



The PAST
Foundation

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iteration

2022-2023

ANNUAL REPORT

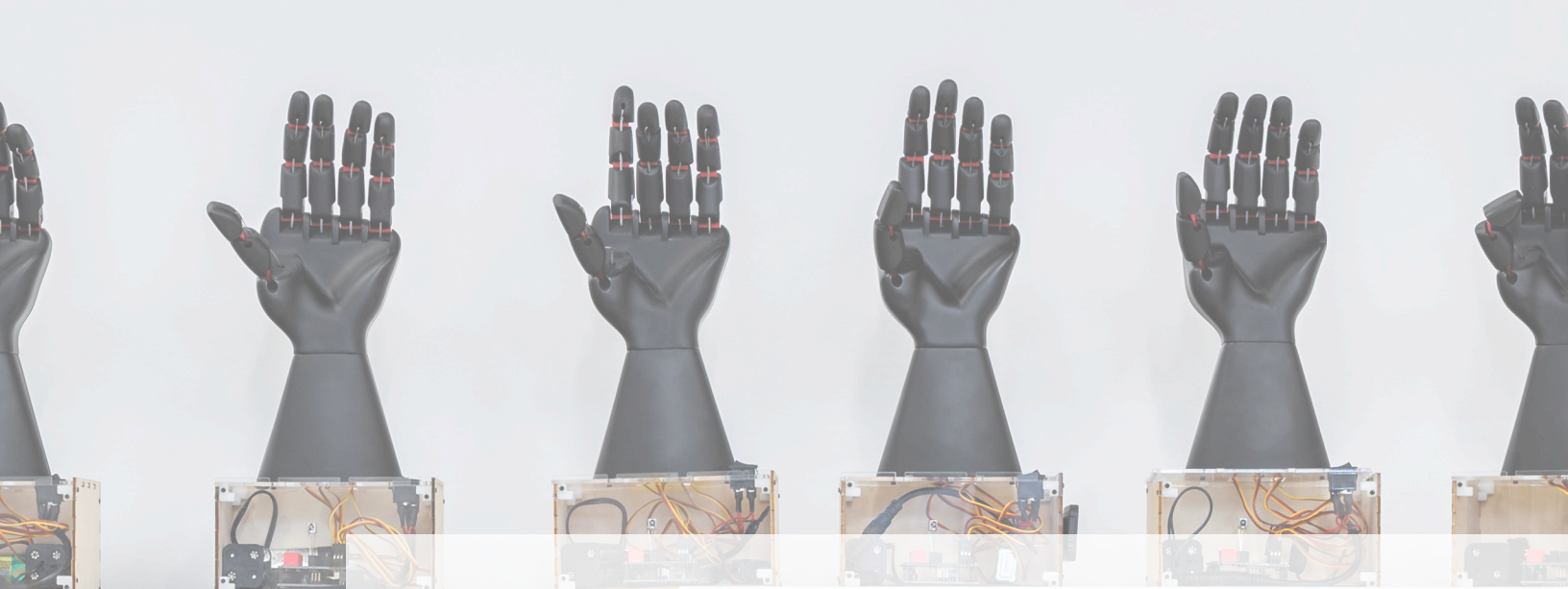


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As 2023 closes, it is my honor to introduce our next innovative leap forward in education – the launch of the Early IT Microschool, powered by the PAST Foundation. This initiative represents a collaborative effort with Upper Arlington City Schools, Metro Early College High School, the University of Cincinnati, and the Getting SMART Collective and is aimed at transforming the way we approach education for our future generations.

Our mission is clear: to provide a seamless, inclusive, and empowering educational journey for students, particularly those who are economically disadvantaged, traditionally underserved in STEM employment, and first-generation college-goers. We are here to break down the barriers that have historically hindered access to quality education and career opportunities in the rapidly growing field of information technology. Through extended advocacy, grantmaking and storytelling campaigns, we are fortunate to have the help and assistance of the Getting SMART Collective.

The Early IT Microschool is not just another educational program. It is a micro school environment that focuses on hands-on learning, personalized attention, and real-world problem-solving. This program has the ability to allow students to take college-level courses in a mastery-focused system, preparing them for success in college and the IT workforce. The University of Cincinnati has been refining this model since 2015, and we are proud to say that it is scalable, sustainable, and ready to make a significant impact.

