Across the street from Bowie High is a fence that marks the border with Juarez, Mexico. Known as the Segundo Barrio and located east of downtown El Paso, Bowie and its feeder schools serve a neighborhood known for its strong culture, vibrant murals and where movement between Juarez and El Paso is a daily way of life. Generations of families continue to live on both sides of the border in this community also known for its extreme poverty and poor performing schools. Teachers are challenged to meet the needs of children new to English and who have previously attended schools in Mexico. For many years, the school district focused on test preparation and strong discipline but few young people found high school relevant and even fewer achieved academic success.

When you visit Bowie High today, you will find Oso New Tech, an academy within the comprehensive high school where students are engaged in active learning in big integrated projects — and are making district-leading academic gains.

Oso New Tech and two of its feeder schools, Guillen Middle School and Hart Elementary, are members of the New Tech Network, a national network of project-based schools. The relationship between the El Paso Independent School District (EPISD) and the nonprofit school design partner is the largest in the country and part of an unfolding large urban district transformation story.
From Crisis to Confidence

For years, learning in EPISD was students in rows, struggling through worksheets. EPISD educators knew this approach was not engaging or serving students well, but they were following the lead of a superintendent focused on state tests. Falsified reporting of test scores led to the indictment of the superintendent and a state takeover of the district.

In 2013, EPISD hired Juan Cabrera, a former English as a second language teacher and software executive, to lead the district. After visiting schools and engaging the community, Superintendent Cabrera and his team identified four pillars to guide the transformation: active learning, great schools in every community, community partnerships, and leading with ethics and character. The strategic plan outlined a new graduate profile that included critical thinking, collaboration, and social and emotional learning. Professional learning for teachers and equitable access to technology for students were early priorities.

To jumpstart the turnaround, Cabrera called on the New Tech Network (NTN). The goal was to quickly get several high-performing examples of active learning and, shortly thereafter, to address struggling schools. Cabrera had seen the New Tech model work in Austin. He took an El Paso team to visit a New Tech school in Albuquerque. A productive partnership was formed.

Cabrera and the leadership team started small with a plan for two NTN academies to open in the 2015-16 school year. They chose two existing high school campuses, Irvin and Franklin, both comprehensive schools in the heart of El Paso. Cabrera advocated that if they were going to see change, the model needed to work in challenging schools and conditions. The school-within-a-school model felt less risky to teachers and students and maintained access to big-school extracurricular activities. Scott Gray was selected to be the founding director of Rocketship New Tech (at Irvin HS) and following its success, Cabrera asked Scott, a long time EPISD educator, to lead the partnership effort.

Teachers were trained in the New Tech model and the Echo learning platform. Over the course of the first year of operation, NTN paid special attention to these sites and provided onsite coaching and support.

About New Tech Network

New Tech Network is a nonprofit school design partner that focuses on public school districts, supporting new schools and school redesign. Working nationally for over 18 years, NTN has partnered with more than 250 schools (90% in school districts) to help schools deliver comprehensive team taught integrated project-based learning. Core elements of the model are:

- **Teaching that Engages**
  - Through project-based learning, teachers become curriculum designers, and students learn to be collaborative problem-solvers.

- **Culture that Empowers**
  - By making learning relevant and creating a collaborative learning culture, students become connected to, engaged with and challenged by their school, their teachers and their peers.

- **Outcomes that Matter**
  - NTN learning outcomes also measure collaboration, written and oral communication, and the development of student responsibility for their own learning.

- **Technology that Enables**
  - Through a technology-rich environment, teachers and students create, communicate, access information and experience self-directed learning.
The success of the first year at Irvin and Franklin resulted in a deeper commitment from all stakeholders that this approach to learning was benefiting students in El Paso. In 2016, planning and implementation of four more campuses, including Austin High School, Bowie High School, Canyon Mills Middle School and Brown Middle School, began. As more staff worked with the New Tech model and saw the dramatic changes in student engagement, the atmosphere and morale in the district improved. Educators shared that they felt more agency and ownership and are eager to stay in the profession due to the improved culture and teaching conditions.

