



**Warwick
Education
Foundation**



2022-23 Innovative Education Grant Recipients

A total of twenty-six (26) Innovative Education grants representing a request amount of \$61,456 were awarded.

Program	School	Recipient(s)	Grant Amount
<p>Create, Learn, Code with Micro:bits</p> <p>The BBC micro:bit is a pocket-sized computer that introduces students to STEM topics, specifically, how software and hardware work together. It has an LED light display, buttons, sensors and many input/output features that, when programmed, lets it interact with you and your world. Mrs. Chmil will create a micro:bit lesson for each grade level that allows students to code something that relates to their curriculum. Examples of projects could be step trackers, sound meters, thermometers. Students will ultimately be able to use micro:bits as a coding tool in their classrooms on a regular basis.</p>	<p>All Elementary Schools Warwick Middle School</p>	<p>Shelly Chmil</p>	<p>\$3,000</p>
<p>Sphero Bolt Power Pack - Sparking Student Innovation!</p> <p>The objective of this STEM project is to provide hands-on Sphero Bolt Robotics lessons for all students in grades 3-8. The ultimate goal is to design training modules and coach teachers until they feel confident in using Sphero Bolt robots independently with their students. Students will use technology to identify and solve problems by creating new, useful or imaginative solutions. They will develop coding skills for use with robots.</p>	<p>All Elementary Schools Warwick Middle School</p>	<p>Shelly Chmil Jonathan Olshan</p>	<p>\$6,000</p>

<p>VEX IQ Gen 2 Robots</p> <p>These 10 robots plus two storage carts will help enhance the Automation and Robotics curriculum taught at the 7th grade middle school level. The new robots will be upgrades compared to current equipment and allow STEM learning at different levels, both block coding and text coding. The students will explore automation and robotics and their effect on the world. The students will get to have hands-on experience with designing, problem solving, and controlling robotic machines. The number of classroom activities possible are endless with these supplies. In addition, they may be used for Science Olympiad.</p>	<p>Warwick Middle School</p>	<p>Kevin Krause Jeffrey Oberholtzer</p>	<p>\$5796</p>
<p>Saving Crystal Creek</p> <p>Five copies of the “Whose Killing Crystal Creek” lab kit and a set of the “Soil Nutrients and Fertilizers” lab kit will allow entire classes of Wildlife Management students to understand watershed ecology and the impact of fertilizer runoff (one of the top water pollutants in Lancaster County) on stream water ecosystems. Students will perform tests, collect data, and analyze results. The activities can be tied to an optional field trip that is offered to students where they study a local stream with a Lititz Run Watershed Alliance employee.</p>	<p>Warwick High School</p>	<p>Brad McClain Krista Roe</p>	<p>\$956</p>
<p>Computer Science Career Exploration</p> <p>Sixty-seven percent of new jobs in STEM are in computing. Only 11% of the STEM Bachelors of Science degrees are in computer science. Computer Science is changing everything and skilled workers are needed. This project purchases kits to help enlighten students and families of the need for computer science literacy. Participants (210 students in grades 4-6) will learn more about careers in computer science, experience projects utilizing Makey Makey and Chibitronics kits to try their hand at computer science while making connections to careers that require elements of computer science. In addition, students and their families in K-6 will be invited to a Virtual Computer Science event.</p>	<p>John Beck Elementary</p>	<p>Colleen Heckman Linnea Martin Jessica Schieber</p>	<p>\$4,600</p>

<p>GASping with Excitement for Science</p> <p>Students in all levels of chemistry learn about gases and their various properties. This grant purchases a gas cell for the infrared spectrometer and an air quality monitor to study air pollution. The equipment allows students to collect gas samples in their natural environments and then bring them back into the lab to analyze them. The equipment will also be available for use in science fair projects, and other classes to study meteorology, earth science, etc.</p>	<p>Warwick HS</p>	<p>Doug Balmer Diana Griffiths Beth Lynch</p>	<p>\$2,484</p>
<p>Thumb Controls for TIG Welders</p> <p>Using four thumb controls for TIG welders, welding students will learn valuable welding skills that help make them more employable. Currently students use a foot control to control machine amperage when TIG welding at Warwick High School. Many local manufacturers use thumb controls when TIG welding. Students are unlikely to gain employment at these manufacturers for TIG welding positions due to their lack of skill with a thumb control. These thumb controls will allow students to learn the newer techniques.</p>	<p>Warwick HS</p>	<p>Brad McClain</p>	<p>\$1,638</p>
<p>Morning Announcements Show</p> <p>This grant provides video lights on tri-pods and “ON AIR” signs to help facilitate a morning announcement show. The morning show helps provide students real world experience as news reporters and anchors. Students will be developing their SEAD skills by bringing the school community together to watch the morning announcements.</p>	<p>Kissel Hill Elementary</p>	<p>Gina Diaz Perez</p>	<p>\$81</p>
<p>Digital Integration</p> <p>Thirty stylus pens and software licenses will be added as tools for 3rd through 6th grade students to manipulate and use for creating digital art work. Students will learn how to transfer their traditional drawing skills to the iPad.</p>	<p>John R. Bonfield Elem.</p>	<p>Becca Cetkowski Carrie Woody</p>	<p>\$1,530</p>

