

Brunch at the Brain Box

With Sarah Connolly & Sheli
Telschow



Welcome

Itinerary

- Definitions and general information
- Birth of the Makerspace programming at Maplewood Public Library
- Teen vs. Adult programming
- Issues
- Equipment
- Success?
- Moving forward
- Marketing
- Open lab
- Community/Specific topics
- Interactive/Show and Tell
- Questions

What is a Makerspace?

- Makerspace
 - A physical space
 - A service
 - A philosophy, culture, way of life
 - Less about technology and more about relationships



What is Making?

- Making
 - The act of turning nothing into something
 - The ability to tackle and solve real world problems
 - The means of production within anyone's grasp

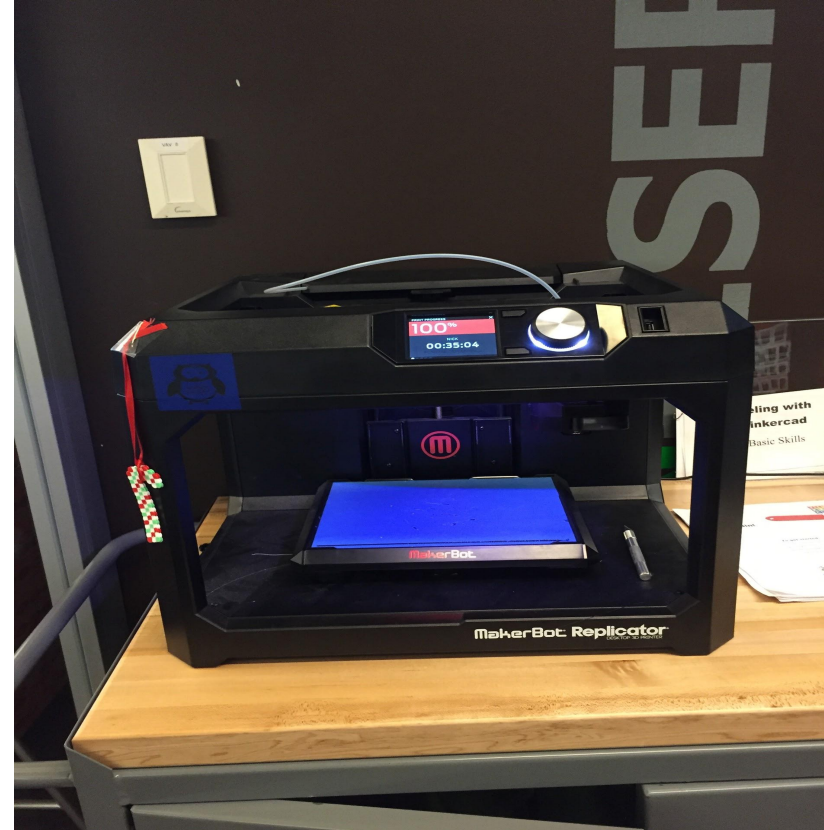


Why Makerspaces, Why now?