Students have demonstrated impressive growth, most notably in math and literacy areas and in their level of engagement. Across the board in the New Tech schools, students also showed improved attendance and the development of workplace skills (such as agency, collaboration and presentation skills).

Similar improvements and positive outcomes have been documented in other NTN schools across the nation (see the NTN Annual Outcome Report).

The success at the middle and high school level led NTN to question if the model could work at an all-girls STEAM-focused school or a dual language elementary school. Knowing that a strong feeder pattern — from elementary to middle school and from middle to high school — would ultimately yield the best results for students, and the team decided to try.

In 2017, the Young Women’s STEAM Research & Preparatory Academy and Hart Elementary School NTN campuses were beginning to take shape. These sites featured the core NTN model and instructional approach while embodying new approaches and content focuses.

Guillen Middle School was also added to the mix, totaling 10 NTN campuses in EPISD over five years. The partnership continues to evolve and grow with the families and students in EPISD schools.
OSO NEW TECH

Oso New Tech sits on the Bowie High School campus on the southern edge of El Paso. Bowie, a school with a long-standing history and alumni pride, looks and feels much like a traditional Texas high school. Oso students engage in integrated courses like biochemistry and art. Oso New Tech is located in a wing of Bowie High and was renovated by tearing down walls and updating double classrooms to support the integrated teaching approach of the NTN. Algebra school scores have been the highest in the district for the last two years.

Based on two successful years of operation at Bowie High, the New Tech model was adopted by Guillen Middle School and Hart Elementary School, making the Oso feeder pattern just the sixth in the U.S. and the first in Texas. Hart is the first dual language school in the NTN.

Transforming Border Learning Experiences:
New Tech Network in El Paso
Students at Cobra New Tech share their final products from a project about the untold stories from the Holocaust.

COBRA NEW TECH

Cobra New Tech Academy, located in Canyon Hills Middle School, has been working to shift learning to be more project-based. Principal Jennifer DeGraaf and the NTN teachers on site shared that they, too, have been shifting their own learning to be more project-based and have never felt more energized by their profession and practice. Non-NTN teachers at Canyon Hills have visited the New Tech Academy and incorporated some of the practices they observed into their own teaching. The enthusiasm for a refreshed approach to teaching and learning that is more student-centered is trickling throughout the schools in EPISD, not just those that are a part of the NTN.
As a second-year middle school, the Young Women’s STEAM Research & Preparatory Academy is alive with ideas. EPISD board member Mickey Loweree appreciates how girls empower each other. She said her daughter is thriving at Young Women’s and that all the girls are more likely to dive into a tough STEM problem in the single-gender environment. “They jump in and lead,” added Loweree. “They don’t worry about what they look like.”

Young Women’s was a new-school development housed with another middle school. As that school is phased out, Young Women’s will grow into a 6-12 school.
More Than a Movement — Quality New Tech Network Options Are the Mainstay

There are few districts with a story and makeup like El Paso that have accomplished such a transformation and all by working with existing staff and facilities. EPISD has quickly become a national model for in-district change and growth, and it has done so all while being a large urban district with big challenges and barriers to overcome along the way.

The NTN results in El Paso have proven to all those involved that it is not just a movement or a fad — these students are thriving and will continue to thrive in these learning environments. The attention to who students are, what they want to learn, and where they are going is remarkable. The partnership has shifted the mindset and culture from “my students can’t” to “I know my students can.” Oso New Tech and veteran EPISD teacher Mauricio Olague describes it well:

“I grew up in El Paso and taught in the district for over 15 years — these are my people and this is my community. We [Oso New Tech] are the new thing; we are what’s happening; we have school reform happening right now. We can make a difference. This is the tool to fix the problem.”