EITC Program Descriptions

August 2025

Fine Arts, Humanities & Creative Expression

These programs support arts-based learning through projects that foster creativity, cultural understanding, and cross-curricular activities through visual art, music, theater, dance, and media arts. Programs emphasize student expression, collaboration, and integration of the arts into core content areas. Students will utilize the latest technologies in lighting and visual effects, sound, and audio composition, set design, video and audio recording, digital music composition, digital media art creation, and produce Interdisciplinary performance projects (e.g., theater meets history).

Global Competency & Civic Literacy

These programs support global awareness, multicultural understanding, and civic engagement. There is an emphasis on cross-disciplinary learning around global issues, community service, and social studies. Students will learn processes for civic engagement such as how to vote; they will learn about other cultures via classroom participation and a communal cooking demonstration; they will execute other service-learning projects with community partners that benefit local residents; or they will provide interactive learning experiences for their classmates, teachers, or community members.

Literacy Competency and Acceleration

These programs support reading and writing instruction across subject areas (science, social studies, math, and the arts). There is an emphasis on developing skills in reading, writing, speaking and listening. Students improve communication skills through various activities and discussions, and will use language effectively in different contexts for

different purposes. Students will be incentivized to increase their literacy skills with book reading goals, participating in experiences that build on reading themes, and participating in media literacy projects that show their mastery of themes and topics.

Maker & Innovation Lab Space Development

These programs fund the creation or enhancement of maker spaces that encourage hands-on learning, prototyping, collaboration and cross-disciplinary exploration. These spaces empower students to actively learn, while also preparing them for the demands of the future workplace. There will be a range of equipment available to encourage physical product design and creation. Graphic design tools, opportunities to use 3-D printers, and devices such as woodworking or in-classroom drones will allow students to learn physical production and management of different items that promote learning of physics, mechanical engineering, aerospace engineering, computer science, and graphic design.

STEEL Integration (Science, Technology & Engineering, Environmental Literacy and Sustainability)

These programs support interdisciplinary projects that integrate science, technology, engineering, environmental literacy and sustainability. Activities emphasize real-world inquiry, problem solving, critical thinking, authentic exploration and collaborative learning. Programs may include devices that promote advanced learning concepts through creative experiments, coding, using 3D printers, developing outdoor learning spaces, promoting sound gardens, and other non-traditional teaching spaces.

What’s Worth Reading Bookfolios

Elementary grade 3 -5 gifted students expand upon their reading class experience by developing a portfolio on every book that they read. This portfolio includes their own

interpretation and design of a book cover, book reports and comments that they make on the books. All these projects are converted into an electronic file, so that other students can view them and expand upon the files, making them interactive, continuing projects.

ROC (Radnor Outdoor Club)

ROC meets after school, during free periods and on weekends for a variety of environmental service-based activities. The focus is working on the GIS/GPS Centennial Tree Project with the Radnor Conservancy, Radnor Shade Tree commission / Radnor Historical Society, Chanticleer and local arboretums. Students are learning how to use and collect data using handheld GPS/GIS equipment and technology to locate, learn and map the 100 year or older trees in the Township. This program is of an advanced academic nature using technology, math, and science at the middle school level. Students contact and work with the local newspapers to initiate and find these centennial trees, which give them public relations and communication skills. Using the GPS mapping system offers limitless ideas to ROC. Plans are underway to map the current middle school building project. Service based activities are ongoing; students have tested the runoff water before it reaches the middle school construction site and work on restoration projects in urban settings (gardens, boathouse area of Schuylkill River).

Aerospace Engineering

This hands-on engineering project collaborates with NASA and allows students to learn about aerodynamics, astronautics, space-life sciences, and systems engineering by allowing students to design and develop several simulated flight vehicles. The projects require students to use state of the art 3D design software from AutoDesk, model rocket engines, microcontroller robotics kits, real flight simulators, structure stress analyzers and a jet stream wind tunnel.

Radnor Robotics

This is an after-school program for High School students that extends the math, science, technology, and engineering curricula of the School District. Students are challenged to design, build and program a robot for competition using the Vex Robotics Design System.

RaiderBots at RMS

This program introduces automation and robotics technology to students, allowing them to design and build robots while using skills in areas of science such as electronics and physics. Students then go on to compete at local, regional, and national levels.

