## MILL RIVER UHS



## Academically Excellent, Personally Meaningful and Socially Responsible

December 5, 2014

## Greetings!

Creativity, problem solving, engineering, and real world skills like communication and collaboration are all qualities that schools want to develop in students. 21st Century skills and knowledge like coding, basic circuitry, project management, engineering are skills that employers are looking for in new hires, and the skills we all want in our community's citizens. These are all the skills fostered when students work in a MakerSpace.

What's a MakerSpace? It's a dedicated space at Mill River where students can work on creative projects. It combines some of the elements of a traditional shop environment with a major focus on combining those with the latest technology, such as microprocessors, microcontrollers and 3D printing. Working in the MakerSpace engages students in critical thinking and problem solving that deepens their knowledge of standards-based subject matter. Work in MakerSpaces improves students' habits of inquiry, self-directed learning and critical reflection.

Over the summer, Library staff set up a new MakerSpace in the Library. We have a green screen set up for video filming, plus space and equipment for audio recording. To learn and see more about what students have been doing in the MakerSpace, check out our webpage at <a href="mailto:mrumakerspace.weebly.com">mrumakerspace.weebly.com</a> When you visit, you might see students learning, tinkering, inventing, researching, teaching, collaborating, sharing, innovating, socializing and creating. Students learn and use an iterative design process that they employ to develop new ideas, test, redesign and test again until they have a product they are happy with.

Our goals for the space include having more tools and supplies available for students. We'd like to purchase a 3D printer and supplies. A 3D printer allows students to design models and parts for their projects in our Media Lab (using software we already have) and then print those designs out to test them in real-world applications. The cost of a 3D printer and starter

supplies is about \$3000. We're also hoping to acquire some Arduino kits with breadboarding (about \$100 per kit), beginning robotics materials (from \$50 to \$500 per robot) and other interactive computing materials, such as materials to integrate LED lighting into projects and interactive wearables. To make our MakerSpace everything it can be, we need support from our community. We are asking for a monetary donation or a donation of supplies to help us fill the space. Please see the form attached to learn more about the donation levels available, or to donate supplies, equipment or materials. You can contact Karen at the Library via email at <a href="mailto:kmccalla@rssu.org">kmccalla@rssu.org</a> or via phone at 775-3451 x216 with questions or to find out more.

Thank you so much for considering our request for support. Our MakerSpace is a work in progress, but with your donation, materials or expertise, it will be even better for kids.

Sincerely,

Karen McCalla