



*Research Article*

**What Are They Doing Anyway?: Library as Place and Student Use of a University Library**

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## Abstract

**Objective** - To determine student use of library spaces, the authors recorded student location and behaviors within the Library, to inform future space design.

**Methods** - The case study method was used with both quantitative and qualitative measures. The authors had two objectives to guide this assessment of library spaces: 1) To determine what library spaces are being used by students and whether students are working individually, communally, or collaboratively and 2) To determine whether students use these spaces for learning activities and/or social engagement.

**Results** - After data collection and analysis, the authors determined students are using individual or communal spaces almost equally as compared with collaborative group spaces. Data also revealed peak area usage and times.

**Conclusion** - Observed student individual and social work habits indicate further need for spaces with ample electrical outlets and moveable tables. Further study is recommended to see whether additional seating and renovated spaces continue to enhance informal learning communities at URI and whether the Library is becoming a “third place” on campus.

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## Introduction

In 2008, Bennett defined *information commons* as spaces in libraries with technology that support individual learning and *learning commons* as spaces in libraries that impact or enhance the learning experience by enacting the institutional mission through collaborative partnerships with “academic units that establish learning goals for the institution” (Bennett, 2008, p. 183). In 2011, the University of Rhode Island (URI) redefined its library, rebranding the University Library with the name Robert L. Carothers Library and Learning Commons (the Library). The University of Rhode Island is a public Land, Sea, and Urban Grant institution, offering Bachelors, Masters, and Doctoral Degrees, with three campuses across the state. The Library is located on the main campus in Kingston, RI. Of URI’s nearly 17,000 undergraduate and graduate students, approximately 6,700 live on campus (URI Communications and Marketing, undated).

While the Library’s mission to acquire, organize, preserve, and provide access to resources in all formats and provide instruction in their use has remained constant, its role on the Kingston, RI, campus requires new and evolving ways of thinking about its physical spaces. The Library’s spaces have evolved into places of individual intellectual inquiry as well as collaborative engagement where students connect with others to build shared learning communities.

Academic library planners have begun to embrace the notion of creating welcoming shared learning community spaces where users connect informally and the library can become *the third place* on campus. Ray Oldenburg, in his book *The Great Good Place* (1991), defined *the third place* in a community as a place that provides the diversity of human contact where people come together to connect and build a shared community when not at home (first place) or work (second

place). Arguably, academic libraries can become that third place on campus, with spaces that welcome a diversity of human contact that nurtures growth when outside the classroom (first place) or campus housing (second place). The Library as the third place can enrich campus life, create a sense of belongingness, and support the institutional mission of lifelong-learning. Thus, the Library spaces at URI, were assessed for their impact on how students are using library spaces by identifying what spaces are used and whether students work individually, communally, or collaboratively.

## Literature Review

The evaluation of the academic library as place, and specifically its impact on learning, has challenged the library profession, administrators in higher education, and accreditation agencies. Joan Lippincott of the Coalition of Networked Information (CNI) stated in an interview: “I’d like to challenge the notion that brand-new, beautiful learning spaces in and of themselves can change learning. I believe that it has to be a combination of the space and the pedagogy and the technology” (Lippincott, van den Blink, Lewis, Stuart & Oswald, 2009, p. 10). Lippincott (2006) advocated making managerial decisions in libraries based on assessment data that measures the effectiveness, efficiency and extensiveness of learning spaces in libraries. There is growing concern for universities to evaluate their library facilities, services, technology, and information resources to determine the impact on student learning and how libraries support the research and public service mission of the institution.

According to Fox and Doshi (2013), group spaces are growing. Additionally, Diller (2015) identified that study areas are the second highest used library spaces. Khoo, Rozaklis, Hall, and Kusunoki (2016) commented on redesigned library spaces to encourage group

interaction where talking, moving around, and moving furniture is acceptable.

The advent of digital tools and resources as well as pedagogical shifts that emphasize collaboration, creation, and student centered learning have changed the library landscape. Libraries have responded to calls for user-centered learning with good reason; student-centered learning is social—active and interactive (Foster & Gibbons, 2007). In that tradition, Montgomery (2014) explained: “The importance of library space is shifting from the content on our shelves to how students use and learn in our space” (p. 71). Trying to remain relevant, libraries allocate and reallocate space in recognition of the pedagogical shift toward interaction among learners (Jackson & Shenton, 2010) by becoming physical and virtual platforms for knowledge creation.

