

Killam Memorial Library Observation Study 2018

Assessment Report

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Executive Summary

Teaching and learning in universities has shifted dramatically in recent years. Students are required to engage in collaborative (often social) learning using an increasing number of digital online tools and electronic content. The Killam Library has responded to these changes by providing vast electronic collections and the computer hardware necessary to access and use these collections. However, there remains a need for functional workspaces that balance the competing needs of individuals who seek facilities for collaboration, co-location and individual study. In addition to meeting evolving needs, the Killam Library must maintain clean, well-lit and safe spaces with functional furniture and appropriate levels of noise. The Killam Library Observation Study is an initial attempt to determine if our building is supplying the type and quality of learning spaces that our community requires by observing the behaviours of individuals using the building.

For the first phase of their space assessment, the Killam Library Assessment Team used participant observations and an inductive approach by looking for themes to emerge from our data. We gathered data through participant observations conducted between January 29 and April 19, 2018. During that time, we conducted observations in all public locations at different times of day. Our observations revealed patterns of heavy use in the Atrium, the First Floor Learning Commons, the Music Room, the McNab Reading Room and the Atrium Hallways. We observed underuse of the Reference Room (JJ Stewart Room), the Second Floor Learning Commons, the LINC/Collider (Room 2600), and the Fifth Floor Special Collections Reading Room. Another major finding was the general confusion surrounding the "quiet" noise policy. This was most noticeable in the First Floor Learning Commons where there is little pretense of remaining quiet during heavy use periods. We also observed many instances where individuals preferred to co-locate while studying without collaborating, as well as other individual behaviours including laptop use at computer workstations and use of seating arrangements intended for group study. Lighting was an issue in several spaces, causing concerns for safety, and we questioned if spaces felt inclusive to all student groups.

Based on the initial participant observations, the Killam Library Space Assessment team proposes several recommendations found in the last section of this report. The following general recommendations are highlighted here:

- 1. A second phase of Killam space assessment to gather direct feedback from students regarding their needs, perceptions, and experiences within the learning spaces in the Killam.
- 2. Consider weeding the collection again, to make way for additional study space.
- 3. Determine usage of public-use terminals (the stand-up and sit-down terminals throughout the building that do not require a log-in) and remove as necessary, replacing with appropriate study space.
- 4. Remove/repair damaged and broken furniture and equipment from public areas more frequently.
- 5. Increase garbage removal on weekends.

- 6. Improve signage and display consistent messaging regarding quiet spaces.
- 7. Provide signage for the LINC/Collider that clearly indicates its availability to students outside of class times.
- 8. Develop a more aggressive schedule to fix burnt out lights that are common throughout the building.
- 9. Besides lighting, other efforts should be made to make dark and potentially "unsafe" areas appear safe or to block off public access to these areas.
- 10. Remind facilities and cleaning staff of quiet study areas and to keep voices low, particularly outside the Fifth Floor Reading Room and the Third Floor Stacks. Consider relocating the Third Floor cleaning staff break room.
- 11. Use caution when analyzing Learning Commons computer usage data. The data does not reflect actual demand. Unused computers may have students using the workstation space for laptop use or other use.
- 12. While doing seat counts, be aware that seats may not be usable while adjacent seats are in use, and not all seats are usable for certain activities.

Introduction

Architects and librarians designed the Killam Library in 1966 during a time when libraries were used quite differently than they are today. At the time, personal computers were not yet available in libraries and most space was set aside for silent study, and to house and use the print collection. While several renovations have taken place over the intervening years, the structure remains mostly unchanged from its original design.

In recent years, several of Dalhousie's library spaces, including learning commons, have been assessed either preceding or following renovations or new construction. There are currently no major renovations planned for the Killam Library; however, insightful results from various assessment studies, including the other space assessments, indicate a need for the Killam to undergo its own assessment to discern if the spaces within the library are meeting the needs of the current user community.

In 2010, a participant observation study was performed in the building by Sociology and Social Anthropology students as an experiential learning project with the Assessment Librarian. This study revealed the effects of building design, student work behaviours, and staff presence, and issues of blending group and individual study spaces.¹ In 2013, the Killam Library scored low in the LibQual+® survey, particularly in terms of "library space that inspires study and learning" and "quiet space for individual activities". Results of the Student Input and Feedback Team (SIFT) in 2017 and 2018 revealed a perceived lack of group workspace, issues with furniture and availability of computer workstations. A review of comment cards from the last four years has revealed general dissatisfaction with the building design, utility and aesthetics. As well, the NSSE

¹ See: Bedwell, Linda, and Caitlin Banks. 2013. "Seeing Through the Eyes of Students: Participant Observation in an Academic Library." Partnership: The Canadian Journal of Library & Information Practice & Research 8(1): 1-17.

2014 and 2017 survey results reveal that "improving the quality/availability of study spaces" was the top option that first and senior year respondents felt the "university most needs to address to improve the student academic/learning experience outside of the classroom" (survey results available through Student Affairs and Dal Analytics). All of these impressions form a growing body of evidence to support the view that the Killam Library is not meeting the needs of the Dalhousie community.

In January 2018, in consultation with the Associate University Librarian, Library Services and the Associate University Librarian & Head of Killam, Linda Bedwell (Coordinator of Library Assessment) chaired a small Killam Library Assessment team including Geoff Brown (Digital Scholarship Librarian) and Lachlan MacLeod (Copyright Services Coordinator). After reviewing existing data and feedback, the team decided to begin the assessment with a participant observation study, adding Carl Harvey (Library Services Technician) to the team. The observation study was conducted during the 2018 Winter term. This final report contains a description of our methods, the results of the observations and recommendations for both changes and additional assessment studies.

The purpose of this report is to document and build a more complete picture of the behaviours of individuals and groups in the Killam Library. Our observations are intended to supplement and build on previous work to help us develop a more complete understanding of who uses the building and how they use it. Ultimately, our goal is to facilitate improvements to the Killam Library that will better meet the needs of the Dalhousie community.

Methodology

Data Collection: Participant Observation

Participant observation was selected as the primary assessment method for this study. Participant observation is a qualitative research method where researchers study social behavior by participating in a group or space.² Participant observation was well-suited to the Killam Library space assessment because it allows us to approximate studying in the library from a user perspective and minimize our perspective as staff. It also allows for a holistic assessment of all conditions of a space. A space is the sum of its parts, which are all interconnected, and the flow from different components and sections is often not obvious to the casual observer. A single component, like the orientation and dimensions of a desk, contributes to traffic, noise, and other factors that affect the feel and use of a space.

Participant observation also allows for a space to be observed over time, rather than in a snapshot "instant." One hour of observation yields different results than a brief check or walk-through. Participant observation can also inform future study, informing questions for surveys or focus-groups, and may balance out respondent bias in these types of study.

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² See: Bryman, A. 2012. Social research methods (4th ed.). Oxford: Oxford University Press. Page 432.

We conducted this study using a grounded theory approach. Grounded theory is a holistic and intuitive approach to qualitative research and is the "most widely used framework for analyzing qualitative data."³ Rather than the deductive approach where researchers begin with existing theory, then use this theory as the basis for a testable hypothesis, grounded theory takes an inductive approach, looking for themes emerging directly from the gathered data. Theory is developed through the data-gathering stages, until final analysis and report-writing. A grounded theory approach allows us to move from broad, open observations, to the identification of themes within the raw observation data.

