

The Library Study at Fresno State

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Introduction

Introduction

Nou walked to Science 1 to wait for her sister, who had a class in the building. Nou only had one class that day, so she waited in the lobby of Science 1 as her sister did work for a biology class involving the wildlife in the display cases. Nou decided to read a short story for her Hmong class. She did not consider reading as “studying.” Studying was “more like studying for a test.” Math was “studying” and required a quiet place. “You need a quiet place to go over and over again,” she said. She did not think the lobby of Science 1 was a good location to study. “It’s ok but it’s like a lot of people are walking past. I wouldn’t study there.” But reading could be done anywhere, so she figured she would get caught up on some reading while she waited. While reading, Nou listened to music on a cell phone that doubled as an MP3 player. Sometimes Nou liked to knit when she had time between classes or she was waiting for her sister. When Nou’s sister had class in the Peters Building, Nou waited for her by the fountain located in the lower courtyard. She felt that knitting was fun and helped her relax. She also enjoyed sitting by the fountain to enjoy its beauty. The fountain was “pretty and gives you a good feeling,” she said. It also helped her to concentrate on reading. Nou also frequented the computer lab in Peters Building. If the library were open, Nou did not think she would visit the computer lab in Peters. If she and her sister were waiting between classes, they would likely just meet in the library. She felt that the library was a place where “you can hang out and study but not too much study” and “talk but not too loud.”

Vignette drawn from Student Day Mapping exercise, fall, 2008

James said that Monday, Wednesday and Friday were his “academic days” while Tuesday and Thursday were his “ROTC days.” He spent Tuesday and Thursday running around, recruiting at high schools, picking up his uniform at the dry cleaners, doing ROTC-related administrative stuff and copying brochures. “I’m not just a student,” he noted.

Notes from debriefing interview, Student Day Mapping exercise, fall, 2008

What is student life like at a comprehensive public university in the early 21st century? How might California State University, Fresno’s Henry Madden Library better adapt its services to student practices while still accomplishing the educational mission of an academic library? These are the two driving questions behind this report.

From September, 2008, to May, 2009, we studied undergraduate student life on our campus with a focus on library services. Our goal was to discover information about student life that our campus librarians could use to both increase library usage and improve student users’ experience of library services. Our ethnographic study of student experiences with an academic library was inspired by the work of Nancy Fried Foster and Susan Gibbons (2007). Their study of undergraduates and libraries at the University of Rochester has propelled a growing nationwide interest in applying ethnographic research methods to campus libraries and their users.

However, Fresno State is a long way from the University of Rochester. With 19,245 undergraduate students in fall, 2008, Fresno State’s undergraduate population was nearly four times larger than Rochester’s that semester. By total enrollment for fall, 2008 (9,712 at Rochester and 22,613 at Fresno State), Rochester reported a student body that was 54.9% white (non-Hispanic), compared to Fresno State’s 36.4%. Fresno State’s Hispanic student population stood at 32.7% in fall, 2008, ten times Rochester’s 3.1%.¹

Going beyond size and ethnicity of the student body, a high proportion of Fresno State students are first generation college

students or hail from families with relatively low incomes. In fall, 2008, 66% of Fresno State undergraduates were first generation college students (Rudd and Leimer 2009). Further, Rudd and Leimer (2009) found that first generation college students at Fresno State lag significantly behind continuing generation college students in academic success, retention and graduation rates. Of 2,239 first time freshman dependent on family income, 26.7% came from families with annual incomes less than \$24,000; over half came from families making less than \$48,000 per year.²

Finally, only about 1,000 Fresno State students, about 5% of the student body, live on campus, compared to campus residency of over 80% at Rochester. Hence, most Fresno State students commute to campus from all over town and from the greater Central San Joaquin Valley of California.

Aware of the deep differences between University of Rochester and Fresno State, Dean of the Madden Library, Peter McDonald, sought our help in gathering data that could inform the design of library services in ways that address the specific nature of our student population. But while our research was focused on Fresno State students, this report has a dual purpose. First, it represents our final report of findings and recommendations to Dean McDonald and our colleagues at the Madden Library. Second, we present data and interpretations that shed light on library use and experience, but also seek to illuminate the texture, rhythm and experience of university student life in general. Therefore, we write also for faculty members, librarians and administrators at other campuses seeking to better understand contemporary student life and library use.

¹ Unless otherwise noted, statistical data on Fresno State’s student body came from our campus’ Institutional Research, Assessment and Planning website (California State University, Fresno 2009). For comparable data on the University of Rochester, see the Institutional Research 2008-2009 Factbook (University of Rochester 2009).

² Parents’ educational attainment and income figures for transfer students were nearly identical to those for first time freshmen.

Design Anthropology and Libraries

As anthropologists, we have attempted a relativistic stance toward student life. As such, we have consciously worked against our own assumptions about student life, which includes concerns about some student habits that we believe detract from their academic success. Whenever possible, we have left our common sense behind. Instead, we have tried to see student life anew.

More specifically, The Library Study at Fresno State draws its primary methodological and conceptual frames from design anthropology. Design anthropology is less a clearly marked and defined field than a multidisciplinary movement that has grown out of the collaborative work of social scientists, technologists and product designers.³ In The Library Study, the basic importance of design anthropology lies in the contention that the design of products and services can benefit from the ethnographic study of users. Whether designing showerheads or libraries (see Delcore 2009), engagement with users in their natural contexts can deliver design insights that make for products and services that better meet users' needs and deliver a richer user experience. While product marketers or librarians have some knowledge of how best to serve users, there is no substitute for interacting with users themselves to learn more about their lives, needs and desires.

The need for user research on library use is particularly pressing. The academic library provides services that are central to the mission of the university. The library acquires, organizes and circulates materials that are often only available to students through the library. In addition to providing access to materials, academic librarians also have a teaching mission focused on information literacy. Through the work of the Reference Desk and through Instruction and Outreach Services, librarians seek opportunities to teach students how to determine the nature of their need for information, and how to find, evaluate and effectively use it. Thus, academic librarians seek to educate students about how to sift, sort and critically think through information. But if the academic library is central to a university education, it also has a very long history, and hence a design legacy handed down by centuries of librarians and users (see below, What Students Know About the Library). We therefore ask, "To what degree are existing modes of delivering library services adapted to the actual needs and desires of the undergraduate library users in the early 21st century?"

Building on the basic relativistic orientation of most anthropological research, we strive to see student life as rich,

complex and sensible in its own context. At the same time, we are aware of the central tension of this study: How do we balance a relativistic stance toward our subjects with the educational mission of an academic library? For example, in several sections below, we dispassionately recount library user practices with as little judgment as possible, knowing that some of these habits are precisely the things that our library colleagues may seek to alter. In defense of our own relativism, we maintain that a necessary precondition to effective educational intervention is a clear, sympathetic understanding of the subjects of intervention. In the end, to know library users accurately is to know how to reach them effectively with core library values and services.

If successful, the narrative that follows will:

- dispel some common misconceptions about students of the early 21st century.
- replace some common misconceptions with sound data and better concepts for thinking about student life.
- portray students as whole people with rich, complicated lives that make sense to them given their time and place.
- deliver some useful recommendations about how the Henry Madden Library on our campus can better accomplish its mission with today's student library users. We also hope our findings and recommendations are useful to faculty, administrators and librarians on other campuses with similar student bodies, as well.

We have provided a Summary of Recommendations in Appendix C. We also detail recommendations in each section below.

Study Participants

We are convinced that calling the subjects of this study "students" risks misunderstanding. To call someone a "student" invites the assumption, however subtle, that they are, primarily, students. By definition, of course, one role they play is that of "student." However, Nou, James and their peers are also daughters, brothers, retail clerks, basketball enthusiasts, aspiring writers, MySpace users, Los Angelinos, DJs, employees and much, much more. In other words, the people we call "students" are in fact *whole people*. If we attend to the fact that they are whole people, it becomes easier to put the tasks related to their studies into the larger context of full, complicated and interesting lives. In the vignette above, Nou's movements around campus and her choice of school-related tasks (e.g. reading in the Science Building) were affected by the fact that she was willing to wait around for her sister so they can spend time together while they were both on campus. James categorized his ROTC-related activities as something non-academic. James stated explicitly, "I'm not just a student."

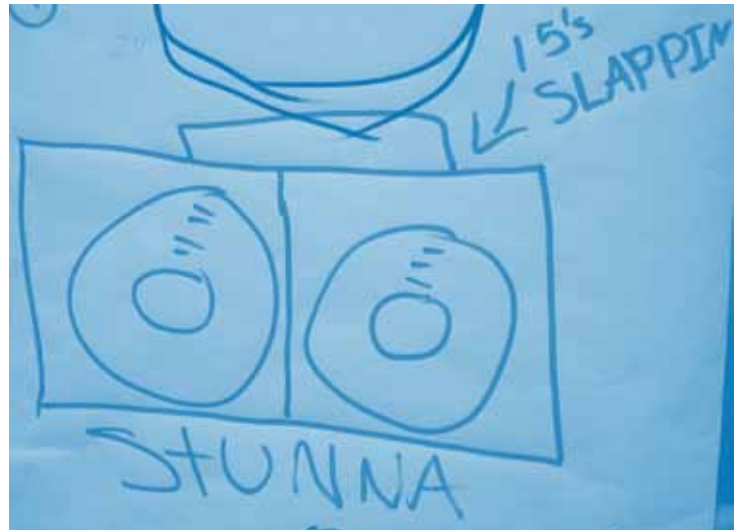
We retain use of the term "student" to refer to the participants in this study. However, whenever possible, we refer to specific participants by their names (all of which are pseudonyms). When making more general references, we favor the terms "student user," "library user" or just "user." One could argue that calling the subjects of study "users" may promote focusing on an even narrower aspect of who they are. However,

³ Foundational works in design anthropology in the United States include those by Lucy Suchman (1987, 2007) and her colleagues at Xerox-PARC (see Blomberg, Suchman and Trigg 1996). However, the field has always been marked by the cross-pollination of ideas and methods between the design fields and anthropology (see Squires and Byrne 2002, Wasson 2000). For example, Beyer and Holtzblatt (1998) represents an important early methodological synthesis from the design side. More recent works touching on design anthropology include Mariampolski's (2006) methodological guide and the recent broad assessment of anthropology in industry edited by Cefkin (2009). Elizabeth (Dori) Tunstall has been a recent important thinker in design anthropology. Tunstall has worked toward a clear demarcation of the concepts and methods that distinguish design anthropology from allied approaches in contextual, user-centered and participatory design (see Tunstall 2008, 2009).

applying the term “user” has two advantages. First, we seek to recommend ways the library can better serve its student users. Therefore, in the context of this report, the fact that the participants in the study were library users is arguably the most relevant thing about them. Second, “user” is such an uncommon term to refer to students that it may achieve a distancing effect and (we hope) encourage seeing the participants anew.



In September, 2008, we asked students passing through the Free Speech Area on campus to draw themselves studying.



Detail from another student drawing exercise, “When I Study I Like To...” The “15’s” are probably 15 inch sub-woofers installed in a trunk; “slappin” refers to playing loud, bass-heavy music; in this context, a “stunna” is likely someone (the person who drew the picture?) with a custom car and nice speakers in the trunk.



A picture from Student Day Mapping: Rachel, an aspiring writer, carries a notebook wherever she goes



Methodology

Methodology

Introduction

The Library Study at Fresno State grew from a chance conversation at a party in August, 2007, where Delcore, Mullooly and Peter McDonald, incoming Dean of Henry Madden Library, met for the first time. We discussed the Rochester library study (Foster and Gibbons 2007) and the potential for a similar study at Fresno State. We continued our conversations that academic year and in spring, 2008, Dean McDonald decided to sponsor a study of student life at Fresno State, focused on discovering ways to increase and improve student library usage.

At that time, the library building was closed for renovations and for the construction of an entirely new wing. It remained closed throughout fall, 2008, when we conducted the first half of the study. During the closure, library reference, circulation and other services were temporarily located in a building near the construction site and the library's physical holdings were housed off-campus, available by request on the library's website. The new building formally opened in February, 2009.

The Library Study research team was comprised of two senior researchers (Delcore and Mullooly), a field project director (Michael Scroggins) and Fresno State undergraduate students enrolled in ethnographic methods classes during academic year 2008-2009 (Kimberly Arnold, Alecia Barela, Bonner Creager, Ashlee Dotson, Patricia Dunne, Elfego Franco, Merrily McCarthy, Jason McClung, David Moore, Radha Mowji, Iliana Perez, Dalitso Ruwe, Felicia Salcido and Jamie San Andres). Under the supervision of Delcore, Mullooly and Scroggins, the student researchers worked on every stage of the project, including participant recruitment, observations, interviews

and data analysis. (Arnold, Barela, Dotson and Ruwe presented preliminary findings at the Southwestern Anthropological Association annual conference in Las Vegas in May, 2009.)

Throughout the year, the Library Study Group, comprised of Delcore, Mullooly and three library faculty and staff members, provided a forum for consultation between the researchers and colleagues at the library. We also conducted a series of co-viewing sessions in which we viewed workshop video or listened to audio-recorded student interviews with library faculty and staff. Through the Library Study Group and the co-viewing sessions, we learned much about how our data looked from the librarians' point of view.

We began the study in September, 2008, with a preliminary exploration of student attitudes toward scholarship and information. For four days, our student researchers took a large easel covered in poster paper to the Free Speech Area, a bustling and heavily foot-trafficked space near the center of campus. We entered prompts at the top of each side of the easel, such as "Draw How You Feel When You Write a Paper" and "When I Study, I Like To...". We invited student passersby to express their feelings and ideas. The exercise served to get the research team into the subject of student life and scholarship practices, and the drawings on the sheets became data to which we returned repeatedly.

Next, in late-September, 2008, we held a day-long workshop for about fifty library faculty and staff. We sought their advice about the kind of information they hoped to learn about students – information that they felt would enable them to accomplish the library's mission. After we analyzed the results of the faculty/staff workshop, and consulted the Library Study Group, we developed a methodology aimed at exploring undergraduate student attitudes and practices related to library use (see Library Study Schedule, below).

Library Study Schedule

NOV. 08	DEC. 08	JAN. 09	FEB. 09	MAR. 09	APR. 09	MAY 09
	Floating Reference					
Visions of Student Scholarship	Visions of Student Scholarship	Visions of Student Scholarship	Visions of Student Scholarship	Visions of Student Scholarship	Visions of Student Scholarship	Visions of Student Scholarship
Day Mapping				Day Mapping		
Ethnography of Student Life			Ethnography of Student Life			
	Bootlegging*		Bootlegging	Bootlegging		
			Student Theatre	Student Theatre	Student Theatre	
					Interior Design Workshops	Interior Design Workshops
		Ethnography of New Library	Ethnography of New Library	Ethnography of New Library	Ethnography of New Library	Ethnography of New Library
				Web Design Workshops	Web Design Workshops	

* Bootlegging, Student Theatre, Web Design and Interior Design Workshops ranged in size from six to fifteen participants; ten was about average.

