Illinois State University

ISU ReD: Research and eData

2018

Ethnography of the Library: Milner Library

Andrew Bartolone
Illinois State University, awbarto@ilstu.edu

Ana Fochesatto
Illinois State University, acfoche@ilstu.edu

Duncan Losacco
Illinois State University, dllosac@ilstu.edu

Scott Lambert
Illinois State University, sjlamb1@ilstu.edu

Follow this and additional works at: https://ir.library.illinoisstate.edu/eui

Part of the Social and Cultural Anthropology Commons

Recommended Citation

Ethnography of the Library: Milner Library

Andrew Bartolone, Ana Fochesatto, Scott Lambert, Duncan Losacco

Dr. Gina Hunter

Spring 2018

Illinois State University

Abstract

This paper summarizes a student conducted ethnographic study of Milner Library at Illinois State University. In the age of technology, many scholars in library science have expressed the need to re-evaluate and re-conceptualize the academic library space. In particular, scholars have remarked on the value of ethnographic methods for understanding student perspectives on library spaces and services.. This study is inspired by the ERIAL project: a two-year ethnographic study of the student research process in five Illinois university libraries starting in 2009. The ERIAL ethnographic research led to a deeper understanding of how students do research, as well as the social connections established in this process between students, faculty, and librarians. The current project at Illinois State is timely due to pending renovations to Milner Library. The student researchers met with Milner library administrators to discuss potential foci for the project and hope the the results of student-led research, however limited, can inform upcoming strategic decisions.

Four ISU students (one graduate and three undergraduate) who conducted ethnographic research during the Spring 2018 semester to understand how other ISU students make sense of existing library spaces, why certain spaces may be underutilized and what improvements could be made to improve library services. The student researchers collected ethnographic data through participant observation, cognitive mapping exercises, and semi-structured interviews with students and librarians. The findings problematize the designation of "underutilized" and stress the importance of the library space as a *multifaceted* space where students use personal technology and desire environments for both individual and group study, as well as for other

important aspects of campus life. The library is a study space and for this students desire open spaces, with more electrical outlets, tables, and whiteboards. The students interviewed are less aware of or able to access the library's provision of scholarly resources and may access scholarship via other venues. Finally, the researchers call for more ethnographies of the library at Milner to continue to inform the library administration.

Introduction

Library ethnographies have elucidated the ways that students learn, do research, and use college library spaces. In the last decade, scholars, librarians, students and education administrators have started to engage in a process of reconceptualizing the college library. The rise of the digital age, changes in pedagogical methods, and socio-economic factors have had a profound impact on the traditional library model as a repository of scholarship. College libraries across the world have had to adapt to these changes by fundamentally questioning their role on the college campus and society at large. Adaptations to architectural design, furnishings, space layout, technological services, and rules of conduct have helped many libraries maintain relevance to their target users, who are digital natives. Changes in the role of library spaces has prompted educators and librarians to more closely examine the ways students use and learn in the library and to gain a deeper understanding of the role of the library to better inform decisions on changes to library space and services.

This student-led research study was conducted at the Illinois State University Milner Library and was inspired by the ERIAL project in 2009, a two-year ethnographic study of the

student research process in five Illinois university libraries starting in 2009. This previous ethnographic research led to a deeper understanding of how students do research, and establish social connections with other students and with faculty and librarians. Our study focused on understanding student usage of Milner Library spaces, and specifically spaces identified as "underutilized" by library administrators. The findings from this study underscore the importance of library spaces as *multifaceted* spaces (Eigenbrodt 2013) where students use of personal technology and desire environments for both individual and group study. We also find that these spaces define the relationships between students who use the library, and relationships between students and the library staff.

About Milner

Milner library Fulfills the academic library's traditional role as a repository for scholarly resources and articles as well as reserves for textbooks and materials geared towards course-specific reading material; the library includes online access to academic resources as well as an interlibrary loan system. A reference desk and subject area librarians are available in house and online to assist users. Milner Library serves all Illinois State University affiliates- 20,000 undergraduate students, 3,000 graduate students, hundreds of faculty, as well as requests from other libraries. With the shift from a center of book resources to a community hub for social studying, the large collection of academic materials Milner houses has been moved to various facilities for storage. An additional reason for the removal of books is the structural problems from the building's age, causing various leaks and threatening to damage the learning materials on the basement level.

Milner Library serves as a campus center for group work and individual study. The library building today features numerous spaces geared towards different study habits of students. Milner Library provides a number of services to the student body, including computer and printing services, loan of laptops and recording equipment, and access to specialized multimedia rooms. This research focused on spaces students use for study.

Milner has six floors, with different study environments to provide spaces for collaborative work and conversation and spaces for quiet, focused study. The first floor is under construction, and is used currently for storage. Its potential future uses have been a subject of debate and some contention as our research uncovered. On the second floor, or main floor, is the public services such as the reference desk, the University Lab, and the reference materials section, as well as Einstein Bagel Bros coffee shop and many public computers. The third floor features a group work space, with open tables for collaboration, and whiteboards for student study use. Floor four is home to the quiet study atmosphere, as well as individual or group study rooms. Floor five is the location of the group study rooms and presentation practice stations. There are collaboration stations, areas where groups can input a laptop's screen onto a large monitor and work with a group on projects, on the third, fourth and fifth floors. Finally, the sixth floor features a Teaching Materials Collection for Education majors, a special books collection, as well as several instructional areas for classes.

Literature Review

Librarians and scholars have studied how students do research in order to inform their redesign of library spaces in the Information Age. As described by Zhang and Maddison, the vast availability of online resources and information technology has created a learner-centered

paradigm (Zhang and Maddison 2016, 3). As a result, library space has been re-envisioned to support student learning by treating "students as intentional learners rather than consumers" and by viewing library space as "one of the chief places on campus where students take responsibility for and control over their own learning and employ library staff to enact the learning mission of the university" (Bennett 2009, 194). Recent studies have found that due to the technological changes, learners want library spaces that are open with windows, that provide comfortable seating, and that provide areas for quiet studying and areas for group collaboration (Vaska, Chan, & Powelson, 2009). This research project confirms these findings.

Other scholars have delved further into understanding changes in library usage and student needs to rediscover the purpose and meaning of the library. Eigenbrodt (2013, 7) contextualizes the changes in library space within the socio-economic change of our society as a "knowledge society." Summarizing the distinction of information versus knowledge societies in post-industrial societies, Eigenbrodt states that in knowledge societies, information is used as "only a vehicle for the distribution and a resource for the production of knowledge" (2013, 9). Thus, he argues that libraries should consider themselves within this larger framework of serving the needs of the knowledge society by being an important place for academic scholarship and education, as well as sociability, Bildung or "being educated to become an active and beneficial member of society" (2013, 7). In this way, through an analysis of current theoretical approaches to library space, Eigenbrodt argues that library space is a "multifaceted space" comprising different socio-cultural meanings for individuals and communities. This is a sharp shift from older views of the library that positioned it as an archival space. Instead, Eigenbrodt's review of approaches reveals that the library is best theorized as a "third place," " a societal place," and "a

meeting place." The library is a place for social bonds, information, learning, leisure and entertainment.

