



2016 – 2017 Teacher Grants

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Clear Springs Elementary School

iPad Keyboards

Lead Teacher/Staff: Carey Sonnenberg

Summary: Students will improve their keyboarding skills with tactile keys that allow them to accurately and quickly compile their thoughts. The keyboards will be used in writing units, giving students opportunities to more easily put their ideas to computer.

Awarded: \$ 1,350

Deephaven Elementary School

Elementary Fitness Heart Rate Watches

Lead Teacher/Staff: Samantha Bauchle

Summary: Heart monitors will teach students about heart rate zones and how their bodies work to keep healthy, empowering students to take ownership of their fitness. Learning about heart rate and fitness tracking is a life skill that is important for students to understand and learn.

Awarded \$ 3,200

Excelsior Elementary School

Hydroponics in the Classroom

Lead Teacher/Staff: Tarah Cummings

Summary: The materials purchased with this grant will enable students to create a homemade hydroponics system in a bin, allowing them to conduct growing experiments and to see technological advances in agriculture using water and nutrients. This will tie in with units related to Water, Structures of Life, STEM and solutions to world issues, such as limited resources. The opportunity to “hack” existing hydroponic models will encourage creativity.

Awarded \$476

Authentic Circuits with Makey Makey

Lead Teacher/Staff: Ali Wachutka

Summary: This project aims to increase and enhance authentic learning, creativity and the use of technology through the use of Makey Makey kits, which are a STEM application where students use knowledge of circuits and conductors to create unique keyboard controllers. These kits encourage student exploration and experimentation with circuitry and foster a curious spirit to engage in science, allowing them to be innovators and to share their solutions with others.

Awarded: \$ 515

Advance Incubators and OvaScopes for Life Science

Lead Teacher/Staff: Hsin-Yi Liu

Summary: This grant will provide more functional and efficient incubators for the Duckling Hatch unit for 21st century science teaching. The advanced incubator manages all functions, providing the essential environmental control for successful egg hatching. The ovascope will allow the eggs to be “candled” to display the images of the embryo on the smartboard using a webcam, enabling easier viewing of the developing duckling. This will allow students the opportunity to witness the development of the ducks inside the egg and to make more detailed observations.

Awarded \$ 750

Stimulating Maturity through Accelerated Readiness Training (S.M.A.R.T.)

Lead Teacher/Staff: Rebecca Johnson

Summary: S.M.A.R.T is a multi-sensory approach to learning that involves physical activities that stimulate brain development, creating a more purposeful and innovative environment in gym. This program is research based and applies activities for developing/enhancing student’s visual perception, eye-hand coordination, auditory skills and large and fine muscle skills. The S.M.A.R.T activities are projected to increase the critical readiness skills students need to succeed in school, resulting in higher achievement levels in Kindergartners in both reading and math learning goals.

Awarded \$ 1,775

Groveland Elementary School

Grandparents and Grandchildren Sing Together

Lead Teacher/Staff: Seth Boyd

Summary: This grant will facilitate the production of a collaborative concert featuring Alive and Kickin’, an auditioned vocal ensemble for people aged 65 and up, and Music & Lyrics, which is Groveland’s curricular 5th grade choir. Students will have the opportunity to experience making music with others who have a different background and vary greatly in age, community members will have a chance to see students they might not otherwise. The audience and participants of the concert will have the chance to examine views on aging, hear music in a

multitude of styles and develop respect for others in a different generation.

Awarded \$ 1,350 from the Minnetonka Alumni Association Fine Arts Fund

Hands-on Computer Building and Programming

Lead Teacher/Staff: Sara Lovelace

Summary: Students will be able to assemble a fully functional computer, including the brain, memory, keyboard, Wi-Fi dongle, speaker and screen and then program the computer to accomplish a set list of simple tasks. This project will give second graders experience in team work, logic, analytics, critical thinking skills, computer literacy and computer science.

Awarded \$ 2,160

Minnewashta Elementary School

Digital Microscope for iPads

Lead Teacher/Staff: Joy Curran and Heather Baker

Summary: This grant will purchase digital microscopes compatible with iPads so individuals, small groups, and classrooms can take a closer look at the world around them and share it with one another, increasing enthusiasm for science. The microscopes will enhance current curriculum—the Mystery Powder unit, Wetland projects, and Forensic Science units, to name a few. Students can see the magnification directly on their iPads and images can be reflect onto Smart boards or uploaded into presentations.

Awarded \$ 1,500

Imagination Playground in Action

Lead Teacher/Staff: Maria Chopite

Summary: Imagination Playground sets of blocks are an innovative play system, intended to transform any space into a play space, encouraging learning, social development, movement and fun. Students will be able to use them to improve collaborative work through active, creative play during free time and indoor recess days. A free 3-D builder app is available to provide additional experiences and guided projects for students.

