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Anthropological Study of Shain Library: Uses, Perceptions, and Recommendations

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**An Anthropological Study of Shain Library:
Uses, Perceptions, and Recommendations**

By

Anthropology 380: Applied Anthropology

Spring 2009

Ingrid Brudvig, Casey Corn, Reed Harris, Brendan Kempf, Sophie Marx, Nick Mercer,

Lauren Moran, Erich Roberts

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Introduction

In the spring of 2009 professor Benoit's Applied Anthropology class conducted a comprehensive study on Connecticut College's Shain Library. The class met with the library staff multiple times before deciding how to tackle the project. The research question posed was, how do students use and perceive the library? Does the library satisfy student's needs, and if not what changes could be implemented to better the student body?

The class began by submitting a proposal of our project to the Institutional Review Board, and then proceeded with the investigation. Though the topic as a whole is an examination of Shain Library each member of the class took on a specific aspects of the research. The topics covered range from study habits such as multitasking to how students utilize library resources outside of the library. The class created a DVD of their research and presented their findings to the library staff. This is the complete report of the research to compliment the DVD presentation.

Methodology

In order to gather the information and raw data for this project, several different methods were utilized. First and foremost, it is important to note that each student received a camera that could function as a device to take still images and record videos of more than an hour in length. Initially, our primarily method of obtaining was by using the camera for student interviews and to take still images of students studying (both within and outside the library). A few weeks into the project we realized the importance of using the camera for observation purposes and also utilized other methods of obtaining crucial

data about students' uses of the library, conceptions of the library, and possible improvements for the library services (including physical layout and library homepage). Additionally, the classroom functioned as a site of fieldwork because along with the students and Professor Benoit, a librarian, faculty from media services, and others frequented the class sessions. As the students discussed their experiences of the library, the faculty realized how different these notions were from their experiences and past uses. Much of the discussion between individuals with various perspectives provided the basis for what the project hoped to accomplish throughout the semester. Many ideas were not the accomplishment of individuals, but rather were refined through exchanging opinions. This section will serve as an outline of all the methods used by the student researchers of this project to obtain the results discussed in the subsequent sections of the report.

The majority of the information gathered for this project was through interviews with students. Typically, the interviews took place in the basement, first, second, and third floors of the library, while the student (who focused on studying outside the library) along with a few other students also conducted interviews in the Crozier-Williams student center, common rooms in residence houses, individual dorm rooms, and classrooms across campus. Each student primarily conducted interviews on their specific research topic (multi-tasking, what students bring to the library, the role of space, uses of library staff, etc...), yet since many of the topics were interconnected the interviews conducted in a specific topic by one student were occasionally used by a different student for the purposes of another topic. Each student had an agenda going into each interview, and therefore the questions asked were written out beforehand. At the same time, the

interviews were informal because they were between friends or classmates and thus the interviews did not entirely reflect the previously prepared set of questions. The student interviewers often focused their attention elsewhere when they stumbled upon an interesting topic. Also, as the students become more comfortable as interviewers on camera and with their portion of the research project, they began to probe the students to elaborate on their responses. This provided for more depth in the responses to the research questions. On the whole, the student interviews were an effective means of gathering information as many of the interviews turned into discussions about students' experiences with a specific aspect of the Connecticut College library.

The use of images in this project revealed the numerous ways by which students study as well as what tangible items students need while studying. Although all the students used the video cameras to photograph students studying, only certain topics utilized the images as an analytic tool. Examining multi-tasking and what students bring to the library required an understanding of what students prefer to have around them while studying. The images revealed the students with laptops, cell phones, food, water, notebooks, and textbooks, among other items, which show that students bring a wide-range of objects with them to the library or other study spots and may be doing a number of different activities while studying. The images were also particularly important to notice the layout of students' workspaces and the emphasis students place on certain objects; examples include water, food, or cell phone. In some cases it was also possible to make note of student workspaces during video interviews, but the camera can provide alternative angles that can further illustrate the uses of space.

As mentioned above, the video camera was also utilized as an observation tool, primarily to document student movement throughout the library. Shain Library, for many students, is a meeting place and thus a social space. Some interviewed students noted that studying involves much social interaction. In order to observe these activities, several students set up their cameras in a manner that focused on group study spaces (mainly in basement and on first floor), social spaces (the main lobby, blue camel café), and other areas with a dense concentration of students studying. The cameras were left running in one spot for more than half an hour to observe patterns of movement while providing additional information on how students study and more insight into the social spaces of the library. The observation periods proved helpful in seeing how student movement and interaction differed in the varying spaces documented.

The most intensive method of acquiring data was through a canvassing project two of the students designed. They were interested in understanding the relationship between the subject studied (History, Math, Anthropology, etc...), the type of work being done (individual, group, or social), and their location in the library. The data was obtained as groups of two students systematically approached each person in the library to inquire about the above questions and then on two different floor plans marked down the type of work and subject. The students completed this survey once a day at 8:30 p.m. for an entire week, to account for variation that may occur between different days of the week. The result of the canvassing project illustrated strong themes about the type of work done by certain students in specific places of the library and also regarding social spaces.

The final methods utilized to gather information for this project involved student researchers asking students to cognitively map the library on standard sheets of paper and one student, whose focus was on the library staff and services, asked students to comment (with pen) on a printed version of the library homepage. For the cognitive maps, the students were given a blank sheet of paper with one vague instruction: to draw a map of the library. The drawings were revealing in that each student took the instruction to mean something different. Some students focused on the entire structure, while others drew the floor they preferred to work on or a quick sketch of all the floors, and still others drew a specific work area. The cognitive maps provide insight into how the students view the library and also what parts were and were not emphasized. All of the library's services are accessible through the library homepage and since the vast majority of the students use this site for research purposes, the student felt it would be important to find out what other students felt should be added or subtracted from the site. The students were asked to cross off, add, and comment on the current layout, and the results were interesting in that many felt the site would better serve their needs with a number of alterations.

What Students Bring to the Library

College students today find themselves participating in many different activities, sometimes all at once. This incredibly busy lifestyle requires that they be constantly connected to others and also prepared for many different events in what may be considered a normal day. Homework, extracurricular activities, volunteer work, socializing, and daily life events like eating, sleeping, and exercising all may be part of each student's routine, and this is reflected in what they carry around in their bags,

especially while studying. Conducting interviews with various students in the library about what they choose to bring for doing work, as well as what they normally carry around, reveals that these students participate in a diverse and technologically advanced lifestyle. Eleven students were interviewed about the items in their bags, their personal technology habits, and how they set up these items in their workspace. The following section discusses the results of these interviews, and may help the library make improvements in order to better accommodate students' studying needs.

Although there are many common or popular items to bring to study with in the library, there are also many objects that might be considered "odd" to work with. Since study habits are extremely personalized and vary a great deal, naturally the items needed for students to feel comfortable while studying will also vary based on personal preference and use.

In the eleven interviews conducted, students were first asked what they usually bring to the library. Typically they would reply with a list of objects that were similar to one another. Items often included notebooks and books, pencils, pens, highlighters, a cellphone, keys and wallet. More individualized items that some students said they carried around with them included USB drives, glasses, nail clippers, checkbook, chapstick, and planners. One senior girl even had makeup in her bag. Obviously, these personal items do not apply to everyone. Interestingly, many students did not include their laptop in the things that they usually bring to study in the library. However, when prompted, about half of the students admitted to bringing a laptop to the library. The importance of this kind of technology will be discussed later.

Many students also said they usually bring a drink (most often water), and sometimes a snack. Food preference is very personal and depends on whether or not the student sees that as distracting or helpful in their studying habits. As the multitasking section reported, some students will use their food and drink as a break from studying and may not actually have it in their workspace.

