

Fremont Fund Provides 3D Printer to Middle School

Last Fall, the Fremont Middle School Project Based Learning (PBL) class received a grant from the Fremont Fund at SCCF and the Fremont Chamber of Commerce to purchase a Dremel 3D40 3D printer. The printer has been in the Middle School PBL classroom since January and has had an impact on many Fremont students.

Currently, 7th grade students are working on the basics of designing simple keychains for printing. Working through this project has introduced students to the constraints that come with designing on Tinkercad software and printing in plastic. Their next project, once they understand the design and printing basics, will be to work in teams to identify a problem in the schools, brainstorm a solution, and then design it. They will be using the engineering design process to solve this problem and guide them to workable solutions. This problem could be for a student with needs, a teacher or staff member, or the general student body. Some examples of problems may be personalized door stops for teachers that fit their doors and don't get mixed up, or different shapes of bubble wands for students to use in Head Start at recess. One team is considering making 3D maps of the schools for substitute teachers, new students, and students with sight impairments.

Fremont has been able to share the printer between schools. The elementary school is creating reusable airplane glider parts for use in a STEM project and a high school business class has explored the possibilities of the printer and the design software.

The purpose of the Fremont Fund is to improve the quality of life in Fremont and to help with projects that will impact the community. The Fremont Chamber of Commerce is interested in a community of thinkers and potential employees that can solve problems. Having a 3D printer will continue to impact student motivation and creativity, as well as help to meet standards that give students the 21st century skills they need in today's job market.