At the same time, there are those who want the academic library to honor its historical mandate as a place for quiet study and contemplation. Gayton (2008), in particular, supports this role for the library by pointing out that, in spite of its diminished importance as a storehouse and access point, gate counts have remained steady. Similarly, Demas (2005) emphasized the library’s cultural roles. Gayton and Demas urge decision makers not to throw out the baby with the bathwater. Gayton (2008) clarifies,

There is a profound difference between a space in which library users are engaged in social activity and a space in which they are engaged in communal activity. Social activity in a library involves conversation and discussion among people, about either the work at hand or more trivial matters. Communal activity in a library involves seeing and being seen quietly engaged in study (p. 61).

There is value to learning that takes place independently or communally in a shared space;

it is a privilege students do not want to risk losing.

Yoo-Lee, Tae, and Velez (2013) found that students responded to two survey questions with contradictory preferences for library spaces: “37 percent of the participants chose quiet study spaces and 28 percent, social spaces. However, 35 percent of them responded that they used both quiet spaces and social spaces almost equally” (p. 503).

Looking at the quantitative results of space studies introduces notions of capacity and occupancy that warrant consideration. Applegate (2009) noted, “Previous observations had shown that unaffiliated people (people not arriving together or working in a group) almost never preferred to sit right next to each other, so an area might reach ‘full’ comfortable use at 50% of maximum capacity” (p. 343). In their discussion about a place and space survey Khoo et al. (2016) elaborated on this point: “Thus, while seating availability is initially evidenced by an empty table, this availability is reduced incrementally and ambiguously, . . . In agreement with Gibbons and Foster, this study suggests that tables may be perceived to be ‘full’ when only approximately 50 percent of the seats at each table are occupied” (p. 7).

Khoo et al. (2016) advocated the use of mixed methods when studying library spaces. Montgomery (2014) and Holder and Lange (2014) both used mixed-methods successfully. As Holder and Lange argued, “Using survey and observation methods together provided a more complete picture of user satisfaction with the spaces, as well as user preference for particular areas and furniture types” (p. 8).

Hall and Kapa (2015) found in their study at Concordia University that some students prefer to work in isolation, as illustrated by one of their survey responses: “More single study spaces. Not beside desks or other people” (p. 14). This is consistent with Applegate’s (2009) study where 30-40% of group study room users were

individuals, despite signage encouraging group use. As planning for spaces goes forward, it is worth considering the value of offering rooms for individuals versus space intended for groups, or using “territorial dividers” to subdivide groups as recommended by İmamoğlu and Gürel (2016, p. 65).

### **Aims**

Embracing the concept of the third place along with Bennett’s 2008 definition of the library as learning commons, the Library administration at URI assembled a team of librarians and staff during the 2014-2015 academic year to examine the evolution of library spaces to assess how the new spaces are being used and whether the Library is becoming the third place on campus. The assessment team hoped to identify student preferences for type of seating and level of engagement through the behavior and activities observed. Students were not asked their preferences, however we could identify the most heavily used spaces and times as well as how students were using them for individual, communal, or group activities on each level (i.e., lower level, first floor, second floor, or third floor).

The librarians used the following research questions as guides:

1. *What library spaces are being used by students and are students working individually, communally, or collaboratively?*
2. *How do students use these spaces for learning activities and/or social engagement?*

### **Methods**

The case study methodology used both qualitative and quantitative measurements to assess the overarching research questions. The assessment team recorded sweep counts and unobtrusive observations on maps and coding sheets and examined aggregated usage

statistics including gate counts to get a complete picture of library use.

The assessment team performed sweep counts of students using the Library spaces for one week at the end of two semesters, Fall semester (December 1-7, 2014) and Spring Semester (April 25-May 1, 2015), three times a day (10 a.m.-12 p.m., 2-4 p.m., and 8-10 p.m.). The sweep counts identified the number of students using the Library as well as the activities of those students for each day and time. Activity codes included reading, writing, using devices, studying in groups, and using movable white boards. The assessment team also observed behavior: individual, communal, or group study. Team members submitted the coded information sheets and key personnel created Excel spreadsheets to compile the numbers and highlight comparisons of times, days, and semesters to determine peak use times. No identifying information about participants was recorded and thus, user privacy was protected.