Similarly, Boys (2011) points out that libraries of the past were stable places but they can now offer the opportunity for vibrant, student-centered spaces (2011, 42). While Eigenbrodt focuses on library spaces more generally (both academic and public) in the nexus of the global and local, Boys' analysis is more specifically related to the particular social relations we find at academic libraries, such as Milner Library. Boys' approach calls into question how students learn, how professors teach, and how those processes of learning and teaching matter in relation to material spaces. Boys (2011) argues that there is a distinctiveness to the teaching and learning of post-compulsory education that must be better understood in order to translate more informed theoretical understandings to improved library spaces. Boys suggests that the concept of "communities of practice" can be help engage with learning spaces in productive and creative ways (2011, 45). Through the "communities of practice" model, Boys argues that we can see post-compulsory learning as a "series of iterative affective encounters, moving towards becoming and belonging, though something which is experienced as an uncertain, liminal space" (2011, 73). These encounters are mediated through the material environment which is why space becomes an integral part of the learning and practice process.

Boys concludes by presenting a conceptual model for understanding the post-compulsory space that builds on the relationship between learning and space by considering "1) the 'ordinary' routines of existing communities of practice in education 2) attempts at, and impacts of, designed transformations of existing spatial practices 3) participant engagements with, and adaptations of, these social and spatial processes and repertoires" (2011, 59). In this way, Boys'

(2011) work does not provide a "how-to" to redesigning library space, but instead posits a model that raises questions about the relationship between learning and space. In a similar conceptualization, Eigenbrodt posits learning space through the social constructivist theory where there is an emphasis on the "social and cultural aspects of learning and the constitution of space in an ongoing process of spatialisation" (2017, 98).

Understanding current societal changes and reconceptualizing the library space according to the needs of students has pushed many libraries to redesign and redevelop. Library spaces are moving away from their traditional purpose as archives to spaces that encourage student learning. As mentioned above, Milner Library, like many other libraries, has seen important changes in the last decade. Milner's journey is similar to what Cannell (2013) describes as the typical library redevelopment project where instead of demolishing and rebuilding, upgrades are made to libraries built in the 1960s and 1970s. The upgrades are important because the layouts of the 1970s are no longer relevant to users of the twenty-first century. Some of the features of these buildings include: poorly designed entrances, intrusive retro-fitted security systems, heavily used functions far from entrances, random and unprofessional signage, a big desk that separates users and staff, lower ceilings, needs of books over the needs of users, uniform space with tightly packed tables, no cafe, no attention to environmental issues, asbestos (2013, 30). Milner Library has already made many changes to its original design yet some of these building and design issues identified by Cannell remain. as we will discuss later in this paper.

Cannell (2013) argues that library redevelopments can be just as effective as building entirely new libraries. Albeit more intellectually challenging, redevelopments are far more financially attainable and can be very effective because they rely on the knowledge and

understandings of staff and users (2013, 26). In this way, ongoing research that reveals this knowledge among staff and users is essential for library redevelopments like at Milner Library.

The need to further understand student use of the library space and to redesign the library experience accordingly was a major goal of the ERIAL project: a two-year ethnographic study of the student research process in five Illinois university libraries starting in 2009. This ethnographic research led to a deeper understanding of how students do research, as well as the social connections established in this process between students, faculty and librarians. The results helped to inform library policies to best meet the needs of students. More specifically, Treadwell, Binder and Tagge (2012)'s study of space at the University of Illinois, Springfield Norris L. Brookens Library informed the library master plan in changes of the space that would better accommodate the needs of twenty first century students. Treadwell, Binder and Tagge (2012) further discuss some of the new features of library redesign including the "information commons" where the traditional central service floor of the library is transformed from a reference desk and several collections to an open area with user services and pervasive technology. The new paradigm in library space accommodates group study, workstations, tables with outlets for personal tech use etc. Forrest and Halbert (2009) argued to change the term to "learning commons" to highlight the student learner rather than the technology he/she may be using. In this way, although the redesign highlights technology use, Freeman (2006) warns that aside from students wanting tech integrated libraries they also want a library that is a "contemplative space" and space redesigns should consider the mission and values of the library rather than adjusting to the latest technologies.

Furthermore, Treadwell, Binder, and Tagge (2012)'s study showed that library users' perceptions are often at odds with the opinions and goals of librarians (2012, 133). This type of finding can be crucial for library space redesign because the library administration could make decisions that are not effective in improving library services for students. In this way, we sought to further understand the changing library space at Milner Library. Acknowledging that the technological age has changed our societies and has fundamentally changed the role of libraries, we conducted ethnographic research to inform the library space redesign at Milner Library in hopes of creating library spaces that enhance learning and research for ISU students.

Methods

The research team included graduate student Ana Fochesatto along with undergraduate students Andrew Bartolone, Scott Lambert, and Duncan Losacco. We used a variety of ethnographic methods for the project including participant observation, semi-structured interviews, cognitive mapping, and flip charts discussed in greater detail below. While participant observation and qualitative interviewing are common methods in ethnography, the cognitive mapping and flip charts were borrowed from the toolkit written by Andrew Asher and Susan Miller which is provided by the Ethnographic Research in Illinois Academic Libraries (ERIAL) project website which can be found at http://www.erialproject.org/publications/toolkit/.

The toolkit provided by the ERIAL project website is intended for use as a guideline for librarians who want to conduct their ethnographic studies in their libraries and does not properly address the issues of power dynamics between faculty researchers and the students which may be an obstacle to research because students may be hesitant to be forthright with someone they see

as an authority figure.   As students interviewing other students, we were able to bypass this issue of authority between the interviewer and the interviewee. Bedwell and Banks (2013) conducted their research at the Library of Dalhousie University examined how the building design impacted the behavior of the students who used the library and as well as to inform recommended avenues the library on how they might change in the future. Of interest in this study was the student participation in the research. Their study was conducted by senior-level students in the fields of Sociology and Anthropology. In other words, the study was conducted by people who were also a part of the culture and had "complete membership." This kind of data gathering can go a long way towards influencing how libraries not only assess the needs of their students but on design and redesign of the space within them to meet those needs. As student researchers we also had the benefit (and blind spots) associated with being "natives" to this environment. We reflect on our methods and our own subjectivities at the end of this paper.

Prior to the start of the study we met with library staff to determine their interests and to gain access to the library as a research site, which was granted Library staff requested that students wear identifying name tags during the times they were conducting their research and to conduct our work in ways that would cause minimal interference for library patrons as discussed later in the methods explanations.

Participant observation - This method was used throughout the study to observe how people interacted in and with the library space. The hope was that as students ourselves, we would have in-depth (as well as useful) insight on the usability of the library's space. We spent a total of 33 hours on the designated floors at different times of the week to gauge how patrons

behaved at different times of the day/week. Recording for this was done as field notes of our experiences in the space and our observations of patrons.

Semi-structured interviews – This method was chosen for the wealth of information that can be gained through open-ended interviews. Researchers composed list of questions that to encourage an engaging conversation about patron and library staff behaviors, experiences, and attitudes.

