

— space

@SIMON FRASER UNIVERSITY

**To better prepare
students for the
jobs of the future...**

Simon Fraser University sits as a leader in innovative research and community engagement. However, as SFU's ambition has grown it has begun to encounter several growing pains as available resources are pushed to their limit. These issues materialize in several ways, including limited resources for the school's industrious clubs and special interest groups that mirror SFU's ambition and vision in their activities. Alongside these pains, there also exist missed opportunities within SFU in terms of deeper engagement with post grad students and support for cross faculty collaboration.

Tackling these issues through an interdisciplinary creative work space would enhance the educational experience at SFU and further cement the university's position as a leader in innovation, community engagement, and research.

**...through
interdisciplinary
collaboration
and co-creation.**

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Potential Opportunities

SFU Surrey becomes the hub for design and entrepreneurship

A collaborative creation space would address current issues within SFU at large while placing SFU Surrey as the centre for design and entrepreneurship in the Fraser Valley. This would not only raise the overall profile of the university but further distinguish SFU as an innovator in educational experiences.

Innovative experiential learning, combining skills with education.

By providing courses and physical locations in which students can combine their academic learning with skill building and entrepreneurial endeavours SFU would help catalyze the creation of new and innovative businesses while making our students more employable and self sufficient overall.

Provide a workplace and venue for local industry

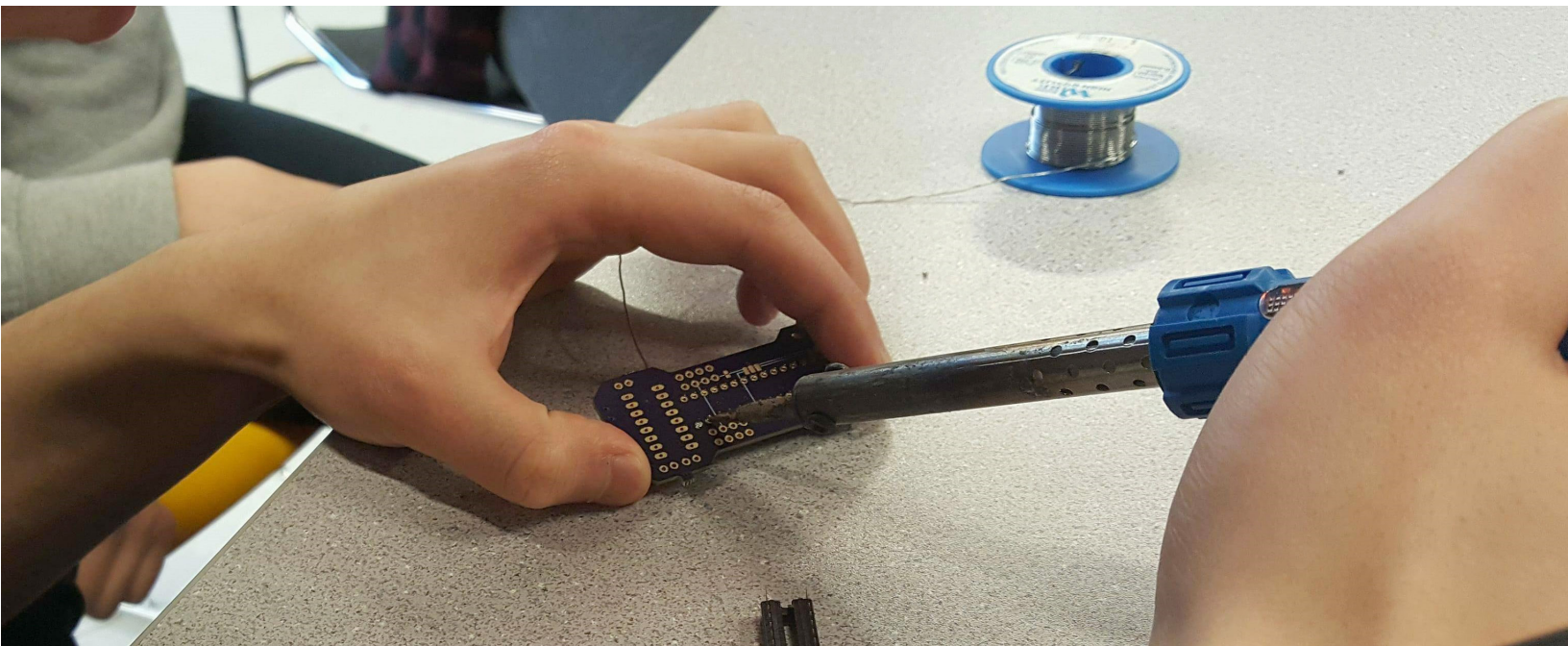
Having rental space that local industry could operate out of and host events in would bolster student's exposure to industry knowledge and skills while increasing SFU's ties to industry.

