The Innovation Lab

Saint Paul Public Library
LibTech • March 15, 2017
The Tech Crew
We are an adult makerspace in Downtown Saint Paul funded by the Friends of the Saint Paul Public Library.

Find us on the 3rd floor!
To become a member you must: attend orientation, sign a member agreement, & get started with a reservation!

(Walk-ins welcome)
293 MEMBERS
82 PROGRAMS
42 APPOINTMENTS PER MONTH
Equipment & Software
Workstations

Digitization

DVD/VCR recorder combo
Video Capture adapter
Roxio Easy VHS to DVD and Cassette/LP to MP3 software
USB turntable
Blank CDs & DVDs for sale

Cutting

Silhouette Cameo 3 cutter
Cutting mat
Sketch pens
Vinyl, cardstock, transfer sheets

Laser

Universal VLS 3.50 50W laser
Fume exhaust filtration system
Engraving table
Cutting table
Rotary fixture
Supplies for sale
**Workstations**

**3D Printing**
- Afinia H800 3D printer
- ABS & PLA filament, various colors
- 1 Copper-infused PLA roll
- Various tools

**Tech Suite**
- 16 Skype-enabled Thinkpads
- 1 Macbook
- 9 Adobe Creative Cloud licenses
- 20 Sony headphones
- 1 Canon EOS 70D DLSR camera

**Sewing**
- 1 Brother PC420 PRW computerized sewing machine
- 4 Singer machines
- Patterns, fabric and notions
- Jewelry supplies
Workstations

Yarn Crafts

- Crochet hooks
- Knitting needles
- Yarn various types & colors
- Patterns

Recording Studio

- Editing suite w/isolation booth
- iMac w/Garageband & ProTools 12
- Yeti & AKG microphones
- Studio headphones
- Focusrite Scarlett audio interface
- MDI keyboard
- Moog Synthesizer

Classroom

- Space for orientations, workshops, online learning, trainings & events
- 2 private study rooms
What are members using?

Rose Oyamot  
Singer, Songwriter, Librarian

Jaime Thompson  
STEM Product Developer

Avid ProTools 12.3

Universal VLS 3.5
3D Printing

3D printed projects. *From left to right:* Plain, white ABS hedgehogs, with acrylic painted smaller model; White ABS magnetic rotating disk for a camera; Black and white ABS chess pieces with laser cut and painted jigsaw chessboard; Laser focus tool and red ABS copy; Red ABS dinosaur painted silver; Custom-designed, green PLA blaster prop for Star Wars-themed costume.
Laser engraved and cut projects. From left to right: Signage on reclaimed wood; Basswood lampshade; Personalized wine glasses; Photograph on pumpkin; Painted wood and acrylic mobile; Engraved coasters on cork; Black, acrylic hydroponic lettuce-growing adapter.
Sewing

Machine and hand-sewn projects. *From left to right:* Hand-sewn stuffed horse with felt and yarn; Canvas tote bag with lace and attachment; Tops and skirts from vintage patterns; Machine-sewn baby swaddle wrap; Blue, felt neck warmer; Black, lined spats; Hand-sewn ornaments.
Crafts
Yarn, Paper & more

Crafts, various materials. From left to right: Shadow box made from cardstock cut on Silhouette cutter, framed, and illuminated with LED bulb; Crocheted and stuffed sea forms; Hand-made paper lanterns; Mask made from textured fabrics and paper; Mini top hat decorated with laser-cut felt cameo and other supplies; Laser-cut card-stock and fabric ornaments;
Classes & Programs
Open to all

Maker activities From left to right: Crochet social; Eco-friendly card making; Mask and costume making; Machine sewing class, 3D Printing class; Paper lantern making; Hand sewing ornaments; ProTools class.
Top Programs
May 2016–Feb 2017
How did we get started?
Timeline of Maker Activities at SPPL

2012
Research on HOMAGO Visits to Makerspaces
Createch begins

2013
Tinker Tuesdays begins

2015-2016
WIN Center Team formed
Class schedule created
Policies drafted
Innovation Lab Meetup created
"Lab After Dark" 2nd Tinker Tuesday location

2016
4th Maker Fest

2017
Innovation Lab Grand Opening
Innovation Lab Advisory Board formed

Where we started
Createch vs Lab

Homago

Structured Learning
Be specific!
How we’ve grown
The Team

George Latimer Central Library Tech Crew

Khun Myo
Work-study student

Aamino Hirmoge
Work-study student

Richa Goel
Star volunteer; Teaches laser, 3D printing, crochet, digitization, computer skills, works special events & more

Carolyn Soler
Sewing volunteer

Z Akhmetova
Sewing & crafting volunteer

Lane Rapp
Social Media Volunteer
Who are we serving?
All members vs Active members (by zipcode)
Market Research

Patron Profiles

TOP MOSAIC PROFILES

George Latimer Central Library

- Urban Edge: 21%
- Striving Single Scene: 19%
- Full Pockets Empty Nests: 13%
- Senior Discounts: 5%
- Status Seeking Singles: 5%
- Tough Times: 4%

Quantity
Population & Membership by Race

**Population by Race/Ethnicity**
- Saint Paul as a whole, 2015
- George Latimer Central Library, 2015

**Innovation Lab Members by Race/Ethnicity**
- Total Members
- Active Members Jan - Feb 2017
Membership by Gender & Age

Average Age = 45
Who uses the Innovation Lab?
Rachel Kane
SureLockPack.com

Rachel uses the 3D printer to test designs for a startup packaging company. 3D printing at cost saves her hundreds of dollars per prototype.
Grai uses the recording studio to produce music in the battle rap genre. He has been a positive model for other aspiring members.

“I do things that your brain’s never thought of yo... same on the audio” -from *Who Put On (Twin Cities)*
“Specimens is the first of its kind: a book created with a new bio-paper medium made entirely from bacterial cellulose. Its pages were once alive.”

Paper artist Eric used the laser cutter for a project funded with a Jerome Foundation grant. His work was then exhibited at the Minnesota Center for Book Arts.
How we connect
We encourage members to take ownership of the space and invite all to participate in the Lab Advisory Board.
We connect with members on Meetup, Facebook, Flicker & Instagram.

#madeitatSPPL
We solicit and share ideas through a member email list & feature members in a bi-monthly newsletter.
Partnerships & Collaboration
• Putting together a dedicated team
• Orientations/Fast-track/1-on-1
• Building relationships with members. We know who they are, their interests & work
• Wishlist and in-kind donations from members
• Open to re-evaluating and re-tooling

• Still working on connecting employers to skilled members
• Second 3D printer
• Extend to other branches
• Circulating maker kits
• Online orientation with quiz