Observations were conducted between January 29th and April 19th, 2018. We divided the library into 23 public spaces and observed each of these spaces across 4 time periods: morning, afternoon, evening, and weekend. These spaces were then subdivided to allow the space to be entirely or almost entirely viewable by an observer. Due to illness/room availability, the Grad Pad received 3 observations, and the LINC/Collider received 1. Covering these major time blocks allowed for identification of trends or outliers across different time periods. We also aimed for 3 observers for each area, with some receiving 2. (See Appendix A for the observation areas and schedule.)

Observers took work with them to their observation sessions and took notes while utilizing the space for their work needs. Often, we would move around the space to use different furniture, check noise, or get a different perspective on the space. Usually, we observed a space for one hour, but some spaces warranted more time due to their size, or to target specific times and users. Some areas like the stacks, were observed in less time, due to the similarity of the space. For instance, rather than spending an hour on each of the North, West, and South Fourth Floor stacks, we could spend 2 hours, moving from area to area. The goal was to use and observe the space in a way that would approximate a user perspective.

Data Analysis

Our primary approach to analysis is a continuation of the grounded theory approach we had established through participant observation, to see what themes emerged from our observation data. Rather than applying categories, theory, or terms from existing literature, we relied on what we had observed and recorded to guide categorization of our data. If a topic or question was recurring in our observations and discussions, we identified this as a theme worthy of further discussion.

Analysis was conducted over a series of meetings to discuss and aggregate observations and to limit observer bias. We combined observations into summaries for each main space. (These summaries are attached to this report as Appendix B.) These summaries were then combined as overall summaries for the following grouped areas, drawing on relationships between the uses of

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³ Bryman, A. (2012). Page 567.

similar spaces: First Floor Service Areas, Learning Commons, Reading and Multipurpose Rooms, Atrium Hallways, and Stacks.

Each of these aggregate summaries included a list of author-identified themes. These summaries underwent another review by the team. We then created a combined long-list of themes common to the reports, refining this longer list into the short-list of themes below:

| Observation Themes | | | | | |
|--|--|--|--|--|--|
| Cleanliness | | | | | |
| Duration of use | | | | | |
| Food | | | | | |
| Furniture Issues | | | | | |
| Group work/Individual work/Communal Work | | | | | |
| Inclusivity | | | | | |
| Unattended belongings (includes laptops) | | | | | |
| Lighting | | | | | |
| Popular/Underused | | | | | |
| Noise | | | | | |
| Safety | | | | | |
| Signage | | | | | |
| Staff presence | | | | | |
| Workstation/Laptop use | | | | | |

Themes that were synonymous with other themes were combined or removed. Themes that were not truly captured by participant observation were removed; for example, themes regarding student motivation to choose a space. The results data were then extracted from the aggregate summaries by theme for this report. Once a draft of the report was complete, the team performed a walk-through of the building, double checking our observation notes and confirming our findings.

Limitations

There were several limitations encountered during this observation study, including issues with access to space, homogeneity of the observation team, and limitations inherent in the participant observation method.

First, some rooms were occupied during scheduled observations, and it was unclear when they could be observed under optimal conditions. In particular, the LINC/Collider was occupied or booked during weekdays, and it was unclear if classes were in there or arriving soon. The Collider space had a number of hand-written signs on it, warning that it was used as a class space, but we observed that it was often empty. Also, tables in the atrium hallways were fully occupied for most observation periods. These limitations, however, also served as observations into the preferred usage and availability of spaces.

Second, there was significant homogeny of perspective since we are all staff, familiar with the space, all white, and mostly male (three of four observers). This means that there are likely issues we did not identify (we don't know what we don't know). For example, near the end of our observations, we began to discuss space in terms of safety. We felt safe in the library, but would other users not share this perspective? Similarly, the female observer was the only one who had significant ergonomic issues with furniture, which she theorized might be caused by difference in size and proportion. Are some spaces/furniture designed primarily for male bodies?

Finally, participant observation is not able to answer questions of patron motivation - why people choose spaces, and why do they act the way they do? Direct study of patrons (e.g., surveys, interviews, or focus groups) would confirm if our experiences are in-line with that of library patrons, could identify motivations for specific space usage, and answer several of the questions that arose from our data (see the Discussion section).

Results

While summarized results data are presented here within the themes identified during the analysis process, the reader is encouraged to read the individual area summaries in Appendix B for a more complete picture of observations performed by team members.

Group Work, Individual Work, and Communal Work

In general, the design of each space dictates the type of academic work performed there: group or individual work. We observed communal work (individual work performed in groups) in both space designs, work that defied the intended design, and instances where the intended design did not suit natural **behaviours**.

The Atrium is mostly designed for groups – whether they are working or socializing or doing both. Tables and chairs are grouped, and there are no instances of seats and tables intended for one person. Individuals still use the space, however, but end up occupying table and chair combinations intended for two or more people. The same can be said for the tables and chairs in the Lobby.

Within the Learning Commons, the amount of group work versus individual work varies. In the First Floor Learning Commons, there are many individual patrons working at computers or on laptops, and groups convene at the tables beside the windows; however, we also observed instances of group work happening at the individual computer workstations.

It appears that patrons in the McNab Reading Room are primarily engaged in individual work; however, our observations indicated that many people enter in groups and sit with each other as they work alone, checking in with each other now and then (i.e., communal work).

The LINC/Collider appears to be oriented towards group work, with movable furniture generally grouped in clusters. Individuals may not be aware or feel comfortable rearranging the furniture and so may end up occupying grouped seats. In the Grad Pad, the arrangement of furniture in the back room (two seats per table section, grouped furniture and comfy chairs) seems to invite more group work or socializing, although the room is intended for quiet study (as per the signs).

In the Stacks, work spaces are primarily designed for individuals, although one observer noted that students turned their desks to face each other, but even then, there was little to no talking between them.

Throughout the Atrium hallways, group tables are in very high demand, and are more difficult to acquire than individual tables. (Only one of our observers was able to obtain a group table from which to conduct his observations.) Often, we saw belongings of several individuals left behind at tables now occupied by one person. In some cases, it was clear to observers that individuals were working at these tables alone, or groups were occupying these tables but doing communal work. It was also apparent that group and communal work were occurring at the individual tables as well.

Furniture Issues

Underused furniture, furniture rearrangements and ergonomic issues were observed throughout the library spaces.

As previously mentioned, in the Atrium individuals use furniture arranged for groups, rendering the accompanying seats unusable. Some seating also appeared underused, such as the lounge chairs and the wide chairs. We also observed patrons sitting on the "orange crescent" seats and not on the chairs opposite them, preferring to sit side by side.

In the Learning Commons, some of the workstations did not have a chair to go with the computer. Some of the chairs are dirty or damaged, as well as some of the screens and keyboards. In the Lobby, some of the yellow chairs are also discoloured and the tables are wobbly.

In the Grad Pad, small armchairs in the front study space do not appear to fit larger sized people. Some chairs had wheels while others did not. The stationary chairs were difficult to move over the carpet to pull one's self into the table.

In the Stacks, most of the tables/desks that are in the study nooks are at a good height and give ample space for most work needs, and the chairs fit the tables well. The chairs are comfortable enough for longer study sessions; however, it was noted that they might roll too easily. One observer (male) experienced a table that was not installed at an ergonomicallyappropriate height. In the Atrium hallways, students regularly moved furniture into new arrangements, joining one or more tables together. It was common to see individual tables and/or chairs arranged as a group in the corners of each floor. The one female observer noted problems with the ergonomics of the individual tables in the Atrium hallways.

In the Special Collections Reading Room, the large wooden tables and chairs also caused ergonomic issues. The tables themselves are quite high, making laptop use uncomfortable.

