



BRUNSWICK SCHOOL DEPARTMENT

TEACHER TALK

Spring 2017

IN THIS ISSUE

UNION SCHOOL/Off-Campus Learning Center of BHS NEWS

*In December, students and teachers at Union School continued to add some community-related activities in the "Experiential" category. Each year, our program facilitates job site visits to local work places so students can examine different work sites; they also receive a better understanding of what some employers are seeking in prospective employees. On December 9, we visited the **Owens Corning Plant** here in the **Brunswick Industrial Park**. This plant is part of the international company famously represented by the "Pink Panther." The Brunswick facility manufactures Technical Fabrics that are used in many different industrial applications ranging from boat construction to the fabrication of windmill blades*

*for state of the art wind turbines that are used in renewable alternative energy applications. We met with two enthusiastic representatives of the company. We learned of the perspective of the company as a global player in a growing market. We also learned details about working in this field, from hiring practices to benefits. After hearing about the company, plant and products, we went out on the manufacturing floor to observe some of the amazing machines that weave the various fabrics. The level of precision was impressive and the obvious pride of the employees was noticed by everyone. **Thank You to Owens Corning!***



DO YOU KNOW THAT THERE IS AN APPLE ORCHARD ON THE GROUNDS OF BRUNSWICK HIGH SCHOOL?

Thanks **BHS Science Teacher Trent Hutchinson** and his collaboration with **ReTreeUs** students have been participating in planting growing and nurturing the BHS Apple Orchard for years and years to come. Inviting experts in to our school as well as reaching out to experts around the world has been a long standing practice for Brunswick Schools.

This edition of the **Brunswick School Department Teacher Talk** shares just some of the collaborations and experiences which benefited our students this school year. We are proud of our teachers, students and community. Thank you for the support.

Learn more about **ReTreeUs**, **Trent Hutchinson**, and the BHS orchard and how its growth is managed on the last page of this newsletter.



Jud Caswell

For the past two weeks local singer/songwriter Jud Caswell has been working with third grade students at HBS as the 2016/17 Arts are Elementary third grade resident artist. During his residency he introduced students to the folk tradition of reusing catchy, familiar melodies, rewritten with new words, to relay new information. He then helped each class write an original song on a topic of their choosing and recorded it with them.

THE JOSHUA LAWRENCE CHAMBERLAIN CIVIL WAR ROUND TABLE

submitted by BHS Social Studies Teacher, Jim Flanagan

Members of the Joshua Lawrence Chamberlain Civil War Round Table describes themselves as "A forum for all interested in learning, writing, presenting and discussing the ideas and events that were part of the American Civil War." The group meets on the second Thursday of every month in the Morrell Room of the Curtis Memorial Library. On Thursday December 8, 2016 six members of Mr. Flanagan's AP American History class took the opportunity to extend learning beyond the classroom and attend a meeting of the Chamberlain Civil War Round Table.



The Morrell room was so crowded that we had to split up between two different rows. An unexpected pleasure was having the President of the Round Table introduce our group to the gathering. After this, we were all expected to stand and say something to the assembled multitude. Emily Coffin wowed the crowd by exclaiming, "The Civil War is really my favorite war!"

After the lecture was completed the students were approached by a number of people all of whom were very impressed by our presence. We were invited to attend a number of other events around town. On the walk back to the cars the students were able to debrief a little. The experience that most impressed the students was how excited the speaker was about his subject. It was great to see the students step outside the classroom and really engage with people who are in love with History.



Carol Masterson lives in Brunswick and has worked as an artist, illustrator, graphic designer, and teacher. During her AAE residency, Carol focused on the kindergarten and first grade science curricula at Coffin and Saint John's school. She shared topical stories with students and encouraged students to paint with watercolors to interpret both the story and the relevant curriculum area. In a new AAE twist, Carol will meet with each class three times throughout the school year, focusing each time on a new science study area.



For more info please visit www.artsareelementary.org

ADAM EPSTEIN, METEOROLOGIST VISITS COFFIN SCHOOL

Many of us understand the basics of weather and its impact on our daily lives. One of our Coffin Kindergarten units of study within the Brunswick School District is weather. Maine has such a great natural environment to observe changes in weather. As a result, many Kindergarten classes explore this topic year round.

Kindergarten classes hosted our local meteorologist, Adam Epstein, from Channel 13 WGME News on January 18 at Coffin Elementary School. Students connected their studies on weather to a science-based career and its importance to our community. Students explored the job of a meteorologist, the tools used in the studio, and all things weather related. We had great fun learning about storms, snow walls, floods, and out of this world weather science!





Coffin School Teacher Uses Her Expertise to Help Students Focus Their Learning with Flexible Seating Options

Brenda Shea sought funds from the Donors Choose Program to support her first grade students' learning experiences with "choice seating!" "I want students to be able to choose whether they would like to stand, sit, kneel or lie down while they work. This will help them better focus on their learning and maximize their academic performance."

"By adding flexible seating options (balance balls, wobble cushions and lap desks) in my classroom, I can provide students with an environment which focuses on their choice of where they can work and learn best."

To learn more about **Donors Choose** and how you mind fund one of our teacher requests visit DonorsChoose.org.



