Group Study Room Bookings - UX Final Report

Rationale

In the 2016-2017 school year, the Library moved from a key system to an online system for booking Group Study rooms. The UX Team set out to explore how students are experiencing the new system and if any changes should be made before fall 2017. Robin Sakowski was particularly interested in verifying if students were staying up till midnight to book a room for the next day (as she had heard from a concerned faculty member), and if they were staying up, did students perceive this as a problem?

Research Method

I. During the month of April, we politely rapped on the doors of occupied Group Study Rooms at random times throughout the day and conducted quick 5 - 10 minute interviews. Interviewees were given a voucher for a free coffee/tea and muffin. We asked the students the following questions:

1. What time did you book the Group Study Room online?
2. How long did you book the room for? Is this enough time?
3. What are you working on today? What course (if any) is this associated with?
4. Did you get a big enough room for your needs?
5. Did you get the room you wanted at the time you wanted?
6. Did you encounter any issues with the room?
7. What other equipment/supplies/furniture/technology do you wish the room had?
8. Has anyone else in the group tried booking a Group Study Room?
   a. How was that experience? Where does it fail / succeed?
9. How far in advance would you like to book a Group Study Room?
10. Why did you choose to book space in the Library?
11. What would make the entire experience better from booking online to the space itself?
12. We are considering other room booking options...
   a. Revert to the old key system. Thoughts?
   b. Another possibility is keeping the online system but having no restrictions on advanced booking or time slots, etc. Thoughts?

→ 16 group interviews were conducted with 46 students.

II. Random occupancy spot checks were conducted where we compared the online availability with the actual usage of each Group Study Room for a given hour time slot.

→ 7 occupancy spot checks were conducted.
Limitations

We did not conduct any interviews after regular business hours or on the weekend. Was the experience different for these students?

Our interviews were conducted just before and during the final exam period. Group Study Rooms were at a premium as students prepared final assignments and studied for exams. As it was the end of the year, most student we spoke to were "old pros" at using the booking system and knowing when they need to book to secure a room. Our findings may have been different had we conducted this study earlier in the year.

Findings

--- Booking Group Study Rooms ---

What do students think about the online booking system?

- Overwhelmingly students found the online booking system easy to use. It was clear which rooms were available and how to select those rooms.
- When students book a room, they receive an email requiring them to respond within 15 minutes to confirm the booking. The confirmation email did not seem to be a problem for most students. However, most students we spoke to were not first time users of the booking system and therefore knew to expect the confirmation email.
  - “It seems like a solid system right now from what I’ve seen.”
  - “Booking online is super easy. I prefer it because a few years ago we struggled a lot booking rooms in person.”

What time do students book the room online?

- Room bookings open up for the day at midnight. Almost every student we spoke to had booked the Group Study Room between 12:00-12:05. It was well known among the students that you “had” to stay up to book a room, or you either wouldn’t get the room you needed at the time you needed, or wouldn’t get a room at all. Many students need a room for a solid 3-4 hours at a time. Since a student can only book one 2-hour slot at a time, they would synchronize their watches with a friend and book two 2-hour slots back to back.

  Although this is not an ideal process for students, they all understood the need to allocate a scarce resource in a fair and equitable way, even if it means scrambling to get a room at midnight. When we probed for alternative solutions to this problem, they either said they wouldn’t change the current process, or they said they couldn’t think of a better solution.
  - “I stayed up until midnight just to book it. I do it every night at midnight. We all stay up. You have to type in your email wicked fast.”
“We went on at midnight. Usually when we book it in the morning, we don’t get the time we want for that morning. As soon as we booked it, the page refreshed and it was just all red. It was already full because everyone will stay up until midnight to get the room they want.”

“I don’t like waiting until midnight, but it makes sense doing it the day of.”

“It does work good at midnight. I mean that does make sense and it’s feasible enough.”

“I booked the room right at midnight. This is my normal practice. I find they book up really quickly and it kind of ensures we will get the time slot we want.”

“I checked at 8 am a few days ago and they were all full, but not this time. I’m not that desperate to stay up until midnight though.”

Note: We received this email from Mark Weiler at WLU. Mark did intense user research before developing a homegrown online room booking system. Mark writes: “We have that same 12:01 booking pattern. We initially saw it as a problem but realized that moving the time just moves the issue. One perspective is to open the room bookings earlier (e.g., 8pm) so the library isn’t encouraging students to stay up late and students who choose sleep aren’t penalized for a good mental health decision. For technical reasons, we kept it at 12:01. We allow 1 week advanced booking. We proposed extending it longer but students consistently detected problems with that (e.g., their schedules aren’t as predictable as we thought to allow advance booking). One proposal was to let one room be just for day-of bookings to support drop-in needs. We had detected a problem: the room would get booked very quickly. But students consistently didn’t think this was a problem as it increased their chances of getting a room. In sum, there’s a tension to balance: room needs that appear suddenly (within the next couple of days) and room needs that are known well into the future.”

What do students think about the same-day booking model?