We are addressing critical needs in our community and workforce. The tech industry in Central Ohio, and indeed across the nation, is experiencing a shortage of trained workers. This shortage is exacerbated by the underrepresentation of women, Black and Hispanic individuals, and people with disabilities in the IT workforce. Our microschool aims to tackle these challenges head-on by providing free tuition, books, and fees for the first year of college, personalized learning journeys, and a supportive environment that encourages students to explore and excel in STEM fields.

The Early IT Microschool supports the inclusion of all learners. We are excited to work on this project with our K12 based partners from Upper Arlington and Metro Early College High School. This approach ensures that time becomes a variable with performance as a constant, allowing advisors and instructors to assist students in mastering their coursework and advancing when they are ready.

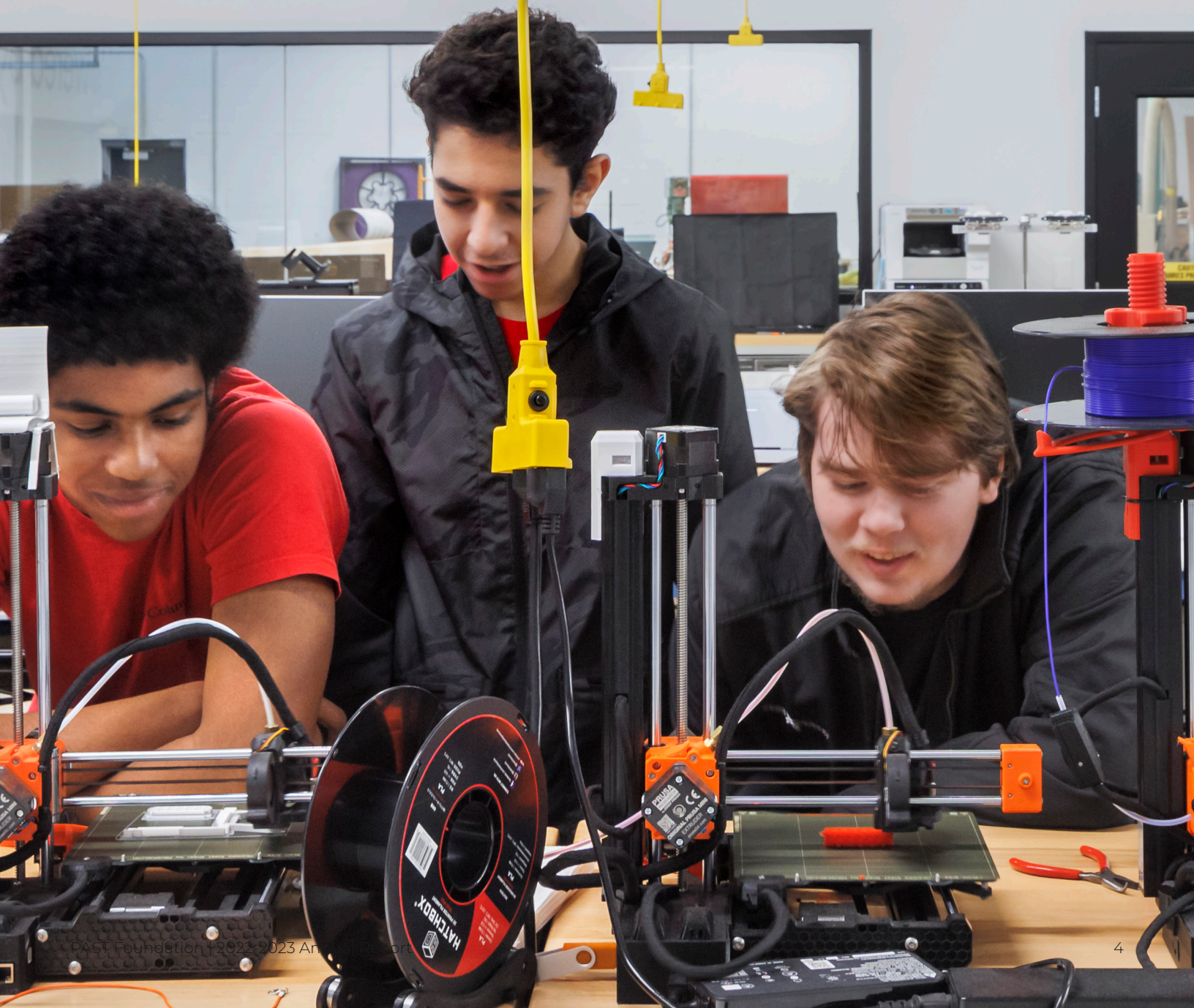
I want to express my deepest gratitude to our partners, supporters, and the entire community for joining us on this journey. Together, we are not just changing the educational landscape; we are shaping the future of our workforce and society. The Early IT Microschool is a testament to what we can achieve when we come together to innovate, support, and empower our students. Thank you for your commitment to transforming the learning landscape and for believing in the potential of every student to succeed and thrive in the 21st century.

