What if a School Could not only Transform Students’ Lives, but also Transform a City?

Case for Support
Imagine a school that accepts students from all walks of life, regardless of past academic performance – the students who had been failed by the system countless times before – and exposed them to top-notch teachers, rigorous coursework, and a learning environment like no other… a school that challenges every student to think deeply and strategically… a school that primes every student to succeed instead of simply survive… a school where every student is taught to believe that they are the future of their home city.

In New Orleans, only one such school exists: Sci High, formally known as the New Orleans Charter Science and Mathematics High School, an open admission public charter school that prepares all students for college and successful careers. Sci High has a Science, Technology, Engineering and Math (STEM)-based, highly individualized academic model that prepares its student body to serve as the next generation of critical thinkers and problem solvers. In New Orleans, where innovation has long been the basis of the city’s economic competitiveness, Sci High not only creates the workforce of tomorrow – it creates pathways to opportunity for its graduates, preparing them to play a leading role in New Orleans’ future.

Since its founding, Sci High’s academic offerings have reflected the school’s foundational tenet: that every child can learn the most challenging subjects, including math and science, with the help of competent teachers, committed administrators and an individualized approach to education. And, the model is working. Sci High’s student achievement scores have been on the rise for a number of years, culminating in a 98.7 School Performance Score in 2017. Sci High is producing students that can compete globally, but contribute locally – which is just what New Orleans needs to grow and thrive.

The leadership of Sci High has launched a $1 million capital campaign effort to equip and furnish a much-needed new educational facility with necessary STEM-based enhancements. The private fundraising effort will supplement a $32 million investment from the Orleans Parish School Board (OPSB) to construct a new campus for Sci High in New Orleans’ vibrant, flourishing BioDistrict.

Campaign investments will enable Sci High to serve and support its students in compelling new ways, providing them with the tools they need to determine their own destination and empowering them with the knowledge they must have to change the trajectory of our city.
It is no coincidence that Sci High’s mascot is the nautilus, the symbol for expansion and renewal. After 25 years of educating New Orleans’ young people, Sci High is embarking on a new chapter, one where the school finally has a permanent home that matches the transformative learning experiences that are happening within its walls.

Sci High is an essential part of New Orleans’ educational landscape. As an open-admission school, Sci High’s proven curriculum and talented teacher corps is available to any student who seeks to enroll. Not only is the school providing opportunities for a diverse cadre of young people to learn and thrive, but Sci High is also producing the graduates that will fill the next generation of jobs in our city, state and region.

Mary Zervigon
Past Chair
Advocates for Science and Mathematics Education Inc.
A School Unlike Any Other in New Orleans

The New Orleans Center for Science & Math was founded in 1993, when three faculty members at local universities saw science and math education as a vehicle, both for engaging students who were not achieving at high levels by eighth grade and for subsequent college and career success. A diverse group of community stakeholders founded the original Sci High, which provided a specialized half-day math and science program to high school students enrolled in any public high school across the city. The program was housed at Delgado Community College.

In 2005, when Hurricane Katrina decimated New Orleans and the entire Delgado Community College campus, Sci High was forced to relocate. Two months after Hurricane Katrina hit, Sci High secured charter school status from OPSB and was the first school on the Eastbank to re-open as a full-day, comprehensive high school. By January 2006, only four months after Hurricane Katrina, Sci High resumed classes on the Uptown campus of the former Allen Elementary School.

The school is governed by the 14-member Advocates for Science and Mathematics Education Inc., a group of committed community leaders that offers the school programmatic guidance and facilitates a myriad of school partnerships. An independent 501(c)(3), the Foundation for Science and Mathematics Education (FSME), provides financial support to the school, raising supplemental funds to close the funding gap between state investment and the cost of administering enhanced STEM-based curriculum and programming.

Sci High is the recognized leader in STEM education and workforce development in New Orleans ... and the only high school focused on educational equity, as its model is designed to educate an underserved student population.

"No matter what path a graduate chooses – be it college or career – they will need both the ability to be curious as well as the foundation to ground that curiosity in education in order to succeed. With its unique curriculum and school culture, Sci High offers the best of both worlds.

Erik Causey, KPMG, Sci High Alumnus"
Creative & Independent Thinkers

As an open admission charter school, Sci High prides itself on welcoming students from all across New Orleans, regardless of previous test scores, documented academic ability, or special education status. The result is a diverse, dynamic community of young scholars.

