

Radnor Educational Foundation 2009-10 EITC Approved Programs

Radnor Outdoor Club (ROC)

School service learning group works on projects chosen by middle school students that promote the understanding and stewardship for our urban and suburban communities emphasizing leadership skills. This program extends the current Watershed alternative learning curriculum with student led programs such as GIS(Geographic Information Systems) mapping, greenhouse monitoring, recycling issues, storm water run-off, native plants and green roofs. ROC works with the Radnor Conservancy, shade tree commission and community members to map heritage trees in the area. Students learn how to use GPS and GIS technology to compile data.

Radnor Robotics Team

This after-school Robotics Team promotes interest and extends the current math, science, technology and engineering curriculum offered at the high school level. Students are challenged to build a robot using the Vex Robotics Design System to compete in the FIRST VEX Challenge, a mid-level robotics competition. The "RaiderBot" is capable of acquiring balls from the floor. Students programmed the robot controls using a variation of C programming language. The student competition includes a 2 minute operator controlled match using board sensors and student written control codes to navigate the fields, collect balls and score. This program creates mentoring relationships between students and professional in the fields of science, math, engineering, etc and enhances the current curriculum in a creative way.

What's Worth Reading Bookfolios

Students in 3rd through 5th grade will use the web quest "What's Worth Reading" to create book folios. To encourage self-selected reading, students will have the opportunity to review books to encourage other to read. Using the web quest, students will be able to determine the genre of the book, preview reviews by others, write their own review, design their own covers and/or have the book covers scanned, write about themselves, and incorporate a digital photo. Book folios will be available in the school library encouraging self-selected reading. This program was designed to align curriculum to standards involving reading and writing through the use of technology. The project encourages students to read and respond to literature in a meaningful way through technology. It will spark increased reading and self-selection of appropriate texts by students and provides a reference for teachers.

RaiderBots Technology at Radnor Middle School

GATEWAYS is an advanced alternative to the traditional eighth grade program of study using the Project Lead the Way's (PLTW) Gateway to Technology (GTT) program as the core while incorporating strands of the current eighth grade curriculum. Classroom instruction is one third theory and two-thirds application and gives students meaningful, hands-on experience in problem-solving, teamwork and project-based learning with cutting edge advanced curriculum. It helps students explore math, science, and technology while challenging and engaging the natural curiosity of eighth graders.

“RaiderBots at RMS” introduces automation and robotics technology to students allowing them to design and build automated systems incorporating the principles of electronics, physics, and robotics to gain an enriched understanding of the contemporary mechanized world. Students will engage in local, regional and statewide robotics competitions showcasing the practical knowledge learned in their studies and have access to robotics computer applications. Autodesk Inventor software helps students build, apply, and test their skills giving them a competitive advantage of hands-on training.

Gateways Space and Flight Unit introduces students to aeronautics, space and the use of design used to help make aerospace engineering an important field. Students learn about Newton's Laws of Motion, forces, rockets, propulsion, and what makes things fly. Students acquire and apply knowledge and skills in engineering problem solving and explore the many aspects of aerospace engineering.

RADNOR GREEN: Outdoor Environmental Classrooms

A campus-based interactive environmental program introducing in-the-field nature learning opportunities for all elementary schools has been established. The program consists of campus improvements to create outdoor learning spaces and demonstration garden areas to enhance habitat for birds, insects and other species and to provide teaching materials to facilitate meaningful use of the outdoor learning sites. The project provides demonstration sites to model improved habitat stewardship practices and environmental education experiences. Creating improved habitats for birds, insects and other animals enhances the life science curriculum at every grade level.