

Principles and Guidelines for Enhancing Well-Being through Physical Spaces at SFU

Developed by SFU Health Promotion
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The Well-being through Physical Spaces project recognizes the profound impact of physical space features on the social, mental and physical health and well-being of space users. The project is part of SFU's Healthy Campus Community initiative and aims to improve the well-being of SFU campus members through an intentional consideration of well-being in the design and development of SFU's built environment. Continue reading for an overview of design, structural, and architectural considerations for physical spaces to enhance well-being at SFU.

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Territory Recognition

We respectfully acknowledge that our three campuses reside on the traditional, ancestral, and unceded territories of the xʷməθkʷəy̓əm (Musqueam), Sḵwx̱wú7mesh Úxwumixw (Squamish), sə́lilwə́taʔt (Tsleil-Waututh), q̓íćə́y̓ (Katzie), kʷikʷə́ləm (Kwkwetlem), Qayqayt, Kwantlen, Semiahmoo and Tsawwassen Peoples. These lands were never surrendered, relinquished, or handed over in any way.

In acknowledging all the stewards of these lands since time immemorial, we must take on the responsibility of reconciliation and decolonization by understanding the truth and stories of these lands, and the peoples' relationships and responsibilities to these lands. We must do the work of confronting the lessons from our colonial history, as well as recognize our complicity in ongoing colonialism, oppression, and racism. SFU is committed to creating a "diverse, equitable and inclusive community where all feel welcome, safe, accepted and appreciated in learning, teaching, research and work" (Simon Fraser University EDI, n.d).

This Territory Recognition has been shaped by reflections and learning from teachings by Len Pierre. Len Pierre is Coast Salish from Katzie First Nation, as well as an educator, consultant, TEDx Speaker, social activist, traditional knowledge keeper, and cultural practitioner. We would like to give many thanks to Len for his time, knowledge, and patience. We are very grateful to have had the opportunity to work and grow with him, and we look forward to working alongside more Indigenous community members and knowledge keepers as we move forward in this work with our diverse SFU community.

Purpose

This document was created through a collaborative process with multiple stakeholders and experts on and off campus for the following purposes:

To enhance health and well-being through the design of physical spaces at Simon Fraser University (SFU). To build awareness about the impact of physical space on health and well-being.

To increase the incorporation of design elements that positively impact the physical, social and mental well-being of space users (staff, faculty and students) into SFU's built environment.

The application of this guide is also intended to foster a greater sense of connection to and community pride in campus space. It is to be used in tandem with existing design procedures and standards. The principles and design guidelines for well-being align with best practice criteria for built environments including the WELL Building Standard (Delos Living LLC, 2015) and the Whole Building Design Guide (National Institute of Building Sciences, 2022).

Alignment with SFU's Strategic Vision and Academic Mission

In a post-secondary setting, a supportive physical space is a strategic opportunity to enhance both student well-being and the student experience. The quality of physical learning environments has a significant and measurable impact on student well-being, engagement, productivity, and satisfaction. The Well-being through Physical Spaces Project and Healthy Campus Community initiative are aligned with SFU's Academic Plan (Objective 1.4, 1.6) and Strategic Vision to be the leading engaged university. The project also demonstrates innovative action aligned with the 2015 Okanagan Charter: An International Charter for Health Promoting Universities and Colleges that has been formally adopted by SFU as a leading institution.

Scope

It is acknowledged that space is overseen and maintained by multiple groups on campus. As such, this guide is intended for any student, staff, faculty, or administrators involved in new or existing space development or renovation processes at SFU.

Principles and Design Guidelines for Well-Being

Campus stakeholders are invited and encouraged to use the principles and guidelines outlined in this document for the development of new or existing physical spaces.

SFU Health Promotion recognizes the historical position of SFU as an institution founded through colonialism, located on the ancestral, unceded, and traditional territories of Coash Salish Peoples, including the the traditional territories of the x^wməθk^wəyəm (Musqueam), Sk̓wx̓wú7mesh Úxwumixw (Squamish), səliłwətaʔt (Tsleil-Waututh), k^wik^wəłəm (Kwikwetlem) Katzie, Qayqayt, Kwantlen, Semiahmoo, and Tsawwassen Nations. Thus, we recognize that spaces may not be experienced by all students, staff, faculty, and community members in the same way – they may not feel safe, approachable, or welcoming. As a unit, we are committed to decolonizing our practices and supporting health promoting strategies to emphasize justice and reconciliation and hope to continue working with diverse communities and organizations to improve upon this.

Principles

Physical, mental, and social well-being of campus community members will be a key consideration in on-campus space creation and or renovation.

An integrated, human-centered approach to physical space design and re-design will be applied and will engage diverse campus stakeholders, encourage interdepartmental collaboration, and elicit input and feedback from space users (students, staff, and faculty).

Design Guidelines for Well-Being

1. Provide Opportunities for Social Connection and Collaboration

Physical spaces at SFU encourage social connection, collaboration and active learning among students and community members.