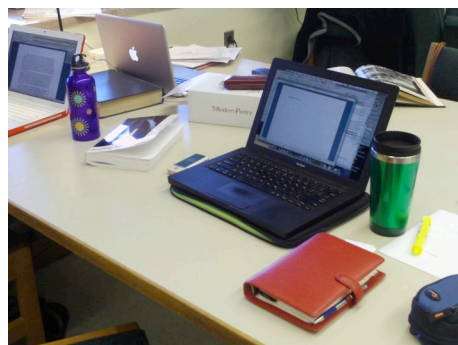
Figure 1: Many items for various



Typically, as their bags indicated, many students who work in the library carry around a multitude of various items (see Figure 1). This implies that not only will they be there for an extended period of time, but that they will be working (or not working) on many different activities. When asked what she usually brings to the library, one senior girl replied, “Usually if I’m going to be at the library, I’m going to be there for a while, so I bring all the books I need, all the textbooks I need, all the notebooks I need, extra notecards, multiple pens, pencils and highlighters for different things, some kind of food or candy to keep me occupied and awake, water usually, my phone...” This kind of response was not uncommon; most students would list multiple objects that they would need for many subjects or activities. Sometimes these activities would merely be different types of work, or they could be a kind of break from that work (like food and drink, headphones for a music break, or a cellphone). This response best illuminates how students working in libraries need multiple items “for different things.” For this reason, libraries need to be flexible and multi-functional. Students demand many different things from their workspaces, which should be able to accommodate a variety of needs (Foster and Gibbons 2007:22). This may include eating and drinking, relaxing, socializing, and

actually doing work like reading and writing. Undergraduates constantly manage many work assignments for numerous classes (Gabridge et al. 2008:515), and therefore may need access to various activities. These needs are reflected in what is often found in students' bags. For example, the library needs to accommodate food and drink in the building, because almost every student said they bring water to study with, which obviously makes them feel more comfortable while doing work. When asked what she usually brings to study, one senior girl replied, "All my books, water, food, my phone..." The fact that she would bring "all [her] books" reveals that she plans on doing many different types of work, as well as eating, drinking, and possible communicating using her phone. Therefore, although these may not seem like activities, they are, and the library needs to be aware of their studying habits in order to make students comfortable in their work environment.

Students at Connecticut College not only carry around similar items, but a study done at Wesleyan University revealed similar findings. One picture taken by a student of the items in their bag showed food, a cellphone, an iPod, a wallet/ID and a key (Klare and Hobbs slide 7). Many of the same objects were found in bags at Connecticut College, especially a cellphone and a wallet or school ID and key, showing that college students do have access to technology but are not necessarily all high-tech and do not use it all of the time (slide 10). Popular or common items in students' bags also reflect that all college students, not just students at Connecticut College, are prepared for multiple activities throughout the day (see Figure 2). Students want many things to be



available because they are trying to get a lot done constantly (Foster and Gibbons 2007:68). College undergraduate society requires a balance between coursework, social activities, volunteering, sports, extracurriculars, and daily life needs. As Foster and Gibbons point out, many students carry around food and drink as well as work and technology so they can change activities whenever they need to without wasting time.

Figure 2: Eating, drinking, and working are all activities conducted daily

After providing the items that they generally carry around with them at all times, students were asked to pick three objects that they considered most important or necessary for studying. Although some responses varied, there were many common answers and items. The three necessities often included a notebook or book, a laptop, and a pen. Less often, students chose a cellphone, some kind of food or drink, and a planner. Clearly there is a mix of technology as well as traditional written work reflected in these answers. For example, one student replied that they would bring a notebook, a pen, and a cellphone. The fact that a cellphone, laptop, headphones, or USB drive were almost always included in the three necessities shows how important technology connections are. However, students obviously still value traditional or “older” and less technological study methods by choosing items like pens and notebooks to write or take notes with instead of using a computer. This is not to say that technology is not prevalent when students work in Shain Library – in fact, it is everywhere – but the idea is to show that technology still shares some of the studying spotlight with notebooks and books.

College libraries need to be flexible, to accommodate the many activities that students conduct all at once or throughout the day, but they also need to contain a myriad of technology and tools to help support the activities that may require technology (Foster

and Gibbons 2007:22). Students use library books, as well as online journals, databases, and the Internet for their work (11), which reflects a need for more than books: access to technology. Today, college students have adapted their work habits to include “digital, mobile, independent, social, and participatory” studying elements (McMullen 2007:5). Students expect to find information and answer questions on the Internet (Gabridge et al. 2008:511), and technology is assimilated into the library experience through computers, databases, areas where cellphones can be used, multimedia work areas, electronic classrooms, and technology labs. Technology not only allows for independent research, but also for “collaborative learning,” in groups which are social as well as work-oriented (McMullen 2007:9). Many different methods for presenting information are available for students and faculty (13), which requires technological hardware. Technology is present everywhere in libraries. If students are working individually, they have access to wireless Internet or a multitude of computers; if they are working collaboratively, there are group areas with television hookups for laptops, as well as electronic classrooms.

Since personal technology has become more important for studying, especially in recent years, students at Connecticut College were asked about their habits concerning laptops and cellphones. Although the responses about laptops and computers varied, every student interviewed admitted they always bring a cellphone to the library, even if they keep it on silent or vibrate. One student said, “My cellphone and my keys are the two things I always have.” As previously discussed, a cellphone was often one of the three necessities for studying those students chose. Since cellphones have become infinitely more pervasive in younger generations, students always carry them. This constant ability to communicate instantly (Foster and Gibbons 2007:67) allows students

to not only distract themselves from work with conversations, but also stay connected with many more people than would be possible without a cellphone. Students are more in touch with their parents and friends than older generations (65-67). Cellphones are the most common form of technology, and college students generally do not use their dorm phones since there is no need for a landline when everyone is connected through cellphones (66).

Although everyone interviewed carried a cellphone while studying, there was not quite the same pervasiveness associated with laptops. When asked if they bring their personal laptops or use the computers provided in the library, the responses were split quite evenly: four students always brought their laptops, four students always use the library computers, and three students sometimes brought their laptops but sometimes used the library computers. Clearly the computers provided by the library are still quite important, because although many people have their own laptops, they do not always bring it to the library and may rely on technology provided in the library. When asked whether or not they bring a laptop, the following two responses illustrate the variation in personal laptop use: one girl replied, “I hardly ever use the computers here,” while another student said, “Oh, no, I always use a library computer.” Reasons for not bringing a personal laptop included not wanting to unplug it and carry it around, as well as not wanting to be distracted by applications and the Internet. Foster and Gibbons found similar results in their study, revealing that although almost all students have personal laptops, they are often not carried around (to classes), because students cover a lot of territory and don’t want to carry heavy laptops (Foster and Gibbons 2007:46). One student interviewed at Connecticut College said, “I’ve never taken a computer though

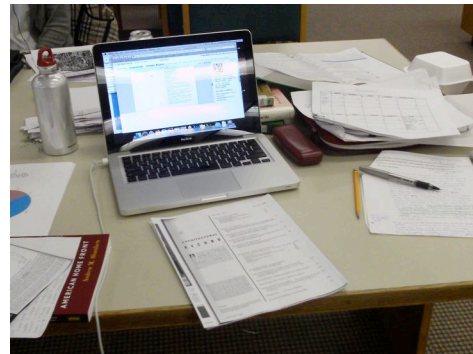
I've always meant to, but I don't like unplugging mine and lugging it around. So I just use the ones in the library." The technology available for students to use in the library is essential, especially if students choose not to bring a laptop with them to work and depend on the library computers. As one other student pointed out, it is not feasible to write a paper without a computer, so technology like this is indispensable for students today.

Despite the fact that nearly every student interviewed said that they would choose a technological item as one of their three necessities to work, many are in denial about their dependence on personal technology. (Only two students did not choose any technology in their three necessities, but it should be noted that they still carried around cellphones and these could be found in their bags and off to the side of their workspace.) Almost everyone claimed that they would be able to work comfortable or efficiently without any personal technology, even after choosing a laptop, headphones, cellphone, or USB drive as one necessary item. When asked if they could work without technology, one student hesitated, "I think so...maybe." Do students take technology for granted, and just assume it is everywhere so they will never need to work without it? Truly, workspaces today are technologically advanced, with wireless Internet, accessible computers, multimedia technology, labs, and cellphone service. Perhaps most students believe they can work without technology because they cannot imagine a world without it, and they probably will never have to. Students typically do not carry their laptops around, but still have access to the Internet and computers, so they use computer technology during the day in many places, like a library or their cellphones (Foster and

Gibbons 2007:51-52). Therefore, even when various technologies are not obviously present (like a laptop), students are still surrounded by it.

At the same time, traditional and non-technological study methods including notebooks, books, and pens or pencils offset technology in the library. All of the pictures taken of students' bags prove that these studying methods are still valuable for students today, and provide a balance between technology and writing by hand (see Figure 3). Often, when asked about the work-related items in the library, students mentioned laptops as well as notes, notebooks, books, pens, and pencils, implying a mix of technological and non-technical study materials.