Epistemology

Our methodology was underpinned by the inductive spirit of ethnographic research. We considered student scholarship and student interaction with the Henry Madden Library to be unknown territory. Therefore, we eschewed directive, overtly deductive methods, which require the researcher's reliance on predetermined background assumptions. Instead, we chose methods that stressed open-ended observations and interactions. We drew some methods, such as ethnographic observation and informal interviewing, from the traditional anthropological toolkit. Other methods, like Bootlegging and Floating Reference (see below), were informed by current practices in design anthropology. However, all were united in their openness to new, unexpected information. A continuing mantra among research team members was, "inspiration not confirmation," a phrase that summed up our efforts to be systematic and rigorous, but inductive as well. In sum, our objective was to let the data lead the way to creative insights about library usage.

Sampling

We strove to recruit research participants whose diversity reflected that of the Fresno State student body. To that end, our students fielded a participant screening survey at various times during the study. We then invited participation in the research from among the survey respondents, aiming for a representative distribution of gender, ethnicity, class standing, GPA and other variables.

Conducting an inductive study aimed at inspiring new and better practices, we did not seek to meet the requirements for statistical significance of findings. Although we were in some level of contact with over two hundred Fresno State undergraduate students, this was a mere fraction of the nearly 20,000 undergraduate students enrolled in 2008-2009. The standards of reliability on which we draw rely largely on the triangulation of findings across multiple methods and contexts of research. In Appendix D, we make recommendations for exploring the statistical validity of some of our findings via a large-scale survey among Fresno State students.

Methods

Floating Reference

During two days in December, 2008, we set up a desk and computer, labeled "reference," in the Free Speech Area.⁴ A student researcher called on passersby to react to the presence and meaning of the desk. We also invited students to play out interactions between "librarian" and "student" at the desk. A second student researcher recorded the proceedings via still images, video and audio recordings for later analysis.

We designed the Floating Reference activity to seek data regarding students' understandings of reference services and their reactions to the physical interface between students and the library.

⁴ We would like to thank Lars Albinsson for suggesting the Floating Reference activity over dinner at the Participatory Design Conference in Bloomington, Indiana, in October, 2008.

Visions of Student Scholarship

In Visions of Student Scholarship, we asked student researchers to photograph students engaged in scholarship wherever they found them throughout the year. We designed Visions to deliver a comprehensive visual snapshot of student scholarship on and off campus. The results have contributed to a database of images that we have used for analysis of student scholarship.

Student Day-Mapping

Each semester, we provided a diverse group of students with blank maps of campus, disposable cameras and notebooks. (We recruited ten day mappers in fall, 2008, and five in spring, 2009.) We asked them to take time during a day to fill in the map with their movements, take pictures of significant things around campus and record their thoughts (see Appendix A: Day Mapping Guide). After developing the pictures, we met the participants for ethnographic interviews.

We drew the idea for Student Day Mapping from Foster and Gibbons (2007). Our goal was to gain insight into students' perspectives of campus and generate ideas about improving library services based on actual student experiences. In order to understand how the library could "get in students' way" more effectively, we needed to know where students go, what they do, and (most importantly) how they experience campus.

Ethnography of Student Life

Throughout academic year 2008-2009, we conducted mini-ethnographies of student life. Each semester, we provided five students with disposable cameras and a list of twenty photo prompts (see Appendix B: Ethnography of Student Life Guide; Zimmerman and Wieder [1977] provided precedent). When a student finished taking the photos, we developed them and scheduled a site visit to the student's home, where we used the photos as prompts for an ethnographic interview.

We launched the student ethnography activity hoping that visiting a participant's residence would have inductive possibilities and lead to a more holistic view of student life. Also, many Fresno State students commute, so we needed to find a way to gather data regarding student life at home, work and play beyond campus.

Bootlegging Workshops

In three Bootlegging workshops, we invited participants to engage in creative "brain-stretching" exercises related to library services. Participants brainstormed aspects of library-related scenarios. For example, in one of the workshops, we asked participants to list all the kinds of people who use libraries, followed by the types of technology they use, their purposes and so forth. The brainstorm results were entered on index cards, which we shuffled and re-dealt to participants in groups of four or five. We then asked each group to act out a scene incorporating their cards.

Delcore, Mullooly and Scroggins were exposed to bootlegging methodology at the October, 2008, Participatory Design Conference at Indiana University. Inspired by William S. Burroughs' cut-up technique, bootlegging in user experience research is meant to challenge users' preconceptions of the possible by forcing them to devise real use cases from what

otherwise might seem irreconcilable elements. We found that the data also revealed much about existing student attitudes toward the library, as well.

Student Theatre Workshops

Student Theatre was a creative tool we used to gather data regarding students' understanding of the library space and library services. In each of three Student Theatre workshops, the research team devised a plot revolving around a library service situation and directed student actors through the first half of a skit. We then asked other student participants to direct the skit's second half.

Similar to Bootlegging, Student Theatre was designed to capitalize on students' playful and creative imaginings about current and future library arrangements.

Interior Design Workshops

The opening of the new library building in January, 2009, afforded some novel design opportunities. Inspired in part by the work of Foster and Gibbons (2007) on interior library spaces, we sought student insights on the interior design of Studio 2, the library's instructional suite.

We held the three design workshops inside Studio 2 itself, which was unfurnished at the time. In each workshop, students split into two groups. The groups performed skits about the nature of group work, and they used blocks to design a collaborative study space, resulting in a total of six designs. Our process for the design workshops evolved over time, moving toward progressively more constrained prompts. In the first two sessions, we prompted students to help us design a space of indeterminate size for collaborative, creative work. In the third workshop, we tightened the constraints, telling the students that they were actually helping us design the space in which we were meeting.

Spaces that are adjusted to current student needs and desires are more likely to attract student use and enhance their interaction with the library. Through the Interior Design Workshops, we were able to elicit data on students' perceptions of the way collaborative study spaces in the new library should look and feel.

Ethnography of the New Library

After the opening of the new library building, we assigned student researchers to observe interactions there.

Web Design Workshops

We held three participatory design workshops for students in which we invited them to re-design the library website. Some workshops invited the participants to design from scratch while others engaged them in patchwork prototyping (using existing elements in novel combinations). We used the data from the Web Design workshops to recommend ways the library's website can better meet students' expectations about online experiences.

Taskscapes of Student Life

Taskscapes of Student Life

Multi-tasking Does Not Exist

Students these days are addicted to multi-tasking. They are always doing many things at once. They study for an exam while listening to music while checking MySpace while texting their friends. This way of doing things degrades their learning. They do not retain as much nor understand their studies as deeply as students in the past. If only they would concentrate more and be less distracted by their digital devices and other diversions, then they would be more successful in college.

The preceding paragraph represents a widespread common sense interpretation of the problem of multi-tasking for today's students. This interpretation draws its strengths from several sources. "Multi-tasking" has become an accepted part of everyday English usage and so, by habits of speech, many assume it to be real. Further, to faculty who grew up and were educated before the spread of the Internet, social networking sites, cell phones and text messaging, the term "multi-tasking" appears to summarize nicely some of the real differences they observe in behavior between themselves and today's traditional college-age students. In the workshop with library faculty and staff in September, 2009, one participant commented that students in the library very often "have their heads down" (i.e. facing their cell phones, texting).

Our public discourse affirms the widespread impression on campus that certain technology-related practices are in constant, real time competition with student scholarship. For example, in April, 2009, our campus newspaper, The Collegian, ran a front page story entitled, "Facebook Vs. Homework" (Villalobos 2009). In it, students talked about how social networking sites compete with school for their attention, both in and out of the classroom. One student was quoted as saying, "I use it to procrastinate." The article cited research by Ohio State University doctoral student, Aryn Karpinski, who found Facebook users had lower GPAs than non-Facebook users. The article also included positive comments about the research by a Fresno State mass communications professor, Tamyra Pierce, who studies online media and young people. In the weeks before the Collegian article, Karpinski's research received widespread media attention, including many articles in which she cautioned against drawing unwarranted conclusions from her findings, which said nothing about causation. In a Chronicle of Higher Education article about the study (Young 2009), Karpinski's own cautions were joined by comments from Eszter Hargittai, an associate professor of communication studies at Northwestern University, who found no correlation between Facebook use and grades. Though the Collegian piece did, at the very end, quote Prof. Pierce's own cautions against jumping to the conclusion that Facebook causes lower grades, the piece on whole supported the common perception on campus (among both faculty and students) that Facebooking and other digital practices are in direct, real time competition with school work for students' multi-tasking attention.

The idea that student digital media activities are in necessary, direct competition with the work of scholarship is flawed. Social activities and scholarship are not bounded from each other. The reality of scholarship is that it is highly and inherently social. Students consult friends, family, roommates and classmates constantly about requirements and assignments. In fact, texting and social media websites are directly implicated in scholarship when students use them to communicate with classmates about their schoolwork. We suspect that there are other positive functions to "having your head down" (texting). For example, one participant reported that she used text messaging to get distractions off her mind while she studied, dispensing with pressing non-school matters via text and thus freeing herself to continue with her schoolwork.

The idea that students multi-task their way through college could still be compelling, but for one problem: multi-tasking does not exist. If we observe students (or anyone) closely, we see that they attend to different tasks *in turn*, not at the same time. One does not study for an exam and look at MySpace at the same – a physical and mental impossibility. Rather, one studies, then opens a MySpace page and looks at it, then returns to studying, and then perhaps pauses to field and answer a text message. Each of these activities (studying for an exam, checking MySpace, texting) requires more or less total attention, and when students engage in all these activities they attend to each one, in turn – not all at the same time (see Varenne and McDermott 1998, especially pp. 57-58).⁵

Once free from the myth of multi-tasking, we can think more effectively about what library users do day to day, hour to hour, minute to minute. Indeed, the erroneous term "multi-tasking" does capture the important point that what we do are "tasks." Further, the tasks users undertake are related, sometimes in patterned ways (e.g. many users link tasks like listening to music, eating and sleeping with studying), sometimes in idiosyncratic ways with a high degree of individual variability. In place of "multi-tasking," we have applied the concept of taskscape (Ingold 1993) to analyze the multiple, complex activities of Fresno State students.

Taskscapes

A difficulty in studying student library use at Fresno State is the dispersed and mobile nature of the student body. Because of Fresno State's status as a commuter school, the demands of geography and the variety of social contexts in which students operate prevented us from drawing a sharp boundary around the category of "student." At the same time that geography constrains the scope of our study, technology allows movement from one activity, or social milieu, to another without changing physical location. The traditional social boundaries to college attendance, such as time and proximity to campus, have been mediated to some extent by the use of technology. Additionally, schoolwork is not an activity that stands separate and apart, or that can be analyzed in isolation. Rather, it is implicated within and inseparable from other spheres of student life.

⁵ Of course, one can fairly wonder if rapid switching from one task to another degrades student understanding and retention of academic material; there is evidence that it does.

Our challenge then was to develop a unit of analysis that allows us to account for meaningful student scholarship as it occurs over a wide geographic area encompassing varied social contexts. We propose the term “taskscape” as a way to conceptualize and articulate the varied complexity of users’ lives.

Anthropologist Tim Ingold (1993) argues that we can profit from viewing the practice of daily life as an ensemble of interlocking, related tasks, which he calls the taskscape. Ingold has developed the taskscape concept to highlight the social nature of daily life, the rhythmic interweaving of tasks and the relationship between tasks and the landscapes on which we live. We can take two lessons from Ingold’s proposal to use the taskscape as a unit of analysis. First, he reminds us that all our activities are social and their timing is conditioned, in large part, by the demands of social life. Second, he promotes a holistic view of human life by emphasizing the interconnection of tasks and the contexts in which we perform them.

The first crucial distinction that underpins the concept of taskscape is the distinction between clock time, which rules the world of labor, and social time, the rhythms of life that emerge as people attend to each other (Ingold 1993: 158-159). For example, students’ days are often structured by specific class and work times. However, clock time is only part of the story. When a student hangs around campus waiting for friends to finish lunch in the food court so she can catch a ride to go grocery shopping, her task (shopping) is structured by social time (waiting for her friends to finish the social and biological work of eating so they can give her a ride).

Despite the importance of clock time in industrial society, the majority of our tasks go down according to social time. Even tasks that we sometimes erroneously consider “technical” tasks (distinct and insulated from social life) are highly social. In workplace studies, several generations of anthropologists have noted the highly social nature of work. No office, factory, farm or store operates according to some human relations or industrial engineering manual. The concrete social relationships among workers, managers, customers, clients, plants and animals all condition the way any “technical” task (e.g. forging a brass valve, or irrigating an orchard of almond trees) gets done. Ingold says it best:

Every task takes its meaning from its position within an ensemble of tasks, performed in series or in parallel, and usually by many people working together. One of the great mistakes of recent anthropology - what Reynolds (1993: 410) calls ‘the great tool-use fallacy’ - has been to insist upon a separation between the domains of technical and social activity, a separation that has blinded us to the fact that one of the outstanding features of human technical practices lies in their embeddedness in the current of sociality. It is to the entire ensemble of tasks, in their mutual interlocking, that I refer by the concept of taskscape. Just as the landscape is an array of related features, so - by analogy - the taskscape is an array of related activities (Ingold 1993:158).

Thus, it would be a mistake to consider student scholarship as some merely technical operation that they perform outside of a larger system of social practices and meanings. Student scholarship is inherently social – the motivations, locations,

conditions and specific practices of scholarship are all social, and they all relate to other socially-conditioned motivations and practices.

Ingold goes on to argue that social life, in an analogy with music, has cycles and repetitions formed by our movements. Indeed, as in music, social life has not one rhythmic cycle, but a “complex interweaving of very many concurrent cycles” (Ingold 1993:160). Ingold’s characterization of social life as a complex interweaving of cycles is particularly apt for thinking about student users’ lives. Cycles of tasks related to school, work, friends and family unfold, overlap and diverge in complex ways: children need to be dropped off and picked up daily, weekly work schedules are adopted and later changed, weeks come and go with their class/work-patterned rhythms and semesters begin and end. Importantly, though, we are not concerned here with the official structure of any of these cycles. The university publishes a calendar of the semester that works according to clock time: it parcels out weeks and months in even proportions, as if one were essentially like the other, but for the occasional deadline (“last day to add/drop”) or holiday (“campus closed – Cesar Chavez Day”). Rather, the cycles we have in mind are the real cycles of student user life: the semester starts off “slowly,” builds in pace toward a few midterm periods, dips off again, and then builds back up to a frantic crunch time of final exams and final papers. You cannot find this cycle on any university calendar but it is one of a very many cycles that students live, always in conjunction with other cycles (work, family, etc.).

