Idaho Libraries Creating a Maker Culture

ERICA COMPTON AND SUE WALKER

In early 2013, the Idaho Commission for Libraries (ICfL) developed the "Make It at the Library" pilot project to implement a maker culture in public libraries across the state. The project was funded in part by a grant from the US Institute of Museum and Library Services and a grant from the Micron Foundation.

We worked with five libraries to embrace "making" and push the boundaries of programming with tweens and teens. Library staff demonstrated innovation, creativity, and drive. Through their maker programs, the libraries served 3,585 teens/tweens and 1,120 families, and engaged 4,650 people through outreach events. As they nurtured a maker culture in their communities, the five libraries created eighteen partnerships and hosted sixty-six programs with these partners.

These successes made us even more excited to open up the opportunity to libraries for a second year. In year two, we plan to share best practices, replicate the project with new libraries, use pilot library staff as mentors, and continue to expand programming in the pilot libraries. Libraries from the first year of the project have committed one new staff member to attend trainings with the six new libraries selected from eleven applicants to participate in the second year of the project.

Each of the new libraries has committed two staff members to participate in the yearlong project. Training workshops focused on developing a foundational understanding of the maker culture and the design process, along with exploration of construction, simple machines, engineering, and architecture, as well as robotics, 3-D design, 3-D printing, and e-textiles.



3-D print of a double helix.

Changes in Library Use

Patrons are coming in more frequently, meeting with others, staying longer, jumping into more hands-on activities, delving into exploration, teaching others what they've learned, collaborating on projects, using problem-solving skills, working together as families, and showing increased interest in technology and STEAM-based (science, technology, engineering, arts, mathematics) activities.

People routinely bring in projects they are working on, from remote-controlled cars they are modifying to Arduinocontrolled devices they have created and use the library's 3-D printer and Fischertechnik engineering kits to design and create. Tweens/teens are more engaged, use the library as a place to explore and work on longer-term projects, take ownership in the maker area, and take pride in their projects and the challenges they've overcome. Many makers are truly connecting with the library for the first time, and additional community members are volunteering to help.



Erica Compton (left) and Sue Walker are project coordinators with the Idaho Commission for Libraries.

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Hands-on work with tools is key.

Overall, there is an increased awareness of all the library has to offer. The view of the library as a "depository for information" is now one of a "meeting and learning place," a "place where creation happens."

Libraries also report an increased sense of community. One librarian said, "One day, we had patrons of all ages creating snowflakes out of cupcake liners to hang on our Christmas tree. I never thought such a simple thing could bring the community together like it did."

Changes in Patronage

Libraries have also seen an increase and shift in who is using the library—specifically, patrons of a variety of ages, from students to patrons fifty and older; older children and high school-age users participating more in library programs and the maker events; and homeschoolers coming into the library to participate in programs, use the library as a resource, and benefit from the social aspect of the Make It space.

One participating librarian said, "Our public in general seems to be look-

ing toward us more and more as a resource for technology. Specifically because of the 3-D printer, I've heard many business people consult us when they are looking to make technology purchases of their own."

Community/Patron Benefits

The project has given libraries the opportunity to create a culture and a place that offers a broadened experience. Whole families engage in activities, strengthening family bonds, which

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Extensive training is foundational to our project.

in turn can keep parents involved in their kids' lives and interests over the long term, thus increasing their likelihood to finish school.

Library programming is becoming more informal (stealth programming), with an emphasis on group exploration. Instead of just instructing patrons, libraries are creating an environment where patrons can explore and discover independently as well as collaboratively.

> Staff members have become more confident and excited about science and technology, and about sharing what they have learned. Staff is also becoming more comfortable with the idea that they can run a maker program even though they don't know all of the answers.

> The maker tools have also increased awareness and interest in the community. Patrons see the libraries as places that offer resources they can't get anywhere else, both because of the actual materials (robot kits, engineering kits, 3-D printer) and how libraries approach their maker activities. With the 3-D printer at one community/school library, students in drafting classes are

learning how to print their own designs.

ICfL staff look forward to watching the learning, the making, and the creativity happen in year two as the pilot libraries expand and enhance their maker programs and the new libraries begin offering new programs to their communities. \mathcal{S}

This is a condensed version of an article that appeared in the spring 2014 Idaho Librarian. For more information on Idaho libraries' programs, visit http://libraries.idaho.gov/make -it-idaho.