Duration of Use

Areas in which we observed long-term stays included the Atrium, the Music Room, the Second Floor Learning Commons (compared to the First Floor), and the Atrium Hallways. The Atrium provides an atmosphere conducive to both work and socializing and this may be the reason why occupants stay for longer periods of time. Just inside the Library doors, the Lobby acts as more of a transition area - a place for a break, to do quick printing from laptops or public workstations, to meet someone, or to eat before moving on to other areas of the library. While the Music Room is sometimes used by folks to simply send items to print, for the most part this room houses students staying for extended periods of work. (Anecdotal evidence indicates most of the regular occupants are Music students.)

In the First Floor Learning Commons, length of use varied. Some patrons would quickly go in, print and then leave. Workstations saw a relatively quick turnover of users (within one hour), with some staying on for longer sessions. The Second Floor Learning Commons – a much quieter location - was observed to be favoured by patrons for longer sessions. Extended sessions were observed in the Atrium hallways as well, at individual tables and especially at group tables. In general, those with short tasks tend to use the First Floor Learning Commons or the Lobby - the more easily accessible areas of the library.

Workstation Demand and Laptop Use

We observed heavy use of computer workstations on the first floor, indicating a high demand, while some terminals throughout the building were underused. Extra availability of workstations was observed in the Reference Room (JJ Stewart Room) (where sightlines and the layout make it difficult to identify an available terminal) and in the Second Floor Learning Commons. While the public use terminals in the lobby by the entrance to the First Floor Learning Commons were consistently in use, other public use terminals in the building, particularly the stand-up terminals on the First Floor, were seldom in use. We also observed First Floor workstation seats occupied by laptop users, thereby making what would be an available workstation effectively unavailable. We observed similar behaviour in the Music Room, with laptop users occupying seats for listening stations; however, we never observed the listening stations in use.

Many of those who did use the public use terminals in the Atrium hallways appeared to be of an older demographic, perhaps indicating that these older users are uncomfortable using the computer common spaces in other areas of the library. Aside from this, Atrium hallway

workstations were observed to be mostly unoccupied while other seating in the area was in high demand.

In areas of no computer workstations, heavy laptop use was observed. Only in a few instances did we observe a table occupant reading/studying from books or notes and not using a laptop.

Popular vs Underused Spaces

We observed various levels of capacity throughout the building. Some areas were heavily occupied, while others appeared underused. "Popular" areas may indicate a high demand for that type of study space or perhaps a lack of choice. Similarly, underused areas don't necessarily indicate low demand; their underuse may indicate a lack of awareness of the space or a perception the space is not available. (It should be noted that all the building's spaces receive much heavier use during exam periods, making nearly every area "popular" at those times.)

Areas receiving heavy use and that may be in high demand are: the Atrium, the First Floor Learning Commons, the Music Room, the McNab Reading Room, and the Atrium Hallways. Underused areas are: the Reference Room, the Second Floor Learning Commons, the LINC/Collider, and the Fifth Floor Special Collections Reading Room.

The Atrium was observed to be a very active, populous spot, with individuals having to occupy furniture intended for groups, and other individuals having to walk around, searching for available seats that didn't exist. The most densely populated area is the seating on the side between the microwave and Subway; however, a "dead end" area was identified in the far corner where Student Services used to be that is underused compared to the rest of the space. The "dead-end" aspect may be socially inhibiting, as one must walk down it to investigate if there is available seating. That area appears darker than the rest of the atrium, especially in the evening.

The First Floor Learning Commons was observed to be the most used "study space" in the building. The room was often at capacity, particularly during weekdays. The population decreased substantially for the weekend observations, but there was still some activity. The Music Room was also well used, particularly during the daytime observations and it seemed like the occupants were regular users of the room. In contrast, the Reference Room was only at ½ capacity during daytime observations, and less on weekends. Similarly, the Second Floor Learning Commons also seems to be less known as a study space, with the computers and work spaces being somewhat underused.

The McNab Reading Room was very popular among the students. It was "packed" during two observations, with occupants at every table. This popularity might be attributed to how quiet the space is. In drastic contrast, the Fifth Floor Special Collections Reading Room appeared to be underutilized, with plenty of extra seats for those seeking quiet. The availability of this room is not

promoted, and some students may feel it is exclusive to Special Collections users. The disallowance of food and drink may also factor in its underuse.

The question of perceived availability was also an issue with the LINC/Collider on the Second Floor. We were only able to conduct one observation in this space, which highlights the heavy booking of this room. It seems to be unclear to patrons whether the room is available for their use or if it is booked for a class or other group. Meanwhile, just outside, in the atrium hallways, both group tables and individual seating are in high demand.

The Stacks appear to be a popular place for students to study, possibly because of the adherence to quiet study space rules and the sense of seclusion that was felt by the observers. Demand increases leading up to and including the exam period, with almost all nooks occupied by at least one patron, and many fully occupied. Unless entering the stacks as a group or duo, patrons tend to prefer unoccupied nooks over occupied ones (thereby occupying a 2-seated nook by occupying just one seat). However, if there were no empty nooks, it was observed that patrons have no problem sharing a nook with another patron if necessary.

Inclusivity

In several areas of the building, our observations made us question not only the general awareness of available study spaces, but also if all spaces were welcoming to all potential users. (Note the limitation of our observations due to the member homogeneity mentioned in the methodology section.)

On the first floor, the atmosphere of the Atrium (furniture groupings, noise level, activity, foot traffic) seemed geared towards groups who would feel comfortable talking with each other in regular voices. Individuals wanting to use the space would have to take tables intended for two or more, and therefore create some "unusable" seats. The First Floor Learning Commons is one of the most used spaces in the library, giving some indication to its inclusivity. Meanwhile, the Reference Room is quite small, workstations are arranged in a pattern down the centre of the room, making it hard to see available terminals. This room also has an accessible work station that we observed often in use by one individual, but we questioned if its placement in a quiet room with no food allowed restricted the activities of those who needed to use it. When we observed the Music Room we wondered if it is mostly used by Music students and if other students felt welcome to use it.

The Second Floor Learning Commons appears to be less well known than the First Floor Learning Commons, giving it a sense of exclusivity, although the patrons who do know about it may enjoy using it to study and work because of its relative seclusion. Since this space is not obvious from outside the room, we wondered if its availability is not well known, limiting its use by other students. Outside and down the hall, the LINC/Collider space was an enigma (who knows when/if the room is available?).

The Grad Pad is exclusive to graduate students, but we wonder if there are grads from certain programs more aware of its presence or feel welcome to use the space more so than other grads who also need the study space.

With regards to the Fifth Floor Special Collections Reading Room, there is the aforementioned ergonomics of the furniture that observers felt would make it difficult for patrons of a smaller stature to use the space effectively. It is also unclear if students are aware that the space is available to be used as an open study space with hours extending to the evenings and weekends.

Unfortunately, despite the zero-tolerance policy and reporting protocols, some graffiti was found on and around the desks in the Stacks; some of it offensive. Steps have been taken to have the graffiti removed. Due to this discovery, we question how inclusive these study areas may feel for some students.

In the Atrium hallways, ergonomic issues with individual tables may affect its use by females or those of smaller statures. Inadequate lighting in the work space behind the stairwell on 2nd floor and in the hallway leading to 4th floor study rooms, and potential safety concerns also made us question if the accessibility of these study areas is limited for some people, and intimidating for some as well.

Lighting

Only certain areas of the building benefit from natural light which can have both positive and negative effects on overall lighting. Several areas suffer from no natural light and, in some cases, from an overall lighting deficiency. It is hoped that these deficiencies are rectified in the upcoming lighting project funded by Sustainability.

