3D Printing at the Library
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The library has a new service, and I am thrilled to share with you about it this week. Thanks to a generous grant from our local Walmart, the library was able to purchase a 3D printer for library programming and for public use. Now that we have staff trained on how to use the 3D printer and its software, we're excited to have the 3D printer ready for our patrons to make their own creations. I'd like to thank our excellent Library Board members for their input and approval for us to offer this service.

Maybe you've heard of 3D printing but don't know much about it or are curious but unsure how difficult it might be. Perhaps you're itching to try out your own creations and ideas. 3D printing is the process of building a three dimensional object with thin horizontal layers of material. There are many different styles of 3D printer, but the process of building an object follows the same steps: create a 3D model file, set the print parameters, slice the 3D model into layers, input the sliced instructions into the printer, and build the object. Our 3D printer, a Dremel DigiLab 3D40 Flex, uses a material called poly lactic acid or PLA. It's a bio plastic made from corn that has good strength, great flexibility, and is nontoxic and biodegradable. The printer can create detail to a measurement of 50 micrometers. That's five hundredths of a millimeter, which can be the same thickness as a human hair! On the other hand, our 3D printer can create an object that is larger than a tissue box. This allows for an incredible variety of things to be made. Look up 3D printed objects on the internet and you'll see items for cooking, gardening, organization, crafts, hobbies, art, and more. Whether you need a plastic part with exact dimensions, a rough model, or a visualized prototype, our 3D printer can handle the job.

So how can you request a 3D print at the library?  First, understand that we don't build 3D models because of the time involved. On the bright side, you probably won't have to either! There are thousands of models for 3D printing available online for free or low cost, and we can point you to some websites where 3D artists share their work. Second, you'll need a flash drive to hold your 3D model file. Third, come to the library to request a 3D print job. Due to time constraints, you may only make one build every two weeks, and we only take 3 jobs at a time. Our staff will have you review our 3D printer policy and help you fill out your reservation and claim ticket for your request if we have an opening. Fourth, we'll check your 3D model file for safety and make adjustments to the file to try to fit your request. Fifth, when your job finishes, you'll pay for the time needed for the job to complete. It is $2 for the first hour of printing, and $1 for each hour or part hour beyond that. For example, a set of 6 decorated stitch locks for knitting was printed in ninety minutes for $3. For short jobs, you are welcome to observe the print, but larger or more detailed jobs may take up to 10 days to complete depending on parameters and staff availability.

We're excited to be offering this service to the community, and we hope to be able to offer instructive classes on the software and other related topics in the future too. We're

grateful to our local Walmart for making the 3D printer possible and to the Library Board for approving it for public use. We hope you'll take advantage of this fascinating resource here at the library, and we'll see you soon!

The library is located at 17 N. Broadway and is open to the public Monday to Thursday 9:30 a.m.-8 p.m. and Friday and Saturday 9:30 a.m.-5 p.m.