

2015-16 EITC- APPROVED PROGRAMS



Project Lead the Way Pre-Engineering Program

Project Lead the Way (PLTW) has become the top high school STEM (Science, Technology, Engineering and Math) program in the country and Parkland has participated in the program since 2002. Through this initiative, we offer our students a quality STEM program with a strong emphasis on promoting careers in Engineering. Funding in the amount of **\$114,938** is needed to replace six machines that have reached the end of their life span and are technologically outdated since they were purchased in 2002. All of the machines are required for us to offer the Project Lead the Way National Engineering curriculum and are heavily used in the following classes:

Introduction to Engineering Design

Principles of Engineering

Computer Integrated Manufacturing

Digital Electronics

Engineering Design & Development

Biotechnical Engineering

Civil Engineering & Architecture

Aerospace Engineering

Production Materials and Processes Manufacturing Systems

Innovation and Invention

After School Science Enrichment Program

The proposed science enrichment program is a ten-session program designed to enhance the fourth and fifth grade science curriculum as well as promote further interest in science. This program will be developed by science teachers and taught by the Science Fair Club students from the high school – essentially providing the opportunity for students to mentor younger students. It will give students interested in science a chance to advance their science skills and knowledge through hands on, interactive, innovative experiments and labs. Funds will be used for the cost of materials and labs in the program as well as to pay for the development of the curriculum by a certified teacher.

Robotics Program

The Robotics project is designed to promote students' interest in science and technology in the high school. Using the FIRST (For Inspiration and Recognition of Science and Technology) program as its fundamental base, the program will involve students in the FIRST Vex Robotics Challenge, offering them a new and exciting platform for learning about science, computer programming, mechanical engineering, math and physics along with teamwork, project management and problem solving in groups.

Summer Acceleration Courses in Algebra II and Geometry

The Foundation would like to offset costs incurred to offer courses for acceleration in Algebra II and Geometry during the summer. Students must be entering grades 9 – 12 in order to enroll and must be residents of Parkland School District. The course is designed for children who are able to learn at an accelerated pace and would like to advance to the next level of math in September. Students who wish to enter the Honors level of the next course will need to score a minimum course and exit test grade of 85%. Students who score between a 70% and 84% can move on to the next level at either the regular or gifted/high potential level.

AP Course Titles

Supporting one of the largest high schools in Pennsylvania, serving 3,200 students annually, the Foundation would like to fund the following Advanced Placement courses that continuously challenge our student body and offers instruction that provides credits at 2-year and 4-year colleges and universities authorized by the Department of Education:

English 4	Statistics	Spanish 5
World History	Computer Science	French 5
Economics	Biology	German 5
Government and	Environmental Science	Art History
Politics	Chemistry	
Psychology	Physics	

The Parkland High School Broadcasting Program

Each semester approximately 75 students participate directly in the Parkland High School T.V. studio by taking broadcasting courses, producing morning and mid-day news programs aired throughout the school and community via our community access channels on Service Electric and RCN, and creating special content packages benefiting the school district and the community.

Students learn all aspects of reporting, script writing, editing, and production. This program integrates English, physics, and math components of the core curriculum. Courses emphasize strong writing and communication skills. Students are required to learn advanced computer and technical skills. Many students coming through this program have gone on to study journalism in college or pursue careers in broadcasting.

Each student learns to use every piece of equipment in the studio. The technology and equipment is similar to that found in college and commercial broadcasting studios. Students learn how to operate studio and hand-held cameras, microphones, audio mixers, teleprompters, lighting equipment, the switcher, editing programs, and the video router. Students gain further technical expertise by teaching each other how to use the equipment.

Funds generated will be used to upgrade the broadcasting equipment and keep technology current with industry standards.

Summary

The above descriptions only list a small percentage of the many benefits to enhance and add value to the science, math, and language arts curriculum. The full impact of such programs to the Parkland School District and the surrounding community cannot be grasped. In order to advance the programs, funding needs to be provided. The positive return on these educational programs will far outweigh the dollars invested into it.