



# CELF Student Symposium

Houston, TX  
March 6, 2024

**Civic Science**  
**Recap and Impact Report**







# Path to the Symposium

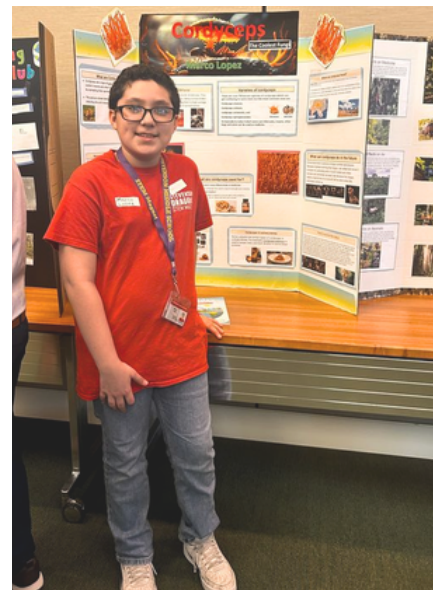
## CELf Civic Science

The Student Symposium is a culminating event from CELf's **Civic Science: Inquiry-to-Action** program which engages students in hands-on learning to identify, analyze, and solve real-world environmental issues that impact their schools, neighborhoods, and beyond.

CELf's Student Symposium brings young civic scientists together to share their research projects, data, and solutions for pollution remediation and environmental stewardship with community members, field experts, policymakers, and peers being the primary audiences.

By navigating the connection between science, society, and policy, children are empowered to make a positive impact on our world. Led by classroom teachers trained and supported by CELf, students are transformed into vital global citizens, ready to face tomorrow's challenges head on.

On March 6, 2024, CELf HTX held its second annual Student Symposium where students in the Civic Science program presented place-based action projects. The event was hosted by EDP Renewables at Hess Tower in downtown Houston.

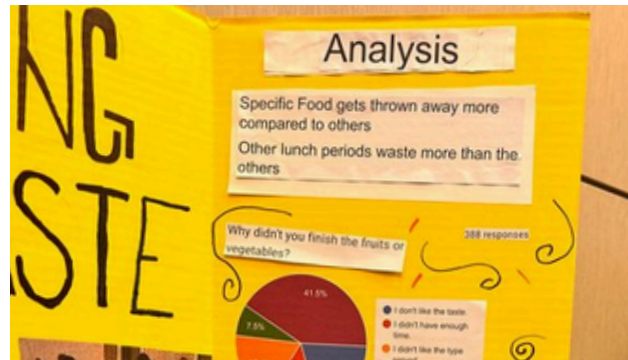


## Student Learning Experiences

During the 2023/24 school year, CELF provided students with numerous opportunities for discovery and inspiration with programs to complement their Civic Science experience.

### Introducing the Inquiry to Action Framework

CELF educators introduced teachers to the concepts of Civic Science, including the Big Ideas of Sustainability. While developing their driving questions, students began imagining their final projects.

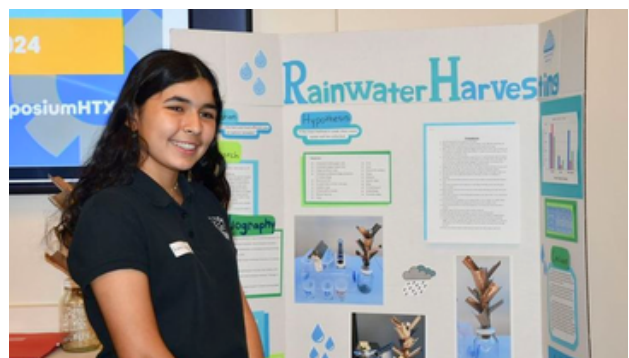


### Microgrants

CELF supported teachers in our Civic Science cohort and on their journey to the symposium by offering microgrants, enabling them to use a small budget for supplies and other expenses to supplement their teaching and student-led projects.