As we shift from one year to the next, let's embark on this exciting journey together creating a brighter future for our students and our community

Warm regards,

Annalies Corbin Ph.D.
President & CEO

maker



What we do

Student Experiences: The PAST Student STEM Experiences Team designs, tests, and implements various summer programs, after-school programs, and community events. These programs and events engage students and link learning to life in a fun and unique manner in collaboration with professionals and community partners with real-world issues.

Professional Learning Experiences: PAST focuses on a replicable process of building holistic educational experiences for professionals in our community and beyond. Whether one needs on-site support, online assistance, or immersive experiences, PAST will create customized offerings to meet those professional needs. The PAST team approaches all learning from a Inquiry-Based Learning perspective using STEM, the principles of design, and systems-thinking to build programs that address culturally relevant issues and engage all participants in a learning partnership.

Research: PAST Research has provided evidence-based guidance to PAST projects and partners for nearly 20 years and undergone a process of trials, experimentation, and on-going field-testing. The PAST Foundation Research Model utilizes mixed methodologies from the humanities and social sciences to capture qualitative and quantitative data. These data inform projects supported by PAST Foundation as well as external clients, allowing them to ascertain the fidelity impact of actions for proposed projects, and contribute to broader education issues through publications, conference participation, and public outreach.



696,774

**Students Impacted
in 2022 & 2023**



150

**PAST Led Student Experiences
in 2022 & 2023**



3,646

**Educators Impacted
in 2022 & 2023**

PAST Research: STEM Identity

PAST Foundation believes that a student’s STEM identity plays a powerful role in an individual’s success in educational environments, as well as on their career goals and the ability to earn a sustainable wage in STEM careers after high school or college (a belief supported by studies published in education research).

As part of our evaluation process, we assessed students’ STEM identity status through the use of pre- and post-surveys. Our goal is to measure the impact of our programming on students’ STEM identity - their confidence, capability, and a sense of belonging in STEM fields, as well as encouraging the formation of STEM identity in students across the Pre-K12 ecosystem.

During 2022 and 2023, we applied our initial instrument for STEM identity assessment during summer programming. This instrument touched on five features of identity (as perceived by the students and self-reported): competence, performance, internal recognition, external recognition, and ways of seeing and being. We administered 776 pre- and post-surveys through the course of 2022 summer programming. For 2023 summer programming, we administered 614 pre- and post-surveys, with 175 of those administered at CCS summer programs.

During fall 2023, we assessed the patterning in the results from the 2022 and 2023 surveys, the age appropriateness of a single instrument for all K-12 students, and reviewed research publications on science/academic identity, developmental psychology, and vocational/occupational studies. As a result, PAST Research constructed a series of new, age-appropriate instruments to study STEM identity. Toward the close of 2023, we finished developing a STEM Identity Instrument (SII) and a STEM Identity Status Instrument (SISI) for high-school students and a SII for 4th and 5th graders. We piloted these three instruments at the end of 2023 and will be refining them during the first months of 2024. We plan to continue developing age-

appropriate survey instruments for the remaining grade levels during the beginning months of 2024.

We believe having role models that share personal characteristics plays a key role in the development of STEM identity among students. Another important factor in a student’s STEM aspirations, which we have incorporated into our instrument, is the impact of parents’/guardians’ academic backgrounds and/or occupations on students. Caregivers are highly important role models, and those with backgrounds in STEM often provide children with informal STEM learning through daily activities (e.g., dinner-table discussions, help with STEM homework, etc.).

Background reading in the education research literature to refine these instruments contributed to the development of a long-term (multi-year) project to study STEM identity development



among high-school students from historically marginalized groups. In November 2023, this project was submitted to the National Science Foundation’s Discovery Research preK-12 in formal STEM education.

