



# TEAM 17505B **BREAKING** STEM **BARRIERS** FOR THE FORT WORTH COMMUNITY

ADVOCACY PROJECT

“STOP RESISTING, START EXISTING”

# INTERESTED BUT **LACK OF INITIATIVE**

According to PR Newswire (2022), "About 40% of students feel STEM careers aren't welcoming to women, and almost half think there isn't enough racial diversity in the STEM workforce."

## OUR TEAM MOTTO:

"STOP RESISTING AND START EXISTING. PRESENCE  
CREATES POSSIBILITIES"



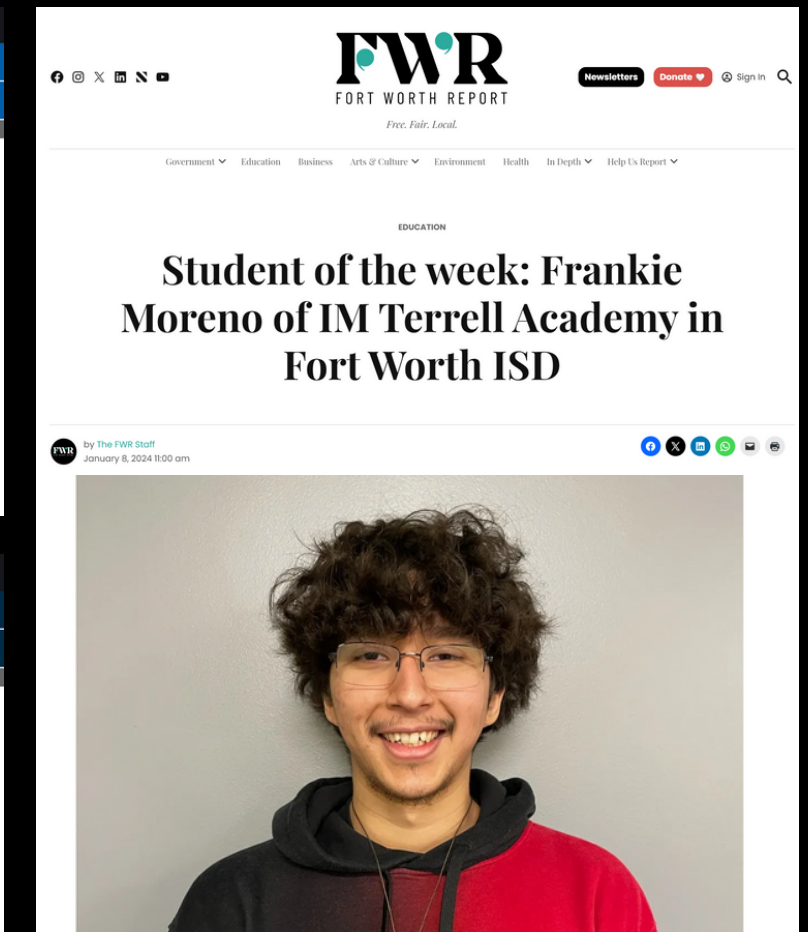
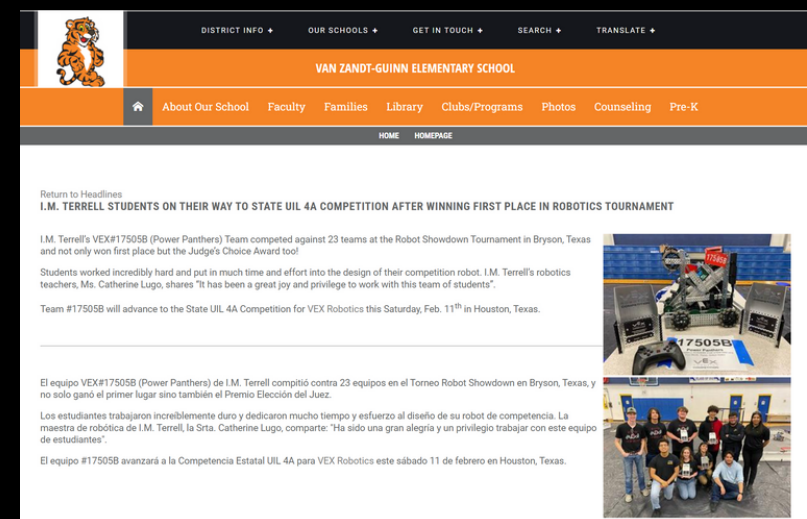
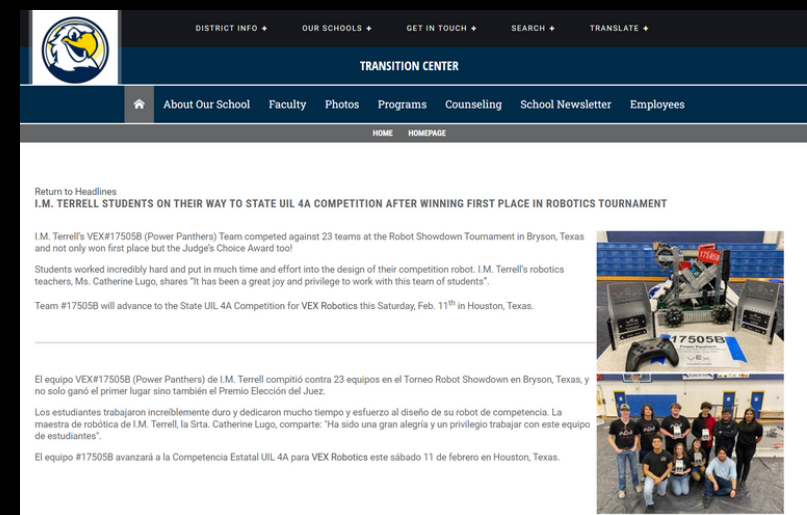
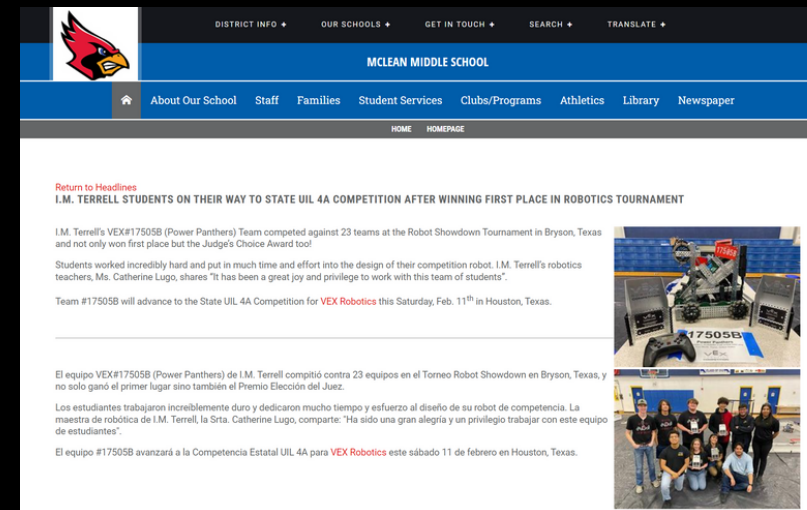
17505B

