|Winter 2023 TRU Library Makerspace Librarian's Report – TRU Library Makerspace (C7elelkstén')

This semester was a significant milestone for us as it marked the completion of our first full academic year since we opened and it's amazing to see how far we've come. Since January, over 7500 people have visited our Makerspace. We hosted 21 events with 369 participants and provided users with assistance over 1880 times. These statistics are truly remarkable, and we believe they are just the beginning. But beyond the numbers, what really excites us is the incredible work happening in the Makerspace. People have built community, pushed the boundaries of assignments, conducted research, taught and learned from each other, created prototypes, made art, and had a lot of fun. The Makerspace has become a place where students, faculty, staff, and administrators frequently come together to work, inspire, and support each other.

The end of this semester also marks a turning point for us. Opening the Makerspace has been a tremendous learning experience. We've gained invaluable knowledge, from managing thousands of hours of 3D printing to empowering students to learn and solve problems independently. We've had to constantly adapt and develop our own ways of working but it feels like we know what we are doing now. We also recently wrapped up data collection for an assessment project that will tell us about how the space is being used and where we can improve. Now is a good time to take a moment to reflect on what we've learned and where we want the space to go in the future.

As the Makerspace Librarian, my role involves overseeing the design, programming, curriculum, and operations of the Makerspace. However, I also serve as the Co-Chair of our department, which keeps me occupied much of the time. I am incredibly grateful for our amazing staff: Olivia, Sarah, and Valentine. They manage the day-to-day operations of the space and have developed exceptional expertise in the technologies we support and the underlying philosophy of the Makerspace. Each staff member also has their own significant responsibilities, ranging from helping users plan events (Olivia), to tracking statistics (Valentine), to managing our social media presence (Sarah). We all work together on enhancements to the space and meet weekly to discuss ongoing issues. Working with such a dedicated, intelligent, and compassionate team has been one of the highlights of my career.

I hope you enjoy reading about the exciting developments of the past few months. If you have any questions, please don't hesitate to reach out to me. If you'd like to catch up, you can also access our previous Makerspace Librarian's Reports on our blog.



Makerspace Librarian Franklin Sayre (me!) working with Arts students to 3D scan sculptures

Highlights

Makerspace Awarded a TRU Sustainability Grant

In March we were awarded a <u>TRU Sustainability Grant</u> for our "Makerspace Sustainability Incubator" project which aims to turn the Makerspace into a shared resource for sustainability. This grant is a major milestone for the Makerspace, moving us closer towards our goal of creating a culture of repair and maintenance, decreasing duplication of purchases, and enhanced equitable access to tools and materials for the campus community.

The grant had three main goals:

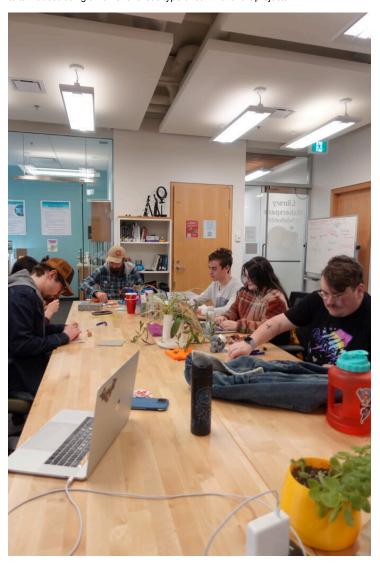
- · Establish a library of lendable tools for basic maintenance and repair that any member of the TRU community can borrow
- · Create a donation-based fiber bank of textile materials for users
- Build relationships with campus groups and create infrastructure to support them using the Makerspace to pursue their environmental and social sustainability goals

Two students have recently been hired as Makerspace Sustainability Champions and we look forward to introducing them soon!

Learn more about the grant on our blog: Makerspace Sustainability Incubator Funded!

