

3-D printer lending library a hands-on opportunity

By Ellen Pill

Under the auspices of The Romich Foundation, a new lending library has been formed to loan 3-D printers to Wayne County residents of all ages who are interested in a hands-on opportunity to learn more about the printers and how they work.

Izabel Meshew, a sophomore at Norwayne High School, is managing the new program. After becoming more and more involved in the STEAM program at her school, Meshew met Barry Romich on a school trip late in 2021 to look at a laser engraver in use at Smithville High School.

"We got to chatting, and he gave me his business card," Meshew said.

In January she reached out to Romich to discuss the work he does with 3-D printing and laser engraving. "We chatted about my future," Meshew said, "and on the way home, I realized that I had just gotten a job."

Romich knew of 80 laptop computers that were about to be recycled at the PRC-Salttillo Company in Wooster and decided he and Meshew could repurpose the outdated gear for use with 3-D printers — and the new lending library was born.

"The idea of the library,"

Meshew said, "is for adults as well as kids to be able to explore the world of 3-D printing. Anyone can get a chance to use the software and materials at no cost."

She said the library provides a beginning experience — one that can potentially lead an individual on a path toward a new hobby or career.

Romich created the first prototype of the 3-D printer kits the library now lends and gave it to Meshew to try. "I was the guinea pig," she said. "From there we created a user manual that's now included in every kit."

The manual takes users through the entire process of using the printer.

Each kit contains everything needed to set up and create 3-D printed items — either original creations or using templates that can be found online. Included among the items in the complete kit are two stands, one for the computer and one for filament. These were designed by Romich using PVC pipe. Students in the multi-handicapped classroom at Norwayne High School then helped by assembling all the stands.

"We heard they had a blast," Meshew said.

Right now the library is looking for hosts — places



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Mason Rupp, 10, made earrings that he is selling on a 3-D printer. Under the auspices of The Romich Foundation, a new lending library has been formed to loan 3-D printers to Wayne County residents of all ages who are interested in a hands-on opportunity to learn more about the printers and how they work.

that will be clearing houses for connecting interested community members with a kit to borrow. A host site may be anywhere, from a school, to a library, to a historical society or makerspace. The options are open. Currently, Meshew is reaching out to all the middle schools in Wayne County to determine their interest in hosting.

Host sites will be tasked with locating individuals interested in borrowing a kit, checking out the materials, and then cleaning and prepping returned kits to be loaned out again. Each kit is valued at \$370, and those checking one out are required to sign

als for 3-D printing. Mason Rupp, 10, is a fourth-grader at Norwayne Elementary.

"Mason is a great example of what can happen when kids get to try out a printer," Romich said.

"Mason came to his dad and me and asked for some trains, and we told him he would have to earn some of the money," said Mason's mom, Melissa Rupp.

"I needed a job," Mason Rupp said. "But who was going to hire a fourth-grader?"

So Rupp came up with the idea of making earrings on a 3-D printer. He found a paw print pattern online that fit with the Norwayne mascot and made a few pairs. With the help of social media, the earrings have been selling, and Rupp has become a 3-D printer entrepreneur.

"Ultimately, it started with Barry," Melissa Rupp said, "with Mason being exposed to learning how to use the printer."

In addition to the lending library, Romich hosts a

makerspace that is open to the public by appointment. The space includes 3-D printers, laser engravers, CNC routers, and welding and woodworking equipment.

Anyone interested in using the makerspace or in borrowing a 3-D printer while the program is still seeking host sites is invited to email Romich at bromich@aol.com or call 330-464-7877.

Potential lending sites are invited to contact Romich or email Meshew at izy.meshew@gmail.com. Both Romich and Meshew will be at the Wayne County Maker Faire to discuss the lending library and demonstrate a test kit. The faire will be Saturday, May 21 from 11 a.m. to 2 p.m. at the University of Akron Wayne College, 1901 Smucker Road, Orrville.

Find the lending library online at www.romichfoundation.org/3DPLL/.

"As far as we know," Romich said, "there's no one else in the world doing what we're doing with this project."