

Creation Station

Students urged to explore and discover in makerspace at St. Rose

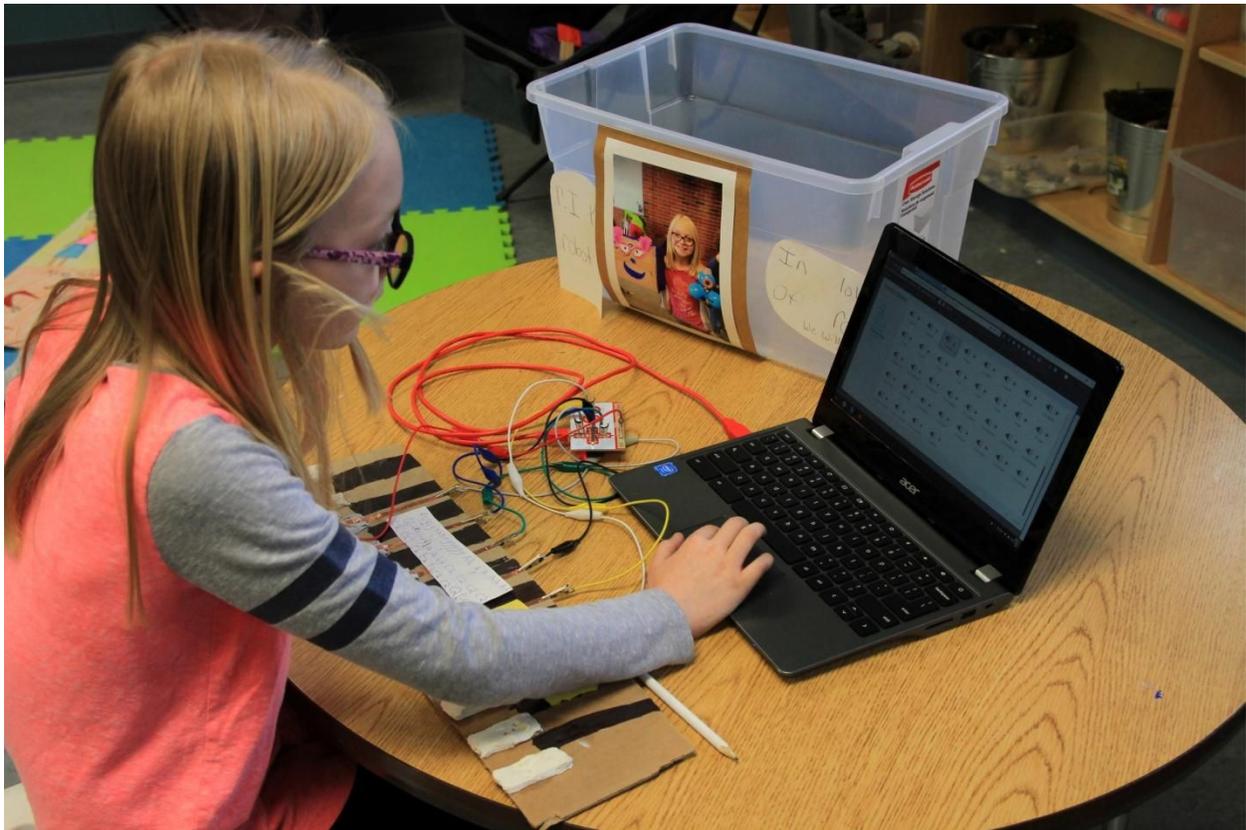


Photo by Lindsay Hanifan

Amelia Gignac plays the electronic keyboard that she made with a Makey Makey invention kit in the Creation Station at St. Rose Catholic Elementary School in Windsor.

(Windsor, Ontario, Monday, March 5, 2018) – Amelia Gignac has never taken formal piano lessons but she can play *Hot Cross Buns*, *Mary Had a Little Lamb*, and Leonard Cohen’s *Hallelujah* on a computer-based electronic keyboard that she built and programmed by herself. Amelia is 10-years-old.

Her device is just one of the many incredibly innovative student projects that have come out of the Creation Station makerspace that opened at St. Rose Catholic Elementary School last October.

The whole idea behind the space was to create an alternative learning environment where staff could promote play-based discovery, collaboration and inquiry- based learning by providing hands-on, creative ways to encourage students to design, experiment, build, and invent. Funded with grants from the Ministry of Education’s Teacher Learning and Leadership Program (TLLP) and Parents Reaching Out (PRO) grants, as well as some support from the parent council,

the school bought a raft of technology including Dash and Dot, and Bee-Bot robots, and Makey Makey invention kits. Makey Makey is an electronic system that allows students to connect USB cables and alligator clips to a circuit board, which is connected to a computer, turning any object into an electronic touchpad. Sounds can be programmed into the Makey Makey by recording voices, audio clips, or songs off of YouTube.

Once they had the technology, the school sent some of their key staff members to professional development conferences to make sure they were properly utilizing all that equipment to the maximum benefit for the students.

“It’s great to have a bunch of stuff, but that’s not really maker space,” said Grade 3 teacher Kim Sidi. “You need to know what to do with it.”

Since opening the Creation Station, the room – formerly a media room that was left unused – it’s been filled every lunch hour with at least 25 students who are simply there to tinker with the technology and other STEAM (Science, Technology, Engineering, Arts, and Math) related equipment in the room. Every month they have a different theme and students are encouraged to create things related to that theme.



In addition, teachers at the JK-6 school can sign out the room and bring their students there during class time to explore new and engaging ways of learning about the curriculum and concepts they’re studying in their home rooms.

“They might learn how to use a device in their classroom and come here to do an activity, or they might learn how to use a device here and then go back to their classroom and connect it to the curriculum focus,” said Sidi.

To help promote leadership and collaboration among students, the school has developed Creation Station Trainers - older students who have been involved in the STEAM program longer and can help the younger members with learning how to use the different types of technology. The students have learned to solve their own problems rather than going to a teacher right away for help. This program has opened new doors for exploration, planning, and brainstorming for students.

Students have created musical instruments with Makey Makey kits, creating natural animal habitats that can be navigated by robots

St. Rose Principal Tina Tuer said the space has really exceeded her expectations.

“They’ll try things in here that they wouldn’t try in a regular classroom,” she said. “No one’s going to tell you you’re wrong. It’s just like, figure it out. You don’t hear ‘I don’t know how to do that in here,’ and they take that attitude back in to the classrooms.”

One of the key ingredients to its success was to create the space and foster a philosophy of purposeful creation, but not micro-manage it, especially during the voluntary lunch time sessions.

“Instead of us telling them what to learn, they’re discovering things on their own in here,” she said.

The makerspace has also received a tremendous amount of support from the school’s parent community, Tuer said. The school has received some financial and in-kind contributions, and almost 130 parents attended their Full STEAM Ahead event in late February to showcase the Creation Station.