

# Today's Skills for Tomorrow's Services

**What are These Things Doing in the  
Library?**

**How Makerspaces and Library of  
Things can fit in your library's  
collection and service.**

Al Peterson



**What are These Things Doing in the Library?  
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and service.**

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## **What are These Things Doing in the Library?**

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Libraries are cornerstones of informed citizenry and vibrant communities. Libraries have always been a place of discovery and lifelong learning.

Academic libraries are an important part of higher education institutions and usually serve two complementary purposes: to support the curriculum and to support faculty and student research.

Community college and tribal libraries can function as both research/student academic support hubs and community centers.



*North Dakota  
State Library*

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Libraries have always provided materials such as books, DVDs, Music CDs, and digital materials.

To support student and faculty research, Academic libraries purchase or license access to scholarly information resources in many formats. Increasingly, these proprietary resources are available electronically.

Makerspaces and Library of Things extend libraries' roles as centers of opportunity and learning.



## What are These Things Doing in the Library?

How Makerspaces and Library of Things can fit in your library's collection and service.

### Origin of Makerspaces.

The Do-It-Yourself movement started up in 1950s through the 1960s

- Returning G.I.s and growth of the suburbs
  - Unfinished spaces such as basements
  - Growth in the power tools industry
  - Station Wagons



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Do-It-Yourself Garages - A shop that rents space and equipment to people who were trying to fix their own cars.



Tom and Ray Magliozzi (not Cheech and Chong) opened a DIY garage, Hacker's Haven, in Cambridge MA in 1973.





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C-Base- Established in Berlin, Germany in 1995, as a hackerspace is considered one of the first Makerspaces.



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Membership-based, open-access, do-it-yourself (DIY) workshops and fabrication studios. Started in 2006, in San Mateo, CA by Jim Newton, Ridge McGhee and Robert Thomas. Jim Newton, who had been a science adviser to the TV show MythBusters and a College of San Mateo Robotics Professor.

At the height of their success there were 10 TechShops across the US, 4 international.





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### Equipment included

- Table saws, miter saws  
abrasive saws,
- Metal and wood lathers,  
milling equipment
- Welding equipment
- Sheet metal fabrication  
equipment
- 3D printer and CAD software
- Textile areas with sewing  
machines



TechShop filed for bankruptcy in 2017 and all US locations have since closed.

People who were members of TechShops went on to start their own versions of it, spurring on the Makerspace movement.



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### Examples of Makerspaces:

Hackerspaces- places where computer programmers shared knowledge and infrastructure.

\*\* "Hacking" refer to activities that involve making existing objects i.e. programs do something unexpected.

- Development of Freeware, open-source software, and open access blueprints.

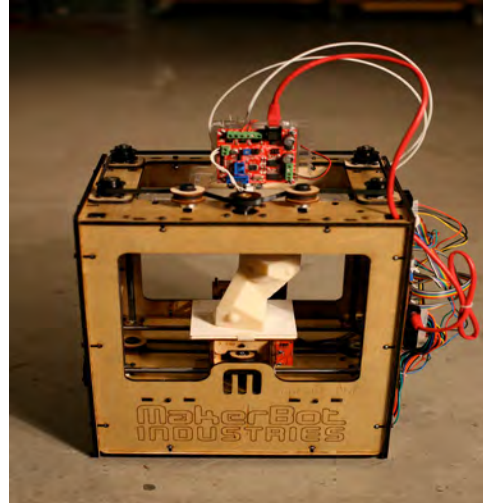


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Difference between European and American hackerspace is Americans worked on physical projects.

- Led to development of Makerbot Industries 3d Printer



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Fab Labs- (fabrication laboratory) small scale workshops

Focused on small scale manufacturing such as electronic components like circuit boards using digital fabrication tools for industry.

Sometimes partnered up with a particular industry or Technology education program.

Often participates in larger global networks and the sharing of ideas across borders.





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Makerspaces in Libraries offers a different type of service to patrons. A library makerspace allows patrons to experience technology or activities that they previously were not able to access

- The first public library makerspace was in 2010 at the Fayetteville Free Library in Fayetteville NY.
  - Mobile Makerspace consisting of a 3D printer, laser cutter, and sewing machine.



