



February 6, 2019

ATTN: George

RE: Plans for Educational Laser

Connect Charter School is currently developing our own makerspace – a space where students can use the process of creation to help them learn about design to solve problems. Currently, our makerspace is limited to our new 3d printer, Lego and some Lego robotics. Access to a laser cutter would help us to expand this space, and include more creative endeavors than fixed Lego pieces, and have faster iteration than the 3d printer. Thus far, students and teachers have thought of creative solutions and begun designing solutions – but have had an inability to test some of their creations. Here are some of the ideas that the students have generated:

- Varying wing shapes and designs to test glide length for different plane designs.
- Designing different triangle sizes for Pythagorean proofs
- Creating small physical blueprints and furniture, for special reasoning
- Creating stamps for print work art / recreating portions of the renaissance printing press
- Testing different shapes of balsa wood to see how shape and structure are related through force distribution.

Many of these designs have been put off to the side because of limited resources, but with the addition of a laser cutter, we would be able to cut with a higher fidelity rate (as some of these projects are precise).

Louis Cheng
Math/Science Specialist & Lab Director
Connect Charter School