Cumberland County Fair Maine Agriculture in the Classroom

STUDENTS BECOME EXPERTS

Contributed by BHS teacher Nancy Burnette

Our class studied the Cumberland Fair book, and decided to enter biscuits, whoopee pies and a pie. We went apple picking and learned how apples grow. We learned about grafts and how some trees have different kinds of apples. We cut open our apples and found seeds. We are going to plant them in the spring. We were pleased with the pie judging results, as we received a blue ribbon.

We cook every week in the class. Biscuits and pie crust help work on many fine motor skills. We did have the use of an apple peeler, slicer, and corer machine. Turning the handle was fun for all. Rolling out the crust required patience and effort. We decided to cut our slits in the shape of a smiley face, as that allowed the steam to rise.

During our visit to the fair we were kept very busy. We weren't able see everything, but it is always better to have too many things to do than not enough.



Some students looked from a distance at the animals that they didn't dare to approach, while others went right up and pet them. We talked about the weights that the draft horses were pulling, the cost to raise the animals shown in the 4-H arena, and the many varieties of animals. The sights, smells, and tastes of the fair were enriching for all.





Brunswick High School Players performed the Broadway musical Les Misérables and wowed audience members with costumes, songs, great dialogue and acting!

This tremendous undertaking featured a cast of 63 students, a full orchestra, and one of the biggest sets BHS Players have ever constructed, featuring a fully realized city street in the slums of Paris circa 1832. Bravo!

Seeing the show was a memorable event for HBS Fifth Grade students. They were inspired! Students returned singing their favorite songs and amazed at what these high school role models were able to accomplish with talent and dedication.

We hope you were able to attend the production too



Photo credit to Sheryl Loeffler Palese of **Two Nickels Photography**

INVITE THE EXPERTS IN TO MEET YOUR STUDENTS

The fourth grade students in the classes of HBS teachers **Mr. Larrabee** and **Mrs. Yuodsnukis** are buzzing with enthusiastic writers. Thanks to a grant from **Brunswick Community Education Foundation (BCEF)** the children published an anthology of original pieces of writing.

Shortly after the project was introduced in December, these young fourth grade authors met and discussed writing with some famous local authors. **Brian Pressley, Jim Adolf, Matt Cost and Kate Egan** graciously volunteered their time and advice to discuss their craft. Each one of the volunteers offered different perspectives about their journey from their initial ideas to publishing. The students asked thoughtful questions, and many of the children took copious notes. After each session, the authors were mobbed for autographs.

The students finished their first drafts by February. Community volunteers conferenced with students and assisted with the editing and the revision process to prepare our stories for final publication.



Mr. Matt Cost discusses the skeleton of writing, which are the elements of a story that hooked your reader in and keeps them reading.



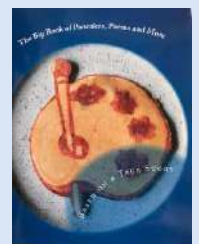
Ms. Kate Egan reads the very first published book she wrote. She shared her inspiration for writing about characters and accepting constructive criticism from editors.



Everyone wanted autographs from **Mr. Brian Pressley!**



Mr. Jim Adolf asks some students to perform one of his scripts. The children learned a great deal about dialogue and script writing.



If you'd like to learn how you can read or have your own copy of the final publication

The Big Book of Pancakes, Poems and More, Based on a True Story
contact Mike Larrabee mlarrabee@brunswick.k12.me.us or Lynn Yuodsnukis
lyoudsnukis@brunswick.k12.me.us

Bigelow | Laboratory for Ocean Sciences

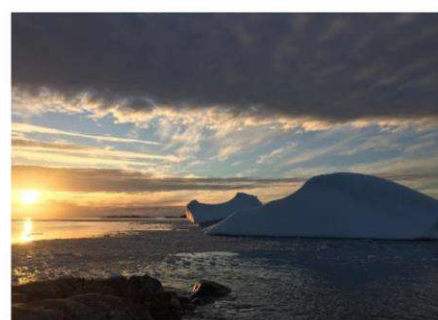


Scientific Outreach and Education Expedition

Some students at Harriet Beecher Stowe School share an incredible visit to Antarctica through VIDEO CONFERENCING.

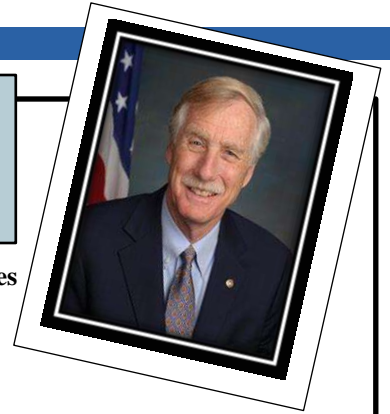
HBS teachers Doug DeCamilla, Lou Sullivan and Maria Palopoli, worked with Dr. Peter Countway, a parent of Gillian and Garrett Countway, both students at HBS, to bring Antarctica to the students for an experience the students will never forget. Dr. Countway is part of a 3-year grant from the ***National Science Foundation*** to conduct research in Antarctica. Doug DeCamilla wrote the following of this experience.

