

# Fall 2018 Makerspace Proposal

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The makerspace committee met a total of 5 times to discuss the following planning pieces and to form recommendations as per the terms of reference:

- A vision for the Makerspace (rationale, focus, purpose, etc.)
- A list of recommended furniture and equipment, with costing
- A service plan outlining recommended staffing, facility use, and programmes
- An implementation plan with tasks and timelines

## Research Methods

Many preparatory research methods were used for informing decision making and recommendations. These include:

- Landscape review including articles and library experiences from across North America
- Makerspace tour of Calgary spaces with Q & A of experiences, recommendations and advice
- Makerspace webinar
- Vendor exhibits at Public Library Association conference
- APL program statistics and evaluation review
- Review of Airdrie climate for Making, including school involvement and local clubs review
- Individual group member research into different themes and associated equipment required

## Makerspace Vision

The team came to the following vision for the makerspace:

**“The APL makerspace is an innovative community hub providing opportunities to create, engage, and discover using existing and emerging technologies to promote lifelong learning”. – APL Makerspace Committee’s revised vision (February 16, 2018)**

## Themes and equipment required

After much discussion of the types of things makerspaces could provide to a Community, and keeping in mind the management team’s directive to make this makerspace technology-based, the committee came up with the following themes:

- Media conversion (ie. converting VHS and DVD to video files, and cassettes and CDs to MP3)
- 3D printing and fabrication
- Coding/robotics
- Photo/video editing
- Sound booth (music/audio recording)

- Augmented Reality/Virtual Reality

We currently own the following equipment that could be used in the Makerspace:

- 3D printer
- Dash robot
- Mindstorm Robotics (heavily used – needs restock)
- Mobile computer lab (6 computers)
- Little Bits (heavily used – needs restock)
- Snap circuits (heavily used – needs restock)
- Virtual Reality googles (cardboard google) 1 pair, maybe more
- Bamboo digital pens
- iPads (6)

In order to facilitate these areas of focus, the attached Appendix A outlines the equipment, with costing, that needs to be purchased. Some equipment is already owned.

## Furniture and space required

When talking about furniture, the Makerspace Committee was working on the principle that all furniture was functional, flexible, or storage-based. We have tried to make use of what APL already owns to make the space cost effective. We have the following needs (blue items we already have; red items we need to buy):

- 1) Space for two high-end computers with an abundance of room between for needed peripherals.  
Removal of dividers between computers.
- 2) Material display/brochure/information AND a white board and bulletin board for programming and customer engagement
- 3) Lego wall for customer engagement (needs to be confirmed with Programming and Customer Engagement Manager)
- 4) Mobile tables with built-in electrical/data for in middle of the Den for programs and work space
- 5) A desk for 3D printing fabrication / quiet study
- 6) A vise clamp to be clamped onto the above desk for holding projects during fabrication
- 7) A space for the iMac and space around it for equipment associated with the sound booth
- 8) A locking storage cabinet, ideally with bright attention grabbing signage. Ideally we would like this cabinet to have clear plastic doors for visibility of the makerspace.
- 9) iPad Charging dock relocated to Den
- 10) 3D printer relocated to Den (there were mixed feelings about this on the committee)
- 11) Locking Mobile makerspace cart

See Appendix B for details and costing

See Appendix C for a potential space layout plan

## Service plan for space (services and programs)

### Space and Services

It was noted from the beginning that to designate the room for the sole purpose of a makerspace would not be ideal as this activity was thought to only take place during certain times of the day. It is highly recommended that the space be flexible and serve three purposes:

- Quiet study Mon-Fri 9am-3:30pm and Sundays
- Programming Monday, Wednesday, Friday, after 3:30pm
- Open drop-in maker times Saturday for adults and when programming is not occurring Monday, Wednesday, and Friday after 3:30pm

### Staffing

The makerspace should be staffed at all times by the digital literacy programmer. Current staffing levels can accommodate the following recommended schedule:

- Monday, 3:30-7:30pm
- Wednesday, 3:30-7:30pm
- Friday, 3:30-7:30pm
- Saturday, 12:30-4:30pm

### Programming

We suggest that we pair themes together and do eight week concentrations on certain categories, tied in with programming. This is because we cannot run everything all at once (ie. Media conversion and Augmented Reality/Virtual Reality). This also assumes the principle of quality over quantity.

The following paired categories are suggested for both programming concentrations and open drop-in times:

- Fall 1: Coding/robotics and media conversion
- Fall 2: Augmented reality/virtual reality and sound booth
- Winter 1: Photo/video editing and 3D printing

We can still keep running our 3D printing service at all times, and the Digital Literacy Programmer can assist patrons with their project.

## Implementation plan (timelines and assignments)

See Appendix D