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## Examples of Academic Library Makerspaces

University of Maryland Library MakerSpace

<https://www.lib.umd.edu/visit/tech/makerspace>

Georgia Southern University FabLab

<https://www.georgiasouthern.edu/research/big/big-programs/fablab/>

Kent State University Tuscarawas Makerspace

<https://libguides.library.kent.edu/c.php?g=440118&p=2998898>

The University of Tennessee Knoxville Fab Lab

<https://archdesign.utk.edu/study/studios-learning-labs/fab-lab/>





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## Successful Library Makerspaces

### Physical location

- Space allocation for a makerspace
  - Before and after a potential makerspace
  - Offsite
- Storage
  - Shelves, Cupboards, Closets
  - Portable- Carts, Mobile Units



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## Successful Library Makerspaces

### Financial Factors

- Initial start up
- Enough budget for replacing the consumables
- Budget for expansion



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## Successful Library Makerspaces

### Environmental factors

- Enough electrical outlets
- Workspace and Tables
- Barrier between library patrons and makerspace
  - Ventilation
  - Noise Factor



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## Library of Things

Definition- a collection beyond traditional library materials.

Difference between a Library of Things and a Makerspace is that materials in a Library of things are meant to be checked out and used offsite.



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### Library of Things

#### History:

#### Toy Library- first established in 1935 in Los Angeles

- Westchester area of Los Angeles -Loan toys to low income children who's family could not afford toys.
- Started after a manager of a dime store who caught a couple of young boys trying to steal small toys.
- The children's principal told the probation officer that these were good kids put in a bad situation because of the depression.
- The store owner and others in the business community helped start the first toy library.
- "We cannot let children like these become delinquents just for a lack of toys."



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## Library of Things

### Toy Loan Program - Department of Public Social Services

- Currently available to people enrolled in DPSS services.
- Focus on educational and Bi-Lingual resources, but do have children's books and regular toys available
- Toy libraries and resources libraries grew with the expansion of Headstart in the 1970s.





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Tool Library- First known tool lending library was started at the Grosse Pointe Public Library in Grosse Pointe Michigan in 1943 by the local Rotary Club.

- Lack of access to tools during World War II.
- Borrow tools from basic hand tools and garden and yard equipment.



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## Library of Things

### Resurgence in the 1970s

- Columbus Oh, Berkeley CA, Seattle WA
- Give access to tools for those who can't afford them to make repairs on things they can't afford to replace or get fixed by someone else.

The term Library of Things was popularized in London 2014 when the Library of Things was established at the West Norwood Library.



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## **Example of Library of Things in Academic Libraries**

University of North Dakota Chester Fritz Library

<https://libguides.und.edu/libraryofthings/home>

University of Illinois Springfield: Brookens Library

<https://libguides.uis.edu/LoT/dorm>

University of Louisiana at Lafayette University Library

<https://louisiana.libguides.com/DupreLoT/introduction>

Houston Community College Libraries

<https://library.hccs.edu/things/home>







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Example of Library of Things: Kitchen Appliances Library



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Example of Library of Things: Cake Pans Library





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## Example of Library of Things: Outdoor Recreation Library



Fishing Equipment



Snowshoes and Skis



Outdoor Games

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## Example of Library of Things: Musical Instruments Library



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Example of Library of Things: E-readers, Tablets, Mobile Hotspots



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## Setting Up a Library of Things

Library Space- Where will you house the Library of Things

- Spare shelves
- Carts
- Cabinets
- Corner space

## Financial Considerations

- Start Up Costs
- Consumables – replacement costs
- Expansion





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### Setting Up a Library of Things

#### Insurance and legal issues

- Waiver statements

#### Loan policy

- Local use only (No ILL)
- Cleaning before return
- In Library Use or Offsite Use

#### Damage and replacement policy

- Consumables vs Damage
- Replacement



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## Discussion

Does anyone have a Makerspace or Library of Things in their library?

Are you considering adding a Makerspace or Library of Things?

How do you see Makerspaces and Library of Things in the future of academic libraries?



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# Questions?



# Contact

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# Thank You!



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