In assessing the use of space, the URI assessment team devised a strategy consistent with McCarthy and Nitecki (2011), Given and Leckie (2004), and Applegate (2009). The URI researchers identified the use of library space with sweep counts and structured observations of activities and behaviors. The URI researchers recorded information directly on maps and coding sheets with predetermined categories similar to coders in other studies (May, 2011; McCarthy & Nitecki, 2011).

### **Quantitative Assessment Measures**

1. *What Library spaces are being used by students and are they working individually, communally, or collaboratively?*

The team identified space use by counting and recording the number of people occupying seats in the various areas (e.g., tables, group study rooms, informal spaces such as soft seating, and the 24 Hour Room) on all four

levels of the Library for each day and time slot during the two sweep count weeks. Library personnel created Excel spreadsheets from the coded data sheets to show occupancy rates, and the assessment team analyzed the combined data to determine the most heavily used seating areas, peak times of use, and how spaces were being used.

**Qualitative Assessment Measures**

2. *How do students use these spaces for learning activities and/or social engagement?*

The assessment team observed and recorded activities on coding sheets for each time period and date to identify students’ activities and behaviors, to

record how the spaces appeared to enhance informal learning communities. These coding sheets were compiled into spreadsheets to compare observations of activities and behaviors such as reading, writing, and using devices and to identify commonalities using content analysis. Observers determined whether students were engaged individually, communally (working alongside), or collaboratively (working together in groups) as well as their activities and behaviors. The assessment team analyzed these findings individually and collectively for relations between the two semesters, times of day, days of the week, levels of the building, and so on to determine the effectiveness of the Library’s environment in building a shared learning community.

Table 1  
The Library Floor Level Identification

<b>Floor Location</b>	<b>Atmosphere/Behavior</b>	<b>Noise Level</b>	<b>Furnishings</b>
Lower Level	Mostly individual study, some flexible use	Quiet, Soft voices	Carrels, some small tables
First Floor/ Main Floor	Meet and greet, constant motion, café in the 24 Hour Study Room, Learning Commons spaces, group study rooms, presentation room, and collaborative spaces with whiteboards and flat screens for projection, as well as moveable furniture and roving white boards	Conversation, Collaboration, Mall or busy lobby	Grouped soft seating, high top bar seating, café tables, booths, moveable tables and chairs with wheels,
Second Floor	Group work or communal study at tables alongside others, flexible use with roving whiteboards, group study rooms and graduate carrels (small rooms)	Conversation, Café style seating	Moveable tables and chairs on wheels, bar seating, some carrels and some soft seating, group study rooms
Third Floor	Library designated quiet zone	Silent	Carrels and tables

## Results and Discussion

### *Student Use of Spaces by Floor*

Tracking student occupancy by floor is only one aspect of measuring use of space. Another method is to measure use of space by specific location, time of day, and number of seats available. In this study, discerning students' choices of seating may be influenced by segregation of library atmosphere and noise level by physical floor level as well as by flexible furnishings. The exception is the third floor, which the Library has designated as a quiet zone. Enforcement is primarily self-policing by other users. Table 1 offers a brief snapshot of each floor, its atmosphere, and behaviors identified.

As the total number of seats varies greatly by floor, preferred use was measured by number of seats filled as compared to number of seats available on each floor. Counts provided a clear

picture of preferred seating across various floors by both day of week and time of day. Although the percentage of seats actually taken may be one-third or one-half full, the actual number of tables occupied appears to be a full house. There may only be one or two students at a table with four to six seats. Students arriving unaccompanied seemed reluctant to approach an already-occupied but not fully-used table, unless they knew the occupants. This is consistent with what Applegate (2009) and Khoo et al. (2016) observed in their studies.

