

# 17 years of empowering children in Houston's East End to think and create



Classrooms are not the only places that kids learn, and academic learning is only part of the whole child development needed to help youth discover the interests and talents that lead to success in the classroom, career, and beyond. More than 80% of Texas students' time is spent learning outside of school. High-quality out of school time (OST), which includes afterschool, summer, and enrichment programs, provides hands-on learning opportunities that help kids develop critical life skills as well as nurturing mentor and peer relationships that accelerate academic learning and prepare youth for their futures.

OST is a critical component of the functioning ecosystem of support necessary for whole child development and whole communities. Community-based providers are essential, offering in-person care and learning, while also connecting families to critical services and resources, such as food, technology, and healthcare. Strong partnerships between schools and these community-based organizations are vital to our state's successful recovery and future.

Since 1980, [Children's Museum Houston](#) (CMH) has focused on transforming Houston communities through innovative, child-centered learning, including a variety of opportunities for high-quality learning experiences during out of school time. Working with community partners, CMH strives to help children be successful in school and in life, facilitating the development of critical skills and giving them opportunities to apply what they are learning in real-life ways. "Much of what we do is about partnerships we've made within the community, giving access to families, whether it's afterschool programs, summer camps, or engaging with families at home or in places of worship," says Tiffany Espinosa, Director of Outreach at CMH.

In addition to CMH's community outreach through these partnerships, CMH's Andrea Hernandez has been operating the **Science Workshop at Edison Middle School** in Houston's East End for the past 17 years. A STEAM-focused afterschool and summer program, the Workshop empowers children to take charge of their education, ask questions, and find what inspires them.

Within their A'STEAM program, CMH educators develop curriculum, train staff, and provide supplies to equip area YMCAs to facilitate project-based STEM activities for kids K - 5. CMH's Camp Adventure! is a free camp for K- 5 students attending summer school at several Title 1 schools. The camps transform the last two hours of summer school into a fun learning experience with a full slate of literacy and STEAM programming.



## Youth Demographics, Impact, & Outcomes

**Youth Served:** 30 students daily  
2000+ cumulatively

**Grades:** 6 - 8

**Ages:** 12 - 15

**Demographics:** 98% Hispanic  
2% Black or 2+ races  
37% English Language Learners

**Youth Outcomes:** Edison Middle School students enrolled in Science Workshop were 25% more likely than their fellow students to qualify for AP math classes in high school and 21% more likely to qualify for AP science classes.

Understanding that each child has their own interests, knowledge, and experiences, the staff strives to create an atmosphere of opportunity, creativity, and independence. There is no set curriculum, and students have the freedom to choose their projects and work at their own pace. This process can be intimidating for students initially, but CMH knows that developing lifelong learners takes this kind of space and exploration. Hernandez says, "It's really difficult, and some people would say it's chaos. But it's a controlled chaos—one that allows for a lot of creative energy, and the students really like that energy!"

With a maximum of 30 students and a 10 to 1 ratio, program staff is busy making sure students are connected with the tools and inspiration they need. The Workshop has a variety of resources from hand and power tools to software and 3D printers, and there are displays and books to pique student interest. Student questions are frequently answered with questions, guiding them to think for themselves and think critically to find solutions. Group projects are encouraged, allowing students to collectively manage tasks and set desired outcomes, helping to develop essential life skills.



Workshop students have shown improvement in academics and social interactions, and teachers at Edison say they can tell when a student is enrolled in the program. Students who have dealt with social and emotional issues elsewhere have thrived in the Workshop environment.

The Science Workshop exposes students to high-quality STEAM experiences to foster an environment in which young people learn to think. Hernandez knows that "Given a little bit more freedom, kids can and will learn on their own. It can be a better way because they're inquiring about things they like. And that's what's going to engage them."



### Program Highlight

*Birdhouses aren't just decorative*

Hands-on, applied learning is key in high-quality STEAM, which makes building birdhouses a favorite activity at the Science Workshop. Cultivating an engineering mindset in students from start to finish, program leaders know these birdhouses aren't just decorative. Engineering and biology intersect as students conduct research on different types of birds and apply their knowledge of fractions and angles to design and build unique dwellings with the appropriate dimensions, drainage, and safety features. Students even rough up the sides so that fledglings can climb out and eliminate perches, often called "predator sticks"! The houses are donated to Wildlife Rehabilitation Centers, given as gifts, or sold at school fairs, teaching fiscal responsibility, community engagement, and even marketing!

**"I like that the Science Workshop staff encourages the students to use their minds as well as their hands. That they help the students plan it and the students can visualize it.**

– Science Workshop Parent



The Texas Partnership for Out of School Time (TXPOST) is a statewide intermediary whose mission is to convene, educate, and advocate to improve the quality and increase the availability of out of school time (OST) opportunities, like those offered by Children's Museum Houston, for Texas youth. TXPOST works in partnership with vital local and regional organizations, which invest deeply in their own communities to offer professional development opportunities, engage in system-building work, advocate for the OST field, and support local programs.



### Contact Information

Tiffany Espinosa  
Director of Outreach  
Children's Museum Houston

Phone: 713.535.7234  
Email: [tespinosa@cmhouston.org](mailto:tespinosa@cmhouston.org)  
Website: [www.cmhouston.org](http://www.cmhouston.org)