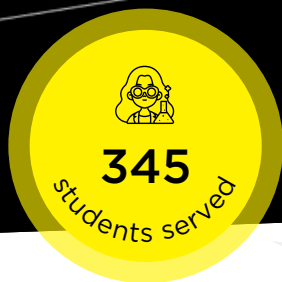


FirstHand™

2024 Impact Report



FirstHand offers free year-round supplemental STEM learning for middle and high school students. Our curriculum is designed to provide skills-based career exposure through real-world, hands-on experience. Our FirstHand Lab connects students from surrounding neighborhoods to the entrepreneurial and innovation ecosystem in Philadelphia.



"I can go out to the real world and if I want a job or something and they ask me about science, I could just tell them where I went. I could tell them I went to FirstHand for 10 weeks and I learned about bioplastic and all different types of things."

DASAN, 8TH GRADER

\$27,701

in stipends earned by high school participants



Companies with >20 hours in 2024



12 MIDDLE SCHOOL PARTNERS

- Add B. Anderson Elementary
- Alain Locke Elementary
- Girard College
- James Rhoads Elementary
- John F. McCloskey Elementary
- KIPP West Philadelphia Preparatory Charter
- Martha Washington Elementary
- Science Leadership Academy Middle School
- S. Weir Mitchell Elementary
- Tilden Middle School
- William C. Longstreth Elementary
- Young Scholars Charter

**Plus students from 40 other high schools*



"I always thought there were 4 or 5 jobs in science, but when I met our mentors I learned that there is way more to science. That made me realize that I don't have to be a scientist working in a lab, I can be any type of scientist I want."

SANIYA, 7TH GRADER

UNIVERSITY CITY SCIENCE CENTER <> FIRSTHAND

FirstHand is an initiative of the Science Center, a mission-driven 501(c)(3) non-profit and Philadelphia's premier catalyst of entrepreneurial activity, healthcare innovation, and economic growth. Beyond providing best-in-class startup support, we recognize that the success of Philadelphia's growing life sciences industry hinges on our collective ability to grow and diversify the STEM talent pipeline.



CURRICULUM

MIDDLE SCHOOL

POLYMER PLAY

Create, test, and design biodegradable polymers while gaining an understanding of what it really means to be a materials scientist.

DNA SELFIE

Understand the structure and many functions of DNA through microscopy and gel electrophoresis, the same technologies that biotechnology companies use every day.

BIOMAKE

Create genetically modified organisms (GMOs) and then design, bake, and market a snack utilizing the GMOs. Developed in collaboration with Penn researchers.

HEALTH HACKERS

An introduction to coding and app development through an empathy-based design lens. Co-developed with Children's Hospital of Philadelphia computer scientists.

FUTURE TECHSTYLES

Apply design thinking principles to prototype new uses for e-textiles and wearables that have meaning to them. Subject-matter experts from the Navy serve as mentors throughout the program, and introduce students to soft robotics.

HI-5

Five days, five STEM career paths. Hi-5 highlights careers in microscopy, material science, taste and smell research, and more. FirstHand alumni serve as mentors by helping to develop student activities and supporting facilitation of the sessions.

HIGH SCHOOL SPRINTS

≥8-week (≥16-hour) curricula that are co-designed and co-delivered by the mentors and the FirstHand team to reflect the skills and topics of the emerging industry while centering the needs of Philadelphia students.

BIOTECHNOLOGY

Learn alongside scientists from Philadelphia companies, and practice essential lab skills.

NFTE BIZCAMP

Learn to think like an entrepreneur, develop an entrepreneurial mindset and apply the fundamentals of entrepreneurship to develop and pitch a business.

CYBERSECURITY

Apply information security workplace skills through hands-on activities and challenges.

PHILLY DATA MINERS

Explore the world of data science by analyzing Philly-centric data sets to reveal the story behind the numbers.

HUMAN CENTERED DESIGN

Identify a problem to be solved and then design a human-centered technology solution (app or otherwise) that will help solve the issue.



2024 FUNDERS



2024 MILESTONE

FirstHand Turned 10! 🎉

2024 marked 10 years of FirstHand. In that decade, we served 2,500 students from 87 schools with a total of 37,000 hours of student engagement. This milestone would not have been possible without the 348 STEM professionals from 95 different companies who volunteered, and the countless funders who have supported FirstHand. Here's to another ten years!

In Loving Memory of Shelby Keating-Brown

Shelby's passion for inspiring young people was evident in the over 30 hours of mentorship since 2020, and she was the galvanizing force behind Century Therapeutics' volunteerism with FirstHand. Her spirit lives on in the countless students that she inspired and the colleagues continuing her work.



FirstHand is supported through philanthropic gifts and grants. To learn more about how you can support FirstHand and the Science Center or make your contribution, visit sciencecenter.org.

University City Science Center
3675 Market Street, Suite 400
Philadelphia, PA 19104
sciencecenter.org

