QUICKSBURG, VA On January 15, 2016, representatives of SUNRNR of Virginia, Inc. visited North Fork Middle School to demonstrate a solar generator to a 6th grade science class.



This presentation, given by Scott and Jenny French (both owners of the company) was part of a renewable energy lesson the middle schoolers are currently studying.

6th grade science teacher John Woods is passionate about teaching his students environmentally sustainable solutions. "We must think about how to live sustainably in our planetary ecosystem, find that equilibrium which sustains all life and nature, and live within that equilibrium," says Woods.

Despite the cloudy day, students were able to use previously stored solar energy to power a microwave, speakers, and a microphone.

To showcase the true power of the generator, a microwave popped popcorn for the students. Upbeat music played as students exited the school, received a cup of popcorn, and prepared to listen to the solar generator presentation.



Mr. French answered questions the students had

about the solar generator and panels, and shed more light on the technicalities and operations of it. Sunlight falls on the solar panel, which travels through the cells. From the cells, DC electricity flows to the battery before going to the inverter, which changes the DC electricity to appliance-friendly AC electricity. A typical SunRunR's battery unit lasts anywhere from 5-10 years before requiring replacement to run another 5-10 years.



In just 6 years, a gas generator making the same electricity daily would cost as much as one of these units, but 1500 gallons of gas would not have been burned and 60,000 lbs of CO₂ would not have been emitted. The time for return on investment (ROI) for the solar generator decreases when you incorporate renewable energy tax incentives and carbon credits. Because grid power is relatively inexpensive in the US, the ROI comparison of solar generators to grid is unfortunately unfavorable at over 20 times the cost.

As a fun activity, a teacher plugged in speakers to the solar generator and played "Cupid Shuffle" and "Watch Me". She encouraged students to join her, and soon a dance line appeared on the school's lawn.



The students will monitor the loaned solar generator for the next month as part of their curriculum on renewable energy. "The SunRunR will be the alternative energy system that the students come to understand, put their hands on, set up, orient towards the sun, plug devices into, use to monitor and manage electrical production and demand, et al, all the while learning what alternative energy is, what it can do, and that it is the new normal," says Woods.

Mr. Woods' Net-Zero Science 6 Classroom grant has been recently approved, so the class will soon receive their very own SunRunRs.