The relatively high occupancy of first floor seating can be explained by the newly renovated Learning Commons area with the highly popular booths (with 1-4 students), flexible and moveable tables and seats, curtained areas, café-style tables, laptop-bar high seating, and a 24 Hour Room with a café where students frequently meet and greet and wait for their next class, or utilize their own electronic devices as well as library materials and white boards. Thus,

Table 2  
Behavioral Use of Library Spaces, by Floor

	Date	IS/Communal	GS/Social
Lower Level	December 2014	60.9%	39.1%
	April 2015	54%	46%
First Floor	December 2014	48.2%	51.8%
	April 2015	51.2%	48.8%
Second Floor	December 2014	40.1%	59.9%
	April 2015	41.6%	58.4%
Third Floor	December 2014	69.8%	30.2%
	April 2015	71.1%	28.9%
Average for all floors	December 2014	52%	48%
	April 2015	47.8%	52.2%

the first floor areas including the Learning Commons and the 24 Hour Room, appear fully occupied throughout the day and evening. Table by table, however, occupancy was approximately 30% of the seats occupied with an increase in seat occupancy between 2-4 p.m.

The lower level and third floors had the least amount of students occupying seats and they also do not have as much seating nor have moveable tables or seats. Both levels are used primarily for quiet study or individual work in carrels and thus, may explain the significant difference in variation of seating by floor. Observers noted that, where carrels were placed side-by-side, students showed a reluctance to take a seat next to an occupied carrel.

The first floor sometimes had double or triple the occupancy of the next highest used floors, with a peak usage from 2-4 p.m. on Monday through Friday. The second and third floors

were the next highest in use. Occupancy of these floors typically varied by less than twenty users (second floor being slightly higher) with patterns of occupancy that tended to move in tandem. Like the first floor, peak time was 2-4 p.m. daily Monday through Friday. The lower level was by far the least used floor, with only half the use of the second and third floors. Unlike the rest of the building, use of the lower level remained moderately steady, with variations seldom rising or falling more than 15 students between scheduled counts. Saturday occupancy grew steadily across all floors for time periods measured while Sunday's use spiked at 4-6 p.m. in May but in December the numbers grew steadily throughout the day.

In summary, first through third floor use was consistent comparing both semesters, with heaviest use from 2-4 p.m. Monday-Friday. Lower level floor use was steady throughout all the observation periods although the numbers

