Cougar Robotics Club and Team

The Vision

To transform our culture by creating a world where science and technology are celebrated and where young people dream of becoming science and technology heroes."

Edna Karr Robotics Mission Statement

The Edna Karr robotics program designs accessible, innovative programs that build not only science and technology skills and interests, but also self-confidence, leadership and life skills.

The Robotics Club

The robotics club is an after school activity open to all students. Edna Karr High School is a member and participant of the FIRST (For Inspiration and Recognition of Science and Technology) robotics competition organization. Over 40, 000 high school students on 2500 teams take part in 45 competitions world wide. The Robotics Club is the organization which undertakes the building of a competition robot and fields the competition team. FIRST Robotics Competition (FRC) is a unique varsity sport of the mind designed to help high-school-aged young people discover how interesting and rewarding the life of engineers, scientists, technologists and researchers can be.

The *FIRST* Robotics Competition challenges teams of young people and their mentors to solve a common problem in a six-week timeframe using a standard "kit of parts" and a common set of rules. Our mentors are professional engineers, scientists, professors, and technicians from NASA, Northrop Grumman Corp (Avondale Ship Systems), Lockheed Martin Corp, University of New Orleans, Tulane University and others. Our students work with and learn from these professional. We then participate in one or more competition event.

Building the robot involves mechanical work, wood working, electronics, pneumatics, computer programming and other skills. Students need not possess any particular skill. Students learn by doing. Some students enjoy doing organizational work for the club rather than "work with their hands." We also seek parental involvement, no prior experience necessary.

FIRST Scholarships

For 2008 there are already 90 colleges and universities, professional associations, and corporations from the United States and Canada providing 450 individual scholarship opportunities, valued at nearly $9 million, to *FIRST* high school students. And there will be more to come during the *FIRST* season. This is an official recognition of the knowledge and technical and life skills these students have gained from participating in a *FIRST* competition. *FIRST* scholarships enable students to pursue majors and careers in engineering, computer science, science, math, design, aeronautics, and many other technical fields.

Impact

Recently, Brandeis University's Center for Youth and Communities conducted an independent, retrospective survey of *FIRST* Robotics Competition participants and compared results to a group of non-*FIRST* students with similar backgrounds and academic experiences, including math and science. Highlights of the study's findings include:

When compared with the comparison group, *FIRST* students are:

- More than 3 times as likely to major specifically in engineering.
- Roughly 10 times as likely to have had an apprenticeship, internship, or co-op job in their freshman year.
- Significantly more likely to expect to achieve a post graduate degree.
- More than twice as likely to expect to pursue a career in science and technology.
- Nearly 4 times as likely to expect to pursue a career specifically in engineering.
- More than twice as likely to volunteer in their communities.

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