Engage with Surrey and empower its citizens to bolster good will.

Having workshops and coworking spaces where citizens can explore making and see SFU students in their element would go a long way to increase SFU's presence as a positive force in the public eye and attract new students.

Create a permanent physical interface between SFU, Surrey, and Industry

By having a permanent physical installation that acts as a connector between SFU, Surrey, and Industry we would create opportunity for cross collaboration between all three. The results of these joint projects would be artifacts that serve as evidence of SFU's dedication to engagement, research, and innovation.





Faculty & Department Silos

Cross faculty collaboration is currently supported by only a handful of courses and even these have image issues that make them appear walled off to most students. Student education should reflect the ever changing landscape of industry, which is becoming ever more interdisciplinary. Having an established space and programs that transcend the walls of faculty would provide students with the varieties of knowledge and skills necessary of different fields necessary to excel in the jobs of tomorrow.

Lack of Space

Having a larger communal workspace where clubs could meet and practice their crafts alongside classes SFU would increase the opportunities for cross pollination and networking. This would also demonstrate to the students SFU's commitment to supporting its clubs extracurricular endeavours.

Brain Drain Post Graduation

With little to no support or space to grow, postgraduate students and entrepreneurs are forced to take their ideas and startup businesses elsewhere. The ability to keep them near campus would allow for the transference of their knowledge and experience while providing current students with learning opportunities through internship.

OUR VISION FOR SFU

A woman with long brown hair and glasses, wearing a light-colored sweater and dark pants, stands in the center of a lecture hall, facing a group of students. The students are seated at desks, some looking towards the presenter. In the background, a large chalkboard is covered with handwritten notes and diagrams, including a floor plan labeled 'FLOOR PLAN' and various text. The room has modern lighting fixtures on the ceiling and a patterned rug on the floor. The overall scene is a typical university lecture or presentation.

**Through a public-private relationship
develop a place and program for
SFU that further engages with their
students & the Surrey community to
bolster innovative, entrepreneurial,
and economic growth.**

OUR VISION: SPACE

What a space should be.

Proximity, Proximity, Proximity

In order to maximize the potential of collaboration, ideation needs to be done in close proximity to the tools necessary to actualize rapid and high precision prototypes. The space seeks to bring Surrey campus closer to the group meeting areas, workshops, and technologies necessary for student ideas to be generated, modeled, and produced in rapid succession.

Rough & Resilient + Modular & Flexible

The space facilities would be robust and combine heavy duty equipment alongside the skill sharing necessary to use them. The space would encourage innovation and creativity by enabling students to explore mediums and equipment without being overly concerned with damaging their workspace.

Fabrication, machining, and textiles are some of the skills and mediums the space would allow students to explore. Work areas in the space would be impermanent, allowing for modular rearrangement to support a variety of workshops, projects, and events. The space's goal would be flexible enough to cater to the different requirements of its stakeholders to support the idea of open-access and collaboration between SFU, Surrey, and industry.