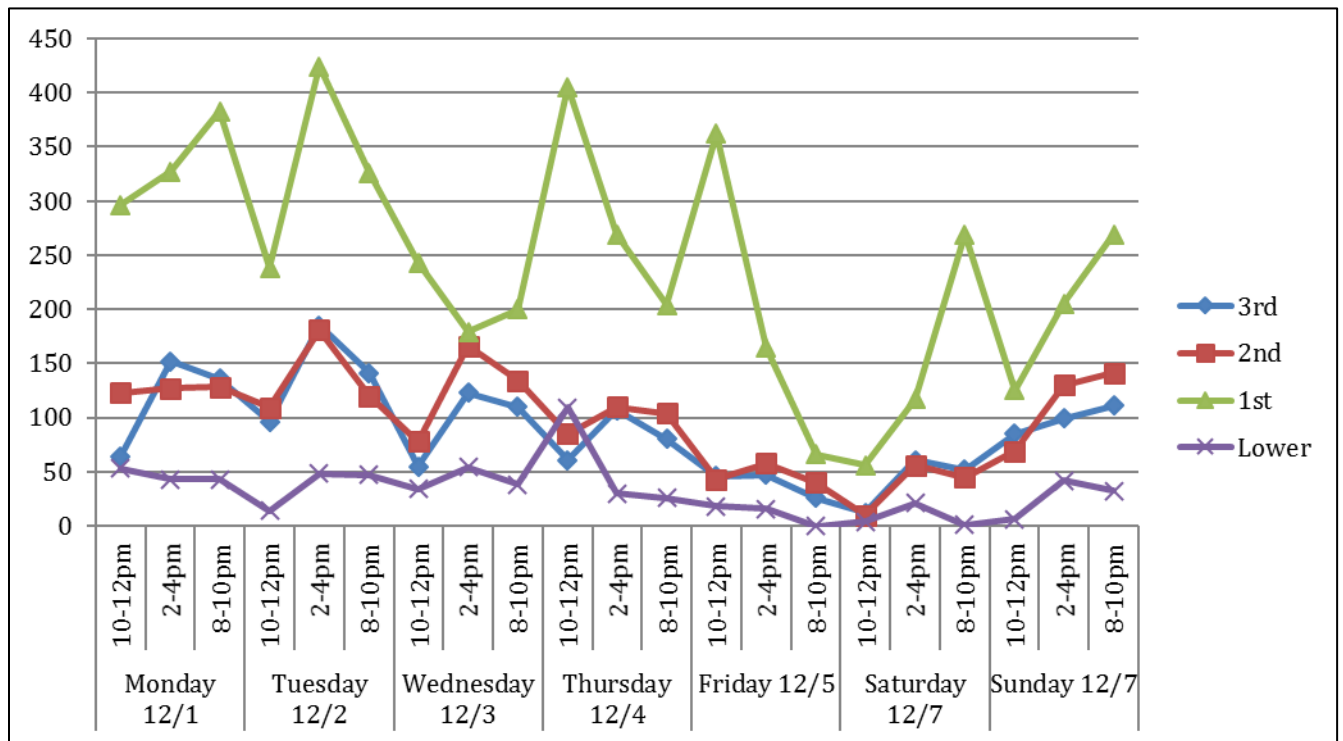


Figure 1 Carothers Library occupancy by floor, day, and time for Fall 2014.



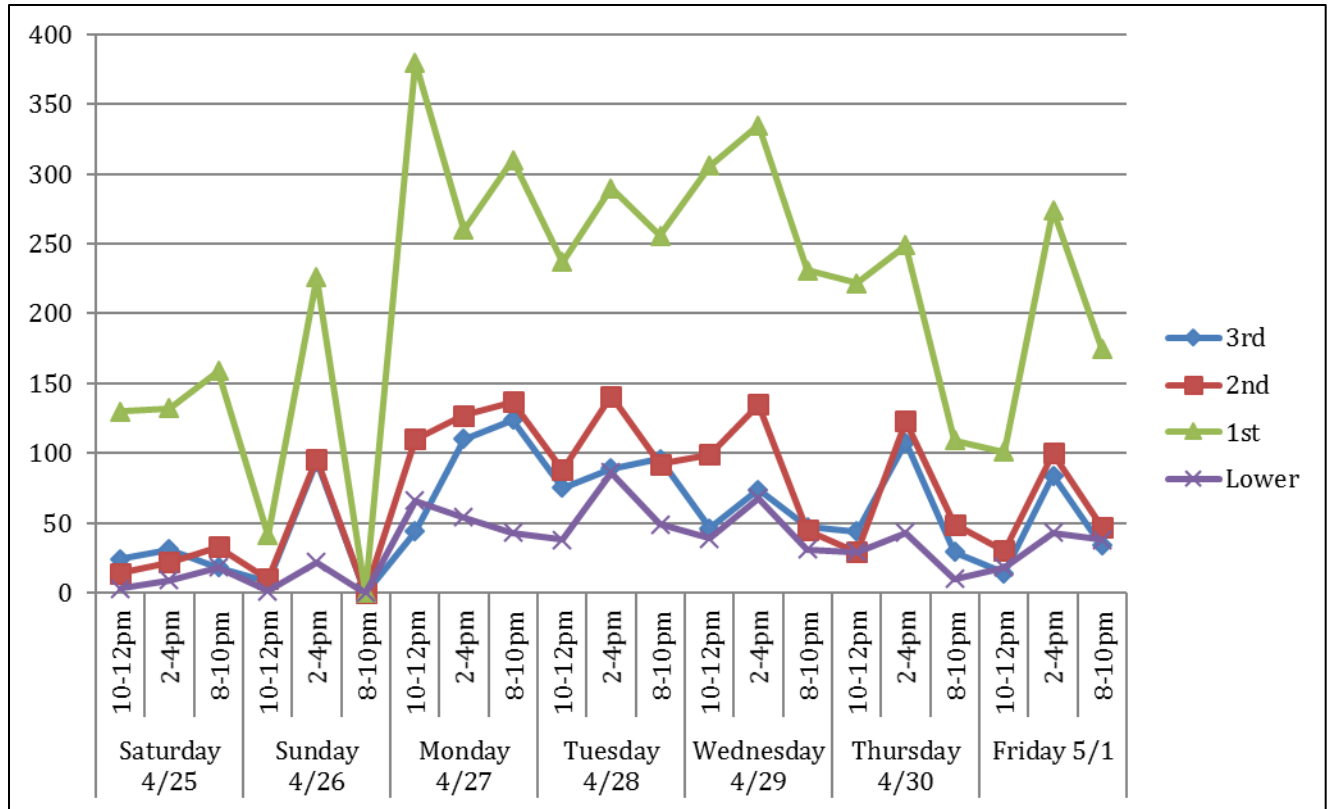


Figure 2  
Carothers Library occupancy by floor, day, and time for Spring 2015.