Figure 3: Both technology (laptop) and traditional study methods (notes) are



The non-technical aspect of studying becomes more obvious when studying how students set up and choose their workspace, and how they arrange study materials. The most popular places to study included (in order of popularity, with most popular first): large tables on the second floor of the library, somewhere on the first floor (for some noise or a window), the Charles Chu Asian Art Reading Room, corners of the library for windows, the basement for some stimulation, armchairs on the second floor, and the large tables on the third floor. Space and a comfortable atmosphere (whether that means quiet, some noise, or a window) therefore seemed to be the two most important factors when deciding where to study in the library. Similarly, a study conducted at another school found that the most important values for studying areas were no distractions, good lighting, temperature and ventilation control, comfortable chairs and desk space, and

plain decorations and furniture (Webb et al. 2008:410). Students cited the large tables on the second floor as a favorite place to study because they provide plenty of space to spread out, as well as a quiet (but not deathly quiet) atmosphere. The first floor has many windows with good natural lighting and something to look at, and also some stimulation with other people around. Similar to the second floor, the Chu Room contains large tables and is quiet, but also has plenty of natural light. By using just these three popular study areas as an example, it becomes clear that students value different features of study areas, based on personal preference and their work; these may include noise or distractions, windows or something to look at, silence, space, other people, and other features associated with particular locations.

Figure 4: Setup of work space with food, drink, notes, and technology

Students were also asked about the way they set up their workspace and arrange items within it. Most students said they place their computer (if they have one) in front of them, their papers, notebook, or book in front of the computer or possibly on their lap, pens and mouse on the side, cellphone on the side, and food or drink on the side (see Figure 4).



Some students did not have a particular layout of their work since they switch locations often. A very important feature of working in the library was the idea of space. Multiple students stressed the importance of having enough space to spread their work out:

“I don’t like it when there aren’t tables in the library, cause otherwise I won’t get anything done.”

“I usually don’t like having too much on my desk.”

“I need to work at a big table. I can’t work at a cubicle, I don’t do well there. I like being able to spread out.”

Foster and Gibbons found that although there may be large tables with eight seats, students will spread out with their laptops, textbooks, notes, food, and drinks (28). There are never actually eight people studying at the table meant for that many people, because students need the space. Instead, students at large tables will sit diagonally from one another and take up two or three seats, in order to preserve their personal space, using books, magazines, bags, and laptops (Webb et al. 2008:409) (see Figure 5). Similarly, in a study conducted at another school, the authors note that more people have begun working at tables than at carrels because they now have more materials and thus need more space (410). The study also reported that furniture and window proximity often dictated favorite study spots (414), because students study where they feel their working values are more prevalent (like places with the most natural lighting, or the most table space).

This increased need for space may be linked to the fact that college undergraduates are often trying to get a lot of work done constantly (Foster and Gibbons 2007:68), and are trying to balance multiple courses (Gabridge et al. 2008:515). Since students are “seldom focused on one activity,” they carry around more items to



Figure 5: Students require plenty of space to work.

conduct academic, social, recreational, work, volunteer, and personal activities (Foster and Gibbons 2007:46) and thus take up more space in any given area.

There are several common study elements that students desire, not only in Shain Library, but at other colleges as well: comfortable areas, support for computer work, and group study areas (Foster and Gibbons 2007:22). This reflects a need for areas with plenty of space that are also technologically friendly (i.e., have wireless). Libraries today need to be able to adapt to constant change, including the fact that students need more space, and also carry and use more technology than other generations of college students.

Back in 1997, the Connecticut College Student Government Association wrote a letter to the Information Services Committee and suggested library modifications. Even more than a decade ago, there was a need for group space, as well as more conducive study areas. They recommended that the library install more group study rooms, and create open spaces on floors so groups are able to spread out and find each other (Golub and Brennan 1997:2-3). In 2001, a consultant group assessed the library and made suggestions for changes. Their report, issued a few years later, assumed that the library was going to have to continue providing print and electronic resources, and adapt to the constant change as well as having two very different approaches to studying (Einhorn Yaffee Prescott 2008:sec. 1, p. 1). They also reported that there would be an increased need for group study, access to multimedia, and that the library should strive to be functional, flexible, comfortable, and aesthetically appealing (sec. 2, p. 2). The top recommendations for changes to the library included more collections to accommodate growth, better reading and study areas (which contain natural light, group study, and a café), and more technology, like media development, multimedia, electronic classrooms,

and 24-hour work areas (sec. 2, p. 5-9). After interviewing students who use the library today, it has become clear that many of these suggestions are still relevant and would help promote a comfortable, appealing work environment.

One senior girl revealed that although she does use the library sometimes, she “avoids it... Because I don’t like the atmosphere that it creates. I think it’s very confining, I think it’s very claustrophobic, there’s too many people, there’s not enough space, there aren’t enough tables...it’s just a very unpleasant atmosphere, especially to get a lot of work done.” Many of these negative impressions can be remedied with more group space, tables, and more open spaces for students to spread out work items. When students go to work, as this same Connecticut College student revealed, they often bring many items and assignments with the intention of being there for a long period of time. Therefore, to promote basic needs, desires, comfort, and communication, it is necessary to have multifunctional yet separate spaces in libraries (Foster and Gibbons 2007:419). Individual, quiet study areas and group study locations should not be together, but should both still exist.

Based on the interviews conducted about items found in students’ bags, it is clear that the library is used for many different activities: socializing, reading, writing, using the Internet and other technologies, as well as basic needs like eating. Students are seldom focused on one activity (Foster and Gibbons 2007:46), and need to bring various study items to support this lifestyle. Technology, although pervasive and essential to study habits, is offset by some traditional study methods that utilize books and writing utensils. Libraries should be prepared to adapt to this constant change and the need for

more space to accommodate the growing number of items, activities, and study methods utilized by today's college students.

How Does the Library Affect Where Students Study? : Mapping the Physical Layout of the Library

This portion of the Anthropological Study of Shain Library focuses on how and where students choose to work in the library. The general consensus of the students that utilize Shain is relatively straight-forward. The basement and the first floor are the loudest floors, and conducive for socializing and collaborative group work. As you go up the stairs, the floors become more quiet, allowing for more intense and individualized study with fewer distractions. This can be seen not only in student interviews, but also in the student tour. This is an excerpt of the student tour guide handbook that shows how Connecticut College would like the library to be viewed by perspective students:

There are four stories in Shain Library. The bottom floor has a coffee shop and computers for students to use; this first floor has more computers, the circ desk, the reference help desk, and the Chu Room; the top two floors have all sort of study rooms and cubicles for students to use. Generally, the library gets quieter as you more up to the floors.

In order to study this widespread perception of the floors of the library, the entire population of the library was surveyed at 8:30 pm on three different weeknights and asked the following questions:

- 1) "What kind of work activity are you engaged in (individual work, group work, or socializing)?"

2) “What subject are you working on (if any)?”

Based on the student responses, a color-coded map was created that distinguishes social spaces, individual work spaces, and group work spaces. Blue represents areas for individual work spaces, green for group work spaces, and orange for social spaces.

<images>

After studying the results of the survey and this color-coded map, several correlations between students’ activities and the physical layout of the library became apparent. For instance, cubicles and individual computer stations are generally individualized work spaces, while the larger tables with multiple chairs lend themselves to group work. Additionally, wide open areas devoid of workspaces become social spaces.

The overall floor plans of the first floor and basement are very open contribute to the louder, more social atmosphere. The entrance area on the first floor and the area around the Blue Camel Cafe do not have any desks or cubicles and become the de facto social spaces. On these floors, the social aspect also spills over into the rest of the floor because of the open floor plan. With fewer stacks and visual obstructions, it becomes it easier to find fellow students. One interviewed student reported that it is easier to find classmates on the First floor to talk to and ask questions about work. It is much more difficult to find people on the second and third floors because all the stacks block view. As a result, group work spaces and social spaces are concentrated on the first and basement levels.

The First Floor

Looking at the first floor, cubicles are not isolated by stacks of books (like we see on the second and third floors) but rather integrated into the rest of the space, incorporated with the individual computers and the comfy chairs in the back and front left hand corners of the library. Because the first floor has numerous large tables with multiple chairs, there is an abundance of group work that is being conducted on the first floor. The tables with multiple computers, lend themselves to group meeting spots if a computer is needed, but it is mostly individual work. The Chu room, a distinct area of the first floor, is designated as a room that requires complete silence, so it is exclusively an individual work space. In interviews conducted, students have stated that they enjoy working in the Chu room because it provides the silence that is needed for their concentration but at the same time is located at the front of the library, and it's big glass windows, allows for a varied visual stimulation without being completely isolated.

The Basement

Like the first floor, the basement has an open floor plan as well, with booths bordering the edge of the social space that surrounds the Blue Camel Cafe. Though there are different kinds of seating in the basement, all of the different modes of seating are relatively close in proximity and so the lower level is a floor dedicated much socializing and group work. As seen on the floor plans, the individual computers are perhaps the only place for individualized study.