Finally, Ingold seeks to link the taskscapes of life to the social landscapes on which they are lived. Ingold’s use of the term “landscape” is not the same as the colloquial meaning of the word. His landscapes are not the concrete, fixed physical environments which we imagine to exist in relative stasis. Rather, Ingold’s landscapes are socially constituted and maintained, always in process, made up of the movements of people and things and the meanings we attach to them. Importantly, the constant human striving to impart meaning to life, and the variation among the meanings that people attach to the same things and events, means that every scene to unfold is something different from one person to the next. No landscape is ever “obviously” this or that; rather, all landscapes are socially made by people on the move, imparting meaning wherever they go.

In the Day Mapping exercise, James took a picture of two students bumping fists by the vending machines in the Social Science Building. He explained to us that he saw these two guys regularly, bumping fists in the same location on Mondays, Wednesdays and Fridays as he went to class. He did not know them, but occasionally they gave him a head nod. The fist-bumpers were part of James’ socially-constituted landscape across which he moved and practiced his various taskscapes that semester.



The fist-bumpers

Ultimately, Ingold recommends that we investigate landscapes together with taskscapes, to understand, holistically, the way people practice ensembles of tasks in socially-constructed contexts.

The holistic nature of taskscape helps knit together the varied social aspects of student life (scholarship is just one of them) and attends to its spatial realities (i.e. dispersed and mediated by technology). Scholarship gains meaning from its position within an ensemble of tasks students perform. It is a thread running through student life, both interdependent with and constitutive of other student activities. Our challenge is to understand the nature and range of student taskscapes, identify how the work of being a student fits into those taskscapes, and how the library might disrupt⁶ prevailing practices in ways that further the educational mission of the library.

Fresno State Taskscapes

Christine

When we contacted Christine for the Ethnography of Student Life exercise in fall, 2008, she was a re-entry student in her late-forties.⁷ She decided to go to college after her second husband passed away, leaving insurance benefits and a posthumous request in his will that she use the money to return to college. Following her husband's wishes was not an easy decision for Christine to make as she had never considered herself smart enough to pursue higher education. However, despite struggling with learning disabilities, Christine had made the Dean's List the three semesters preceding our work with her.

Hank Delcore and Kim Arnold visited Christine at home in December, 2008. Christine lived in a Fresno County town with her daughter, Amanda, a student at Fresno Pacific College, and their many dogs. Christine and Amanda, both English majors, commuted to college in Fresno together, travelling over an hour each way. The trek was long and could be treacherous in

the winter when the fog rose (indeed, Delcore and Arnold got lost in some dense night fog on the way back to Fresno from Christine's). Sometimes Christine and Amanda stayed overnight in the Fresno area, either with family or at a hotel.

Family was integral to Christine's life. There were numerous family photos in her living room and we discussed her family, immediate and extended, at length. Christine relied on her family and friends for emotional support and inspiration when she felt she had reached "ceilings in learning." Christine's learning disability required her to work hard and she developed her own studying techniques to counter her difficulties. Christine took extensive notes during lecture and she read and re-read material, highlighting and taking notes as she went. In addition, Christine met with tutors, often using the time with them to verbalize what she was trying to learn.

Christine's workspace at home was a room of many purposes: schoolwork, sewing, crafts and general storage. Her study area was in the corner, where she placed her laptop on the pull-out keyboard shelf of a large corner unit desk. Her low, black leather swivel chair fit the level of the laptop. We asked her to demonstrate what she did when she studied. Christine plopped down in the black chair and pulled another chair out to elevate her left leg. Her dogs took their place surrounding her. Turning on a nearby television, she said that while studying, she kept a movie or television show playing, something that she had seen "a million times." Around her, the room was overflowing with sewing equipment, arts and crafts supplies and a welter of other items that seemed to have been left and forgotten. It did not appear very organized, but Christine felt quite comfortable in the space, surrounded by familiar things and in her own personal study mode and posture.

Christine's desire for a comfortable and familiar place to do schoolwork extended to her experience at Fresno State. Christine said she felt isolated and left out in the atmosphere of campus, its tone dominated, she said, by "nineteen year olds." She had made only a few friends from classes with whom she sometimes studied. Christine said she often studied in the Services for Students with Disabilities office because it was comfortable and familiar. The other students who went there also had disabilities, which made her feel more relaxed. She could spend hours there, she said, studying but also eating lunch and socializing. When the topic of the new and as yet unopened library came up, Christine was not sure whether she would use it. She said she did not think the environment was very inviting, because "there are a lot of no's" in the library, such as "no food" and "no talking." She had heard that the entryway of the new building would be a place where students could talk and that there would be a Starbucks, which would perhaps make it a more relaxed atmosphere, things that would possibly attract her to use it.⁸

Analysis

Christine's story nicely illustrates the intersection of family and college. Her experience with Fresno State was also shaped by her place of residence, learning disability and age. From

⁶ Our use of the term "disruption" follows Christensen (1997). A disruptive innovation improves a product or service in an unexpected way and forces a thorough re-evaluation of existing practices.

⁷ In fall, 2008, 12.1% of Fresno State students were over thirty years of age (California State University, Fresno 2009).

⁸ In fact, the new library building is very friendly to open conversation and it does include a Starbucks.

motivation to daily practice, Christine's student experience was intertwined with the taskscapes of family and her personal landscape of commuting from a considerable distance. Despite feeling somewhat left out of campus life, Christine's scholarship was highly social in nature, encompassing family, friends and tutors, and the comforting social space of the SSD office.

Marcus

We met Marcus in spring, 2009, for the Day Mapping exercise. He mapped a Friday in April and Hank Delcore and Ashlee Dotson conducted the debriefing interview shortly thereafter.

Marcus, a freshman from Los Angeles, lived in an apartment just west of campus. On the Friday he mapped, he walked to campus at about 8:30am and stopped at the Kennel Bookstore to get a scantron form for an exam at 9am. "I ended up with a B on the test, so I was pretty happy," he said. Marcus had a class at 10am on Mondays and Wednesdays, but this Friday he left his 9am class and he walked to the library to print something out and to study.

Marcus did not own a computer. When he needed a computer, he used one in the library or the computer lab in his apartment complex. In the lab at his complex, the Internet service was not very reliable and the printer was "always down," so he usually came to campus to print things; he had found the library to be a reliable place for that. (Marcus said that his classes so far had not required any research at the library, but he was introduced to it via a library tour that was required in one of his classes.) He also visited the library for Starbucks and to use the computers to access Facebook, ESPN.com and other entertainment-related websites. Marcus felt the library was a nice building and offered helpful services. However, he rarely studied there or anywhere on campus. Instead, he studied in his private bedroom, usually with the TV on, which he said helped him to concentrate.

After his visit to the library, Marcus walked home to relax and watch TV until his 1pm class. On Fridays, Marcus had classes at 1pm and 2pm. (On Mondays and Wednesdays, he had a 4pm class, as well.) After his 2pm class let out, he went to the food court at the student union to eat. Marcus said he always ate something before going to class and he was usually hungry before he headed home, so he snacked often.

Marcus then went to the campus dorms to hang out with a friend from back home in Los Angeles. The two have been friends since the 7th grade: "His mom was like my mom, my mom was like his mom, so basically [we're] like brothers." Their decision to attend Fresno State was, to some extent, linked. However, Marcus applied for dormitory residence too late so they were not able to room together.

Marcus' pictures included his basketball shoes, the Student Recreation Center and some weights. Visits to the Rec Center formed an important part of Marcus' life. On the day he mapped, Marcus left his friend's dorm room to go home and get his basketball shoes. He and his friend then met back up and walked to the Rec Center. Monday through Thursday, Marcus spent 7-11pm (closing time) at the Rec Center playing basketball and lifting weights, usually with the same friend from LA. "It

relaxes me when I go to the gym and play basketball and stuff, it gets my mind off things." The gym had also served an important social function for Marcus and his friend: "When we first got here, like, that's how we met people and stuff, by going to the gym." Friends from the gym became their friends to socialize with in general.

On Fridays, the Rec Center closes at 9pm. After their visit there, Marcus and his friend visited some friends in the dorm to hang out.

Analysis

Marcus organized his day (and probably many others) around the tasks of attending class and maintaining a close relationship with his childhood friend from Los Angeles and his recently made friends in Fresno. For Marcus, the role of student and social work were intertwined and inseparable. Arguably, his integration into life at Fresno State hinged on his ability to find a circle of friends via his lengthy trips to the student Rec Center.

Will

Will mapped a Tuesday in November, 2008. Jim Mullooly and Kim Arnold conducted the debriefing interview. On the day Will mapped, one of his classes was cancelled. It could be argued that a class cancellation made Will's Tuesday in November an atypical day, but actually, contingencies are a common part of student life.

Will's first class of the day was at 9:30am in the Social Science Building. He arrived at parking Lot Q on an empty stomach and walked alone to class. After his class ended at 10:45am, Will started back to Lot Q, pausing at a spot just outside Social Science. He used to stop here to smoke, but since quitting he has used the spot to check his iPhone for messages. (While in class, he left his phone on silent.)



Will's former smoking spot, now a place to check his iPhone

Will then drove to University Deli & Liquor, off campus, where he purchased a Rockstar energy drink. He drove because he found it more convenient than walking across campus. Will then looked for a new parking spot on campus. The Rockstar detour made him late to his 11am class, which consisted of a slide show.

At about noon, Will usually went either home or to work.

On work days, he taught classes at the Discovery Center in downtown Fresno. However, on his mapped day, Will grabbed lunch at a Taco Bell and was home to eat by 12:30pm. Lunch was never at the campus Taco Bell, where Will once had a bad experience with cold, unappetizing food. He headed back to campus at about 1:45pm. Will noted that driving through the road construction around the Save Mart Center made him nervous.



Road construction near campus

Will parked in Lot J at 2pm. He had returned to campus to meet with a major adviser on the east end of campus. At this point, Will included a picture of his jujitsu outfit, balled up on the seat of his car.

Will's late-afternoon class was cancelled so he went home after meeting with his advisor. If the class were being held, Will would have walked to class at North Gym at 4pm. Before going, he might have studied in his Jeep and had a Diet Coke. At other times, as well, Will has spent time in his car preparing for class because it was quiet and insulated from "noisy" people. He could not access wifi from his car or he would have probably gone on-line. He also often used time in his parked car to make phone calls and check in with his girlfriend. Will did not like to study where people were making noise, like the Student Union. His preferred campus study locations have been downstairs at the Peters Building near the fountain, and the courtyard of Science II, both places that afforded some quiet. He spent time in his car preparing or reading for class as it was quieter than most places on campus.

Departing from his account of the mapped day, Will told us that he largely stayed on the periphery of campus – where most of his classes were located – unless there was a specific reason for going somewhere else on campus. When his girlfriend went to Fresno State, they would sometimes meet on campus at the Psychology and Human Services Building and decide together whether or not to stay on campus after their school obligations were done.

Will did not typically do schoolwork with people from his classes, and once had a bad experience with a group project where he was the only one contributing. He preferred to study alone. When Will had research to do, he did it at home or at Revue, a coffee shop in the Tower District. He liked to use Revue's back room because they offered free wifi. He usually

went to Revue in the late evening since it was open until 10pm or 11pm. Normally, he began research at home and then moved to a coffee shop for more research, outlining or writing. He would return home when distraction set in, which was usually one to four hours at any given location. Will used JSTOR, Lexus/Nexus and other library databases, as well as the online book reserve. He had not used inter-library loan and was not aware of it until interviewed. What he knew about the library's online services he learned at the Madden Library information booth during Dog Days.

At home, Will studied in the office (which he shared with his three roommates: his girlfriend, girlfriend's sister and her boyfriend) or his bedroom. Recently, he had taken to studying in the garage, where he found he could escape his roommates and access his neighbor's wifi connection.

Analysis

Will's landscape of scholarship was defined by noisy people and quiet places; he largely avoided the former and sought the latter, to the point of studying in his car while on campus and in his garage while home. His movements around campus depended largely on the location of parking and classes, as well as his preference for "quiet." He stuck to the periphery of campus due to his class locations, and avoided the geographical center of campus, like the Free Speech Area and the Student Union, because they did not serve any purpose for him.

Across his larger landscape, Will accomplished a variety of tasks. As a student, he attended class, did schoolwork and consulted with his advisor. He fed himself by visiting a convenience store near campus (a choice that made him late to class) and a fast food restaurant between campus and home. On other days, work would have been part of his day. Throughout, cars, driving, road construction and parking were ubiquitous. Will parked on campus no less than three discrete times on the day he mapped.

In addition to being a student, Will was also engaged in the social work of being a roommate and a boyfriend, relationships that affected his movements and habits of scholarship. When his girlfriend went to Fresno State, his presence on campus was affected by their mutual decisions about where to spend time. At home, he sometimes fled his roommates, including his girlfriend, to find a quiet place to study (the garage). Overall, Will seemed to approach his tasks with an eye for the careful assertion of control over competing and intertwined tasks (e.g. he chose to drive for a Rockstar rather than be on time to class).

Karina

Karina was an Ethnography of Student Life participant in fall, 2008. Hank Delcore and Jamie San Andres visited her at her dorm room on campus one evening late in the fall semester to debrief her.

Karina was a freshman from Los Angeles who came to Fresno State for a specific academic program. She was frequently homesick, for her mother's food and for the big city atmosphere in Los Angeles, among other things. Also, as the oldest child, she said that she was used to helping her mother – a single parent – when her mother got "stressed." But, she did note her mother's pride in her going to college.

Aside from feeling homesick, Karina shared some other difficulties she has had with adapting to college. In fall, 2008, Karina was carrying eighteen units and she said she was feeling the stress of the heavy course load. She also struggled to understand all her different classes and professors, each with their own preferences. Finally, Karina reported trouble finding the right friends to hang around with, having been through a few different groups of people without finding the right fit.

Karina most liked doing schoolwork at the Women's Resource Center because they "make you feel so welcome." She did not like to study at the dorm because of all the comings and goings and some loud neighbors upstairs, both of which distracted her. She also has some simmering conflicts with her roommate over space and respect for each others' belongings.

