



MAKER
SPACE



MAKERSPACE

Find your maker community

ANNUAL REPORT

2022-2023

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OUR PURPOSE

CREATE - CONNECT - INSPIRE

The Makerspace provides opportunities to explore creating that bridges the digital and physical worlds.

The Makerspace enhances innovation on campus and provides immersive learning opportunities.

The Makerspace is a place for students to connect through shared interests and build community.



WHERE WE ARE NOW

The Makerspace services are in-demand, pushing the boundaries of our space.

GROWTH

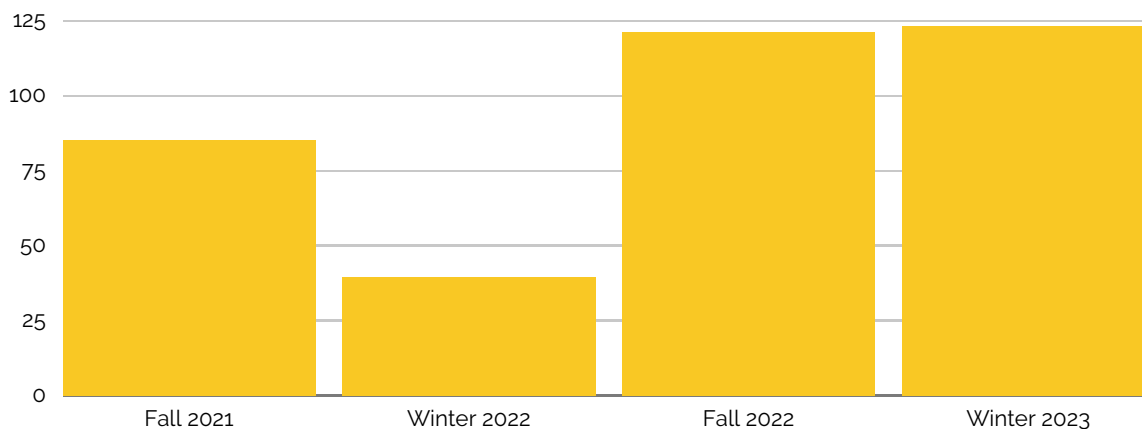
- The Makerspace is a busy place! With an average of 25 drop-in visitors per day, and a 42% increase in total visitors in Fall 22 over Fall 21.
- We answered 339 making questions online this year. Our questions increased 95% this winter over last winter semester.
- 3D Printing is our most popular service, we significantly increased the number of printed objects from 551 last year to 1400 this year. We had 376 users printing - a few of them REALLY liked our printing service and printed over 20 objects - but most printed 1-4 objects over the year.