**TAKING  
PRIDE IN  
BUILDING  
OUR  
LEGACY  
FOR STEM**

Our Team 17505B advocates for the community because of our achievements, leadership, and contributions to building a legacy in expanding and diversifying the STEM community. So, students can become innovative leaders in society for the future. Due to our campus being new, we notice the lack of knowledge and understanding of STEM. So team 17505B's mission is to gain essential skills to share among others to expand the Robotics community. We aspire to inform, guide, help, and inspire others to involve themselves in STEM-related activities in the hopes of growing and diversifying the STEM community. .

# BUILDING A LEGACY

We are a team consisting of diverse individuals with diverse perspectives committed to thriving through adversity. Team 17505B is the first in the Fort Worth district to have qualified for both VEX UIL and the Regional Championship in the High School division which is more rigorous and difficult. Because of our success, we have been recognized by our entire district and campus. We have also formed a new legacy with VEX robotics, gaining more followers within our community.



- FWR Fort Worth Report



- FWISD Board District Meeting

Showcased in k-12 school websites accross the district.

# LETTER OF RECOMMENDATION



I.M. TERRELL  
ACADEMY FOR STEM AND VPA

January 31, 2024

The I.M. Terrell Academy for STEM and Visual Performing Arts is the City of Fort Worth's premier STEM school. While only being established in 2018 (and despite two years of covid) our students have accomplished great success.

We have participated in district, regional, and even national VEX and Drone robotics competitions. The school was established in order to focus limited resources on some of our most promising students. While talented, our students are still subject to public school funding that falls far short of bridging the gap between their talent and the challenging curriculum they deserve.

