2019

MakerLab Annual Report 2019

Amy Vecchione
Boise State University
The MakerLab in 2019 experienced growth as a team. We onboarded a diverse group of student employees, and hired Amanda Baschnagel as our MakerLab Manager.

The Library initiated a search for a tenure-track faculty member in the Emerging Technologies and Experiential Learning Unit. This faculty will advance the initiatives in the makerspace, and also lead on instruction.

We reestablished a culture in the MakerLab through expectations documents and maintaining walkthroughs of the space. Using research regarding mindfulness in makerspaces, we enhanced our approach to help individuals with their projects.

Faculty from across campus worked with the MakerLab team to utilize the resources, expertise, and support that they receive in the space.

Projects in 2019 included Sawtooths in Silver, designing Volcanology Sensors, creating 3D printable models out of MRI data, and partnerships with St. Lukes.


https://www.boisestate.edu/library-makerlab/
MISSION

Making for the Social Good

to inspire transdisciplinary research

by creating connections between community and emerging technology
Stephanie Milne-Lane, University of Washington iSchool, MLIS Student, conducted directed field work studies on the instruction practices at Albertsons Library to design a toolkit. With Matt Saxton as advisor, Stephanie conducted a study about information needs, then created this toolkit to assist us in designing instruction for the MakerLab.

This toolkit was designed and created by Stephanie Milne-Lane, MLIS student at the University of Washington, 2019 in consultation with Associate Professor and Head of Emerging Technology and Experiential Learning, Amy Vecchione. The purpose of this toolkit is to create and establish a framework for providing library maker instruction through the lens of the ACRL Framework. The framework connects with maker instruction easily, as evidenced in this research. To use this toolkit, follow the links to the subpages below to learn more information. Reading the background, literature review, and downloading the toolkits can provide any librarian with the ability to design instruction to use their makerspace to create new information.
June Meissner, English graduate student at Boise State University, participated in an internship with the MakerLab to design an inclusive excellence library guide based on the needs of the university community. Partnering with the Center for Teaching and Learning, and many other constituents, she designed a guide to help the community learn more about inclusive excellence. This guide has already been replicated by others around the country.

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RESEARCH

Making for the social good, undergraduate research, and research projects.

UCREATE

Special Education students partnered with the MakerLab to design products to assist individuals in the public schools. This adaptive device allows an individual to have independence to swipe her lunch card and her dance card. She can't hold onto the card without this grip.

This process helped establish the UCREATE program in the College of Education. The Undergraduate Collaborative for Research in Equity & Access in TEaching (UCREATE) project supports undergraduate researchers. This program provides a space where pre-service teachers can develop into professionals who believe research is integral to their job and understand how to engage in meaningful research that directly serves P-12 students.

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Adaptive Tech

MakerLab students, staff, and faculty partnered with St. Lukes to design adaptive technologies for individuals requiring an object to enhance their livability. Pictured below, a Boise State alum, Meagan Boll, gets fitted for some devices to assist her with medical school at University of Washington.

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The international non-project Precious Plastics allows anyone to recycle plastics. Using this non-profit as a model, Oliver Russell and Humanista sponsored students to design a local recycling facility.

PlasticWorks Lab

The MakerLab brings plastics to this space to recycle and turn them into wall tiles.

http://www.plasticworkslab.com/

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RESEARCH

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Mike Rogers, Boise State University alum, and owner of Precious Metal Arts, partnered with Amy Vecchione to create a piece of art that captured the imagination.

Sawtooths in Silver

This icon is based on the exact topography of Stanley Lake and the Sawtooth Mountains of Idaho.

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EQUIPMENT

One of the three main services of the MakerLab is to provide access to emerging technologies. Every student, staff, and faculty can access these and receive coaching on how to use them.

- 14 3D printers
- vinyl cutter
- 3 sewing machines
- 3 dremel tools
- 3 drills
- soldering irons
- button maker
- arduino and raspberry pi kits
- touch up tools
- desktop CNC machine
- vacuum former
- axi draw
- scanners
- and much more!

1,200

Over 1000 users book equipment in the MakerLab. Every day, the 3D printers are running non-stop, and each hour 10 individuals drop in for help.

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In 2019 we conducted four different studies in the MakerLab to identify who is using the space, how we can best reach non-users, what non-users think about the MakerLab, and how we can become more accessible. We build the space and culture based on this feedback.
GOALS FOR 2020

Some of our plans include...

- Supporting data visualization services
- Creating an inclusive, safe, and accessible space
- Provide access to the laser cutter and implement assistance on this tool as a service
- Launch a Pony Up campaign
- Onboard a new faculty member
- Improve the MakerLab website

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