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**Learning about Student Research Practices through an Ethnographic Investigation:
Insights into Contact with Librarians and Use of Library Space**

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Abstract

Objective

Student research habits and expectations continue to quickly change due to technological advances, complicating the design of library spaces and the provision of research support. This study's intent was to explore undergraduate and graduate student research and study needs at a private university in the Northeastern United States, and to improve librarians' understandings of these practices so that more appropriate services and spaces may be developed to support student learning.

Methods

The research project utilized a mixed-methods design for data collection that spanned from fall 2012 to summer 2013, consisting of a survey, observations, and interviews. Data collection commenced with a survey questionnaire consisting of 51 items, distributed through campus email to all students and receiving 1182 responses. Second, 32 hours of unobtrusive observations were carried out by taking ethnographic "field notes" in a variety of Library locations during different times and days of the week. The final method was in-depth interviews conducted with 30 undergraduate and graduate students. The qualitative data were analyzed through the application of a codebook consisting of 459 codes, developed by a data analysis team of four librarians.

Results

The results address topical areas of student interactions with librarians, contact preferences, and use of library space. Sixty percent of interviewees contacted a librarian at least once, with texting being the most popular method of contact (27%). Forty-five percent of respondents rated the importance of contacting a librarian through the website as extremely or very important. In being contacted by the library, students preferred a range of methods and generally favored use of their personal email, to learn about library news and events through signage. Participants were less interested in receiving library contact via social media, such as Facebook or Twitter. Regarding student use of and preference for library space, prominent themes were students creating their own spaces for study by moving furniture, leaving personal items unattended, the presence of unwanted noise, and a general preference for carrels to enable individual study.

Conclusion

Being aware of student research processes and preferences can result in the ability to design learning environments and research services that are more responsive to their needs. Ethnographic research methods are recommended as a means to better understand library user practices and expectations.

Keywords

Ethnographic research; Student research behaviors; Library space; Mixed-methods research

Introduction

Academic libraries have increasingly taken ethnographic approaches to understanding how patrons utilize library spaces, resources, and services, due to the unique contextual insights that can be revealed. As noted in a recent review of the literature, Ramsden (2016) observes that the use of ethnographic methods by librarians has skyrocketed since the mid-2000s. Broadly defined, ethnographic research in libraries often takes the form of exploratory investigations into how a library is used or conceived of. As opposed to seeking to predict student behaviors, these studies aim to cultivate a greater understanding of what patrons do in actuality, with an emphasis on their motivations or reasoning for doing so.

Using an ethnographic approach, the [Name of University] University Libraries in [City, State] and [City, State] conducted a four-year research project to better understand undergraduate and graduate student help-seeking and study habits at its suburban residential and urban commuter campuses. This project's intent was to improve librarians at [Name of University] Libraries' understandings of students' research and study needs, and used the methods of in-depth interviews, unobtrusive observations, and a survey questionnaire to do so. The ethnographic framework was adopted in order to better consider students' practices from their own perspectives, and to situate research and study habits within the complex social settings they take place. Beyond examining the local culture of student research at [Name of University] Libraries, the study intended to result in the design of services and environments that would be more responsive to and reflective of students' expressed needs.

Literature Review

Representing a range of qualitative research methods and based in the field of anthropology, ethnography seeks to understand the thoughts, experiences, and/or actions of a given culture through close observation and interpretation. Ethnographic research necessarily involves the contextualization of practices and activities, and through a longitudinal and iterative process of information gathering, can allow for the detailed description and understanding of a subject under study. Because of its focus upon social behaviors, ethnography is particularly useful for developing insights into people's experiences and expectations.

