



Innovation Project Application

Library: Valparaiso Community Library

Project Manager: David Weatherford, Director

Phone: 850-729-5406

Email: dweatherford@valp.org

Name of Project: Valparaiso Media Lab- Keeping Our World 3D

Project Amount requested: \$3036.74

Scope of the Project:

The Valparaiso Media Lab, formerly known as the Valparaiso Creativity Lab, has become a hub of activity in the last year. The library staff has transformed an infrequently used conference room into a space for patrons to explore a world of new technologies and games. And it all started with our 3D printer. We now offer computer basics classes, Maker Day programs, and a safe, after-school gathering place for students and families. We went from 10-15 users per week to an average of 46 users per week in September, 2019.

As a result, more established tech items that have been in the collection are being used more often, including our Qidi Tech dual extruder 3D printer. It has had more requests since the establishment of the lab than in previous years. We have printed everything from figurines for tabletop roleplay games to models for class projects. Though the printer has performed well over the last two years, it has outlived the software support and is now frequently down for maintenance. The downtime has had a negative impact on our patrons who want to learn to use the device and/or have requests for objects. To keep our world 3D at the Valparaiso Media Lab, we are in need of a more up-to-date device and training to ensure proper usage and maintenance.

What need in the library/community will this project address?

Patrons have discovered the opportunities associated with having a 3D printer and are excited to have the chance to use the printer themselves, adding to their skillset. Students have discovered how useful the device can be when needing to create models for classes. Many families use our library and collection items to supplement their children's education, whether enrolled in a local school or homeschooled. We have also begun training individuals to use the 3D printer and software like TinkerCAD to create their own 3D designs. We expect for attendance in this training to increase once the word gets around that are offering this opportunity.

The library regularly uses the 3D printer for creating props for the various programs we host and prizes for contests. Like any library, we are the gateway to access for our community members, especially when it comes to new technology. It will prove to be very advantageous for our patrons and staff members to have working knowledge of how newer machines operate and of the latest software in order to assist patrons. We also are unable to meet patron requests for projects, academic or otherwise, because of the many maintenance issues we experience with our current machine. We want to be the first resource patrons and non-users think of when it comes to new technologies, and updating our 3D printer will be a huge step in the right direction.

Resources required and budget (NOTE: for items whose unit price exceeds \$500, 3 quotes are required or an indication that the vendor is sole source.):

- The Makerbot Education Starter Kit - \$1999
 - Makerbot Replicator+ 3D Printer
 - Educators Guidebook
 - Makerbot Certification Program
- Smart Extruder+ - \$199
- Large 10-Pack PLA Material - \$392.49
- Copernicus Mobile 3D Printer Stand - \$446.25

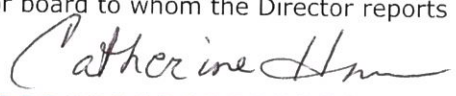
Activities/Timeline (include estimated completion date):

We will begin using the 3D printer immediately to fill our back-logged requests, and resume our 3D printing training courses upon completion of the Makerbot training course for one calendar year, adapting the classes as needed to meet the varied needs of our patrons. We will also implement the 3D printer more into our Maker Day and Science Kids programs by printing off 3D topographical maps, teaching 3D design classes using Tinkercad, and creating other manipulatives to aid our staff's instructional purposes. We will also be able to serve more patrons quickly with the Makerbot Replicator+ that we plan to supplement with our existing 3D printer, assuming it can be repaired. We will announce in our local newspapers and on social media that the Valparaiso Library can fulfill more 3D print requests and enable patrons to use the technology themselves.

How will the library sustain this project?

Since we have a 3D printer already, there are funds dedicated in the budget for filament, parts, and other needs we may not foresee currently. Beyond funds, staff members will be trained using the Makerbot certification program included in the bundle and any other applicable training from other sources.

Library Director's signature:  Date: *October 10, 2019*

Signature of agent, office, or board to whom the Director reports
 Date: *10/14/2019*

For PLAN use only:

Approved Not Approved

PLAN Executive Director