The Second Floor

The second floor is quieter than the 1st and basement levels as its floor plan has much many more isolated cubicles that border the edges of the floor. Because the floor plan is not as fluid and 3 floors, there is very little to no space for socializing.

The Third Floor

The same results are indicative of the 3rd floor, as the 3rd floor is the quietest and the floor plan is extremely sectioned off, with the stack isolating the cubicles so that it is even hard to find a space to socialize or conduct group work.

Results

The maps that were created based on the survey reflect not only the general perception of the library's four floors, but also offer insights into how the physical layout of the library affects students and where they choose to do work. Based on the results of the first and basement levels, it becomes clear that open floor plans, combined with varied workspace types, such as computer stations, desks, cubicles, and large tables, are the most conducive for collaborative group work. As a result of the open floor plan, these workspaces become integrated and overlap with each other, further enhancing collaboration, discussion, and, to a certain degree, socializing.

The stacks on the second and third floors, however, have the effect of cutting off circulation and the view. As a result, the tables scattered around the two floors and the

cubicles that line the edges are hidden from view. Because of this, it is very difficult to find fellow students on these floors. Even though there are large tables scattered around the second and third floors, they are not conducive to group work because, while they may be hidden from view, sound still carries through the stacks. It is impossible to know who might be listening and overhear a conversation or discussion. --->Anthro implications right there! Elaborate/citation?

Despite these correlations with the physical spaces, these maps, however, do not reflect the information gathered from our second questions, “What subject are you working on?” In studying the results of the survey, it became difficult to see any distinct patterns in where students go to work for specific classes or departments, and as a student's workload varies from night to night, this kind of data would not be consistent. The different classes students are working for is also dependent on what major assignments or exams that are pending. For instance, on one night of the survey there was an abundance of biology and chemistry students that were busy studying for tests the next day. Another day or another week and it might have been econ and art history students working in the library.

While we were unable to find any distinct patterns of where students study for certain subjects, it did become possible to make broad generalizations in correlating where students work and whether they were doing coursework in the humanities, sciences, or the arts. The humanities are often based extensively on reading and writing papers and, perhaps most importantly, individual ideas. Therefore, these students tend to work individually. The sciences, on the other hand, often entail group work on labs and exercises. For example, students working on problem sets for Econ classes often do so in

groups, and similarly, students studying for organic science and psychology exams also often do so in a collaborative way. In stark contrast, students working on Art History and English are often writing individualized papers, and do so in a more isolated space that is conducive to individual study. These different modes of the studying lend themselves to certain places in the library.

Group Work and Social Space

Introduction

Students at Connecticut College have varied interpretations of particular spaces within Shain Library. The student experience of the library is largely shaped by the nature of their activities within the library. While the space itself remains unchanged, particular spaces adopt new meanings depending on the students occupying them. Routine activities within certain spaces of the library have created “unwritten rules” about the library. These rules are not official in any way, but rather they are traditions that students have upheld within the library. This section of the report draws on the activities that occur within the library. It aims to cognitively map out the library based on students’ perceptions of the nature of their activities, as well as their peers’ activities, in different spaces.

Students work on diverse assignments and engage in a multitude of activities while pursuing their individual studies. The nature of various academic disciplines lends students to different study habits, and thus different study activities. The researchers of this study propose various generalizations about the type of work required for different subjects. These conclusions are based on concrete data collected from elaborate

interviews with students from varied academic fields. These conclusions aim to contribute to a holistic overview of the students' study habits in Shain Library.

This portion of the study aims to contribute to organizational change by focusing on students' activities in particular spaces. This approach is crucial for implementing “user-centered designs”, which guided the University of Rochester *Undergraduate Research Project*. User-centered designs “aim to meet the needs of the people who use them.” (Foster and Gibbons 2007, 81). “User-centered designs in higher education must take a broad view of the ‘user’ and pay attention to a wide range of needs, preferences, and constraints on the part of numerous people who are served by the technology, spaces, and services the library provides” (Foster and Gibbons 2007, 81-2). It is essential to analyze student-centered space in order for the library to meet its goals and objectives of supporting the study needs of students.

Students' Study Habits Based on Academic Fields

Economics/Mathematics

Studies that are largely fact-based such as economics and mathematics lend themselves to group study. “Problem sets” are common weekly assignments that require students to work together in small groups. Exams are also common in these academic subjects. Students find it beneficial to work in groups to share information, to discuss materials, and to “bounce questions off of each other”. Economics and mathematics majors often study in the basement area of the library in the area

surrounding the Blue Camel Café. One economics student claimed that he and his peers occupy the basement because “everyone is there.” He keeps a cell-phone nearby for “bringing people in to study.” The basement is conducive to group work and discussion-based study because of the high prevalence of noise and activity that goes on. Students do not have to worry about bothering others who are working individually because it is assumed that a relatively high level of noise is acceptable in this area.

The Natural Sciences

The natural sciences, which include biology, chemistry, and environmental studies, require both group and individual studies. As one student noted, the decision to work in a group often depends on lab report assignments. Partners frequently divide up the lab report, working together on certain sections and separately for others. If working in a group, science students generally occupy the first floor because of the large desks and higher acceptable noise level. Also, students can occupy a space for a long period of time. By leaving large textbooks and course materials at group study spaces, students are not expected to leave, even if they abandon the space for some time. One student stated that certain courses, such as organic chemistry, are extremely demanding. Students tend to study together, once again, to “bounce questions off of each other.” Science students come to the library often because it is likely that they will find someone else from their class there. While students usually come to the library with organized study-group appointments, it is always possible to come to the library without an appointment and find a group to join. Another student claimed that she likes the first floor for group

projects because of the availability of desktop computers. Computers are an important resource because assignments are posted online and databases provide excellent resources. However, science students studying alone would often occupy the 2nd or 3rd floors because of the quieter atmosphere.

Humanities and the Social Sciences

Study of the humanities and the social sciences lend themselves to individual study because of the heavy reading load and the predominance of essay writing. A philosophy student claimed that he can study anywhere in the library, because his work is mainly writing papers. English majors especially tend to work alone, while students studying foreign languages might work in groups or with tutors. Students claimed that they like to read on the first floor, in the Charles Chu room, in one of the corners of the library, or even in the basement. However, for more serious work, such as writing papers or while working under pressure, students migrate to the 2nd or 3rd floors of the library where they know they will find quiet space. Since studying is often done individually, students who occupy certain spaces, such as the basement or the first floor, enjoy the social atmosphere. Students may choose to sit near friends. However by sitting on the first floor, students assume that they will inevitably run into people that they can socialize with. Students studying East Asian Studies claimed that they have a special appreciation for the Charles Chu Room because of the fitting atmosphere - they can relate to their environment and feel more inspired in their studies.

Group Work and Liberal Arts

Group work plays an important role in the liberal arts education. Since Connecticut College is a residential college, academic affairs diffuse into community living. Students live in close proximity to their classmates and group work is always an option. Further, the central location of the library is an attractive location for students living all over the campus to come to study. One student commented that in his home country of Spain, working in groups is just an excuse to socialize. However, at Connecticut College, students working in groups accomplish high standards of academic work. Group work has become a part of the Connecticut College liberal arts experience because it encourages communication and positive group dynamics between students. It promotes cooperative learning, as students interact to support the education of themselves and of each other. Students that were interviewed felt that studying in a group motivated them, helped them to retain information, and was more efficient than working individually. In the study of Shain Library conducted in 2002 it is notable that a top priority recommendation was “additional group viewing and study rooms” (Lucker 2002; 2-9). It is important to address group work, as its prevalence signifies changes in higher education teaching techniques. Lucker notes as a recommendation, “Accommodate changes in pedagogy by creating spaces for student group work, both with and without media viewing and development facilities” (Lucker 2002; 4).

Group Work and Socializing

Certain spaces in Shain Library led themselves to increased social interaction. While most students do not claim to come to the library to socialize, it happens often. Since Connecticut College is a relatively small community, it is very likely that one will meet friends and acquaintances during trip to the library. Moreover, the prevalence of

group work increases communication and noise levels in certain areas such as the first floor and basement. While students choose where to study based on their study habits, certain academic fields lend themselves to more social study trends.