In libraries, ethnographic research can contribute to the essential tasks of "understanding users, the way they work, and the various challenges they face when trying to locate, retrieve and use information" (Dent Goodman, 2011, p. 1). Through an analysis of the library and information science literature, Khoo, Rozaklis, and Hall (2012) identified five primary types of ethnographic research methods employed by researchers in library settings: observations, interviews, fieldwork, focus groups, and cultural probes (p. 84). Many researchers acknowledge that, like other qualitative methods, ethnography is a process that requires considerable time and resources to conduct. Yet Lanclos and Asher (2016) argue that as a practice ethnography has significant benefits, including potentially "profound implications for the nature of libraries, for definitions of work and practice, for imagining the connections that libraries have within their larger contexts, for holistic considerations of student and faculty experiences, actions, and priorities."

The field of academic librarianship has seen several particularly influential ethnographic studies, beginning with the University of Rochester's Undergraduate Research Project that culminated in Foster and Gibbons 2007 book *Studying Students*. Fresno State (Delcore, Mullooly, & Scroggins, 2009) and MIT Libraries (Gabridge, Gaskell, & Stout, 2008) also conducted large-scale studies using a combination of participant observation, interviews, mapping, and photo diaries. Two recent studies of major significance are the Ethnographic Research in Illinois Academic Libraries (ERIAL) project conducted at five universities Illinois representing both public and private institutions (Duke & Asher, 2012) and the City University of New York's Undergraduate Scholarly Habits Ethnography Project, which explored student research habits and technology use at six public commuter colleges (Smale & Regalado, 2017; Regalado & Smale, 2015).

In a review of ethnographic methods in libraries, Ramsden (2016) describes the considerable range of subjects this approach has been applied to: "Ethnography has been utilized to learn more about collection management, use of library materials or technology, information seeking behaviors, reference desk use, student behavior, space organization and wayfinding, and to analyze (and even as a student task in) library inductions and teaching" (p. 256). Researchers continue to adopt and develop inventive uses of ethnography in library settings, whether as a method, as in Dunne's (2016) shadowing of several students during the final weeks of their undergraduate studies and Kinsley, Schoonover, and Spitler's (2016) use of GoPro cameras to learn about students' processes of finding books in library stacks, or as pedagogical inspiration, as in Pashia and Critten's (2015) use of the ethnographic methods of mapping and observation in library orientation sessions. Recent studies with implications for the research at hand include Holder and Lange's (2014) mixed-methods examination of library space and patron satisfaction, Allan's (2016) analysis of student awareness of librarians roles within a learning commons setting, and Khoo, Rozaklis, Hall, and Kusunoki's (2016) surveys of student perception and usage of library space. These implications will be addressed in the Discussion section.

Methods

The study began as an initiative of the Dean of Libraries, whose background in anthropology was invaluable as inspiration for the project and in training librarians regarding data collection procedures. Initially, the research was intended to learn more about how students were using electronic devices for their academic work. When it became clear that the use of electronic devices, academic work, and use of library space and resources were closely intertwined, the study's scope was expanded to encompass these areas related to library use. The study did not begin with predetermined research questions in order to remain open to possibilities during data collection and analysis, but in general, focused upon the intersection of student research and study habits and library use.

Data Collection

This research utilized a mixed-methods design and drew upon quantitative data to formulate and revise the in-depth interview questions. The three data collection methods consisted of a survey questionnaire, unobtrusive observations, and in-depth interviews, and involved a total of 16 librarians and staff members across two campuses. Each member of the research team underwent ethics training in research involving human participants. Data collection occurred from fall 2012

to summer 2013, while the coding and analysis of interviews and observations began in spring 2014 and concluded in early 2016. Table 1 provides a summary of the project’s timeline.

Time Period	Action
Summer 2012	IRB approval received
Fall 2012	Survey distributed
Spring 2013	Observations conducted
Spring and Summer 2013	Interviews conducted
Spring 2014	Coding process started
Summer 2015	Coding process completed
Fall 2015	Data analysis started
Spring 2016	Data analysis completed

Table 1. Data collection and analysis timeline for the study conducted.