#### Demographics and Metrics:

- Approximately 68% of our students come from socioeconomically disadvantaged households. Despite, this 87% meet grade level requirements compared to the 25% average for the rest of the school district.
- We are one of only two P-TECH qualified schools in FWISD.
- Four students have been awarded internships with NASA, with one student helping to design a life sustaining greenhouse for a future Manned Mars Landing Mission.
- Students were State of Texas Finalists for the Samsung Electronics "Solve for Tomorrow" contest in 2022.
- Students won the Judges Choice Award at the National Bell Helicopter Vertical Robotics Competition in 2022 and 2023.
- VEX Team 17505B placed 3<sup>rd</sup> at the UIL 4A Championship in 2023.
- As a School of Choice, we do not have feeder schools. Our students can come from anywhere within the county. Students must apply, meet academic requirements, and in some instances, perform auditions, in order to be accepted to the school.

The robotics students in VEX Team 17505B have shown outstanding leadership and academic advocacy for their peers and their community. I am immensely proud of these students and their accomplishments.

*Catherine Lugo*

Catherine Lugo, CTE Department Head  
I.M. Terrell Academy for STEM and VPA  
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# REPRESENTATION

We collaborated with Paschal High School, hosted free scrimmages with them and were able to aid them so they could improve their competition strategies and robot designs. We also created the first-ever STEM workshop at our school exposing middle schoolers to hands-on experience with, building, programming, career preparation, and documenting in their own engineering notebook we designed for them. After a successful workshop we received a lot of great feedback from students and parents.