Awarded \$ 2,351

Scenic Heights Elementary School

Chinese Culture Engagement - Dragon/Lion Dance

Lead Teacher/Staff: Xue Han

Summary: A comprehensive practice activity which includes knowledge and appreciation, creation of decorations and costumes, and presentation of the Chinese dragon/lion dance.

Awarded \$639 from the Minnetonka Alumni Association Fine Arts Fund

Diverse Kids

Lead Teacher/Staff: Anita Britton and Jennifer Cho

Summary: Honoring students of color by bringing increased awareness to their countries of ancestry and cultural norms by providing multi-cultural supplies and role model speakers from the community and high school, raising inclusivity among students.

Awarded \$1,669 from the Youth Citizenship Development Fund

Authentic Circuits with Makey Makey

Lead Teacher/Staff: Ali Wachutka

Summary: This project aims to increase and enhance authentic learning, creativity and the use of technology through the use of Makey Makey kits, which are a STEM application where students use knowledge of circuits and conductors to create unique keyboard controllers. These

kits encourage student exploration and experimentation with circuitry and foster a curious spirit to engage in science, allowing them to be innovators and to share their solutions with others.

Awarded: \$ 515

All Elementary

Minnetonka Elementary School Musical

Lead Teacher/Staff: Lauren Bartelt

Summary: This grant will underwrite partial costs of the royalties for the 2016-17 Minnetonka Elementary production of Aladdin Kids. All elementary schools will share sets, costumes, props, lights and sound and rotate performing in the Excelsior Elementary Auditorium. Approximately 300 elementary actors will be involved in the production. While acting, students interested in theater are given the opportunity to recognize and surpass their own expectations of self through a fully realized performance, teaching them lessons in dedication, leadership and self confidence that will be used throughout their life.

Awarded \$ 1,000

Critical Thinking and Collaboration through Code Breaking

Lead Teacher/Staff: Ali Wachutka

Summary: Breakout EDU is an open source immersive learning experience allowing students to decode clues to solve thematic puzzles. Students will collaborate within their groups and use critical thinking and logic to solve the puzzles. Teachers can create their own clues and experiences, so Breakout EDU can be used in all English, Chinese and Spanish classrooms and can support studies of various curricular areas.

Awarded \$ 1,474

Size Matters Handwriting Program

Lead Teacher/Staff: Kelli Anderson

Summary: The intent of this grant is to provide a handwriting curriculum to elementary students that have demonstrated impact on handwriting legibility for students who receive occupational therapy services for writing. This program focuses mainly on letter size, rather than the traditional approach of letter formation. Student's confidence and improved perception of their writing strengths is the anticipated result.

Awarded \$ 2,080

Minnetonka Middle School East

Keyboards for iPads

Lead Teacher/Staff: Liz McAllister

Summary: The keyboards purchased by this grant will be used daily in the Study Skills classroom, assisting students to write with more ease and confidence while strengthening their typing skills. The keyboards will reduce frustrations and delays that sometimes happen when typing directly on iPads. Typing on iPad keyboards will enhance and effect essays, portfolios, debate presentations and more, in core curriculum areas.

Awarded \$ 450

Jamstik Smart Guitar

Lead Teacher/Staff: Karen Gotz

Summary: The Jamstick is a tool that helps to bridge the gap between playing an instrument and utilizing technology, increasing student engagement and enthusiasm by adding a technology component to the traditional guitar unit. The Jamstick will improve student learning and engagement by teaching them how to play guitar chords and allowing students to play along with a library of popular songs. Included apps have the ability to track student progress and

give immediate feedback, as well as allowing students to work at their own pace using tutoring apps.

Awarded \$ 450 from the Minnetonka Alumni Association Fine Arts Fund

Plug and Communicate

Lead Teacher/Staff: Eva Boyd

Summary: A classroom set of keyboards will allow students' writing time to become a more effective way to compose the written material incorporated in the language arts curriculum. Keyboards will allow students to be more efficient while composing, editing and revising their written work.

Awarded \$ 1,575

Heart Rate Monitors for Physical Education

Lead Teacher/Staff: Melissa Sundboom

Summary: Using heart rate sensors and an app, students will be motivated and assessed using various metrics and real time feedback. Students of all abilities will be able to see the effect of exercise on their bodies by measuring heart rate and can set goals and earn badges, a powerful motivational tool. Teachers will be able to ensure that students are exercising at the right intensity so they can be inspired to do their individual best.

Awarded \$ 3,200

Minnetonka Middle School West

Building K'NEX DNA Models

Lead Teacher/Staff: Jennifer Morcomb

Summary: Students will be able to use K'Nex to construct a model that teaches the structure and function of the nucleic acid molecules that make up DNA and RNA. The process of building these models will encourage collaboration and communication as students create them in small groups. By using a hands on model, students will be more engaged about learning about DNA, which is an important foundation for other topics such as genetics and evolution throughout the year.

