



What's Happening?

Ions, Geigers, and Squares...Oh My!!

TRHS has quite a number of afterschool interest clubs and activities, and that list continues to grow as a new one has taken flight this year. Through the work of Junior Kate Hoadley, engineering teacher Michelle Grimm and math teacher Lorainne Mascioli, females have a club where they can pursue their interest of all things STEM (science, technology, engineering and mathematics). Kate was inspired to form the WiSE (Women in Science and Engineering) club after realizing a potential gender imbalance may discourage some females from pursuing STEM related career paths. Many STEM industry leaders ask how schools can help foster the interest in STEM for females, and this club is doing just that. The club has some high aspirations in their goals to promote STEM to girls in the elementary schools and middle school. Kate talked about the plan that the members of WiSE have for mentoring younger children during the district's April vacation 4th grade Science camp and for working with the middle school to plan science days, science movie viewing parties, and field trips. Engineering teacher Michelle Grimm adds "I have no doubt that they'll be a tremendous role model for these young students". The future is bright for these young women as industry and higher education is looking for this STEM passion in females. In fact, recent TRHS grad and current WPI engineering student Kirsten Herchenroder, will be returning to TRHS to talk about her experiences and future plans.

A WiSE Owl took flight



Yanni Kakouris discusses the lab, with Mr. Fraser, while Cam Murphy works on the calculations.

Kids have this 'In the Can'.

Although the task to land a ball into a tin can for an 'A' seems easy enough, Physics teachers make it a bit more challenging than that. Students are tasked with calculating the proper variables to ensure that a projectile will land where it is intended. The students only get one attempt, and their launch angle is drawn at random, so students must use the skills and concepts they have learned to ensure they are successful. For days prior to the launch, students work with their projectile (ball), their launcher, and the formulas and concepts that physics teachers, Lou Broad, James Fraser and Mark Cerniglia, have taught them, to calculate the needed variables to launch their projectile accurately. The day of the launch assessment, students randomly choose a launch angle that puts their calculations to the test. If they were correct in all of their calculations, the ball should land squarely in the can, thus demonstrating mastery of the skills and the kinematic equations of motion in a hands on application.

Oh the Humanities...

You Can't Judge a Book by its Cover!

Creative Book Transformation is a course that requires students to travel on an independent journey of literary analysis. Because each student reads a different piece of literature, there is not an option to find the one right answer of interpretation. It is up to the individual student to use the skills taught in the course to interpret the literature's point of view, main ideas, symbolism, and emotion. The course challenges readers to think outside of the box, create visual and written ideas, and express individualized theories of a piece of literature. 10 weeks of creative writing and artistic interpretations are compiled into a book transformation altered art project. Artistic techniques highlight their various interpretive pieces ranging from perspective writing, character letters and diary entries, found and original poetry, research based writing, personal narratives, two-voice and pantoum poetry, news articles and broadcasts, compare and contrast analyses, photography, abstract art, symbolic drawing, character and scene drawing, and more. Although altered art has been around since the Middle Ages, this is one modern form inspiring students to READ and THINK and CREATE!



Standards, dead ahead Sir!

This winter sixth grade English/Language Arts teachers used a four week Titanic unit to teach two informational reading standards, a narrative writing standard and a language standard. On the first day of the unit students were given a ticket to board the Titanic that included the identity and social class of a real passenger from the voyage. They followed the passenger on their journey for the unit and were engaged and anticipated their fate. Teachers used various informational texts about the Titanic for teaching text structures and informational reading strategies. To end the unit, students had a chance to create a narrative based on their passengers experience during that historic voyage. They were given a choice of several writing prompts to shape their narrative. Throughout the unit, teachers collaborated to find differentiated readings, create activities, develop practice and formative and summative assessments.



Stick Your Nose in Our Business!

An Hour Well Spent

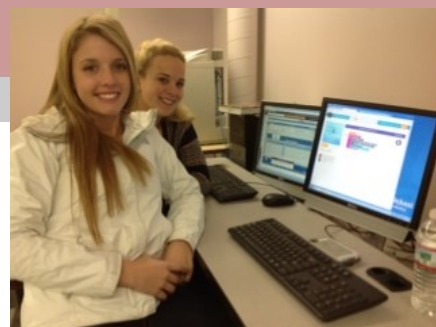
Students from both the middle and high school participated in the Hour of Code this year, a global movement reaching tens of millions of students in over 180 countries!

The Hour of Code is a one-hour introduction to computer science, designed to demystify code and show that anybody can learn the basics. The event, organized by Code.org, took place during the week of Dec. 8 in celebration of Computer Science Education Week.

Computer science helps to nurture problem-solving skills, logic and creativity and provides students with a foundation for success in any 21st-century career path. Code.org is dedicated to expanding participation in computer science by making it available in more schools and increasing participation by women and underrepresented students.



77,550 Hour of Code events around the world



Juniors Madelyn Padellaro & Madeline Kennedy Code

About 150 students from the high school business & ICT department participated in the event. Business technology teacher Wendy Bibeau stated, "I personally feel that exposing ALL students to computer science is important. There is a fear of the unknown and a stigma that computer science is very difficult. This is a way to take the mystery out of it and show that it can be something that each student is capable of doing (and it can be fun)."

Middle school technology teacher Gena Richards has all of her 6th and 7th grade classes do an hour of code, not just during this event, but every quarter.

"This is a fabulous way for students to use critical thinking and learn a small bit of how programming works. My students loved making their own games and then putting them on their phones or ipods to play later," said Ms. Richards. For more information about Hour of Code, please visit

<http://hourofcode.com/us>

Spreading holiday cheer

Holiday cheer filled the halls of TRHS last month thanks to the efforts of enthusiastic students and teachers!

Lisa Cerne and her Child Development and Advanced Child Care students invited the faculty to bring their young children and grandchildren to the school Tues., Dec. 23rd. The students planned the activities, which included coloring pages, cookie decorating and playing with toys. The children, ages two to five, had a great day and even attended the basketball and volleyball games for Mealey's Meals!

Michelle Monti's baking class enjoyed making gingerbread houses and happily agreed to Patti Mangini's request for holiday cookies for the faculty. Each department received a delicious tray of freshly baked holiday cookies!

The elves of Eric Shoeneberger's woodshop classes were very busy making gifts this holiday season. They



began making just a couple of snowflakes but then decided to mass produce them. Every faculty member received a wooden snowflake to celebrate the season.

Senior Chris Leondires determined the degrees needed for the angles used, and students used both the table and band saw to create the snowflakes from hard woods such as oak, cherry, and maple. Other students did the sanding and refinishing.