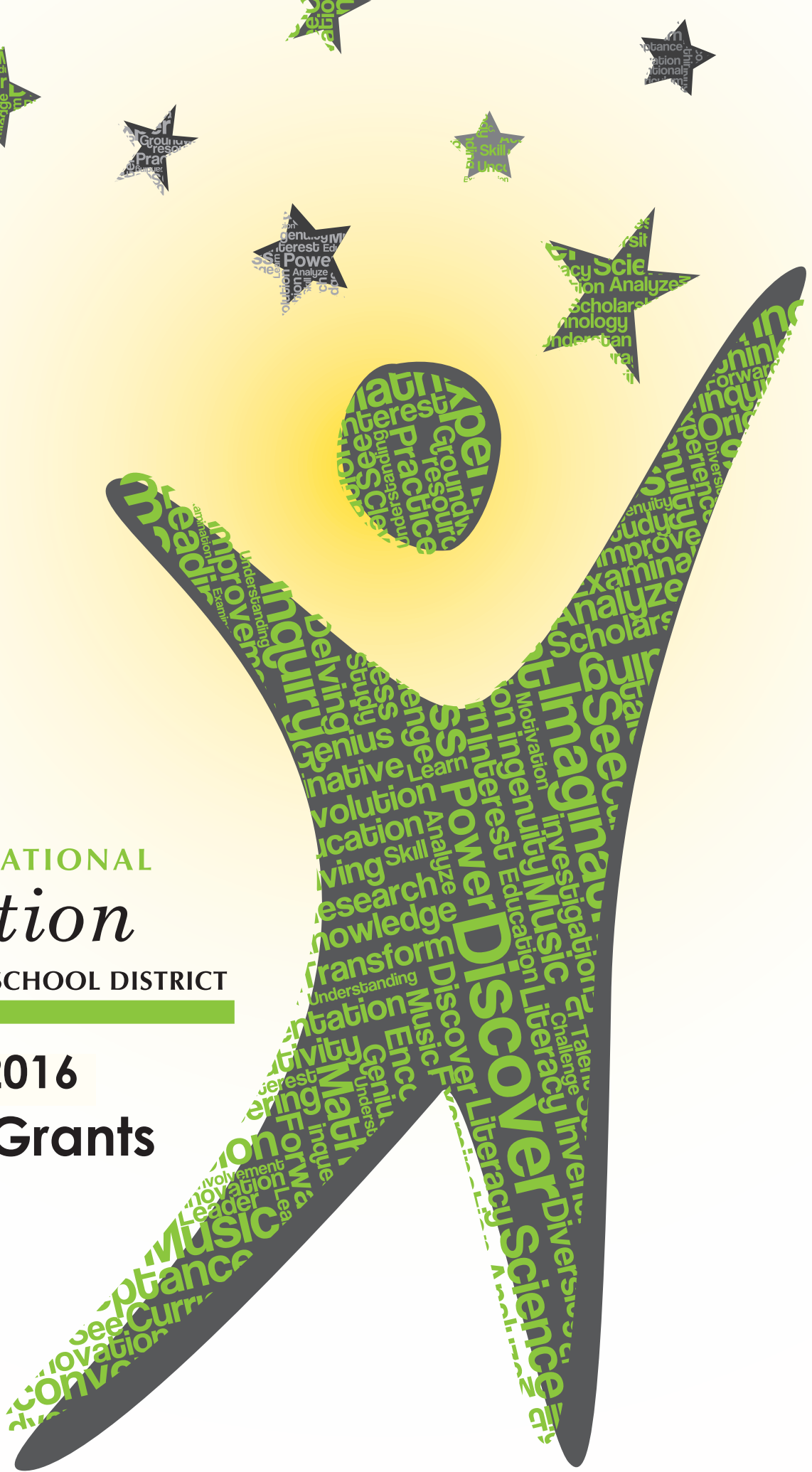


The EDUCATIONAL Foundation

OF THE NORTH PENN SCHOOL DISTRICT

2015-2016
Funded Grants



A Note from the Trustees:

For this year's grant cycle, the North Penn Educational Foundation awarded **25 grants** totaling \$_____. These grants have benefitted students at each grade level.

Grants like the selection described below not only enhance the curriculum but provide a hands-on and innovative way for students to embrace and fully comprehend the lesson. When NPSD educators apply for these grants, some think of how this experience will affect the student in the future. Science and technology grants allow students to understand theories at the next level of thinking. Other grants allow teachers to think about how this experience will benefit students socially and vocationally. We are sure that when you read through these grant descriptions you will see how these experiences allow our students to develop into better students and citizens.

