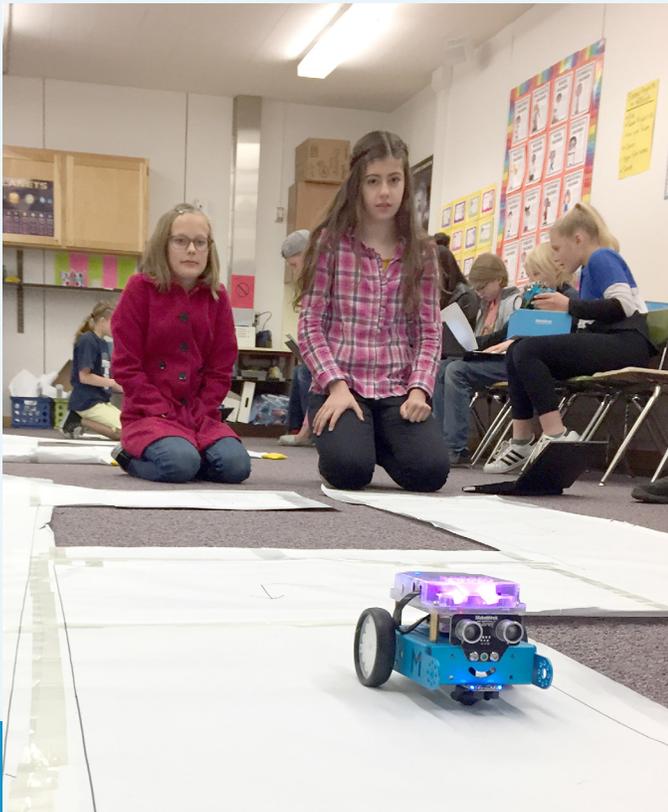




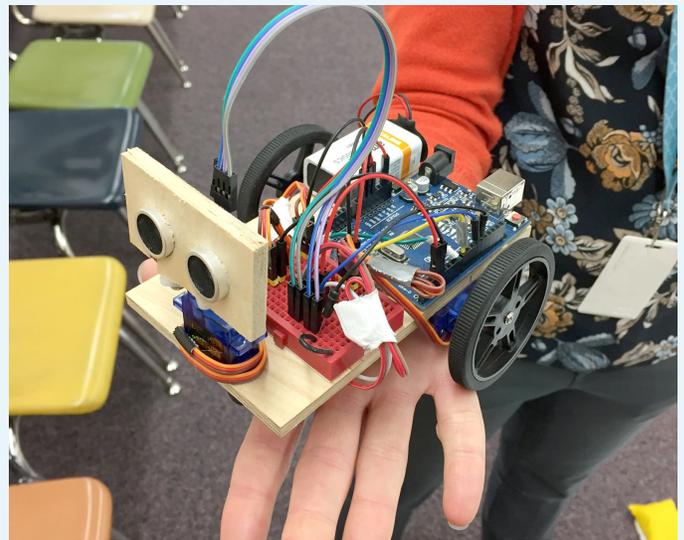
If at **FIRST** you don't **SUCCEED,** **CODE, CODE** again

Amanda Hamilton's fourth, fifth and sixth grade students at West Bountiful Elementary were tasked with programming a robot to navigate through a maze on the floor without touching any lines or going out of bounds. In groups of two, they ran back and forth huddling over their Chromebooks to write code and testing how their robots performed in the maze.

"Before we had the robots I didn't know a lot about coding, and I didn't really enjoy it either," said Karissa, one of the fifth grade students. "After we got the robots I learned so much and coding is fun for me now. Because we got the robots I want to do more coding and get better at it."



Students at West Bountiful Elementary School test drive their custom programmed robots.



All of this started when Hamilton, a Prep-time STEM specialist at the school, decided she wanted to try to bring coding and robotics into her classroom. Since she had no prior experience with coding or robotics, she enrolled in a two-day course over the summer. Even though it was slightly intimidating, she decided she wanted to try it out. She applied for a classroom grant from the STEM Action Center and used it to buy 15 robots.

After months of trial and error, working hard to fine tune code, Hamilton's students were ready to show off what their robots could do. Students came into class with a mixture of nervousness and excitement. As they turned on their computers, they saw that overnight the software had been updated and saved work had mysteriously vanished.

Learn more about STEM Action Center programs at stem.utah.gov

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“These were files the kids had been working on a couple times a week all year, and they were just gone,” Mrs. Hamilton said. “For the first five minutes of class, we were all just really depressed and sulking, until one kid said ‘Well, can we rebuild it?’”

All of the students latched on to that idea. Using the notes they were required to take over the course of the year, they set to work.

“I haven’t seen the kids work that hard all year. The room was almost dead silent, and by the end of half an hour almost everyone had successfully rebuilt their code,” Hamilton said. “It also became apparent that there were a few kids who really weren’t getting it, and I was able to spend some time one on one with them and see the light bulb go on.”

Hunter, a sixth grade student said “sadly most everyone’s code was corrupted and we had to re-write it in a day, and we did it!”

Eric, one of her fourth grade students said, “I learned that coding can get really hard, but to just keep on going. I used to never want to do coding or any of that, but now it’s what I want to be when I grow up. I feel proud that I got to program a robot - a real robot!”

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