From Zero to Makerspace
Computers in Libraries Conference 2016
Presenters: Mike Wozniak and Angel Truesdale
Charlotte Mecklenburg Library

Brainstorming Questions
1. What is or should be the role of the library today?
2. What kinds of things do people want to make and do in this space?
3. How might we engage 19-35 year olds?
4. What ideas might we consider for programming in the makerspace?
5. What are some ways staff might find assistance in running the space (local maker community)?
6. How should the space look and feel?
7. How might we create engagement with the community and promote this new library offering?

*Create a “parking lot” or random post-it note area for innovations and/or off the wall comments.

Concept Statement
As a way to entice new users into the library and expand the library’s reach, we are creating a public “makerspace” with Main Library…a place where anyone can design, prototype, build their ideas for products and crafts. We envision the space as a vibrant, collaborative, and creatively messy environment—unlike the typical library. Equipment within this Makerspace may include 3D CAD workstations, 3D printers for prototypes, laser cutters/engravers, CNC routers, worktables and tools. Library staff will assist and instruct users on the equipment. Currently there is no plan to charge for use of this equipment except the cost of prototype materials. Over time the space may grow additional functions like video and music production, app development, screen printing, weaving and group presentation space.

Goals of the Makerspace in the Library
1. Create a place in uptown Charlotte where anyone can “make your ideas happen”.
2. Generate new energy around main library.
3. Create a cool, creative, engaging environment that draws new users to the library, especially 19 to 35 year olds but also those families that want to “Make” and learn together.
4. Help promote the many other services the library offers today.
5. Help revise the public’s perception and the positioning of the library.
6. Help support the growing number of makers within Charlotte and Mecklenburg County.
Idea Box Team Requirements

- Time commitment (minimum of 16 hours per month spent on Idea Box)
  - Minimum of 8 hours per month staffing Idea Box during open hours including 1 evening a month
  - Minimum of 8 hours outside Idea Box open hours developing/planning programs and training on equipment and software
- Attend ⅔ of the monthly Full Staff Meetings (must attend at least 8 of 12 meetings)
- Active member of 1 of the 4 Programming Subteams
  - 3D Programs (software, 3D printing)
  - 2D Programs (software, laser cutter/engraver, vinyl cutter)
  - Arts & Design Programs (fiber arts, book recycling, other literacy activities)
  - Technology Programs (editing, coding, circuitry)
- Be able to walk the public/staff through the basic use of 3D printers, Laser Cutter/Engraver, Vinyl Cutter, 3D CAD software, 2D vector drawing software within 6 months of joining the team
  - Develop and maintain software/hardware manuals pertaining to Idea Box usage
- Programs: Lead 1 program a month
  - Develop 3 self-directed activities per calendar year
- Deliver a completed Idea Box Monthly Report to Team Leads by the 5th day of the next month

*Each team member was required to sign and have their direct supervisor sign that they agree to the requirements

List of some public programs

- 3D Printing and Modeling
  - 3D Printing 101
  - Cookie Cutter 3D Design
  - 3D Modeling Basics with Autodesk
  - 3D Modeling Basics with Tinkercad
  - 3D Modeling Intermediate with 123D Design
  - 3D Modeling and Design Techniques with Inkscape
- Laser Cutting and Engraving/Inskcape/Vinyl Cutter
  - Laser your Pic (Inkscape and laser cutting/engraving)
  - Paper Cut Shadow Boxes (laser cut materials and paper)
  - Alternative Printmaking (Vinyl Cutter and Laser Cutter)
- Creative and Fiber Arts
  - Accessorize your Life
  - Upcycled Art
  - Yarn-works:
    - Knitting Level I, Level II, Level III
  - Introduction to Sewing
  - Knitting Machine basics
- Advanced Technologies and Digital Services
  - HTML Basics and CSS3
  - Mobile Technology: Devices and Features
  - Mobile Technology: Library Apps

mwozniak@cmlibrary.org | atruesdale@cmlibrary.org