Awarded \$ 990

Log Rolling Club

Lead Teacher/Staff: Sarah Beron

Summary: Log rolling is an old sport that is gaining popularity, due to the development of the Key Log, a synthetic portable log that makes it practical for schools and recreational activity. Log rolling is a unique activity that promotes balance, leg and core strength, cardiovascular endurance and coordination. The purchase of a Key Log will allow log rolling to be offered as an extracurricular activity.

Awarded \$ 1,000

Minnetonka High School

What Do You Really Look Like?

Lead Teacher/Staff: David Surver

Summary: This grant will fund a true image mirror...people will be able to see themselves as others see them, not as a mirror image. In the math classroom, this can be used in the context of teaching about reflecting functions. It will be a memorable experience for the students viewing themselves as well as helping them to better understanding the reflections of graphs of functions.

Awarded \$ 200

Home Maintenance and Renovation Course Supplies**Lead Teacher/Staff: Brad Eby**

Summary: The funds from this grant will purchase new tools, equipment and supplies for the Home Maintenance and Renovation Class that has a curriculum connected to vocational careers and DIY related activities. Students will have hands on experience with the tools needed to complete projects such as wall framing, electric wiring, tiling, plumbing, and other practical and useful home topics.

Awarded \$ 1,000

Chemistry Probeware Enhancement**Lead Teacher/Staff: Clint Fenner and Sean Holmes**

Summary: Grant funds will be used for advanced scientific tools that will propel students into the 21st century of scientific investigation, significantly improving the variety and depth of investigation currently available to students. This grant will allow the implementation of more real-world, hands-on and engaging chemistry experiments, students will benefit from an enriched learning environment with direct instruction in advanced scientific topics and experimentation as well as more inquiry based learning experiences. These will hopefully spark interest in scientific research and careers in science.

Awarded \$ 12,825

Research Topics in Human Physiology**Lead Teacher/Staff: Stephanie Nelson**

Summary: This grant will provide equipment that will enable students to measure and collect data about the respiratory system, muscular system and integumentary systems. It will be used for several courses as well as individual projects. Students will be able to design experiments and test the effect of different variables, using data logging devices to collect information about homeostatic and respiratory functions.

Awarded \$ 1,000

Cine Slider**Lead Teacher/Staff: Andy Smith**

Summary: This grant will complete the Video Jib system that was purchased with last year's grant, allowing students interested in video production to use the latest tools in digital video making. The cine-slider adds movement and a higher sense of energy to video productions and allows students to tell long and moving visual statements.

Awarded \$ 1,300

Social Skills Through Improv**Lead Teacher/Staff: Kelly Kautz**

Summary: The purpose of this grant is to help students with Autism Spectrum Disorders increase their ability to navigate social situations through participation in improvisation classes. These classes provide a framework for addressing challenging social situations and new experiences by reinforcing social skills that many people take for granted. Students have fun while learning how to respond to the unexpected, engage and interact and support fellow participants. Improv allows students to practice social skills in a comfortable, non-judgmental environment.

Awarded: \$ 2,000 from the Minnetonka Alumni Association Fine Arts Fund

All Schools

Tools For Anxious Youth

Lead Teacher/Staff: Colleen Faber and Kathleen Leisman

Summary: Anxiety is a reality for students at all grade levels. This grant will purchase anxiety tools (stress test thermometers and bio dots) that offer immediate feedback on student stress levels. These will help school social workers provide another strategy to monitor the effectiveness of taught interventions and to monitor the level of awareness that students have about how stress and anxiety impacts school performance.

Awarded \$ 1,554

Extended School Year Opportunities

Lead Teacher/Staff: Colleen Faber and Amy Horning

Summary: This opportunity is designed for underserved students to help them reach their full potential by inviting them to participate in enriching, fun and unique learning experiences. School and community partners will collaborate to bring together students who face barriers to participate in out-of-school time year-round activities that promote academic success and positive social interactions. Role modeling and mentoring will also be included in the program.

Awarded \$ 3,800

Media Resources Supporting the Minnetonka Framework

Lead Teacher/Staff: All Media Specialists

Summary: Funds from this grant will purchase new media resources to support teachers and students, incorporating the Minnetonka Teaching and Learning Instruction Framework, to deepen learning experiences in all schools and classrooms. Resources will include printed materials, available for check out from all Media Centers and ebooks and online databases which will be able to be accessed 24/7 from any location. The media resources will support students and staff as they engage in learning experiences outside of curricular resources, encouraging personalized learning.

Awarded \$ 5,000

Minnetonka Community Education Early Childhood and Family Education

Backyard STEAM (Science, Technology, Engineering, Art, Math)

Lead Teacher/Staff: Margaret Coldwell and Sara Ridgway

Summary: Funds from this grant will introduce STEAM curriculum to create learning opportunities and expand utilization of the MCEC Outdoor Learning Center for children and families. STEAM will be aligned with the preschool Creative Curriculum and allow teachers to utilize new approaches to experience the science all around, for application in the classroom. Preschool students will have hands on, inquiry based presentations and will be able to expand their natural curiosity using simplified scientific methods.

Awarded \$750