Each year, Sci High, a participant in New Orleans One App, proudly enrolls students from all neighborhoods and educational experience, some of whom were accepted into or attended the city’s most prestigious public and private schools. Serving 470 students in grades nine through twelve attend Sci High. The school will expand enrollment once their new home is available.

An overwhelming percentage of students are low-income; more than 90% of Sci High’s students are eligible for the federal Free or Reduced Lunch program. More than 23% of Sci High’s students access special education services.

After 25 years of service within the New Orleans learning community, Sci High’s network of alumni is both considerable in number and impressive in stature. Countless former students have gone on to prestigious colleges and pursued successful STEM careers.

At the same time, many Sci High students have gone on to local and regional colleges and universities to continue their education before entering the workforce.

Outstanding Alumni

- **Sireice Edwards**, a 2016 graduate who is currently attending Howard University on a full academic scholarship
- **Shamarr Allen**, an acclaimed trumpet player
- **David Biery**, a Presidential Scholar who majored in international finance at Harvard
- **Jimani Mwendo**, a dentist and one of four siblings to attend Sci High

**Student Demographics**

- 470 students in grades nine through twelve attend Sci High.
- 83% African American
- 11% Caucasian
- 2% Asian American
- 90% of Sci High students eligible for the Free & Reduced Lunch program
The cornerstone of Sci High’s academic curriculum has always been, and will continue to be, rigorous math and science education. However, the school’s diverse student population demands equally diverse academic offerings, and over the years the Sci High curriculum has evolved to meet these needs with the addition of humanities classes, special education services, and foreign language instruction.

**Pathways to college.** Sci High is committed to ensuring that every student who wants to attend a two or four-year college is academically prepared to do so. Sci High offers ten Advanced Placement (AP) courses in math and science, as well as English and history; any student can enroll in any of the courses. Sci High’s AP class offerings enable students to experience the rigor of college coursework, receive college credit and expand their academic horizons, discovering new areas of study and academic passions they might have otherwise overlooked. The school also offers comprehensive college counseling and mentoring services, providing students with invaluable guidance as they navigate the college application and acceptance process.

**Pathways to careers.** Sci High boasts a robust and expanding Career Technical Education department that embraces four distinct STEM career tracks: Engineering; Skilled Crafts, such as construction and carpentry; Computer Sciences and Digital Media, such as graphic design, computer programming, and software design; and Biomedical and Health Sciences. By participating in these career pathways, students have the option to earn industry-based credentials and certifications, putting them a step ahead of other high school graduates who are entering either college or the job market. In addition, Sci High students at every grade level are provided the opportunity to participate in paid internship and mentoring programs with Sci High’s bevy of community partners. In school year 2016-2017, 65 Sci High students participated in the internship program, and in school year 2017-2018, that number grew to 100.

Since its inception, Sci High has been transforming the expectations of what low-income students can achieve in the classroom, particularly in STEM education.

- **89%** of Sci High students earned a passing rate in Louisiana’s end-of-course tests
- **96%** Sci High graduation rate
- The school’s 2017 performance score was a 98.7, garnering a “B” ranking
- Sci High’s ranking on U.S. News & World Report’s 2016 list of top Louisiana public high schools.
Sci High’s distinct culture, challenging academic curriculum, and commitment to educating the ‘whole child’ are just part of what makes this school special. Our outcomes are a testament to the school’s model. Whether Sci High graduates choose to enter a two or four-year college, obtain a technical degree, or jump straight into the workforce, they are poised for success.

Courtney Guidry, Former Sci High Engineering Instructor

Setting Our Sights High

Sci High is achieving at impressive levels. But what if Sci High could be even better? What if it is a choice between being great – and being the best? What if New Orleans could play host to a world-class STEM school – a school prepared to produce the next generation of innovators and leaders? This vision is poised to become a reality, but only if Sci High can overcome its most substantial barrier: its school facilities.

Currently, Sci High is housed in the former Allen Elementary School facility, located on Loyola Avenue between Nashville Avenue and Joseph Street in Uptown New Orleans. The facility, constructed in the early 1930’s, presents challenges for Sci High’s STEM-based curriculum. In short, the school’s basic infrastructure is not conducive to accelerated math and science education. Most classrooms only have one or two electrical outlets, which is not adequate for a classroom full of student with laptops, and lab spaces are not wired to support fume hoods or the use of specialized STEM equipment.

There is no space for a gymnasium on the current campus, leaving limited room for enrichment activities, community gatherings, or athletics. Classrooms are small and cramped, and teachers and administrators have little to no access to office space. And, beyond the facility’s programmatic limitations, the structure was created to house elementary school students, not teenagers. This means that everything, from stairway handrails to student restrooms, is the wrong size and scale to serve a high school student population.

