

UBC Social, Ecological Economic Development Studies (SEEDS) Student Reports

Stewardship in Irving Barber and Beyond

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Stewardship in Irving Barber and Beyond

Abstract

From the increased use of Irving K Barber Learning Centre (IKBLC) after its renovation in spring 2008, the rise of littering and removal of furniture have become a major issue within the building. Not only has it caused inconvenience for its users, in addition huge funds are required to fix such predicaments. From on-site observations and experiments, administering questionnaires and conducting interviews, reviewing literatures on environmental psychology, stewardship and recycling, this paper argues that based on ownership of space and proximity of resources, these factors will affect the litter and furniture removal level found within IKBLC. This report concludes by proposing long term sustainable and economic feasible recommendations to solve the litter and furniture removal problem within IKBLC and ways to promote ownership of space.

Introduction

The Irving K. Barber Learning Centre (IKBLC) contains four stories of book stacks, lecture halls and classrooms, public computers, a cafeteria and lounge space for the community. With its countless resources and close proximity to other buildings on the UBC campus, the IKBLC is one of the most frequently visited open spaces, for UBC undergraduate and graduate students especially. Although its open access floor layout has proven to be inviting for its users, an increasing amount of problems have also arisen due to this specific property. Furniture is being moved to different floors and the high volume of littering during peak hours has caused a huge nuisance for both its users and supporting staff, generating social and economic negative effects.

Objective

The IKBLC acts as an educational and social space for students and staff to interact. Yet from the increase in littering and furniture removal between floors of IKBLC, it has alarmed the staff within IKBLC to take initiative in finding plausible solution to these problems. From discussing the dilemma with the Assistant Director of IKBLC, Simon Neame, SEEDS Project Coordinator, Brenda Sawada and the Associate Director of Student Development, Margot Bell, the idea of how a lack of ownership and accountability within UBC may have encouraged the disrespectful behaviour within IKBLC was raised. To address the litter and furniture removal problems, through the UBC SEEDS program and as part of the fulfillment requirement for geog 419, I began to research environmental psychology, stewardship and the recycling habits that may affect human's behaviour in a space. From doing on-site observation and experiments, questionnaires, interviews and research, I tried to seek specific patterns which may explain the lack of responsibility and ownership within IKBLC. From interacting with the various users within IKBLC, I seek to gain a greater insight of the innate problem that has prevented the envisioned use of the IKBLC. Ultimately, my objective is to propose feasible and economic efficient strategies to reduce the litter and furniture problems within IKBLC and ways to promote stewardship within IKBLC.

Background models and theories

Transformative environmental psychology states that the relationship people have with their environment dictates simultaneously the action, values, attitudes and behaviours they have towards the specific surroundings (Rathzel, 341). A successful case study was the 1998 Aarhus Convention signed by European Ministers. By allowing public participation in a local assessment and decision-making that would impact their environment in the future, it was proven that it had

promoted and encouraged active citizenship to be more sustainable and take initiatives towards their objective (Doody, 1129). Another campaign, called “Are you doing your bit?” urged the involved group to find out the ‘facts’ to increase their awareness and importance of sustainability and to understand the economical saving that could be accumulated (Barr, 227). “The campaign helpfully [recognized] the significance of the need for incentives and the necessity for environmental action to be seen as normative behaviour alongside awareness raising” (Barr, 227). By providing incentives, sustainable behaviours will be better acknowledged and encouraged.

The level of stewardship behaviour within society is also greatly correlated with level of trust an individual has within society. Those who are willing to trust others, in general, have a higher voluntary contribution compared to those with a higher level of distrust. From the assumption that distrustful people are less likely to foresee the benefits in investing their time and money on plausible public goods, they are less willing to participate in activities and sacrifice their comfort. Consequently, sceptics have a lower public cooperation and commitment rates compared to others (Dijk, 405). The idea of ownership of space also has a high correspondence with the stewardship an individual has upon the environment. “Organizational commitment, identification, and internalization” are seen as stimuli in promoting altruistic behaviours (Dirks, 305). By illustrating the enticement of ownership, it will capture an individual’s interest to contribute and respond to unselfish behaviour from gaining self identity and a sense of fulfillment within society (Dirks, 307).