were the least. Saturday use was steady across all floors with a small spike from 4-6 p.m. Sunday use in December showed a steady increase during the day and night, but in May, use spiked from 2-4 p.m. The December count (possessing greater variations) clearly aligns with the fact that classes were still in session, while the April count had less drastic variations with May 1 as a reading day prior to the start of exams.

While analyzing occupancy numbers by day of the week tends to support the observations drawn from Table 2 (e.g., usage tends to be highest in the 2-4 p.m. time slot, the first floor is used noticeably more than the other floors), the data does not reveal further meaningful patterns. More than two weeks of observation are needed to uncover significant patterns at the week by week scale. Note that the low values for

Sunday, April 26, 8-10 p.m., are the result of lack of data rather than absence of students.

### Behavioral Use of Spaces

The framework devised to show how students use library spaces originally identified three criteria to be observed as a set of *behaviors* defined as Independent Study (IS), Alongside Study (AS), and Group Study (GS). The charts created to record data for the sweep counts also used the codes IS, AS, and GS to record behaviors observed. Discussion by the assessment team after the first count identified that observers may interpret these categories differently, and to label all behavior as *study* may be inaccurate. Thus, the original category of studying alongside (AS) was merged into the existing heading of individual study (IS) because group work (GS) should indicate active collaboration with interaction at the time of

observation. These categories correlate to a similar examination of students using library space by Holder and Lange (2014) who also found it necessary to clarify proximity: “interaction (students working alone/students working collaboratively/other)” (p. 9).

Some observers noted that it was a subjective call whether to label student use IS or AS when they were working independently but at the same table or space although they were not directly interacting. So alongside (AS) became identified as *communal* and was combined with IS for the count. Group work implied interaction among participants and may incorporate social activities as well.

### *Space Use*

Table 2 provides an overview of how students were using each floor during each of the study periods. The lower level has more carrels and fewer tables than other floors and provides more individual/communal activity rather than group work/study. Accordingly, the results showed significantly more individual work: the lower level had 20% more individual than communal study in December and approximately 10% more in April.

The first floor, which includes a Learning Commons with booths, cluster soft seating, high top and moveable tables, a café in the 24 Hour Room with moveable seating, as well as service points (circulation and reference), shows almost equal use of space between individual/communal (IS/Communal) versus group/social activities (GS/Social). Data for this floor closely parallels findings for the Library as a whole and is fairly consistent between semesters with almost equal behavioral use with 48% individual/communal versus 52% group work in December with 51% individual versus 49% group work in April.

The second floor shows significantly more Group/Social activity compared with all floors and is consistent over two semesters with

approximately 40% individual versus 60% social. One reason for the high usage is the preference shown by many Greek Society students who use these spaces for communal study.

The third floor, designated as the silent floor, has vastly more individual/communal than group/social use and is consistent between semesters with the highest number of individual use of all floors with approximately 70% individual and only 30% group or social activity.

When all floors are averaged for behavioral use of space, it is almost equally distributed between IS/Communal and GS/Social. In the observation of behavior, the counts indicated that the lower level 60% vs. 40% preference for individual versus group activity and third floor (quiet area) approximately 70% vs. 30% preference for individual over group activity; whereas, the first floor showed nearly equal preference for individual vs. group activity but only the second floor was higher in group work/activity with approximately 40%-60% individual vs. group engagement. The average totals for all floors for both semesters indicate approximately 52% and 48% individual vs. group activity for December but the opposite, 48% - 52% individual vs. group activity, for April.

The data collected about behavioral use of library spaces revealed the total average percent for all floors in the Library is almost equal for individual/communal work vs. group work or social activity/learning. The results indicate that students at URI gather in the library to work both communally and collaboratively in almost equal amounts throughout the day and evening with peak times in the late afternoon. Thus, it appears that more tables and seats are needed to accommodate students' desire to work communally or collaboratively.