The first step of data collection was the development and distribution of a survey questionnaire consisting of 51 multiple choice and open-ended items. The survey was developed using proprietary university software, and distributed through a university email listserv for all undergraduate and graduate students. An array of incentives, including a MacBook Air and sports event tickets awarded to random participants, and extensive promotional efforts that involved a survey kick-off event with food, social media posts, and a banner on the Libraries homepage, resulted in 1182 responses for a response rate of 13.6 percent. At the end of the survey participants could indicate whether they were interested in taking part in an interview.

The second method of unobtrusive observations were conducted by research team members by taking ethnographic “field notes” in a variety of campus library locations on both campuses in half-hour increments, including hallways, book stacks, computer labs, quiet study rooms, and near reference desks. These observations were conducted during different times and days of the week, and the notes included what was observed using Spradley’s AEIOU Framework as well as the researcher’s interpretation. A total of 32 hours of observations were completed, and the notes were compiled for later analysis. Appendix A contains a sample observation sheet.

The final data collection method was semi-structured in-depth interviews with 20 undergraduate and 10 graduate students, representing different majors and class levels. 15 students from each campus were randomly-selected from the pool of survey participants for a total of 30 interview participants. For each interview one librarian acted as the interviewer and one librarian operated a camera to video record the discussion. Sample interview questions are included as Appendix B. Interview durations ranged between 40 and 60 minutes, and participants were compensated for their time with a \$30 gift card for a large online retailer. The audio files were professionally

transcribed and made available to the team of librarians performing coding and data analysis.

Data Analysis

Four librarians representing both campuses acted as data analysts for the project. After survey responses were collected, a word count of the 185 observations and 15 randomly selected interview transcripts served as the basis for a codebook, to guide coding of the observations and interviews. The observations and interviews were coded in teams of two, with one librarian representing each campus. The teams meet periodically in pairs and as a group to report their progress and compare themes. An interrater agreement of 85% was established between group members and between teams through double-coding 20% (6) of the total number of transcripts.

Six iterations of the codebook were devised during the process, and the final codebook contained a total of 459 codes at the question, unit, and thematic levels. Sample thematic codes from the final codebook are included as Appendix C. The survey data were entered into SPSS and analyzed using inferential and descriptive statistics, and the interview and observation data were analyzed using descriptive statistics in addition to coding.

In terms of limitations regarding data analysis, it is important to note that each campus library offers different services and has different spatial configurations, making comparison across campuses sometimes difficult. As a data collection method, unobtrusive observations are subject to the observer's biases, and thus have limited reliability when considered alone. Although the necessary precautions of calculating interrater reliability and working in pairs were taken to limit coder bias, it is also possible for errors to have occurred during the observation and interview transcript coding process, as coders' biases could potentially lead them to focus on some findings while unconsciously ignoring others.

Results

Seven major themes were identified through data analysis: student interaction with librarians and contact preferences, access services (such as Interlibrary Loan and reserves), use of online library and non-library information sources, use of technology for academic work, use of library space, and research and study habits. Because the full results from this large-scale study are not possible to describe within one article, the results at hand will focus upon two areas with potential implications for academic library service and space planning: participant interactions with librarians and contact preferences, and participant use of library space. These areas serve as a snapshot of the larger study, which contains additional areas of inquiry concerning undergraduate and graduate student research and study behaviors.

Student Interactions with Librarians and Contact Preferences

The three data collection methods provide different perspectives on the questions of student interaction with librarians. Analysis of the interview transcripts (n=30) indicated that sixty percent of participants reported interacting with a librarian in conjunction with their academic work at least once. In terms of reference service points across both campuses, the interactions included the following modes: text (27%), research appointment (13%), reference desk (13%),

phone call (13%), and chat (10%). Participant comments regarding their interactions with librarians were often favorable. One sophomore describes her interaction with a reference librarian as such: “I didn’t know how to go about finding information. The librarian helped me. She showed me how to do things online, very helpful, a very good experience.” Of the set of observations (n=185), twenty noted in-person interactions with librarians taking place during the time of observation. Survey responses (n=1072) showed that forty-five percent of respondents rated the importance of contacting a librarian through the website as *extremely* or *very important*. Among survey respondents, first-year students (54.3%) and sophomores (53.3%) were most likely to rate contacting a librarian through the Libraries’ website as *extremely* or *very important*, with this percentage declining as students’ class levels increased.