Suggestions:

- Provide a range of formal and informal areas with appropriate furniture for students to interact and exchange ideas, from lounges and bookable spaces to outdoor space and hallways.
- Provide a variety of group seating, multiple writing surfaces, access to technology and reconfigurable.
- Incorporate open, transparent spaces by enabling students to observe activities taking place inside of rooms and buildings.
- Physical spaces can be a barrier to connection, especially for students with additional accessibility needs or disabilities. Ensuring an environment that is accessible to all supports fulsome participation for all.

2. Enhance Access and Connection to Nature

Physical spaces contribute to a regenerative and biophilic design by highlighting connections to the outdoor natural environment and incorporating nature into interior spaces to enhance health and well-being.

Suggestions:

- Maximize natural lighting (with appropriate glare controls) and outdoor views with windows, skylights, atriums, and transparent walls.
- Incorporate indoor plants, water features and natural materials (such as wood and granite).
- Include artwork depicting natural landscapes (especially in windowless spaces).
- Enhance opportunities for access to the outdoors by creating roof top, patio or community gardens and outdoor seating and work surfaces.

3. Provide Flexibility and Adaptability

Physical space design is as flexible as possible in order to adapt to diverse needs and activities and anticipate innovations in pedagogy and technology.

Suggestions:

- Space design should support multi-functionality, re-organization and be reflective of individual processes as well as interaction through moveable, adaptable furniture or varied seating and work surfaces.
 - This could include tables with vertical-folding tops to increase floor space, foldaway tables/chairs that allow for wheelchair users to access the space, or modifiable tabletops/desk space as necessary.
 - Size-inclusive seating (without armrests, height-adjustable seating, multiple options of supportive seating in the room)
- Consider current research and innovation in teaching and learning when planning room layouts, furniture choice and technological infrastructure.
 - Easily operable doors that require little force to open or the option of mechanized doors.
- Incorporate the maximum amount of work surfaces to support teaching and learning (e.g., marker and projection surfaces, writable walls).
- Adaptive furniture that facilitates ease of use in spaces

4. Support and Promote Healthy Living

Physical spaces are designed to support all dimensions of well-being, including physical and emotional well-being.

Suggestions:

- Encourage activity through supportive infrastructure and design (e.g., active transport amenities, stair accessibility, active furnishings such as standing work surfaces, access to recreational facilities).
- Support pedestrianism and access to the outdoors through aesthetically pleasing outdoor spaces (seating, water features, and public art), covered walkways, clear signage, footpaths, and appropriate lighting).
- Provide sufficient access to water dispensers and food.
- Provide smoking stations in suitable locations as per [SFU's campus policy](#).
- Ensure physical spaces are supportive of personal safety (e.g., well-lit, clear signage to enhance way finding).
- Utilize healthy materials to minimize off gassing.
- Infection control/hygiene practices (e.g., using copper in spaces, ensuring adequate sanitizing supplies/places to wash hands)

5. Enhance Physical and Mental Comfort

Physical spaces create a comfortable, welcoming, and aesthetically pleasing atmosphere through the consideration of design features that enhance well-being.

Suggestions:

- Provide furniture that is comfortable, adaptable and
- Maintain optimal thermal comfort and air quality through appropriate HVAC systems, natural ventilation strategies and operable windows and doors when possible.
- Consider acoustic planning and
- Maximize exposure to natural light (with glare control).
- Incorporate appropriately motivating, pleasant, or biophilic elements through artwork, colour and indoor plants into physical
- Consider reviewing spaces to assess if they support neurodivergent students through architectural choices that consider sensory comfort, adjustability, and flexibility of furniture.
- Incorporate room controls that are intuitive and easy to operate (e.g., lighting with dimmer functionality).
- Provide technical training and support, when possible, for instructors, staff and students.
- Provide a variety of spaces to meet diverse needs (e.g., quiet spaces, social spaces, areas for individual and group work).

6. Ensure Inclusion and Appreciation of Diversity

Physical spaces demonstrate a universal design approach, incorporate effective access and control for people of all abilities and enhance sense of place.

Suggestions:

- Consider different teaching and learning styles and formal and informal activities that need to be supported through space design.

- Consider implementing [Tools for Well-being in the Classroom](#), which have supported well-being across campus in tangible ways.
- Incorporate clear and inclusive signage (e.g., gender neutral washroom signs for singles stall washrooms).
- Consult with accessibility and inclusivity specialists on campus (e.g. Centre for Accessible Learning, Out on Campus etc.).
- Honour Indigenous perspectives by consulting with the Office for Aboriginal Peoples and the Indigenous Student Centre (e.g., support Indigenous ways of knowing and sharing through design, vernacular artwork, include traditional language on signage).
- Support for designated spaces for equity-deserving students (e.g., Women's Centre/OOC/Black Student Centre)

7. Align with SFU's Sustainability Goals

Physical space planning and design processes will consider social, economic, and environmental sustainability.

