Conversation Starter:
Libraries are a Space to Create: Marketing 3D Printing in a Small College Library
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Questions to Consider:

Physical Location
- What is the location of the 3D printer or makerspace in the library? Is it in a high visibility area or out of the way?
- Do potential users feel comfortable approaching the space? If not, how might you make the physical location more inviting?
- Is there clear, specific signage identifying the space or directing users to the space?
- Are components of the maker space portable? Can transport the 3D printer or other maker space equipment to a larger space in the library or to a classroom?

Website
- On your website, where is the information about 3D printing / makerspace placed?
- Are there multiple access points on your library homepage and LibGuides?
- Are there additional ways to market using image carousel / social media feeds, etc.?

Advertising
- What types of print media will be effective? Flyers, brochures, school newspaper?
- How are you using social media, and who is it reaching? Can you use to highlight regular services, special events, promotions, contests?
- Are there ways to tie in maker space services with other library events/student orientations?
- Are there different ways to marketing depending on whether you are introducing services vs. ongoing marketing of services?
- What are ways to help develop a collaborative maker community with students? With faculty?

Potential issues limiting response from students/faculty:
- If physical proximity of the 3D printer is an issue, how do you combat that?
- Is your library charging for 3D printing? If so, is the cost a deciding factor in whether students utilize the services?
- Does the complexity/high learning curve for some of the associated software limit user interest?
- Are faculty willing to put in the time to incorporate 3D printing and/or makerspace projects into their courses?
- How effective are advertising/promotions in sustaining long term interest?
**Recommended Reading:**

Excellent article by Lutes (2016) on how Texas A & M University marketed their new Virtual Learning Lab. Though it discusses a much more extensive facility than you would typically find in a small college library, it contains many great ideas/strategies for marketing to students and faculty that could translate well to a small college 3D printing services or maker space. Lutes describes how they used a multi-pronged marketing campaign to open the lab, with different approaches for faculty and students; in addition to an open house and tech demo for students and faculty, they had VIP tours for program chairs, a faculty only reception with personal tours, and additional sessions for faculty/staff featuring hands on training. Takeaways from Lutes include: social media and digital marketing are effective for students, personalized invitations and face to face interactions are important connecting with faculty, and long term follow up is very important.


**What we are looking at for the future:**

- More prominent display of 3D printed items
- Carousel/pictures on the website
- Partner with student activities
- Partner with communications
- IT club/other clubs
- Design contest
- Gearing up for renewed faculty contact/interactions - focus on the education program, scientific equipment
- Interest is building with faculty for VR experiences/use of merge cube in Augmented Reality to view 3D images of historical objects
NOTES:

Wide range of attendees, from smaller colleges to k-12 schools, with about half in the planning stages of getting a 3D printer/makerspace or having 3D printing elsewhere on campus and/or administered by IT or other department.

Physical Location
Physical location in your library can effect awareness of services and/or perceived.

At NC Wesleyan, the room for housing the 3D printer and scanner is located behind the circulation desk. It is an area that typically students do not go, they wait to be invited. This makes it less likely to get walk-in business.

Some libraries house the 3D printer in very visible locations, right at reference desk.

If the location is in a less visited part of library, have to rely more on promotions, website, social media.

Portability of the 3D printer (workbench with wheels) to bring the 3D printer out more into the library has been very helpful at NC Wesleyan. Move printer out to main floor for orientations, into classroom space.

Questions about reliability and maintenance of 3D printers. Printers without self-leveling print beds (often the less expensive models) require more prep time before each print job and can fail more frequently.

Budgetary considerations will determine what printer a library can purchase, consult other libraries before buying for recommendations and/or models to avoid.

Operation and maintenance of 3D printing requires training of staff and as well as staff time for print jobs.

Locating the 3D printer by the reference or circulation desks can allow staff to multi-task.

Website
Prominence on the library website can help 3D printing, but have to balance with other services.

Level of control over website varies from library to library.

At NCWC, recently upgraded from a smaller quick link to a more prominent box as part of redesign of the landing page.
At academic library, LibGuide for the makerspace with services and links to free software, model repositories like Thingiverse, etc.; can use links within course LibGuides that highlight the makerspace services and link to the makerspace LibGuide.

**Advertising**

Brochures – some users still prefer printed brochure.

Flyers, table cards - good for promoting regular services and special promotions.

Social media can be used to advertise regular services, promotional events, contests and contest winners, short clips of the printer in action, etc.

When NCWC obtained the 3D printer, introduced services by printing in the main reading room of the library, with extensive social media, short video distributed on social media channels and email blasts, followed by personal interactions with faculty promoting the service.

Giveaways – small 3D printed items as giveaways, advertising for the 3D printing services.

Be mindful of print times and material use for giveaways, choose carefully.

At NCWC new student orientations, live demo of 3D printing with giveaways of 3D key chains, cellphone stands, bookmarks (including a gnome, the library mascot) - most consistently popular Wesleyan "W" keychain.

Tie-ins with other library events - 3D print objects as game pieces, clues for contests, create coupons for free 3D printing.

Guess what's printing contest at NCWC – placed 3D printer right at the library entrance - students had to guess what was being printed, mark times on the guess, first correct guess wins the object. Ran for 5 days with a different item each day, posted updates on the printing progress on social media and posted winners on twitter. Good level of participation form students. Need to pick objects that will be recognizable as the print progresses (i.e. Statue of Liberty).

**Faculty collaboration**

Target programs with likely need for 3D printing - lab equipment for science classes, education /teacher training programs (3D printing in K-12), historical artifacts for history /religion courses.

Test students in math classes (K-12) by having them create geometric shapes on printer.
Work with faculty to conducted orientations for entire classes.

**Potential reasons/Issues limiting response from students/faculty:**

Cost for print jobs. Wide range of costs at various libraries/schools, some provide the service free, some are based on weight of material printed, time to print, or combination of time and material cost.

At NCWC there is a time & material cost structure, not sure if the cost is this is a deciding factor for most students.

If there is a cost, see if the school's technology fee can cover 3D printing.

Learning curve - the steep learning curve for some of the 3D modeling software can be a deterrent.

Length of time it takes to 3D print - for those who don't know how long it takes - the hour/hours of print time could be a deterrent.

For faculty - takes time to work new things into curriculum, then once you have something that works, hard to change.

Keeping up to date software in your makerspace, sometimes it takes time to get new software from IT.

Effectiveness of promotions/advertising. Promotions/special events can generate interest, but must work to keep that interest sustained.

Elevator pitch - when seeking funding for a 3D printer or when seeking buy in from faculty/students/users they may not understand why they should invest time and effort into this technology. Develop a good elevator pitch to sell administration on creating the makerspace and good elevator pitch for users. Design thinking, prototyping, developing skills for a rising technology.