

CASE STUDY

Riverpoint Academy

Experimenting with Fabrication

Learning Objectives in a Makerspace

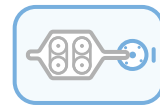
Riverpoint Academy, a high school located in Washington State known for its interdisciplinary, project-based STEM curriculum, added a D.I.Wire to their makerspace shop. A desktop wire bender was something new to the Riverpoint Academy (RA) learning space, and at first, students were unaware of the capabilities, such a small machine could have. However, it did not take long for students to go from experimentation to design and fabrication.

“ We’ve seen the quality and complexity of student work increase as they’ve learned to think with the D.I.Wire ”

MATT GREEN, INSTRUCTOR AT RIVERPOINT ACADEMY

Sage, an RA senior began to prototype his own designs for a free-standing lamp. At RA, a tremendous amount of teaching energy goes into creating and maintaining an environment in which students build to learn. Iteration is infused into all they do. As students learn to embrace the freedom this

Machine Used:



D.I.WIRE PRO

Industry:



EDUCATION

How the D.I.Wire Plus was used

While working on his lamp, Sage’s applied learning process allowed him to transform the way he envisioned his final product. With each prototype came new ideas which eventually included incorporating code for color-changing Neopixels, along with laser-cut wood, solder, glue, heat shrink, and a cloth shade made in collaboration with a fellow student. Sage even ended up using the CNC mill to build a custom table that allows the D.I.Wire to sit flush with the surrounding surface, bending free from any entanglements.

Faculty at RA believe in giving students opportunities to engage with materials, machines, and content in their own way. In alignment with Seymour Papert’s constructionist assertion that students need “objects to think with,” their physical space caters to the curious. “The freedom to play fosters a natural evolution of how students use a tool,” explained Matt Green, one of the instructors there.

The students' learnings

The students and faculty see the D.I.Wire as a unique catalyst in their space, as it naturally encourages students to think about how bent wire designs can be used as part of a larger design.

Work Sample