Methodology

I focused my research on the third floor since it would be implausible to collect data building wide. The third floor open study space was chosen mainly for its heavy traffic, making it the most problematic region. The third floor also connects to the book stacks between hours of operation and is relatively close to the café within IKBLC itself. From its close proximity with seminar classrooms, group study areas and public computers, the large volume of users within the third floors would provide data which are unbiased and neutral. Two variables would be tested during my research; litter level and amount of furniture removal.

1) Litter level

To conduct the litter component of my research, as observation I collected data on the number of times litter was being left behind. The litter disposed on the ground was divided into two categories; within 1 m radius of garbage bin/recycling bin and further then 1 m from the garbage can/recycling bin. As well litter was sub-categorized into two categories; recyclables (paper and bottles) and garbage litter. The data was collected on two days, once at day time and night time, between 8:30am-4:30pm and 5:30pm-9:30pm respectively. After collecting the results, as an experiment I changed the location of the recycling bins and the garbage bins to see if there was any change in the litter level. The experiment was conducted once at day time only from 8:30am-4:30pm. By doing ground observations and experimentations at different time of the day, I seek to find the correlation between users that disregard this public space and factors which have stimulated them to do so. Lastly, a questionnaire was given to the custodial group identified specific areas and problems in regards to the littering problem within IKBLC.

2) Furniture removal

Since it was hard to experiment with the arrangement of furniture within the third floor, for my furniture removal part of the research, I made notes on the frequency when individual moves

furniture and the approximate size of the group he or she is associated with. In addition, from performing an interview with the Assistant Director of IKBLC in regards to classroom services, I obtained an inside view on their perspective on what the greatest challenge was from furniture being moved to different floors and being damaged. Piloted programs and other problems that arise from the removal of furniture were also discussed. Lastly literatures and educational campaigns that were conducted within UBC previously was researched upon which may be appropriate to implemented within IKBLC.

Observation and results

1) Litter

At the beginning of my day time observation, I noticed that there was no litter in the morning because the custodians have cleaned the space the night prior. As more students arrived during the day and groups began to gather, an increased in the amount of litter level began to develop. Litter was mostly left during lunch hours, resulted many food containers such as cellophane wrapping or paper plates left on the tables. One thing to note was while a newspaper was left on top of a blue recycling bin instead on in the recycling bin, the newspaper was taken by another user approximately 30 minutes after. Furthermore, a juice box and a glass drink bottle were left beside garbage can.

Table 1: Number of litter and recyclables found during day time observation

	Recyclables		Litter	
	Yes	No	Yes	No
Within 1m of garbage/recycle bin				
Time				

8:30am-10:30am	1	0	0	0
10:30am-12:30pm	0	1	0	0
12:30pm-2:30pm	0	4	0	0
2:30pm-4:30pm	0	4	0	4

At the start of my night time observation, an immediate noticeable change was a large increase in litter level compared to day time. Litter was found on the floor, on tables and beside chairs. There were also more students studying in larger group settings compared to day time. Furthermore, more food waste such as candy wrappers and food leftovers were present relative to other litter that were left behind.

Table 2: Number of litter and recyclables found during night time observation

	Recyclables		Litter	
	Yes	No	Yes	No
Within 1m of garbage/recycle bin				
Time				
5:30pm-6:30pm	1	5	2	8
6:30pm-7:30pm	1	4	2	10
7:30pm-8:30pm	4	4	2	12
8:30pm-9:30pm	5	4	2	12

As the night progressed a greater increase in litter were generated. At one end of the open space, a large construction paper was being left in the middle of the floor. Scrap papers and pens were also found on the floor. However food waste were the predominant litter left behind by students. At 9:30pm, the night time litter level has more than tripled compared to day time observations.

As an experiment, on a different day I relocated one of the blue recycling bins and added a black bottle recycling bin in the open space area. In addition, some of the garbage cans were moved to become more noticeable for the users, especially those beside the pillars.

