

Camp Innovate: STEM In the Outdoors

“On line, on site, on lake”

For the past two years, MORT has partnered with the Hopatcong Borough Board of Education to provide STEAM instruction to young students. Initially, the board received a \$75,000 grant to run a six-week STEM camp for Title 1 students, who receive free or reduced-priced lunches. MORT jumped on the opportunity to assist with the Robotics Week program in July 2016. After we demonstrated our robot and played the 2016 game-release video, the children were hooked. They loved being able to drive our robots around and learn how to shoot boulders from the FIRST Stronghold Competition. By the end of the day, all 20 students sported at least one MORT tattoo.



Besides robotics, the camp included theme weeks of Act It Out, Cook It Up, Olympics, Robotics, Crime Scene Investigation, and Learning at the Lake. After the camp ended, its directors invited us back for a celebration presentation to show the parents what the children were working on within six weeks. There we spoke to Senator Oroho, who expressed interest in our program and our district event, which he attended in 2017. We also spoke to the athletic director of Hopatcong High School, Chris Buglovsky, who said he was looking for a program like MORT to be offered at their school in the near future.

Although the school district did not receive a grant renewal in 2017, the Board of Education still funded and even expanded this great learning opportunity. For the summer of 2017, the board opened up the camp to all second and third-graders within the district. they opened the camp up to all second and third graders within the district. Enrollment boosted from 20 to 80 students in only one year! This year's themes included Deceptively Delicious, Nature's Portrait, Sports in Hopatcong, STEM in the Great Outdoors, Digital Photography, and Learning at the Lake II.

Because the camp staff enjoyed our presence and program so much the year before, they invited us back again for the week of STEM in the Great Outdoors. The students of the camp were challenged to build a bridge out of materials they found in nature. The structure was required to contain an opening passage underneath of at least a fist's height and be able to hold up to two textbooks and two bags of pennies.

Each MORT member was in charge of a group up to five students and guided them through the design process. The children had learned about different types of bridges earlier on in the camp, so they came into the challenge ready with ideas. First, each group drew out different plans for their bridges. Once they decided on a design, they designated different materials to the different parts of their bridge. Then the building began!!

When all 15 bridges were complete, we tested their strength with two textbooks and two gallon-size bags full of pennies. One of the bridges was able to hold up to ten textbooks!!

Camp Innovate was a success, with a total of 60 outreach hours! Because of the excitement demonstrated by each Hopatcong student, MORT is looking forward to attending this event for years to come!