These grants positively affect NPSD students and your support has allowed us to do this.

Astrophotography for Astronomy Classes and Club ★

North Penn High School; *James P. Bauman*

The North Penn School District currently has access to three high quality telescopes that are kept at the North Penn Planetarium in the High School. These allow students to view various objects in the night sky and, with the proper solar filters, the Sun during our daytime sky. However, students in our classes are only able to view the objects. This grant will provide over 100 North Penn High School Astronomy students with equipment which allows them to take photographs of the Sun, Moon, Planets and various Deep Sky objects like Nebulae, Star Clusters and Galaxies. Having the ability to take these photographs on their own will give the students a more personalized experience when learning of these same objects in our sky and allow them to analyze those objects in greater detail.

Butterfly presentation ★

Bridle Path Elementary School; *Maureen Zazyczny, Liz Melville, Nancy Kahn, Suzanne Sylvester*

First grade students will have the opportunity to learn about butterflies from world-renowned lepidopterist, Rick Mikula. Rick presents information to students through a slide presentation of his world travels, demonstrations of live butterflies and in-depth descriptions of their habitats, behaviors, and life cycles. Rick's knowledge and experience accompanied by his collection of outside materials and live samples of rare, exotic butterflies from all over the world will excite the children and supplement their science unit by allowing them to have firsthand contact with a butterfly expert in his field. Success will be evaluated by the interaction and involvement of the students in this rewarding, interactive program.

Electric Bicycle Conversion (Hub Motor Study) ★★

North Penn High School; *William Waddington*

Nearly 75 North Penn High School students in the Principles of Technology course will design and perform extensive experiments based on the mechanical features of a regular bicycle and then design and build an electrical conversion. Following the construction of the electrical bicycle, students will design similar experiments to ultimately compare a manual powered bicycle to one that is powered with an electric motor.

Elements ★

Penndale Middle School; *John Collier*

This grant will fund the purchasing of pure physical samples of 78 of the elements of the periodic table in glass ampules and a case to store and display them in. The objective of this project is to spark and enhance an interest in science and the natural world in students. Having samples of the elements will provide teachers with a visual aide for students while discussing the elements on the periodic table as part of the ninth grade chemistry unit. Elements from glimmering gold to melts-in-your-hand gallium and ruby-red bromine will now be on display for students to see.

Engineering and Nanotechnology Research Endeavors ★★

North Penn High School; *Michael A. Boyer*



The Future is N.E.A.R. Program (Nanotechnology Education and Research) at North Penn High School provides students opportunities to gain essential STEM (Science, Technology, Engineering and Mathematics)

skills to become leaders in a technological society while allowing them to engage in the engineering design process which utilizes meaningful, challenging and relevant global issues. Nanotechnology research is performed by senior Engineering Academy students. Each year, 10 or more student teams perform research in various arenas, from organic and natural water filtration to energy creation (piezoelectricity) and more. The NPSD Educational Foundation grant will purchase materials necessary for the students to complete their research and take their ideas and projects from conception to reality.

Flatland ★

Penndale Middle School; *Rebecca Rousseau*

This grant will be used to purchase the classroom edition of "Flatland: the movie" complete will teacher and student materials for students taking Geometry. The video will give a visual representation of dimension along with a fun story to help students connect the topic to curriculum content. Students will gain a greater understanding of dimension and how each dimension relates to another. This deeper understanding will aid students as they work through the geometry unit and apply abstract thinking to geometrical concepts.

Guest Jazz Musician in residence Clinic and Solo Performance ★★

District-wide; *Pefer Neu*

Student members of jazz ensembles from all schools across the entire district will rehearse with a renowned jazz artist who will demonstrate the art of jazz improvisation both in a clinic and a concert setting. The guest jazz artist will spend a day rehearsing and doing workshop demonstrations with all of the jazz ensembles. Each band will have an opportunity to perform a selection with the guest artist. The event will conclude with a concert at Pennbrook Middle School featuring all of the school district jazz ensembles performing with the guest artist.

★ English as a Second Language
★ Health/Physical Education
★ Music/Arts
★ Reading/Writing/Language
★ Special/Gifted Education

★ Family Outreach
★ History/Social Studies
★ Other
★ Science
★ STEM

Interactive Lesson with Nearpod on the iPad ★

Penndale Middle School; *Amy Greco*

This grant will be used to purchase a two-year membership to Nearpod, an interactive technology program which allows teachers to construct presentations using the Nearpod website and deliver instruction to students by pushing content out to multiple devices at once. The students will be able to demonstrate their understanding of concepts during the lesson with immediate feedback from the teacher and classmates. The students will build on their knowledge of iPads in the classroom. The students will be able to display good digital citizenship during each of the interactive lessons.