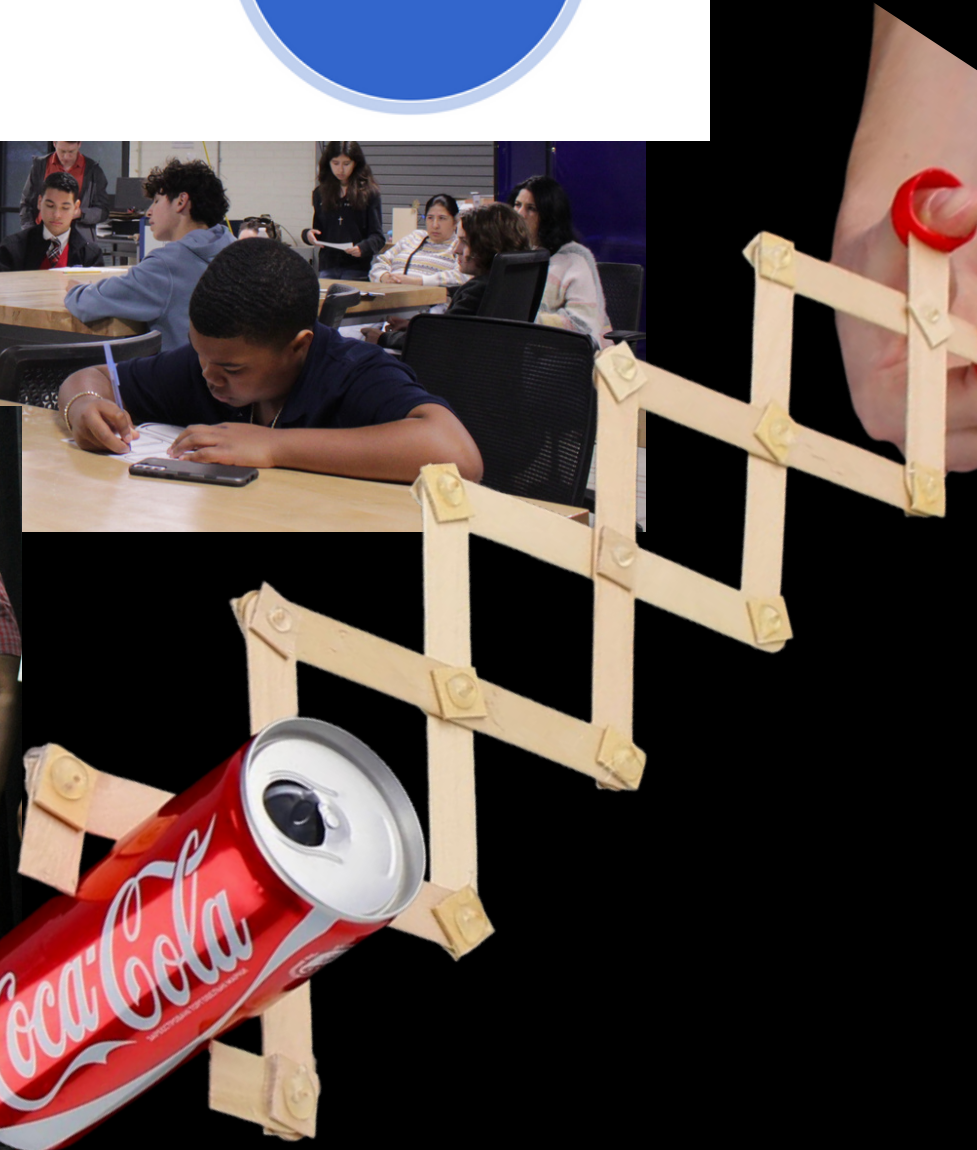
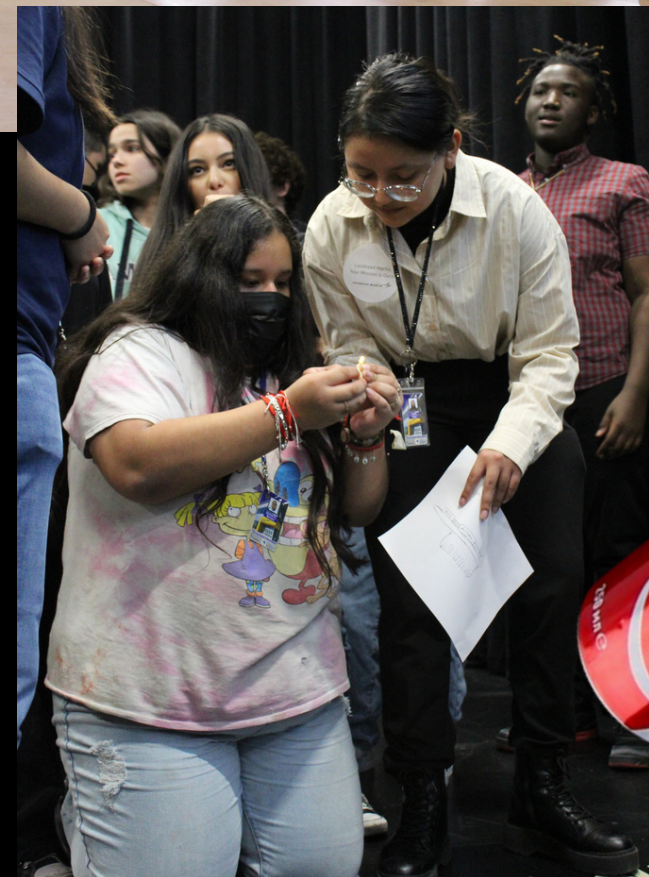
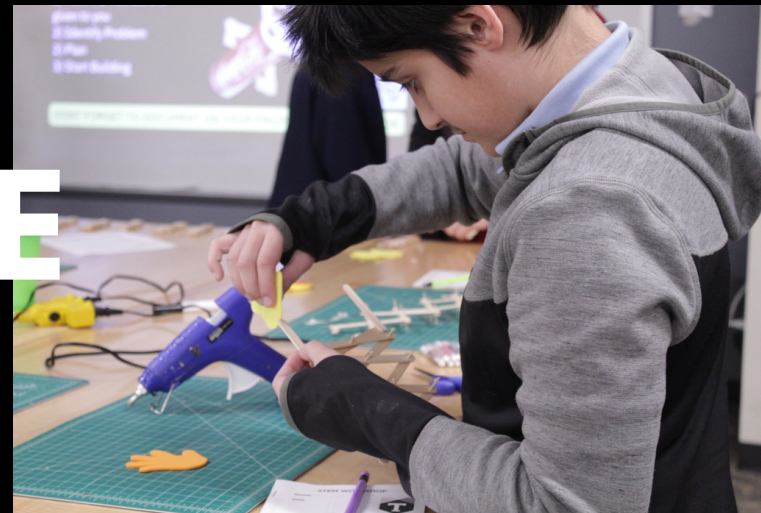


## **Leslie Nava**

Superintendent Student Board Representative  
Student Government Senator  
Senior Class President  
Dance Club President  
United Voices for Change Chief

# COMMUNITY SERVICE

We are all individuals growing to impact our society, and this success is thanks to VEX Robotics. Not only is it about the success, but the progress being made. We serve, inspire, and advocate, so the next generation can stop resisting and start existing because presence creates possibilities. That is how we impact our community.



# PASSING THE TORCH

As we all move up in school our knowledge stays with us in our school life and soon gets forgotten. I.M Terrell robotics wants to give the knowledge that we've gained throughout the years and give it to the future generations to come. We have accomplished so much and want this legacy to keep growing and never end.





# REFERENCES/ CITATIONS

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