While the Charles Chu Room is known to be a quiet oasis suitable for individual-study, students have claimed that it is actually a social space. Students in the Chu Room have a view of everyone because of the open space. They can therefore pick and choose when they wish to socialize. One student claimed that the Chu room is too open and too loud. He enjoys the 3rd floor because it is the most quiet and relaxing, although it gets much busier at nighttime and during finals. Students generally use the Chu room for individual study or for attending lectures. However, its vicinity to highly social areas of the library often increases noise level and distractions for students. This is especially so during evening hours.

The relatively open layout of the first floor has created a clear meeting spot between the Chu room and the circulation desk. This area, extending towards the computers and the printers, is considered the most central spot to most students. It is a spot for congregation and socializing. Students often come to this area to talk on their cell-phones, and the noise level often disseminates into the Chu Room and surrounding spaces. The Blue Camel Café is also a significant meeting spot. If working in a group, students assume that they will find their group members in one of these two spots. Also, professors often schedule to meet their students at the café area, and there is a clear distinction of those faculty and staff that choose to utilize the café as opposed to the Crozier Williams Student Center.

Group work has influenced certain spaces within the library to become more prone to socializing. Studying is a social activity for many students. One student remarked, “Studying is truly a group experience.” While there is a high level of social activity in the library, the library has not transitioned fully to become a purely social space. Students become socialized to the dynamics within the library during their first year at Connecticut College. They learn that there are “unwritten rules” about what types of activities are acceptable, or even permitted, in particular spaces. Students uphold these trends over the years. Shain Library has a distinct traditional culture that requires participation to fully understand.

The Convenience of Socializing at Shain Library

Shain Library is an extremely convenient place for social activity because of its central location on campus. The café, computers and printers, outdoor seating area, and frequent lectures draw students towards the library if they have time to spare in between classes or other commitments on campus. A student who works at the Blue Camel Café described the space as fun, caffeinated, and friendly. These are clear attractions for a student looking to take a break from studying or to relax for a moment. The television is constantly on, newspapers are available, and meetings occur throughout the day in the surrounding area. These factors contribute to a café atmosphere, which is positively viewed by the students and highly appreciated by all. Various other services offered in the area, such as media services, the computer help desk, and the restroom, increase the arrival and movement of people in the basement area. This naturally administers socializing, as many people have a wide-range of friends, acquaintances, and classmates that they meet in the library. In a study of the library conducted in 2002, it is noted that

the project goal was “to emphasize the emotive potential of the library while providing space and services so that it may function as an information center for students and faculty to study, work *and socialize*” (Lucker 2002; 2-9).

Despite this, some students’ social trends depend on those of their closer friends. One student claimed that she never socializes in the library because her friends do not generally come to the library. Once again, because Connecticut College is a small residential school, it is likely that many students are well acquainted with each other and with the staff and faculty of the college. However, students who understand the “unwritten rules” of the library know where they can find a quiet, secluded, or undisturbed area. This is generally on the 2nd and 3rd floors or in the Chu Room. They also acknowledge the social atmosphere of Shain library, which exists predominantly in the basement and on the first floor in the vicinity of the entrance and central printers.

Multitasking and Study Habits

To fully understand students’ perceptions and uses of Shain Library at Connecticut College, an examination of study habits must be undertaken. This section will focus on these habits, with a particular emphasis on multitasking. Students in Shain were interviewed regarding how they work in the library. Questions concerning distractions, computer and phone use, and multitasking itself were all a part of the interview. The results of these interviews paint a clear picture of how students study in Shain and the role of multitasking in the collegiate academic setting of Connecticut College.

What is multitasking? Multitasking consists of engaging in many activities to accomplish one or many goals. These activities may be done to help complete these goals, or they may be distractions and take time away from the task at hand. One thing that was immediately evident from the start of the interviews was that students could not decide if multitasking was positive or negative. When asked, “Would you consider yourself a multitasker?” students seemed almost ashamed to admit that they were. In some cases, students would adamantly deny any identification with multitasking, even though as the interview proceeded, it was very clear that they did, in fact, have study habits that would be categorized this way.

Part of the confusion appeared to stem from the interchangeability of the words “multitasking” and “distracted.” Though the interview questions tried to avoid using these words in similar contexts, the mix-up seems to be inevitable. Whereas academic sources characterize multitasking as “engaging in multiple tasks or assignments simultaneously” (Ishizaka et al. 2001:339), one student interviewed said, “generally multitasking tends to be work in a combination of something else that could be characterized as a distraction from that work.” This comment epitomizes the general idea of multitasking found among the students interviewed. It is apparent from this student’s definition that being distracted is inherent to multitasking, giving the habit negative connotations. It is these implications that seem to make students hesitant to identify themselves as multitaskers.

For another student, there was no confusion: when asked if she considered herself to be a multitasker, she responded, “Yes...no...well, I would consider myself distracted.” Though an amusing statement, it triggered the realization that multitasking is no longer

what it was. Ever since the overwhelming take-over of technology, it is impossible *not* to multitask. Activities that used to be regarded in this fashion, such as listening to the radio while driving (Wallis 2006:49), are now completely commonplace, and can be considered one action. Influenced by a culture that encourages doing as many different things as possible at the same time, multitasking is no longer carrying out many jobs productively concurrently. Instead, students now try to accomplish one task, for example, writing a paper or completing a problem set, while also engaging in several activities that have nothing to do with that goal: they are distractions.

Students were also asked how long they were able to focus on doing one thing. Most commented that they could concentrate for thirty to forty-five minutes before either becoming distracted or needing a break. Interestingly enough, students unconsciously omit some activities that would classify as taking a break or changing focus. Eating or drinking while working was never considered a distraction; neither was checking a cell phone.

Cell phone use itself was among the topics in the interview. Students were asked if they kept their cell phones on, what call mode they kept the phone on (ring, vibrate, silent), and how they used it. Not one student interviewed ever turned their phone off, and while a few changed the mode to silent, the rest chose vibrate. Students used their phones with different levels of activeness and passivity. Some said that they responded to every text message and phone call, but never initiated contact; others commented that they liked to stay in touch with their friends while they worked; few never responded, even though they liked to keep the phone on; and most notably, many chose to leave their

phones on but sit in places where there is no cell phone service. Varied use aside, no students classified his phone as a distraction.

Computer use was also discussed in the interview, and was identified as the premier creator of distractions. Many students said that they chose to leave their laptops in their rooms all or some of the time and used the library computers when needed because of the distracting nature of a personalized device. Others always brought their laptops since it allowed them to relocate around the library as necessary. As interviews continued, one student illuminated the real culprit: “A lot of the time the internet is used to supplement your work; it can be helpful in doing your research. But at the same time, there’s also the infinite distraction.” This statement was proved repeatedly when students were asked what else they were doing on their computer besides work. Most of the responses were different websites: Facebook, Gmail, ESPN, CNN, and blogs. Others were applications that used the internet, like iChat and AIM. In fact, many students said that going on Facebook was “inevitable.”

Music falls into its own category in terms of distractions. Some students said that listening to music was absolutely imperative for them, others said that it was too distracting, but most observed that whether or not they listened to music depended on what kind of work they were doing and how much work they had. One student commented that she listened to the same forty minute song on repeat to get her into a rhythm, another said that he liked to listen to songs that he did not know the words to so that they would not be distracting. Essentially, music as a distraction seems to be a very individualistic choice.

Since the interviews revealed that students do not characterize themselves as multitaskers, but find themselves doing many other jobs while they work, a new term is needed: distractibility, or “students’ perception of their own ability to focus on academic tasks” (Levine et al. 2007:561). The results of the interviews suggest that students at Connecticut College have a high level of distractibility, which supports the findings of studies on multitasking, like those done by Levine and Ishizaka.

So the question must be asked: are distractions important? After all, if high distractibility rendered students completely inefficient, it would not be such a common study habit. The answer from students was a resounding “yes.” One student said having a few distractions was important because “then I’ll just think about the things I could be doing and go back to my room and do them.” Another noted, “to have people around, talking, actually kind of encourages me to do work a little bit...I’d rather do that than sit super quietly and be only to myself.” Many students mentioned that while they may listen to music while they work, their true distraction comes from taking breaks.

Every student mentioned “taking a break” from their work, and a sort of “Bribe Theory” came about. Students remarked that they often persuaded themselves to do a certain amount of work by creating a reward at the end. This reward most definitely included some kind of break, whether it was to socialize, get food or a beverage, smoke a cigarette, go online, or any number of other things. This gave them incentive to finish the allotted work, and bribe by bribe, the assignment would be completed.

