

**Fall 2021**

**Total Awarded: \$45,971**

***Microgrants (up to \$750)***

**AP Physics Support - PTHS**

Although a number of highly capable students are enrolled in the Physics course, there isn't a separate section dedicated to Advanced Placement (AP) Physics. The AP Physics Exam test prep books funded by this grant will help provide enrichment to students as they prepare for the exam while they partner with Skillmation volunteers to dig deeper into the physics concepts.

**Vernier GoLink! Adapters for PTHS Science - PTHS**

The science department at Port Townsend High School will be receiving an updated detector-computer interface for Vernier probes. The school's recent investment into sets of Chromebooks offers a fresh opportunity to make lab experiment setup and data collection significantly more efficient and intuitive. Vernier GoLink! Adapters funded by this grant will allow students to easily connect Vernier probes to Chromebooks and collect data. The integration is virtually plug-and-play with the free Graphical Analysis Chrome app.

**Foldscopes – Blue Heron**

This project will provide a Foldscope each 7th grader at Blue Heron, and they will take them home at the end of the year. These microscopes are made of paper, but quite durable, work easily with most smartphones, and open up a whole new world to students. They also lend themselves to remote instruction, as each student has their own instrument.

**Sensory Room – Blue Heron**

This project is designed to enrich and address the sensory needs of students at Blue Heron Middle School. Sensory processing is how the brain takes in information from the surroundings it is experiencing through auditory, visual, and physical input. Sensory integration has been found to help students process this information in a constructive and helpful way. Sensory integration can be experienced at various degrees: some students seek sensory input, while others avoid it. A sensory room within a school, equipped through this grant, can be used to address those sensory needs through activities and strategies. The goal of meeting sensory needs is the return to learning with greater focus, for longer periods of time.

### **Meaningful Work – Salish Coast**

Meaningful Work is a school-based jobs program that gives students responsibility and so helps them develop purpose, self-worth, and a sense of belonging. This positive behavior support can help students with a history of misbehavior and school failure become contributing members of their community. Meaningful work focuses on changing student behavior in the school environment. Salish Coast Elementary will match students to jobs, train supervisors and teach students how to be successful in a job. The jobs will be ones students want to apply for and perform well in the school environment. By engaging successfully in a job, students will have the opportunity to experience pride in a job well done. With that pride, these students can begin developing the ability to persevere with other difficult tasks.

### ***Grants (range approximately \$1000 to \$9000)***

#### **Driving Place-Based Learning with Science – PTHS, OCEAN, Blue Heron**

The goals of Driving Place-Based Learning Through Science are twofold. First to provide teachers with the opportunity to connect many individual place-based experiences to each other through scientific inquiry, mathematics, and collaboration. Additionally, students will be provided with opportunities in the classroom to use scientific instrumentation, create and analyze graphs, and use scientific reasoning to design their own experiments. PocketLab instruments are easy to use, portable, and will allow students to measure 21 different metrics with only a handheld instrument and a device such as a phone or computer. When students take part in a place-based experience they can easily collect data, save it to the included app, and analyze it later. Collaboration can even extend across grade levels and schools as data can be traded between anyone in the district.

#### **Access for All: Digital Access to the NYT -- PTHS**

Students are assaulted by the deluge of information they receive on a daily basis. Often the information comes from social media and is not vetted. The goal of this project is to help students wade through the sea of information, identify reliable sources, and challenge misinformation. It is crucial that students have access to a reputable, national news source so they are able to connect what they are learning in the classroom to the wider world. This grant would give all high school students and staff in the Port Townsend School District full digital access to the NYT and resources for a year.

### **Physical Education Transformation – PTHS**

The traditional experience of physical education is a competitive sports based model, and this grant will allow the PTHS physical education program to start balancing the sports based model with a more well-rounded health and wellness based approach to physical education. A model that focuses on mindfulness, functional movements, yoga, nutrition, and other alternative movement-based activities. By improving and replacing current physical education equipment, students will have an opportunity to experience the physical, mental, and emotional benefits of exercising. Holistic physical education can not only improve our student's physical and mental well-being for the present, but also for the rest of their life.

### **Students Taking ownership of their Fitness – Blue Heron**

Students at Blue Heron Middle School will learn the importance of heart rate technology and data tracking. Students will wear heart rate sensors both in class and at home so they can be more motivated and determined to increase their physical fitness levels, learn important fitness concepts that they can apply for a lifetime, and improve their self-esteem and mental health.

### **Art Display Panels for Art Shows – Blue Heron**

An important part of any art program is the display and presentation of the art work. Middle schoolers create thoughtful, awe-inspiring art pieces that deserve to be displayed. This grant will fund 14 display panels, which are portable, connect together, and can be popped up anywhere (inside, outside, or even in a gallery space downtown) to display student art. Presentation and display is an important part of creative process and students gain a serious sense of accomplishment by seeing their finished pieces displayed in a professional way at an art night event.

### **STEM at Salish Coast Elementary – Salish Coast**

The main goals of this project are: 1) to encourage students to reflect upon what they have learned through their Project Based Learning research projects to create an original video focusing on the Salish Coast Ecosystem; 2) to empower students' voices through the medium of film, to have them showcase their thinking as citizen scientists to a wider public audience; 3) to promote the Children's Film Festival at Salish Coast Elementary, where our students will have the opportunity to share their research from their PBL projects with friends, family, and members of the local community through the district social media platforms. The current grant focuses on music and robotics and builds upon previous PTEF funding, along with STEM grants from AAUW and the Peninsula Support Group.

### **Sailing to the Future – Salish Coast**

This grant funds an integrated-subject place-based learning project spanning the entire school year that allows students to discover how their community of Port Townsend is tied to global trade, scientific innovation, and maritime heritage. It will also offer real-world opportunities to use key math and literacy skills in real-world and research settings.

### **WITS for 5<sup>th</sup> - Salish Coast**

Writers in the Schools (WITS) provides opportunities for published writers to come into our classrooms to empower our students. These local professionals will be able to provide writing tools and life experiences to help aid our students with their creative writing. By providing our students an opportunity to share their love of writing, it allows students to have a unique learning experience with professional writers within our school community.

### **Watching It Break Down – Salish Coast**

In this project, students develop a model that describes how decomposers found in compost affects soil. They will plan and carry out tests to create optimal conditions for decomposers, and utilize this information to help the gardens at Salish Coast Elementary. They will learn how to use tools like stereo microscopes (funded by this grant) to view various decomposers such as fungus, insects, and worms and then analyze soil samples to help in determining and describing the optimum conditions for plant growth.

### **3D Printing: Taking Ideas into Reality – Blue Heron**

As part of the STEAM (Science, Technology, Engineering, Art and Mathematics) Program at Blue Heron, 7th and 8th grade students will be designing playground pieces, derby cars, windmill blades and much, much more in Autodesk TinkerCAD software. Many of these designs/prototypes will then be printed using the new Makerbot Method 3D Printer funded by this grant, taking their three-dimensional abstract design work to reality.