New Orleans. STEM Library Lab’s Communities of Practice workshops are small hands-on tutorials around a particular topic, a piece of equipment, or lesson activity. STEM Library Lab’s Professional Development services are especially critical to overall classroom success, as a growing body of research has demonstrated that students achieve at higher levels when their teachers have access to ongoing professional development opportunities.
-  In January 2022, STEM Library Lab assumed administration of a **Service Learning Program**, which provides support and funding for teachers in Louisiana and Mississippi to design and implement service learning projects. This 30-year-old program pair classrooms with nonprofit community partners, following a national model for curriculum-aligned service learning. Projects include a food drive which connects the impact of nutrition on health outcomes in low income areas, and a wetlands erosion and restoration project in conjunction with LSU Coastal Roots.
 -  The **Education Opportunities Database**, STEM Library Lab’s newest program, is designed to serve as the virtual clearinghouse for all local STEM education-related opportunities such as extracurricular offerings, professional development opportunities, lesson sequence modules, classroom grants, field trips, guest speakers, internships, and learning events. The Database is designed with educators in mind, providing local teachers with a one-of-a-kind tool that enables them to search for the local opportunities they need, and benefit from Greater New Orleans’ array of often underutilized education resources.



“ The Equipment Lending Co-op is the first stop for STEM teachers; it’s an exceptional depository of STEM supplies, expertise and service. Even during virtual and hybrid teaching, my students were still able to take part in hands-on learning experiences because of the help we received from STEM Library Lab. ”

| Kevin Daly, International High School of New Orleans

STEM Library Lab’s mission and vision are grounded in the organization’s foundational values: *Equity Through Access* and *Community Through Support*. In all of its programming, STEM Library Lab focuses on leveling the field for educators at schools that are under-resourced or which serve large low-income student populations, and on providing convening platforms to develop collaborative partnerships across the STEM education ecosystem.





WHY INVEST IN STEM LIBRARY LAB?

When it comes to K-12 STEM learning in Greater New Orleans, the region faces several acute challenges that highlight the essentiality of STEM Library Lab and its innovative programming.

Students often lack access to a rigorous STEM education, which is problematic for the students and for the region. Industries built on STEM education are projected to see a drastic increase in job openings due to expansion and an aging workforce. Yet many local students do not have access to the type of rigorous STEM education they will need to be successful in these growing fields – often because their schools cannot afford to purchase the equipment needed for more advanced math and science instruction. Without a pipeline of qualified graduates to fill these critical roles in the STEM workforce of the future, New Orleans’ ability to compete economically will dwindle.

Across Orleans and Jefferson Parishes, more than 80 percent of students receive free and reduced meals, or are considered economically disadvantaged. Most often, these at-risk students are clustered within lower-performing, higher-poverty schools; data has demonstrated that these schools have access to fewer STEM supplies and scarce equipment for science labs.



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Greater New Orleans is grappling with teacher retention issues. In 2019, 29 percent of Orleans Parish teachers left the classroom. According to a 2020 report released by New Schools for New Orleans, exiting teachers cite a lack of coaching, training, and access to professional resources as a major reason for leaving the field.

Departing educators in Greater New Orleans are often replaced with teachers with less experience in the classroom, which data shows is directly correlated to student achievement outcomes. A 2019 study conducted by the Greater New Orleans Foundation found that nearly 40 percent of New Orleans’ educators have less than three years of tenure in the classroom; the vast majority of these novice teachers are serving students who are majority Black and economically disadvantaged.



As the only organization offering a full suite of programming designed to take aim at these intertwined issues, STEM Library Lab is unique amongst its 150+ peers in New Orleans’ STEM education field.

With the organization’s move to the STEM Ecosystem Hub, STEM Library Lab has taken a meaningful leap toward creating a centralized community for STEM educators and STEM-focused organizations across the region – making it easier for the sector to tackle these systemic challenges, all while serving – in the immediate term – the teachers, students, and families that need them most.