The data is notably consistent. Observation at the Library demonstrates that close to 50% of the library is used for independent study or communal alongside and approximately 50% of

the library space is used for group collaborating or social engagement. Some observed activities by groups include collaborative learning projects using white boards with equations, scientific data, charts, diagrams, engineering formulas, preparing presentations, and practicing performances, as well as using roving white boards or shared electronic devices and flat screens in the group study rooms. This sort of collaborative work supports the learning commons concept as advocated by Bennett (2003). At the same time, regardless of intention or design, library space is being used communally, individually, for group work with socializing, as well as for interacting with both print and electronic information resources.

Group study rooms are very popular spaces. The Library has 21 group study rooms of various configurations on 3 of the 4 levels. Fifteen of these rooms can accommodate up to six students, and six rooms are intended for one or two students. Students frequently indicate preferred spaces when they request a study room, however, they were identified as full even if only one or two students occupied the room.

Some group study rooms have a small counter permanently mounted at desk height with seating for one or two students. Others have freestanding tables with wall-mounted whiteboards, and some have large monitors in the rooms in the Learning Commons where students can plug in their laptops for greater screen visibility during group work. Rooms on the second and third floor of the Library are sometimes less appealing than rooms on the first floor due to their older furnishings, but they remain quite popular and all are frequently full on all floors. Group study rooms are available on a first-come-first-served basis only, with no option to reserve rooms. Students can check out a key to a room for up to three hours at a time, and can renew the room if no other students or groups are waiting to use the next available room.

While the group study rooms were often in use by groups during both survey periods, on a number of occasions only one student occupied a small group study room. In most cases, however, when large group study rooms were in use, groups of more than two students were using them. The few exceptions to this trend — for example, only one student occupied a room intended for use by three or more students — occurred during the early hours on weekends. This is a time when Library use as a whole is lower than average, and there is consequently lower demand for group study spaces.

### *Occupancy Rate by Floor and Hour*

Although the building rarely has more than 20-35% total seat occupancy during the observation weeks, it was noted that frequently only 1-2 students occupied tables that seat 4-6, further confirmation of Applegate's observations (2009). Students seem reluctant to sit next to unfamiliar students which likely accounts for similar low occupancy of the carrels on the lower level and third floor, as noted above. The 2-4 p.m. time period Monday-Friday accounts for the highest occupancy rates with the 8-10 p.m. time slot generally close behind. The evening count was almost always higher than the morning count in December but the opposite was true in the Spring semester. Another curiosity is that the first floor use drops off more than other floors between the afternoon and evening especially during the Spring semester count. There is no accurate way to determine why usage declines between late afternoon and evening without more intrusive interactions with the students. It is obvious from the data summary charts that the lower level and third floor (designated quiet zone) are underutilized (see Table 3).

### *Limitations*

Discussion of initial data exposed a discrepancy: unobtrusive observation could not definitively state whether people sitting in close proximity to one another were working collaboratively or if those students were working communally by

Table 3  
Occupancy Rate (Occupied Seats vs. Available Seats) by Floor and Hour

	December 2014	April 2015
<b>Lower Level</b>		
Totals	525/2289 (22.9%)	557/2289 (24.3%)
10-noon	153/763 (20.0%)	165/763 (21.6%)
2-4pm	182/763 (23.9%)	266/763 (34.9%)
8-10pm	190/763 (24.9%)	126/763 (16.5%)
<b>First Floor</b>		
Totals	2720/14700 (18.5%)	3548/14700 (24%)
10-noon	727/4900 (13.9%)	1255/4900 (25.6%)
2-4pm	1130/4900 (19%)	1490/4900 (30.4%)
8-10pm	893/4900 (16.8%)	783/4900 (16%)
<b>Second Floor</b>		
Totals	1575/5796 (27.2%)	1283/5796 (22.1%)
10-noon	427/1932 (24.9%)	365/1932 (18.9%)
2-4pm	605/1932 (31.3%)	661/1932 (34.2%)
8-10pm	543/1932 (28.1%)	257/1932 (13%)
<b>Third Floor</b>		
Totals	1504/7833 (19.2%)	1005/7833 (12.8%)
10-noon	326/2611 (12.5%)	240/2611 (9.2%)
2-4pm	599 /2611 (22.9%)	541/2611 (20.7%)
8-10pm	579/2611 (22.2%)	224/2611 (8.6%)