<p>Engaging Math and Literacy Resources that Promote Fine Motor Practice and Skill Development</p> <p>In kindergarten, fine motor development is essential for students to be able to do every day learning tasks. The resources provided will give students practice with academic skills as well as building muscle strength and coordination for fine motor development to color neatly, use scissors skillfully, correctly form letters and numbers, and hold writing tools appropriately. Resources include a color-changing light table, manipulative center, and sensory play materials.</p>	John Bonfield Elementary	Courtney Wolgemuth	\$2,505
<p>Screen-Free – Tonieboxes</p> <p>Nine Tonieboxes will be added to the classroom. Each is a listening device that allows students to hear popular children’s stories that are being read to them. Students will listen to stories during literacy centers to promote vocabulary development and listening comprehension. After listening to a Toniebox story, students will complete response worksheets that demonstrate their listening comprehension.</p>	John R. Bonfield Elem.	Bethan Getway Emily Korzon Courtney Wolgemuth	\$2,095
<p>Canine & Feline Paravetic Resources for Small Animals, Horse Classes</p> <p>Models of animal teeth and jaws, as well as resources to learn about animal hearts, breathing, and hearing will be added to the classroom. Inclusion of paravetic skills as a course module will prepare students for possible careers in medical fields such as vet tech and vet assistants, as well as veterinarians. These models will provide hands-on learning opportunities and better prepare students for entering the small animal program at Lancaster County Career & Technology Center.</p>	Warwick High School	Mrs. Lisa Hochreiter Mr. Brad McClain	\$1,977

<p>Reflex Math Fact Fluency</p> <p>This online program allows students to master basic facts in addition, subtraction, multiplication and division for grades 2 through 4. It is full of games that students love and allows students to gain fluency and confidence. It can be accessed at school and at home. The powerful reporting feature allows teachers and parents to monitor progress and celebrate success.</p>	<p>Lititz Elementary</p>	<p>Patty Appel Andrea Bear Lori Cascarino Andrea Hoglund Shanna Irish-Fyke Megan Kunkle Julie Meckley Nicole Miller Megan Obetz Leisl Reber Jen Teale Sandy Weismandel</p>	<p>\$3,300</p>
<p>Climbing to Fitness</p> <p>A rock-climbing wall will be added to the school. Students will engage in difficult physical challenges, problem solving, and peer communication to help them navigate a traverse climbing wall.</p>	<p>John R. Bonfield Elementary</p>	<p>Amy Balsbaugh Rachel Post</p>	<p>\$5,280</p>
<p>Socially Inclusive Play Through Gaga Ball</p> <p>A Gaga Ball pit will be added at the school for use indoors and outdoors. The Gaga Ball experience provides inclusive, collaborative team building, social skills, and play for students. It will be used for many years at recess and as a class reward. Student leaders have requested this resource to interact with peers. They will lead the play instruction provided to peers.</p>	<p>John R. Bonfield Elementary</p>	<p>Amy Balsbaugh</p>	<p>\$4,530</p>
<p>Simbio: Simulating Biological Principles</p> <p>Two programs will be purchased so that students can visualize the concept of evolution by natural selection and predator and prey cycles in the natural world. In addition to creating a simulated world where students can witness these phenomena, the program also allows students to manipulate variables within the environment to explore how small changes in the environment can greatly impact the end result in the ecosystem.</p>	<p>Warwick High School</p>	<p>Kaitlyn Bryant Loren Dissmore Ray Mount Krista Roe</p>	<p>\$3,000</p>