After asking students questions regarding personal multitasking habits and distractions, the interview came to a close with a question regarding Shain Library itself:

“Does going to the library promote or diminish your tendency to multitask or be distracted?” The overall results appear to be that while parts of Shain can be extremely distracting, for the most part, Shain provides a lower level of distractibility than other places. Students find that the distractions found in Shain are conducive to their study habits, and provide momentary respite from the stress of work. The socialization of the library, that is, that the floors become quieter the farther up one goes, gives students of all study habits a place to work, whether they are focusing, multitasking, or distracted.

Library Staff & Services

The focus of my portion of the project was on student uses of the library staff and services. This required gathering information on students’ uses of the reference desk, media services (basement), and the student-run computer help desk (basement) as well as their comments on the systematic layout of the books in the library and on the library homepage. The goal was to understand how the library staff could better serve the needs of the student body and how the physical arrangement and webpage could potentially be altered to better suit the students. I used multiple methods to complete this research, all of which were focused around student dialogue and observation. The primary and most revealing method was interviews with students on the specifics of their uses of library staff—the questions were guided toward understanding why, when, for what classes, how often, and the results of all interactions. Another method I used was video camera observations of the interactions between students and librarians as a means to further understand the countless ways by which students require the assistance of the staff. The final method was to randomly approach students with a print-out of the library homepage

and request that they comment (on the sheet) on what needs to be added and what is unnecessary. This provided insight into what students actually use on the home page and whether or not this is part of the web-page's current make-up. This section of the report will outline the results of this research and draw some conclusions based primarily off those students who were participants in this research.

Of the 14 students I interviewed, each one had used the library liaisons at the reference desk at least once and all but two had utilized their services multiple times. In fact, the usage ranges from once a week to twice a semester to once in three years, while the average person interviewed said they approached the reference desk a couple times a semester. These students primarily use the librarians for research papers, while only one individual said she also used them to find supplementary readings for class and for presentations. Not one of the interviewed students admitted to ever feeling intimidated to approach the library staff with their questions or concerns, and all found them kind, willing, and helpful. One student said that his only complaint was that one of the librarians provided him with too much information to sort through. Another student remarked that his only complaint about the library staff and services was not from the Connecticut College end, but more from the difficulties involved with interlibrary loan as he sought out some of the "weirder neuroscience journals." The classes that required help with research were typically in the government, philosophy, east asian studies, environmental studies, behavioral neuroscience, or anthropology departments, while english, film, chinese language, economics, and hispanic studies students said they rarely had research projects and therefore infrequently needed assistance from staff. The vast majority of students said they only approach the reference desk when they have hit a wall

in the research process, yet two said they go to them in the initial stages of the research. One of these students said he goes when he is just starting because they provide him with suggestions on where to get started—whether journals or books are his best bet for this specific topic. Typically, the students I interviewed approached the reference desk in need of help finding articles from international journals (or other journals the library does not have access to), identifying the proper language to type into search engines, and with basic questions regarding some of the lesser known services offered by the library. Many of the students said that the research process became more efficient by using the library staff and the majority said they often asked the librarians to be pointed in the right direction when attempting to locate a book, despite the fact that each student told me that if given a call number they could locate the book in the library. Throughout the research, it became apparent that the layout was the source of some confusion. Although the students I interviewed generally understood the system, I do not believe the majority were efficient at locating books. Four of the seniors relied heavily on the librarians for assistance with honors theses and independent study's, and one of these was among the 6 who said that the class sessions and/or individual sessions with librarians were extremely helpful and allowed them to realize all the available resources. On the whole, all students were satisfied with the staff and found them knowledgeable. One student even remarked that “magically” the librarians always have some kind of in-depth knowledge on the topic she is inquiring about.

In the interviews, no students found any real faults in the layout of the library web-page, yet one student did remark that it could be streamlined a little better as he feels he is forced to click more than necessary. Most problems spoken of in the interviews

concerned identifying the proper language to input into caravan and/or the databases, and generally the students felt that this was their fault rather than any problem associated with library's services or databases. Although the students appeared to be content with the library homepage, the eight students I asked to comment on the print-out version had plenty of input. All found the site cluttered with too many links that they never use and wished that the links they do use (mainly under the "Library Research" heading) were bigger and at the center of the page. Three students wished the "Catalog Quick Search" section was larger and also at the center of the page. Three students requested library staff profiles with pictures as a link from the front page so it would be easier to identify those who work in the library. Two students advocated for a "Hot Links" or "Fast Links" section on the right side of the page that included those services used most often, such as Refworks, jstor, journals, and databases. One student wanted contact info/library hours on the front page and another said that "a databases guide/tutorial would be useful!" Each student had at least a few comments, even though most said that it works well for them especially since they have grown accustomed to the layout.

An additional question I inquired about in the interview was in regards to the staff in the basement of the library—media services and the student-run computer help desk. The majority of students had very limited interactions with the media services staff, even those that had taken film classes and utilized the advanced technology lab for editing. The three students that had frequently used the available services in the editing lab only commented on the staff by remarking that they were helpful in the limited role that they required their assistance. Nearly all the students interviewed had sought out computer assistance from the student-run help desk and roughly half were satisfied with the

assistance they were able to provide, many remarking that they were mildly helpful. Three students said that only one student staff was helpful and that they did not ask the others for assistance. Overall, I found that the basement staff is not utilized as often as the librarians at the reference desk.

The University of Rochester library study *Studying Students: The Undergraduate Research Project at the University of Rochester* (2007) designed a survey for undergraduates to fill out after meeting with librarians at the reference desk in order to improve the ways that the staff makes contact with students. Their initial results found that many students had a difficult beginning the research process, and although many could name some of the databases they were not extremely familiar or comfortable using them. Another result stated that “every student had already made an attempt to find information before seeking assistance at the references desk” (Foster and Gibbons 2007:8). This is slightly different from the results of my interviews as I encountered a couple students who began their research process at the reference desk. They found that this enabled them to begin on the right track, while the rest (like those surveyed in the Rochester Study) made attempts to locate references on their own before deciding they needed assistance from the library staff. The study was not entirely satisfied with the results from the survey, so they decided to extend the research beyond the library and conduct interviews with students in other areas where undergraduate students congregate to read and write papers. They targeted those working on research papers and inquired about time constraints, their level of involvement with the paper, and what grade they think they will receive on the paper. I did not find any of these questions of importance for the focus on my research, but they also asked about the research process and whether

or not they had spoken with a librarian for this specific project or if they had in the past. They found that nearly 75% of students interviewed used the library services (catalog/databases) for research, and while the majority had not spoken with a librarian for this project even though more than 80% had worked with librarians in the past. I found this of particular interest because every student I interviewed utilized the library's services for research and had, at least once, spoken with a librarian throughout their time at the college. In my estimation, this shows that Connecticut College as a whole does an adequate job of providing the students with insight into the available services. The interviews done by the Rochester study also revealed that the staff provided more direction to the students during the research process and that the students who meet a librarian in a class period were much more likely to consult them for future research. This confirms a conclusion surmised from a few of my interviews—the library class sessions are extremely helpful to the students understanding of the available services while also building a connection between the library staff and students.

The outcomes of this specific part of the Rochester study concluded that they need to increase the awareness of the librarians' expertise, yet at Connecticut College this is not necessarily the case as it appears that the vast majority of students are aware of the library staff as research consultants. The Rochester study also advocated for placing librarians in different venues which may make it possible to reach more students. This is also not necessity at Connecticut College because the student body spends lots of time in the library and also knows where to go if they need assistance with research. This topic concludes by stating that they would like to continue to “update our understanding and

gather new information about our students so that we may provide them with the best possible reference services” (Foster and Gibbons 2007:12).

I acquired the idea about having students comment on a printed version of the library home page from the Rochester study. They provided print-outs to students as asked them to “cross of things they did not want, circle features they wanted to keep and use sticky notes to add new things” (Foster and Gibbons 2007:36). I was much less specific with my instructions and simply told them to comment on anything and everything, so that it more represented an ideal site to them. The results from my research were very similar to the results of the Rochester study, as they found the results surprising in that lots of things were crossed out and many were added that the staff themselves never thought the students would need or use. An example is that many students requested having a phone number on the home page, which was also mentioned by a few Connecticut College students.