The Atrium is an obvious space that benefits from lots of natural light. This light is very conducive to the work and social activities that take place there, especially in the daytime. We noted some dark areas, however, in the area by the Second Cup cream station, and the previously mentioned "dead end" space.

The First Floor Learning Commons enjoys plenty of artificial lighting and some natural light. The Reference Room is dimly lit in comparison, but it was not so dim as to be a potential safety issue or to make it difficult to do work. Possibly the dim light may contribute to its overall quieter environment. The dim lighting was more of an issue in the Music Room, which also has little access to natural light.

The Second Floor Learning Commons and the McNab Reading room are brightly lit, with sunlight coming in from large windows and overhead lights throughout the room. The LINC/Collider did not have any source of natural light, but the area was still well lit, with no dim areas visible. The Special Collections Reading Room enjoys ample natural light. In the Grad Pad, we observed several burnt out overhead lights.

The Stacks represent a strange scenario for lighting. The lighting is overall very good - there are overhead lights above desks in each nook, which patrons currently have control over, and the tall, narrow windows on the perimeter of each floor let natural light in during the day. The effectiveness of this light is determined by weather conditions outside and the time of day. Because of this, there are some dark zones on each floor; however, we observed plenty of patrons sitting in the dimly lit areas while better lit areas were available.

The Atrium hallways also enjoy natural light. It permeates all floors, with the greatest amount available on the Fifth Floor. The team, however, observed that pot-lights were out in various sections of each floor, making visibility an issue after daylight. It was also particularly dark behind the stairwell on the Second Floor and in the hallway to the Fourth Floor study rooms.

Unattended Belongings

Belongings, including laptops, were observed left behind in all areas of the building except for the LINC/Collider (which received just one observation), the Atrium and the Lobby sitting area. Observers could understand why some patrons would feel comfortable/secure in leaving laptops in certain areas. The McNab Reading Room, Grad Pad and Special Collections Reading Room have high visibility to the rest of the room, allowing patrons to watch for potential thefts. The Grad Pad has a locked entrance, which gives a stronger sense of security in that space than in other spaces. Minor foot traffic, and staff presence, even though limited in some of these spaces, could also be an element in these students' decisions.

We observed students leaving behind laptops in other areas we would deem less secure. In the Stacks, where there is limited visibility, we observed some patrons leaving their belongings in a nook. In the Atrium hallways, where there is a significant number of passers-through, students left their laptops both at individual tables and at group tables. It is possible that fellow students are watching their belongings both at the group tables and at the individual tables, as one observer was asked by a "neighbour" to watch their things for them.

Safety

Safety arose as a theme within our observation data, both in terms of behaviors that indicate occupants feel "safe" and conditions that may cause occupants to feel "unsafe".

As previously mentioned, several areas provide conditions such as wide open spaces and clear sightlines that create a feeling of safety. This is perhaps exemplified by the comfort with which students leave their belongings in these areas, including laptops and other mobile devices. In other areas, however, a lack of clear sightlines and dim lighting create the potential for some users to feel unsafe. We have identified these areas as: behind the stairwell on the Second Floor, the hallway to the Fourth Floor study rooms, study nooks in the stacks with the lights switched off (particularly in the corners of the building), the stairwells, and to a lesser extent, some areas of the Music Room.

Staff Presence

During our observations, we took note of staff presence in the various study spaces. For the most part, where there was consistent staff presence, there was consistent adherence to quiet study rules. The Music Room (CLT staff presence) and the Special Collections Reading Room fall into this category. (We did note that the Third Floor Atrium hallways are the noisiest yet have the most staff present/regularly walking through; however, our heavy foot traffic may be contributing to the noisy environment.)

This is not to say that areas without staff presence were unsuccessful in maintaining quiet. The McNab Reading Room, the Second Floor Learning Commons and the Stacks all appear to maintain quiet without staff present. We do, however, wish to flag the First Floor Learning Commons as an area that if we wish to uphold the quiet study rule, may require more regular staff presence. (The current room for the Help Desk doesn't sufficiently provide a perception of staff presence throughout the Learning Commons.)

Noise

Throughout this report, we have highlighted areas that successfully maintain the designated level of quiet. In this section, we would like to highlight the areas where noise is a factor.

In the Atrium, the noise appears to blend into a hum or white noise and is conducive to the blend of work and socializing that happens there. With the heavy foot traffic, food vendors, group work, and patrons' eating, there is usually a constant background noise. It does not seem to disrupt work, however, and likely just becomes a part of the background ambience. Occupants feel comfortable talking at the level required to do their group work, tutor, have a meeting, or carry on a non-academic conversation.

Unfortunately, the Atrium is the only area where noise works in favour of the intended activities. The First Floor Learning Commons is likely the worst area for upholding its designation of "quiet". During observations it was loud and social, particularly in the back section by the study rooms. Some of the noise came from the study rooms themselves, due to the ongoing problem of open grates at the top of the rooms which allow voices from within to travel out to the commons beyond. Students using these rooms may not be aware of how far their voices carry due to this technicality. This, in turn, may be delivering a message that loud talking in the Learning Commons is acceptable, thereby contributing to the lack of abidance by the quiet rule.

This problem doesn't appear to be occurring in the Reference Room (although there was some noise bleed from the Learning Commons and Lobby), in the Music Room, or upstairs in the Second Floor Learning Commons and McNab Reading Room. (We would like to note here that while the occupants maintain quiet, the physical design of the Second Floor Learning Commons and Reading Room amplifies other noises of movement, shuffling, etc.) Staff walking through the McNab to room 2902/staff lounge are sometimes noisy. Facilities staff were also observed disrupting the quiet of the Special Collections Reading Room.

The Grad Pad is self-policed. While the back study room appears to remain mostly quiet, the front room can be disrupted by noise from meeting rooms and from those not abiding by the quiet rule.

Within the Stacks, there were two sources of noise. One came from classroom 2622 and the other came from cleaning staff in their Third Floor break room.

The practical implications of designating a space as quiet but permitting conversation is evident in the Atrium hallways. For the most part, occupants abide by the quiet rule; it is the individuals who are in transit who cause the greatest amount of noise. This pattern was most evident closer to destinations such as the elevators, classrooms or the Grad Pad. Students talking at the individual tables were another source of noise disruption.

While the Third Floor is the noisiest for quiet-rule breakers, there is significant noise bleed on the Second Floor from classes in 2622 when the door is left open, and from a staff office on the Fifth Floor.

Signage

While this observation study didn't specifically focus on signage, some issues with signage were captured in our general observations.

On the first floor, we noted that passers-by did not appear to look at the screen in the Learning Commons and most seated occupants were not close enough to read it. The one in the Atrium was not in use at the time of our observations. Within the First Floor and Second Floor Learning Commons, paper signage varied. There is a large sign when the patron enters the First Floor Learning Commons saying that it is a quiet study area. There is other signage saying the same thing throughout the room, but these signs are small and not positioned within natural sightlines. The Second Floor Learning Commons on the other hand had large signs with a red band that were very obvious throughout the space, possibly assisting in its success as a quiet area.

There is also an issue with signs indicating room availability, particularly for the LINC/Collider and the Special Collections Reading Room. It was unclear to observers how available and how welcoming these rooms were to students requiring that type of study environment.

It wasn't clear if the signage in the Grad Pad was provided by the Libraries or by Grad Studies. A sign indicating the front study space is to be quiet was not seen until leaving the room, where it was pasted on the inside of the door.

In the Atrium hallways, observers noted that quiet space reminder signs are not always large enough or placed at the right height. Most are paper and taped to the atrium glass, making them easy to remove and, as a result, some are torn down.