Introduction to Robotics ★

Pennbrook Middle School; *Andrea Hollstein*

8th grade students at Pennbrook Middle School will have the opportunity to take an Introduction to Robotics course that will introduce students to the world of robots and how they influence our daily lives. In this course, students will learn not only what a robot is, but how it is programmed. Through modeling, pair share and independent learning, students will explore robotics through a series of laboratory experiments. Through each one of these labs the students will gradually learn the basic parts of their robots, the components of the software program and the programming skills necessary to be successful in solving various challenges presented in class. This grant will provide funding to support the continuing use of the robots through replacing sensors that are starting to malfunction as the robots age.



Kitchen Science Prop Boxes ★

District-wide Elementary Schools; *Marjie Scott*

Students in the extended school care program will participate in building ready-made kitchen science kits to be used in elementary school classrooms throughout the district. Each kit will contain kitchen items such as flour, salt, food coloring, baking soda, etc. along with a booklet of science experiments that will easily enable staff to conduct new science activities with their students. Everything needed for each activity will be provided in the prop box. While staff members are currently encouraged to conduct these activities now, providing all the necessary ingredients and instructions will make it much easier to accomplish this goal.

LitFest IV ★

North Penn High School; *Ellen McKee and Elizabeth Weizer*

More than 300 students will work on a creative appreciation for literature in the high school curriculum through the LitFest. Students will have the opportunity to “own” their understanding of American literature while having a bit of academic fun by competing against other English classes in several categories. These segments will include a gallery of artistic interpretations and creative book covers of the works the classes have studied; a dramatic reading competition featuring students reading their favorite passages; and a Knowledge Bowl where all sections of Honors English will be in competition against each other answering a variety of questions about literature from the curriculum.



National Liberty Museum Leadership Training Services ★

Penndale Middle School; *Christopher Joy*

A group of students from Penndale Middle School will attend the Leadership Training Series at the National Liberty Museum. This representative body of students will transcend ethnicity and culture to promote a more positive understanding of each other and develop an expectation where Penndale Middle School will celebrate their differences. Penndale has a continuing need to provide students with opportunities to learn about each other from a diverse cultural perspective. The Leadership Training Series will focus on providing student leaders with the skills and strategies necessary to mentor students through this process.

North Penn Aquaponics ★

North Penn High School; *Daniel Krueger and Shane Misuro*

The Aquaponics Project will provide co-curricular lessons for over 500 students in both marine science and botany classes taught at North Penn High School. Students enrolled in botany will expand their knowledge of hydroponics and alternative methods of growth while providing an organic alternative to the normal hydroponics systems covered in the botany course. Students enrolled in marine science will use the Aquaponics systems to learn about nutrient cycles in aquatic ecosystems as well as detailing in designing environmentally friendly mariculture systems. The Aquaponics Project will connect these two courses and the demonstrations and experiments done within them by providing the ability to grow plants and raise fish in one communal system.

Oak Park Science Night ★★☆☆☆
 Oak Park Elementary School; *Shirley Bergman, Donna Grabner, and Karlee Clemens*

Oak Park Elementary School will hold a Science Night to celebrate science with local educational clubs and vendors. The event will educate attendees on the science curriculum at the elementary level, provide hands-on exploration and give students an opportunity to showcase their understanding of the subject. This is a great forum for students to share what they are learning with others and for staff members to inform parents/guardians of how they can support and extend upon their child's learning in the subject of science.

- ★ English as a Second Language
- ★ Family Outreach
- ★ Health/Physical Education
- ★ History/Social Studies
- ★ Music/Arts
- ★ Other
- ★ Reading/Writing/Language
- ★ Science
- ★ Special/Gifted Education
- ★ STEM

PBTV Studio ★

Pennbrook Middle School; *Nicasio Lorenzo*

This grant will provide funding to replace the aging video cameras used by students and staff members of the Pennbrook Middle School Television club (PBTV). The cameras are used every day for PBTV's live morning announcements show, which is used to inform students of important information on a day to day basis plus highlight all the wonderful achievements from our student body. With new cameras, PBTV will be able to continue their current broadcasting with less technical difficulties and also have the opportunity to expand their show. The extra cameras will allow students to film on-site with hopes to bring some excitement into the production and broadcasting of the morning show.

