8th Grade Students at Phillip G. Vroom Community School Explore Virtual Labs on their Chromebooks

Mrs. Simko’s 8th grade students have been introduced to the Law of Conservation of Energy. They learn that energy cannot be destroyed or created. An important part of this concept is that all the energy that is transformed is not used. It is a hard abstract concept for students to grasp at first as are other scientific concepts. Thanks to a website, pHet Interactive Simulations, students are able to experience and visualize how these concepts work. PhET Interactive Simulations, a project at the University of Colorado Boulder, is a non-profit open educational resource project founded in 2002 by Nobel Laureate Carl Wieman. There are computer simulations for all types of Science, and for Math.

A computer simulation is the usage of a computer for the imitation of a real-world process or system. The pHet simulations help students to manipulate different variables pertaining to what they are learning. Students have been working with the Energy Skate Park, where they are able to change the height and mass of the skateboarder to see how it changes his energy. While the skateboarder is moving they have a gauge that will show them when the energy is changing from potential to kinetic energy. It also shows them how quickly it can happen. Recently, pHet has changed their simulations to a HTML5 format so they can be embedded into Classroom on their chromebooks.

Submitted by: Ms. Giordano
Phillip G. Vroom Community School
Technology Teacher
Three Bayonne Board of Education Teachers were recently selected to receive a free classroom set of programmable robots from Sphero through the CodeFWD by Facebook program. The teachers are Dana Mason from Henry E. Harris School; Fran Girodano from Philip G. Vroom School and Trisha Holden from Nicholas Oresko School.

Sphero sent each teacher a Bolt Charging case and set of 18 Sphero Robots. This robots use coding and computer programming applications to perform different tasks. These robots will support our students as they continue to develop their coding skills. From creating “draw” comments to writing JavaScript code, Sphero has developed a series of activities and exercises to further introduce our students to the magic of computer programming. The students will also be able to create their own activities. We can't wait for them to get started!

CodeFWD is free online program by Facebook for educators and organizations working with 4th through 8th graders in the U.S. that uses videos and other activities to inspire internist in the field of computer programming.

Submitted by: Dr. Karee McAndrew
Acting Director of Technology