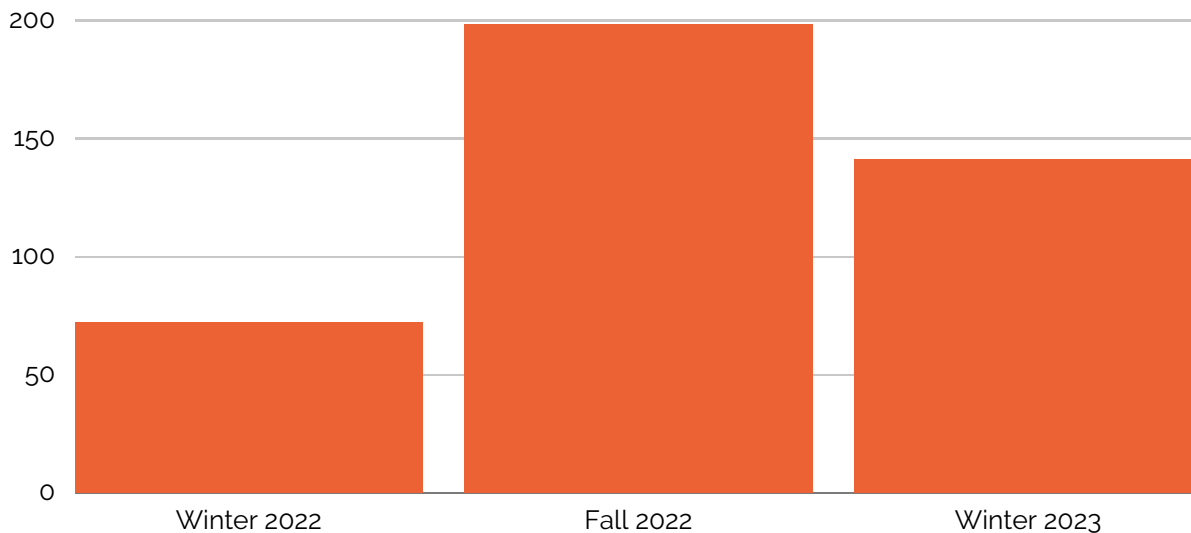
2022 / 23

A snapshot of Makerspace service use

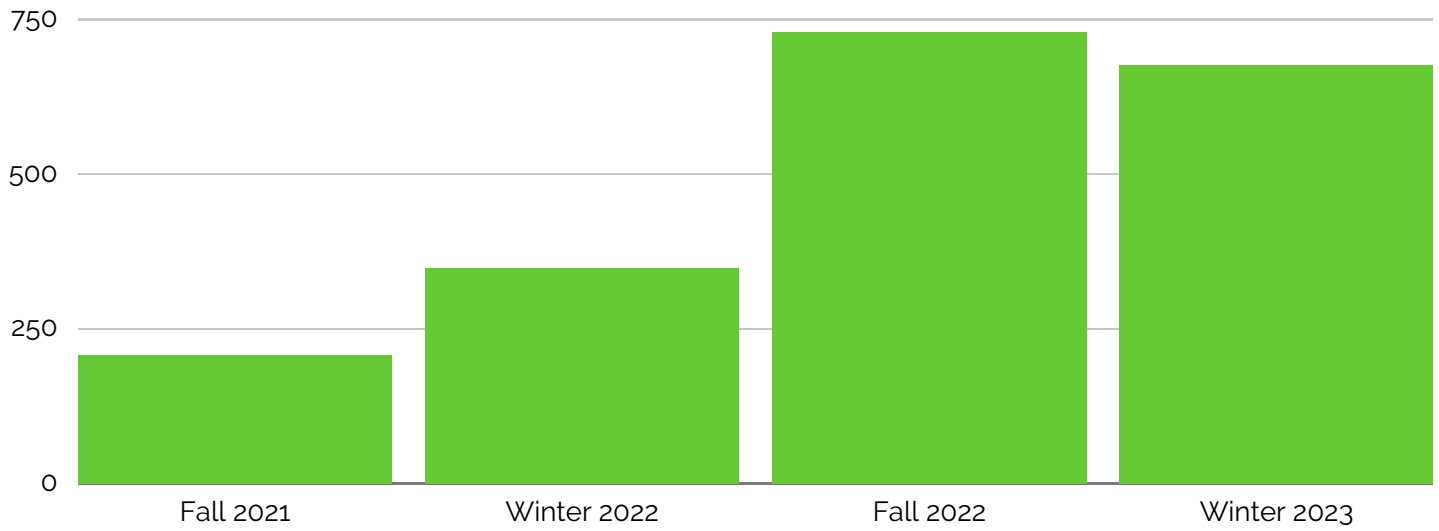
Drop-in Visits per Week



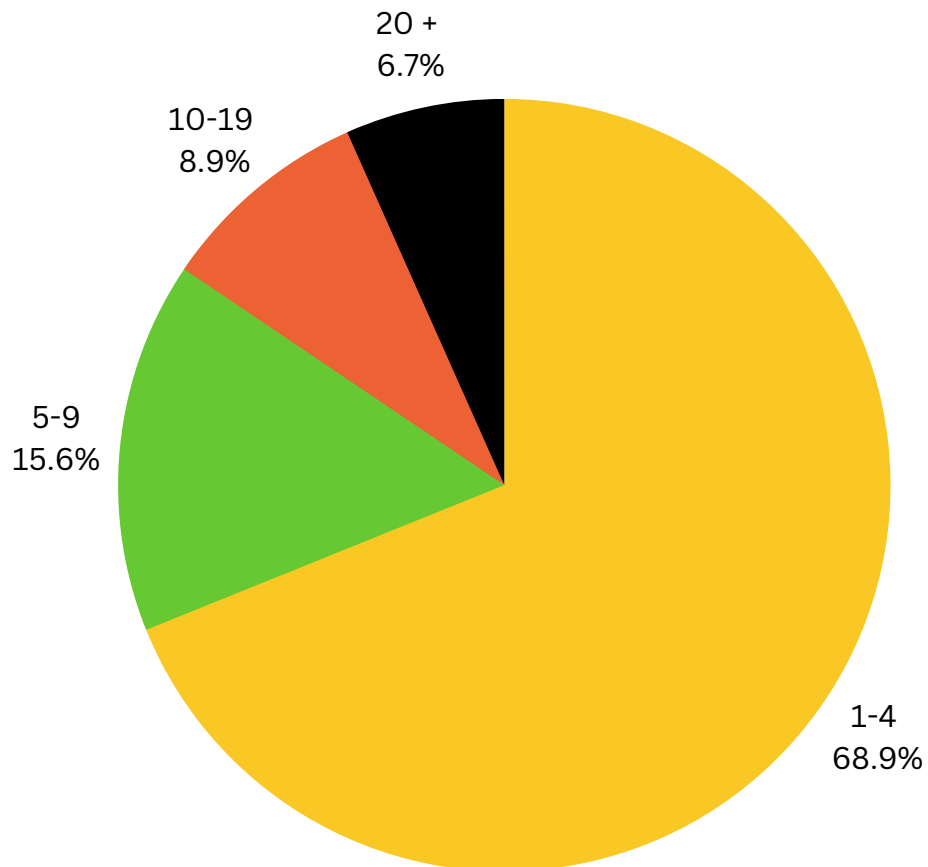
Online Questions Answered



Number of 3D Prints



Number of Prints per User 22/23



Number of Events, Tours, Class Visits

	Number of Occurences	Number of Students
Events	10	796
Tours/Orientations	7	27
Class Visits	11	215

Some of the classes the Makerspace hosted included: SOWK 403: Leadership in Human Service Organizations, ARTE 207:3D Spatial Practice, CRWR 295:The Craft of Writing, INFM 101:Libraries in the Information Age, CMPT 104:Fluency with Information Technology, and PSYC 405:Psychology of Adversity.