“My 3rd grade class had an incredible experience doing real-time video conferencing last week with Dr. Countway (Gillian’s dad) in Antarctica learning about some fascinating experiments on microorganisms! He and his team sailed out of Chile in December on an icebreaker, and then to Palmer Station on Anvers Island. We were able to tour the lab facilities, have a question/answer session and yes-see the Antarctica LIVE! Huge thanks to Dr. Countway for making this possible.”



Thank you to all who share your expertise with our students. This video conference following Mr. Countway and his work in Antarctica demonstrates to our students that work can be an adventurous and exciting experience.

MAINE YOUTH LEADERSHIP DAY 2016



The energy in a room with over 1,300 students who want to be leaders in their communities and the faculty and mentors who guide them is electric.

Welcome to the fifth annual Maine Youth Leadership Day.

US Senator Angus King opened the event with a keynote presentation. After hearing the Senator speak, the attendees rotated through three sessions of workshops, choosing among 35 topics led by both student groups and distinguished Maine community and business leaders. Each workshop centered on the day's theme of "overcoming obstacles and embracing our challenges." They focused on the importance and challenges of sound moral character and the practice of leadership, helping students develop a heightened sense of personal leadership and character. After a bagged lunch, the attendees once again convened for a Student Discussion Panel before heading home.

The event was sponsored by The Maine State Leadership Alliance (MSLA) at Hyde School. The Alliance has two goals: 1) to bring together Maine youth with Maine leaders to explore and promote leadership development, and 2) to provide qualified Maine students a life-changing leadership opportunity with a postgraduate year at Hyde School. Part of the Hyde educational philosophy is that in order to become your best possible self, you must develop an understanding of yourself, the presence to speak, and the grit and confidence to go the distance when the going gets tough.

The Leadership Alliance was created to help students achieve these objectives

Throughout the event Hyde media students captured interviews with visiting students, asking them about their perceived strengths and challenges of being a leader in Maine. The public can read more about the event by using #leadersofthe207 or viewing Maine State Leadership Alliance at Hyde.edu.



Region Ten Building Trades students collaborated with Curtis Memorial Library for the Little Free Library Build Day

Students pre-cut all materials, build five samples, and lent a helping hand at the culminating build on May 6. Visit Curtis Memorial Library at <http://www.curtislibrary.com/littlefreelibrary2017/> For more info on the Little Free Library



Pictures:

Brandon Brooks of Region Ten Building Trades program begins the process of precutting materials for the May 6th Curtis Memorial Library Little Free Library build.

The first Little Free Library sample is taking shape. Next come adding the door and finishing the roof.

More Region Ten Technical High news on page 9



LEAP (*Learning Enrichment in the Academic and Arts*) offers all K-2 students various experiences which build off the regular curriculum. LEAP often invites experts to work with students. This year Jon Wallace visited both Harriet Beecher Stowe second graders and Coffin School multi-age students to share his love and knowledge of arthropods and chemistry.



Mr. Wallace shares an African millipede with the students. This is just one of the live arthropods in his collection that he brought in to our LEAP sessions.



During a visit to share the science of MATTER, Mr. Wallace explains the size of an atom to students. Mr. Wallace travels with all the science tools to put on a great show with knowledge and an enthusiastic love of science.

Following Mr. Wallace's presentation on matter students can't wait to go home and learn more and try their own science experiments. After the arthropod sessions, some students even talked their parents into starting their own collections of arthropods! Now that is exciting and one reason why working with experts is inspiring for life-long learning.



Thanks to Bowdoin Biology Professor Shana Stewart Deeds and her students who put together a specimen box for our students to use during their LEAP arthropod session. Using a keen eye and magnification tools, students' scientific observation skills supported students' ability to observe details of each arthropod in the specimen box.

BRUNSWICK HIGH SCHOOL EMPOWERS STUDENTS!



Contributed by Rick Wilson, BHS Community Outreach and Service Learning Educator

Brunswick High School was awarded a grant from Maine Experimental Program to Stimulate Competitive Research (EPSCoR) Sustainable Ecological Aquaculture Network (SEANET) program. The total amount awarded through a large matching and in kind services was over \$35,000. The majority of this grant is going to the BHS Science Department to help fund and start an aquaculture research project. **The**

grant came together with the collaboration of Dan Devereaux (Brunswick Harbormaster and Marine Resource Officer), Susan Olcott (Tideland Coalition Education Coordinator, Brunswick resident and grant writer), Andrew McCullough (High School Marine Sciences Teacher) and Rick Wilson. This opportunity will allow exciting applied marine research and data collection on different shellfish species on intertidal mudflats on Maquoit Bay, including invasive species like green crabs and other ecologically important marine species. The **Brunswick Marine Resources Committee** chose the specific Maquoit Bay location for its year round availability and suitability for this educational research. With Continued change in the ocean environment it will be all that more important to nurture and encourage young innovative minds to help resolve these complex ecological issues.



Students rally to show off their new "just right" boots provided through this grant which will make it possible to walk the flats.



An airboat is a flat bottom boat that throws air behind the boat to help it ride on the surface of the mudflats.



Gloves, overalls and boots (donated in kind as part of this grant) help to get the job done.