sharing space. Consequently, the team adjusted data categories to reflect the reality of what could be observed. This reclassification of terms reflects a standard downside to research that is limited to observation as also observed by May (2011). Without direct intervention by either interviewing or surveying students, researchers

could not define some behaviors and activities precisely, such as using a computer for study versus social media. Likewise, the findings could have been enhanced by surveys similar to those from Yoo-Lee et al.'s (2013) investigation of how students perceive space. Because we did not ask students directly what spaces and modes

of study they preferred, we cannot speculate on their preferences with any great certainty. Since this study used multiple observers, the assessment team pre-tested the coding sheets and clarified codes to minimize discrepancies and inconsistencies, however subjectivity among coders must be acknowledged.

### Conclusions and Further Research Questions

This study broadly supports the conclusions of other researchers. For example, Montgomery (2014) found that "...the renovation provided users with a better space to work alone in addition to it being used for social learning. We did not anticipate users seeking individual studying space in a social learning environment, but welcomed the flexibility of the space to meet this learning behavior" (p. 73). Additionally, Holder and Lange (2014) suggested that students' use of space is need specific: as a consequence of either opportunity or necessity students repurpose space to meet their individual, time sensitive needs. Their data demonstrated that an area intended for collaborative study on the third floor of McGill University's McLennan Building was used for quiet, singular study 50% of the time (Holder & Lange, 2014). The shared use of space observed at URI also supports theories and findings for the need of both types of spaces as posited by Freeman (2005), Demas (2005), and Lin, Chen, and Chang (2010).

The URI case study reveals that the Library is a popular venue for student use with almost equal individual or communal study as compared to group work or social engagement during these two weeks of observation. The Library provides both a refuge for quiet study as well as a venue for social activity or collaborative engagement, thereby creating social learning communities where students want and need both types of spaces. Differences are minimal between communal/social use as compared to individual/quiet use of spaces on each floor when the total building use is considered. It also speaks to how students use *any* space available,

although the renovated first floor, including the Learning Commons area, 24 Hour Room and café, are the most aesthetically appealing spaces and the most used spaces in the Library. Given these observations, it is reasonable to say, at least provisionally, that the Carothers Library is serving as the third place on the URI Kingston campus. Without surveying or interviewing users, however, researchers cannot know why students have chosen to use a particular library space.

Determining the need for both kinds of places (quiet individual study versus collaborative engagement) in the wider campus environment would help determine whether the Library has become the sole third place on campus or whether there are other spaces serving these needs. Further research on campus-wide availability of places for communal and social spaces could inform an understanding of what students desire and prefer and give a better view of the Library's central role in providing those needs. That kind of study might include interviews or survey questions about the appropriate applicability of other spaces to connect and build shared learning communities, such as in dormitories, social houses, classroom buildings, the student union, or other available spaces on campus for study or social and communal use by students.

If those responsible for designing library spaces document how students actually use spaces with an understanding of student-centered learning, then it may be possible to coordinate the intended function and actual use of the Library's communal space for both intellectual conversations and social engagement.

Answers to the questions of purpose and student preferences by incorporating a survey or interviewing students could supplement the library observations and sweep counts and thus provide more valuable data for the allocation of both space and money. The activity recorded during this study speaks to student use of

spaces and types of behavior observed but not students' specific preferences.

As academic libraries evolve, library spaces should be continuously assessed, identified, and renovated to further identify how they are meeting the teaching, learning, research, and social learning needs of the university community. This first assessment study of the Library as place at URI helped to identify what spaces are being used and how students are using them. Since this study, the Library has already added significant student seating and additional service points. Future iterations of this study should address these physical changes, as well as develop tools to explore student choices and opinions rather than relying solely on observation.

### *Questions for Further Research on Use of Library Spaces*

To determine whether the academic library is becoming the third place on campus, a comprehensive campus snapshot should investigate the availability and quality of spaces for use across campus and incorporate student preferences. Questions for future investigations of the impact of the Library spaces on the learning community may include:

1. Is the Library becoming the sole third place on campus where students go to connect and to study individually, communally, or collaboratively by building informal learning communities outside the classroom?
2. How do library spaces and services support the institutional mission for student success and what spaces are needed for future learning and engagement?

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