Valentine's Day cardmaking table

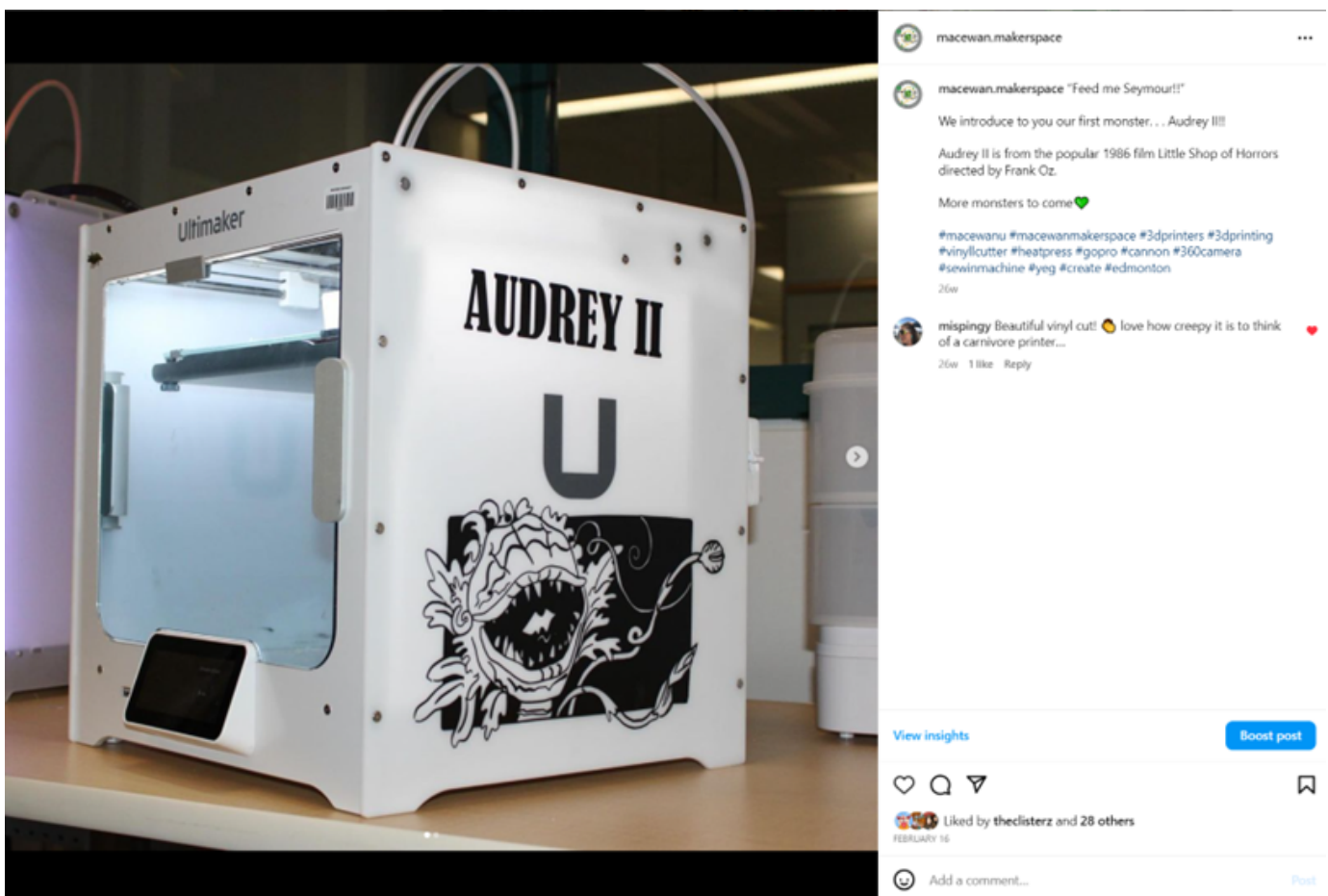


3D printed earrings from a drop-in workshop

Social Media

	Instagram	Tiktok
Followers	166	23
Posts	32	13
Posts with 20+ likes	10	8

* The Instagram page was active beginning fall 2022. The Tiktok account was only active for winter 2023.



One of our more popular posts highlighting our newly named 3d printer

New Services in 22/23

- **3D Scanner**- Allows users to scan an object and then create a 3D file from that object (photo below).
- **Portable Vinyl Cutter**- A smaller version of the Makerspace vinyl cutter that can be borrowed for 3 days at a time.
- **Sewing Machine**- Heavy-duty, beginner's sewing machine.
- **High-powered computer and iPad**- Can be used for 3D modeling and video, photo, and audio editing.
- **Multi-media Support** - Software help for classes or individuals working on multimedia projects such as digital stories, 360 videos, podcasts or photoshop projects.
- **DSLR Camera**- Used by staff to take photos of the Makerspace. Users will be able to borrow it starting in the Fall 24.