<p>A Little Spot of Social Emotional Learning</p> <p>This resource kit will support Social Emotional Learning development for children referred for small group or individual interventions to support their social and emotional skill development. It may also be used as a supplement in primary classrooms. The kit has been shown to engage young learners, target underdeveloped skills, and strengthen self-regulation. The kit will be used over a 6-8 week period to present stories and projects to reinforce particular emotions and skills for coping.</p>	John Beck Elem.	Sharon Conlin Colleen Heckman	\$390
<p>Building Vocational Skills in the Multiple Disabilities Setting: Twisted Pens</p> <p>This is the start of a multi-year project with the objective to develop pre-vocational skills for students with limited access to their community due to their academic, physical and medical needs. The grant provides twisted pens that students will mold into varied shapes specific to Warwick School District and Lititz, PA. Students will sell the pens, and learn various career readiness skills including maintaining inventory, filling orders, communicating with customers, simple money skills and working on a line to create a product. In the first year, 8 students will participate and more will be added in subsequent years.</p>	John Beck Elementary	Kristen Loperena	\$799
<p>Fifth Graders are First in Math</p> <p>Grant funds will enhance 5th grade mathematical skills to address increasing achievement gaps. First in Math is a hands-on, digital tool that will be utilized in the classroom as remediation support to engage and enhance concepts for on-level students and extend learning for advanced learners. Students will increase their math skills by working through different First in Math game modules. Students will use the program in school and practice math skills with it at home.</p>	Kissel Hill Elementary	Jackie Hess Sara Holton Penny Trees	\$720
<p>Doodles Come to Life</p> <p>Twelve 3D Doodle Pens will be funded for use in the Library and Art classrooms. Students will learn basic 3D printing skills, concepts and methods, including how to transfer a 2D image into a 3D rendering. They will be making connections between technology, math, and art.</p>	John Beck Elementary	Malinda Saunders	\$2,195

<p>Strengthening Kindergarten Skills Through ABCYA (Repeat)</p> <p>The ABCYA app provides over 400 engaging learning activities for students accessed through their individual iPads. It provides letter recognition, letter sounds, number sense, strategy games as well as coding, simple science topics and holidays tied to the Social Studies curriculum. ABCYA can be used in a variety of ways including reviewing concepts taught and as a motivational and enrichment tool.</p>	<p>John R. Bonfield Elementary</p>	<p>Bethany Getway</p>	<p>\$900</p>
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<p>Stock Market Game – 6th Grade Math (Repeat)</p> <p>The purpose of the Stock Market Game is to teach students more about the Stock Market and how math can relate to the real world. This is an enrichment activity for students who need extension in the 6th grade math curriculum. Students are instructed in mini lessons covering such topics as What is a company? What is a stock? What is diversification? and How do you buy and sell stocks? Students are given \$100,000 (simulated of course) to invest. After doing research, students discuss what stocks they would like to buy with their team and make sound financial decisions about what to invest. The student portal keeps track of their portfolio and how much they have gained/lost. Fifty-three teams of students with 3-4 students per team will participate in a state-wide competition.</p>	<p>Lititz Elem. Kissel Hill Elem. John R. Bonfield Elem.</p>	<p>Alex Daecher (LE) Nate Eakin (LE) Bob White (LE) Chris Schaffer (KH) Meghan Cupo-Fisher (JRB) Cathy Dommel (JRB) Bob Locker (JRB)</p>	<p>\$1,060</p>

<p>SpecDrums and Spheros in the Music Classroom (Repeat)</p> <p>The purpose is to enhance the musical learning of the students in music class by being able to relate pitches to colors, and then transitioning to a letter name. This is a great learning tool for students to create their own compositions. They can associate with the colors as a way to still compose and play. This grant adds 3 classroom sets of SpecDrums to the two purchased two years ago.</p>	Kissel Hill Elem.	Stephan L. Englehart	\$2,025
<p>Fact Fluency Phanatics (Repeat)</p> <p>The <i>Reflex Math</i> app will provide every 2nd grade student with an individualized research-proven platform to build their math fact family mastery, an area not emphasized in our current program. Students will complete an initial assessment to gauge fluency and input speed, play highly-engaging games requiring them to answer math facts adapted to facts known; and have fun interacting with characters like Crabby the Host, Dwight the Bunny, and Coach Penny the Bear among others.</p>	Kissel Hill Elem.	Dena Cascarino Tyler Clausen Yvonne Engroff Elizabeth Smith	\$2,975
<p>3rd Grade First in Math (Repeat)</p> <p>The objective is to create online remediation, enrichment and practice in 3rd grade math curriculum skills through First in Math. This online program allows students to move at their own pace through third grade skills and beyond. Each student will be provided with their own First in Math account with log in credentials. This website can be accessed and worked on at both school and at home.</p>	Kissel Hill Elem.	Erin Myers Dan Weidman Ashley Woolley	\$720
<p>Grand Total</p>			\$61,456