

Elmbrook Education Foundation
2018 Grant Summary
Submitted by Kristin Westrick, Grant Committee Chairperson

The EEF Grant Committee, consisting of Chris Thompson, Dan Scott, Andy Farley, Karen Replogle, Kim Devine, Carol Chetney, Stephanie Soerens and Kristin Westrick met on Friday, March 16, 2018 for the purpose of discussing grant applications submitted to the EEF for the 2017/18 school year. Fifteen (15) applications were received. The committee recommends supporting the following six (6) applications:

Tonawanda MakerSpace submitted by Kristin Olson, Tonawanda Principal: \$800 for supplies and equipment to begin to build / implement a MakerSpace

The grant application requested \$726.65 to being to supply a MakerSpace with materials and STEM projects for the children at Tonawanda. At this point in time, Tonawanda is looking to phase in a MakerSpace concept and see how their school community uses the space before requesting / purchasing more expensive pieces of equipment. The space will touch all children at Tonawanda and will assist Tonawanda in developing a MakerSpace on scale with the other elementary schools in the District.

Rationale for support of this grant are:

- Continues the STEM program development for our youngest learners
- Tonawanda is “testing” the MakerSpace concept in their school first before purchasing / requesting expensive equipment

Upon acceptance of this grant, we would request for periodic updates from Tonawanda on the the development, implementation and use of their space.

WHMS MakerSpace: Sphero Robotics and Raspberry Pi Weather Station, submitted by Andrew Vrakas, WHMS Learning Support Specialist: \$1000 for six (6) Sphero Robotics kits and a Raspberry Pi Weather Station

The grant application requested \$800 to purchase six (6) SpheroRobotics starter kits and \$200 to purchase a Raspberry Pi Weather Station. These robotics kits and the weather station will be additions to the current MakerSpace at WHMS to further extend the use and enjoyment of the physical space by rolling out new / additional student-centered and student-driven activities. The goal is to incorporate technology that is age appropriate including introductions to electronics, robotics and engineering.

Rationale for support of this grant are:

- Build upon success / use of WHMS MakerSpace
- District support and assistance in purchasing additional SpheroRobotic supplies
- Raspberry Pi Weather Station directly supports the 6th grade science curriculum

Upon acceptance of the grant, we would like to visit the WHMS MakerSpace to witness the supplies and equipment being used. We would also like periodic updates from Mr. Vrakas on overall usage of the WHMS MakerSpace which we have supported multiple times over the past few years.

**BEHS Arts Metal Lab, submitted by Rachel Broge, Brookfield East Art Teacher:
\$5,000 for Arts Metal Lab equipment**

This grant application requested \$40,000 for updated construction, systems and equipment in the arts metal lab at Brookfield East. We have been clear as a committee that EEF does not fund construction projects; however, there many components of this grant that we felt are worthy of support in the area of equipment and supplies.

The important structures in the 3D art classroom enable students to work on a more industrial and professional level, and to gain insight for far more authentic experiences. The grant committee was particularly interested in how working with metals relates to careers in not only the creative art field, but also industrial careers such as welding, engineering, construction, architecture, etc..

By having this new equipment for students, teaching new techniques and involving new methods of metalworking, the experience will be more engaging for all students. Teaching techniques such as etching, casting, forming and shaping metal in a more technologically relevant way makes the content more relatable in terms of 21st century skills that can take them to higher level institutions and prepare them for life outside of high school.

The \$5,000 will be used to purchase advanced equipment such as such as oxyacetylene torches, more fume extractors, and new polishing wheels. Brookfield East administration has committed to working with Ms. Broge to help her find alternative space within the current East facility that provides better ventilation in order to use the equipment properly and regularly.

Rationale for support of this grant are:

- Support of the Arts Department with investment in state of the art equipment
- Equipment will be used to teach all learners interested in creative arts as well as industrial careers
- Commitment by East administration to rework current space at East to make it functional for Ms. Broge's requirements
- Pursuit of other funding sources for her project

Upon acceptance of this grant, the EEF Grant Committee would liked to be invited to see the space once it is reconfigured to the proper use and to see the art and other work students create in this space.

Virtual Reality in Science, submitted by Emily Barmantje, Brookfield East Science Teacher: \$4260 for two virtual reality headsets, software and computer / laptop rebuilds

The grant application is requesting funding for the purchase of a virtual reality system for the Human Anatomy and Physiology class at Brookfield East. VR allows students to be completely immersed in the human body (or whatever topic you choose). Learning about moving parts at the microscopic level is hard. VR allows the students to see this happening and can relate it directly to a macroscopic movement. Students could supplement their learning with VR and hopefully understand topics better.

Rationale for support of this grant are:

- Truly innovative teaching method
- Any teacher/class/subject can benefit from the VR set up as long as there an application that applies to the content they teach
- Proposal to have students assist in the rebuild of laptops to allow enhanced power to run the VR

Upon acceptance of this grant, the EEF Grant Committee would love to be invited to learn more about how the VR system is being used and to possibly try it out. We would also love to hear student response to this technology and to be advised if / how students rebuild the computers / laptops.

PIP Biofeedback to help students with self-regulation, submitted by Jason Lippold, Brookfield East Guidance: \$537

The grant application requested funding to purchase one PIP biofeedback monitor for \$179. The grant committee thought that three (3) may be a better trial.

Students need help with coping strategies on how to self-regulate. A PIP biofeedback monitor will help students identify self-regulation strategies by using electrodemoral activity in their finger tips. With support of a phone app students can get a visual representation of their level of stress/anxiousness and can work with their school counselor on self-regulation strategies to decrease this stress/anxiousness.

To monitor effectiveness of this technology, students that frequently miss class time as result of stress or anxiety will be specifically targeted / asked to use the PIP. This device would be accessible to any student at East.

Rationale for the grant are:

- Social / Emotional health and well-being of our student population
- Support from Student Services
- Innovative use of technology to assist our students develop important life skills

The EEF Grant Committee, upon acceptance of this grant, would like to be updated on the success of the units, specifically how the students feel about them and the success they are having in regulating their behavior.

Trauma Sensitive School, submitted by Laura Damask 3rd Grade Burleigh Elementary: \$2500 for Trauma Training

Unfortunately, we are seeing a drastic change in the students who are entering our school doors. Students are coming to school having had experienced some traumatic circumstances. These can range from abuse, poverty, divorce, death and varying degrees of violence, to name a few. Oftentimes these are circumstance teachers, administrators, and other school staff are not trained or prepared to address, which leads to lost learning time for all involved.

The grant application request is to provide education and training on how best to support students who come to school with trauma so that all the staff working with students can provide immediate interventions, strategies, and supports to students in need.

Rationale for supporting this grant are:

- Social / Emotional health of our youngest learners
- Support for Elmbrook staff as the role of educator expands
- Support from Student Services team

Upon acceptance of this grant, Ms. Damask will work with Dr. Tanya Fredrick to select the best training facilitator for her needs. In addition, the EEF Grant Committee would like confirmation that the training takes place and how it is being implemented in the school.

Total Recommended Grant Amount: \$14,097

Grant Applications not receiving funding are:

Brookfield East: Room 203: ImaginEducation

Brookfield Central: Elmbrook Summer Theater Program

Brookfield Central: Student Services Lobby

Brookfield Central: Date Safe Project

Brookfield Elementary: Building 21st Century Learning Skills through Purposeful Play

Burleigh Elementary: Book A Day

Dixon Elementary: Hands On, Screens Off

Dixon / Tonawanda Elementary: Commission of a Musical Composition

Swanson Elementary: Voice Activated Technology as Learning Assistant