- Most students are satisfied with the current same-day booking model. The prevailing sentiment is that the current model is working well enough. Some said they would like to be able to book a room 2 days (maximum) in advance, but even that was met with mixed reviews.

“I feel like a little more time to book would be beneficial. Oh wait, then they’d all book up… So I guess day-of booking is fine.”

“I feel like if you opened it [room bookings] up at the beginning of the semester for the whole semester, that is a little bit intense. I’m okay with the current setup because I don’t know how many people would actually book that far in advance.”

“I could see people abusing it. So personally I like the way it is right now.”

“Maybe advance booking would be nice. Not too far because that would be unfair so maybe a couple of days.”

“See that’s tricky because everyone will be doing it in advance and then we won’t be able to get rooms for the whole semester.”

“It would be nice if you could do it a day before.”
--- Using Group Study Rooms ---

How are students using the Group Study rooms?

- We heard from several groups that they were not actually working together on a project. Instead they were working independently (studying, writing an essay, etc.) but enjoyed doing that together in the same space. The Library Group Study Rooms provide a rare commodity: a semi-private, quiet space to study together. These students wanted to study together, but most deliberately chose an enclosed study room over the open areas on the first, third, or fifth floors.

- Our occupancy spot checks revealed that when rooms were booked online they are most often occupied. Our spot checks did not capture which rooms were being occupied by those who had booked the room and those who had not. We called those who had not booked the room but were using it anyway “squatters.” Squatters are students who didn’t book the room; either they didn’t bother trying to, or they couldn’t find an available room online. They took their chances by finding an unoccupied room and hoped nobody would come and claim it. Our interviews capture several squatters.
  - “It’s impossible to book a room. You have to stay up until midnight and then you still might not get one, so we just walk around the Library and hope to find a room. Today we went to each floor before we found this one.”
  - “We were looking for a spot on 5th and we couldn’t find one so our friend told us to look upstairs and we found a few that were open, yesterday and today too.”
  - “Honestly, we didn’t book this room and were prepared to move if someone came...It’s too stressful trying to book a room.”

- Squatter Syndrome raises a few interesting issues with the online system.
  - Students cannot see which rooms are available for the current time slot after :01 on the hour. For example, at 10:01 all of the rooms for the 10:00 - 11:00 time slot rooms are unavailable to book. Furthermore, at 10:01, all the time slots in the system change to blue; rather than green (available) or red (unavailable). This means that if it’s 10:01, students can’t tell if there are any free rooms for that hour.
  - Students can’t book in 30-min increments
  - It isn’t easy to cancel a room booking.
Occupancy spot checks also revealed that the 4- and 5-person Group Study Rooms rarely contained that many people. Instead we often found 2 or 3 people in the 5-person rooms. Anecdotally, we didn’t get the sense that students were concerned about meeting the occupancy requirements.

What do students want in Group Study Rooms?

- Students told us they are content with the setup, furniture, and equipment in the Group Study Rooms. All they require is (1) working lights; (2) enough chairs; and (3) multiple working outlets. For the 4- and 5-person rooms, students would like at least 1 outlet per person, so everyone can plug in a device.

Is 2 hours enough time in a Group Study Room?

- No! We heard loud and clear that 2 hours is not enough time for most groups. As a workaround, often multiple members of a group simultaneously try to book the same room at midnight for multiple 2-hr increments. We heard from a 2-person group that they even convinced their roommate to book a room for them so they could have additional time. This is problematic for students because often times they can’t coordinate quickly enough at midnight and therefore don’t get the same room. They have to move rooms every 2 hours.
  - “At least 3-4 hours is needed and it’s annoying if you have to leave and find somewhere else to study.”
  - “In total I needed room for 3 hours.”
  - “4-hours minimum, especially during exams. I don’t want to have to sit here for 2 hours and then have to leave. After 2 hours I’m really in the groove. When Library hours are extended, study room bookings blocks should also be extended.”

Did students encounter any major problems with the Group Study Rooms?

- No! We found that students were respectful and quick to leave if another group was waiting. The only issues that students encountered were related to the physical room itself; the light wasn’t working, there weren’t enough chairs, or the lack of outlets.

--- Conclusions ---

- Users agree that the online booking system is much better than the previous key system.

- Overall the online booking system is working well enough. There aren’t any major issues that need immediate attention. However, there are some minor changes (which most students have already discovered workarounds for) that could enhance the experience. The biggest frustration students have with the current system is the 2-hr restriction. They would like to be able to book a Group Study Room for a minimum of 3 - 4 hours.
Without prompting, we heard from many students the importance the Library plays in their studies. It is the only place on campus that students can book a room with quiet study space. With the relocation of several staff members to the 6th floor, we are concerned that this quiet space is in jeopardy. Over and over again students told us that they chose to study at the Library because it is quiet. We really need to make sure that this continues to be the case.