RADNOR GREEN Outdoor Environmental Classrooms

This is a campus-based interactive environmental program, designed to provide in-the-field nature learning opportunities for students of the elementary school. Campus improvements will enhance habitats for birds, insects, and other species, creating outdoor learning spaces and a demonstration garden. Students are responsible for installing and maintaining greenery, feeders and flowers. The Outdoor Classroom will provide live demonstrations of plant, bird, insect, and small animal life cycles. The Outdoor Classroom will be utilized for all life science classes, as well as supplement cooperative learning activities that include journaling, poetry, vocabulary work and reading. Students will also learn improved habitat stewardship practices.

Anatomy and Physiology

This will introduce Anatomy and Physiology to the high school curriculum. Students will learn the body’s structures and responsive functions at the molecular/biochemical, cellular, tissue, organ, systemic and organism levels. Students will explore the body through laboratory investigations, models, diagrams, and comparative studies of the

anatomy of the cat. The class will prepare students for college-level courses that can lead to careers in health care.

RADTV Studio Enhancements

This is an educational cable television station established for the Radnor community. Radnor High School student productions include the weekend "Radnor Report" along with sports talk, school board updates, roundtable discussions, talk shows, game shows and student of the week. Students learn how to communicate on-air and get experience using current broadcast technologies.

The Radnor Outdoor Club (ROC) Watershed

This program extends the current Middle School watershed program to include student led programs, such as Geographic Information Systems (GIS) mapping, greenhouse monitoring, recycling, storm water run-off programs, native plant studies and green roof technology programs. Working with the Radnor Conservancy, shade tree commission and community members, the students will map local heritage trees using GPS and GIS technology to compile data. Students will examine the stream's role in the agriculture, industry, history, and culture of the region, identifying and classifying plants and animals found in the watershed. They will also conduct laboratory tests in water and soil samples, study the dynamics of the stream's flow and its effects on the surrounding landscape, examine the geological history and resultant topography of the watershed.

Performing Arts at Radnor High School

Students in the technical environment of the performing arts will utilize the latest technologies in lighting and visual effects, sound, and audio composition, set design, video and audio recording, and digital music composition. The advanced theater course will

offer students set, sound, and lighting design as an extension of the curriculum. Theatrical and classroom facilities will be enhanced by technological updates giving students hands on training with the latest technologies in sound, design, composition, lighting, and visual effects. Students will learn how these new technologies might enhance the quality of life through environmentally friendly technology, working with equipment, specifically in lighting, that utilizes green, energy efficient LED modules, saving energy resources while enhancing the quality and complexity of our students' concerts and productions. EITC Funds would be used to update current facilities with these latest technologies and provide support and training from professional technicians. Students will be prepared to pursue technical careers in digital music synthesis, recording, and mixing; professional theatrical direction and set design, as well as lighting and sound design; radio, television, and film; Apple technology, and other pursuits such as A/V support to businesses/other institutions.

Radnor Young Apprentices Summer Theater

This program will allow young people to work alongside professional staff to receive age-appropriate skills-based training in production and performance. This will culminate in performances that include lights, sets, music, and sound. The program provides an opportunity for students interested in performance and technical theater careers to focus and engage in a highly intensive environment.

Radnor Advanced Placement (AP) Programs

The school district currently offers programs in Biology, Calculus, Chemistry, Computer Science, English, European History, Music Theory, Macroeconomics, Physics, Psychology, Statistics, Studio Art, United States History, and World Languages. Courses are taught by Radnor School District faculty. Each AP course meets three days per week for one class period and one day per week for a double block period. Students are given rigorous

coursework throughout the school year and may be required to complete summer assignments prior to beginning an AP course.

Computer and Technology Fluency

Projects include programs integrated with the curriculum as well as offered separately from the school curriculum to teach children basic and advanced computer coding, web design, and technology applications, and the use of advanced programming, as well as programs that develop fluency in video, animation, photography and art production. Equipment includes but is not limited to hand-held technology such as Apple iPad and other computing devices/software.

Cultural, Visual, and Performing Arts

Projects align with and enhance the curriculum in the cultural, visual and performing arts including dance and/or circus artist-in-residency programs. Specialized instructors, such as a composer-in-residence for the Honors and Jazz Bands and orchestras at the middle and high schools, and artist-in-residency mural and design projects are also part of these supplemental programs. Also included are specialized programs in theater performance, technology and playwriting delivered by professionals in those fields.

