

CCPL Invites Residents to Makerspace for High-Tech, Hands-on Learning

The Chesterfield County Public Library recently expanded its services by opening a makerspace at the Central Library for explorers of all ages who want to “hang out, mess around and geek out,” said Nanci Clary, Library Services Administrator. The makerspace is a fun learning environment where people can work with equipment like the Silhouette Cameo electronic cutting tool, sewing machines, small hand tools and a 3-D printer.



Mary, Trinh and Emi show the mechanical hand created with the 3-D printer.

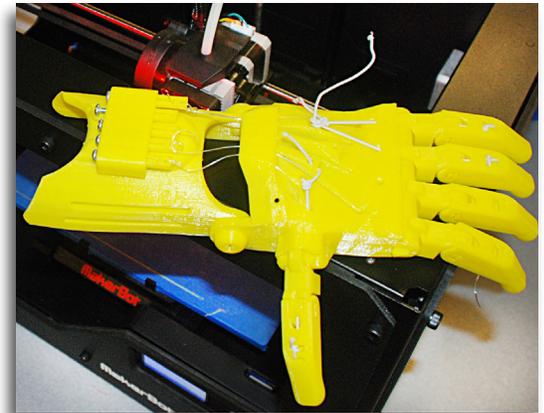
“It’s not designed just for individuals; it’s for a community of learners,” Clary said. “There are small tools for leather and metal work, and the 3-D printer can create just about anything you can conceive.”

3-D printing creates small objects by shaping melted material (usually plastic) using a computer-generated pattern. The resulting items range from very simple to highly complex. A beginner may print a piece of jewelry or a chess piece, while industries are using the same technology to create machine parts and prosthetic limbs. CCPL librarians are using the technology to build a toddler-size robot that will interact with customers at story times and special events.

mentor who has been part of CCPL’s makerspace since its inception. “This year we are working with Tomahawk Creek Middle School students who have already been using the 3-D printer for technology projects and prosthetics and are excited to have access to space where they can explore electronics, robotics, and computer programming in a laboratory setting outside of school.”

“Three students from L.C. Bird High School created a child-size mechanical hand,” said Bruce “Doc” Davies, Ph.D., a volunteer and

The library sponsors a team participating in the VirginiaFIRST Robotics program, which uses elements of gaming and engineering to design and build a robot to perform specific tasks as part of a challenge. The program teaches skills that are important for top education programs, STEM scholarships and successful careers.



3-D printer and mechanical hand

CCPL’s 3-D printer is currently available at no cost, although fees may soon be charged to cover the cost of materials. To use the printer, training is required. Sessions take place Tuesdays, 3-7 p.m. at the top of each hour.

CCPL is looking for mentors and volunteers with backgrounds in science, technology, engineering or textiles. Also, the makerspace is in need of donations – both equipment and monetary. Please call 804-748-1603 for more information on how to help!

Financial Gift Allows Ettrick-Matoaca Library to Offer Customers State-of-the-Art Equipment

The Ettrick-Matoaca Library has been awarded a \$13,000 gift from the Ettrick Neighborhood and Business Foundation to establish a makerspace – an area for individuals or a community of learners to have hands-on experience to create, innovate and collaborate on projects. The library plans to purchase a 3-D printer, a One Button Studio, sewing machines and materials to create raised garden beds.

“The 3-D printer gives users the opportunity to use some 21st century skills,” said Jennifer Hayek, a library branch manager who has worked on both the Ettrick-Matoaca and Central makerspaces. “We have already received calls

from a local elementary school.”

The library is exploring partnership opportunities with Virginia State University, which would involve planting the raised garden beds and establishing the One Button Studio.

The One Button Studio is a do-it-yourself video recording setup which allows users to create a high-quality video production without any previous experience. Users only need a flash drive – everything else is provided.

The library hopes to open the makerspace in early 2015. The equipment will be available for use at no cost.