Contact preferences expressed by interviewees for library communications proved to be more varied. Email, print media, and social media were discussed most frequently. Both undergraduate and graduate students generally preferred to be contacted at their personal email account instead of their university email, and many participants stated that they did not regularly check their campus email account. As a junior explained, “I never checked my [Name of University] email until this year when my professors said I can’t use my personal email but need to strictly use my [Name of University] email. I didn’t know about that until this semester.” More than a quarter of interviewees (27%) wished to be notified of library news, events, and/or new resources by signage posted within the library. Students were generally uninterested in receiving updates from the library via social media platforms. Facebook was a popular platform among both undergraduate and graduate students, but many interview participants made a distinction between social media use and academic work. Sixty-seven percent were unaware of the library’s Facebook page or uninterested in “liking” the page. Some interviewees mentioned the need for convenience and incentives. Regarding Facebook posts, a graduate student stated, “It’d have to pop up and be like, ‘Like this and be entered to win a contest.’ It has to be convenient and welcoming. I wouldn’t go out of my way to search for the library to become friends.” Twitter was also discussed, but not always as a place for receiving library updates. Thirty percent of participants mentioned using Twitter, but thirteen percent were not interested in following the library due to their focus on professional or personal interests within the platform.

Student Use of Library Space

Group study was one theme among student use of library space. Thirty percent of interviewees reported using the library for meeting with classmates for studying, while seven observations recorded students using the library for this purpose. While studying individually, some students created their own spaces by moving pieces of furniture and “cocooning” themselves in a protective way, such as placing stacks of books around themselves or occupying nearby chairs and table space with coats or bags. This was an unexpectedly common practice, described by fifty-seven percent of interviewees and recorded in twelve observations. One graduate student described this behavior, explaining, “I make myself at home when I put myself down [to study]. My laptop here, my water here, so that everything’s there, out in the open.” In terms of temporarily leaving behind items such as cell phones, bags, and books, more than half of the interviewees (57%) stated they had left their personal items unattended for some length of time, whether in order to leave a quiet space and talk on their cell phone, purchase a beverage or snack, or use the restroom. Fourteen separate observations noted students leaving personal items

unattended, confirming the interview data. Students left their belongings for different reasons, such as because they felt that the library was a “safe place” where things would not get stolen or because they were under the assumption that the library had video cameras. No participants reported having items stolen.

Along with group study, creating study spaces, and leaving items unattended, unwanted noise was another prominent theme. Sixty percent of interview participants discussed problems of noise in the library, while ten observations referenced noise. Students addressed this issue in various ways, including using earplugs while studying, wearing earphones but not playing music, and one senior who took drastic measures, stating, “I use those big headphones that cancel out the noise.” Regarding non-academic activity within the library, seven percent of interviewees used library spaces to rest or relax, and thirteen percent used the library as a social gathering place. Seating preferences largely depended on the activity students engaged in. Eighty percent of interviewees equally preferred tables or study carrels, followed by any type of seating with outlets nearby (33%) and soft seating such as couches (20%). Observations confirmed the popularity of carrels in particular, with thirty students at study carrels, sixteen at tables, and twelve at soft seating locations.

Discussion

The discussion below sheds light on a number of questions related to how students interact with key library services. For example, do students find contacting a librarian to be important? What preferences do students have for receiving communication about library services and events?

Student Interactions with Librarians and Contact Preferences

In general, interactions with a librarian appeared to be less important as students progressed in their studies. The impression from the interviews was that this trend was due to the upper-year students’ a) increased confidence to work independently, b) improved information-seeking knowledge, and c) closer relationships with and greater reliance on professors for help. Regardless of year, most students preferred to contact a librarian via text message more than any other online or in-person method. It was also found that students tended to seek librarian assistance for locating information resources such as a book or journal articles or directional questions, rather than help with in-depth research strategies. As one student stated, their only interaction with a librarian was “when I couldn’t find a book on a shelf or when I get lost and I can’t find the room I’m supposed to go to.” Students rarely expressed relying on librarians for other coursework help not related to the library.