Karina's "favorite person" picture was of her boyfriend. (She had snapped the picture during a recent visit home to LA.) He went to college in LA but might transfer to Fresno State in the future. Karina and her boyfriend studied together during high school, and they continued to study together, by phone, despite their separation. Karina described to us a process by which she shared exam or study questions with her boyfriend and he helped her develop answers. After discussing the answers, she would hang up, study, and then call her boyfriend back for a quiz.



The prompt asked for a picture of "something you can't live without": Karina's favorite boots

Analysis

To an even greater degree than Marcus, Karina's social work and schoolwork were woven together. Without her boyfriend's physical absence, her unique studying method could not be effective; conversely, without schoolwork (and unlimited cell phone minutes) she would lack a nightly ritual to maintain contact with her boyfriend. Karina was struggling to adapt to life away from home, and to navigate the new academic and social landscape of campus, but at least her phone studying habits enabled her to fuse the taskscapes of girlfriend and student.

Manuel

HD: "You must be busy."

M: "A little."

JS: "When do you sleep?"

M: "Good question. Um, no I do sleep from time to time. Usually Sundays."

We contacted Manuel in fall, 2008, for the Ethnography of Student Life activity, and Hank Delcore and Michael Scroggins visited him at his home in late-November.

Manuel was a highly accomplished student in his early twenties, pursuing a double major, double minor and triple certificate. He participated heavily in student activities, mostly related to his academic departments and career plans. He aspired to an advanced degree and a specific professional career.

Manuel shared a neat rented house in central Fresno with his mother and sister. He did schoolwork either at the kitchen table or at his desk in his bedroom. In the kitchen, he could comfortably lay all his things out in front of him. "I'm the kind of person who needs to get everything out," he told us. Also, the Internet connection was better in the kitchen, he said, "So you'll find me here at like one, two, three in the morning." Alternatively, he used the desk in his bedroom, which faced a blank white wall and cut down on distractions. For some types of homework, he listened to music or put in a DVD for background noise; if "studying" (e.g. reviewing notes for a test), he needed silence. Sometimes he read under a favorite tree on the lawn near the Joyal Building on campus. His other favorite study places on campus were both somewhat isolated: the courtyard at Joyal and a room upstairs at the Student Recreation Center where few students went.

Manuel left home for campus each morning at about 9am. After classes, he went to work at an after school program. He usually arrived home at 8pm after work and dinner out somewhere. Sometimes, he went back out to help his mother with her cleaning business. On those days, he might get home at 1am and would often bathe and then study into the wee hours of the morning.

Manuel came to the US from Mexico as a teenager, in advance of his mother and sister. After having been a "C" student in Mexico, he excelled at studies in Fresno and was active in high school extracurricular activities. His picture of his "favorite person" was his younger cousin, in whose life he was very involved: "I'm setting the pathway for my little cousin." In other respects, Manuel was a leader in his family. He was its only fully bilingual member, and he noted at one point that "even here [at home] I'm the disciplinary person." While he was accepted to an Ivy League college, he could not make the financial end of things work. He resisted applying to Fresno State because he wanted to leave town, but in the end he did apply – on the last possible day. However, he also admitted that staying in Fresno worked well given his family obligations.

Analysis

While the tempo of the academic term was the controlling variable in Manuel's near term taskscape, his family obligations conditioned his longer term tasks, providing constraints but also motivations. His taskscapes intersected in many ways. When he helped with his mother's cleaning business, he fused the tasks of son and worker. Likewise, his scholarly activities and aspirations sprang from both his own ambitions and those he had for his cousin.

Important family tasks and responsibilities commonly performed by the parents of second generation students are sometimes shouldered by first generation college students, particularly in immigrant families. Manuel clearly up-ended a common stereotype of students as fun-loving and free to pursue entertainment over schoolwork.



The courtyard at the Joyal Building



Manuel's desk in his bedroom

John

We contacted John in fall, 2008, for the Ethnography of Student Life. Michael Scroggins and Alecia Barela visited him at

home late in December, 2008.

John was a full-time student and a full-time employee: he worked forty hours a week while taking twelve units (four classes) in his first semester at Fresno State. He had just transferred from Fresno City College; before that, he attended Heald College. A management major, he had most of his junior and senior years yet to finish. When asked if he considered pursuing a higher degree at Fresno State after completing his BA, he responded that it would depend on the price.

Despite the presence of an adjacent room with couches and chairs, our interview with John was conducted in his living room. We stood around his pool table, which was covered with a variety of items, including papers and books. John did not offer to show us any other rooms, but when asked, he took us to the kitchen where the distinguishing feature was a large quantity of liquor bottles in various locations and states of emptiness.

John's favorite place to study was in the kitchen in a booth built by his grandfather. He liked to study there because there were few distractions, even though his roommates and dogs wandered in and out. John expressed a very precise preference for doing schoolwork at home, around 6pm in the evenings and on Sunday nights.



John's study spot: the booth his grandfather built in the kitchen

When asked if he ever did schoolwork at work, John seemed a bit hesitant to reply. After a bit of conversation, he confessed that he tried to study as much as possible at work and spent at least an hour and a half per work day doing school-related research on the Internet from his employer's desk. He also studied during lunch breaks at work. Though John's schoolwork imposed upon his employer's time, the reverse was not true: John said that even when work got hectic, it did not get in the way of school. He could recall only one instance in which he had had to bring work home with him.

John used the Fresno City College library when he was a student there, but he said that he did not go to the Fresno State library because it was closed and he had no need to use it. He reported using Google Scholar for research, but he also accessed JSTOR via the library website.

On a day to day basis, John carried his wallet, a Samsung Blackjack with a full keyboard, a USB drive, two sets of keys and an HP laptop running Windows Vista. During the interview we

noticed the keyboard on John's Samsung Blackjack was heavily worn. Based on this observation, we asked John if he ever text messaged at work or in class. He answered that he texted at work, but at school it depended on the course and how much he needed to focus on the class itself. For example, he said he never texted in statistics class but did so heavily in biology. John reported that he often used text messaging to coordinate group projects with classmates and to ask his classmates about assignments and due dates.



Analysis

John's lives as employee and student clearly overlapped. He studied regularly at home and at work, though his hesitancy to discuss this practice may register his sense that he ought not. (His ability to study at work was probably lucky, as many students have jobs that preclude this.)

Fresno State was a natural extension of John's career plans: attending college was a business decision. He moved from Heald College to Fresno City College to Fresno State as he advanced in his career. To say that his full time work schedule competed with schoolwork would be an imperfect assessment, since his motivations for attending college in the first place were closely tied to work.



Friends of Jack, a spring, 2009, day mapper



Maria, a day mapper in spring, 2009, took this picture in class. It bugged Maria that people go to class and text message instead of paying attention. They ask for help when an exam comes up, she said, and they do not know what is going on in general. A boy in one of her classes was known to text a lot and would come into class with no pencil or paper. One day the teacher said there was an exam. Maria said the student "freaked out." When he asked for help, the teacher replied, "Why don't you ask your phone?" Maria laughed recounting the episode.

Conclusion

Technology has a double meaning for the library. Library web access means that the library is everywhere students' lives unfold. We found students accessing library resources via the Web everywhere from the workplace to the garage, and all over campus. At the same time, students use the library to accomplish a variety of social ends. They use it as a place of scholarship and research, but also as a place to meet up with friends and family (either in person or via communication technologies), access services such as copy and print, visit Starbucks, hang out and relax. As technology has made the library ubiquitous, it has also allowed the physical library space to accommodate a variety of tasksapes.

However, students do not come to the library as generic users. As the tasksapes above show, their experiences of student life and library services are subject to a variety of individual and social factors: variations in age, ability and disability, the need to work off campus, busy home lives, the struggle to find space and time for the school-related tasks and the pervasiveness of cars and commuting. Christine's needs were conditioned by her personal inclinations, but also her age, disability and residence far from campus. Her experience of campus was far different from Marcus, whose residence nearby, traditional college age and personal habits – like visiting the Rec Center – kept him closely integrated with campus life and in frequent, easy contact with the library.

While the sample of Fresno State tasksapes given above stresses the individual frame, we believe that the impact of larger structures of inequality on student tasksapes remains under-explored – including in this report. In particular, we believe it is worth probing the ways that structures of class and gender find expression in student tasksapes. Students who live at home, in close quarters with their birth families, may find their school tasksapes impacted by space limitations, shared bedrooms and

younger siblings. Women, in particular, may find less physical and social space at home to accomplish school-related tasks, especially when they hail from families whose members grant male scholarship more importance or expect more domestic labor from daughters. While we lack the data to fully unravel the impact of unequal social structures on student taskscapes, we encourage future efforts to see students and their taskscapes in a larger social context.

Recommendations

General

We view as positive the relative openness of the new library building to the whole of student life, and encourage the library to continue to seek ways to allow students to attend to their varied taskscapes.

The inclusion of Starbucks in the library is positive in that it facilitates students' ability to fulfill social as well as physical needs. Students use the space of Starbucks and near it as a place to congregate and talk, eat and drink. Since food options on campus are relatively limited, the library should explore other ways to make the library food-friendly.

Services

Extended hours of library operation are crucial to accommodating the packed and sometimes chaotic demands of student lives and schedules.

Some students have their last classes of the week on Wednesday or Thursday. There are some indications that their studying tails off toward the end of the week. Conversely, students expend more time on campus and doing schoolwork on Monday through Wednesday. Library outreach and services could be more concentrated early in the week to achieve more efficient use of resources and to coincide with the weekly cycle of student scholarship.

During the closure of the physical library, when books were at a remote location, the library fielded a service whereby users could request an item online and have it delivered to a temporary library circulation point on campus for pick up. When the new library building opened, the library retained the request/pick-up system. The request/pick-up system should remain a part of library services, given the limited time some users have on campus.

Outreach

Not all students see the library as a place friendly to their many taskscapes. The library should undertake measures that draw more students in with the promise of diverse spaces. For example, the library could be more deliberate in branding the character of specific interior spaces. The new "brands" could be used to market the library around campus.

- The space immediately outside Starbucks: *The Café*
- Studio 2: "Group Time" (see below)
- South Wing: "Quiet Study"
- A space not now designated "quiet," perhaps the space outside Starbucks: "Hyde Park" (a place where student clubs and causes are welcome).

Etc.

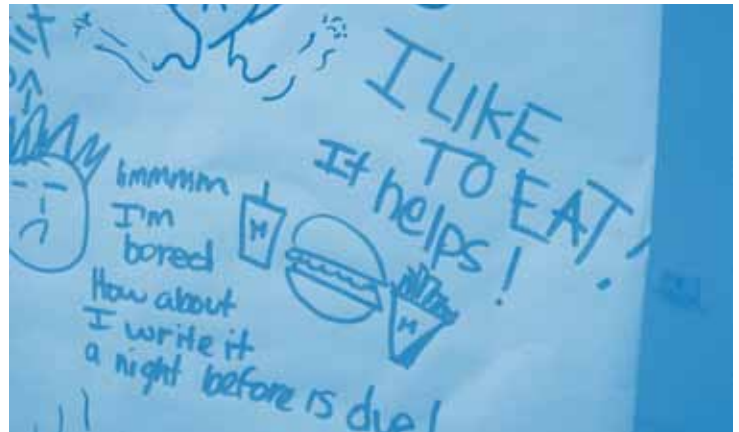
The library should seek to reach out to students more during "crunch times" (particularly, midterms and finals), when students feel the compression and conflict among their taskscapes most acutely. The following measures would be most likely to succeed at drawing more students to library services if undertaken during crunch times:

- Extended food options for students who are staying on campus at times when they disrupt their normal eating habits.
- A portable reference desk.
- A marketing campaign aimed at increasing website and foot traffic during crunch times.

Assignments: Student Frustration, Uncertainty and Stress

Assignments: Student Frustration, Uncertainty and Stress

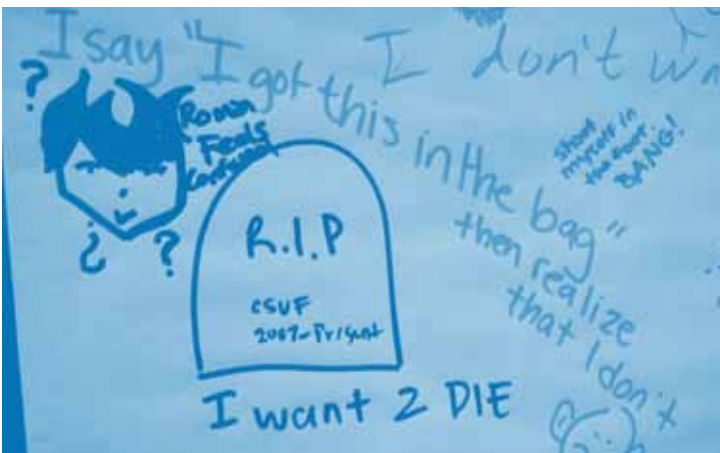
Students find research and writing assignments to be a serious source of stress. At the start of the study, we invited students passing through the Free Speech Area to draw, on a large poster board, how they felt when they had a paper to write. While some pictures represented positive feelings (e.g. a happy face with the caption, “sexy and smart”), the vast majority of drawings conveyed a range of negative emotions, such as sadness, discouragement, boredom, anger and confusion.



Detail from the exercise, “Draw How You Feel When You Write a Paper”

We also found that student day mappers and ethnography participants often mentioned stress and efforts at stress relief. In the Interior Design workshops, students built concern with stress into their designs. Four of the six student designs for a collaborative, creative space included a water feature, like a water fountain, meant to provide relaxation, and three designs included a gym or “stress room” for working off tension (see Interior Spaces: Design of Studio 2).

Below, we review some findings from three design exercises and probe in more detail some student views about the frustration, uncertainty and stress that come with research and writing assignments.



Running Chicken: Uncertainty, Frustration and “Having a Life”



Running Chicken



Running Chicken Debrief

Themes:

- Uncertainty
- Frustration
- School assignments affect other areas of life (not just vice versa)

In March, 2009, we held a Bootlegging workshop focused on the process of writing research papers. One student skit, “Running Chicken,” opened up a candid discussion of stress and frustration and the way assignments affect students’ lives outside of school.

In the skit, five students performed interactions at a restaurant called “Running Chicken.” At Running Chicken, patrons were made to run on a treadmill before they could eat. In the skit, the student playing patron went along with the odd demands of the hostess as she led him to the treadmill, though his exasperation grew as his waitress demanded he run even faster to burn enough calories to eat what he had ordered. The skit ended with the patron going to have a beer with chef.