PAST Research also began work on a Personal Meaning Mapping instrument to directly assess learning in PAST programs in which PAST instructors provide out-of-school learning opportunities (e.g., summer programs, workforce development, home school students). This instrument will provide additional information on competency and performance, as well as help with evaluating and improving PAST programming. During 2024, we will pilot a version applied through interviews and another applied through pre- and post-surveys.

PARENTAL OBSERVATIONS

The majority of parents shared that their child had gained a **curiosity** for STEM (80%), **technical skills** (70%), and **problem solving skills** (65%). Parents also observed that their children were able to explore their **confidence** (85%) and **patience** skills (60%) through the program.

STEM SEEING & BEING

Middle school students’ ways of seeing and being grew by 3%. Elementary school students’ ways of seeing is an area of improvement with a decrease of 4%; however, all students reported a **higher interests with technology** after summer programming.

EXTERNAL RECOGNITION

Middle school students’ external recognition grew by 6%, with large growth specifically in their **belief that others see them as someone with scientific potential** (13%). and elementary school students’ external recognition grew by 5%.

STUDENT STEM COMPETENCY

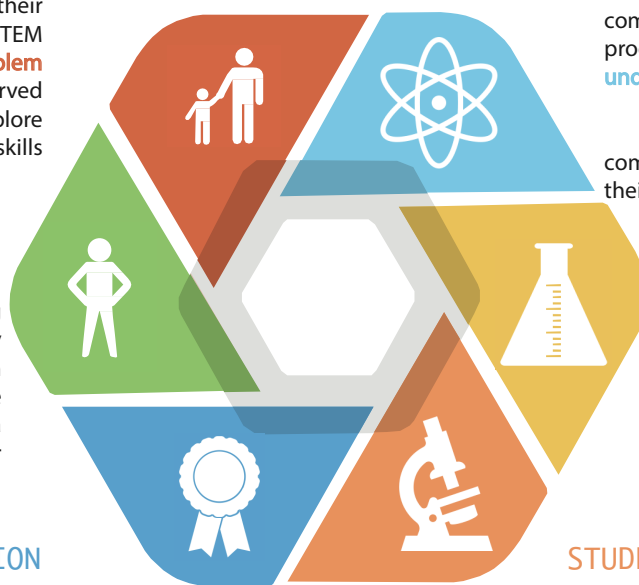
Middle school students’ STEM competency grew by 5% during the programming, with a 10% increase in the **understanding of complex ways living and non living things are connected**. Elementary school students’ STEM competency grew by 6%, most notably in their **understanding of engineering** (11%).

STUDENT PERFORMANCE

Middle school students’ performance grew by 4% during the programming. Elementary students’ performance grew overall by 0.6%, with the most growth seen in students’ ability to **use scientific explanations to understand the world** (8%).

STUDENT SELF-RECOGNITION

Middle school students’ self-recognition grew by 3% and elementary school students’ self-recognition grew by 4%, with the highest growth for elementary students’ in their **ability to think scientifically when faced with problems in school** (12%).



Summary of Results from 2023 Summer Surveys

Spotlight: Workforce Development

Workforce development at PAST is a multi-faceted approach. We work with educators to develop skills and earn Industry Recognized Credentials (IRCs), who in turn bring this knowledge and experience into their classrooms.

STEM Educator Workforce Collaborative

The legislature has invested in PAST Foundation's STEM Educator Workforce Collaborative, and with that funding, to date, 367 educators from more than 32 Ohio counties, 78 school districts, and 138 schools have participated in the program. Through the Collaborative, educators expand their knowledge and skill set in various STEM career areas essential for designing and delivering immersive STEM learning experiences that emphasize learning about "work through work."

Participating educators have the opportunity to earn Industry Recognized Credentials in sought-after fields such as Drone Flight (FAA Part 107), CompTIA A+, Security +, Network +, Entrepreneurship & Small Business, SolidWorks, Lean 6 Sigma, Leadership Excellence, and Adobe suite applications (Illustrator, Animate, Premier Pro, Photoshop, etc.).

By equipping educators with these credentials and skills, the collaborative fosters enriched STEM education experiences for students, preparing them for success in an increasingly technology-driven world.