Food

Snacking was observed in all areas of the library that food is prohibited, except for the Special Collections Reading Room. The presence of food garbage was particularly noticeable in the Stacks. Observers surmised that much of the food bought in the Atrium is transported elsewhere into the library due to the lack of appropriate seating in the Atrium. We observed individuals looking for available seats without success, leaving them to perhaps seek out seating elsewhere in the building where food is not permitted.

Cleanliness

Although we recognize the ongoing challenge of cleaning the atrium windows, we would be remiss if we did not report our observations of dirty/dusty atrium glass, which gets worse as one goes up the floors, making the Fifth Floor particularly noticeable. Litter was also observed throughout the building on the weekends.

Discussion

Our observations raised several questions, both generally across the Library, and in specific spaces.

General

Noise was an issue in many "quiet" spaces, especially in the First Floor Learning Commons and certain Atrium hallways. We wonder how do students interpret our "quiet study" noise policy? Is signage/messaging for the policy ineffective, or are students prone to making more noise in certain spaces? We also wondered what could be done to make sure students know where to go to find quiet/silent study spaces.

Related to the noise policy questions, we wondered if the ratios of individual versus group seating was working for each space, particularly in the Atrium and the Atrium hallways. We observed individuals in the Atrium hallway using group seating and wondered what motivated that choice. We also observed group seating used by individuals, working in groups. We wondered what factored into the choice of individuals to work communally, and if the building provided adequate types and amounts of seating for all three types of study: group, individual, and communal. The balances between quiet and loud, social and individual seem to be a key component of designing the Killam space, and it seems like addressing these balances would yield a lot of positive change, without high investment.

Finally, we were often left wondering, in general, why do people use the different study areas? Is it due to lack of appropriate space elsewhere? Are there ergonomic issues with non-adjustable tables and chairs? Do these issues lead students to use other types of spaces? (For example, are group tables in the atrium hallways in higher demand because the individual tables and chairs are ergonomically difficult for some people?)

Are students aware of the availability of various types of work spaces in the library? Could a potential lack of awareness lead to underuse of certain spaces? Are there other reasons for students not using these spaces? Through participant observation, we are unable to determine student motivation to choose whether or not to use specific spaces. We can speculate, and approximate the student experience through immersing ourselves in the space, but gaining direct student feedback may provide insight into the value of certain spaces for certain needs.

Specific Spaces

Learning Commons – First and Second Floors

It appears that the First Floor Learning Commons is being used as a conversational study space, not the "quiet conversation" it is designated as. We wonder if it is best to double-down on quiet study enforcement, or to instead allow this space to be used as social study space, as the students seem to be using it. Meanwhile, the Second Floor Learning Commons remains quiet, but underused. So, we wonder if potential users are aware of the Second Floor Learning Commons. We wondered if there is a need for more quiet space with computers, or less? Is the First Floor Learning Commons not meeting the needs of people needing quiet with computers?

We also observed a high number of patrons using laptops in front of workstations. Sometimes they were using both their laptop and the workstation, but often they were using the workstations as desks. Why are they doing this? Does it indicate a need for ergonomic spaces for laptop users? More access to electrical outlets? Or are they working with their friends? Does this behaviour keep those who need workstations from using them? (In the 2017-18 Killam SIFT, participants indicated this is their experience.) How many dedicated workstations do we need? Do we need more laptop space in lieu?

<u>Music Room</u>

This behaviour of using table space intended for other purposes for laptop use was also observed in the Music Room. We questioned why students used the listening stations for laptop use.

<u>Grad Pad</u>

While the Grad Pad is exclusive for only grad students, we wondered who uses it and who doesn't and why? How can we ensure the space feels inclusive to all grad students?

Fifth Floor Special Collections Reading Room

The Fifth Floor Reading Room has potential for more use. We wonder if students are aware of its availability, we question the ergonomics of the large wooden tables and the accompanying chairs, and overall, we wonder what is contributing to its underuse.

Atrium Hallways

The heavy use of the group tables in the Atrium hallways indicates a high demand. Why is there a preference for these tables and what does this mean about the other available furniture? We wondered if there is a need for more group tables? We questioned the ergonomics of the individual tables and chairs.

<u>Stacks</u>

The stacks seem to be working as intended in terms of individual study space; however, there were other design questions that arose during our observations. The space is dim, with dark, isolated areas that could be considered unsafe to some. Students have control over the light in this space, which means they can create these dark areas themselves. We questioned if they should have this control. This was also the area where we observed the most graffiti, tying into issues about hate-speech graffiti on campus and inclusivity. What can we do to curb the graffiti? Are students experiencing ergonomic issues with desk height, chair size, and do the chairs roll too much?

Recommendations

Based on our observations and the ensuing questions we raised, we have many recommendations for the Killam Library – both for the next steps in the assessment project and for change. The reader should note that for some of issues we observed we have withheld recommendations until further study in phase 2 of the assessment.

General

- The second phase of the Killam assessment should gather direct feedback from students regarding their needs, perceptions, and experiences within the learning spaces in the Killam. This student assessment may include survey/question cards/focus groups/interviews, etc. to gather insight on:
 - Demographics of the users of the spaces.
 - Which spaces/furniture are being used for what tasks?
 - Why users choose the spaces. Is it their first choice? Does it meet their needs?
 What do they like about it? How could it be improved?
 - Are there issues with ergonomics of the non-adjustable chairs/tables? One size does not fit all, but what is the extent of the lack of fit?

- What is the effect of the current signage/messaging regarding quiet rules? How do users naturally differentiate between "silent" and "quiet"?
- Why are laptop users using the computer workstations?
- If overall availability of study space is identified as an issue in the building, then consider weeding the collection again to make way for additional study space.
- Determine the usage of public-use terminals (the stand-up and sit-down terminals throughout the building that do not require a log-in) and remove as necessary, replacing with appropriate study space.
- While staff in Admin perform regular furniture inspections and remove any damaged or stained pieces, the frequency of these inspections should be increased.
- Increase garbage removal on weekends, if funding allows.
- Improve signage and consistent messaging regarding quiet. Signs should be large, use "caution" colours (e.g., red, orange), and should be seen upon entering a space. They should be more durable and less easily removed. Large signage at the Atrium hallway entry and destination points could make the policy more obvious.
- The LINC/Collider requires signage which clearly indicates its availability to students outside of class times. Long-standing plans to install a screen indicating class times should be put into action.
- Lighting issues are common throughout the building. This may be resolved by the lighting renewal project through Sustainability. In addition, a more aggressive schedule to fix burnt out lights should be developed.
- Particular attention should be paid to areas that potentially feel unsafe. (See "Safety" under Results.) Besides lighting, other efforts should be made to make these areas appear safe or to block off public access.
- Remind facilities and cleaning staff of quiet study areas and to keep voices low, particularly outside the Fifth Floor Reading Room and the Third Floor Stacks. Consider relocating the Third Floor cleaning staff break room.
- Use caution when analyzing computer usage data. The data does not reflect actual demand. Unused computers may have students using the workstation space for laptop use or other use.
- While doing seat counts, be aware that seats may not be usable while adjacent seats are in use, and not all seats are usable for certain activities (i.e., "comfy" seats for "work").

Atrium

- Update/repair damaged seating.
- Improve lighting in the "dead end" by old Student Services, and by the Second Cup cream station.
- For future renovations in the Atrium, individual seating should be placed in this space so that group seating isn't rendered unusable by individual occupants. This may also reduce food garbage in other areas of the building, where individuals may currently be forced to go.