Student interviewees were recruited using Milner Library's social media (Twitter and Facebook), posting fliers throughout the building in places that students normally go to as well as in the locations indicated as spaces of interest, and using participant observation to identify and approach possible interviewees. Librarians were recruited through internal library email and face-to-face contact while they were stationed at one of the reference/help desks throughout the building.

Following library staff stipulations we only approached patrons on targeted floors two, three, and six and only while they were 'in transition". We did not interrupt patrons actively engaged in study or research.

The interviews took place either in the library or at another ISU campus public space that was convenient for the interviewee. Interviews lasted approximately one hour with some running slightly longer or shorter depending on interviewees' responses. We conducted a total of ten interviews, eight with students and two with librarians.

Cognitive mapping - As part of the interview, process students were asked to construct a cognitive map of the library (Asher and Miller 2011, 14). Students were asked to draw a map of

the library from memory using blank paper along with blue, green, and red pencils. They were given 6 minutes to draw a map of the library space with interviewers instructing them to change pencil colors every 2 minutes to understand which spatial features stood out most prominently in the minds of participants. The introduction to the cognitive mapping exercise was explained using this script: "For this exercise, I am going to ask you to draw a map of the library from memory using three different colored pencils. You will start off using the red pencil for two minutes, then switch to the blue one for two minutes and switch to the green one for two more minutes. I will keep track of time for you so that you can focus on your drawing." We ended up with seven maps for this exercise as one of the students declined to participate in the exercise.These maps were then compared and analyzed to see which features appeared more frequently than others or which features appeared only rarely.

Flip-charts – We placed large pads of paper in the form of sketchbooks on easels in targeted-spaces throughout the library. For the most part, these spaces were ones that library faculty had identified as underutilized spaces which we hoped would elicit more meaningful responses. The flip charts were divided in half using a marker with the top half containing the question "What do you like about this space" and the bottom half containing the question "What is missing from this space?" The sheets were refreshed daily for one week from April 18th to April 25th.

Data and Findings

Library as a Multifaceted Space

Milner Library offers many different kinds of spaces and resources, from individual study carrels to collaborative classrooms. Our data demonstrates that ISU students use these spaces and resources for many different purposes, from socializing to deep work. As Eigenbrodt (2017) argues, the library space is a "multifaceted space" comprising different socio-cultural meanings for individuals and communities. Our data supports that both students and librarians see the library space as a multifaceted space with a variety of different student activities and needs. Students like Dan, an undergraduate at ISU, may choose to use different spaces in the library depending on how much interaction they would like to have with other students and the kind of work or activity:

Yeah, if I'm more socializing probably 30% studying, a lot more socializing that's third floor. 50% socializing 50% studying, fifth floor. And 100% studying fourth floor is where to go, so there is different levels ya know.

Similarly, Jolie, a graduate student in Sociology, makes a distinction between two different types of study spaces that she utilizes in the library. When going to the library to study with a friend on a Sunday afternoon, she underscores how much they enjoy sitting by the "big windows on the fourth floor." However, like Josh, Jolie expresses that for a different type of study day she would be more likely to choose a different spot:

...also on the way [to the study area with the big windows] there's like this row of desks that only face the wall and it's like one little chair and a little table space and it's got sides up and I was like that might be... I might utilize that space when I really just need to feel like I'm trapped [laughs] to get my work done. It's not a feeling that I seek out but I know that... Okay! One little individual space... like I am here to get work done.

Like many other students we interviewed, Jolie also emphasized the value of the collaborative classrooms and open study area on the third floor. Josh mentions that this space is good for socializing and Jolie speaks to the importance of the collaborative classrooms as spaces that are valuable for group work because of the "multimedia functioning" that facilitates sharing and working together.

Furthermore, librarians at Milner Library also understand the importance of catering to different types of student experiences. When asked what students like about the library, Sherry, a Milner librarian, states:

Students like it as a place to be with groups, to meet up, for the quiet study space. I think that having [the] coffee bar - that's a fairly new thing, made the library more attractive, you can easily, quickly go grab something, take a break from studying, you don't have to go to the [student center], I often see students studying or reading, just alone, so I think it's sorta a welcoming, comfy kinda place.

Sherry comments that the library serves many different populations, including undergraduates, transfer students, and graduate students. She explains that there is diverse group of students using the library with diverse needs to be met by the library space. In line with many of the trends in library redesign, Milner has changed the space and layout of the library to accommodate more students, more outlets, more group and individual study.

The kinds of changes that Milner has made in the last decade mirror the kinds of challenges and solutions described by Cannell (2013). As Sherry mentions, the coffee bar was added three years ago and the fact that the building was built in the 1970s meant that they had to "add tons of wiring so that people could plug devices in." Technological features, tables, outlets,

sunlight/windows are all features that are increasingly important to students and that librarians also identify as important.

Tables and Outlets

The importance of items with functional utility, such as outlets, tables, and whiteboards, is a theme that is commonly identified in all the methods used during this study. Researchers' observation notes reveal how deeply embedded these concepts are to students as digital natives. While this was not something that researchers looked for, or even discussed at the initial planning stage, once researchers started coding data , this theme of occupation of space in relation to outlets was pervasive. The importance of this relationship is demonstrated in Figure 1 where one of the researchers grabbed a floor map before heading to one of the little used areas (bottom right) for observation. The map shows that the observer drew the tables that occupy the space as well as the whiteboard in the area. The tables with access to outlets are denoted with an x.
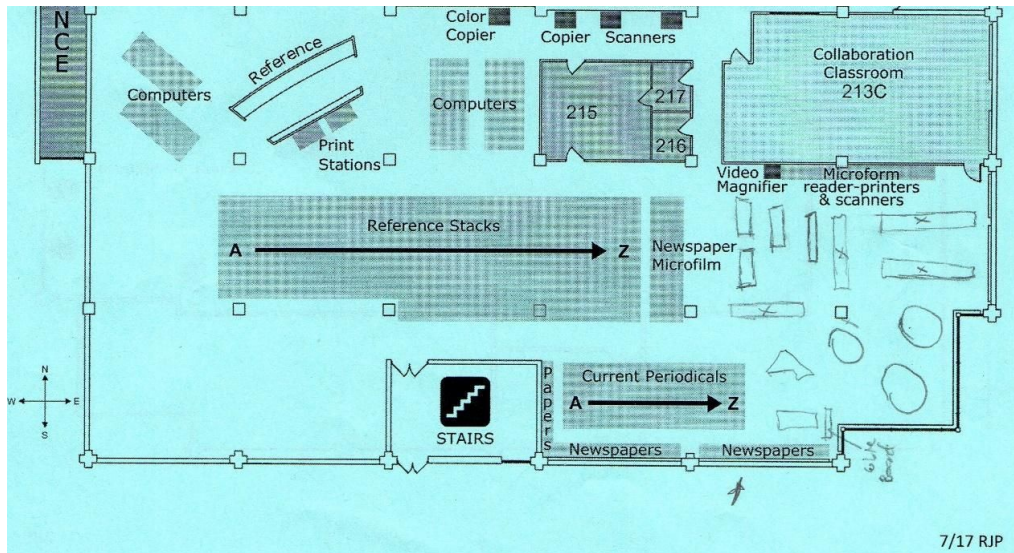
Figure 1 Main floor (Floor 2)

The table next to the white board and newspapers in figure 1 was one of the sites used to

conduct interviews because it was almost always free, available, and secluded from other people.