Penndale Mural Enhancement Project ★

Penndale Middle School; *John Corson*

The walls of Penndale Middle School will be covered with a series of murals. These murals will be designed and executed by Penndale Middle School students using the elements of art and the principles of design taught through the art curriculum. These murals will be a lasting memory of the students' educational experiences at the school and will create a sense of pride, both by the students that make the actual painting and by the students who walk the hallways every day. This grant will provide funding to create a working studio in the form of a wall Mural. This year's main focus will be on a Mural in a music room which is used by most of the student body of the school. The students will learn about improving their environment through planning and hands-on hard work.



Pennsylvania Space Grant Consortium ★★

North Penn High School; *Michael A Boyer*

Students in the EPICS club (Engineering Projects in Community Service) will work with students and professors from Montgomery County Community College as part of the Pennsylvania Space Grant Consortium (PSGC). The primary focus is to offer students opportunities to engage in meaningful STEM (Science, Technology, Engineering and Mathematics) research endeavors. The initial research endeavor will be focused on the development of a hydrophobic polymer nanofiber membrane for the protection of electronics. This project will enhance teaching and learning for NPSD students by offering them opportunities to research and experience the same research topics that graduate, doctoral and industry researchers are performing.

- ★ English as a Second Language
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- ★ Other
- ★ Science
- ★ STEM

Philadelphia Orchestra Field Trip ★

A.M. Kulp Elementary School; *Michelle Cohen*

Students will attend a concert at the Kimmel Center of Performing Arts in Philadelphia performed by the Philadelphia Orchestra. Prior to the trip, students will spend time studying the program music that will be performed at the concert as well as the history of its composers. Attending this concert will bring classroom studies to life while also teaching students proper concert etiquette. By attending the live performance and participating in class discussions afterward to reflect on their experience, students will gain knowledge and respect for the performing arts on a larger and more complex scale.

Providing Perception at the Please Touch Museum ★

Oak Park Elementary School; *Geretha Billett*

English Language Learners (ELL) in grades first through sixth will attend the Please Touch Museum in Philadelphia, PA. This trip will give students the opportunity to further develop their vocabulary and background knowledge in a safe, engaging environment that offers "hands-on" experiences utilizing life-size realia, allowing them to build language acquisition, cognitive connections, and social and physical abilities.

Reading Super Bowl ★

District-wide Elementary Schools; *Cheryl Neubert*

The Annual North Penn Reading Super Bowl, held in conjunction with the date of the NFL Super Bowl, takes North Penn Knights football players to visit to all 13 elementary schools in the North Penn School District. The Knights read to NPSD elementary students and emphasize the importance of reading. Each year, the number of students who participate in this district-wide activity increases as the program grows. The original Reading Super Bowl had 30 football players who read at eight elementary schools in NPSD. In the 2014-2015 school year, there were 82 players who read to over 5,600 students in 238 classrooms in all 13 elementary schools. The Reading Super Bowl fosters an interest in youth reading and showcases the fact that "everyone" reads.



Thanks for the Tanks ★

North Penn High School; *Shane Misuro and Sinah Tuma*

North Penn High School marine science work study students will research, design and build new tanks as well as make improvements to existing tanks. The addition of new tanks and updates to the current tanks will give students the ability and materials necessary to observe, work with and perform experiments on saltwater organisms. They will also be able to host a better variety and quality of specimens that could not currently survive in the existing systems prior to being updated. Each of these systems provides a dual purpose of giving the work study students the opportunity to apply the theory they learned in the course to actual saltwater systems, as well being used in by student in the marine biology course.

The Henry Chapman Mercer Experience ★

Northbridge School; *Marcia Lucas*

30 interested students from Northbridge School will visit the Mercer Museum & Fonthill Castle and the Moravian Pottery and Tile Works Museum to enjoy unique pieces of art, architecture and history while making multi-disciplinary connections and creating lifelong memories. Prior to the trip, students will participate in an activity called, "Comparing Castles," which will combine historical and architectural aspects of a medieval castle to be compared and contrasted to the Concrete Castle created by Henry Mercer in the early years of the last century. A multi-dimensional educational program benefits all learners. This field trip experience will combine the creative arts with history, helping to develop students' creativity and improving their problem-solving skills by encouraging them to think outside of the box. Following the trip, students will use examples from the Mercer Museum & Fonthill Castle and the Moravian Pottery and Tile Works Museum to aid in designing and painting their own personal tile that expresses a positive aspect about themselves.

