

FOR IMMEDIATE RELEASE

August 30, 2018



Contact Lori Grein, Director
Community Relations and the Foundation
Rochester Community Schools
lgrein@rochester.k12.mi.us, Office: (248) 726-3127, Cell: (248) 941-1227

Rochester Community Schools Foundation donates equipment to enhance STEM education

ROCHESTER, Mich. – High school students in the Rochester Community School District will have expanded opportunities to enhance their technology, computer programming, and personal craftsmanship skills, thanks to a generous donation from the Rochester Community Schools Foundation.

The Rochester Community Schools Foundation awarded more than \$9,000 to purchase a computer numerical control machine for STEM (science, technology, engineering and mathematics) education. The device is used by students throughout the district to learn engineering, architecture, woodworking, computer-aided design, and computer programming.

“Our high-school engineering, architecture, and woodworking classes are gaining technical experience and programming skills, using the real-life applications of the CNC machine and its related software,” said Tim Lewis, Rochester High School design and technology teacher. “STEM education and related tools like this help create a hybrid, cross-curricular approach to learning. Students are excited to watch their work come to life.”



Students begin by creating a computer design that gets converted into coordinates. The cutting spindle on the CNC machine moves to various positions, shapes and depths, as directed by the coding instructions. These processes combine to create two- and three-dimensional patterns out of wood, metal or plastic. The system has practical applications in manufacturing, parts fabrication, milling, engineering, engraving and more.

Although students will continue to learn from using stationary and portable power tools and hand tools that are foundational to their understanding, along with adhering to standard safety procedures, the CNC machine adds another dimension and brings together the human and technological elements, said Lewis. Eventually, a laser dimension could be added as well.

In industrial applications, the CNC machine allows for precision, which is nearly impossible with older tools. Under the direction of a skilled operator, the machine can perform tasks repeatedly without tiring and without sacrificing accuracy. “In this age of automation, it’s important to remind students that human skill is needed to drive the technology,” said Lewis. “The operator is still critical.”

Rochester Community Schools Foundation Mission

To support and advance learning for all students by obtaining contributions for academics, arts, and athletics.

“It is exciting to see our students and educators directly engaged in problem-based learning. They are creating, building, collaborating and discovering together,” said Carrie Lawler, assistant superintendent of secondary education, equity and inclusion. “These important skills are valuable both personally and professionally.”

The Rochester Community Schools Foundation, an independent 501(c)3 nonprofit organization, funded the CNC machine purchase with a teacher grant, established to enhance educational opportunities that support the district’s strategic plan and directly impact student learning.

The RCS Foundation encourages staff members to apply for grant opportunities twice a year. “When a staff member has a great idea for a classroom or building that requires additional funding support, they have the opportunity to apply for a grant through the RCS Foundation,” said RCS Foundation Coordinator Joann Beydoun. “The RCS Foundation has been supporting unique programs for nearly 25 years, and are always looking for new partnerships to support our mission.”



Rochester High School design and technology teacher Tim Lewis works with a student in the lab. Pictured in the background is a wooden plaque with the RCSF logo made by the students with the CNC machine.

For more information on becoming a donor to support the RCS Foundation, please visit the website at: <http://rcs-foundation.org/>.

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