

Waukesha Education Foundation Grant Recommendations
Spring 2014

Total Amount Requested: **\$29,676.62**

Total Allocated Funding: **\$18,585**

Nellie Worden

Hawthorne Elementary School

Making Connections through Technology in the Art Room

The students this past spring received individual iPads as tools for independent learning and as ways to connect their learning to real world applications. This can grow within the art classroom and has so much potential for personalized lessons and projects. However, without an art colored printer and scanner, students are limited. The possibilities for connecting traditional art making techniques to contemporary technological practices can be implemented with a Technology Table. I have submitted a proposal for an Art Room Redesign, in which this is included, and will attach the document in the Additional Information section of this application

Bryn Perry

Lowell Elementary School

Math Games & Materials to Promote Differentiated Learning Opportunities

Participants will use the contents of the various math games and materials to develop skills targeting third-fifth grade School District of Waukesha math curriculum expectations directed by National Common Core Standards. Multiple level items specifically focus on the areas of problem solving, fractions, decimals, and elapsed time. Research supports that differentiated instruction and a hands-on approach is necessary to reach all students. Antiquated approaches from the past rely on memorizing information and practicing concepts through the use of worksheets. Allowing children to collaboratively experience and think about the concepts they are studying "enhances the depth of their content understanding, their interest in the subjects they are learning, and their retention of the material." (Swartz, 2008, Educational Leadership).

Carl Faby, Doug Kugler, Thomas Mancuso

Juvenile Center

Graphic Design: Dye-Sublimation

Graphic Designing is the art of communication, style and problem solving through the use of type (letters), space, and imaging. Graphic designers use various methods to create and combine words, symbols, and images to make a visual representation of both ideas and messages. Graphic design often refers to both the process (designing) by which communication is created and the products (designs) which are generated into finished product.

Jennifer Wienke

North High School

Family literacy

In the 2010 National Assessment of Educational Progress (NAEP) report, 74% of high school seniors, in the United States, tested at a basic reading level (U.S. Department of Education,). The Alliance for Excellent Education (2004) stated that 8.7 million secondary students are unable to read and comprehend classroom material. Implications of these statistics are that students who score at basic reading levels, are more apt to have low paying jobs and are at risk for failing out of post-secondary school (Gallagher, 2009) In order to stop this, current educational research has begun to focus on adolescent literacy, in prospects of increasing reading comprehension. One of the ways of increasing reading comprehension is by implementing reading interventions. One reading intervention that has yet to be documented, in Waukesha, is a family literacy program.

Jenny Wienke, Rachel Skinner

North High School

Books for Strategies Students

Response to Intervention (RtI) and the need for reading interventions is something that has become very real within the educational world today. In order to give students a strong foothold in graduation rate as well as set them up for successful futures, schools need to start responding to the need for reading that many students are lacking. Currently, North High School services between 75-100 secondary students in reading interventions. These students are in need of intensive support in the areas of comprehension, decoding, and reading strategies. Students that are being serviced have Lexiles between 700-1000, which equates to the 4-6th grade levels, and some of these students are seniors in high school. Due to the students needs at their Lexile and comprehension levels, we do not have access to materials that are of interest for the students. Many of the materials that are being at students current levels do not invest and pull in students because it is bland in nature. Within Waukesha, students that are being serviced come from diverse backgrounds, and have had experiences that are beyond what we can even comprehend. Therefore, in order to pull in students interests, motivation and build background knowledge, materials need to be of interest, as well as include diverse settings, plots, and character situations in order for students to make connections to their lives to build their comprehension levels. What we are proposing is to acquire more motivational texts, at these Lexile levels which requires money to access a diverse set of texts and materials that will be a better tool in order to teach students and set them up for success in their future lives.

Rebecca Kozak, Susan Otto

Harvey Phillip Alternative High School

DBQ Project (document based questions)

The DBQ Project is committed to helping teachers implement rigorous writing and thinking activities with students of all skill levels. (www.dbqproject.com) Consistent instruction, scaffolding of material and opportunity to practice enable students of all levels to succeed on tests ranging from GED to AP. The focus is on college-readiness skills with alignment to best practices and the Common Core. Students are instructed in the art of critical thinking while reading non-fiction texts. Students then express their thoughts in an evidence-based essay to communicate their understanding of the material. Two teachers have already attended training and can see the application of this material to several programs at Harvey Philip.

Cierra Bartol-Byers, Ashley Nemoir

Horning Middle School

Creating Connections for Mathematics and Technology: Geometer's Sketchpad

The National Council of Teachers of Mathematics has stated that "Technology is essential in teaching and learning mathematics; it influences the mathematics that is taught and enhances students' learning." Currently, the connection between technology and mathematics is lacking. We propose to implement Geometer's Sketchpad into the curriculum to create a connection. This software has a positive impact on student engagement, motivation, and critical thinking. Geometer's Sketchpad provides hands-on mathematical learning for students. The project allows two teachers to participate in an online course on teaching with Geometer's Sketchpad. Middle school students receive the opportunity to explore their ideas, discover properties, and check conjectures on the software. Along with the software, schools receive related texts to provide project and activity ideas.