### Getting Students Outside

Focusing on real-world issues like water quality, air quality, or pedestrian infrastructure safety, students are encouraged to apply their civic science skills in outdoor settings.



### Green Careers Speakers

The Green Careers speaker series connects teachers and students with field experts and scientists who enrich the classroom experience by adding real-world exposure and career connection during presentations and Q&A sessions.



# Community Gardening and Tackling Food Waste



## Projects Overview

G.W. Carver High School from Aldine ISD participated in the symposium offering questions exploring the effects of educational community gardens on food deserts and the benefits of share-tables to mitigate food waste production. The students from G.W. Carver High School conducted thorough research to understand the dynamics of food deserts within their community and the potential role of educational community gardens in addressing this issue. Through their project, they explored how these gardens could not only provide fresh and nutritious food to underserved areas but also serve as educational tools, teaching students about gardening, nutrition, and sustainability.

## Student Action Steps

- Student's findings highlight the benefits of community gardens for those without access to fresh produce.
- They plan to leverage their newly grown garden to invite and educate the local community on nutrition, urban agriculture, hydroponics, entrepreneurship and community development.
- Implementing and maintaining the Moonlab 3 Hydroponics System at Carver HS and funded by the City of Houston



# Air Quality and Food Waste



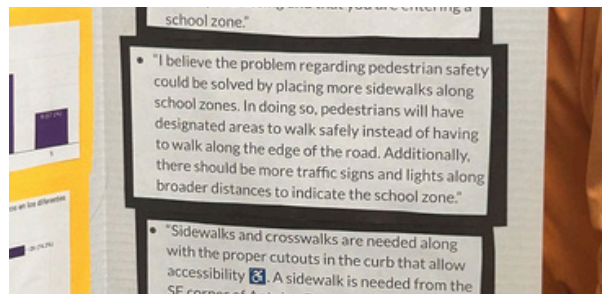
## Projects Overview

C.E. King students presented on environmentally-themed projects aimed at tackling pressing issues within their community. With a focus on improving air quality and addressing food waste problems, these student-led initiatives are making a tangible impact. One group of students is researching and implementing strategies to enhance air quality in their community. They're conducting air quality assessments, identifying pollution sources, and proposing solutions such as advocating for stricter emissions regulations and promoting the use of alternative transportation methods. Another team is tackling the issue of food waste by raising awareness and implementing practical solutions at their campus.

## Student Action Steps

- Students collaborating with local decision-makers to implement their proposed solutions
- Organizing outreach events to engage more people in their cause
- Continuously monitoring and evaluating the effectiveness of their initiatives.

# Safe and Secure Pedestrians



## Projects Overview

Students from Aldine ISD's Eisenhower High School showcased their project centered on enhancing safe pedestrian infrastructure in their community. Through comprehensive research and community feedback, they identified key areas near the school where safety measures were lacking. Their project focused on implementing solutions such as improved lighting, traffic signs, and designated personnel to direct traffic at critical crossing zones. By addressing the concerns voiced by the community, these students are actively working to create safer, more accessible environments for themselves and their peers, demonstrating their commitment to enhancing the well-being of their neighborhood.

## Student Action Steps

- Contact City officials to share recommendations for pedestrian infrastructure improvements



# 2023/2024 Texas Civic Science Metrics

**453+**

Students Engaged in CELF's Civic Science Programming



Projects from students at **7** schools across **4** Texas districts

**27**

Student-driven projects presented by **110 students** across Civic Science pathways

**\$8,500**

Awarded through **17 microgrants** to support Civic Science projects

**100%**

Title 1 Schools in this Civic Science cohort

**Air Quality**  
**Water Harvesting / Quality**  
**Energy Audit**  
**Food Waste**  
**Infrastructure**  
**Biodiversity**  
**Hydroponics**

Numerous project pathways

## Symposium Partners and Sponsors