Workforce Development Internships & Student Programing

The SMART Skills Workforce Development Program, led by the PAST Foundation, is a dynamic initiative designed to prepare high school students for success in today's rapidly evolving workforce. Regardless of format, whether spanning a 7-week internship program over the summer, a 3-month after-school session, or intensive week-long boot camps, these student programs offer immersive experiences across diverse STEM disciplines. Participants engage in hands-on learning opportunities in areas such as Information Technology, Drone Flight, CAD and Additive



Manufacturing, Leadership, Cybersecurity, Financial Literacy, Media Production, Information Technology, and more.

Partnering closely with industry leaders and mentors, our student programs emphasize real-world challenges and projects, equipping students with both technical competencies and essential soft skills like collaboration, problem-solving, and effective communication. Participants dedicate focused hours to working alongside professionals, often earning industry-recognized certifications and credentials along the way.

To date, more than 370 students have participated in workforce development programming at the PAST Foundation, and nearly 600 industry certifications have been earned. The impact of workforce development student programming transcends its various formats, serving as a catalyst for personal and professional growth among students. By bridging the gap between education and industry, the program empowers participants to explore diverse career pathways with confidence and purpose.

As a cornerstone of the PAST Foundation’s commitment to nurturing the next generation of innovators and leaders, the SMART Skills

Workforce Development Program stands as a beacon of excellence in experiential learning, collaboration, and community engagement. Its adaptable format ensures accessibility and relevance, setting a standard for educational initiatives nationwide.



Projected Impact	FY22	FY23	Projection FY24	Total Impact
Educators	69	208	250	527
Student Impact	10,350	26,100	37,500	73,950
Additional Students Receiving Direct Instruction from PAST or PAST Fellows	848	3,150	4,000	7,998
Educational Leaders	30	75	150	225

Engagement with Industry & Community Partners

The success of The PAST Foundation’s workforce development initiatives, including educator training and student internship opportunities, hinges upon robust partnerships with industry and community stakeholders. With over 100 representatives from more than 34 organizations actively involved in supporting programming, these partnerships are essential for bridging the gap between education and real-world career readiness.

Industry and community partners are integral to our educator and student initiatives, serving as guest speakers who provide insights into industry trends, technologies, and career paths, inspiring educators and students alike. Mentors offer guidance, while coordinated site visits offer first hand exposure to practical applications. Additionally, some partners collaborate on curriculum development, ensuring alignment with industry standards, and others serve as mentors for student interns, providing authentic projects that enhance technical skills and foster essential soft skills like teamwork and problem-solving.

In essence, the involvement of industry and community partners is instrumental in enriching the quality and relevance of PAST Foundation’s workforce development initiatives. By fostering collaborative relationships and leveraging the expertise of external stakeholders, these initiatives empower educators and students to thrive in today’s dynamic and competitive workforce landscape.

Ongoing Involvement of Student Interns:

PAST Workforce Development interns have continued to participate and engage in workforce development activities after summer programming ended in a variety of ways. The continued engagement of former PAST Workforce Development interns beyond their initial summer programs has created a dynamic ecosystem of sustainability within PAST. By actively participating in various projects and initiatives, these interns have seamlessly integrated themselves into the PAST culture, mindset, and ecosystem.

Interns have engaged in various workforce initiatives including taking on mentorship roles for incoming interns and middle school students,





tackling design challenges in the Maker Space, creating a business plan, and managing a PAST Foundation merchandise store, and working directly with industry partners whom they initially engaged with during summer programming in their respective organizations. Their ongoing involvement in these activities demonstrates their commitment to contributing meaningfully to the organization’s mission and objectives.

The mentorship and guidance provided by returning interns to new cohorts highlight the cultivation of a lifelong learning mindset within the PAST community. By sharing their experiences and expertise, these interns not only facilitate the onboarding process for new recruits but also foster a sense of camaraderie and collaboration among team members. Additionally, interns have taken what they learned during their programming to develop and facilitate student summer programming for middle school students. This intergenerational exchange of knowledge and skills not only enhances the efficiency and effectiveness of operations but also reinforces the organization's commitment to nurturing talent and fostering personal and professional growth.

Furthermore, the expansion of intern involvement beyond the confines of the organization, such as collaborating with external partners underscores the broader impact of PAST’s programs on the community and industry landscape. Through these partnerships and initiatives, former interns have the opportunity to apply their skills and expertise in real-world contexts, while also contributing to the organization’s reputation as a hub for innovation and excellence in workforce development and education.