Walnut Street Theatre Field Trip ★

Pennbrook, Pennedale, Pennfield middle schools; *Josephine Puglia-Robison, Cara Lewis, Deb Bovell*

Students in the English as a Secondary Language (ESL) program at Pennbrook Middle School will read A Christmas Carol by Charles Dickens as part of their curriculum. Afterwards, they will travel to the Walnut Street Theatre to see a dramatic performance of A Christmas Carol, to reinforce their reading. Student will be prepared thoroughly with the background of the story so that they will understand what is happening during the production. This project will enhance students' learning by reading a famous piece of literature that is not only educational, but also a very important theme in American culture. Many of our students do not celebrate or understand the traditions of Christmas, so reading this play and viewing it live will impact them significantly.

Vocab Bowl ★

North Penn High School; *Ellen McKee and Rebecca Poole*

Eleventh grade students at North Penn High School will participate in a Vocabulary Bowl, a scholarly competition that is exclusively designed to challenge and delight students. The Vocab Bowl provides an opportunity for academic competition that showcases knowledge, while reinforcing the importance of vocabulary in everyday life. It helps students build study skills and academic confidence, as well as camaraderie. Students participate in both team and individual competitions, testing and showcasing their knowledge of vocabulary and reading/writing skills.

Zoo on Wheels ★

Northbridge School; *Sarah Barndt*
Science

Nearly 100 students will attend the Zoo on Wheels program where they will have the opportunity to experience zoo life in a quiet, familiar and safe setting. They will be able to meet live animals, participate in hands-on scientific investigation and learn how their actions can make a difference in the lives of animals. The Zoo on Wheels program offers students the opportunity to participate in dynamic lessons created to meet their IEP skills in an interesting, integrated fashion. Instruction for the week of the program will all be connected to the theme of the Zoo on Wheels program and the animals and habitats that will be presented. This project will allow students to have a human/environment interaction that would otherwise be unavailable. Observation of lessons will look to identify active participation in all areas as instruction and extension activities as well as a high level of interest in the activity.



THANK YOU!

Through the generosity of our donors, the North Penn Educational Foundation accepts grant applications twice a year. Each funded project not only enhances the curriculum but provide a hands-on and innovative way for students to embrace and fully comprehend the lesson. When NPSD educators apply for these grants, some think of how this experience will affect the student in the future. Science and technology grants allow students to understand theories at the next level of thinking. Other grants allow teachers to think about how this experience will benefit students socially and vocationally. With out you, and your generosity, the North Penn School District students and staff would not have access to these amazing opportunities. Thank you!

THE PAUL MURPHY MEMORIAL FUND

The Paul Murphy Memorial Fund was established in the fall of 2013. Carolyn Murphy, a Foundation Trustee, a member of NPSD Board of School Directors and a retired North Penn High School German teacher, wanted to honor her late husband and benefit the Foundation at the same time. With the help of her son Michael, the fund was established to support science-related projects for years to come.

THE NPSD EDUCATIONAL FOUNDATION AND THE NORTH PENN ALUMNI ASSOCIATION: A PARTNERSHIP WITH THE PAST FOR THE FUTURE

In 2012, the NPSD Educational Foundation, in conjunction with NPSD administration launched the North Penn Alumni Association as a committee of the Foundation. The association's mission is to encourage networking and communication among North Penn School District alumni and to help maintain and enhance the legacy of North Penn schools for future generations. We hope to see more graduates join us for NPSD and Foundation events, attend reunions and stay informed on the happenings of the district.

We see that NPHS graduates do great things, but what is the most amazing is the pride one takes in saying they are a graduate of North Penn High School. Whether a member of the Class of 2014 or someone who is celebrating their 50th reunion, alumni see North Penn High School as a place that helped to shape them into whom they are today. We are confident that with the support of the community and the 40,000 NPHS graduates, the North Penn Alumni Association with help the Foundation in leaving a lasting effect on our students and North Penn School District. For more information on the North Penn Alumni Association, please visit www.NorthPennAlumni.org.

EITC: YOUR BUSINESS + NORTH PENN SCHOOL DISTRICT + OUR STUDENTS = A WINNING COMBINATION

NPSD Educational Foundation has been approved by the PA Department of Community and Economic Development (DCED) as an Educational Improvement Organization (EIO), meaning that our organization can accept Pennsylvania Educational Improvement Tax Credit (EITC). The EITC makes it affordable for you to contribute to the education of Pennsylvania's children and make a foot print in our community. Read about this exciting program below.