- **3D Printing Procedures**- Makerspace tutors identified an issue where a user-submitted print would fail and the user would keep submitting the unchanged file with the same results. To address this a process was implemented whereby if a print fails a second time the user will be contacted to come in for an in-person troubleshooting session to work on the file before it is printed again.
- **New 3D print tracking system**- Has cut down on communication errors and allowed users to get their print jobs in a timelier manner.
- **Extra clean up time** - The Makerspace was getting cluttered by the end of each day, so 15 minutes were added to the end of closing shifts to allow for time to clean the space.
- **New walk-in tracking system**- To represent the number of users in the space more accurately the tracking system was changed to a simple form, which has given a clearer picture of who is in the space and which technologies they are using.



Survey Results

The Makerspace surveyed users at the end of the winter semester asking for feedback. We heard from over 30 users. Some of the results:

- 60% of users mentioned the atmosphere or helpful and friendly staff.
- Users also liked having free access to equipment and supplies they either couldn't afford or didn't have the space for.
- 3D printing was the most common service used by respondents, with vinyl cutting and button making being second and third.
- One major improvement suggested was a larger space, as some users said they sometimes felt intimidated to come into the space when it was busy.

Positive Comments from Users

- "I would like to thank the two tutors who gave us a tutorial on the Makerspace yesterday. They were both so friendly, answered all of our questions and seemed excited to be able to work in that space. It was nice to see."
- "Thanks for all your help on this project. The results are looking great!" from an Art instructor who brought her class in to learn how to design a 3D stamp and then print it.
- "Convenient access, friendly & helpful staff, free to use, good options/technologies available."
- "Thank you for having us! The students seemed excited about using the Makerspace for their projects."
- "I love the knowledgeable staff and the free use of the services when I need them."



Examples of some making projects advertised on Instagram using a variety of materials such as textiles, 3D filament, and stickers. Techniques include sewing, weaving, stamping, vinyl cutting and graphic design.

WHERE WE ARE GOING

Makerspace Community Study

The Makerspace Librarian and staff noticed that there was a diverse community of regulars frequenting the Makerspace. To learn more about this group, in spring 2023, the Makerspace Librarian, along with Dr. Jennifer Long, hired Tech Tutor Kaeli-Rae McCormack and journalism student Liam Newbigging to conduct participant observation of the makerspace community of users, and to interview four student members of the community.

What we learned from was that students were visiting the makerspace initially for the equipment but subsequently for the culture and community of the Makerspace. Interviewees said they felt the space was, "**open**" - "**easy**" - "**accepting**" & "**supportive**".

Students also provided us with lots of ideas of where we could improve including:

- MORE space!
- Getting the word out more
- Hosting a maker club
- Supporting projects via programming
- Improving accessibility
- Training staff for consistency in anti-bias response
- Lending out more equipment
- More ways to get community input & feedback

We are in the process of taking steps towards many of these in the next academic year. You can see equipment and materials we are planning to add on the next page. Some improvements have been put in place since the study was conducted, for example our new feedback box.

Planned Improvements and Additions

The Makerspace will be expanding by moving to a larger space nearby in spring of 2024. Some new equipment has been identified by users and staff, will be added if funding is available. Including:

- **Resin printers**- A 3D printer that users resin instead of plastic, which allows for greater detail in objects.
- **Desktop laser engraver**- Allows users to engrave a variety of materials including wood and plastic. The Makerspace would have to consider ventilation requirements.
- **More 3D printers**- The Makerspace will be branching out and purchasing new brands of 3D printers, which will increase the variety of printing materials able to be used.
- **Robots**- Robots are a fun entry point to coding, which can be used to create programming for university students and potentially younger users as well.
- **More craft materials**- Users have expressed interest in simpler creative projects that don't require expertise. The Makerspace plans to stock more knitting looms, more painting and drawing material, and other crafting material.
- **Sink**- The new space would ideally have a sink. Making can sometimes get messy, and it would be nice to have a space for users to wash up in the space. 3D printing also sometimes uses dissolvable support material that needs to be removed by soaked, and it would be much easier if it could be done right in the space.

We can't wait for more making!
