

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 5 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 cross curricular, 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). The students had to explore space and space systems through a Fortnite hyperdoc. Students selected from a series of choice based lessons, and worked in teams to support arguments that differences in the apparent brightness of the Sun compared to other stars is due to their relative distances from Earth. They had to represent data in graphical displays to reveal patterns of change and support arguments relating to gravitational force. As a culminating project students had to define and delimit engineering problems, develop possible solutions, and optimize design solutions relating to various engineering challenges. The challenges included creating a working hovercraft, designing prototypes of roller coasters, creating air powered rockets and cars.