In the debriefing, the performers and audience members offered interpretations of the skit’s meaning. One student skit-maker, Alecia, said that the skit represented the way frustration from writing assignments bled over into the rest of life. One might want something simple (like the patron who just wanted

some chicken), yet, in the wake of hours spent on a research paper, nothing seemed to make sense and even small obstacles became frustrating: “I don’t know why this damn stop sign is right here, you know, you’re driving, and you’re just pissed at everything and you’re just so frustrated after you spend hours writing it and it’s just kinda like nothing makes sense, kinda like our restaurant kinda didn’t make sense.”

With some probing, Alecia’s skit-mates agreed that the frustration and disorientation she described existed not just after, but also before and during the writing process. Alecia’s skit-mate, Ram, who played the disoriented patron, noted that frustration about unfinished school work can permeate one’s life: “Because we don’t have time...to sit down and finish it from A to Z, so we gotta finish part of it and then get on with the rest of our lives, and the rest of our lives is incomplete because of that one thing. It keeps nagging. It’s just frustrating.”

Alecia agreed and added that when she was frustrated by an unfinished paper, people around her did not know why she was so frustrated and “throwing pencils around”: “Your parents are like, what the hell’s wrong with you.”

An audience member, Bill, read yet another meaning into the skit: “The whole process of research is like the restaurant. You think it’s gonna be all simple and easy and you find that it’s really complicated, maybe so complicated that you might not be able to handle it or process it, and then at the end, you celebrate, you have the beer, you know.”

As revealed above, the themes of the discussion revolved around frustration, uncertainty (“you think it’s gonna be all simple and easy and you find that it’s really complicated”) and the intertwining of student scholarship with other taskscapes of student life. Driving around town (perhaps to work), being a family member and simply living one’s life are all affected by the pressure of incomplete assignments and looming deadlines.

Waiting Till the Last Minute: The Student Analysis



Themes:

- Procrastination has many sources, including wanting to “have a life,” but also poor planning
- Students can be self-critical about waiting till the last minute

How much of student stress is self-inflicted? At the same Bootlegging workshop, another skit by some of the same participants opened up the contentious topic of procrastination and the obstacles that arise when one waits till the last minute. In the skit and ensuing discussion, the students offered many reasons for waiting till the last minute, but they differed on the degree of choice students have. Some were hard on themselves and their peers for not planning ahead better, others less so.

In the skit, “DVD Drama,” a student approached a librarian at an unnamed service point and asked for help getting a DVD that she needed for an assignment due the next day. The student was aware that the library had the DVD and that it had been checked out. As the student explained her situation, the librarian assumed a disdainful posture, with arms crossed and a look of smug condescension on her face. “Waited till the last minute, didn’t you?” she asked. The student defended herself by saying that she had been trying to get the DVD for a while but it had been out for some time. The librarian offered to recall the item, but noted that this would take ten days. “You should have came ten days ago,” the librarian commented. Over the student’s defensive protests, the librarian continued: “Well, you know, unfortunately students are very, very, very irresponsible and they don’t return it on time. It’s actually late.”⁹ She also ruled out inter-library loan since the student needed it immediately. To the student’s appeals for help, the librarian – smiling smugly the whole time – repeatedly said that there was nothing she could do, and recommended that the student ask her friends if any of them had the item. As the student retreated, she thanked the librarian, who commented, smiling, “Start on it earlier, bye,” to laughter from the audience. (The student went on to find that a friend had the DVD, but she lacked a TV and the two were forced to go to a bar to watch it. There they encountered the professor who gave the assignment, who protested that their video was interrupting his football game. He demanded that the student give her presentation on the spot.)

The librarian in the skit came off as condescending and unsympathetic. Probed about the librarian’s role, the woman who played librarian in the skit noted that, indeed, sometimes “librarians” were not that helpful, especially when pressed for time. Interestingly, though, she noted that last minute situations were probably annoying for librarians and anyone else a student called on at the last minute. The student who played “student” in the skit emphasized that the plight of library items being out was real, especially when a professor recommended one item to an entire class.

However, the bulk of the debriefing discussion revolved around the question of the student’s own culpability for her predicament. Audience members criticized the student in the

skit for not planning ahead and for relying too much on others. The skit-makers themselves also emphasized the pitfalls of waiting till the last minute. As the discussion broadened out to the last minute phenomenon in general, one student offered the view that with so many classes and assignments, students simply had to work on them in the order they were due, and that this meant that any given assignment got pushed to the last minute. Delcore then asked every participant in the room to respond to the question: “Why do students wait till the last minute?” The answers were:



- “Personal issues”
- “Lack of time”
- “They try and have lives”
- “They don’t prioritize”
- “Other commitments”
- “A lot of classes and a lot of work to do and maybe working on the outside, too”
- “Like she said, trying to have a life, it’s not just school stuff”
- “It’s part of the norm”

So to the Bootlegging participants, the last minute phenomenon produces stress, but its sources are complicated and blame for the resulting stress is distributed. To some participants, last minute assignments are a necessity or simply “the norm,” to others, professors are implicated in the way they structure assignments and put pressure on specific library resources. Yet others blamed students themselves for not being more conscientious. Librarians may be less than helpful, as one participant said, but they too are put in a tight spot by last minute demands.

The Faculty Role

Themes:

- Students expect trouble when doing research and writing assignments
- Problematic faculty prompts can fuel a “who cares?” attitude

The preceding skit was not the only time professors were implicated as a source of student stress and uncertainty. We

⁹ Fresno State students cannot check out Madden Library DVD holdings, though faculty members can. While the skit librarian’s specific accusation of student irresponsibility regarding the overdue DVD is technically unfounded, the important point made by the exchange is the students’ portrayal of a scowling, judgmental librarian and its implications for their attitudes toward the library.

know from our library colleagues that faculty assignment prompts are sometimes flawed. Any librarian who has worked the Reference Desk can attest to the existence of vague prompts or “treasure hunt” assignments that lead to the same resource, which cannot possibly satisfy every student.

We probed the role of uncertainty and stress produced by faculty prompts in a Student Theatre workshop in February, 2009. In response, one group of students produced the skit, “Just Google It.”

Delcore, the moderator, set up a situation in which a professor gave an unclear assignment to her class. Under Delcore’s direction, the class tried unsuccessfully to get clarification. After the professor left, one of the students suggested they go to the library. From there, Delcore turned the direction over to three other students, requiring that the conclusion include the library and that the students in the skit manage to complete the assignment.



Google It

In the student-directed conclusion, two students cut the class in question. They were at Starbucks ordering drinks when two classmates from Delcore’s set-up scene ran into them and told them about the paper. The four proceeded to the library. A male student, acting as leader, accessed the library catalog online but failed to find any matches for their search terms (“culture” and “Shakespeare”). Then, the power failed. (Our campus had a real power outage shortly before the workshop.) The leader complained that they had received no help from the library or the campus (“they can’t even run power to this place”). A female classmate suggested they go home and use the Internet. The leader wondered aloud if the resulting information would be reliable, then resolved his own dilemma: “Does it even matter? She won’t care. She’s crazy anyway.” “Yeah,” his female classmate replied, “she didn’t tell us anything. We’ll just Google it.” The skit ended with the leader saying, “Yeah, that sounds good, let’s go.”

The student-directed second half of “Just Google It” could have gone many ways. The classmates could have found what they needed at the library. Instead, the three student directors threw a troublesome power outage in the way of the struggling classmates, perhaps registering the reality that many students routinely face difficulty and struggle with assignments.¹⁰

Faced with the outage, the students could have agreed to return when the power was back on, or they could have searched the library catalog more from home. Instead, the directors had them decide to go home and consult the Web, risking reliance on what they knew could be faulty sources. The directors thus implied that “the library” was primarily a physical location: once the players returned home, the WWW, not the online library catalog, beckoned. (Notably, in the minutes before the final version of the skit was staged, Delcore wondered aloud if, in the skit, the players might access the library catalog from home; there was no shortage of reminder that this was a plot option.)

Most to the point for this section, unclear assignments seemed to fuel a “who cares” attitude among the students. The directors told the players that in the conclusion, they were to go home and use the Internet. However, the group leader and his female classmate improvised most of the lines at the end of the skit. They justified going home and simply “Googling it” by blaming the professor for being unclear (“she didn’t tell us anything”) and “crazy.” Thus, faculty lack of clarity in assignments became a justification for what students suspected to be sloppy, perhaps inaccurate work.

Incidentally, Starbucks appeared in the skit as self-contained and efficient. The students ordering drinks at the start of the student-directed conclusion were quickly and efficiently served, leaving with that they came for – in stark contrast to the uncertainty, frustration and angst surrounding the assignment and the library.

“Nightmare Professor”

Themes:

- Seemingly capricious professors add to student stress
- Group work is complicated and frustrating



Also in February, 2009, Mullooly moderated a Student Theatre workshop in which students staged a skit, “Nightmare Professor.” “Nightmare Professor” registered the stress and chaos that could ensue when group assignments, difficult class mates and capricious professors collide. In the skit, four students met to discuss a group assignment about WWII. Four students acted as directors. As the students began their meeting, a director intervened to tell some of the group members to act out by ranting about personal concerns or simply criticizing the group leader. The leader, who identified herself in the skit as an Honors College student, reacted by offering to do the whole assignment and simply attach everyone’s name to it. Mullooly, also playing director, had the professor enter because he was suspicious that the group was cheating. The professor entered,

¹⁰ A caveat to this conclusion involves the constraints of the theatre exercise itself. The students were presenting a short drama, and so they included a good deal of *drama*, with a classic tension-resolution arc.

ensured they were not cheating, then told them that they had fifteen minutes to present something – over student objections that class was the next day. Mullooly then announced, in a PA-style voice, “The library will be closing in two minutes.” The group reacted by sending a member to the library to get a book, but one of the student directors instructed the student to go get a snack instead (breaking the fourth wall, the student on the errand drafted an audience member to play fast food worker). The student returned with snack but without book. Mullooly then instructed the group to begin plagiarizing. The Honors student immediately said she would look everything up on the Web via her iPhone. One group mate suggested consulting Wikipedia while another asked to use the iPhone to check her MySpace. Mullooly upped the ante by saying that a meteor was hurtling toward the earth. The atmosphere in the meeting became increasingly chaotic, and a student director had the professor re-enter and demand the paper. The group leader, who had been fretting about her grades and scholarship, started criticizing her team mates to the professor. A student director told the professor to “take away points for her phone.” The professor complied, improvising, “You play on your phone, you should have been working.” The meeting deteriorated into chaos and accusations, and Mullooly told the professor to give the snack-fetching student an A, prompting the Honors student to lobby the professor for an extension. A member of the group then asked the professor, “Do you sleep with students?” at which Mullooly called a halt to the skit.

In “Nightmare Professor,” Mullooly and the student directors conspired to create a chaotic and conflict-ridden atmosphere. However, the student playing professor improvised moving the due date for the assignment radically forward of his own accord. In the debriefing, one of the skit actors commented that the professor in the skit was like the “nightmare professor,” and wondered if his role might represent a perception of professors having “variable due dates.”

The Cell Phone Connection

As indicated above, in “DVD Drama,” students are aware of ways that their own practices contribute to stressful situations. In a Bootlegging workshop in March, 2009, four students staged a skit in which classmates called repeatedly among themselves, struggling to fix a location to meet about an assignment. The calls occurred at the very moment that the meeting was scheduled, but the students were at odds about where to meet – a computer lab, the Student Union or Starbucks. For nearly three minutes, the students called back and forth among themselves on their cell phones. Despite their efforts, they all ended up in different locations: the lab, the Student Union, Starbucks and broken down on the freeway. The conclusion of the skit – with one group member riding his bike out to the freeway to help his friend – implied that the meeting never occurred.

In the debriefing, the players and their audience noted that cell phones encourage last minute communication. One audience member said the skit captured “the stresses of trying to confer with everyone else, trying to get everything done at the same location.” “Happens every day,” she added. Another audience member commented: “It appears that they didn’t give each other enough time to actually meet at the actual place. They waited till the last minute.” Moderator Delcore asked if he had experienced this kind of situation in his student life. “Everyday all the time,” he replied.

Recommendations

Services

The Madden Library currently offers a variety of ways that students can seek help from librarians, including IM, phone, and (at this writing) a new text-messaging option linked to the IM system. The library should continue and extend these initiatives whenever possible as they accommodate the reality of ubiquitous computing via laptops and smartphones, as well as the harried schedules of many students.

We recommend institutionalizing the presence of a manned Welcome Desk, which was first employed when the new library building opened. The permanent Welcome Desk should be signed to encourage use (e.g. “Ask Here,” “Need Help?” or “Stressed? We Can Help”). If staffing limits impinge on manning the Welcome Desk, then prioritize crunch times, when some students are under the most stress or may enter the library for the first time.

The Madden Library offers a variety of tools that can potentially address stress over research, writing and time constraints. The Assignment Research Calculator helps students calculate when they should accomplish certain tasks given a particular deadline, and LibGuides orient students to resources for specific subject areas. However, the tools available to students need to be better-publicized, through marketing campaigns (see below), library instruction or faculty (e.g. a campaign for inclusion of library study tools into course syllabi).

Outreach

Library marketing to students should recognize the reality of student stress and frustration to publicize ways the library can help.

- Outreach efforts should use student folk terms like “stress,” “confusion,” “frustration” and “having a life” to signal to students that librarians understand them. Phrases that cut to the core of student concerns include: “Confused by an assignment?,” “Stressed out?,” “Short on time?” and “Don’t let stress ruin your life.”
- Outreach efforts that use folk terms related to stress, uncertainty and frustration should be redoubled during crunch times like midterms and finals week.
- The library website offers some excellent opportunities to direct students to the right library services. During crunch times, a library website tile or pop-up that says something like, “Stressed??? We can help!” might increase library usage.

The library should redouble efforts to work with faculty to improve the nature of assignment prompts. Faculty outreach could occur through the librarians assigned to specific colleges. However, a “Library Fellows” program provides another option. A Library Fellows program would involve a selection process that draws in faculty who are particularly engaged in library-related issues. Library Fellows would have access to library-sponsored professional development opportunities, and in exchange, they would become point-people for library outreach to faculty in the colleges on issues like assignment prompt design.

What Students Know About the Library

What Students Know About the Library

In our research, we have had contact with users who possess a wide diversity of knowledge about the library and its services, from the extremely savvy to those with little or faulty knowledge about academic libraries. In Appendix D, we include some recommended questions for a large-scale survey that the library can administer to quantify the diversity of library knowledge among users. Here, we focus on a subset of users who lack significant knowledge about academic libraries.

Lack of knowledge about the library is not simply a blank space in users' experiences. Rather, all users have knowledge about the library. More precisely, all users have expectations about libraries that they use in the breach, to get by, when they interact with library services. We argue that much of the disjuncture that we observed between library faculty/staff and student users comes from a mismatch of expectations.