Our study confirms the data from interviews conducted with 91 undergraduates and 45 teaching faculty as part of the ERIAL project. Miller and Murillo found that students primarily engage with librarians for directional or library-specific help, and that students’ lack of relationships with librarians results in their frequent consultation of professors or peers for research assistance.¹³ Given that students who are encouraged by librarians to ask for librarian assistance are no more likely to do so, but students encouraged by their professors to ask for librarian assistance are, closer collaboration with faculty and better communication of librarian roles are necessary undertakings.¹⁴ Only twenty observations referred to student interaction with librarians

or library staff, and at first glance this number suggests a very low rate of interaction. However, many observations were conducted in areas where there were no library personnel stationed, such as the stacks or hallways, so this number is not as insignificant as it appears.

Analysis of student preferences regarding the ways they are contacted by the library or contact the library themselves revealed use of different platforms for different purposes, generally divided along the lines of academic and personal use. In terms of being contacted, participants expressed strong preferences for their personal email addresses compared to their university email accounts. That said, university email policy mandates that communication between faculty, staff, and students be done through the university email address and strongly discourages redirecting email to another address. Based on student email behavior and preferences the policy should be revisited and/or revised. Students generally used Facebook for personal non-academic activities, and showed little interest in “friending” the library or receiving library updates through other social media such as Twitter. This general lack of interest in using social media for receiving library information was striking, as a significant number of studies consider many applications of Facebook for library activities, particularly marketing. Fewer studies assess students’ reception to this type of outreach. Of those that do, some find that students are receptive to Facebook as a marketing tool,^{15,16} while others question student interest in social media for academic purposes and ask librarians to more deeply consider the usefulness of these tools.^{17,18} Due to students’ reported lack of interest, the findings presented here warrant caution before devoting significant resources to social media efforts.

Unexpectedly, signage and posters emerged in several interviews as one low-tech preferred solution to communicating library services, news, or recent acquisitions. These students wished to be notified of the same services that they might through email or social media, but in-person while at the library or on campus. That most interviewees who contacted a librarian virtually did so through text and chat, coupled with the finding that among survey respondents the importance of contacting a librarian through the website was rated as less significant by upper-division students, suggests that in appraising the contact preferences of students, demographic factors and both digital and low-tech modes of contact must be considered. Taking participant contact preferences as a whole, personal email was the most popular mode, followed by signage, Facebook, and Twitter. Given these disparate platforms it is advisable to not rely upon campus email accounts to reach students, and to instead pursue various channels, such as print and opt-in means for personal email or text.

Student Use of Library Space

The findings noted that “cocooning” (defined by locating a preferred study space and remaining there for a long amount of time with snacks, entertainment, and so on) was relatively common, practiced by more than half of the interviewees. Relatedly, interviewees created their own space through moving library furniture, stacking books, or otherwise blocking off a space of their own to focus or seek privacy. These behaviors were observed in various areas of the libraries. Many students sought proximity to certain areas, such as natural light, away from distractions, or in areas where groups can work comfortably. In particular, students frequently sought out limited electrical power sources to charge their devices, even “waiting their turn” to sit near outlets. While some students did not move furniture or create their own space, it was clear that many

valued the ability to form a space of their own, or to have the flexibility to do so. Modular furniture that can be configured for group or individual study, as well as study areas that create or accent a pleasant environment, could serve students in this manner.