Digital and Distance Learning

Provide access to electronic non-fiction and fiction texts and online resources for students in creative writing and STEM programs, with additional subject areas. Includes distance learning integrated with the curriculum encompassing but not limited to virtual classroom sessions through the use of Smartboards or other similar technology in partnership with providers such as the Philadelphia Museum of Art.

Radnor Center of Excellence Programs

This program is offered to students at Radnor High School in grades 9-12. Students submit resumes and applications which are then evaluated in order to have the students with a strong commitment to the program matched with appropriate winter and summer internship opportunities with local businesses. Internships range a number of fields including computer software design, orthodontics, medicine, culinary science, accounting and finance, non-profit management and fashion design. This program addresses a need for students to have an opportunity to gain practical experience in their anticipated field of study prior to choosing and matriculating into college or embarking on a career. The program has grown from 7 students in last year's pilot program to over 35 internship participants.

Makerspaces In the Library

This program strives to redesign the library into a makerspace. The library will house a makerspace area in it. The remodel will support new STEAM project It will also have upgraded technology, computers, and spaces to house the new technological equipment. Technological whiteboards, SMART Boards will be featured here. There are new desks and chairs that will be able to be moved around the space to facilitate the teaching style that a teacher may need to effectively lead a program. The library also will purchase STEM/STEAM literature that students and teachers can access to educate and support the scientific experiments that are presented in this program. A varied amount of educational subject matter will be learned here. Scientific experiments in the nature of STEAM will be carried out in this space.

Decodable Readers

This program is for K-3rd graders only. With the purchase of Geodes Decodable Readers, which are accessible information-rich books. The purpose of this program is to develop stronger readers and to build upon the skills that the students learn in the classroom with Reading. Unlike regular books for reading, Decodable Readers are interactive reading books that will make the process of reading and writing fun! They will not only read, but during the reading process of each book, stop and look information on key subject matter up to study. There are key indicators on what subject matter the students will process through reading and interacting with these books. There is a lot of educational subject matter in these Decodable Readers.

Nathan Hale Author Series

The subject of Writing will be the focus in this series. Arts, literature, and writing will combine in this author/speaker series. English Language Arts will be supported here as well. Author Nathan Hale is an author that demonstrates illustrations and writing techniques through a speaker series. He is an Eisenhower Nominated, New York Times Best Selling Author on American History Subject Matter. There will be two 50-minute speaker series presented to the Radnor Students. This will expose the students to the development side of creating a storyline and creating a unique story through English Literature. Nathan will guide students in the process of writing a story from front to back.

Growing With STEM

In this program students will be using a 288 individual plant space to learn all about STEM subjects. Using the plant structure, students are exposed to Aquaponics. Through lighting, and water sources, the students will learn about the Science of Aquaponics and Gardening to grow foods and understand nutrition of the food they grow. They will also harvest this

food. Learning all about crops and the Science of what plants grow in this type of environment is the focus of this program. Technology, Engineering, Science, Math, and Biology will all be studied here. Students will also grow the plants and harvest them for study of the plants in the classroom and understanding the biology of the plant and its growing environment.

Garden Re-Design

In this program, students' overall goal is to produce sustainable food and review the entire farm-to-table process. The seed-to-fork concept will encompass Biology, Science, Math, Engineering, Technology, and many more STEM Subjects. Students will learn all about planting, harvesting, selling, cooking and much more. After harvesting the crops, students will incorporate the crops they grow into the classroom, more specifically the Family and Consumer Sciences Classroom. Garden beds, greenhouses, and composting structures will be built by the students, thus incorporating engineering as well into the program.

Career Awareness and Preparation

This program will tie in career readiness with activities that are educationally based but real-world ready. This program ties in the school's curriculum and helps to make it relate to many careers that students may go into. Students will learn many skills from local industry leaders through job shadowing and individual studies. One example of a part of this program is the Girls Lead Program. Women in STEAM activities are the future and this subprogram will facilitate your female entrepreneurs in career readiness. Additionally, female local industry leaders will be highlighted in this program to prepare young women for the work world.