Brunswick Resident Dr. Aileen Yingst, Senior Scientist at NASA's Planetary Science Institute Visits BJHS Eighth Grade Students

Submitted by Laura Hench, BJHS Science

Part of the eighth grade science curriculum at Brunswick Junior High School is Astrobiology, the study of the possibility of life beyond Earth. We were thrilled to welcome a local expert to discuss recent developments and the science behind NASA's search for life on Mars. Dr. Aileen Yingst, Senior Scientist at NASA's Planetary Science Institute, visited Mrs. Hench's classes in November.

Working primarily from her home in Brunswick, Dr. Yingst currently serves as Principal Investigator for the Mars Handlens Imager instrument on the Mars Science Laboratory's rover named Curiosity. Curiosity is four years into its long-term robotic exploration of the red planet. It is equipped with a variety of scientific equipment to assess whether Mars ever had an environment able to support microbes. Eighth grade science students spend the year learning about what makes a planet able to support life, commonly known as a planet's habitability. We were excited to listen to Dr. Yingst explain NASA's mission to determine the current or past habitability of Mars and her role in supporting that goal.

Dr. Yingst uses her background in geology to analyze soil and rock samples collected by the rover. Historical climate and geologic data is found in the rock and soil formation, structure, and chemical composition. Curiosity's onboard laboratory studies the samples to detect carbon and other chemical building blocks of life. Dr. Yingst summarized the primary goal of this part of the 8th grade science curriculum perfectly: "In the same way you can't understand a single person without knowing at least a few other people, there is no understanding Earth unless it can be placed in the context of other planets. Mars shares many characteristics with Earth, and yet there are key differences that led to them having very different histories. Understanding Mars' history helps us understand Earth's history."

We thank Dr. Yingst for being a role model and know that her visit might inspire Brunswick girls to pursue a career in science, technology, engineering and math (STEM). Perhaps there are some future Mars explorers here in our school district!



Dr. Aileen Yingst

Learn more about this amazing scientist at <https://www.psi.edu/about/staffpage/yingst>.

Dr. Wilkoff and Art Teacher Amy Crosby Collaborate to Share Student Talent and Adorn the Town Hall Chambers

Contributed by Amy Crosby, Coffin and HBS Art Teacher

This year I've been lucky to be able to help out community member and art enthusiast Will Wilkoff on a vision of his - to showcase our students' incredible work. Together, we've created a rotating show of 22 works by Coffin students, on display at the Brunswick Town Office. We hope the exhibit will continue to grow throughout the year, and are really pleased at the response from community, teachers, parents, and students. Will felt that it was really important to showcase what students are creating for people who might not be in the schools on a regular basis.



BHS Art Department Celebrates Their Students as Experts

Contributed by the BHS Art Department

Congratulations to our Maine Congressional Art Awards Winners for 2017! Out of 908 entries from around the state, Brunswick High students took home 33 Scholastic Art Awards: 14 Honorable Mentions, 9 Silver Key Awards and 9 Gold Key Awards. From the Gold and Silver Key Awards, the Congressional Art Judges chose 6 winners from District One. Three of the six winners were Brunswick High School students: Morgan Schlaack, won an Honorable Mention for her drawing, "Flora Fish as Vase," Sarah Belling, won an Honorable Mention for her acrylic painting, "Island Cove," and Taylor Worthington won first place for his oil painting, "Touch of Pink" which is now on exhibit at the Capitol Building through 2018. In June, Taylor will fly down to Washington, D.C. to receive his National Congressional Art Award. To celebrate these impressive accomplishment, Congressional Art Award winners, their parents and art teachers were invited to a ceremony and reception at the Blaine House on May 4.

BHS Celebrate Congressional Art Awards at the Blaine House



To learn more about this competition visit <https://pingree.house.gov/services/art-competition-maine-s-1st>



“EARTH OUR PLACE IN THE COSMOS”

Contributed by Doug DeCamilla

***Northern Stars Planetarium
visited HBS!***

***All 3rd grade classrooms
experienced***

***“Earth—Our Place in the
Cosmos.”***

***This show was created to meet
Maine learning standards
for grade three.***

***Learning points included: the
Earth/Sun connection, the water-
cycle, constellations, the Moon
and its phases, rotation and
revolution, and our place in
the solar system of eight planets.
Beyond the planets we found our
galaxy of stars called the
Milky Way, which in turn
is one of millions
of other galaxies. Students
discovered that our Earth is a
small place in a vast
constantly moving universe.***

***For more information on the
Northern Stars Planetarium visit
<http://www.northern-stars.com/>***

More from Region Ten Technical High School

Region Ten staff recently welcomed the eighth graders from all sending districts to a full day of program activities. This community outreach happens each year during midterm week when R10's regularly enrolled students are busy at their sending high schools. Despite their busy exam schedules, many students find the extra time to volunteer at Region Ten during the week. Their willingness to lead tours and help supervise activity stations makes the day run smoothly for everyone.

The eighth graders start their day with a tour of all Region Ten programs and then they settle into the first of their four hands-on sessions experiencing the activities of a program. Depending on their interests and choices, they may be making play dough in Early Childhood Development, using spot welding and machine bending skills to create a plant hanger in Metal Fabrication/Welding, using the paint booth and spray painter in Auto Collision Repair, or making no-bake cookies in Culinary Arts. Judging by the smiles as students head for busses, the day is a great success!



Destiny Parker, as Supergirl, is bending metal to make a curlicue on her plant hanger in Metal Fabrication Welding class.