The current facility limits Sci High in terms of student enrollment. The existing campus has a capacity of 500; however, demand for slots at the school necessitates a growth in student enrollment in subsequent years. Further, its location at the far end of Uptown New Orleans makes it difficult for many students and families to access the campus, and presents transportation challenges for students participating in internships.

Over the course of the next decade, industries built on STEM education, such as information technology, biosciences and health care, digital media, and manufacturing, are projected to see a drastic increase in job openings due to both industry expansion and an aging workforce. In New Orleans alone, 15,000 new high-paying positions are forecast across medical and technology fields over the next several years. Thanks to the school’s rigorous academic model, Sci High graduates will be the ones prepared to fill those jobs, contributing to a viable workforce across the city, state and region.

Sci High needs a new facility to ensure its future success... and New Orleans needs Sci High to continue achieving at high levels to secure the city’s standing as a place where innovation can flourish and industry can prosper.
The Campaign for Sci High

In response to Sci High’s tremendous and urgent need for expanded, enhanced space, OPSB has approved the construction of a new facility for Sci High, appropriately located in New Orleans’ burgeoning BioDistrict. The $32 million construction project, funded with some of the last remaining FEMA monies available for public education facilities in the city, will transform Sci High into a school with cutting-edge capabilities and the capacity to elevate the school’s programmatic and curricular offerings to unprecedented heights. The new Sci High will be a facility worthy of the students, teachers and instruction happening within its walls.

The school will feature:

- STEM learning-supportive classrooms and labs, including a Fabrication Lab, an Engineering Lab, a Digital Graphics Lab, a Bio-Medical Lab, three Science Labs, and two Science classrooms
- 28 core content classrooms
- Expanded special education classrooms and resource centers
- A Visual Arts center
- A hybrid gymnasium and auditorium – the first in the school’s history – with seating for 400 and a versatile staging area for performances and presentations
- A state-of-the-art Media Center
- A tiered “learning staircase” with amphitheater-style seating for smaller presentations
- Outdoor learning areas and space for physical education classes

The new school facility will increase Sci High’s capacity.

650 students

38% increase
Sci High’s new school building will be fully ADA-compliant, LEED-certified Silver, and configured with enhanced school security in mind. In addition, Sci High’s new location on Bienville Street adjacent to the Lafitte Greenway will facilitate greater ease of access for students, teachers and parents, a particularly important factor when considering that Sci High enrollees hail from all across New Orleans.

While the OPSB investment in Sci High’s new facility will cover the costs to construct the building and provide basic furniture and equipment, it will not cover the additional capital assets that Sci High’s STEM-based curriculum requires to fulfill its mission. As such, $1 million in additional funding from the private philanthropic community is needed to cover the costs of specialized equipment and furnishings to outfit the STEM-education based classrooms and labs. Monies raised as a result of this campaign effort could also serve as a potential 1:3 match for capital outlay funds should an appropriation be granted by the state.

Construction on the new school structure is scheduled to commence in the Fall of 2018, and will be completed in 2020. Classes are slated to begin in the new Sci High facility during the 2020-2021 academic year.

“This capital campaign will have a tremendous impact on Sci High students. But it is the ripple effects that will be felt – both within the school and throughout our city – for many years to come. Sci High’s success is New Orleans’ success.”

Bob Sternhell, PhD
President, Foundation for Science and Mathematics Education
How You Can Help

As a donor to this effort, you are stepping in to fill the gap where local and state governments cannot, providing Sci High with the critical enhancements that will elevate the school’s STEM-based programming to new levels. You are doing more than simply investing in a school facility – you are leveraging Sci High students’ academic gains into economic opportunity for our city, state and region.

Our students – and our city – need Sci High.
And Sci High needs you.

Since our founding in 1993, our mission has never changed: we will accept any student willing to work hard and learn to think by observing and gathering evidence before making conclusions. We are dedicated to preparing students for choices after graduation: two or four-year college, career, or national service. We focus on math and science because those are the career fields of the future. Our graduates write to thank Sci High for making them persist when the going got tough. You will, too.

Barbara MacPhee, Sci High Founding Principal
Sci High, an open-admission, comprehensive charter high school, is the recognized leader in STEM education and workforce development in New Orleans. It is the only open-admission school in the region that was specifically designed to prepare an underserved student population for high-demand, high-pay careers in STEM industries.

THE FOUNDATION FOR SCIENCE & MATHEMATICS EDUCATION

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