

WCSD is En Route

Individuals increasingly must understand the subjects collectively known as STEAM to thrive in today's society, and schools accordingly are challenged to provide high-quality innovative learning experiences and environments to all students. Teachers are at the forefront of meeting this challenge, and the quality of their instruction therefore acts as a major fulcrum for improving education, by developing knowledge and skills in our students to solve tough problems, gather and evaluate evidence, and make sense of information.

Through the use of Three Technology Integration Specialists and a STEAM Professional Developer, teachers and students at WCSD are meeting the STEAM challenge head on.

Students in grade 4 had to address the newly adopted New York Science and Learning Standards (NYSSLS), as well as International Society for Technology in Education standards (ISTE). Students had to work through a series of hands-on, as well as technology enhanced lessons. The students employed Science and Engineering Practices (What Scientists Do) as well as Crosscutting Concepts (How Scientists Think). Ultimately, students had to use evidence to construct an explanation relating the speed of an object to the energy of that object. They had to ask questions and predict outcomes about the changes in energy that occur when objects collide. In addition to the Science components, the students had to define and delimit engineering problems, develop possible solutions, and optimize design solutions as they engineered catapults to compete against the Dash robot's catapult and capabilities.