

## **WPSF 2015 Grant Summaries**

### **Grant #1 FRC 5735 Robotics Club Formation**

The Robotics Club Formation grant supports the revival of the high school's robotics club that successfully competed at the district, regional and national levels of the FIRST Robotics Competition during last year's grass roots effort. By connecting what students are learning in science, technology, and math courses to design and build a robot from scratch, students further develop their excitement for innovation, as well as gain improved problem solving, collaboration and organization skills.

### **Grant #2 High School MakerSpace Buildout and Provisioning**

High School Maker Space Build-out and Provisioning launches one of the first MakerSpaces (a modern day lab for design, engineering and innovation) among public high schools in Massachusetts. Students have a unique opportunity to ignite their imaginations to invent solutions that solve real-world problems. This grant funds materials and equipment such as a laser cutter, 3D printer, CNC router and traditional woodworking tools that help bring ideas to life -- inspiring creativity in fun ways.

### **Grant #3 Evaluation for next HS/MS Device**

The Evaluation for the next HS/MS Device grant will provide 9 iPad Pro devices to high school and middle school teachers so that teachers and students can try out the device as a possible replacement product for the currently used MacBook Air computers (at the HS) and the Chrome Book computers (at the middle school). The devices will come with added keyboards and "pens", allowing students to draw, take notes and do math calculations and they can also be used to download textbooks. This pilot program over the next two years will allow teachers and students to provide significant input regarding the best choice for the 1:1 initiative in our schools as we move forward.

### **Grant#4 Continued Digital Innovation in the Classroom**

Continued Digital Innovation in the Classroom will provide funding for a leadership team of predominately teachers and some administration to attend a summer conference in North Carolina to formulate a plan to bring authentic project based and personal learning to Wayland. The conference will help the leadership team create a long-term technology vision using best approaches/practices for our student's digital learning.

### **Grant #5 STEAM Station for the High School Library Media Center**

The STEAM Station for the High School Library Media Center grant funds engaging challenges and experiments that expose more students to STEAM (science, technology, engineering, arts and math), a multi-disciplinary district-wide initiative. Students can earn bragging rights and prizes for activities such as building a catapult that launches a snowball the furthest or using the Fibonacci sequence to create music and poetry.

### **Grant #6 Digital Citizenship: An Evening for Freshmen and their Parents**

This Digital Citizenship grant provides 2 keynote speakers from the Library Freedom Project to accompany students on stage for a Freshmen Symposium. Using a Ted Talk Style, selected students from all Information Literacy classes will present their research findings on topics such as online privacy and security, self-image and identity, relationships and communication, information literacy, copyright, and cyber-bullying.

### **Grant #7 Chinese Shades: Learning Mandarin Through Art**

The Chinese Shades: Learning Mandarin Through Art grant provides the opportunity for students to learn traditional Chinese art and culture from an artist who will conduct workshops for all Mandarin classes and the World Cultures Club. Using Chinese brushes, paint and ink, students will master basic painting techniques to create a work of art on a silk fan. Students will also gain insights into history and the origin of Chinese writing.

### **Grant #8 New Music Technology Studio at the High School**

The New Music Technology Studio at the High School grant provides storage and backup capabilities for large media files created by students while working on music technology projects, without placing additional strain on the IT Department and its server. This grant builds upon a 2014 grant from the WPSF that allowed the creation of the Music Technology course at the high school.

### **Grant #9 3D Visual Arts Display**

The Visual Arts Display grant allows the purchase of glass floating shelves and supplementary support stands for a display case in the Fine Arts Department at the high school. The shelves and stands will showcase student's artwork from 3D Visual Arts courses, such as Metalwork and Ceramics.

### **Grant #10 Standing Desks: An Innovative Classroom Seating Solution**

Standing Desks: An Innovative Classroom Seating Solution will provide eight Adjustable Mobile Stand Workstation desks to the high school. The desks will be used to improve the educational experience for students who struggle with attention deficit and/or hyperactivity and for those who learn better while standing or moving.

### **Grant#11 Professional Development for School Librarians**

The Professional Development for School Librarians will allow all 5 district librarians to attend a conference to learn about innovative library practices, programs and tools. Our librarians will have the opportunity to speak with colleagues, vendors, authors and publishers from around the country and they will create plans to introduce new practices into our schools.

### **Grant #12 Meditation for Middle School**

The Meditation in the Middle School grant funds an in service for teachers regarding the benefits of mindfulness meditation and funds an 8 week course for interested teachers to learn how to meditate and to then effectively teach meditation to their students. One middle school teacher will become a resident meditation expert and resource for all WMS faculty and will teach meditation skills in Org Skills classes and 6<sup>th</sup> grade cluster meetings.

### **Grant #13 Professionalism Begins at Home**

The Professionalism Begins at Home grant will allow middle school students to showcase their learning by helping the students transform the cafeteria space into a professional presentation environment. The grant provides funds for the purchase individual easels to present memory books, specialized materials to create a professional look for the books that some students may not have had access to in the past, and tablecloths for the cafeteria tables, lending a more professional, uniform look for the presentations on nights like D.C. Night and Cape Cod Night.

### **Grant #14 Digitized Drawing, Design and Discussion**

The Digitized Drawing, Design and Discussion grant funds the purchase of a Brightlink Pro interactive projector for the art department at the middle school. This powerful tool will positively impact all middle school students in their visual arts courses, allowing students and staff to produce interactive and engaging work that can be shared, archived and annotated in real-time and greatly enhancing

instruction. The projector can also communicate with connected Chrome Books and ipads, enabling simultaneous collaboration and encouraging students to think bigger and create more boldly.