Table 3: Number of litter and recyclables found during experiment

	Recyclables		Litter	
	Yes	No	Yes	No
Within 1m of garbage/recycle bin				
Time				
8:30am-10:30am	0	0	0	0
10:30am-12:30pm	0	1	0	1
12:30pm-2:30pm	0	1	0	1
2:30pm-4:30pm	0	2	1	3

From the additional black bottle recycling bins, many students began to put their beverage bottles within the black container. As well, no drink bottles were left by the garbage can. Furthermore, a number of students threw scrap notes and paper into the newly added blue recycling bin instead of the garbage can. However, in areas where garbage cans and recycling bins were not in close proximity, the level of littering of recyclables and litter continued to be higher relatively to areas near garbage/recycling bins.

From the response collected from a questionnaire done by the custodial staff of IKBLC, the custodians found that level 3 and level 4 open areas were most occupied and most littered within IKBLC. Students tended to leave garbage or beverage cans on top of garbage cans instead of in the appropriate recycling bin. Garbage and pop recycling bins were mostly full at the end of the day. In

addition, often as students began to leave IKBLC, they would leave litter behind on their tables.

Littering was particular a problem when the IKBLC is open 24 hours. Lunch and pizza boxes were found everywhere; on the ground, on top of garbage bins, recycling bins, tables, etc. While the IKLBC banned food and beverage consumption within the book stack areas and a decrease in littering was found, it was common for custodial staffs to see students taking food into the library and littering was still evident around the study stations. The staff suggested since many libraries on campus still allow food and drinks, students may not be aware of such policy within IKBLC.

2) Furniture

While observing the alteration of furniture, one noteworthy difference is students which were part of a larger group were more inclined to change the furniture setting, especially moving chairs as other students joined in on the already existing group. Although there were plentiful of space during the day, tables and seats became limited at peak hours and at night. In addition, a combination of large and small tables was often used to facilitate large group discussion/homework instead of using large tables. In the daytime observation, furniture were moved only within the open space. Chairs with wheels were pushed towards the desired area. At times students would share a table based on the availability of space. Yet as the day progressed, especially during lunch time and dinner time, a decrease in chair was available where more people began to sit on couches, on chairs, share seats or used chairs that were initially to put belongings on as seats. During my night time observation, a student took a chair from another level and via stairs, brought the chair down to the third floor's open space.

Aside from observation, I interviewed the Assistant Director of IKBLC, Simon Neame, regarding on the classroom services and furniture problems within UBC. At the beginning of

January, the classroom service had piloted at locking 3 classrooms (room 185, 460, 461) from morning to 5pm. From the pilot although there was a significant decrease in furniture removed from the locked classrooms, students began to move furniture from other unlocked classrooms instead. According to Simon, the removal of permanent furniture that was not intended to be removed occurred at night time only. The elevator was used to move the furniture. Moving furniture to different floors were most evident when students use the hallways for late night studies. The major issue that caused the most concern for IKBLC was the cost in fixing furniture that were not meant to be moved such as large couches or screwed tables. The furniture damaged were caused from moving it over long distance, especially between different floors. Another issue was that the missing furniture often disturbed instructor's teaching from losing class time to search for chairs for his or her students.

Discussion

From observations and experiments conducted within IKBLC, a greater amount of furniture removal and littering was evident during night time compared to daytime. As well, at peak hours such as lunch time and dinner time, more littering was observed. Students that were in large groups have a greater likelihood to litter and obtained furniture elsewhere from their limited mobility to move elsewhere. In particular, areas which were distant from garbage cans and recycling bins seemed to encourage littering from the threefold increase in litter level compared to areas with garbage/recycling bins. This may suggest that while students are aware of throwing away litter, based on convenience students have a higher probability to leave behind garbage. From the experiment done, again it showed that convenience and location of garbage cans/recycling bins have an effect on the amount of recycling within IKBLC. The greater amount of

littering and furniture removal at night may also suggest that with no library staff supervision, the monitoring effect IKBLC staff had on students was eliminated which may encourage the increase in littering within the open space at night time.

