2020

MakerLab Annual Report 2020

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OUR MISSION

The Albertsons Library MakerLab works to inspire transdisciplinary research by connecting communities to emerging technologies at Boise State University.

NEW FACULTY AND STAFF

Yitzy Paul
Instruction Librarian and Assistant Professor

Marisa Hadley
Instruction Assistant

The MakerLab and the Emerging Technology and Experiential Learning Unit team serves the Boise State University students, staff, and faculty. We offer access to emerging technologies, coaching on emerging technologies, and formal instruction on emerging technologies. In 2020, we welcomed a faculty member, a part-time staff member, and two new student assistants. We welcomed Associate Professor Yitzhak "Yitzy" Paul who joined us as a faculty member in August 2020. Marisa Hadley joined us as a part-time instruction assistant also in August 2020. This is in addition to our existing team of Cali Glasgow, Amanda Baschnagel, and Amy Vecchione. This report was written by Cali Glasgow, Amanda Baschnagel, Yitzhak Paul, and Amy Vecchione.

PROJECTS

The MakerLab serves the campus community - all students, staff, and faculty. These projects showcase what our community was able to achieve in 2020 utilizing the MakerLab resources, expertise, and service.

Collaboration with the Innovation Studio to print over 1000 face shields

Dr. Julia Heath’s research team further develop Kestrel nest monitors

3D Printing typewriter guides for the blind and visually impaired

Jeffery Johnson and students create volcanology sensors with 3D printed cases

A partnership with St. Lukes to create universal cuffs for disabled individuals

Bookmarks designed to honor longstanding and retiring Boise State faculty
VIRTUAL CONSULTATIONS

These consultations are projects, and substantial in nature, regarding complex information questions. This counts any time we met with someone one on one for an hour meeting and worked with them to create the project they had in mind. This number reflects from the time we implemented a new system from mid-August until the end of December. This count does not reflect the countless other emails and meetings we have regarding other maker questions.

PUBLICATIONS

"As library buildings close, library workers are finding ways to help communities to mitigate the COVID-19 crisis. Librarians have maker skills as well as access to maker technologies. Maker skills include designing prototypes, products, and services using emerging technologies, such as 3D printers. During the COVID crisis we are experiencing a disrupted supply chain. This disruption, when combined with an increase in local needs, result in a problem that library workers can solve."

MAKE IT VIP

THE PEOPLE

A team of students is working to develop a prosthetic with myosensors. This work is iterative, taking place with several students in design teams. This course met in spring 2020, and made progress developing a prosthetic device.

THE PROJECT

This collaborative work involves design thinking processes. Teams create designs based on needs, then work to generate prototypes to meet the users' needs. Along the way, they revise the prototype, testing it with multiple stakeholders, leading to a final result.
NEW EQUIPMENT

LASER CUTTER
The Epilog Zing can raster and vector on multiple surfaces. This laser cutter can easily cut into wood and acrylic, and can engrave on glass, coated metals, and many other surfaces. The addition of this tool can assist MakerLab users in creating fast prototypes.

WACOM TABLET
Illustrators and designers can use this drawing tool to design illustrations for graphic design, websites, and for rastering on the laser cutter.

OCULUS QUEST
The Oculus Quest is a virtual reality headset that provides interactive and fully immersive experiences without the need for a computer. Come to the MakerLab to try it out!

WORKSHOPS & EVENTS

SPRING
The MakerLab workshops transitioned from a busy, in-person space to offering remote workshops online. These included a 3D printer group that met to discuss ongoing issues with 3D printing to Pokemon professor workshops.

FALL
Workshops during the Fall 2020 semester included Designing 3D Pumpkin Carving, and Shadow Puppetry with Jaime Nebeker and Chad Shohet.
CLASSROOM INSTRUCTION

Despite the ongoing pandemic the MakerLab continued its work to help classes learn about and utilize the MakerLab to enrich the classroom. This included specialized tours with the Health Professions Living Learning Community, assisting RADSCI 313 Fluoroscopic and Contrast Media Exams create anatomical models, and much more!

FUNDRAISING

BRONCO GIVING DAY

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C-TAP, the Engineering Innovation Studio, the College of Engineering along with the Library's MakerLab, worked to develop and design a face shield with hospitals and health care workers around the state of Idaho. The Library worked together with a large number of community members from around the state to 3D print these for health care workers fighting the pandemic. These face shields were used in Idaho, and also 200 were donated to Gorongosa National Park.

GOALS 2021

- Implement online tutorial system to learn to use MakerLab equipment and software
- Select and use online scheduling software
- Reopen for in-person use, including a combination of remote and in-person training
- Assess the MakerLab impact on the community

ALBERTSONS LIBRARY MAKERLAB

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