

Educational Technology Graduate Students Facilitate
STEM Robotics Workshop for 5th Grade Students at
Davis Elementary in Malone, NY.



Mrs. Sanchez's 5th Grade Students

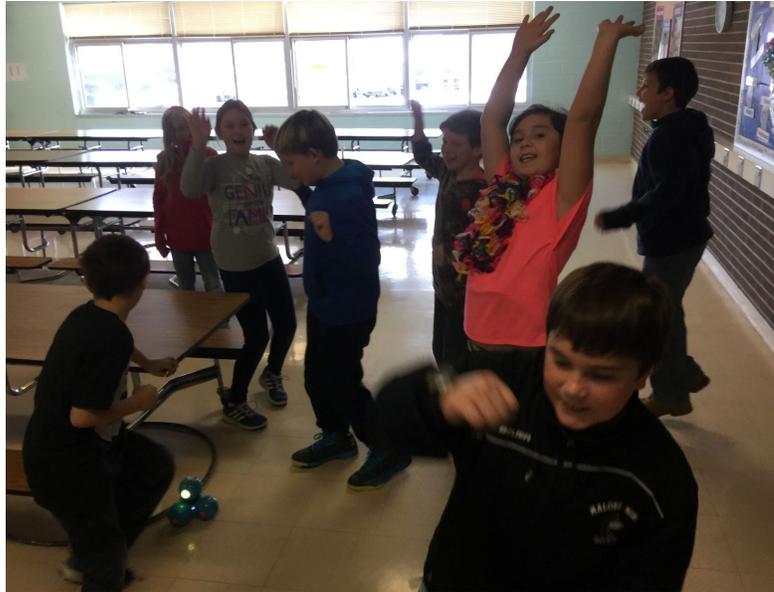
On the morning of December 6, 2016, Dr. Anthony Betrus and two Educational Technology graduate students, Dustin Strong and Marisa Madson, facilitated a robotics workshop for 5th grade students at Davis Elementary in Malone. To prepare for the session, on the day before the workshop the students each completed an *Hour of Code* from “code.org.” The *Hour of Code* is an online course that helps students learn the basics of a object-oriented programming using a common language called *blockly*. Once Dr. Betrus and the graduate students arrived at the school, they set up an interactive scavenger hunt in the school cafeteria using puzzles, clues, and action figure props they gathered, created, and tested the day before.



Marisa and Dustin setting up the scavenger hunt

When 5th grade teacher Angela Sanchez's students arrived shortly after, they were broken up into three groups and given the task of programming their *Dash* robot (using *blockly*)

to navigate a maze of villains, with each action figure villain along the way providing the next clue in the puzzle, ultimately to help rescue their hero at the end of the scavenger hunt. This activity and the *Hour of Code* was for many students their first exposure to the idea of coding and what it can do. During the activity you could feel the energy in the room as the students completed each task and got closer to saving their heroes. There were many giggles and cheers as the scavenger hunt was completed, and the students could barely contain their excitement. The class was able to grasp the concepts quickly and were able to save all their heroes!



Success, they rescued their hero!

Once completed, and the basics of programming *Dash* understood, they were given free time to explore other additional coding options, providing them with a “sandbox” style learning experience at the end. The students were clearly engaged throughout the lesson, and during the debriefing the students asked when the next time they would be back to visit!



This student really developed an affection for Dash, and wanted to take him home!