Kolby Matthews and Cameron Rafford were measuring flour to make play dough in Early Childhood Education Class, but spilled some and quickly tried to clean it up. They did not notice how much had spilled at neighboring tables.



Shane Merrill inspects the attaching mechanism for a windshield wiper blade during his visit to Auto Collision Repair.



During Grace Confer's visit to Auto Technology, she used a ratchet wrench to loosen a bolt.



Submitted by HBS fifth grade teacher Holly Greene

MARTIN LUTHER KING'S INSPIRATION

After learning about what Civil Rights marches are and learning about what the one that Martin Luther King Jr. was led in, the students worked on poster and signs of their own creation highlighting such themes as freedom of speech, freedom of religion, and freedom for all peoples. Some of the students extending the freedoms to freedom from bullying and freedom from animal abuse.

Ms. Greene and Mr. Sullivan's classes participated in a Martin Luther King Jr. Civil Rights Walk throughout the school halls.

Students Reached Out to Share Their Knowledge, Experience, Empathy and Dreams.



"I have a dream that all animal abuse will end. It is horrible that innocent animals get abused every day. People need to stop. It is killing too many animals. That is my dream." *wes*

BECOME AN EXPERT

Join Brunswick High School teacher Mr. Flanagan on a cultural tour of Ireland, Wales, and England in the Spring of 2018.

In the Spring of 2018, Mr. Flanagan will be leading a group of students, parents and faculty on a cultural tour of Ireland, Wales and England. Participants will have the opportunity to completely immerse themselves in new cultures – to experience the people, the food, the language and ways of life that need to be experienced to be understood.



Our tour begins along the western coast of Ireland where students will be able to see the natural beauty of the Emerald Isle first hand. Stunning natural vistas will be supplemented by a visit to an authentic 18th – century Irish Village (pictured above) where costumed local guides will demonstrate the way of life that prevailed at the time.

The tour will continue along the southern coast of Ireland with visits to such well-known places as the Rock of Cashel and Blarney Castle. The Irish leg of our excursion ends in Dublin where everyone will experience a guided tour of Dublin and enjoy the incredible historical and cultural aspects of the city.

Then it is across the Irish Sea to Wales and a visit to a Welsh castle.



From Wales the group will journey to Stratford and visit the home of Anne Hathaway, Shakespeare's wife, as well touring the city of the Bard's birth. Our tour ends with a visit to London. There will be an expertly guided tour of all the major attractions of this dynamic city including Big Ben (pictured below) and the Houses of Parliament. As an added attraction there will be a tour of Windsor Castle.



If you would like to join in this cultural experience please contact Mr. Flanagan on his school email (jflanagan@brunswick.k12.me.us).

BRUNSWICK JUNIOR HIGH *Screenagers*

Growing Up in the Digital Age

Brunswick Junior High School hosted a viewing of the documentary *Screenagers* for parents, students and community members at Crooker Theater. *Screenagers* does an excellent job describing the challenges children and families find with the amount of screen time students experience daily. A serious movie in general, with just the right touches of humor, provided excellent information for or families and community. The well-attended event was made possible by a generous donation from a parent.

Contributed by Walter Wallace, BJHS Principal



Learn more about the documentary *Screenagers, Growing Up in the Digital Age* at <https://www.screenagersmovie.com/>.

Bowdoin

Bowdoin College students and staff share their expertise and time with Brunswick School Department.

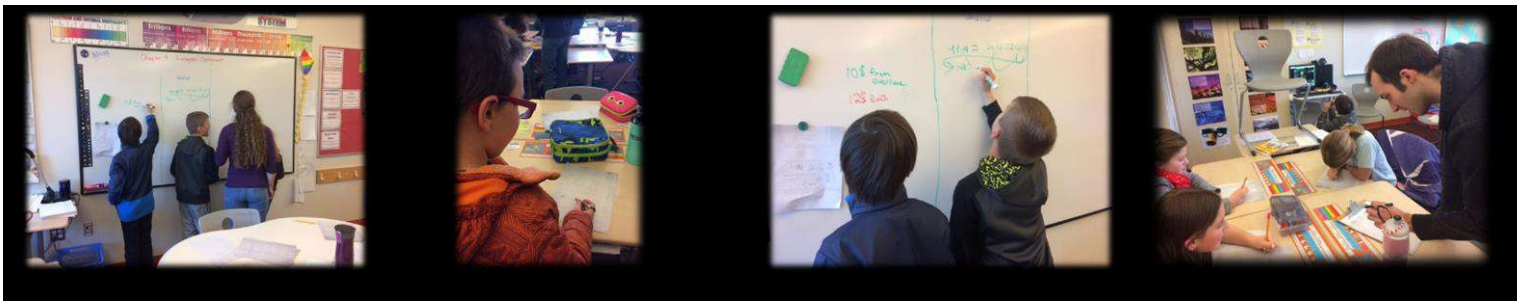
Jennifer Taback, Professor of Mathematics and mother of two students in the Brunswick District has shared her love of mathematics and teaching with Brunswick School District students as well as Bowdoin Math students. She has inspired many Bowdoin students to work with Brunswick students in the classroom and during before and after school math clubs. Jennifer shared the following about these experiences:

Bowdoin Math Volunteers

Every semester I coordinate between 50 and 75 Bowdoin students who come over to HBS during the math blocks once or twice a week. They help out in any way that their classroom teacher needs -- some take small groups of kids on their own, some walk around the classroom helping, some provide enrichment and others work with struggling students. I heard such wonderful things from my students about their volunteering experiences! Some tell me that it was the highlight of their week! Many ask to return to the same classroom semester after semester! (Annie has the record on the most devoted and returning Bowdoin students!) One student last semester told me that he hadn't realized it would be such an important responsibility -- he hadn't realized that the elementary students would so look up to him! Thank you to all the teachers who have so warmly welcomed Bowdoin students into your classrooms.