Overall, the active participation and continued engagement of former interns exemplifies the transformative power of experiential learning and the enduring impact of PAST’s programs on the lives and careers of its participants.



New Directions: Portable Innovation Labs (PILs)



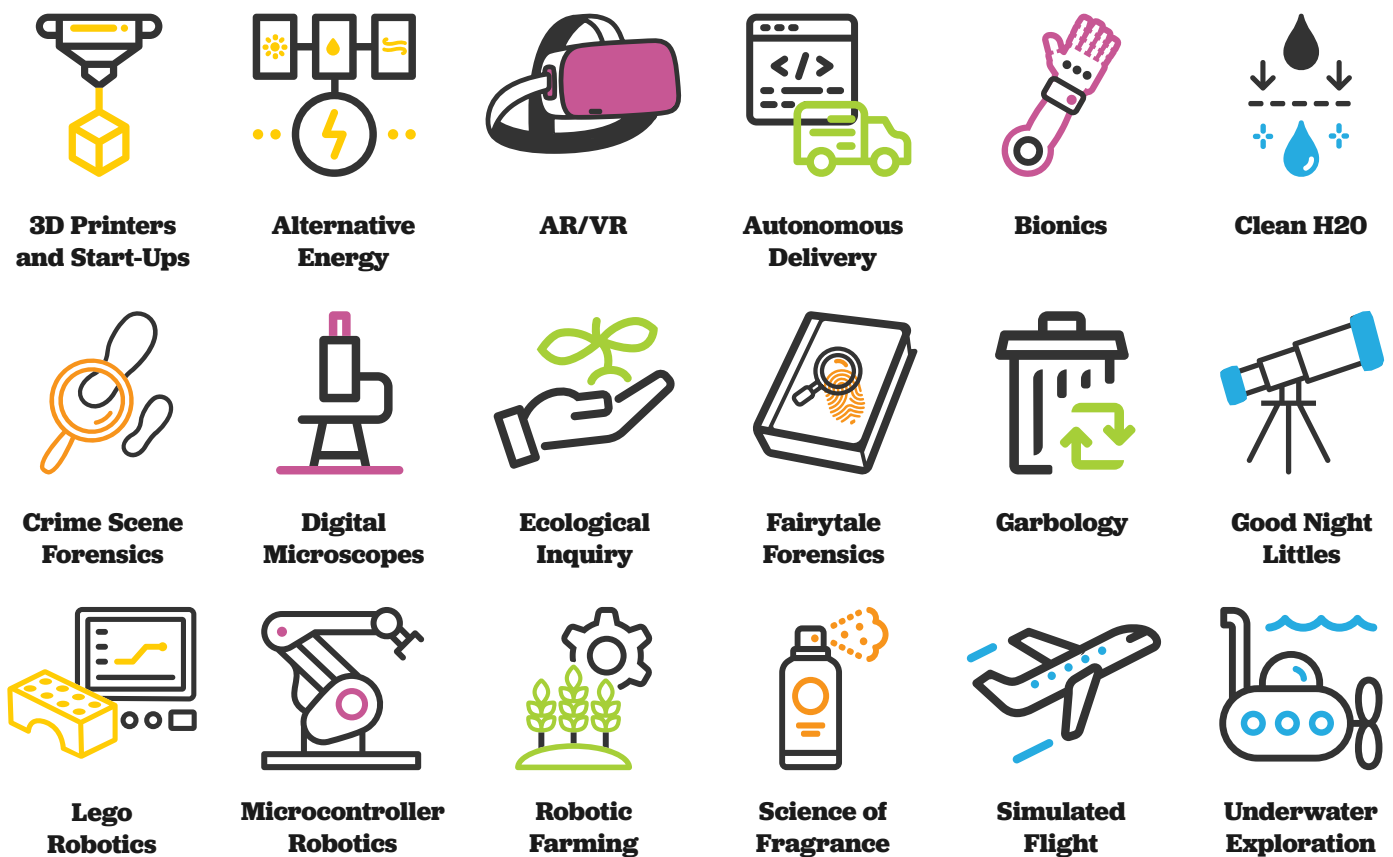
Powered by PAST and in partnership with Battelle, our Portable Innovation Labs are designed to facilitate unique educational opportunities by providing teachers and students with the resources that schools may not be able to purchase on their own. With the exception of easy-to-find consumable materials, all necessary items are provided. The curricula are culturally relevant and hands-on. PILs were designed to be taught with a transdisciplinary mindset, making it easier to cover multiple learning standards in more than one subject. They also connect to career pathways ranging from Robotics to Forensics. In many ways, these activities equip teachers with tools they can use to help foster STEM identity.