Lobby

- Update discoloured seating.
- Fix wobbly tables.
- Install directional displays for the building, based on desired tasks (e.g., "for silent study, proceed to the 2nd floor reading room or the 5th floor Special Collections Reading Room.) (The current touch-screen directory could be re-imagined for this purpose.)

Learning Commons – First and Second Floors

- Promote the use of the Second Floor Learning Commons.
- Clean/repair dirty or damaged seats and equipment.
- Consider dedicating the First Floor to transitional work like printing and social group work, while amplifying the strengths of the Second Floor as a silent study space. Either enforce quiet study or redefine the space to allow conversation and, potentially, food.
- Examine stand-up, public terminals usage and eliminate/reposition underused stations. Market the remaining for use, including providing clear directions for quick printing from these stations. Alternatively, co-locate standup terminals and printers.
- Depending on the results of the follow-up assessment study, consider providing ergonomically appropriate laptop plug-in stations, including a screen and keyboard.

Reference Room

- Re-arrange so that available terminals are easily visible from the entrance.
- Assess the use of the reference collection and weed or move the collection depending on the results of the study.
- Revisit the quiet and no food rules in the Reference Room and improve signage if keeping the rule. (Keep in mind it houses one of only two accessible workstations in the building.)

Music Room

• Remove half the listening stations and monitor use again.

McNab Reading Room

• Remind staff of the "silent" rule in this room (as they are going to/from meeting room 2902 and the staff lounge).

LINC/Collider

• Make hours of availability clear and observe use again in the future.

Grad Pad

- Ensure all burnt out lights have been replaced. Facilities should also do a full check of the space for broken power outlets.
- Signage should be revisited. There are no signs on the meeting room doors and only a quiet sign on the way out the door.
- Promote more heavily to all programs through Grad Studies.

Fifth Floor Reading Room

- Promote availability via signage, messaging, and improved visibility.
- Add ergonomically appropriate furniture for laptop use and provide/highlight electrical outlets.

Atrium Hallways

- Improve lighting i.e., replace burnt out bulbs (this may be covered in the lighting renewal contract funding by Sustainability).
- Remind occupants of classroom 2622 and Fifth Floor office spaces to close doors when work noise is likely to spill into the hallways.
- Clean Atrium glass.

Stacks

- Examine the lighting. Determine if switches should be controlled by users. Make lighting consistent throughout the space.
- Remove graffiti and have staff perform regular checks.

Respectfully submitted by:

The Killam Library Assessment Team

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Appendix A

Killam Observation Schedule

| Space | Floor | Morning | Afternoon | Evening | Weekend |
|------------------------------|-------|------------------|------------------|----------------|-----------------|
| Atrium | 1st | Linda - 07 Mar | Geoff -02 Mar | Carl - 05 Feb | Carl - 10 Feb |
| Circulation Lobby | 1st | Lachlan - 19 Mai | Linda - 05 Feb | | |
| Music and Film (exclude G70) | 1st | Linda - 27 Feb | Lachlan - 26 Feb | Carl - 05 Feb | Carl - 10 Feb |
| Reference Collection | 1st | Linda - 26 Feb | Geoff - 09 Feb | Carl - 12 Feb | Carl - 17 Feb |
| South Learning Commons A | 1st | Geoff - 09 Mar / | Linda - 16 Mar | Carl - 01 Mar | Carl - 24 Feb |
| South Learning Commons B | 1st | Lachlan - 12 | Linda - 28 Mar | Carl - 12 Feb | Carl - 17 Feb |
| Atrium Hallway | 2nd | Lachlan - 23 Mai | Linda - Mar 21 | Carl - 01 Mar | Carl - 24 Feb |
| McNab Reading Room | 2nd | Geoff - 14 Feb | Linda - 09 Mar | Carl - 05 Mar | Carl - 04 Mar |
| Upper Learning Commons | 2nd | Linda - 21 Mar | Geoff - 19 Mar | Carl - 05 Mar | Carl - 04 Mar |
| LINC / Collider | 2nd | | | | Carl - 11 Mar |
| Government Docs - Stacks | 2nd | Geoff - 24 Jan | Linda - 31 Jan | Carl - 21 Mar | Carl - 11 Mar |
| Atrium Hallway | 3rd | Lachlan-Apr 11 | Linda - Apr 19 | Carl - 15 Mar | Carl - 08 Apr |
| North Stacks | 3rd | Geoff - 05 Apr | Lachlan-Apr 17 | Carl - 15 Mar | Carl - 08 Apr |
| West Stacks | 3rd | Geoff - 22 Mar | Linda - 24 Jan | | |
| South Stacks | 3rd | Geoff - 05 Apr | Lachlan-Apr 17 | Carl - 15 Mar | Carl - 14 Apr |
| Atrium Hallway | 4th | Linda - 23 Mar | Lachlan - 02 Feb | Carl - 15 Mar | Carl - 25 Mar |
| North Stacks | 4th | Lachlan - 09 Mai | r Geoff - 22 Mar | Carl - 10 Apr | Carl - 17th Mar |
| West Stacks | 4th | Lachlan - 09 Mai | Linda - 29 Jan | | |
| South Stacks | 4th | Lachlan - 09 Mai | Geoff - 22 Mar | Carl - 10 Apr | Carl - 17th Mar |
| Grad Pad Front Room (meeting | s 4th | Lachlan - 07 Mai | Geoff - 19 Apr | Linda - 10 Apr | |
| Grad Pad Back Room (quiet) | 4th | Lachlan - 06 Mai | r | Linda - 10 Apr | |
| Atrium Hallway | 5th | Geoff - 12 Apr | Lachlan - 01 Feb | Linda - 10 Apr | Carl - 14 Apr |
| Reading Room & Service Pt. | 5th | Linda - 28 Mar | Lachlan - 02 Mar | Carl - 21 Mar | Carl - 25 Mar |

Appendix B

Observation Summaries

1st Floor Atrium

Despite all the observations of eating in areas of the library where it is prohibited, here in the Atrium/food court, we witnessed little eating. A noon-time observation, with a packed house, recorded individuals looking around for seating, with food in hand. Observers offered a couple explanations: The food services are geared more to individuals, rather than groups. Those individual eaters may prefer to eat in privacy, snuggled away with their work, elsewhere in the building. Also, the seating and atmosphere of the Atrium is geared toward groups, rather than individuals. It fills up easily and the groups appear to stay for extended periods. Individuals wanting to use the space end up taking seats at tables intended for two or more. So while there may be available seats, these seats are not really open to other individuals, forcing those with newly acquired food to go elsewhere. This use of group seating by individuals should be borne in mind. Just because multiple seats are made available, if they are grouped in an area that appeals to individuals, they really aren't all "usable" seats.

The orange crescent of seats – users tend to sit on the bench, not the seats opposite, even if they are together (i.e., they will sit side by side).

Central "raised" area – mostly meetings, tutors.

Seating between microwave and subway seems to be the most popular.

Lounge chairs and "big bottom" chairs by subway not as popular.

It is dark in the nook by the 2nd cup cream etc. station.

Seating by old student services – while it was packed during the noon time observation and appeared mostly social, during the other observations it was the least occupied. Observers think this is because of its "dead end" nature. You have to venture down, toward occupants to see if there is a spot free, then turn around if not. This may be a social deterrent.

Screen was blank during our observations.

Saturday observation noted some cleanliness issues.

Great workspace in terms of lighting (daytime) and noise. Conversations blend into white noise. People can work and be social at the same time. Even the heating seems to be adequate, even though traffic has the doors opening and closing a lot. Traffic flows are good here. Just enough space to get through without crowding.