This location ended up providing one of the interviewees with the perfect opening in which he

could discuss the importance of outlets when choosing what spaces to occupy in the library.

Dan: Yeah, do you see these tables in the middle? No one is going to sit there just now
    AWB: Yeah?
Dan: Yeah, I honestly would not sit here (looks around), no I wouldn't because-see there is no
    outlet within five feet.
AWB: the only outlet is over there (referring to spot in the wall between the two shelves of
    newspaper) not being useful at all.
Dan: Yeah. So, it has to be near a wall, most people usually hug the wall. They sit there because
    of the outlet in the wall (pointing at two students using the round table in the middle with
    an x near it) see that?
AWB: Oh yeah
Dan: Most people would- sitting in the middle I mean you're at a disadvantage.

Earlier in this conversation Dan talks about the social awkwardness of how to interact

with other students when the ratio of tables to outlets are too high. He reveals that when it comes

to deciding on what tables to use, outlets are not only a matter of spatial strategy but one of social strategy as well. This social transaction is demonstrated in this next section when the student references back to a group of tables on the 6th floor.

Dan: Also, 6th floor, if you are by these round tables you're not going to have- there is like one outlet in the middle you have to share with three tables. If you are at the wall you are fine but if you are here [Points to tables on map]*, you have to fight for those and it's kind of awkward.*
AWB: It's kind of awkward?
Dan: Yeah, people look at you like "Are they done charging?" And you look back at them like", "Should I let them use it? ""
Awb: So unspoken communication over the outlets?
Dan: Yeah

Access to tables with electrical outlets in a prime interest for many students at Milner.

Whiteboards

Whiteboards are another item of interest as student interviewees identified the need for whiteboards for group work, concept mapping, individual projects, and even for tutoring each other. Whiteboards are important to almost all aspects of learning, from a student's point of view. The flipchart placed near the periodicals section shown in Figure 1 (which received very little in the way of comments) did receive in response to "What is missing from the space?" a request for "more whiteboards" written in very large letters. The request for more whiteboards was primarily found in the third floor which is seen by students as the floor for socializing and group work. One interviewee, Jason, goes as far as to suggest that the floors focus be entirely on providing more space for whiteboards and furniture for studying.

AWB: If you could change anything entirely, you don't have to think small. Just walking onto the floor is there anything where you think to yourself I just really wish that they had done this or would just change that etc.?

17

Jason: oh, okay. So, the one thing I would probably change is I would probably take out all books from the third floor and move those elsewhere. That way the whole floor can be a study floor. More room for more people to get work done
AWB: Get rid of all the books on the 3rd floor?
Jason: yeah and put in some of those comfyish chairs that have the desks and swivels.
AWB: the circular chairs that have their own desks?
Jason: yes, add either those or add more board space
AWB: more board space? Do you see those taking up valuable board space or what do you mean?
Jason: sometimes you have to wait to get a board and sometimes you get impatient. If you were to have more boards, you would have more opportunities to work as a group easier
AWB: how often have you had to wait for the boards
Jason: I've only used the boards four times so far and half those I've had to wait five to ten minutes
AWB: just to get access to a board
Jason: and you are always hoping that when people leave they are not coming back. Because sometimes they don't erase what they put on the board and you don't know if it's important it or not.
AWB: So, you need more board space. You also said you want more of those circular chairs?
Jason: Yeah, either have more board space or more chairs or a combination of the both.
AWB: Why does it have to be either or? It seems like the chairs and the boards serve entirely different functions.
Jason: Right, they could move all the chairs into the area where all the books are and add more whiteboards to where the chair area was. Expanding the board area and still give plenty of room for the chairs.

Another student interviewee, Derek, does not go so far as to suggest getting rid of the books on the third floor, but he also expresses the desire for more whiteboards in the table areas. Initially he discusses desks separated from the main study area by the stacks then moves into a small area located just off the main floor as well.

Derek: I don't know if people would like want-because people do use that but Not that many people cause it's not a big space so maybe they could expand the whiteboard like group idea because there's already this spot on the main floor for that. It's on the other side and there's already the fourth floor and the sixth floor. So they can just go up there
AWB: For quiet spots?
Derek: Yeah for quiet spots because the desks aren't really anything special just like regular-regular seats regular desks. I think they put it there because- I mean they were thinking fairly I guess in a clever way to try to use what utilized as much space as possible. So, you know that's a good idea I think you know that's a good idea. but I think they could expand that the um the whiteboard and the table because sometimes it can be a bit crowded.

18

*AWB: Yeah definitely especially during finals week.*
Derek: Yeah. So maybe like actually get rid of that or keep the chairs, I guess keep those like
rolly chairs and push them back and like where those chairs were make that like another
whiteboard.
AWB: What about the books?
Derek: I don't know what to do about the books.

Derek's last statement articulates a general theme in this research— that the Milner Library space is seen by students as a study/social area rather than a source of literature, in addition to the interviews, a compelling case for how students view space at Milner library is to compare their cognitive maps to the floor plans provided on the library website. Figures 2 and 5 are the floor plan maps provided by Milner library for the main floor (also referred to as floor 2) and the 6th floor. Each of these is shown along with some student drawn maps of the same floors. The difference between the student maps and the library floor plans show the concepts of utility and function.