Lynda Troeger, Greta Voit, Kirsten Wiesneski, Eric Hill

North High School

LabQuest 2 and iPad App for Graphical Analysis of Data

Vernier Software and Technology has developed the LabQuest 2, a standalone interface used to collect and graphically analyze scientific data. The science department at North High school has used several of the Vernier automated collection probes (motion sensors, pH meters, temperature probes) in the past, but data was collected and then sent to a lap top at which point data was analyzed by the student using the Logger Pro graphical analysis program. With the Waukesha One to One initiative and all students having access to personal iPads, we found that the Logger Pro program has become outdated. Logger Pro does not work on the iPads and this year we "made do" in the science department by using a few lap tops that were still available, of which only about 12 were functioning at any given time. We began searching for a graphical analysis program that would replace Logger Pro. Several members of the North High School science department team began investigating replacement software and two teachers were fortunate enough to attend the WSSST convention and experiment with the Lab Quest 2 devices. They found that when employing the Lab Quests with the Vernier probes we already have, data can be sent directly to the iPads for analysis. Once on the iPad students can analyze, interpret and manipulate the data with their lab partners and then save their analysis for future study or send it to the instructor who can offer feedback, supply a grade or give suggestions for future work. Scientific investigations are driven to a new level of complexity when applying graphical analysis to laboratory data. Early in the academic year, students are introduced to the components necessary to construct a proper graph (i.e. establishing proper axes, drawing a best-fit line, calculating slope, etc.) so that these skills are firmly in place. However, students quickly see how their graphs can be enhanced and an augmentation of relationships between variables can be established when using graphing software, such as that supplied by the LabQuest 2. With the use of this technology, students become more engaged and personalize their learning as they manipulate variables and immediately visualize these effects with the LabQuest 2 devices. They are compelled to use the skill of inductive reasoning in order to develop and interpret models, one of the College Readiness Skills. Inquiry investigations become easier to plan since students see the results of their data collection almost immediately and are not required to spend long amounts of class time constructing graphs. Another feature of the LabQuest 2 is that it comes with a number of scientific investigations pre-loaded into the data base. In addition, labs that are currently being taught can be added to the memory. Not only will students increase their literacy skills through analyzing graphs, but having labs directly loaded onto these mobile devices will eliminate students asking the instructor "what do we do next"? A teacher can merely respond, "the procedure is loaded on your LabQuest and you can read it there".

Aimee Hyland

STEM Academy - Randall

iCreate, iCollaborate, iCommunicate - Digital Media Lab

Within this proposal, students at the Waukesha STEM Academy will have the regular opportunity to use the technology components (MacBook Air, Green Screen Kit, and iPad stands) available in the media lab space, aligned with the School District's Waukesha One initiative. Student creations and the use of these requested tools will sustain well into the future of WSA, as we continually strive for students to use higher level thinking skills to explain and extend their learning. Included as a component of the grant activities, a partnership with Carroll University's Communications Department will help solidify a commitment to this type of learning experience for our students, ensure that students will have a solid foundation in skills and concepts regarding these creations, as well as demonstrate a commitment to pushing innovation with technology forward at the Waukesha STEM Academy.

Erica Cosson

Whittier Elementary School

World Music Drumming

Students today need more than traditional methods of instruction in order to engage them in the learning process. The World Music Drumming program helps students be actively engaged in the music classroom. The program includes cultural connections to African and Latin American culture. It builds communication skills as students demonstrate the value and

techniques of collaborative teamwork. I am seeking the funds to purchase a set of World Music Drumming instruments which also includes the program text for students.

Krista Krauter, Jeffrey Allen

Horning Middle School

iRobotics

iRobotics will focus on critical thinking skills through the incorporation of technology, computer science, and collaboration. This program will focus on collaborative design projects that will foster inquiry-based teamwork.

Ian Schaefer, Kim Daly, Molly Mott, Diane Giese

Horning Middle School

Explore Learning Math/Science teamup

We would like to purchase the use of Gizmos through the ExploreLearning site for every student in Horning Middle School. ExploreLearning contains Gizmos that are award winning, interactive simulations that bring research-proven instructional strategies to life and also make learning an enjoyable experience. Students use Gizmos to interact with and explore hundreds of math and science concepts. Gizmos are dynamic tools that help students move beyond memorization and help them to get a true understanding of the concepts through inquiry based activities. Assessments can also be utilized through the site that provides immediate feedback so that students can check their understanding and get helpful feedback. Each inquiry based-lesson comes with step-by-step, inquiry-based Student Exploration sheets that can be used as-is or customized to meet the needs of the students.

Erin Richards

South High School

Enjoy the Show!

The fine arts are always appreciated but unfortunately, extremely expensive! South's theater is in need of many updates but I am focusing on purchasing a scrim for the stage, headsets for the technical crew, and a new spotlight. The scrim will enhance the theatrical productions and the ability to include various effects for future shows. The headsets are needed for the students to be able to communicate during rehearsals and productions, whether they be theatrical or orchestral. This will enhance the safety for other students during shows by allowing for clear communication from various points in the theater. The spotlights that we currently have are dated and get very hot. This is also a safety concern. A new spotlight would be easier for the students to use and would lower the temperature in the beam port for the students during any production. All of these enhancements would behoove the entire student body as well as the community in that they would all enhance the theatrical and musical experiences here at South. This would support the largest theatrical venue in Waukesha County.