In 2022, PAST received funding from Battelle to support a STEM Lending Library for Central Ohio schools. From the outset, we knew this would be an exciting new project with many moving parts. Building out the development of PILs at PAST has required multiple areas of knowledge to be utilized. PAST Educator Experience and Student Experience staff have been involved in the creation and piloting of PILs. PAST Research has created feedback forms for educators and students so we can ensure our labs are appealing to both groups of users, as well as

tools to collect student and educator impact data and STEM identity data.

PAST worked with our out-of-house marketing and development team (GP Creative) to create the now iconic PILs design that educators love. The same team helped us redesign our PILs website and reservation system, where educators can learn more about each lab and check the availability of PILs. Having worked out several of the logistical pieces to the puzzle, we went to the next step and bought a van. This is a game changer in our work, as it will help spread the impact of PILs to educators more broadly across Ohio.

To date, numerous educators have borrowed one or more PILs, and have implemented the PILs with nearly 900 students. In addition to making PILs available to Central Ohio schools, PAST is partnering with the Columbus Metropolitan Library (CML), the Akron OSLN Hub, and the Dayton OSLN Hub to develop protocols for borrowing PILs. CML piloted three PILs during summer 2023, and are excited about using a wider variety of PILs with their young patrons during the school year in addition to using PILs for summer programming. Mindful of feedback gathered from a focus group conducted by PAST Research with the CML facilitators who piloted PILs summer 2023, PAST adapted the PILs curriculum to meet the needs of CML. Here are the PILs currently available to be borrowed:



“The PAST Foundation innovation labs have been an excellent hands-on addition to my current middle school medical career exploration curriculum. My students enjoyed the collaborative hands-on learning and extensions to our current curriculum.” (Central Ohio Middle School Teacher)

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New Hires 2022-2023



Brianna Agomessou
Portable Innovation Labs Coordinator
Investigator of Intellect

Brianna is passionate about inspiring young minds and fostering a love for learning. Her goal is to reach the hearts and minds of the people she interacts with each and every day.



Jocelyn Browning
STEM Coordinator
Insightful Innovator

Jocelyn has a background in special education and has taught in Chicago and Columbus. She is also a proud member of Metro Early College High School's first graduating class. Jocelyn is dedicated to creating equitable experiences and outcomes for all students.



Cassie Davis
Research Assistant
Fact Forager

Cassie has a passion for using anthropology as a foundation for research that creates beneficial impacts in our community. As the Fact Forager, she uses her skills to collect, analyze, and report on data, contributing to our communal knowledge of STEM programming and identity.



Lane Fargher
Director of Research
Quæditor Magnus

Lane is passionate about promoting an understanding of collective action and its role in good government. Accordingly, he believes that high quality STEM education is vital for well-being and social progress.



Kelleigh Huey
STEM Experience Instructor
Academic Alchemist

During college, Kelleigh discovered her passion for innovation and STEM, which motivated her to join the PAST Foundation. In her position, she hopes to be an inspiration and role model for the young people she leads.



Rubi Martinez
Administrative Assistant
Minister of Maximization

Rubi supports the PAST Foundation's work in transforming the educational landscape by performing a variety of clerical and administrative support responsibilities.



Janetta Pickens
Office Administrator & HR Representative
Connection Catalyst

Janetta has years of administrative experience and the communication skills that make it possible for her to adapt to the PAST foundation environment and contribute where needed as the office administrator and HR representative.



Daijah Robinson
Student Experiences Coordinator
Botanical Maverick

Daijah has incredible energy for agriculture, and advocating for youth. Her objective at PAST is to spread awareness of agriculture, and create sustainable gardens in underserved areas. She plans to develop innovation in the horticulture industry by leveraging strategies from the PAST Foundation.