Large & Open + Private & Personal

The space would be divided into social working areas and dedicated meeting areas. Members of the space would need an area to gather and socialize as well as work with the shared tools. Another invaluable area would be a quiet space that could be used for educational programs and meeting areas. It would be important to have a layout that caters to the needs of the individual maker as well as the needs of a team. In addition, members would also be able to rent their own area and personalize their space. This would allow for a wide variety of people to come in and customize the space to whatever their needs are; whether it's woodworking, painting, sewing, or any other type of creating.

Access to Space, Tools, and Experience

In order to accommodate the wide variety of skill sets in SFU and Surrey, the space would offer different levels of memberships and training. More experienced individuals would only need the tools and space to work. For them the space would provide a membership service or rental space. Untrained individuals would need to go through workshops and classes offered by the space to learn how to use its tools. After going through safety guidelines, new members would be able to use the space however they choose. This open access would empower the students and community to explore their passion in making.



What we have now.

— space

~1200 sqft. @ SP 190B behind Central City Brewery

Electronics & Wood Shop

For simple wood and electronics works with hand and basic power tools. Powered off only one circuit shared across three zones.

Cables, Monitors & Laptops

Basic equipment that allows anyone to come in and create without technological barriers.

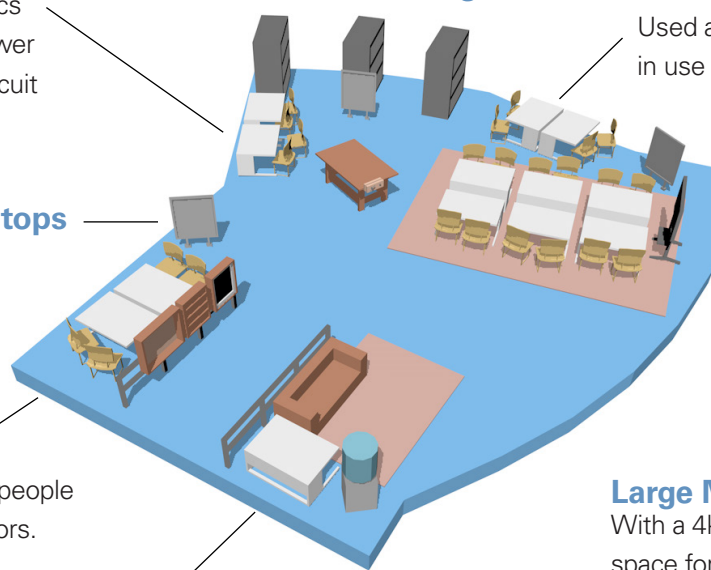
Small Meeting Pod

Small meeting pod for up to 6 people with access to power & monitors.

General Storage

Textiles & Paper

Sewing machine, cutting mat, and other supplies to create with. Used as meeting pod when not in use for textiles & paper.



Large Meeting Space

With a 4k display and meeting space for up to 16 people.

Rest & Social Space

A rest area with a water cooler, microwave, and couch to provide a place to rest. Notably missing running water and washroom facilities.

Room Capacity

35 people, 5 teams, or 1 club / course

Room Power Capacity

3.6kW, 2 x 120V 15A circuits

Booking Availability

7 days a week based on staff availability.

To book email pmakerspace@gmail.com

Notable Limitations

No running water service, drain, or bathroom facilities.

No air ventilation, thus large power tools are disallowed.

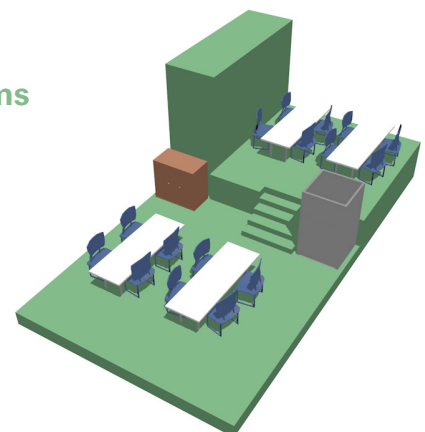
Tap card entry system is limited to assigned keyholders.