- The next few sections are structured by the following arc:
- Traditional expectations about academic libraries are infused with attitudes and practices rooted in the history of libraries.
- Some users in the student population are ignorant about the norms, purposes and functioning of an academic library. In interactions with the library, such users carry with them the expectations developed in a lifetime of experiences with retail establishments and standard-setting web services like Google and Facebook.
- Users often experience the disjuncture between their expectations and the library/university reality as puzzling and disappointing; often, they feel poorly served.

Reverential Roots of the Modern Library

Before academic libraries became a commonplace feature of universities, the library as a space of scholarship and research had already taken shape in, and been formed by, the monastery (Setton 1960). Many of the common features of libraries, such as hard wooden chairs and benches, tightly controlled access to resources and silence, originated in monastic libraries and were carried over into the academic library.

One holdover from the library's monastic origins was the celibacy requirement for librarians. Celibacy was required, by statute, of the librarian at Oxford until 1813, and the hiring preference was for a man under the age of 40 who would otherwise be suitable in temperament for the priesthood. These rules were later amended and by the mid-nineteenth century, the Bodleian librarian was allowed to marry.

Intended as a repository of rare material to be accessed only by those who had been properly vetted, the reading room was available to those fully accepted in the academic community. In a move mirroring the monastic focus on sacred texts, priority was placed on those materials which were not in common circulation or which required the expertise of a specialist to elucidate.

The vestiges of the monastery continue to inform academic libraries in the form of reference desks, reading rooms, special collections, spaces devoted to meditative silence and the grand scale of library architecture. Most importantly, the strategies developed to counteract the most profane act in the academy, plagiarism, were developed in monastic libraries (Setton 1960).

Thus, academic libraries have traditionally been surrounded by an air of reverence. Most librarians and some users alike partake in the practices of the reverential library naturally, as a result of enculturation, and hence their expectations about libraries co-exist comfortably with library realities. But recently, reverential assumptions about libraries have been shaken by a number of social and technological trends, such as the Google Books project. American historian Robert Darnton, a pioneer in the history of the book, recently analyzed Google Books and related initiatives in an article about the settlement between Google and some authors and publishers who had sued over some aspects of Google Books.

In the nineteenth century...[the fields of knowledge we know today] metamorphosed into departments of universities, and by the twentieth century they had left their mark on campuses—chemistry housed in this building, physics in that one, history here, mathematics there, and at the center of it all, a library, usually designed to look like a temple of learning.... When businesses like Google look at libraries, they do not merely see temples of learning. They see potential assets or what they call “content,” ready to be mined. Built up over centuries at an enormous expenditure of money and labor, library collections can be digitized en masse at relatively little cost—millions of dollars, certainly, but little compared to the investment that went into them (Darnton 2009, paragraph 17).

Darnton accurately reflects the traditional reverential library model, referring to libraries as “temples of learning.” He is critical of Google's approach to books and knowledge, for some well-argued practical reasons, but also for some cultural reasons that have to do with prevailing (reverential) assumptions about libraries.

Reverence, Reference and the Spaces In-Between

Whether or not we share the nervousness of Darnton and others, we are confronted with a reality of student expectations that are, in whole or in part, devoid of reverential assumptions. We can represent the actual range of student user expectations by a continuum. On one end of continuum, we find a Hyper-Reverential approach to the academic library, and on opposite end, a Retail orientation. Both extremes of the continuum result in a clash of expectations with the academic library.

Continuum of Student Approaches to the Library

Student Perception of Library	Hyper-Reverential	Reference/Reverence	Retail-Oriented
Librarian Perception of Student	Obsequious/Ignorant	Appropriate	Rude/Ignorant

The middle of the continuum, Reference/Reverence, represents student expectations and behaviors that mesh most comfortably with academic libraries. Members of this group are familiar with the services that academic libraries provide and how to behave when confronted with things like Reference Desks, online databases and so on. Their library use is thus marked by both willingness, and ability, to engage library services as they are currently presented, with a minimal amount of confusion or frustration. They also hold at least some reverential attitudes toward academic libraries and librarians. They engage the library's physical or online services with an expectation of obtaining useful or trustworthy information, conscious of being engaged in a scholarly activity that is set off and distinct from other activities, such as shopping or surfing the Web. Consequently, their behavior is almost completely invisible to the extent that it represents routine, ordinary behavior where the expectations of librarian and student are smoothly negotiated. Reference/Reverence behavior would be the sort of behavior that is implied and occasionally taught overtly in first year experience classes or the sort of behavior exhibited by a second generation college student or a graduate student who is well familiar with his role vis-à-vis a librarian.

At the left pole of the continuum is a set of expectations that we characterize as Hyper-Reverential. The Hyper-Reverential lack significant experience with the norms and expectations of university life in general and academic libraries in particular – and they know it. Knowing that the academic library represents unfamiliar territory, and perceiving that none of their previous experiences apply, Hyper-Reverential students avoid the library and its services. Hyper-Reverential students are difficult to depict due to their relatively low usage of library services. We know they exist, however, by anecdotal evidence from library faculty who describe students who never approach the Reference Desk due to sheer unfamiliarity with it, or because they report being too embarrassed to do so. Most likely members of this group include students who are the first in their family to attend university. Out of concern for the Hyper-Reverential, some librarians have suggested private offices for reference consultations rather than the public desk, and our campus' First Year Experience program includes a "library study skills component" in response to this recognized need.

The opposite pole of the student continuum represents Retail-Oriented expectations. Like their Hyper-Reverential peers, the Retail-Oriented lack knowledge about the norms and practices traditionally associated with an academic library. However, unlike the Hyper-Reverential, Retail-Oriented

users approach the library by falling back on several "default settings" developed in a lifetime of face-to-face and online interactions. When they visit the library in person, they expect it (and sometimes demand it) to operate like a well-run retail establishment, like Starbucks or The Apple Store. When these users interact with the library's digital resources, they expect it to function like the now-ubiquitous standard setters of the online world: Google, Facebook, or the Apple "ecosystem" of devices, applications and services (iPods, iTunes, iPhones, the App Store, etc.). Starbucks (and other well-run retail establishments), Google and Facebook all share some common features that shape student expectations: they are extremely easy to use, they are available to you at your leisure and on your terms and they allow for easy customization; the Retail-Oriented students take these expectations to the library.

For the remainder of this section, we focus on the experiences of the Retail-Oriented students, though we suspect that many of our findings hold for the Hyper-Reverential, as well.

Student Scripts: Starbucks and Google

What would trigger a Retail orientation to an academic library? We know that some students bring to campus a sense of consumer status vis a vis the university. The consumer-based sentiment behind the phrase, "I'm paying for this, so I expect..." has crept into the student educational experience at places like Fresno State. Student self-perceptions as consumers of university services prime them for retail expectations when they enter the library. Certain specific features of the library also open it to perceptions as a retail establishment. For example, from a certain perspective, the library can be seen as a kind of multiplex infotainment destination. We know from our work that many users go to the library simply to visit Starbucks, meet friends, wait for their next class or do school work unrelated to any library holdings. The availability of the library as a hang out spot makes it one choice among the likes of Starbucks, Barnes and Noble, a restaurant with a wifi connection and so on.

The library is, in fact, a service provider. Indeed, library parlance includes the phrase, "library services." Of course, most librarians (and most campus faculty at large) would argue that their educational efforts for students are not the same as services offered in retail spaces. Still, if many students lack the Reference/Reverence orientation to libraries, and subtly perceive the library as a kind of retail experience, then they are apt to conflate – on some level – the services they receive from, say, a librarian, with the services they receive at a retail establishment.

Finally, a user can actually expect to leave the library with a physical product (a book, some Xeroxed pages, a paper they have printed out), just like any other retail establishment. In the case of books, the fact that that the product is borrowed is less material than the physical fact of having entered-acquired-left, a common flow of events in any retail establishment.

Our colleagues at the library have provided indirect confirmation that retail scripts influence the way students interact with the library. In September, 2008, we held a workshop for library faculty and staff during which we solicited ideas for the direction of this study. In one exercise, we asked the participants to perform skits of students interacting with the library. Several skits included student characters who did not know the differences among various library service points. For example, three library faculty and staff members enacted a group of students hanging out at the Starbucks in the new (then yet to be opened) library. One “student” remembered that they had a paper due the next day and they headed for the nearest manned library desk, reasoning, in the words of another “student,” “If they’re behind a desk they should know.” In the debriefing, several library faculty affirmed that students sometimes seem puzzled by the fact that people manning different service desks at the library cannot accomplish the same tasks (a finding echoed by Foster and Gibbons 2007).

An expectation of interchangeable service functions is typical of the user experience in many retail establishments. Customers expect retail employees to help them, not simply send them away to another part of the store. In many retail establishments, an employee who cannot provide the exact service desired will personally conduct the customer to a co-worker who can. If the customer seeks something that is not close by, employees in places as diverse as supermarkets, bookstores and home improvement supply stores will often walk customers directly to the location of the item or service they seek. These service patterns are not universal, but they are widespread enough that they have set service expectations for many of us.

Some of our clearest evidence of a retail orientation to the library among students came during the Floating Reference exercise. We placed a mock-up of a library reference desk in the Free Speech Area, a campus space with heavy foot traffic. Student assistants flagged down passers-by and asked them to enact the roles of reference librarian and student user trying to get help with a research paper.

Some Floating Reference participants expressed uncertainty about reference desk functions. Some enacted skits about job applications and letters of reference, while others used it as a general information booth (consistent with the real experiences of campus reference librarians).¹¹ However, most participants in the Floating Reference exercise enacted librarian-student scenes. The students playing librarian roles commonly displayed a “customer service” attitude, smiling, saying things like, “How can

I help you?” and trying to be as helpful as possible. Some even went so far as to go to the imaginary stacks to get books for the “student.”

In one interaction, the user in the “librarian” role began by asking, “How can we help you?” The student asked for help making an Internet connection with the laptop that he had checked out from the library. The reference librarian said that he would like to help, but explained that it was best if the student returned to the “Laptop Lending Program” where he got the laptop in the first place. The “librarian” then turned to the camera and said, playfully, “See, that’s how I get rid of the customer.”

In another interaction, a student who identified himself as a teaching assistant in real life played the role of reference librarian. In the course of helping the “student,” the librarian displayed strong knowledge of library services online, mentioning EBSCO Online, the availability of library help with citation formats and the dangers of plagiarism. Yet, at the very start of the interaction, as the “student” sat down, this library-savvy TA-turned-“reference librarian” greeted him with, “Hi, how’re you doing sir? How can I help you today?” – his pitch and tone dead-on for a helpful and attentive retail store employee.



Evidence of retail orientations emerged from yet other research activities, as well. Nearly all the students we spoke to prior to February, 2009, expressed some excitement about the opening of the new library building. In James’ Day Mapping debriefing interview in fall, 2008, he said that nothing about Fresno State stood out from the city at large, except the nearly-completed “new, modern” library. James noted the presence of Starbucks as evidence of the new library’s modern status. “That’s like everyone’s lifeblood,” he said, claiming that in class, 40% of people have a Starbucks cup in hand. Probed further about the meaning of “modern” library, James continued:

Modern meaning that, like, everything pretty much revolves around being online. Like, it’s convenient. Like, being able to check your bank account online, and paying your bills online, and like, I find that more and more places are having wireless Internet.... And I’ve seen some, like, artist’s renderings of how the interior’s gonna look like, and like besides like the furniture and stuff like that, they will have like these drawings of like students, and, almost every student in the drawing has a laptop in front of them. You know what I mean? That’s my image of modern.

¹¹ Student uncertainties about the term “reference desk” also emerged in other research contexts: in an Interior Design workshop, one student used the term “reference desk” to describe her proposal for a desk that maintained reservations for group study rooms.

James anticipated the library as a desirable addition to campus not because it would be a “temple of knowledge,” or a place of reverence, but because it would partake in (to him) the quintessential markers of modernity: Starbucks, ubiquitous computing and the convenience afforded by wireless communication.

The Gap between Expectations and Realities

During fieldwork and interviews, students referenced the relative ease of searching for and citing online journal articles compared to the points against books: the physical encumbrance of trekking to the library, talking to humans, leafing through pages and becoming responsible for a physical artifact. Further, during a Bootlegging workshop, the desire for “ease” was demonstrated by a group of students who designed a machine which took physical paperwork, such as class assignments and tax returns, as input and processed them into completed and corrected form. In essence, the machine applied digital norms and “ease” to physical documents.



The Ease Machine

Though “ease” is visible in the digital/physical document dichotomy, it has wider connotations involving student strategies for avoiding bureaucratic hassles and indignities. Students from the Smittcamp Honors College and the McNair Scholars Program differentiated themselves from the mass of students primarily through their avoidance of daily hassles. They cited avoidance of difficulties involving parking, impacted classes and confusing bureaucratic procedures as program benefits. It is worth noting that in contrast to the promised future benefits of these programs, the benefit of “ease” was practical, immediate and consequential. Importantly, ease does not indicate an avoidance of essential tasks, such as registration, financial aid and on-campus employment. Rather, ease indexes the avoidance of tasks that student users perceive as unnecessarily annoying and bureaucratic.

The desire for ease is a social fact with roots far beyond the university community, the library and its users. We see today heightened competition across all sectors of the economy and society, including marketing wars between churches and the continual refinement of user experience and customer service models by firms like Google and Starbucks. Our expectations of ease and convenience have perhaps never been higher. That students expressed to us a consistent emphasis on ease is merely a reflection of wider social values.

But the library is not in fact Google, Starbucks or a church (at least, not anymore). Rather, like the university at large, it

operates according to traditions and policies developed over many years, some of which make the library seem difficult, bothersome and rigid. Users often experience the disjuncture between their expectations and the library/university reality as trivial, officious busywork. Instead of the friendly, efficient, have-it-your-way Starbucks or Google, they experience puzzling situations, such as being sent, unserved, from one desk to another. Unfortunately, when a student discovers that the various “desks” at the library are not in fact commensurate, then the library can leave the same impression as a poorly-operated retail establishment. The user’s impression of the library as a poorly-run retail store may not be absolutely conscious. However, the experience, from the user’s point of view, can be similar enough to trigger the sense of unease, annoyance and aggravation that flows from being poorly served elsewhere.