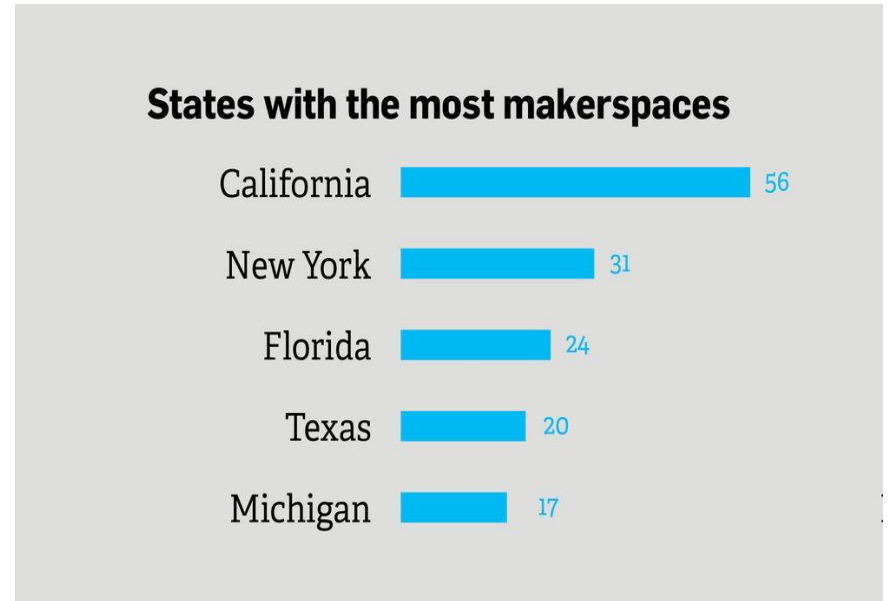
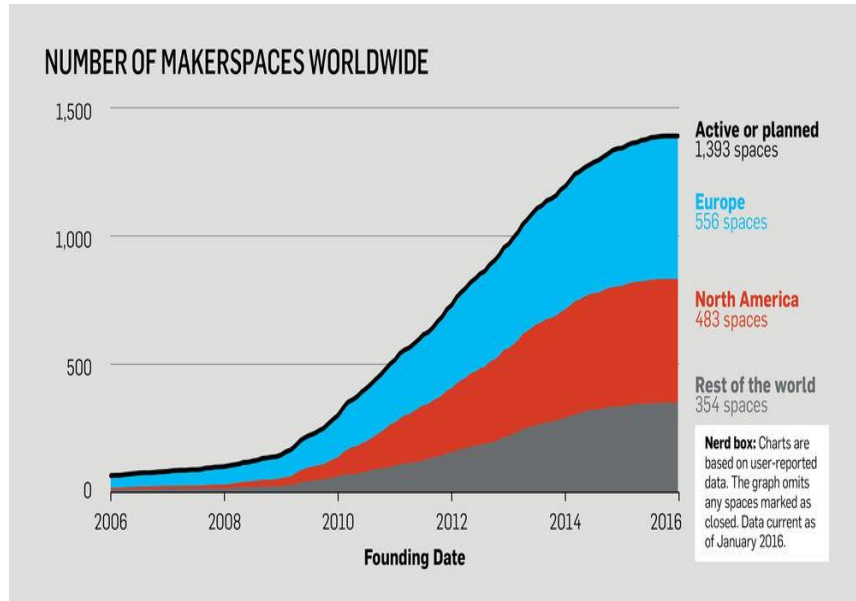
- Makerspace movement started around 2006 (Maker Media (Make: magazine, 2005) and first Maker Faire)
- Developed out of the DIY culture (much longer history)

Why Makerspaces, Why Now?

- National push from Obama, saying “every child, a maker. He discussed how it could help formal STEM education (2009)
- Equipment has become more affordable for normal consumers
 - 3D printers then: \$30, 000 - \$40,000 3D printers now (MakerBot): \$2,500



By the Numbers



THE BRAIN BOX

- Summer, 2015
- Initial focus on teens
- Adult interest
- Americorps: CTEP
- Initial programming ideas for adults

How Did We End Up Here? What's in a Name?

- MLIS program - St. Kate's
- Practicum
- Maplewood and Rosedale
- Why Brunch at the Brain Box?

SOUTH METRO

Libraries are adding 'maker spaces' to attract DIY crowd

With 3-D printers, software and DIY tools, libraries hope 'maker spaces' draw users.

By **Jessie Van Berkel** Star Tribune | OCTOBER 9, 2015 — 8:22PM



PHOTOS BY RICHARD TSONG-TAATARII • RTSONG-TAATARII@STARTRIBUNE.COM

AmeriCorps mentor Jana Greenslit, center, chatted with Ben Leach, 13; Nasir Jackson, 13, and Amier Day, 12, as they created tunes in GarageBand at the Maplewood Library. Maplewood is one of several metro-area libraries investing in...