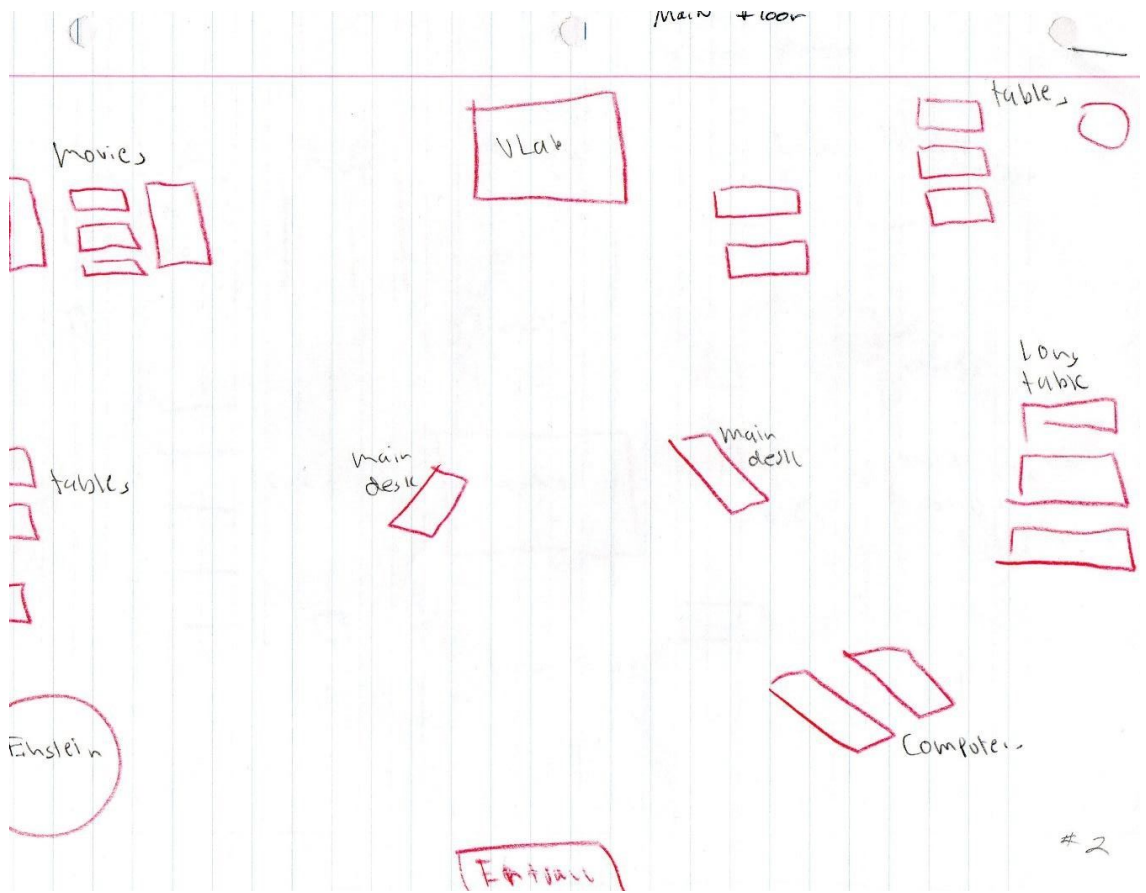*Figure 2. Main Floor (floor 2) map provided by Milner Library*
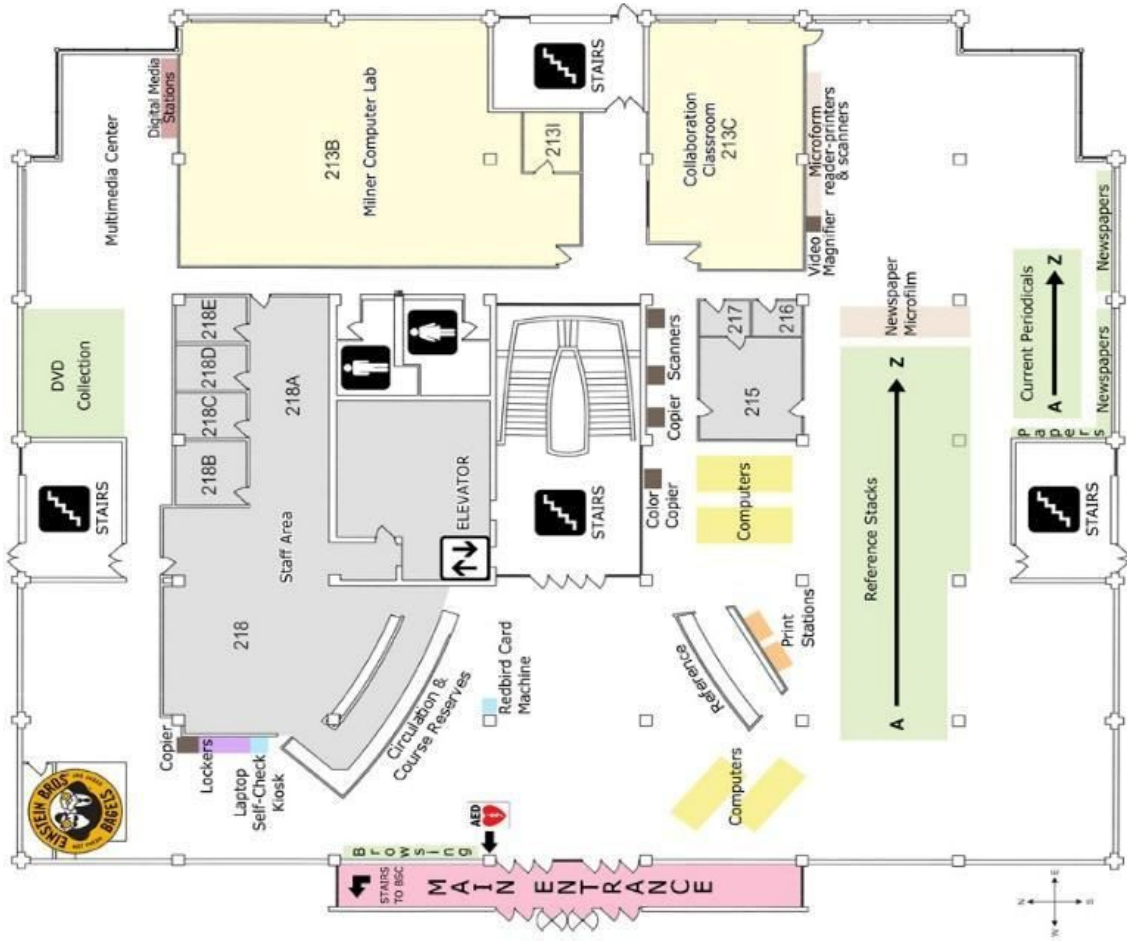
Figure 3, a student map, depicts the main floor as being made up of tables, a movie section, the coffee shop (Einsteins), and the help and reference desk.
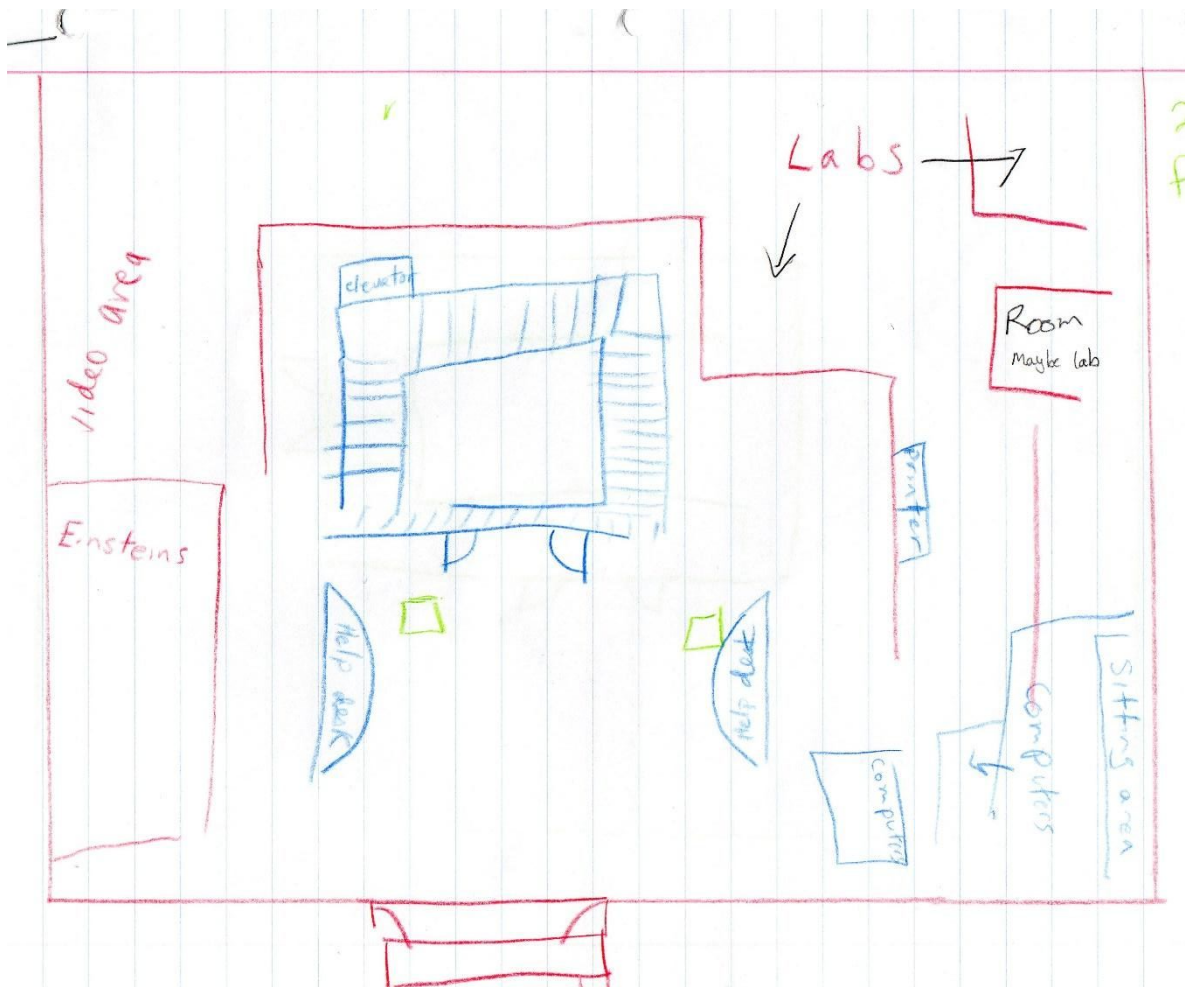
Figure 4 show that this student focuses on the computer lab, the video area, the coffee shop, and the computer terminals located throughout the floor.
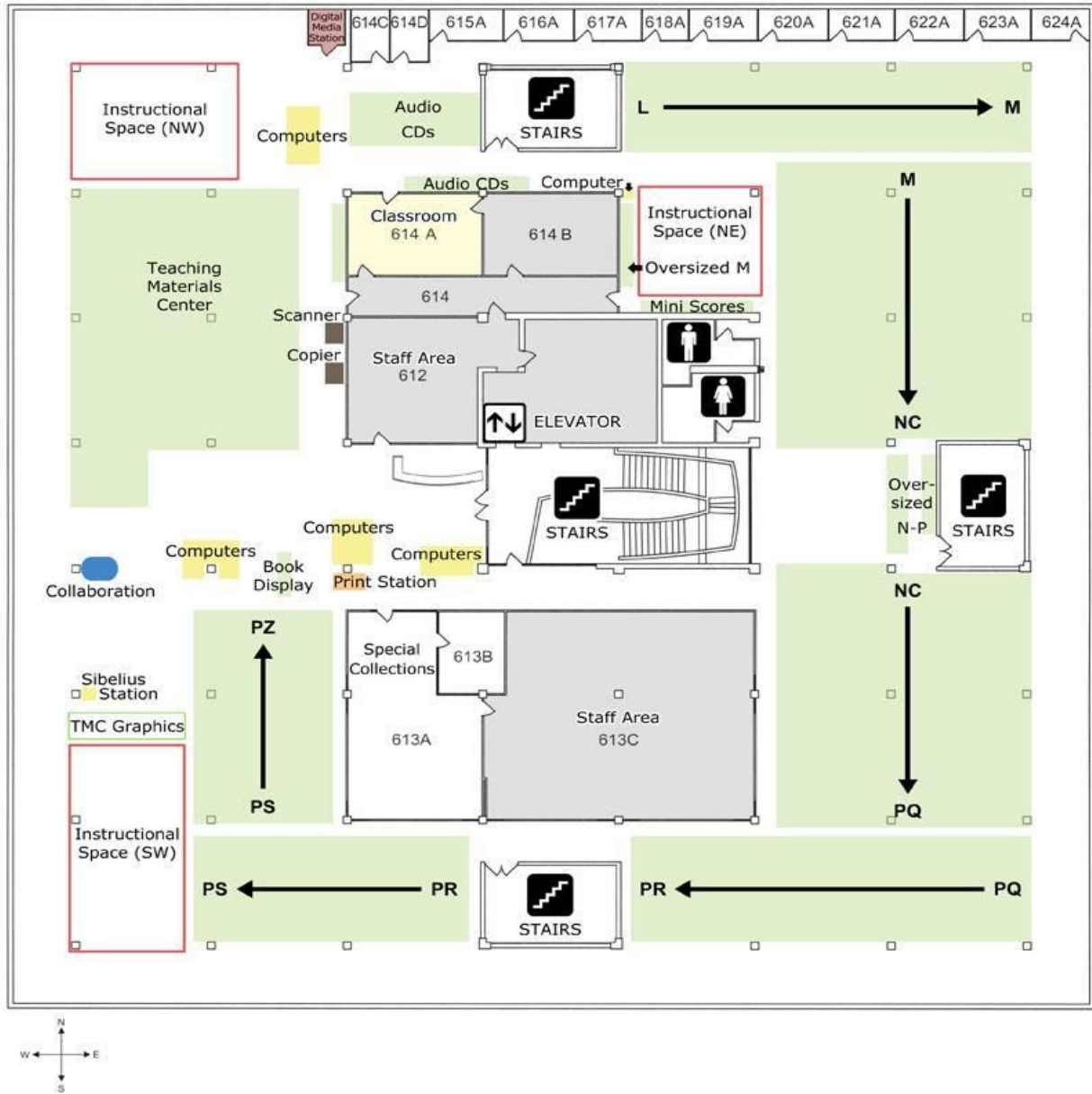
Figure 5: Map of Floor 6 provided by Milner