The problem is that some of what student library users experience as trivial, officious busywork is not in fact trivial, officious busywork. It is part of becoming a critical thinker, learning to craft arguments, assembling information, learning to distinguish among different kinds of information produced under different conditions – in other words, learning the ropes of scholarship and information literacy. However, some of the things users experience negatively are holdovers from past times, and could bear some re-working. As Foster and Gibbons say,

[T]here is much to learn from student behavior and expectations about those aspects of libraries and their technologies that are simply outmoded. We might not want our students to use Google all the time, but giving them Google-like simplicity in the library interface—on top of functionality that supports precision searching and advanced forms of browsing—would certainly be desirable (Foster and Gibbons 2007:77).

The critical question for the library becomes: How does the library clearly differentiate itself as a center of consequential work as opposed to yet another locus of bureaucratic indignities on campus? Put another way, our challenge is to distinguish between the things that can and ought to be changed and the things that contain the core values and practices of the academic library and the university.

Conclusion

In order to better serve students, we argue that some long-standing library practices bear re-examining. With the ubiquity of online information, libraries can no longer claim status as the only or even primary gateway to information. However, academic libraries do play an indispensable role as repositories of information of a certain kind (books, especially academic monographs, and refereed journals), and expertise in information literacy. However, delivering library services effectively may require a re-working of traditional library services in order to better serve both Hyper-Reverential and Retail-Oriented students.

Recommendations

General

Self-study: Henry Madden Library faculty and staff are better equipped than anyone else to explore the legacy of library history on our campus. We recommend that the Dean of the Library lead the faculty and staff in a self-study process

focused on building collective awareness of the ways reverential assumptions condition current library norms and practices. As noted above, some library norms and practices are central to the library's mission. However, future self-study may turn up practices whose benefits are out-weighed by their costs to the student user experience.

Spatial and Way-finding

Minimize the use of terms that inhibit student comprehension of library services. For example, the "Reference Desk" could be re-signed as "Ask Here" or "Need Help?" Building on recommendations from the previous section, some signage and terms could incorporate student concerns with stress and uncertainty.

Service points could also be labeled with the specific kind of expertise of the faculty and staff present at any given time. For example, when a librarian with health science expertise is present, a sign indicating so could be posted as a way to welcome and encourage health science students to seek help there.

Explore options for spatial arrangement of library service points. Spatial arrangements that put students and librarians on the same level, or side by side, may appeal to many users. The Apple Store "Genius Bar" (<http://www.apple.com/retail/geniusbar/>) offers one model, though other models specific to library studies are also available.

Personnel

We recommend that the library establish (and actively publicize) a cadre of Student Docents. Student Docents would be trained specifically to guide fellow students to the service points and resources most relevant to their needs. Student Docents could also be trained to troubleshoot challenges like print station snafus which tend to occupy library faculty time to the distraction of their other duties.

Explore ways for service points to be multi-functional through cross-training of library faculty and staff.

Other

Explore the establishment of a social bookmarking system akin to PennTags (<http://tags.library.upenn.edu/>). Either the tags, or the raw search terms entered into library catalog search boxes, could be projected in real time on a highly visible wall section. The effect would be to make the otherwise esoteric work of searching library holdings into a public, and hence demystified, process.

Also worth exploring are opportunities for library users to network with each other in the library in real time. For example, a user could choose to enter information about the assignment on which they are working and their location in the library, which is then relayed to other users via a display board

or dialogue box at individual terminals. While Akselbo et al. (2006:42-43) found that their Danish research participants largely rejected the utility of in-library networking, the library could test the salience of such a system among Fresno State users.

Echoes of Reverence

In a Student Theatre workshop, moderator Mullooly started things off with four students receiving a research assignment. He directed them to head to the library and then turned direction over to three student directors. One director specified that the three have never been to the library and the fourth must explain the process of looking for books. The following dialogue ensued:

A: *Have you guys never been to the library???*

B: *No.*

A: *Aw! It's like if you're not religious and you don't go to church. That's my church, the library!*

B: *How do you use it?*

A: *If you guys want a book, you go to the computers and you type in a subject and it'll tell you the row. Pretend those rows are the pews in a church, alright? You gotta kneel, and when you kneel and pray, it's like reading a book, same thing.*

After the exchange above, the student directors took the skit elsewhere: as the students proceeded to Starbucks, the church parallel receded from view.

Spaces of Student Scholarship

Spaces of Student Scholarship

The kinds of spaces in which students do schoolwork are tremendously diverse. Not only do individuals have their own preferences, but schoolwork itself is diverse and an individual student may prefer different kinds of spaces for different kinds of scholarship.

Student Categories of Scholarship

We have used the terms “scholarship” and “schoolwork” as cover terms to describe the range of student practices that flow, mostly, from class requirements. We prefer “scholarship” and “schoolwork” because the other obvious term, “study,” actually has specific meanings that do not encompass all the work done by students to fulfill class and other student-related requirements.

Most students saw “studying” as something that required concentration. Hence, they included reviewing and memorizing notes before a test as “studying.” “Homework” referred to a range of things, like doing problem sets, answering questions and writing short assignments. Research, to students, usually meant some kind of information search and retrieval, often electronic but also extending to library books and other physical assets. Most students clearly distinguished between “reading” and “studying,” though some felt they required similar kinds of concentration. Finally, though writing as a category rarely came up in our conversations with students, we suspect that it holds up as a discrete category.

To some extent, student categories of scholarship register qualitative differences among the activities. However, one student felt that the distinctions students draw are based on their professors’ categories. For example, professors use the term “study for the test,” but they rarely use the word “study” in other contexts. They may, however, direct students to “do the problem set” or “do the reading.” Such usages may provide the seeds for students’ emic categories of scholarship.

We did not systematically probe student categories of scholarship. A survey based on our preliminary findings might reveal some interesting data about the way students categorize different kinds of schoolwork (see Appendix D, Survey Recommendations).

The Range of Student Spaces

During the Interior Design workshops that we conducted in Studio 2 (see below, Interior Spaces: Design of Studio 2), students generated categories of study spaces. Their categories hinged on three dichotomies, though features of some categories overlap: quiet/loud, serious/social and individual/group. Below, we apply these student-generated categories to data gathered in different research activities.

Quiet vs. Loud

Some students sought quiet spaces for tasks that required concentration. Such spaces exist all across student landscapes, from home to work to campus. When Manuel sought quiet at home, he went to his room and desk in front of a blank white wall. On campus, he liked to read under a particular tree near the Joyal Building. Will, likewise, sought quiet places like his car or garage for certain tasks.

While some students found quiet refuge on campus, these places were – from the student point of view – few and far between. We know that the library has some quiet study spaces, such as parts of the South Wing, the “cell phone booths” (which students typically use for quiet study) and group study rooms. However, in our conversations with students even after the library opening, the library rarely came up as a place for quiet scholarship.

Students consistently mentioned the Student Union as the quintessential “loud” place on campus. However, we know from observation that some students do schoolwork individually and in groups on all floors of the Student Union.

Individual vs. Group

Individual study areas correspond closely with quiet areas, and group areas are often loud areas. However, the overlap is incomplete. Some students are content to do some forms of individual schoolwork in loud areas surrounded by others. Some do individual work alone, though often breaking the quiet with music or TV. Likewise, not all loud areas are conducive to group work. One can observe groups of students at work in loud places like the Student Union or Starbucks. However, some students expressed a desire for more secluded group study areas and felt that campus, including the library, lacked such spaces (see Interior Spaces: Design of Studio 2). Several students complained that group study rooms in the library were often occupied by individual students, presumably seeking quiet/individual spaces but in turn obstructing groups seeking work spaces.

Serious vs. Social

In Interior Spaces: Design of Studio 2, we discuss how student designs of Studio 2 incorporated what some termed “serious” spaces (those where schoolwork has priority) in close proximity to “social” spaces. In individual contact with students during the Day Mapping and Ethnography of Student Life activities, we found further affirmation that study and sociality are closely linked: the serious is social and the social is serious. In particular, we discovered a variety of on-campus spaces where students did schoolwork because they found it welcoming or comfortable in some way, or because some social group tended to be present.

Christine (see Taskscapes of Student Life) cited the Services for Students with Disabilities office as a favorite on-campus space for scholarship. As an older re-entry student with learning disabilities, Christine felt out of place on campus, but found the SSD office to be comfortable and familiar. There, she was

around other students with disabilities, which made her feel more relaxed. She spent hours at the SSD office studying, eating lunch and socializing.

Freshman Karina said the Women's Resource Center was her favorite on-campus spot for scholarship; she went there for the partitioned study carrels and sometimes the soft seating. But the WRC suited her generally because she liked "small spaces but not too cluttered." More importantly, she told us, "they make you feel so comfortable." She continued:

It's not a lot of riff raff in and out, like, you have people comin' in sometimes but not often, as it would be as if you were, like, like, in the library there's a lot of bullshit goin' around or people walkin' around, gettin' up and down, or like if I'm in my room or somethin' people are in and out.¹²

In his Day Mapping exercise, James, an ROTC cadet, included a picture of the ROTC student lounge. The room has a refrigerator, sofas and computers. James preferred to use the computers there rather than carry his laptop around. On the day in question, James said he did not get much schoolwork done because a friend was there "distracting" him by talking about interesting things. However, he told us that many cadets did schoolwork in the lounge. Even after hours, cadets on an authorization list could call campus police to unlock the room, and some cadets have been known to stay in the lounge overnight working on projects.

James also offered an interesting insight on the scholarly function of Starbucks. We spoke in fall, 2008, when the only Starbucks nearby was the one at the intersection of Shaw and Woodrow Avenues. He said he visited Starbucks on winter mornings to get a warm drink. James considered Starbucks to be "a part of campus" because there were always students there studying and working on group projects.

From Chris, we learned that the minority student organization in which he served as an officer reserved a classroom on Tuesday and Thursday nights where members could go to study. He said the idea was to encourage the members to "find a balance" and to have time to study. However, the immediate impetus for the club to reserve study rooms came during the library building closure as a response to the general student need for study spaces. Even with the library open, he told us, people had trouble finding places for group work, and so the club continued to reserve a room for members after the new library opened in February, 2009.

The number of people and atmosphere in the room depended on the time of the week, according to Chris. On Tuesdays, there were more people, up to ten, and it tended to be a "study-study-study" atmosphere. On Thursdays, there were fewer people, but it "tends to be more social," he said. On the Thursday that Chris mapped, he went to the room at 9pm after a lab class, tired and ready to go home, especially since his last class day of the week was Thursday. By going, he was mostly fulfilling his duty as a club officer to look in on things, and he said he was "probably on Facebook" while he was there.



James' friend having a morning drink at Starbucks

Call Security!

A Bootlegging workshop in February, 2009, turned up some interesting themes in terms of student spaces of scholarship. We asked students to act out scenes in a library, which sparked a number of skits that dramatized conflicts over use of library spaces.



Call Security

In "Call Security," a student, presumably playing librarian, stumbled upon a student playing a video game in the library. She asked him what he was doing, and he answered, "I'm just researching." When pressed, he added, "I'm researching on games." "You don't—you don't do—you don't play video games in a library!" the librarian responded. She asked him to leave, and when he resisted, she practically screeched, "Am I gonna have to call security on you?!"

Self-Policing Fails

In another skit, a group of four students studying as a group were distracted by another student talking loudly on a cell phone nearby. He was describing a great party he recently attended: "Yeah I'm on the track team – so what? I can have fun too!" The four students asked him to quiet down or go somewhere else. "There's a cubicle box where you can talk over there," one told him. He responded that the cubicle was "too far." When the students began talking about their test, the cell phone-talker turned the tables and asked them to quiet down: "Excuse me, excuse me, I'm trying to talk loudly here!" The skit ended in a stand off.

¹² Karina could not have been referring to the Madden Library since, at the time we spoke, she had never been on campus when the library building was open.

Beleaguered

In “Beleaguered,” a librarian was caught between an elderly patron seeking help with a computer, a student listening loudly to music and another student watching a “funny” movie. At one point, the elderly patron shushed the music listener and the movie watcher told the librarian to keep things quiet. The librarian barely got a word in edgewise as the patrons alternately admonished each other and him, appealing several times to the librarian’s role as order-keeper. In the end, the librarian helped the elderly patron but ejected the other two from the library.

Are You Kidding?!

In “Are You Kidding?!”, four students studying as a group were distracted by another student snoring loudly nearby. The study group woke her and told her to be quiet. She brushed them off, and after snoring some more, she briefly woke to admonish the group for talking too loudly. One of the group then suggested they call 911, and another member of the group took out his cell phone. As he reported the incident, the sleeping student woke up and asked, indignantly, “Are you calling the security on me?! Are you kidding?!” before storming out.

Analysis

In the Call Security! series of skits, library users pursuing a variety of activities – such as group exam studying and computer use – were bothered by other users engaged in behaviors portrayed as off-limits (such as playing video games and loud cell phone-talking). Librarians appeared as order-keepers, sometimes egged on by annoyed users seeking even more order than the librarian could deliver. In the debriefing session after the skits, the students who spoke up said that while the forms of misbehavior portrayed in the skits were not particularly common, they did welcome order-keeping in the library when it was needed. At the same time, one student said:

When I think about libraries, I think about, like, the old school movies that I used to see with the librarian with the pointy glasses and she’s always like, “Shhh! SHHH! You can’t do that in the library! Shhh-shhhh.” Like that. So I don’t know, I think that everybody kinda knows that picture in the back of their brain.

It is possible that many students are ambivalent about library spaces. They want a place to do schoolwork unimpeded when it suits them and they look to librarians to keep order. But at other times, they may want to talk on their cell phones. All the while, many students probably do have the caricature of the shushy librarian with horn-rimmed glasses “in the back of their brain[s].”

Recommendations

Given the diversity of both individual student preferences and types of scholarship, the library should provide a range of spaces to ensure its place as a destination on campus.

Different kinds of spaces must be clearly signed and the range of spaces available should be included in library marketing campaigns.

The library has gained a reputation as a relatively “noisy” place; future marketing efforts should stress that the library has all kinds of spaces.

The library should consider a reservation system for at least some of the group study rooms to ensure that they are available for group study (see below, Interior Spaces: Design of Studio 2).

Interior Spaces: Design of Studio 2

Interior Spaces: Design of Studio 2

Introduction

The interior spaces of the library help structure student interaction with library services. At the same time, students are continually at work making and remaking the library interior to their liking, converting floor into study space, moving tables and chairs, appropriating group study rooms and cell phone booths as individual study rooms and so on. Student design activities on the fly are examples of the way in which we are all designers, whether or not we hold that title or are “authorized” to alter our environment. Thus, we brought three groups of student designers into Studio 2, the library’s instructional suite, for a series of design workshops. During each session, we split the group in two to perform skits and design spaces. Our goal for the workshops was to elicit student design insights that can help make the space of Studio 2 conducive to the instructional goals of the library.