1st Floor Circulation Lobby

A very busy spot, used mostly by people for brief periods of time, before moving on to somewhere else. Sometimes a meeting place, a place to eat before going elsewhere in the building, a place to open a laptop to send something to the lobby printer, a place for staff to take a break. Everything observed here indicated it was a great idea to place tables and chairs here; however, the chairs (yellow) are looking discoloured and the tables are extremely uneven and wobbly.

The stapler is still in high demand. One person was seen using the e-directory. Lineup at KLSP doesn't go beyond 2 people.

1st Floor Learning Commons – A (far side)

The most notable observation was that this area is particularly noisy, with habitual disregard for quiet conversation rules. Signage is everywhere in this space, but some observers noted that the print was small and hard to read from the seats. "Groupwork" appears to be common here, with participants talking loudly with each other. Social conversations were also happening in the chairs to the side of the room. Study rooms were also loud due to the vents at the top of the walls. Several factors could be contributing to the disregard of quiet study rules – the need for computer space without quiet rules, the fact that conversations are easily heard from study rooms and may cause other users to think loud conversations are acceptable, and no staff presence are a few. Full findings/recommendations for this space will hinge on findings from other Killam spaces. It also should be noted that observations cannot determine if other users of the space are negatively impacted by the noise or if they find it acceptable.

Laptop use at terminals was observed. Observation alone cannot determine the reasons why students do this and this may be a question we gather direct data on in phase 2 of this project. Possible reasons discussed among the observers: some work may require students to use both desktop and laptop at the same time, groupwork involving both laptop users and desktop users, preference for the LC furniture, easy access to printers, etc.

Mismatch of chairs. Students move them around to use the ones they prefer. Some chairs are damaged. We also observed pencil marks on screens and a disconnected keyboard.

Several study rooms were free during some of the observations. (The demand for Killam study rooms seems to not be as high as the demand for WMLC study rooms?)

1st Floor Learning Commons – B (near side)

Though not as noisy as the "A" side, this side of the LC is louder than the "quiet" rule allows. Signage is ineffective. Users simply disregard the rule and have established their own user culture/environment in this space. Lack of staff presence may also be contributing to the disregard of quiet rules. Loud movement of garbage trolleys in the lobby also makes it hard to expect quiet here.

Chairs and equipment appear to be worn, with some dirty, broken chairs and keyboards. Also noticed were people using seats but not the computer terminals. Some were using laptops instead, others were using the seats to work with others. One observer thus found it hard to find a free seat/computer in the space. This seat occupying behaviour is therefore making computer usage data unreliable for accurately measuring computer demand.

The stand-up/public use terminals are underutilized. The soft seats at the front are also underutilized. The old tv screen doesn't appear to be in use. The newer screen by the help desk is difficult to see unless you are very close to it. It appeared that the large majority of passersby did not look at it.

Individuals at side tables left laptops behind. Is the space so "public" that they don't worry about theft?

Observations in this space and follow-up discussion have raised more questions than answers. Is the noise level in the space acceptable to the majority of the user community or does it fail to meet the requirements of a significant portion of the community? Has the room become more suitable to group work rather than individual? Are the individuals using the space for shorter periods of time than in the past when it was relatively quiet? How long are users staying and what kind of work are they doing?

1st Floor Reference Room

As in other spaces, eating was observed. (This room permits covered drinks but not food.) Observers could not remember seeing signage. When checked, it was noted that the signs are facing into the room. You can't see the signs as you walk in, past them.

There is an accessibility station in the back of the room. The same patron was observed using it during three of the four observations. Where this station is located in a "quiet" room, with no food allowed, we wondered if it suited the needs of community members who need it.

It is a suitable room for folks looking for quiet study, with access to a computer (occupants abide by the quiet rule, and only ambient outside noise is heard); however, it seems the room is underutilized at half capacity during the day time, and ¾ capacity at night. (Only a few were observed in the room on a Saturday.) At ¾ capacity, individuals walked into the room, and then left. The layout of the room with the computers in a zig zag row down the centre may give it the illusion that it is congested, even when there are free terminals. A better layout for the room, with the removal of some or all of the Reference collection (not used during our observations) may make the space seem less congested and more appealing.

1st Floor Music Room

Observers had the sense that occupants were regular users of this room. (In a SIM class since, a former music student commented that it's the only study she used, that music students feel it is their space.) One observer noted several people using the computers just to print. (The printer is in the lobby just outside.) Generally, the room is quite heavily used (at least in the daytime, less so in the evening) - mostly for individual work, with some group work happening by the CDs. The computers are popular, and occupants at both the computers and other spaces appear to stay for extended periods of time. Users also seem very comfortable leaving their belongings behind.

The room maintained quiet with users respecting the quiet rule, outside lobby noise was muffled, and traffic to/from CLT was not distracting. The lighting, however, is low and could be a problem for some users for reading tasks. The lights also hummed – again, a distraction for some sensitive users. No one was observed using the listening stations but they were a popular spot for laptop usage. We know of at least one patron complaint of not being able to access a listening station because people were using the seats for other work. We also observed no one using the collection. The keyboard was used during one entire observation.

2nd Floor McNab Reading Room

A very well used, popular room for quiet studiers. It was "packed" during two observations (morning and evening), with occupants at every table during the afternoon observation, and noticeably more full than the LC beside it on the weekend. Seating at the very back, in front of the windows, facing out, was less used, possibly because the furniture arrangement makes it difficult to get to the chairs, many of the

seats force the individual to put their back to the room, and a cool draft was noticeable. Besides this area in the very back, the back half of the room appeared to fill up first. Rarely did two people occupy the two-person tables on the side.

Occupants abide by the quiet rule, probably because the space is so open and everyone is clearly seen. It was noted that while the room is very quiet, it became clear over time that occupants knew each other and would engage in very quiet whispers now and then. While whispers were mostly inaudible, rustling noises were slightly amplified by the open concrete ceiling.

Nearly all occupants were using laptops. Folks seemed comfortable leaving their belongings (including laptops) behind.

Following the observations and discussion, an opportunistic observation was conducted at a time of a known meeting in 2692. The flow of staff through the locked door did not appear to disturb reading room occupants. Staff came in individually and did not speak. We know this is not always the case however, and a general reminder to all staff would be beneficial.

2nd Floor Learning Commons

This space seems mildly underutilized, possibly because it is hidden away and not visible to passers-by. It maintains its "silent" status, much like the adjacent silent reading room, with obvious "silent study" signage and an open arrangement, making it easy to see anyone should they choose to speak/make noise. While users abide by the silent rule, noises associated with movement are somewhat magnified due to the concrete walls, ceiling, and uncarpeted floor. This is only mildly disruptive, however. The space is somewhat dimly lit, but this is not generally a problem for computer use.

Cubbies are well used. Oddly, the printer was seldom used.

There were just two observations of laptop use at computer stations – one for quick printing, the other used both the laptop and the computer.

2nd Floor LINC/Collider

We were only able to do one observation in this space (weekend) due to the room being heavily booked (at least on the booking system). During the week, it was difficult to know when the space was open for use and when it wasn't, and then it was closed for construction in April. This helped the observers to understand how difficult it would also be for students to know if/when the space was available. Handwritten signs were unreliable as they were not dated, plus the frosted windows and "Collider" sign made the space appear to be special or "owned" by a separate entity and access was restricted. Often the room was empty (and therefore not conducive to an observation) while other spaces were in use, which indicates a hesitancy to use the space. We even began to question if the room is indeed intended for open study space outside of bookings. Weekends may see more use of the room as experienced by our one observer. During that observation, the room was mostly used by groups and the observer realized that as an individual he had no way of using the room without taking up a group table.