One of our major goals for last term was to create processes so campus groups can host events in Makerspace. Any individual or group from TRU can now apply to host events related to making, innovation, design, or the technologies supported in the Makerspace, as long as the event follows some basic guidelines. More information and the event booking form are available here: Hosting an event in the Makerspace

Last term, we hosted activities in our Makerspace organized by campus groups that aimed to involve many participants over time working on a common project, such as coloring objects or contributing recipes. The groups provided instructions and materials, and people could join in during our opening hours. We are happy to talk about being a home for these type of communal art projects.



Happy Birthday to Us! Makerspace Turns One!

On March 4th, the Makerspace celebrated our first birthday! Sarah, one of our staff members (and the primary person who posts to our social media) put together a great instagram post about our first year.



|Second Round of CELT Makerspace Faculty Grants Awarded

Our first round of CELT Makerspace Faculty Grants wrapped up in March and we announced the successful applicants for the Spring 2023 Grants. Harshita Dhiman and Katelin Pietrusinski from the Career and Experiential Learning Department of the Faculty of Student Development, and Twyla Exner from the Communications and Visual Arts Department of the Faculty of Arts were selected. Harshita and Katelin will bring together cross-disciplinary students from the Co-op 1000 class to create an innovative networking product using the resources available at the Makerspace. The project aims to foster essential transferable skills such as communication, team building, and problem-solving. Twyla's project, which began in Fall 2022, engages students in questions around art and public space, challenging them to create prototypes of public sculptures or monuments. The project also explores the integration of 3D digital models created in the Makerspace into virtual reality environments, resulting in tutorials to make the process accessible to students. These innovative projects demonstrate the faculty's commitment to hands-on learning experiences that help students bridge the gap between their skills and the professional work environment.

Learn more: 2023 CELT Faculty Makerspace Grant Awardees



A Software Engineering student prototyping in the Makerspace

Assessment Research Project Data Collection Complete

Since January we've been running a research project to understand who our users are and what they are doing in the Makerspace. This is a collaboration between myself as Makerspace Librarian, Amy Paterson (Assessment Librarian and Department Co-Chair with me), and the Makerspace staff (Olivia McDougall, Sarah Porter, and Valentine Bilton). This project went through ethics approval and involved surveys, ethnographic observations, and interviews with users.

Now that we have the data we will start analyzing the results and we're looking forward to sharing what we learned soon!

Little things

- Filament recycling: As part of a collaboration with the Sustainability Office we've started collecting PLA from our 3D printers to recycle. A grey bin is in the print room. Campus groups with printers can contact us if they want to take part as well!
- The wonderful You Got This! podcast interviewed our users, staff, and faculty collaborators about the Makerspace! Learn more and give it a listen:

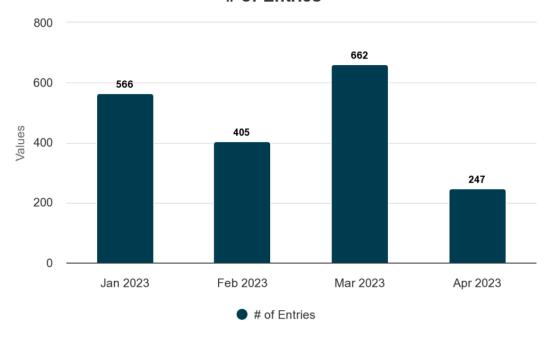
 Makerspace users and staff Featured in You Got This! Podcast

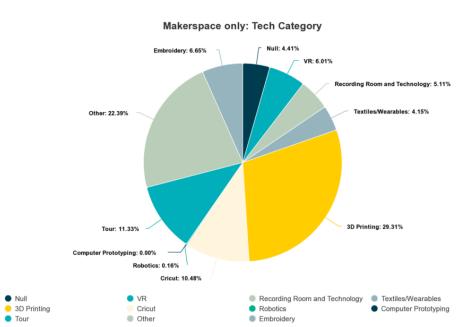
Data and Events

Supporting our Users: 1880 Helpful Interactions this term, 3547 this academic year!

