

## Fab Lab

Ross School District

**Ross School**

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Building, tinkering, and engaging students are not just phrases at Ross School. They are alive and fully integrated into the school. It's not on a cart. It's not a fad. The Ross School Fab Lab is where design and innovation meet. All students in grades K-8 have participated in hands-on projects that are created in the Fab Lab.



Ross School has a dedicated classroom that is called the Fabrication Lab, or “Fab Lab.” It is a middle school elective option and part of the overall STEAM program at Ross School for K-5 students. The Fab Lab

houses state of the art equipment and software including 3D design and printing, laser cutting and engraving, wood and metal cutting equipment, electronics/soldering, hand tools, and more.



Students develop and then use their newfound skills to design and make a variety of projects, from simple circuits and boxes to more complex integrated projects such as hovercraft, harmonographs, motorized art, and more. Middle school students have shared that it's the one class that “allows me to be free to explore, to let my imagination help me to build.” Studying tessellations in middle school mat led to designs that were programmed and cut on wood blocks in the Fab Lab. These blocks were used for printmaking that adorns the art room wall. Another project includes students designing a robot using Arduino microcontrollers to program different behaviors. Second graders produced paper mache monster sculptures that incorporated crankshafts and levers to create movement.

Another student states, “Anything is possible in the Fab Lab. If I can think it, I can create it!”

The Ross School Fab Lab is committed to infusing innovation and creativity throughout our program in order for students to apply knowledge to practical and exciting application.