Recommendations

- Eliminate the "please confirm your booking within 15 minutes" feature of the confirmation email. This adds an unnecessary extra barrier for the user.
- Students will book the rooms the moment they are made available. The Library might consider changing the start time for room bookings from midnight to slightly earlier in the evening (10 or 11 PM) or first thing in the morning (7 or 8 AM).
- The Library might consider allowing students to book more than 1 day in advance.
- Extend the 2-hr limit to allow one user to book 3 or 4 hours in a row.
- Monitor usage patterns during the school year and match the booking system to the need, e.g. different blocks of time (2-4 hours), extend how far in advance you can book, etc.
- Allow students to book in 30-min increments.
- Change the labels on the rooms to reflect actual student needs and behaviour. For example:
  - CHANGE "2-person" TO "1 - 2 person"
  - CHANGE "4-person" TO "2 - 4 person"
  - CHANGE "5-person" TO "3 - 6 person"
- Allow students to see online which rooms are available for the current time slot. So instead of rooms going "offline" at the top of every hour, allow those rooms to be bookable until :59 on the hour.
- Explore easier ways of cancelling room bookings rather than forcing students to locate the confirmation email. Text students an hour before the room booking to confirm or cancel?
- The information about Group Study Rooms posted on each room is very dense. Shorten the text to make it more user-friendly.
- Soundproof the rooms. The Group Study Rooms are on "quiet" floors, but groups can become loud, disturbing other students working at carrels and desks.,
- Remind staff that the 6th floor is quiet study
- Long term: re-zone the quiet space in the Library to ensure it is not shared with staff offices and Group Study Rooms.

Appendix
<table>
<thead>
<tr>
<th>OCUL Library &amp; Place on website where Group Study Rooms are found</th>
<th>Number of Rooms</th>
<th>Booking in advance</th>
<th>Max. # hours available in a block</th>
<th>Max. #hours/day</th>
<th>Max. #hours/week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algoma</td>
<td>1</td>
<td>2 weeks Book at Borrower Services</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Brock “Use the Library”</td>
<td>11</td>
<td>Same day</td>
<td>½ hour bookings possible. Max not indicated.</td>
<td>?</td>
<td>?</td>
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<tr>
<td>Carleton “In the Building”</td>
<td>28</td>
<td>1 week</td>
<td>2</td>
<td>?</td>
<td>?</td>
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<tr>
<td>Guelph “About”</td>
<td>11</td>
<td>1 day</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Lakehead “Services”</td>
<td>16</td>
<td>2 weeks</td>
<td>2</td>
<td>2</td>
<td>?</td>
</tr>
<tr>
<td>Laurentian “Services”</td>
<td>?</td>
<td>Book at Borrower Services</td>
<td>3</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>McMaster-Mills “Using the Library”</td>
<td>5</td>
<td>2 weeks</td>
<td>2</td>
<td>2</td>
<td>?</td>
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<tr>
<td>Nipissing “How do I?”</td>
<td>12</td>
<td>Book at Circulation desk or by phone</td>
<td>?</td>
<td>4</td>
<td>Up to 5 advance bookings at once.</td>
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<tr>
<td>UOIT “Book a Study Room”</td>
<td>?</td>
<td>1 opens at 10 AM</td>
<td>2</td>
<td>2</td>
<td>?</td>
</tr>
<tr>
<td>Ottawa</td>
<td>?</td>
<td>2 weeks</td>
<td>3</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Library</td>
<td>Locations and hours</td>
<td>Bookings can be made at any time, including during an active timeslot. On May 11, rooms were available for booking up to July 6.</td>
<td>½ hour bookings available 2 hour max.</td>
<td>6/week 50/year</td>
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<td>Queens-Stauffer</td>
<td>19</td>
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<td>Ryerson</td>
<td>?</td>
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<tr>
<td>U of T Gerstein</td>
<td>?</td>
<td>2 weeks</td>
<td>3</td>
<td>3</td>
<td></td>
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<tr>
<td>U of T Robarts</td>
<td>?</td>
<td></td>
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<tr>
<td>UTSC “Visit”</td>
<td>6</td>
<td>2 weeks</td>
<td>2</td>
<td>2</td>
<td></td>
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<tr>
<td>UTM “Visit”</td>
<td>?</td>
<td></td>
<td>2</td>
<td>4</td>
<td></td>
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<tr>
<td>Trent “Book Group Study Rooms”</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>UW Porter “Services”</td>
<td>6</td>
<td>1 week</td>
<td>3</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>UW Davis “Services”</td>
<td>4</td>
<td>1 week</td>
<td>3</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>WLU “Locations”</td>
<td>8</td>
<td>1 week</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Location</td>
<td>Category</td>
<td>Timing</td>
<td>Pre-bookings</td>
<td>Notes</td>
<td></td>
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<td>--------------------------------------------</td>
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<tr>
<td>Windsor</td>
<td>“About”</td>
<td>?</td>
<td>Pre-bookings made at Circ desk or by phone</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td>York-Scott</td>
<td>“Ask &amp; Services”</td>
<td>4</td>
<td>14 days</td>
<td>3 (1-time slot only)</td>
<td>?</td>
</tr>
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</table>