# Have It Your Way: Designing a Library Makerspace to Support Creativity and Innovation





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## Want to add a makerspace?



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#### What is a makerspace?

"Makerspaces are combinations of a community of users, a collection of tools, and a desire to create, exchange knowledge, and share what is created."

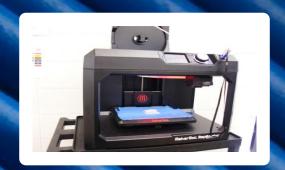
- John Burke, Makerspaces: A Practical Guide for Librarians

#### Why a makerspace?

- The maker movement has been in full force the past several years.
- Libraries are the perfect setting for makerspaces. They are used to share resources and knowledge, which is what a makerspace is created for as well.
- Although some stand alone makerspaces charge fees for use, many libraries do not, or have minimal charges for supplies.
- While both academic and public libraries can create makerspaces, they can be used in different ways and serve different purposes.

#### How we started

- Gathering materials was our first task
- Makerbot 3D printer
- 3Doodler pens
- Wood burning pens
- Button makers
- Craft materials (paint, markers, paper, hot glue guns, etc.)









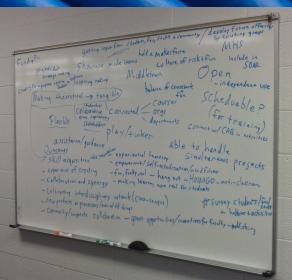
#### Our making timeline

- Summer 2014 bought Replicator 2 and button maker
- Fall 2014 established makerspace in open study area, purchased second Makerbot printer
- November 2014 offered first two workshops terrarium building and 3D printing
- Spring 2015 renamed makerspace: "TEC Lab"
- Fall 2015/Spring 2016 offered nine workshops
- Spring 2016 received laser cutter/engraver
- Fall 2016 opened official TEC Lab (with walls!)



#### How we decided what to offer

- The first materials were purchased by the library.
- Faculty and patrons also donate items on occasion.
- Extra workshop materials added to the makerspace.
- Faculty/staff makerspace planning group
- Faculty surveys
- Student suggestions



# Changing spaces





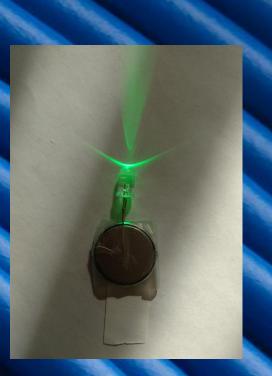




#### How much did it cost?







# What's free and what do we charge for?

| Item             | cost   |
|------------------|--|
| 3D printing      | \$1 per hour   |
| Button making    | Large - 25 cents each<br>Small- 15 cents each                |
| Regular printing | Black & white- 10 cents per page<br>Color- 25 cents per page |
| Lamination       | \$1.00 per foot  |
| Workshops        | Free   |
| Use of tools     | Free   |

# Running Workshops



### Why workshops?

There are many reasons workshops are beneficial for makerspaces

- As a social activity
- Opportunity for patrons with different backgrounds to come together.
- To let patrons see available makerspace tools
- To let those who are interested in makerspaces have an opportunity to use the room without having to create their own project.
- To get patrons into the library!

## Who runs workshops?

- Pay or ask a professional to volunteer some time to run a workshop
- Community members who have a special skill they can share
- You!





#### How we choose workshops

- Plan workshops around holidays/seasons
- Find project ideas on Pinterest, Instructables, etc.
- Crowdsource for ideas









#### How workshops are run

There are different ways to format a workshop:

- Designated class- Participants are expected to be there for the allotted time so they are able to follow along with the instructor.
- Drop in-The makerspace will be staffed with someone who can help participants during a specified time.
- RSVP or open- Workshops can either be RSVP or open to all interested. This is important when supplies are limited.



#### Past workshops

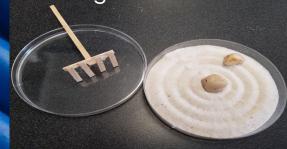
**LED Flowers** 



3D scanning and printing



Mini Zen gardens



Wood burning



3Doodling



# **Faculty Working Community**



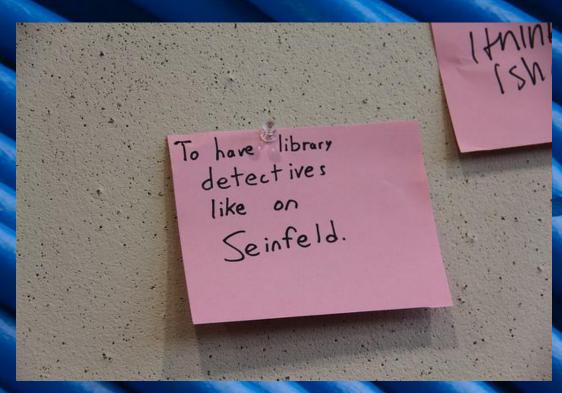
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# How can you get started?

Consider the following questions . . .



#### Is making part of your mission?



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#### Is your campus community interested?



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#### Does the library staff have interest/experience?



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#### Do you have space to store and use stuff?



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#### Do you have funding available?



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#### Will your administration support you?



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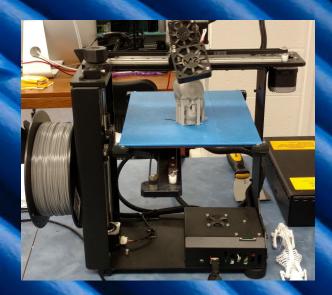
#### Can you find collaborative partnerships?



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## Let's get a makerspace started!

- 1. Get a group together (students, faculty, staff)
- Figure out your limits (budget, noise, etc.)
- 3. Buy some stuff and figure out how to use it
- 4. Make it available and market it
- 5. Hold some workshops/open making times
- 6. Grow as you are able
- 7. Keep making stuff and finding new connections



### Looking for inspiration?

- Two Academic Spaces That Are Transforming Student
  Learning
- What Colleges Can Gain By Adding Makerspaces to Their Libraries
- Behind the Scenes of a Makerspace
- <u>Library Makerspace Resources</u>
- Gardner Harvey Library TEC Lab
- askghl on Pinterest
- Instructables.com

# Questions?

https://goo.gl/Gi9L8D

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