The Innovation Lab
Saint Paul Public Library
LibTech • March 15, 2017
Xenia
Amanda
Andrea

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)

orientation days
2nd & 4th Mon., 5:30-6:30 PM
2nd Saturdays, 11 AM-12:30 PM
Attend orientation to become a member and gain access to equipment, software & classes.

membership
• Must be at least 18 years old.
• Have an active Saint Paul Public Library card with less than $10 in outstanding fees.
• Attend an orientation to see demos, learn about safety, usage equipment, or schedule one-on-one training.

equipment
• Skype-enabled laptops
• Canon EOS T700 DSLR camera
• Affinia H800 3D Printer
• Studio Headphones
• Avid Protocol 12.3
• Addie Creative Cloud
• ULS Laser Engraver/Cutter
• Roxio Easy UP!Cassette to MPU software
• VHS to DVD Converter
• Sewing machines

(Innovation Lab Member Agreement)
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 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?
Where we started
Createch vs Lab

Homago

Structured Learning
Be specific!
How we’ve grown

Staffing Timeline 2016

- Library re-opens
- Grand opening of the Nicholson Workforce & Innovation Center
- First regular volunteer begins
- First work-study student starts

- Jan 28
- Feb 5
- Mar 12
- Apr 4
- Apr 8
- June 13
- Nov 5

- Central Tech Crew begins weekly staff trainings
- Assistant Manager hired
- First Advisory Board Meeting
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
  - White: 58%
  - Black: 16%
  - Asian: 17%
  - Hispanic: 10%
  - American Indian: 1%
  - Other: 4%

- George Latimer Central Library, 2015
  - White: 78%
  - Black: 13%
  - Asian: 4%
  - Hispanic: 5%
  - American Indian: 1%
  - Other: 4%

**INNOVATION LAB MEMBERS BY RACE/ETHNICITY**

- Total Members
  - White: 71%
  - Black: 10%
  - Asian: 7.5%
  - Hispanic: 2%
  - American Indian: .5%
  - Other: 1%

- Active Members Jan - Feb 2017
  - White: 61%
  - Black: 16.5%
  - Asian: 7%
  - Hispanic: 8%
  - American Indian: 1.5%
  - Other: 3%
Membership by Gender & Age

**INNOVATION LAB MEMBERS BY GENDER**
Active Members Jan - Feb 2017

- **Male**: 57%
- **Female**: 38%
- **Unknown**: 5%

**INNOVATION LAB MEMBERS BY AGE**
Active Members Jan - Feb 2017

- **18-30**: 38%
- **31-43**: 34%
- **45-56**: 16%
- **57-69**: 7%
- **70-82**: 5%

**Average Age = 45**
Who uses the Innovation Lab?
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.”

Eric Gjerde
EricGjerde.com

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.
We solicit and share ideas through a member email list & feature members in a bi-monthly newsletter.
Partnerships & Collaboration

MCNALLY SMITH COLLEGE OF MUSIC

CATHOLIC CHARITIES
of St. Paul and Minneapolis

JAMES J. HILL CENTER
1921

SPRINGBOARD for the arts

WORK of ART
BUSINESS SKILLS FOR ARTISTS

THE FRIENDS OF THE SAINT PAUL PUBLIC LIBRARY

HREEO

SAINT PAUL

CENTURY COLLEGE
• 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
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