

## Eanes robotics program promotes STEM skills and community engagement



Westlake High School's robotics team, FRC 2468 Team Appreciate, swept its first competition of the 2019 Deep Space season at the FIRST in Texas district Austin event March 1-3 at Anderson High School. After six weeks of preparation and three days of competition, Team Appreciate claimed first in the robot competition out of 36 teams and took home the Chairman's Award, the most prestigious award in FIRST Robotics, recognizing the team's outreach program. Its efforts include legislative advocacy and organizing STEM-related summer camps. The Westlake team's success qualified it to compete at the Texas FIRST Championship at the Palmer Special Events Center on April 3-6. [Photo courtesy Westlake Robotics]

### By Jennifer Salas / Special to the Picayune

The development of the Eanes ISD graduate profile, known as WHEEL, defines the characteristic we strive to instill in all students during their time in the district. We want students to be Well-Rounded, Healthy Individuals, Effective Communicators, Engaged Citizens and Life-Long Learners. While these characteristics are emphasized in the classroom, it is often those activities beyond the classroom where some of these traits can be learned more effectively.

The robotics program at Westlake high school is a particularly good example of a group that strives to achieve these characteristics. The robotics program in Eanes ISD provides students the opportunity to explore a STEM education in a fun and hands on manner both through classes and competitions. Specific robotics classes are offered at the high school and middle school level. There are multiple levels of classes and teams available in order to accommodate as many students as possible. There are also teams available for younger students, and the district is working to increase coding in the classroom for elementary age students.

The growth in this program has been phenomenal. There are currently over 350 students competing on over 40 different teams from kindergarten through 12th grade. Of particular note is the increase in girls participating in the program. Over the past five years there has been a 600 percent increase in the number of girls joining teams, many of them holding leadership positions. This experience is a significant advantage to our girls who intend to pursue a career in fields that are typically dominated by men.

While the focus of robotics is clearly engineering related, the opportunities for students to grow and develop other skills are plentiful. Students have the opportunity to develop both leadership and communication skills as members of a competitive team. There are also several options for student involvement beyond class and competition.

Westlake Robotics founded the STEM Advocacy Conference of Texas (SACOT), which brings together students from across the state to advocate for increased legislative support for STEM education. They have hosted two conferences and visited with state and local officials to advocate for improved STEM education across the state.

Westlake summer robotics camps are staffed by high school robotics students who work alongside a teacher to guide younger students as they build and program their own robots.

Westlake's FRC 2468 team has adopted the Lilypad Project as a way to give back to the community. The team provides hand-painted wooden attachments for IV poles to hospitals not only in Austin, but also in the cities where they travel to compete. These lily pad-shaped seats allow children to sit as they are wheeled around hospital halls with their IV poles.

The robust nature of the robotics program has led to a need for more space. Included in the May 4, 2019 bond package is an expansion of robotics facilities. This expansion would allow for adequate space for current competition formats as well as the addition of two new classrooms for the engineering program. It would also consolidate robotics into one location, rather than being spread out across campus. This change would also free up three much-needed classrooms at the high school for other uses.

Along with the growth of the program has come much success. At the Greenville District Tournament, FRC 2468 Team Appreciate not only brought home the win, but also brought home the Engineering Inspiration Award for outstanding success in advancing respect and appreciation for engineering. The team is in first place in Texas going into the final week of competition. They will compete in the Texas District/ UIL Championship competing against the top 64 teams for Texas and New Mexico. The Westlake Philbots will also compete in the Texas FTC State/ UIL Championships.

The events, which are free, will be April 4-6 at the Palmer Events Center. [firstintexas.org/events/district-model/district-championship/](https://firstintexas.org/events/district-model/district-championship/)