Figure 6 is a student drawn map focusing on the tables and seating on floors five and six.
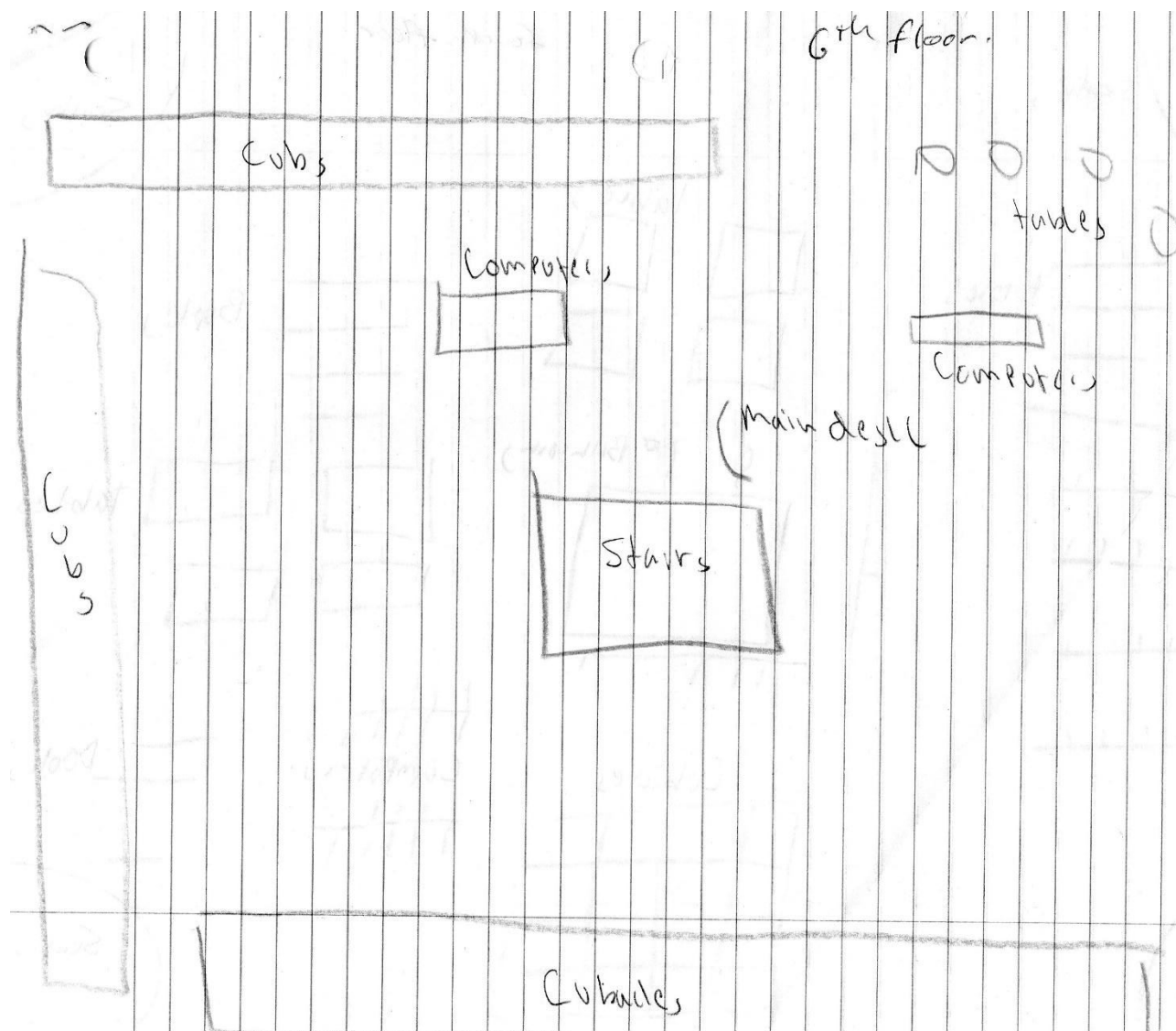
Figure 7 is a student's map that focuses mainly on the computers, cubbies and some tables
located on floor six.