The Fifth Grade Math Team

The fifth grade math team meets every week at 7:45am! Twenty four eager young mathletes are ready to practice Math Olympiad problems! The math team competes in the national Math Olympiad competition, representing HBS against other fifth and sixth grade teams. Everyone tries really hard! We work on learning problem solving strategies as we go over these challenging problems. The basic ideas of algebra start showing up in these problems, and the students get more comfortable with them as the year progresses. They will take this competition again on the sixth grade math team and find the problems much easier! I am very proud of how hard they are working. Check out page 14 for more news about Math Olympiad Competition and how great our Brunswick students performed.





REAL School

Relevant | Experiential | Authentic | Learning

Greetings from the REAL School! We are very busy working on service learning projects in our community and growing our network of partnerships, and nurturing real-world experts. Some of these efforts are highlighted in this newsletter. Contributed by Principal Martin Mackey



Open Bench Project

We are continuing our partnership with The Open Bench Project, a new local “maker space” in Portland that offers a variety of industrial tools and guidance for our students. There, students engage in hands-on projects and learn new skills in technical areas. So far this year, students in the middle and high schools have engaged three days a week on several projects: a wooden speaker box, a suggestion box for school, kestrel houses, bird houses, and a series of shelves and cubbies to become part of the permanent structure of the shop. Students are also learning to use reclaimed materials to up-cycle into new projects. This means we are looking around the community and asking for scraps and donations to repurpose. This is critical in our work because we are learning how to build community relationships, become better stewards of community resources, and think innovatively on our designs and ideas.

The Animal Welfare Society in Kennebunk offered a six-week service-learning project in the first semester; allowing students to provide critical service for the care of the animals and to learn about the science of humane practices with animals. At the end of the day, students were encouraged to play and socialize with the puppies, cats, ferrets, and other small animals. Students reported feeling more happiness, increased confidence, and a stronger sense of belonging, in addition to the academic benefits. This was a very successful program and we are working to expand this partnership, utilizing local animal shelters statewide.

Animal Welfare Society



Maine Academy of Modern Music

This is our fourth year of working with the Maine Academy of Modern Music (MAMM) in Portland. Every Wednesday morning, REAL School students have the opportunity to spend time in the MAMM studio. They participate by singing, playing keyboards, drums, electric guitar, or other instruments, and learning music theory. All students are welcome to join the rock band, whether they have musical experience or not. Students in all grades, 3-12 are involved. We are hoping to have a spring recital to showcase this collaboration. We will keep you updated! This learning experience is possible thanks to a generous anonymous donor.

Mid Coast Hunger Prevention Program

This year, we began a new partnership with the Mid Coast Hunger Prevention Program. This collaboration allowed students with an interest in the culinary arts, food security, community service, and in community agriculture to provide needed help in the soup kitchen, food bank, and food pantry process. This hands-on work promises to provide meaningful experiences and opportunities to students.

Thank you to the Brunswick and Greater Portland Communities

We are grateful for the many donations that we received around the holidays from individuals, community groups, and local businesses in support of our annual gift giving to our students. Thank you so much!

**Brunswick High School Art Students
Share Their Expertise and
Bring a Smile
to the Faces of Kids Living Far
Away and Close to Home**



National Art Honor Society Celebration acknowledges students whose service promote excellence in visual art and make creative thinking more visible at Brunswick High School.

The Memory Project - Members of the National Art Honor Society participated in this arts in-service project. The Memory Project is a nonprofit organization that invites art teachers and their students to create portraits for youth around the world who have faced substantial challenges, such as neglect, abuse, loss of parents, and extreme poverty.

"We want the portraits to help the children feel valued and important, to know that many people care about their well-being, and to act as meaningful pieces of personal history in the future. For the art students, we want this to be an opportunity to creatively practice kindness and global awareness."



The following description is taken directly from the **Brunswick Community Education Foundation** website. This is just one way that the Foundation supports teachers' attempts to connect students and the experts.

Maine: A Place, a Beloved Home, a Part of the World – Over the course of four months, through partnerships with Maine institutions such as **The Telling Room, the Abbe Museum, and the Maine State Museum**, and through exchanges with local businesses and citizens, **4th grade students** will create museum exhibits, oral histories, a Maine guidebook, a Maine Encyclopedia and video archives. The project will culminate with a public presentation of student creations.