Available in Mid February 2018 for up to 8 Clubs & Project Teams

— subspace

~600 sqft. located behind the glass elevator on Tower Lobby

We are currently working to get the room ready for clubs & teams to use. Please stay tuned for more information. If you have a space booking inquiries, contact us at pmakerspace@gmail.com



What we need soon.



Pop-up Shop

This shop will serve as a place to provide resources needed to create. This includes, wood, fabric, and any other item that can be used in _space. There will also be an area for members of _space to sell their products. Giving members access to an entrepreneurship route.



Co-working Space

This is an essential place to connect people from various backgrounds in order to grow the community. It promotes collaboration and creativity by allowing people to share their ideas and perspectives.



Large Multi-purpose Space

Multi-purpose areas will allow _space to host events, bring large clubs in, and create gallery spaces. By engaging with the community in this way, SFU fosters goodwill with the industry and community.

Machine Shop

A large and ventilated area for wood, metal, plastic, and electronic work. These workshops will be the foundation of _space, giving members access to a wide variety of tools and the help needed to use them.





Key Point	Key Act	Value	Company	Customer Seg
		Collaborate		
		Innovation		
		Expand		
		Partnership		

Thu 12-5-20

Mon 10-30-12-20

4 December

Microstate

OUR VISION: PROGRAMMES

How to integrate?

Existing programs need to be modified and additional programs created to bring _space to life. Program strategy for _space requires a multi-pronged approach both within SFU and between SFU, Surrey, and industry.

Cross faculty programs offered by SFU such as Business of Design, Tech-E, and Changelab sound synonymous with, and therefore restricted to, Business and SIAT, Mechatronics and Business, and Science and Business faculties respectively. Reframing and remarketing these programs to emphasize their diversity and openness both in terms of the faculties involved and projects produced will be key to ensuring more students are aware of and take advantage of the experiential learning experiences they provide.

Running these programs through an established, open-access creative workplace like _space would greatly enhance their resources while placing them more prominently in the public eye. This would help _space foster a culture of tangible hands-on learning which would complement the more academic and theory based work most students are accustomed to. This combination of hands on and theory based learning experiences would go a long way in arming students with the variety of skills necessary for the creative and innovative professions of the future.

What happens inside?

Between SFU, community, and industry, a new set of programs should be developed to bring expertise and experience into _space and distribute it to students and community members.

These programs would generate goodwill towards SFU while providing value for all involved in the form of increased skill and knowledge of manufacturing processes, raising the profile of the university and increasing enrollment. This concentration of knowledge and skill would cement Surrey's place as a leader in innovation.

OUR VISION: BUSINESS

How will this run?

The scope of creating a makerspace is huge and the cost is even larger. We believe that such a project cannot be funded and executed by one single party. Only through a private public relationship between SFU, the City of Surrey, makerspace experts, and industry can such an enterprise succeed. We are currently investigating potential business models such a makerspace can take on.

Potential sources of revenue include:

- fabrication and prototyping work for local businesses
- rental models for space and tools for local creatives
- space rentals for industry events

We will be engaging SFU, industry, and community experts to create a shortlist of ideal business models to propose in our final report.

The next step...

The momentum we've created with _space must be sustained in order to keep moving our university, city, and region closer towards this creative vision in the upcoming years. Action must be taken at the highest levels of the university by those who have the authority to ensure that the demand and the opportunity can be met. Our vision and prototype have shown strong demand from the student body.

The next step is to publish a strategic document by the end of Spring 2018 covering in greater detail the content discussed in this document. We will continue to engage with you and other SFU, industry, and community stakeholders to refine this strategy over the semester.

_space



The _space team would like to acknowledge the people who've helped us along the way. The instructors, administrators, experts, students, and community. Please look forward to our final report to be published at the end of Spring 2018.

personal
co-creation
collaboration
community
startup
artistic
design
your _ space
making
inspiring
learning
socializing
networking
prototyping