We track how often Makerspace users ask for help so we can understand needs and impact (note: we never collect names or specifics about what was asked). Each interactions could involve one question or twenty, and could take two minutes or an hour. **Between January 1st and April 30th, 2023 we provided 1880 of these helpful interactions in the Makerspace.** This academic year (September 2022 to April 2023) we provided 3,547 of these interactions. This definitely undercounts how many times we've helped users because when it is busy we don't always get around to recording it. That's a lot of questions!

of Entries





| Hosting Events: 21 Events, with 369 Participants.

This semester we hosted 21 events with more than 369 participants. These include class tours, visits by departments and staff, student club events, and outreach events.



Clothing Swap and Repair Cafe event run in collaboration with the TRUSU Eco Club, the Sustainability Office, and Kamloops Repair Cafe

Curriculum Integration

This term we hosted classes from the following areas:

- Engineering
- Fine Arts
- Adventure Studies
- Education
- Business
- Geography
- Social Work

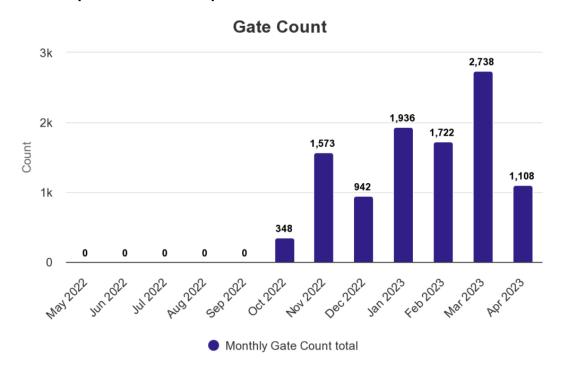


We also hosted events in collaboration with:

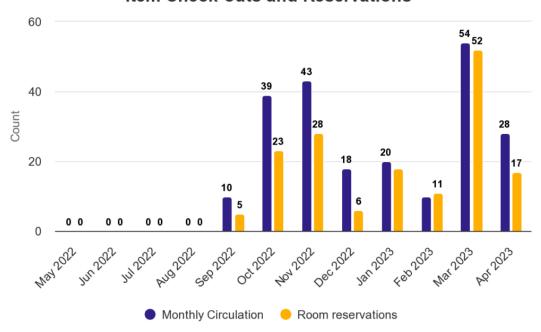
- International Women's Day with the Sexualized Violence Prevention Office
- School District 73
- TRU People and Culture for a PD Days Workshops for Staff
- Faculty of Engineering for a Women in Engineering event for highschool students

For the third time we collaborated with Engineering Faculty to high school students taking part in the <u>Women in Engineering Robotics Event</u>. These events bring high school students to TRU for a half day in the Makerspace and a half day building robotics and learning about careers and roles for women in Engineering. This has become a highlight of our term and we look forward to future events!

|7504 People came into the space!



Item Check-outs and Reservations



|Summer 2023 Goals 🔆 🥞



Getting the Sustainability Grant started

Our major goal this summer will be getting the Sustainability Grant off the ground, orienting our new Student Sustainability Champions, and setting the project up for success before everyone gets busy in the fall. We need to start planning for how to lend tools to users, take donations of material for our new Fiber Bank, and build relationships with campus groups.

Professional Development and Team Building

Our second goal is going to be working together as a team to do some professional development activities this summer and to think about how to better integrate our student ambassadors, and even our users, into the space so it continues to be a vibrant, living, space that is responsive to the needs of our community.

Thinking about what's next

Finally, I want to take some time to think about what is next for the Makerspace. After 2 years of development and constant change, how do we make sure what we are doing is sustainable for ourselves and our users? How do we fight against burn-out while working in a constantly changing environment where we want each day to bring new challenges and opportunities? How do we meaningfully bring in sustainability and other values into the work we do? How do we encourage users to think about these values in the work they are doing in the Makerspace? How do we integrate new technologies like Artificial Intelligence into the Makerspace, while also making sure we are not ignoring ethical considerations?

That's a lot! As always, if you have any questions please do not hesitate to email me at fsayre@tru.ca