2nd Floor Gov Docs Stacks

Quiet area with users spaced out in the cubbies, preferring their own cubby to doubling up in one, but will take the second seat if there are no free cubbies. Very little traffic. Green colour is soothing and conducive to work. The area feels secluded, electrical outlets are handy. One observer could hear noise from room 2622. Some lights are out – noticeable when no sunlight is coming in. One observer noticed a user turning out the light

2nd Floor Atrium Hallways

Users of this space respect the quiet study rule, but not the classrooms or passers through. The small quiet study signs placed on the atrium glass are insufficient – large signs as people enter the space may do the trick. Users of room 2622 should be asked to respect the quiet study rule and close the door.

Chairs are not adjustable – meaning the table and chair combo is not ergonomic for some. (One of the three observers found it painful to use a laptop.)

During observations, two laptops were left unattended.

3rd Floor Atrium Hallways

This area was heavily used at the time of the observations, and appeared to be busier and noisier than the 4th and 5th floors. Group tables were always full so observers could not observe from this vantage point. Single tables were in heavy use as well, but there were always a few at least free, possibly indicating a heavier demand for group tables. Express stations were mostly unoccupied. Groups tended to talk quietly with conversations contained to those sides of the building. The conversations that did interfere with study at the individual tables came from other individual table occupants talking with their neighbors. It was noted that the quiet study signs on the atrium glass are not at eye level and may not be seen by seated occupants. The east side was quieter than the west side (coinciding with less foot traffic).

The blue topped tables gave ergonomic difficulties to the female observer.

Group tables were mostly occupied by more than one person but were often occupied by only one. Does this indicate a need for more space than is provided by individual tables?

An unattended laptop was observed.

3rd Floor Stacks

West Cubbies

Quiet area where users prefer to sit singly in the cubbies, rather than take the second seat. Some dark spots (lights out?) but doesn't seem to deter users. Orange is warm and inviting and conducive to study. Only food wrappers heard and quiet shuffling of occasional foot traffic (folks looking for an empty cubby).

North Stacks

Darker here. Lighting on outside walls creates dark zones which are still occupied by people (by choice?). Garbage present on weekend. Graffiti present.

South Stacks

Better lighting. Some litter in eve. Graffiti. (Carl noted that some was not so positive.) At end of semester, tables were being moved to face each other or toward the wall.

No use of collection observed.

Cleaning staff in their "break room" can be clearly heard.

Stairwells are unwelcoming and may pose a safety concern (little traffic/presence of others).

4th Floor Grad Space

This space was not observed as much as the other spaces due to illness and a swift end to the semester. This space is also jointly managed by the Libraries and the faculty of grad studies so for the sake of this study, observations will be used as information for how the building is used as a whole and will not factor into any recommendations for phase two studies, nor will we attempt to make recommendations for the space, itself – aside from reporting the outage of various light fixtures in this space, as well as broken outlets. Facilities should do a full check of the space.

Observations noted both adherence to quiet rules in the front study space and non-adherence to these rules. Occupants of meeting rooms could get loud and ineffective self-policing was witnessed. Noise from the front room doesn't appear to bleed into the quiet back study room, although loud conversations in meeting rooms could heard in seating closest to the shared wall. Small armchairs do not appear to fit larger sized people in the front space and there is no signage on the meeting rooms to indicate their purpose. There is also no clear signage indicating the front space is intended to be "quiet conversation", except on the door as you are going out.

The back area appears to stay quiet, even though the layout and furniture design is more geared toward group work or socializing (i.e., two chairs per table space, grouped furniture, and comfy chairs). There was a mix of wheeled and non-wheeled chairs. With carpeting, it was difficult to scooch the non-wheeled chairs in to their table. Air flow noise in this space helps with blending external chatter. Laptops were left behind but one can see how one would feel safe in doing so. Several folks were observed entering, walking to the back room and then coming back to the front. It is unclear if they had used their lockers in the back or had gone to the back looking for study space. The back study space was full on at least one observation.

It appeared that folks working alone knew/also worked with others in the space. We wondered which faculties this space is mostly serving and does it feel inclusive/welcoming to all?

4th Floor Atrium Hallways

This study space does not hold up to its "quiet study" status, not because of the seated users, but due to the traffic flows between the elevators to the other side (for the grad pad or the study rooms) and general passers-by to washrooms, water fountains, and stacks. Even users of the group tables remained fairly quiet. Folks walking into/through the space (both from the elevators and from the grad pad/study rooms), however, often spoke with their "outside" voices and seemed oblivious to the expectations of "quiet". Group tables were occupied but often by just one person.

One observer had ergonomic issues using a laptop at the individual tables/chairs.

4th Floor Stacks

West Cubbies

Quiet area where, again, users prefer to obtain a cubby to themselves, rather than sitting with their back to another person. Study closets appear to be rarely used. Red colour feels harsh, not very conducive to study, and more novel reading/phone use observed in this section than other cubby areas. Lighting not the best and poor in some cubbies (lights out?). One person was observed leaving their laptop and one chair/desk was not ergonomically lined up.

North Stacks

One laptop unattended here. Headphone use. One table turned to face stacks (back to wall). Garbage on weekend. One shelf/chair seemed unusable – shelf too high to be a table top. Someone browsing the stacks was heard in this space during one observation.

South Stacks

Better lighting, but doesn't seem to be more occupied than west and north. 2 laptops were unattended.

Study rooms/offices - some concern for security/visibility in these back rooms. Some groups and some individuals using these rooms.

Chairs roll too much. This should be considered when purchasing chairs.

Offensive graffiti noted on this floor.

5th Floor Reading Room

This is a somewhat underutilized haven for those seeking quiet study space. Staff presence provides an assurance of quiet and any conversations at the service point or noise from staff walking through is preaccepted by users of the space. Décor and natural light add to scholarly ambiance. Even during unstaffed hours (evening and weekends), the occupants remained quiet.

This room may be used by more people if awareness of the space was improved and in particular, if signage (and the webpage) didn't indicate closure times on evenings and weekends (yet it's open), and possibly if the furniture in the room was more ergonomic/conducive to laptop work. The large wooden tables and chairs occupying a significant portion of the space were found be very uncomfortable for the female observer while using a laptop. If this observer represents the smaller frame (30-50% of user group?), then this furniture arrangement does not serve the same portion of the user community. Is this space therefore not "inclusive"? These tables are required for viewing of material, however it should be considered if two are required. Individuals with laptops in laps were observed using the "comfier" chairs by windows.

Noise from facilities staff was recorded during one observation of the space and during an observation of the atrium hallway.

One individual left their laptop. It appears this would be a safe space to do so.

Observers felt that the success of this room in maintaining quiet was not due to under-use (or lack of awareness of this space) but due to staff presence. As long as staff are present in this space, this space will maintain quiet, regardless of the number of occupants.

5th Floor Atrium Hallways

The atrium hallways here are quieter than the 3rd floor but there is still disruptive conversation occurring amongst the individual tables. Passers-through seem to respect the quiet better than other floors. It is still quieter on east side, not only due to traffic (A staff member can be heard in his office on the west side). The daytime lighting seems to be the best of the atrium hallways – possibly more natural light? - but at night it was dark due to pot lights being out, particularly on the west side. There were more occupants on the 5th than the 3rd and 4th during observation times. As observed on other floors, there were single users of the group tables. It was noted that some tables had belongings for several people but only one person present. Possibly tables are claimed by groups for extended periods with individuals coming and going. The wooden cubbies appeared to be popular choices.

Ergonomic issues with blue tables as per other floors.

Appendix C

Killam Library Floor Plans









