
Welcome to the School District 5 Design Labs

March 2021

Fun and exciting things happening in Fernie and Cranbrook

We are Still Smarter Than the Bots

Students from TM Roberts Grade 6 French Immersion class were challenged to create an invention using the Lego Spike kits at the Design Lab. They learned how to code and planned their ideas in a few short classroom sessions before coming to the Lab to build their designs. There were toy pets, armoured vehicles and encrypted safes. All the students were excited by the group who followed a complex set of directions to create a Rubik's Cube solver. Most of the projects went through multiple iterations, mistakes and rigour to realize their vision. One of the students who is a self-professed Rubik's Cube aficionado raced the robot and was able to beat it by over a minute!

Check out the video of the Rubik's Cube Solver Here: <https://youtu.be/AtNhl7aDXmw>



Bugs, Rodents and Robots



Amy Woodland students from Mrs. Kessler's Grade 2 class started their coding journey with the Code-A-Pillars and Coding Mice available from the DRC. They learned about computer languages such as binary and symbols then programmed their mice and Code-A-Pillars to complete different exploratory challenges. The great thing about the Coding Mice and Code-A-Pillars is how they introduce coding with robotics without any devices and at a level that all students can participate.

Making Music with Jell-O!

Students in Ms. Kennedy's class at Rocky Mountain Elementary learned about electrical conductivity, computer science and music when they made Jell-O pianos. Students coded 3 notes for their pianos and played music for each other. We invited Ms. Ehman to take part in the fun!



Going Above and Beyond with Lego Wedo

Some students from Ms. McMullan's grade 5 class from Rocky Mountain Elementary were challenged to find a Lego Wedo design that was not from the Lego Wedo app. One group wanted to build and code a shark, while another group built a forklift, and Mrs. Froehler built a robo-monkey. Kids can do hard things!



Mental Wellness and the Design Lab

Mr. Cullins brought his physical and health education class from Fernie Secondary to the Design Lab to explore how using technology appropriately and working as team to achieve a goal can have a positive effect on a person's well-being. Students worked together to complete various LEGO Spike robotics challenges and others used the time to explore virtual reality. Recent studies show that virtual reality can have positive impacts on a [person's mental health](#).

VR Explorations

Students in Mr. Roszell's class at Elkford Secondary will be conducting a research project on virtual reality and the brain. Students have been given the opportunity to explore some different virtual reality applications to understand what it feels like to wear and experience a virtual reality headset. Check out the [video](#)!

