

2016 Technology Education Foundation Grant Recipients

In 2016, the Technology Education Foundation (TEF) awarded grants to deserving recipients throughout Southern Wisconsin. Each recipient demonstrated their ability to provide science and/or technology for the greater good of our community. Congratulations to:

School District of Monroe: \$9,000 for three Makerbot Replicator Desktop 3D Printers for each elementary school. The goals for using this technology is to introduce basic technology skills, keyboarding skills, basic programming and developing simple game apps. It will also teach basic coding and design websites such as code.org, Scratch and Tinkercad, SketchUp and Makerbot for three dimensional design.

Huegel Elementary School: \$4,928 for Dreambox for their 2nd, 3rd and 4th grade students. Dreambox is an online math program that provides extensive data on student progress. It will provide engaging guided student mathematics practice and free up the teachers to work with small groups providing the targeted instructions their students need.

Chavez Elementary School: \$5,300 for Chromebooks, internet service, laser printer and related hardware to be used in the Trail to Success after-school programming and parent empowerment training. Trail to Success will serve students and families by encouraging student learning outside of the school day and will empower families in supporting their child's learning.

Vera Court Neighborhood Center: \$5,000 to help launch Vera Vision 2020. This campaign will double the size of the current center and intensify its academic programming to ensure every child has the support they need to read at grade level and graduate high school. Funds from Technology Education Foundation will go towards tablets and e-readers to use in tutoring sessions, for reading time, and for family Academic Support Teams, and for Qualitative Reading Inventory tests to measure changes in reading levels.

DANenet: \$10,000 for Everyone On Madison, a new initiative to close the digital divide in Madison. Everyone On Madison will help connect families to home internet services, provide refurbished desktop computers and digital literacy education for 500 households. With funds from Technology Education Foundation, DANenet will help low-income households get affordable internet access; deploy free or very low-cost computers; and provide digital literacy skills workshops and drop-in technology support to make the devices and connectivity useful.

Madison Metropolitan School District: \$5,000 to support a project to implement Mobile Makers in MMSD's elementary schools. Mobile Maker's purpose is to engage all MMSD's elementary school students in learning experiences that will help them build complex problem solving, critical thinking, creativity, communication, and collaborative skills so their education stay on pace with the exponential change rate of technology and prepares them for careers that may not yet exist. Mobile Makers will be contained in kits that will rotate among all elementary schools and provide resources such as robots, mini-drones, green screens, 3-D pens, 3-D printers, sewing kits, Google Expedition kit and basic electronics devices. Each school will have the kit for 9 weeks per school year.

Boys & Girls Club: \$5,000 to put towards Engineering in Action: Community Building, a new STEM program that BG CDC will be implementing in fall 2016. Engineering in Action – Community Building is a 16-week program during which participants learn engineering principles and practices through nine progressive challenges that culminate into the creation of an innovative design that responds to a community need. The program will provide its members with an opportunity to practice real-life STEM activities in an afterschool setting that is highly nurturing, safe and fun, thus encouraging members to get out of their comfort zones, test their skills, and gain confidence in their ability to learn. The goal is to strengthen the STEM skills of South Madison 7th-12th graders and to provide them exposure to engineering careers.

Maydm: \$2,500 for iPads to be used by students in hardware and Arduino programming, coding exercises and web development. At Maydm, they believe in a holistic approach will bridge the digital divide: Technical Skills: coding, programming languages and design; Education Pathways: development of concrete education goals and pathways; Mentorship: direct, supportive relationship with a successful industry professional; and Portfolio Design: a body of creative work the student designs. In their semester program students learn fundamentals of programming in the first few weeks and then spend the remainder of the semester building on that base through a practical project that both deepens and broadens their skills. At least once during the semester an industry professional visits to engage students in an exposure activity. Topics are technology specialties such as virtual reality, hardware programming or application development.

Madison Children's Museum: \$5,000 to support the 2016-2017 MCM STEAM Programming series, which will have the theme of virtual reality. Virtual reality is a quickly progressing field that has the potential for transformational STEAM education programming. The museum is the ideal organization for mobilizing this type of technology because MCM's mission is rooted in the intersection of arts and science. With TEF support, MCM will put virtual reality technology in the hands of children and allow them to imagine worlds outside that of their daily life.

Aldo Leopold Nature Center: \$3,000 to fund electronic hardware to ensure functionality of their high-tech meets high-touch educational exhibits and field studies programs. Information, visuals, one-of-a-kind experiences in these theaters and exhibits are best connected to rich outdoor programs and fieldwork through the use of mobile devices complete with educational tools and apps to enhance learning, data collection, and data entry. Aldo Leopold Nature Center is able to bridge the high-tech with high-touch, and provide experiences for student of all ages and backgrounds that they will not encounter anywhere else. Funding from TEF will provide opportunities for a tech and media savvy generation to utilize digital resources for exploring the causes and solutions to environmental problems and provide a high-tech hands on integrated and standards-based setting for delivering STEM education.

YWCA: \$10,000 for Macbook Air laptops to support YWeb Career Academy. The YWeb Career Academy program provides instruction in website development skills through an intensive training institute. The class provides 400 hours of instruction to 20-25 individuals per class in HTML5/CSS, JavaScript, Node.js and user experience design. YWeb Career Academy targets young women and people of color, who are underrepresented in technology, to increase opportunities to attain family-sustaining jobs while also meeting a labor gap. The class covers job readiness, team building, and hands-on learning in computer programming.

Wisconsin Youth Company: \$9,584 for laptops with 6th Gen/i7 Processors that would be accessible to approximately 200 students. The funding from TEF will upgrade the current computer lab and engaging STEM programming to middle school students. At Elver Park Neighborhood Center, operated by Wisconsin Youth Company, they offer students out of school time programs during the school year and summer. The afterschool program reaches students from populations that are experiencing significant academic achievement gaps and are underrepresented in STEM fields.

St. James Catholic School: \$5,500 to implement an information technology plan to supplement its current curriculum. The funds will go to purchase tablets for junior high grades. The tablet technology training and implementation will extend the classroom and open doors to easy and immediate access to information that exceed the present physical boundaries of textbooks and classrooms, enable each student to access and control the time and tempo of reading, provide a wealth of apps for students to access and to use the resources that they explore online. Mobile personalized technology will increase the knowledge and skills in the STEM areas of the curriculum, specifically Science, Technology and Math.

Sector67: \$8,300 to provide 10 portable workstations that will enable afterschool clubs to expand and grow. Sector67 serves many facets of the Madison community, including educational outreach and programs oriented at middle school students providing sessions soldering, sewing, Scratch programming, Raspberry Pi, and Arduino activities, electronic, rockets, hovercrafts, and 3D printing. Funding from TEF will support new computers to be used for afterschool programs as well as school break camps hosted by Fractal at Sector67. These camps are designed to introduce participants aged 6-13 to innovative technologies such as 3D printing, soldering and computer programming to bridge the learning between lessons at school and real world experiences.