The Syracuse University Study *Patterns of Culture: Re-aligning Library Culture to Meet User Needs* (2008) had a brief section on finding information. The students at Syracuse University also felt that the electronic databases were marginally confusing, hard to negotiate, and that it was a hassle to identify the proper language to input into the search engines. This was certainly one of the issues I found in my research on finding information along with the fact that the layout of the books was considered confusing by many students I interviewed, even though all said they could eventually locate a book in the library. The outcomes of this study show that even though virtually all Connecticut College students are aware of the help that can be given to them by the library staff and all find them helpful, very few students are aware of the services available to them

through library and its website. Students would benefit from more interaction with the librarians and especially more class sessions. The students I interviewed that were forced to participate in a library class session or an individual session through a class or recommendation from faculty were better equipped to efficiently utilize all the available resources. The recommendations generated from this portion of the research project will be discussed in the conclusion to the report

Studying Outside the Library

The Applied Anthropology class has been working on a research project to benefit the Connecticut College library. The class interviewed a variety of students to determine if these individuals had an opinion on how the library could improve on its efficiency in terms of its workspace and staff availability. Throughout the semester, the class learned step by step the various aspects of how to collect research and what it takes to become a practicing applied anthropologist. The goal of applied anthropologists “is that they share in common the attempt to use anthropological ideas and techniques to help individuals, families, communities, and corporations, address their needs and wants” (Gwynne 2003: 2). In our case we were asked to try and come up with solutions to make the library a more viable space for students to study, accomplish research for a paper, or make better use of the available resources and technology. Each member of the class took on a relevant question to poll different members of the student body. Armed with these questions the class hoped to collect some important data and opinions from the students themselves. Some of the questions that the class sought answers about were on topics such as multitasking, or where certain majors are apt to study when in the library? The individual class representatives doing the research filmed each of their interviews using a

Nikon Z16 camera. The camera was very practical as it was easy to handle and it could take stills as well as movies of those being interviewed. It also provided the interviewer with live documentation of the specific questions that were asked. At the end of the semester, all the interviews will be compiled together into a final documentary that will hopefully give the library staff some new ideas on how to maximize the use of the library. My particular piece of the research dealt with a question concerning alternate study spaces outside the library and why students are using them. I interviewed thirty students that included a sample of freshmen to senior opinions. I also spent a short time asking questions, as to the helpfulness of the library staff. Connecticut College has an enormous variety of study spaces on campus including the library.

Many factors determine where a student can most productively get their work accomplished at Connecticut College. Depending on the weather, the individual's stress level, the subject matter, even a person's personal preferences all determine where a student will study on a given day. Students have different needs to achieve academic excellence at Connecticut College. The library offers many places to study, however some students prefer to work in other areas of the campus. Through interviews, I realized that dorm rooms, the student center, common rooms, empty classrooms, cafes, and even the green (on warm days), are all popular substitutes for the library. The interviews demonstrated that complete silence was not always necessary in order for someone to be productive in getting their work finished. Today advancements in wireless technology and cell phone use has made communication so much more efficient. It is not always necessary to meet with a partner in the library to discuss a joint project. Sometimes the details can be worked out more effectively by communicating by e-mail or texting a

message. Often students find they waste too much time having meetings, so they make better use of their time by sending the information electronically. The library needs to keep up with the latest technology and make it available to everyone on campus. In other scenarios, the library can be a useful place to go to meet groups for a study session and sometimes these spaces are limited. Hopefully all these questions will be answered by our student questionnaires and that they will begin a dialogue for positive change.

In order to establish a tone for the interview a set of basic questions were presented, to make each student think about where they preferred to study outside the library. Do you have a comfortable setting to do work in your room? Does your dorm location factor into your use of the library? Do you have a printer in your room? Do you prefer to do work in the library? Do you use online resources when you are not in the library or at school? These questions helped students focus on where they actually studied when they were outside of the library. Their answers were varied and very interesting.

The dorm room is one option that students use for studying when they are at school but it is one of the least preferred spaces. Students generally do not work in their rooms. In the interviews, I discovered that many students have had the desks removed from their rooms, so that they have more square footage for a couch or a chair. The room spaces are relatively small and with all the clutter of personal possessions it is easy to get distracted. The majority opinion of the thirty students interviewed stated it was much more time efficient to go to another location to study, than remaining in one's room. Most students use their rooms for socializing, sleeping and just hanging out. Usually music is played too loud, students are constantly moving up and down the halls making

noise, and in general the mood is not conducive to accomplishing work. One student Matt a sophomore stated, “I can’t control the noise that is going to occur in the hallway of the dorm so I go to the library to study.” Seth a junior manages to do his reading in his room because he really likes his comfortable couch. When he is reading quietly, he feels almost as if he were in his family room at home. Occasionally light reading can be accomplished in the dorm room when it does not matter, if you are interrupted in the middle of a paragraph. All students confirmed it was difficult to take care of any serious work with other students constantly bothering them. In general, students at Connecticut College associate their room with non-academic endeavors.

Cro, known as the student Union is a popular place to get work done at college. It tends to be an ideal, central location on campus for most students. Over the course of a couple of hours it is very easy to connect with a variety of students that you might not otherwise find in the library or the dorm. As deadlines permit, a student can either socialize or get their work done. Students that use Cro to study seem to be very good at multitasking. They are able to study, have a conversation with someone and even grab a bite to eat. Several students that I interviewed specifically liked the versatility of Cro and all the amenities it had to offer. They liked the access to food so they did not have to stop working, as well as the balance between academics and being social at the same time. One senior stated, “People are always passing through Cro, so if they want to talk they can come over.” Another student Charlotte was at Cro doing a little work because she had a meeting and it was not worth the time to go somewhere else. Charlotte’s only complaint was that there were never enough outlets for computers at Cro. She has found this very

frustrating at times. If you are a disciplined student, Cro is a good place to study for short periods of time.

Common rooms are another popular place for students to study. Most students were very enthusiastic about their common room spaces. They liked these areas because they have a cozy feeling to them with people sitting around chatting. Common rooms are big rooms in the dorms that can be used for social or study purposes. In general the common rooms in the newer dorms seemed to be much more popular. They are equipped with newer couches, televisions, and game table facilities. These rooms are a very comfortable place to go if the weather is terrible and a student does not want to venture outside. Some students actually go to their common areas in their bathrobes and slippers. Three freshmen girls that I interviewed always meet up in the common room to study for tests. They find that the space is similar to a home environment and they are able to get all their work finished with few interruptions. Some common rooms have better wireless access connections than others. This can be very important depending on what kind of work a student is trying to accomplish. For one senior, the amount of sunlight in her common room is critical to her ability to study. She really likes the common room in KB for three reasons: it has a perfect wireless connection, great sunlight pouring through the windows during the day, and virtually no one ever uses the space, so it has become her private spot. Common rooms offer a variety of reasons as to why they are excellent places to study.

For the student who wants complete solitude, the empty classroom is the ideal work environment. Classrooms are not for socializing at all. They are a great space when a deadline needs to be met and the student is running out of time. Several students

appreciated the fact that they could hide away in a classroom without any distractions from their friends or random noise. Mainly math and econ majors seem to use empty classrooms to get work finished but there are also others who appreciate the space. One junior said, “Blaustein 209 is a great place to write my papers because I can take everything out of my bag and spread it out on the table in front of me. It also makes me physically aware of the different materials that I must include in my paper.” He added, “The printers in the library are not very far away, so when I need to print something out, I can just run over to the library.” Michael a junior stated that over the three year time period he has spent at college, he has learned to maximize his paper writing time by heading straight to an empty classroom. He is convinced that he writes papers much quicker when he isolates himself from outside distractions. He finds the library much too busy with students wandering around and talking. Most students interviewed had not discovered the solitude of a classroom but it seems like an ideal environment for those that do not want any interruptions.

The cafes either at school or off-campus are another study venue. Sara a sophomore has a car and she said, “My favorite thing is to study off campus at a coffee shop. I have a special table right next to the window so there is plenty of sunlight. During finals, I never go to the library because it is too much of a madhouse. I find it more productive to remove myself from a lot of frenzied people.” Several of the other students I interviewed felt the same way as Sara and preferred the casual atmosphere of a coffee shop, where they could order a cup of coffee and work leisurely at their own pace. The downside of leaving campus was that if you forgot a book it was very time consuming to return to school to collect it. The majority of students interviewed felt the café at school

was too busy a setting to accomplish any work. Most students prefer a quieter environment than the café to study or do work.

The green has always been a unique but somewhat difficult place to study. Students that I interviewed had mixed reviews about actually accomplishing any work on the green. The majority felt that some reading material could be managed but it was virtually impossible to write a paper or do serious work. Papers had a tendency to blow all over the place, so it simply was not worth the hassle to be outside. Susan, a freshman loves being able to study outside on the grass. Being so new to the school she says it is really fun to hang out on the green on a warm sunny day but she admits that not too much studying is actually accomplished. She really just likes the camaraderie of students that stop by and chat with her. The green is a great place to hang out but not the best study environment.