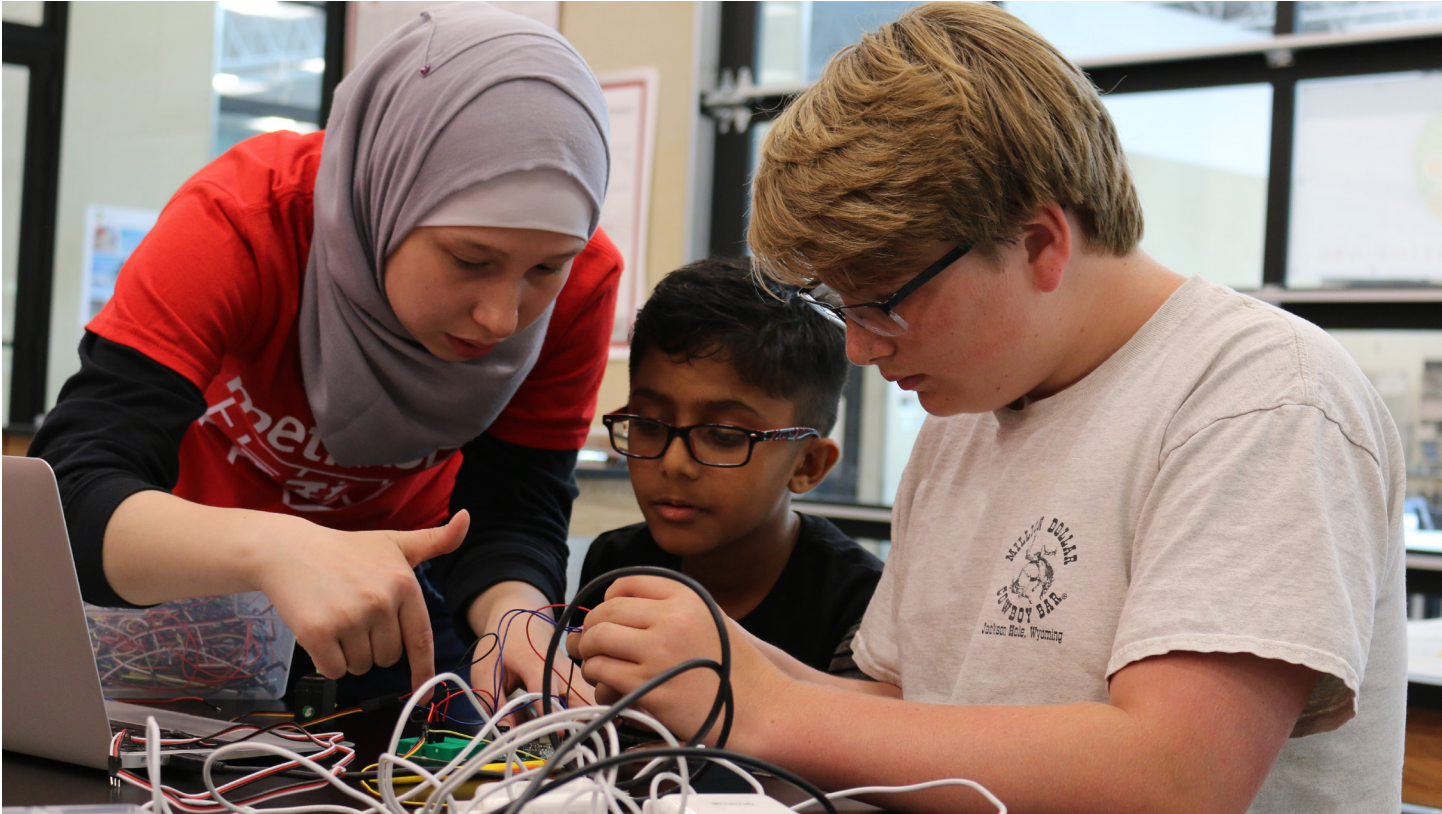


Kathy Wright
Director of Educator Experiences
STEMinista

Kathy is a veteran educator with Cincinnati Public Schools, serving in various role, including science educator, facilitator, coach, and administrator. In her work at PAST she focuses on innovative practices for exceptional results.

2022 & 2023 Financials

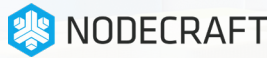
	2022	2023
Total Revenue	\$5,322,639	\$3,350,684
Total Expenses	\$3,299,069	\$3,603,552
Total Assets	\$6,477,353	\$6,237,433
Total Liabilites	\$2,957,942	\$2,848,890
Net Assets	\$3,519,411	\$3,388,543



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