To learn more about how BCEF supports teachers supporting students visit their website at <http://brunswickcef.org/>



Local Genetics Expert Dana Bateman Visits Brunswick Junior High Seventh Grade Science

Contributed by BJHS teacher, Sue Lamdin



The seventh grade science unit on heredity, genetics and evolution involves many weeks of exploration. We study how physical

and behavioral traits can be inherited, how the physical mechanisms of DNA and mutations create diversity, and how species separate geographically and become new species. **Dana Waring Bateman**, our local creator of **Harvard University's Personal Genetics Education Project**, came in and spoke to each class about the newest technologies in genetic engineering, such as CRISPR, and their potential impacts on our personal and societal decision-making. Students loved her visits, as she encouraged them to think about how they feel regarding topics such as genetic manipulation, disease-prevention, aging, designer babies and bringing back extinct species. Learn more about Dana and her erudite work at <http://pged.org/staff/>. She and her colleagues are amazing!

Personal Genetics Education Project

FIFTH GRADE MATH TEAM and MATH OLYMPIAD

*Brunswick is proud of these students and
their commitment to be great!*

Contributed by Jennifer Taback, Math Team Coach,
parent and Bowdoin Professor

Twenty four students from HBS were among the nearly 150,000 students worldwide to participate this year in the Math Olympiad program. They participated in a series of five monthly contests of 5 problems each, and weekly practice sessions with Prof. Jennifer Taback of Bowdoin College. She taught the children to solve unusual and difficult problems and to think creatively in mathematical situations.

All students on the fifth grade math team received a certificate for their

participation in the Math Olympiad program. In addition, several students were recognized for outstanding work. Wesley Haynes was the top scorer, placing among the top 2% of all students who took the contest. Loring Boak and Quinn Repetto placed in the top 10% of all students participating, with Maia Pietraho and Sawyer Prescott in the top 20%. We are very proud of all the children who participated!

Each year the Math Olympiads serve over 100,000 students in over 5,000 teams nationally and about 50,000 students on 1,000 teams in more than 30 other countries. Since 1979 it has

provided challenging, thought provoking problems that stretch the abilities of students in grades 4-8, strengthening their foundation for both assessment tests and more advanced studies. Our children have responded to the challenge with eagerness and enthusiasm.



Fifth Grade Math Team Celebrates Their Team!

BRUNSWICK HIGH SCHOOL CONTINUES to COLABORATE WITH EXPERTS and ORGANIZATIONS TO EDUCATE STUDENTS THROUGH REAL-LIFE LEARNING EXPERIENCES and the STRENGTH of COMMUNITY SERVICE

Thank you BHS Director of Community Outreach Rick Wilson for sharing these great BHS student experiences.

Brunswick High School Garden Project 2016

The BHS Garden Project is wrapping up its third year, with over 1700 lbs. of vegetables harvested so far. Six students worked three days per week all summer to make sure things got planted, weeded, watered and harvested. The garden is currently supplying the BHS cafeteria with fresh vegetables--and we mean *really fresh*. Because the garden is located 300 feet from the high school, students can eat produce that is less than four hours old.



Each year has seen increased harvests, and we hope eventually to hire a garden manager. Generous support has come once again from Wild Oats Bakery, which purchased a \$1,000 C.S.A. from us; New Beet Market, which has purchased vegetables all summer; and the Brunswick School Department's Food Service. The project was made possible by a generous donation for the third year by Seeds of Independence. We were also able to give back to the community by providing over 150 lbs. of fresh organic produce to the Mid Coast Hunger Prevention Program. ❖

"You never understand a person until you consider things from his point of view... until you climb into his skin and walk around in it."

- Atticus Finch, To Kill A Mockingbird

Giving Project

Freshman and Sophomore Academy students participated in their annual Giving Project in November. Students researched local organizations and non-profits, conducted interviews, and then had the opportunity to volunteer their time as a way to give back to the community. Students pictured had the chance to spend a day in the life of a farmer in late fall by disposing of tomato plants and mulching strawberries at Crystal Spring Farm in Brunswick. Other organizations that received community service from the students were the Coastal Humane Society, Family Focus, Mid-Coast Hunger Prevention, Curtis Memorial Library, and the Ronald McDonald House to name a few.



You have brains in your head.
You have feet in your shoes.
You can steer yourself in
any direction you choose.

Oh, The Places You'll Go!

Dr. Seuss

Doc4aDay

The goal of the Doc4aDay program is to ignite a spark of interest in high school students to explore a career as a physician. The program consists of a presentation on the pathway to a health care career, direct involvement in simulated patient scenarios, hands-on clinical activities in a skills lab (such as suturing pigs' feet) and a round table lunch discussion with MMC-Tufts Medical Students and/or Residents. BHS students Lauren Grocholl, Zach Grant, Desiree Tanner, and Bronte Fontaine attended.



STUDENT ACTIVITIES NEWS

Not sure who was rewarded more from this Action Team fall clean up, the Action Team or Johanna who is 93 years old and grew up in the Czech Republic during WWII, until she married her US Army husband and moved to America. Johanna shared many childhood stories and photos with the Action Team of her time in the Czech Republic. We look forward to visiting her over the winter to hear more about her homeland. ❖



Brunswick High School students work as a team, and appreciate sharing their time with new acquaintances at *Preble Street Food Kitchen*.

*Atlantic Federal
Credit Union
Promotes
Financial Literacy*

From AFCU's own website:
"Atlantic takes a proactive approach to sharing financial education opportunities. With the start of our financial education program in 2014, our goal has been to educate as many students as possible so that they become financially aware adults."