The other segment of my interviews asked students to evaluate the availability and usefulness of the library staff. I asked them if they felt comfortable asking the staff questions, was the staff helpful and why, in general what kinds of issues would warrant asking a staff member for help, and are the staff readily available when you need them. Unanimously all thirty of my interviews stated that the library staff was one hundred percent helpful with whatever questions a student might need guidance about. The main questions directed toward library staff were predominantly focused on research projects and computer technology issues. I discovered that students who were in anthropology, sociology, and environmental science needed to ask the staff the most questions. Overall the staff is liked and respected by all the students. According to my interviews the staff is not something that specifically needs an overhaul.

During the interviews there were some specific issues addressed that could potentially improve the library. The first floor of the library is viewed as more of a social space. The recommendation consistently was for more tables and chairs to be made available for students. The second floor is seen as a quieter space but students feel that there can be some talking there if someone must ask a quick question. The third floor should be totally quiet and used for independent study. Several students felt there should be special areas designated for group study projects. This would give them a place to gather and they would not be interfering with other students that require a quiet workspace. Pamela a freshman felt that a map system on each floor to make locating books easier would be useful. She often has difficulty trying to locate a specific book in the library. Michael was adamant that the library needed to control the temperature more efficiently. He said, “ Every time I go to the library to study for a test it is so hot that I invariably fall asleep. Campus security controls the thermostat and it is impossible to get them to lower the temperature. This has really been a problem for me this year, so I don’t spend a lot of time studying in the library.” There were others that had the same complaint and thought it seemed like an easy one to resolve. The library space clearly could be made more useful for the students of the college.

Throughout the last couple of weeks I have actually used the skills I have acquired in my applied anthropology class to conduct my interviews like a professional anthropologist. By selecting a topic to research I have compiled a variety of answers to the question of where students study. These answers along with the material that my classmates have acquired will be combined together to hopefully create suggestions that will improve the library at Connecticut College. This group effort should result in some

very positive feedback for the library. Hopefully they will listen to the student's opinions and respond in a pro-active fashion. I personally enjoyed working with so many different students and improved on my interviewing skills.

Conclusion

Through the analysis of the research compiled, the class has concluded that the library does not adequately suit student's needs. As student study habits have changed the library has not kept up with student's current needs. Many of the suggested changes have already been recommended to the college in 2002 when an outside consultant firm researched how the college could improve their library. One of biggest problems found is the lack of group study space.

It can be seen that group study has increased over the years and students have expressed a need for more group workspace in the library. Due to the nature of group work and how it tends not to be quiet there are specific areas that would be restricted from creating new group workspace. These areas are the second and third floors. It would hurt the quiet environment that exists on these floors if group work occurred. Therefore only the first and lower levels are available for creating new group workspace. One area that could be used for group workspace is the back of the lower level where the stacks are. If the stacks were removed or condensed using space saving movable stacks a large area would be created. This new area could have multiple square and round tables creating an atmosphere conducive to group study. This area would need an increase of electrical outlets so students could plug in their personal technology, i.e. laptops. This area would be far enough away from the blue camel café, which is a place of socializing.

It would also create two different areas on the lower level one for group study, which would be the new space created, and one for socializing and meetings, which would be where the blue camel cafe exist now. Currently socializing and group work are mixed together and some students have expressed that too much socializing occurs in the same space of group work and it is a distraction. On the first floor the video stacks could be condensed to create more space. Students have stated that they like large tables over cubicles because it allows more space to spread out their work materials. Another aspect of group study that students have expressed interest in is, quiet separate group study spaces. These would be like mini conference rooms. The small Neff lab could be changed to create this type of space. To create other spaces of this nature would require a redesign of the interior of the building. Another change the library could make is an improvement with their current technology.

There are a couple complaints with the current technology in the library. The biggest complaint is that students don't understand why in 2009 not all areas of the library have wireless Internet. Some areas that students have pointed out are the side that faces Blaustein on the second and third floor. The students feel that because every available workspace is being used all areas should have wireless Internet. Another suggestion the students made was to have some computers in quiet work areas on the second and third floors. At the moment all of the computers are either on the lower level or the first floor. Both of these floors tend to be loud and it is hard for students to write papers who use the school computers. Computers could be placed in some cubicles on the second and third floors creating individual quiet computer stations. Students also stated that they wished they could print from their laptops. The library staff has informed us that it is possible,

but it is not widely known or used by students. Maybe the process could be simplified to make it easier for students. The library website could be updated and become more user friendly. Many students have stated that the website could be simplified. The library home page is cluttered with many links that students rarely use. The site should enlarge the "Library Research" section and put it in the center and also place the "Caravan Quick Search" section in a spot that is more visible (i.e. not in the bottom right-hand corner). The student body would immensely benefit from class research sessions with librarians. It should be mandatory that Freshman seminars take one class period so that they can understand all the services and resources available to them through the library.

Another aspect of the library that students have complaints about involves the structure and inter-workings of the building. Many students brought up the lack of natural light that the building gets. This is due to the small windows on the building. Students have stated that they like to work near windows and do not like the overpowering fluorescent light. To fix this problem the building would need renovation. Students have also complained about the heating in the library. The overall consensus is that the library is too hot. It is hard for students to study if they are uncomfortable. One student stated that if one person asks campus safety to turn up the heat they would do it. One reason for the heat problem in the library is the lack of ventilation. If the windows could be open and closed it would help fix this aspect of the library. Specific areas of complaints are the first floor and more specifically the Davis classroom. The Davis classroom gets too hot because the computers generate a tremendous amount of heat. Adding fans to this room would be a quick fix but something more will be needed to really fix the problem. If the

college renovated the building students have suggested putting a bathroom on the first floor.

The library also needs to add and improve the signs that help students find books on the stacks. The current signs that exist on the second and third floors are too small and are not placed in spots where students can see them. It would be helpful if the signs that are on the stairwell of the second floor were bigger and placed in a spot that is more visible to students. This would allow more efficiency when attempting to locate books in the library. Students have also suggested putting these floor plans of the stacks on the library website.

There are a couple other improvements students feel the library could make. One improvement is keeping the library open later. The whole library does not have to be open but students have suggested having a computer lab and print station open 24 hours. Also a couple of students have recommended having rolling chairs on the first floor. These chairs would add to the group study and socializing atmosphere that already exists on this floor. As a whole Shain library is a great undergraduate library. The improvements mentioned above would allow the library to better suit current student needs and desires.

References

Einhorn Yaffee Prescott Architecture & Engineering P.C.

- 2004 Final Report: Shain Library & Information Commons. Final Report. Boston, MA and New London, CT: Connecticut College, Library Services.

Foster, Nancy Fried and Susan Gibbons, eds.

- 2007 Studying Students: The Undergraduate Research Project at the University of Rochester. Chicago: Association of College and Research Libraries.

Gabridge, Tracy, Millicent Gaskell and Amy Stout

- 2008 Information Seeking Through Students' Eyes: The MIT Photo Diary Study. College and Research Libraries: 510-522.

Golub, Jason N. and Claire Brennan

- 1997 Proposal #28: Library and Library Resource Restructuring. New London, CT: Student Government Association, Library Services.

Gwynne, Margaret A.

- 2003 Applied Anthropology. Boston: Person Education

Ishizaka, Kyoko, and Sandra P. Marshall, and Jeffrey M. Conte

- 2001 Individual Differences in Attentional Strategies in Multitasking Situations. Human Performance 14(4):339-358.

Klare, Diane and Kendall Hobbs.

- Going Native: Using Ethnography to Study Students Studying. PowerPoint presentation. Middletown, CT: Wesleyan Library, Reference Librarians.

Levine, Laura E., and Bradley M. Waite, and Laura L. Bowman

2007 Electronic Media Use, Reading, and Academic Distractibility in College Youth.
CyberPsychology and Behavior 10(4):560-566.

Lucker, Jay K. *Connecticut College Shain Library Space Plan*. 29 January 2002.

McMullen, Susan 2007 The Learning Commons Model: Determining Best Practices for Design, Implementation, and Service. Sabbatical Report. Bristol, RI: Roger Williams University, Roger Williams Library Services.

Syracuse University Library. *Patterns of Culture: Re-aligning Library Culture to Meet User Needs*. Library Assessment Conference, August 5 2008

Wallis, Claudia

2006 The Multitasking Generation. *Time*, March 19:48-55.

Webb, Kathleen M., Molly A. Schaller, Sawyer A. Hunley

2008 Measuring Library Space Use and Preferences: Charting a Path Towards Increased Engagement. *Libraries and the Academy* 8(4):407-422.