Based upon librarians' observations, students were asked if they left their personal items unattended. Students leaving personal items behind to meet a friend, use a bathroom, or get a snack was perceived to be a problem in terms of potential theft. Leaving personal items was confirmed to be a common practice, as 20 out of 30 interviewees indicated they leave behind items of some sort to do other tasks. This was particularly common among students who lived on campus, who likely feel they are in a familiar or friendly environment. Another activity that students were perceived as doing frequently was eating food in the libraries. 20 interviewees ate food in the library, and students who lived on campus were more likely to eat in the library than those who lived off campus. The observations confirmed both frequent eating in the libraries and the occasional instance of students leaving items unattended.

The issue of noise within the libraries was mentioned by 18 interviewees and referenced in ten observations. Noise was also mentioned by a number of survey respondents as a suggestion for what to change about the library. This dislike of noise in the libraries was shared across student academic levels and disciplines. The use of the libraries' rooms designated for quiet study was not as prominent. Only eight interviewees used the quiet rooms, although observations indicated that these rooms are used during busy times of the semester. Some students, including seniors, were unaware the libraries had quiet rooms. This point underscores the necessity of communicating the different purposes of library space to students through formal and informal cues, particularly considering the implementation of a noise-monitoring device at one academic library had no impact upon the reduction of noise levels.¹⁹

In general, students expressed the need for more comfortable or functional spaces and extended hours. While two interviewees did not feel that the library needed to extend its hours, ten others would like the library to be open earlier, later, or 24 hours, due to personal, work, and academic obligations that made it difficult to visit the library. Observations indicated students using the library until closing and waiting for the library to open, particularly during limited hours on the weekend, suggesting the need for increased library hours. Other items discussed by students as key to improving the library were to increase the number of electrical outlets, to improve the wifi signal throughout the entire building, and to offer wireless and free printing. Hall and Kapa found similar requests from library users for larger table space, additional comfortable furniture, and an increased number of desktop computers.²¹ These requests underscore the fact that the material infrastructure of libraries cannot be ignored, for these basic features very well determine the quality of students' library and academic experiences.

Conclusion

This project drew upon qualitative and quantitative data from unobtrusive observations, in-depth interviews, and an online questionnaire, exploring undergraduate and graduate student library and research experiences at two university campuses. Analysis of the data through an extensive coding process revealed myriad findings relating to library services, use of technology, student research habits, and use of library space, several of which are described above. Future research

might consider the incorporation of other methods, such as mapping exercises or student photo diaries. Additional research could be conducted in intervals of three to five years, contributing an important longitudinal dimension to the qualitative study of research and study habits.

At our own library, several strategic actions have been completed or are being pursued based on the study's findings, including instructional efforts, new technology services, and the redesign of library space. At one campus, basic library instruction and an information literacy exam were integrated within the first semester curriculum, and librarians have become involved in Learning Communities to communicate directly with students early in their academic careers. New technologies were developed and deployed to make library use and research assistance easier, including a Library App for mobile devices and research appointments conducted via Skype. Both libraries have undergone renovations that include soft seating and natural light. The addition of "lounge environments," group study tables, and "Genius Bar"-inspired workstations supply study spaces more aligned with how students work.

Though potentially requiring new skills and a considerable contribution of time, the data and insights derived from ethnographic research are often unique in their detailed description and contextualized understanding of information practices. Moreover, ethnography in libraries allows researcher-librarians to move past assumptions regarding the use of services and resources to discover what happens in actuality. In a time of large-scale quantitative assessment and extensive capture of student data, "Ethnography can serve as an effective antidote for the problematic reliance in higher education (including libraries) on analytics and quantitative measures of effectiveness."²³ As libraries continue to seek ways to meet the needs of their campus communities, ethnographic research holds potential for doing so in a way that reflects the complex nature of library operations, users' lives, and the ways that social forces interact.