A BOLD VISION FOR THE FUTURE: THE CAMPAIGN FOR STEM LIBRARY LAB

The leaders of STEM Library Lab are embarking on a campaign effort that will ensure a successful transition into the organization’s permanent home in the STEM Ecosystem Hub and convene the region’s STEM stakeholders around common aims. The components of the proposed campaign include:



STEM Ecosystem Hub Capital Improvements \$450,000

Philanthropic investment will enable STEM Library Lab to complete vital capital improvements in the organization’s permanent space, the **STEM Ecosystem Hub**. While STEM Library Lab is currently operating from its new facility, the space is not optimal to support the STEM ecosystem in a robust manner, or enable STEM Library Lab to harness its physical presence in service of increasing the organization’s earned revenue streams. Necessary capital improvements include:

-  **The formation of a “Teachers’ Lounge” on the main floor of the building.** Library Lab offers local educators free co-working space to network with resident nonprofits, as well as space for independent work outside the classroom walls. Educators also use the Teachers’ Lounge to test out lessons using materials from the Co-op before they utilize those materials in the classroom.
-  **The creation of state-of-the-art teacher classrooms for community usage.** Many local nonprofits that serve STEM educators operate from a small office, with only occasional needs for event or workshop space. Once the capital build-out is complete, local nonprofits and school administrators will be able to reserve workshop and classroom space in the STEM Ecosystem Hub to host their own professional development programming or convene grade level/ content meetings.
-  **A build-out of the Teacher Free-Store.** Within the STEM Ecosystem Hub, the Teacher Free-Store is currently located in an adjacent shell warehouse space, not climate controlled or built out to meet the growing inventory and demand. Campaign investments will enable appropriate renovations of this space, including the addition of a new loading door for supply deliveries and donations.
-  **Other essential infrastructure upgrades.** Philanthropic support will enable other essential updates to the STEM Ecosystem Hub’s physical building, such as roof remediation, the addition of signage, and other ADA-compliant facility renovations.

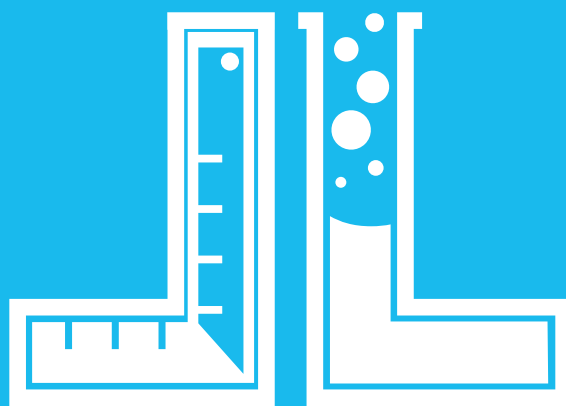
At present, approximately 80 percent of STEM Library Lab’s annual revenues come from philanthropic support, and 20 percent comes from school membership dues or workshops. The fully renovated STEM Ecosystem Hub will serve as a driver for increased earned revenue streams, with opportunities to derive rental income from its flexible office spaces.

HOW YOU CAN HELP

By supporting STEM Library Lab, you have a rare opportunity to spur far-reaching outcomes. An investment in the Campaign for STEM Library Lab will produce ripple effects across Greater New Orleans’ STEM ecosystem...enabling long-lasting educational equity; encouraging teachers in traditionally under-resourced schools to remain in the education field; ensuring that students in these schools have unfettered access to high-quality, hands-on STEM instruction; and empowering other nonprofits in the STEM sector to succeed at high levels...for years to come.

Support for the Campaign for STEM Library Lab will allow the organization to serve more than 1,000 teachers annually by the end of year three, providing the equivalent of \$850,000 per year in equipment and support for schools that otherwise wouldn’t have these resources, and developing these teachers into more capable, sustainable, collaborative educators. The STEM Ecosystem Hub will also improve the capacity of more than 200 local nonprofit service providers, who will be equipped with new pathways to connect to the thousands of teachers and students they serve each year.





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For more information on the
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