### **Grant #15 STEAM Projects for Sixth Grade Students**

The STEAM Projects for Sixth Grade Students grant provides funds to support a new initiative for students which will require them to take skills and content from multiple STEAM (Science, Technology, Engineering, Arts and Math) disciplines and integrate them into a solution to a realistic and relevant problem. Students will address such problems as “How can we demonstrate how much energy is generated by a solar panel?” by designing and building a device or demonstration that uses the energy created by the panel to complete a visible task.

### **Grant #16 Digital Projectors of Middle School Theater Program**

The Digital Projectors for Middle School Theater Program grant funds the purchase of three short-throw projectors for the middle school theater. The projectors will be used for students in drama classes and the spring musical and will allow students to create digital scenery, animations, short films, and background slideshows to incorporate into their productions and for public display. The projectors will also be used for fine arts performances, school assemblies and other public presentations.

### **Grant #17 Heart Rate Monitors and Activity Trackers for Wellness**

The Heart Rate Monitors and Activity Trackers for Wellness grant funds the purchase of 60 Fitbit devices for the middle and high schools (30 per school) and will enable all students to learn to use their heart rate to track fitness levels and to monitor the effects of various degrees of exercise intensity on heart rate. This will allow students to better correlate perceived levels of exertion with an objective measurement of effort.

### **Grant #18 Pattern Seekers: Math and Science Exploration in Nature**

The Pattern Seekers grant funds materials for raising frogs in the classroom in conjunction with a Drumlin Farm program that involves field studies at both Dudley Brook and Great Meadows. Students will have hands-on opportunities for observation of the natural environment, encouraging them to use classroom based math and science concepts in ways that are relevant to their lives and the world.

### **Grant #19 Fifth Grade Field Study to Boston African American History Museum**

The Fifth Grade Field Study to Boston African American History Museum supports the deepening of fifth grade student understanding of life in 19<sup>th</sup> century Boston and the history of the Beacon Hill Black community and their role in the anti-slavery movements. In addition to learning about the history of this community, students will also meet a re-enactor playing the role of a teacher at the Abiel Smith School and learn about bringing a historical figure to life. This experience will serve as a touchstone as fifth graders prepare their own projects bringing a Global Change Maker to life.

### **Grant #20 Ergonomic Furniture for K-5 Classrooms**

The Ergonomic Furniture for K-5 Classrooms grant provides funding for several AlphaBetter Standing Desks, Hokki stools and Bouncy Bands for each classroom at Happy Hollow and Loker elementary schools. These various types of ergonomic furniture will allow many children to better access the curriculum by increasing their ability to focus and increasing their stamina while working.

### **Grant #21 Third Grade RTI: Success for All**

The Third Grade RTI: Success for All grant awards funds to both Happy Hollow and Loker 3<sup>rd</sup> grade teachers, reading specialists, and special educators for the purchase of books to help best meet the needs of all students in RTI. This comprehensive kit comprised of 144 titles that are both fiction and informational text is structured to help students who are below grade level reach the appropriate reading level. The books are tiered and leveled for third grade instruction below, on and above grade level reading.

### **Grant #22 Rocker Chairs**

The Rocker Chairs grant provides funding for Rocker Chairs for every student in two classrooms at Claypit Hill School. These ergonomic chairs allow a subtle rocking motion which helps calm restless students and fulfills their intrinsic need to move leading to increased focus, decreased distractions and ultimately, an improved student experience.

### **Grant #23 Wireless Headset Microphones for Student Performance**

The Wireless Headset Microphones for Student Performance grant funds wireless microphone headsets for students providing them the opportunity to develop confidence and skills in public speaking through student meetings, plays and

performances. This system provides better presentation and performance flow, resulting in less disruption and greater audience engagement than with a traditional microphone system.

### **Grant #24 Reader's Theater Roleplay Playbooks**

The Reader's Theater Role play Playbooks provides instructional resources to engage and enrich student reading. By using "theater" scripted books and materials students engage in dramatic role-play, interacting with text to become part of a story, resulting in higher reading comprehension levels and fluency.

### **Grant #25 Beyond Decoding to Real Understanding**

The Beyond Decoding to Real Understanding grant provides the elementary schools with excellent resources and training for instruction in reading comprehension strategies with a particular focus on non-fiction text. Newly adopted teaching standards place an increased importance on reading informational text. With these tools teachers across the elementary schools will be able to tackle this task with increased skills and confidence and the resources needed to succeed.

### **Grant #26 Promoting Cultural Proficiency through Children's Literature**

The Promoting Cultural Proficiency through Children's Literature grant supports bringing Coretta Scott King Award winning author **Sharon Draper** to present to students in grades three through five across the elementary schools. One of Ms. Draper's most acclaimed books, *Out of My Mind*, is told from the perspective of an 11 year old girl with cerebral palsy which connects beautifully to our *Just Like Me* curriculum. This grant allows our students to engage with Ms. Draper, a well-known author to deepen their understanding of differences as well as begin to understand the work of being an author.

### **Grant #27 Engaging Elementary Engineers with Robotics and Bluetooth**

The Engaging Elementary Engineers with Robotics and Bluetooth grant funds the acquisition of BlueBots, ProBots and BeeBots to be used in technology classes in Kindergarten through Grade Five technology classrooms at the Loker School. Students will develop their logical reasoning, problem solving, and critical thinking skills as they learn to program these robots to accomplish particular tasks. This grant supports Wayland Public School's ongoing efforts to develop STEM experiences throughout the district.