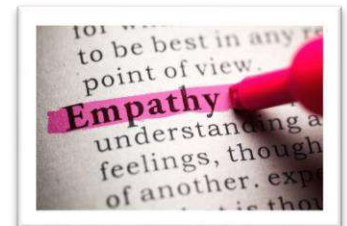
BRUNSWICK HIGH SCHOOL students participate in financial literacy sessions at **ATLANTIC FEDERAL CREDIT UNION**.



Learn more about
*Atlantic Federal's
Community Outreach* at
<https://www.atlanticfcu.com/resources/education-tools/financial-literacy.html>

EVERYONE HAS A STORY

BHS students experienced empathy and understanding when working with the Cumberland County Jail and Two Bridges Regional Jail with the guidance of BHS Community Outreach Coordinator and employees of both facilities. Through stories, interviews, and discussions students heard about *assets* which support a person's healthy growth and resiliency, and *liabilities* which are a detriment to nurturing an able healthy life.





Rotary Youth Leadership Awards (RYLA) is an intensive leadership experience organized by Rotary clubs and districts where you develop your skills as a leader while having fun and making connections.

Retrieved from <https://www.rotary.org/en/our-programs/rotary-youth-leadership-awards>

Visit this site to learn more about the Rotarians and how they help and support Brunswick students excel in school and life.

RYLA Leaders

Tiana Bernier, Lily Mateus, and Emily Coffin were our RYLA leaders this past summer. RYLA is Rotary's youth leadership training program.



The Brunswick Rotary and the Coastal Rotary sponsor BHS. RYLA emphasizes leadership, citizenship, personal growth and service. In late June of each year, clubs throughout District 7780 send 120 high school sophomores to the Rotary Youth Leadership awards conference held at Camp Hinds in Raymond Maine. Students spend 4 days together exploring leadership concepts through a series of practical situations which include team building activities, group problem solving, confidence building and solo events.



Rotarians recognize leadership and accomplishments whether celebrating with certificates and handshakes, or sharing time with students in the halls of Coffin School.

Thank You to this generous group of community leaders. We appreciate you and the guidance, support and accolades you offer our students.



Brunswick High School Environmental Science Teacher Shares His Passion with Students and Community and Collaborates with the Experts

Trent Hutchinson is an environmental science and chemistry teacher at Brunswick High School. He began his teaching career at BHS in 1988, after student teaching the previous spring at BJHS and BHS. Over the years, he has taught the majority of science courses offered at BHS but his true passion is environmental science. His college background was in forestry and wildlife management at UMO. The units he teaches as part of the Environmental Science classes follow the *Envirothon* competition model which are Soils, Forestry, Wildlife, and Aquatics. As part of the Forestry section, Trent wanted to see if he could start an orchard that teachers and students could manage as a mixed growth forest.

In 2014, after some research, Trent reached out to *ReTreeUs*. *ReTreeUs* is a great nonprofit project based effort “dedicated to promoting an environmentally sustainable, socially just food system. We plant orchards with local schools and provide educational programs that empower young people and their families to grow their own home orchards and gardens.” Retrieved from [ReTreeUs.com](http://www.retreeus.com)



Richard Hodges, Project Manager from *ReTreeUs*

Trent and Richard from *ReTreeUs* collaborated together to locate a spot on the BHS site for the trees and then waited for approval before planting 12 apple trees (Northern Spy and Liberty) and 5 peach trees. *ReTreeUs* supplied materials and guidance and BHS supplied the labor.

Years later the trees are still alive and growing. Maintenance of the trees requires painting specific parts of the tree trunk for rodent control, composting, and mulching. Currently the trees are waiting to be pruned and have fencing placed around them to keep the local deer population from browsing on the tips. More compost and mulch will be spread at their base of the trees and installed fencing will offer added protection. Trent notes that it was a difficult spring for pruning but pruning and grafting is on the docket for this spring.

Trees are Trent's passion and he hopes to continue to nurture a healthy orchard as an ongoing sustainable and worthwhile effort for BHS students and Brunswick community! Learn more about *ReTreeUs* at <http://www.retreeus.org>.



One of the beautiful apple trees thriving on BHS campus

The orchard is an ongoing labor of love and worth every last bite!

Brunswick School Department Invites Experts to Share Knowledge and Discuss Experiences with BSD Staff and Brunswick Parents

"Every session with Molly was fantastic. I looked forward to every workshop."

The statement above was a typical remark regarding the Professional Development offerings facilitated by Molly Kellogg, educator and consultant. Ms. Kellogg was invited by the Brunswick School Department to provide a series of five workshops for educators, support staff, and substitute teachers. The workshops focused on various topics surrounding differentiation, at-risk learners, twice exceptional gifted learners, and how literature can meet the intellectual and emotional needs of students.

BSD also offered a two part series of workshops for parents of students in the Brunswick schools. These sessions facilitated by Ms. Kellogg focused on twice-exceptional learners and ways parents can support this group of learners and help them find success, both in and out of school. A second session shared literature resources and how literature can be used as a vehicle for understanding each other through family discussions of a variety of issues children and parents face every day.

Contact Sharon McCormack with any newsletter comments or inquiries. smccormack@brunswick.k12.me.us