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Appendix A: Sample Observation Recording Sheet

Location: PERIODICALS READING ROOM LOWER LEVEL
 HALLWAY LOWER LEVEL
 Date: 02/25/2013
 Time started: 10AM
 Time ended: 10:30AM

A - Activities are goal directed sets of actions-things which people want to accomplish
E - Environments include the entire arena where activities take place
I - Interactions are between a person and someone or something else, and are the building blocks of activities
O - Objects are building blocks of the environment, key elements sometimes put to complex or unintended uses, changing their function, meaning and context
U - Users are the consumers, the people providing the behaviors, preferences and needs

What I Saw/Raw Data (A, E, I, O, U/Spradley)	What I Thought/Interpretation
<p>The Hallway area was empty during the entire time of observation (except for the normal walking-through traffic). There were two groups of students in the periodical reading room area. One group consisted of three students. They were sitting at the large table by the windows. Students had iPads, laptops, smartphones, food, and water on the table. They also talked in full voice. The second group was consisted of two students sitting at the table close to the wall by the Technical Services area. They had food, water, and laptops on the table. There was very little interaction between those two students. They were reading and using laptops. At one point, one of the two students got up and left the area with her iPhone in hand. Previously she was trying to make a phone call and could not get a reception. Besides those two groups one student was sitting by himself at the empty computer carrel and was reading.</p>	<p>The student sitting by himself (reading) was there long before the observation began. I saw him at 8AM in the morning on exactly the same spot.</p>

Appendix B: Sample In-Depth Interview Questions

When you study in the Library (if you do), do you prefer to be around other students, or have more of your own personal space? Can you describe why you prefer this? If you prefer to have more of your own space, where do you go to find a more private space in the Library? Do you ever have to “create” your own space? If yes, can you describe how you do this?

When you study, do you have more than one electronic device in use? Do you ever listen to audio such as music, tutorials, etc. on headphones while you are studying? If you do, can you describe what you typically listen to?

Do you come to the Library when you are on campus? If yes, do you tend to come to the Library alone or with friends and classmates? If you come to the Library alone or as a group, what are some of your typical activities? How often do you come to the Library when you are on campus?

Are you interested in receiving information about the Library’s services and programs via social media? For instance, would you “Like” the Library on FB or follow us on Twitter?

If you use the Library to study, do you bring a laptop with you? Where in the Library do you tend to study? Do you use different areas of the Library at different times, or for different reasons?

Do you seek help from Library personnel? If yes, please describe. If not, when you have questions regarding your assignments or research projects, where do you turn for assistance?

Have you ever used the Libraries’ website to help you with an assignment? If you did, how did you find the Libraries’ website/homepage? Can you show me how you used the website and how you found your way to the things you used?

Do you access the Library from home? If you do, can you give me an example of what you did or what you were looking for? Did you ever need help when trying to connect to the Library from off-campus? How often do you access the Library’s website and for how long?

Appendix C: Sample Thematic Codes from Codebook

Major Theme	Code	Subtheme	Code
Student Research Strategies	RESSTRAT	First Source Consulted	FIRSTSRC
	RESSTRAT	Search Engine Use	SEARCHENG
	RESSTRAT	Evaluating Sources	EVALSRC
	RESSTRAT	Shelf Browsing	SHELFBRW
	RESSTRAT	Catalogue Browsing	CATBRW
	RESSTRAT	Keyword Search	KEYSEARCH
	RESSTRAT	Copy and Paste as note taking	CPPSNOTE
	RESSTRAT	Textbook Acquisition	TEXTBKAQ
	RESSTRAT	Time Spent In Library	TIMEINLIB
	RESSTRAT	Downloading and Printing	DLPRINT
	RESSTRAT	Downloading and Emailing	DLEMAIL
	RESSTRAT	Use of Cloud Storage Services	CLOUDUSE
	RESSTRAT	Fulltext	FULLTEXT
	RESSTRAT	Bibliography	BIBLIOG
	RESSTRAT	Peer review/scholarly	PEERREV
	RESSTRAT	Take picture with phone	MOBILEPIC
Student Study Habits	STUDYHAB	Time Spent In Library	TIMEINLIB2
	STUDYHAB	Print	PRINT
	STUDYHAB	Saving	SAVE
	STUDYHAB	Playing Music	PLAYMUS