Suggestions:

- Consult LEED Canada Rating System for Buildings to inform decision making and if possible, meet LEED certification status.
- Consult with the Living Building Challenge performance.
- Consult with the Association for the Advancement of Sustainability in Higher Education's (AASHE) Resource Centre.

Acknowledgements

This document was developed through a collaborative process, engaging key stakeholders, including staff, faculty members, administrators, and students as part of the Well-being through Physical Spaces project that began in 2017. Well-being through Physical Spaces has advanced with the support and involvement of key partners including Campus Development and Planning, Facilities Services, Build SFU and the Simon Fraser Student Society, the Office of the Registrar, and Vancouver Campus Administration. It is part of SFU's Healthy Campus Community Initiative led by SFU's Health Promotion team.

This is a living document that will be modified over time. This document was last updated on April 25, 2023 with thanks to Caldon Saunders, Health Promotion Special Projects Assistant & Daksha Jadhav, Health Promotion & Engagement Strategist for their leadership and contributions. For further information or to provide feedback, please email health_promo@sfu.ca or visit www.sfu.ca/healthycampuscommunity.

Appendix A: Background and Rationale

SFU's Vision for a Healthy Campus Community (HCC) aims to create a "healthy campus community where the people, programs, practices, policies, and spaces foster well-being, supporting campus members to thrive and succeed at SFU and beyond." The HCC initiative is founded in settings-based health promotion theory whereby the institution itself is the focus for intervention, in order to create campus conditions that are supportive of well-being. The Well-being through Physical Spaces project was developed by SFU's Health Promotion team, in collaboration with SFU stakeholders, to address physical spaces as one of six key areas for action identified to positively impact well-being. The project aims to improve the well-being of SFU campus members through the enhancement of SFU's physical environment.

Physical environments can significantly influence well-being through social, mental, and physical dimensions of health. Spaces that are welcoming and accommodating can facilitate social connection, an indicator of longevity and quality of life [Mineo, 2017], through inclusivity [Lawburg, 2022]. Thoughtful and considerate design and architecture that embed SFU Health Promotion's guiding principles of diversity, equity, and inclusion foster environments that enhance student experience. Barrier-free environments promote autonomy, allowing patrons with diverse backgrounds, needs, and abilities to feel independent and in control, enhancing positive self-perception. The built environment can also influence acute emotions, promoting feelings of joy, relaxation, and comfort [DuBose et al, 2018], directly and indirectly affecting short- and long-term well-being of all patrons. The built environment can also influence acute emotions, promoting feelings of joy, relaxation, and comfort [4].

The quality of physical learning environments has a significant and measurable impact on student achievement, productivity, satisfaction, and well-being (Earthman, 2002; Hill & Epps, 2010; Lippman, 2010; Schweitzer, Gilpin & Frampton, 2004; Strange & Banning, 2001). Post-secondary institutions have a unique and strategic opportunity to create supportive physical spaces that enhance student well-being and student experience.

Appendix B: SFU Campus Examples of Well-Being through Physical Spaces

A few of the many spaces built at SFU in alignment with the Physical Spaces guide include:

1. The Student Union Building (SUB)
 - a. [Building Directory](#)
 - b. [SUB Homepage](#)
2. [SFU Dining Hall](#) & Residence and Housing Expansion Project
3. [Faculty of Health Sciences Student Commons](#)
4. [Community Vibrancy Project](#)
5. The Learning Hub (EDB 8620)
6. AQ Student Lounge Spaces
7. SFU Vancouver Wellness Studio and Lounge Spaces

Appendix C: Definitions

For the purpose of this document, the following definitions are used:

Physical Spaces: Refers to the built environment and surroundings including indoor and outdoor areas. Spaces can include but are not limited to theatres, classrooms, dining areas, residences, green spaces, study and lounge spaces as well as other public areas.

Student Wellbeing: Student well-being is about students' resilience, connectedness, persistence, sense of community, physical, social and emotional health and ability to thrive at SFU and beyond. It is also about reducing negative health outcomes such as overwhelming stress, hopelessness, anxiety and isolation.

Access: the ability to use and have full participation in all aspects of life, including the built environment, programs, services, opportunities, and beyond (Whole building design guide, 2022)

Accessibility: how spaces are designed and function for people with disabilities (Accessibility Canada, 2023)

Adaptive furniture/settings: refers to furniture and settings that are accommodating to people with disabilities, providing easy and full access to, use of, and interaction with the physical environment ([source](#)).

Integrated Design: The way by which spaces are designed to address its functionality, how it fares against natural elements, and the sensory and associative feelings it evokes ([source](#))

Off-gassing: the release of odorous chemicals from materials that can continue past their "new smell" stage ([source](#))

Neurodivergent Architecture: design with the intention of creating a space that is welcoming, accommodating, and enjoyable to the diverse needs of the neurodivergent population (Lawburg, 2022, p. 11)

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