The comparison between student drawn maps to those of the official floor plans shows
that students rarely note the stacks or the periodicals yet every place that has tables is drawn on
students' maps. - The official library floor plans lack any reference to the tables on any of the
floors. The student who drew Figure 4 revealed during his interview that he never spends any
time on floor 2 except to print and his map reflects his conceptualization of that space as

basically one big computer lab. He was not the only student to put emphasis on the use of the library for computers and printing. The locations of computers are clearly marked on the official library floor maps showing that the library recognizes the importance of computer availability and knowledge of their locations as important to students. For this paper we have only looked at two different floors using only a few different maps, but these themes were repeated across almost all the mapping exercises and on all floors. This might suggest that while the library puts a lot of importance on the features/services it provides, students' primary items of interest are tables and whiteboards. This is not surprising if students view the library as a space for solo work, group study, and internet access where they can charge their personal computers and other electronic devices. It is a problematic finding that might might indicate that students are not aware of academic resources or do not know where to find resources, other than books.

Underutilized Spaces?

For this research, researchers focused on studying spaces that were identified by library staff as "underutilized." Milner assesses the usage of resources through internal evaluation methods such as the gate count of the number of people entering the building, the Access Services department's regular counts in specific locations throughout the library throughout the day, and software usage, computer logins, number of print jobs, and number of copies made. This approach aligns with an understanding of library usage that assumes that "students vote with their feet," and which Eigenbrodt (2013) argues is a simplification of the usage of the space considering that students rely heavily on library services and spaces. Because of this, students will not simply stop using services because they are not maximizing their learning. Likewise, a number of different factors may influences usage counts.. In researchers' own usage of the uLab

26

as students, we found that we were never asked to scan our cards at the entrance, and that even when we went with a group of people, only one or two people signed on to the computer. The uLab may be utilized more than teachnology tracking reveals.

After analyzing the observational data, we question whether"underutilized areas" are as underused as gate counts and logins suggest, and whether surplus spaces and computers should be seen as problematic Students expressed positive views of extra, empty computers in the lab, these are seen as a safety net for when their own computers do not function properly.An abundance of terminals is comforting in that aspect. Through our investigations and interviews we found that some students do not even know about the uLab, which also contributes to the safety net of the students who do know about that service. Rather than the areas being underutilized, these areas of concern are seen as yet another aspect of the multifaceted space that is Milner Library-always being available to students in need with low wait time in case of emergency need of technology. Many such areas in the library are seen in the same or a similar way by the students, and the idea of making sure each seat of the library is filled at all times to measure the utilization of space is a disconnect between the perception of the usage of these spaces between the students and the library staff.

In contrast, The coffee shop area was not identified by library staff as an "underutilized" area, yet, our participant observation and flip chart data show that students make significant use of the green booths lining the wall but very little usage of the round tables in the middle of the area. Students typically use this area for quiet study (as identified by librarian Sherry) and they desire more booths. Along with our previous discussion on the need for outlets, the round tables in the coffee shop area do not provide access to an outlet which could explain why students

typically do not use them and why they prefer the booths ..Even though we problematize this designation of "underutilization" for some spaces, we do see that there are significant challenges to student access of certain library spaces and the resources in those spaces.

Although students and librarians both conceptualize the library as a multifaceted space that comprises many different kinds of social meanings and interactions. Some students expressed disappointment about plans for the currently closed Floor 1 of the library and lack of trust regarding whether students' voices are heard or important to the University or Library Administration. Jolie described Floor 1 as a space hasn't been used for a while and that has been overlook while, other renovations have been done on campus.

Likewise, when asked if there were anything he could change about the library, another undergraduate student, Michael, also cited the basement as an important issue. He expressed that a candidate for student government had initially promised to turn the first floor of the library into a "diversity safe space," but that this never happened and instead they were given a small space in the Bone Student Center. Michael expresses how he and other students felt that their wishes were not respected. Michael states they wanted the diversity center at Milner because it would've been "a huge space where students of diversity could feel safe and feel more connected." Instead, he says, "we did not get what we wanted and politicians lied to us." In this way, Milner library space is intricately connected to important student issues across campus including research and scholarly activity but not limited to this. Students also see Milner as an important center of student interaction that should address issues like minority representation. Jolie emphasizes that this space "meant something to people… the incoming classes, they can't utilize the space."