One student during my morning observation had put a newspaper on top of the recycling bin instead of inside the recycling bin. While at first this was recorded as littering, within 30 minutes another student picked up the newspaper on top of the recycling bin and walked away. In addition, beverage recyclables were found beside the garbage can instead of disposing it into the proper bottle recycling bin, a 4 bin system by the stairs. However during the experiment when a black bottle recycling bin was added. No bottles were left around the garbage can. Both incidences can be seen as a culture within UBC. Often drink bottles are found surrounding the garbage cans and newspapers are left around entrance. Past studies recorded that by providing recycling bins and by knowing the location of those containers, an individual has a 50% increase in chance of recycling newspaper (Reid, 480). Thus by increasing the number of recycling bins it will encourage the use of such containers, decreasing the amount of littering within IKBLC.

From evaluating the litter and furniture removal problem, I argue that both dilemmas can be solved by promoting stewardship within UBC campus. From having personal ownership within the UBC campus, it will stimulate altruistic behaviour, such as less littering (Dirks, 307). While stewardship posters were found within classrooms and within IKBLC to educate its users to take ownership of space, due to its limited visibility its effectiveness has been questioned. The lack of ownership within IKBLC is suggested because during my observations and experiments, I did not see any individuals that acted as a curator and threw away litter or recyclable within the open space. Causes that had uninspired stewardship within IKBLC and UBC as a whole are that students are unable to see the potential benefits into taking care of such space thus, leading them to

disregard such environment. There is also little incentive which would encourage students to take care of the IKBLC and with no penalty for disregarding such space; it was ineffective to stimulate any motivation within an individual to behave altruistically.

I conclude that it is important to have on-going campaign in order to encourage stewardship. Studies have shown that discontinuing campaigns such as reduce the litter problem after its success often to reach back to the prior-campaign level (Beagle, 163). For example, the one less cup educational campaign within UBC was at first successful, yet from the lack of information, role models and social pressure subsequent to the educational campaign, students began to stop bringing their coffee mugs (One less cup, UBC). Thus, instead of creating a new educational campaign for IKBLC, I propose that by encompassing sustainability within IKBLC as part of the campus-wide campaign "Place of Promise", from the campus wide message it will be a more effective method to promote ownership of IKBLC than a specific IKBLC campaign (Geller, 350).

Proposed Recommendations

From observations, experimentations, interviews, questionnaires and research, below is a list of recommendations which will be beneficial to implement within IKBLC to solve for the littering and furniture removal problem and to promote stewardship within IKBLC:

- 1) Increase in number of blue recycling bin, garbage cans and black bottle recycling bins

2) Frequently change the trash before it is overflow because it discourages people to throw away garbage, especially during peak hours

3) Combine the blue recycling bins, garbage cans and black bottle recycling bin as one unit

4) Increase visibility and accessibility of garbage and recycling cans

5) Clear labelling of the 4 bin system to encourage bottle recycling habits

6) Provide a food and beverage at a lower cost when using a reusable plate or bringing own reusable mug in café, it will act as an incentive to use less paper plates or wrappings which caused the most littering within IKBLC

7) Use multi-media to promote ownership of space

- Computer desktop wallpaper with UBC slogan “Place of promise”
- Cafeteria monitor having pop up messages
- Entrance display

8) Monitoring cameras in elevators to prevent students from moving large, immovable furniture between floors

9) Use the already existing UBC educational campaign, Place and Promise to further promote ownership and steward behaviour on campus and within IKBLC

- Incorporate the UBC educational campaign, Place and Promise slogan at areas of high traffic and areas which high volumes of litter are found to promote self-responsibility within campus
- Promote sustainable living to reduce litter from the source (students) by monthly emails
- Have exhibits and displays within IKBLC which promotes student ownership within UBC

Further Studies

While this study has looked at the litter and furniture removal problem within IKBLC, due to time constraint, much limitation have affected this report to be comprehensive. If future study is to be conducted, by interviewing students, it will provide the paper a greater insight of the causes in explaining why students have a lack of ownership within UBC and what effective strategies they feel are effective to stimulate users to act as steward within IKBLC. By having ownership within UBC, it will encourage students to look after such open space, solving the problem from the source, the students. Furthermore, it will be interesting to conduct on-sight observation and experimentations during the 24 hour operation of IKBLC and explore plausible solutions at that specific timeframe. Lastly, if resources are available, to contact different institutions abroad to see if any successful educational campaigns they have had would be suitable to implement within UBC to promote ownership and stewardship on campus.

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