More

Issues - Gender Gap and Diversity

Make Magazine Study

As a matter of fact, a review of Make Magazine from 2005 (the first issue) through 2013 revealed:

- 85% of people on the cover have been men
- 100% of the people on the cover have been white
- 87% of editorial staff are male; 100% white

Where Are the Women at in Makerspaces? Why the Lack of Diversity?

- Georgia Guthrie - Director of The Hactory in Philadelphia
 - Hacking the Gender Gap
 - Takeaways
- Research Articles (not nearly enough about diversity)
 - Maker movement initiatives are often driven by more affluent white males.
 - The maker movement is too often being associated with the tech stuff – 3D Pr
littleBits, Makey-Makeys – stuff that less affluent schools and community programs can afford.

The Space and its Equipment



3D Printers - Makerbot Replicator

- 5th Generation
- \$2,899
- Assisted build plate leveling

3D Printers - Makerbot Replicator 2

- Backup 3D printer
- \$1,999
- PLA vs. ABS

Silhouette Cameo 2

- Cuts paper, vinyl, fabric and other material
- Can also draw using a pen attachment instead of a blade
- \$299.99

Eggbot

- “Draws on round things”
- \$195
- Awesome in theory...

Sphero 2.0

- Newest addition
- Robotic Ball
- \$129.99

3D Modeling Software



Sketchup



Sculptris

Spreading the Word

- Quarterly Events Magazine
- RCL Website
- Maplewood Library
- Flyers at Reference Desk



The Makers

- Marketing worked!
- 4 - 8 patrons visit each week
- Mix of individual adults and families with children



What was Made

- 3D Printing
- Lots of stickers
- Tinkercad
- Crafts



Maker Profiles

Adult Male

- Artist

- 3D printing and design

Family with 9 year old Child

- Homeschool

- 3D printing and vinyl cutter

Children in an Adult Space

- Needed to adjust our vision of an adult space after first week
- Finding balance for both adults and families
- Children must be accompanied by an adult

What Worked Well

- 3D printing projects after hours
- Using the projects and materials from the Teen makerspace for kids
- Open Lab format
 - Individual projects
 - Teach each other skills
- Two 3D printers

What Didn't Work

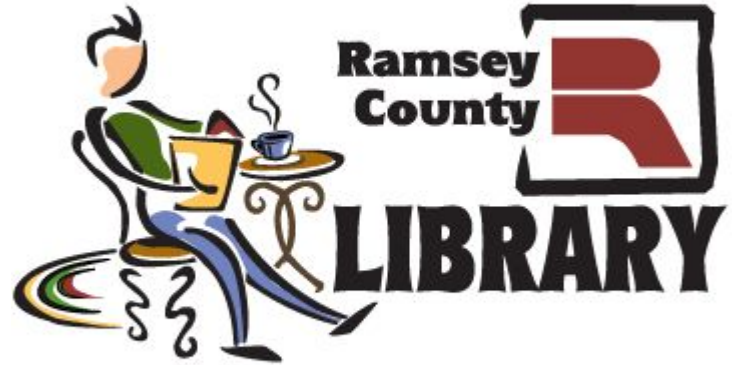
- Having themed projects each week
- The Space
- Brunch

Teen Makerspace vs. Adult Makerspace

- Different roles for Librarians and Volunteers
 - Teens need more supervision and direction
 - Adults need more tutoring
- Different types of projects
 - Teens have weekly projects and collaborate more with peers
 - Adults generally work independently on their own projects

Going Forward

- Makerspace at Roseville
- Grant for more equipment



Embrace Open Lab Format

- Encourage adults to teach each other
- Continue expanding adults' skills

Community Involvement

- Developing relationships with patrons
- Reaching out to local “maker” businesses

Marketing

- Going beyond the Events Calendar
- Special Maker Events and Classes



3D Printer

Silhouette

Cameo

BB8 - Sphero

Interactive fun

LED Throwies

Place battery in between LED prongs with the longer prong touching positive side of battery. LED should light up.

Tape together LED and battery.

Place magnet onto positive side of battery and tape together. THROW at something magnetic. Like a fridge. Or a whiteboard. Have Fun.

Questions?

Thank you!!

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