Our own research inadvertently solicited concern that students' opinions where not important. The student wrote an email about the flipcharts we used to collect data:

As I was getting coffee from Einstein's in Milner I walked to the garbage to throw away my sugar packet and I saw the sign below [referring to the flipchart]. I think that this sign, the location, and it's appearance says a lot. The presentation, with the massive amount of tape at the top, the location in a corner near garbages, and the fact that it is in a corner does not seem to me that it is looking to elicit the responses of students at all. In fact to me, it shows that the thoughts of students are not really important. If there are other signs I have not seen them as I typically go to my usual spot near Einsteins.

I am writing this email so that responses can be greatly increased by the way it all is presented. I chose not to write but instead send feedback so that the voices of students who will be here next year will have precedent. I think if the sign were moved from the corner and near garbages then things would be better. Per the Campus Climate study students already don't feel heard or that they have a space so this being near garbage cans was quite telling. If there is any way i can help in my short two weeks left i would be more than happy. Thank you.

As the student highlights in this email, discontent with our method of collecting student feedback through the flip chart is embedded within a much larger campus context in which students feel that they, in particular minority students, are not heard.

Research Services and Librarian-Student Relations:"you don't know what you don't know"

With thousands of books and resources, the library can be a daunting space for students to navigate. These challenges can be different depending on the student and the activity at hand. However, overall, students express frustrations over finding resources and librarians express frustrations over not being able to reach students when they are experiencing these issues. From freshman to graduate students, the challenges of retrieving resources in the physical stacks or on the library database can vary significantly depending on the student's previous exposure to an academic library and their specific need. This challenge is often described by both students and librarians in interviews as the "you don't know what you don't know" problem, where students

are facing challenges with using library resources but they are not aware of what the library provides to help or how to ask for help. Even a graduate student, who had had several years of experience at other academic libraries, expressed similar concerns. When asked about what kinds of things she would like to learn more about Milner, Jolie describes, "I don't know what I'm missing… all of the things I've needed the library for so far I've been able to find." Yet, earlier in the interview, Jolie expressed frustration in the search for the things she needed. As a graduate student, she is a more experienced library user so her understanding of library services may be much more advanced than other students. Nonetheless the problem persists in that she anticipates that there are resources she knows she may be missing.

In her difficulties finding resources, she offers the solution of better signage but overwhelmingly, her experiences point to a great satisfaction in her interactions with librarians. Librarians themselves also identify that students are unaware of library resources or do not know how to find them. They stress the need to interact with students and to help them in any way possible. In these desires, librarians also find themselves trying to understand what the student is missing in their understanding of the library. Sherry explains that students often do not know how to ask their questions or they think they shouldn't ask. In her interactions, Sherry tries to "think from their perspective and put myself in their head. Think like they're thinking." Jolie found her interactions with librarians to be very positive, and Sherry describes that students often express that they wish they would've known the resources available to them earlier. Therefore, understanding and accessing library resources is often most successful by creating librarian-student connections.

Milner attempts to do this by having "subject librarians" that can meet with students from specific colleges and departments and give them assistance that is relevant to their area of study. Jolie and Sherry both express that these resources are incredibly valuable to student learning. . Further integration of subject librarians into the courses and curricula of their departments might foster connections between librarians and students. Students may find a sense of belonging and greater access through their specific subject librarian, building a community of practice connecting the student, the library, and the academic departments (Boys 2011).

Student needs and demands of the library space point to a utilization of a "multifaceted space" supporting communities of practice that are only possible through information sharing and people-to-people interactions within and about the library space. Understanding library space as communities of practice link student-librarian-faculty relations and campus-wide activities and politics that truly show that students want and identify the library as a multifaceted space that incorporates many different aspects of student life.

Conclusion

Our study finds that library spaces serve students for different purposes. Despite the library's functionality as a multifaceted space, this is a recurring theme throughout our study and emphasizes the importance of access to technology or outlets to the students who use the library.This rising need for access to outlets comes from the development of students as digital natives, where technology is an essential part of studying. Across all spaces, students are looking for more outlets to plug in their devices and sit either independently or in a group to collaborate.

This aspect determines what areas are more utilized than others .. Rather than spread out across an entire space, the students hug the walls where outlets are for extended periods of time, creating a landscape of priorities where outlets reign supreme over things such as comfort levels of chairs or noise levels. To improve upon the multifaceted space that Milner aims to provide, the student-librarian relationships should be strengthened in order to promote communities of practice.

Tangible recommendations

From the themes presented in our research, several recommendations can be made in order to improve the space within Milner Library.

- Indicate diverse kinds of study areas on library floor maps.

- Prioritize adding electrical outlets.

- Add additional whiteboards.

- Further engage students regarding services that Milner has to offer, perhaps by integrating subject librarians into curricula

Continue to conduct future library research with a focus on ethnographic methodologies that can and should be employed with the cooperation and participation of the diverse library stakeholders - undergraduate and graduate students, librarians, faculty, staff and other patrons.

References Cited

Asher, Andrew, and Susan Miller. 2011. "So you want to do anthropology in your library." *Or a Practical Guide to Ethnographic Research in Academic Libraries*.

Bedwell, Linda, and Caitlin Banks. 2013. "Seeing through the eyes of students: Participant observation in an academic library." *Partnership: The Canadian Journal of Library and Information Practice and Research* 8, no. 1: 1.

Bennett, S. 2009. Libraries and learning: A history of paradigm change. Portal: Libraries and the Academy, 9(2), 181-197.

Bryant, Joanna. 2009. "What are students doing in our library? Ethnography as a method of exploring library user behaviour." *Library and Information research* 33, no. 103: 3-9.

Boys, J. 2011. *Towards creative learning spaces: re-thinking the architecture of post-compulsory education*. Abingdon Oxon; New York: Routledge.

Cannell, Sheela. 2013. "A Great Opportunity." Essay. In *University Libraries and Space in the Digital World* .Routledge.

Duke, Lynda M., and Andrew D. Asher. 2012. *College libraries and student culture: What we now know*. American Library Association.

Digital Resources in the Library. 2017. *FreeBook: Digital Resources in the Library*. Routledge. https://www.routledge.com/reference/posts/12312.

Eigenbrodt, Olaf. 2013. "The Multifaceted Place." Essay. In *University Libraries and Space in the Digital World*. Routledge.

Eigenbrodt, Olaf. 2017. "Learning Space and Campus Planning." Essay. In Exploring Informal Learning Space in the University. Routledge.

Forrest, Charles and Martin Halbert, eds. 2009. *A Field Guide to the Information Commons*. Lanham, MD: Scarecrow.

Freeman, Geoffrey T. 2005. *The Library as Place: Changes in Learning Patterns, Collections, Technology, and Use.* Washington, DC: Council on Library and Information Resources.

Vaska, M., Chan, R., & Powelson, S. 2009. Results of a user survey to determine needs for a health sciences library renovation. New Review of Academic Librarianship, 15(2), 219-234.

Ward, Amy. 2017. "Student Perspectives." Essay. In Exploring Informal Learning Space in the University. Routledge.