



In fall 2016 STEMNETICS offered (2) five-week in-school programs along with professional development at Genesee STEM Academy (GSTEM) that focused on electricity and circuits. The program was a great success as fourth grade students built electrical houses with simple circuits and seventh grade students built their own operation games. The program concluded with an all school STEM family night that was open to the entire community.

Fourth and seventh grade students began their study of electricity with a lesson on energy consumption, difference between conductors and insulators, and designed a simple circuit using LED and mini buzzers. The fourth grade houses had the criteria to include an open and closed circuit, a buzzer, a light and had to be designed with the proper dimensions. Seventh graders also learned about electricity, but they deepened their knowledge by creating a game and learning about programming as well. Both classes were very pleased with their final product and data showed their critical thinking and problem solving skills were highly enhanced.

In addition each grade took a field trip to Kettering and Flint Children's museum. The field trips consisted of students learning about roller coasters, electricity, renewable energy, robotics and cars. The culminating event occurred on November 17<sup>th</sup> where students, faculty and parents participated in a STEM night. At the STEM night mini hands-on challenges were created and student projects were showcased.