Studio 2 is 60x110 feet square and consists of two large classrooms, nine smaller group study/seminar rooms, two faculty offices and an L-shaped open space that wraps around the west and north sides. The L-shaped space has 2160 square feet, with floor-to-ceiling windows along most of the outer walls and easy access to all other rooms. Instructional librarians conduct their information literacy sessions in the large classrooms. However, the librarians use a student-centered approach to instruction that involves group work among students, including group problem-solving and presentations. For example, Studio 2’s director, Monica Fusich, envisions instruction in the large class room combined with bouts of group work in the L-shaped space. Hence, she charged us with helping develop plans to make the L-shaped space conducive to collaborative, creative work by students.

Student participants offered highly consistent design insights across all three workshops. Common themes abounded, and the conclusions we draw below have broad support across multiple design sessions and, in some cases, from other research activities. The spaces students designed were highly comprehensive, including facilities for individual and group study, socializing, working out, childcare and even water features like fountains and waterfalls. Students apparently took us on our word when we encouraged them to be creative and include whatever they felt they needed in the space. However, we believe the comprehensive nature of the spaces they designed reflect the comprehensive nature of their lives. Given the opportunity, students envisioned study spaces that served – in some cases – nearly all the needs of a busy student.

We are not recommending that every feature discussed here be included in Studio 2. (Even in good budget times, we doubt the university will install a water feature in Studio 2!) We framed the workshops as being about spaces for collaborative work. Hence, the conclusions in this section can be applied to

library spaces outside of Studio 2. Also, some recommendations may not apply directly to Studio 2. For example, Studio 2 is not necessarily the best place for students to be able to reserve rooms for general group study, though we think the idea has merit. However, common features across the student-driven designs do point to some general student needs and concerns that can help future designers in their work in the library.



Student-designers at work

Feature 1: Welcome and Reservation Desk

Four student designs included a desk at the front of the space, staffed by someone who answers questions and maintains reservations for group study rooms (one design included a status board telling what rooms were available).

Students said the desk was there to make students feel welcome. One group included both a welcome desk and a red carpet leading in through the front door because, as one student said, they would make you feel “special and welcome.” The other important function of the desk was to maintain reservations for group study rooms. Several groups of students reported that they had problems acquiring library group study rooms for actual group work because such rooms are often occupied by individuals. Hence, they suggested reservations and time limits on use of group rooms.

Recommendation

Studio 2 can distinguish itself as a place friendly to collaborative work by maintaining reservations for its group study rooms. Reservations could be maintained by a staff person or student assistant who is also fulfilling other duties. Short of installing an actual desk (or red carpet), Studio 2 could include some other form of welcoming entrance.



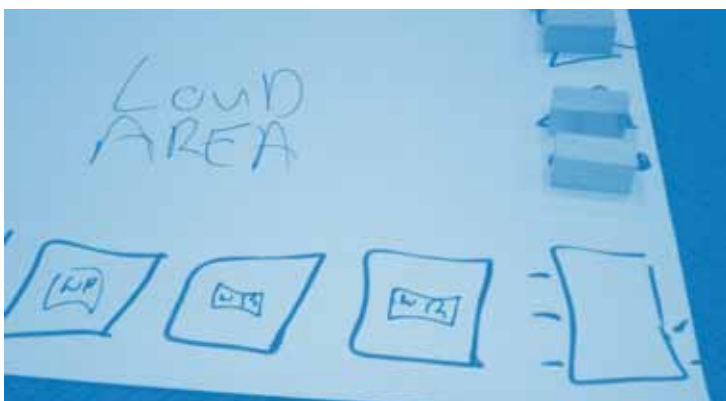
A student design includes a welcome desk (labeled “librarian”) and a red carpet, represented by the strip of pink post-it notes

Feature 2: Open Areas for Individual or Group Study

All six designs included some open space where individuals or groups could work. Each group’s vision for these spaces differed slightly. Features that came up included soft seating, round tables (to facilitate collaboration), tables with white boards built into them, traditional computer stations and computer stations designed for group work (e.g. a computer on an open table surrounded by chairs).

Recommendation

Some Studio 2 space should be configured for flexible use by individuals and groups.

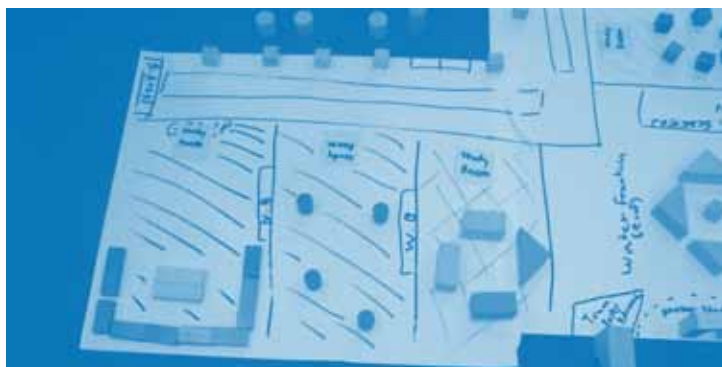


Feature 3: Group Study Rooms

All six designs included enclosed or semi-enclosed group collaboration areas. Common features of these areas were tables, chairs, computer and projection equipment (for group presentation practice) and white boards. One of the most creative designs involved color-coded rooms, each with its own unique functionality, including highly informal (soft seating, including bean bags), more structured (traditional table-and-chair set-up) and debate-friendly (with podium and moveable furniture). In most cases, students felt the rooms should come with reservations and time limits.

Recommendation

Studio 2 should include some group study areas, and consider configuring them in different ways or providing furnishings that can be adapted to multiple purposes.



A student design with color-coded rooms, each with different functionality

Feature 4: A Presentation Practice Area

Four student designs envisioned some kind of space designed for group presentation practice. Students seemed to be registering a problem with finding some place where groups can practice their presentations.

Recommendation

Given space constraints, group study rooms could include equipment and configurations conducive to group presentation practice, as detailed above (Feature 3).



Student vision of a presentation practice area

Feature 5: Lounge Area

In all six designs, students asked for a lounge area that resembled “home” or “a dorm room,” where they could relax on soft seating, enjoy magazines and newspapers, watch TV, eat and socialize. Students’ explicit rationale for the social area rested in the contention that they needed a place to relax and break from studying before going back to work recharged and ready.

Though students did not state so explicitly, we believe that the demand for a lounge area near the more “serious” work areas also reflected, spatially, the reality of student study habits. Students do not draw a clear line between time for scholarship and time for socializing or relaxing. Their study habits are shot through with social activities, such as the well known practice of flipping between assignments and MySpace. Also, school work itself, especially group work, is a social event – as one student group portrayed in a skit in which one group member tried to “hit on” another. Finally, as described earlier, activities that are sometimes characterized as purely social – like texting

or MySpace – are implicated in scholarship, since students sometimes find and communicate with classmates via text and social networking websites. Hence, when asked to design a space for collaborative scholarship, they naturally included a space for socializing and relaxing nearby.

The student request for access to food was directly related to the collaborative nature of the space. The demands of coordinating schedules among group members means that in order to meet with a group, students must often remain on campus at hours that fall outside their normal schedules, thus disrupting their usual food plans. Having food available is crucial to forging a space conducive to group work because it solves the students' problems with feeding themselves when their schedules are disrupted by those of their group mates.

Recommendation

There may not be room in Studio 2 for a full-blown lounge, but the space should include some area explicitly focused on relaxation and socializing, such as some soft seating, a magazine table and perhaps a vending machine.



Example of a student-designed lounge area as part of a larger collaborative study space

Feature 6: Stress Release

Four designs included a water feature (in three cases, a water fountain, in one, a waterfall). By way of explanation, students cited the relaxing effect of running water. Students sometimes placed the water feature in the open work space, others tied it explicitly to the lounge area.¹³ Three designs included a gym or some other area for strenuous physical activity. One design included a “stress room” with punching bags for working off stress.

As we detailed in a previous section, students report high stress levels, especially when they have writing and research assignments to complete. Group work also involves stress, as students conveyed in the skits they performed, which featured various forms of disagreement and non-cooperation by some group mates.



The “Stress Room”



Four of six student designs included a water feature

Recommendation

Interior designers working on library spaces need to address the student struggle with stress by designing a relaxing environment.

Feature 7: Art

The topic of art only came up explicitly a few times during our three sessions. The students emphasized the importance of art produced by students on our campus and art that represents the vast diversity of our student body.

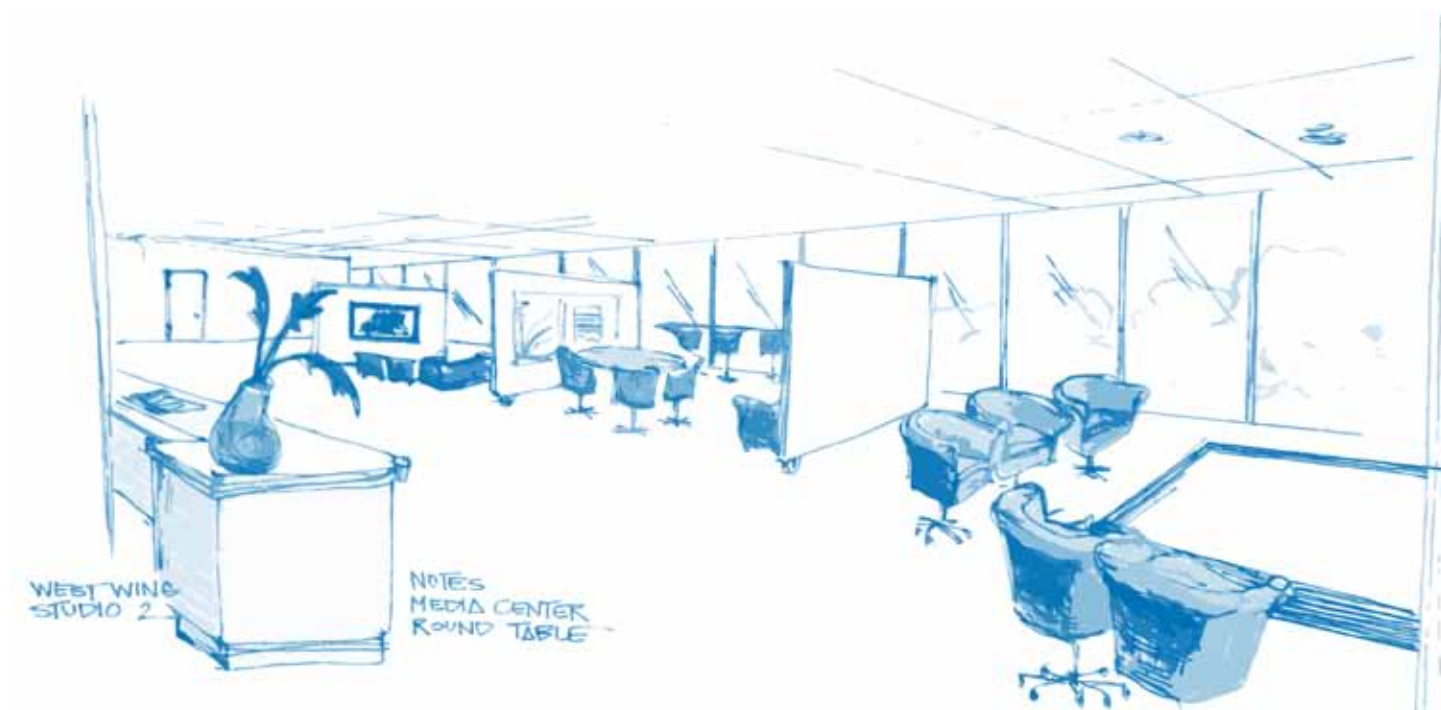


An example of a completed student design

¹³ Plants also cropped up in two of the designs, a finding consistent with Hobbs and Klare (2009). Interestingly, most of our day mappers included pictures of plants, trees and water features, particularly the large fountain at the center of campus, and commented explicitly about their attachment to aesthetically pleasing natural features of the campus.

Conceptual Drawings

During the Studio 2 study, we collaborated with interior design faculty and students on campus. An interior design student, Jada Gaspar, attended one of the design workshops and participated in several data analysis sessions. She produced the conceptual drawings below. The major features in Gaspar's designs are moveable partitions, a range of seating and work-space types and a presentation practice area. The moveable partitions are multi-purpose: they can hold artwork, white boards, or projection surfaces for presentation practice, and they can be used to configure the space according to student needs.



Library Web Design

Library Web Design

Introduction

Many students find searching for information confusing and difficult. Their confusion is often compounded by underlying uncertainties about the assignments they are given, as well as the competing demands of work, family and social life. A student named Susanna represented the profound disorientation she feels when searching for information. For Susanna, the library stacks represent a dizzying array of information, blank and inaccessible. The stacks lead to what she called “The Abyss of Books,” a kind of information oblivion. But, she explained, the “easy button,” or mouse, leads to the Internet, where one can “look up a book” or find other information, even “more than you want.”

Susanna did not want to escape the world of books. In fact, all students in our web design workshops included books in their drawings of “searching for information.” However, she did expect the library website to provide an easy, straightforward but powerful tool that would save her from the Abyss.

The desire for straightforward and easy access to information via the Internet is likely fed by the strong gains made in web design in the last decade. The clunky and arcane websites of the early web have given way to well-designed sites, crafted by trained professionals, often with input from actual users. Further, with heightened competition among web providers of all kinds, web users can vote with their clicks and move to a competitor whenever a website fails to be “user friendly.”

So, our students demand excellence and ease in their web experiences, demands that extend to the Henry Madden Library website. If the library fails to deliver a high quality, up-to-date web experience that facilitates the information search and saves students from the Abyss, then students simply will not use it. Our experience tells us that many students are, in fact, bypassing the library website by using, for example, Google or – for the more sophisticated – Google Scholar, sometimes to search Madden Library holdings themselves.¹⁴

Below, we make a series of recommendations based on the results of three web design workshops we conducted with twelve different students in spring, 2009. We asked students to both tell us about aspects of their various web experiences and recommend ways that the library website could work better for them.



Susanna's "Abyss of Books"

Competing with My Fresno State

When asked to design their ideal library website, students included a great variety of elements, such as financial aid information, General Education requirements, class schedules and campus events. Of course, “feature-listing” the library website would be a mistake, turning it into a monstrous and difficult site. Nevertheless, students do envision a library website that is much more comprehensive than the one that exists now.

Some of the functions for which students are asking are those currently offered by My Fresno State, Fresno State's PeopleSoft portal. This opens the potential for the library to compete with My Fresno State as the premiere on-campus website for “getting student things done.”

Recommendations

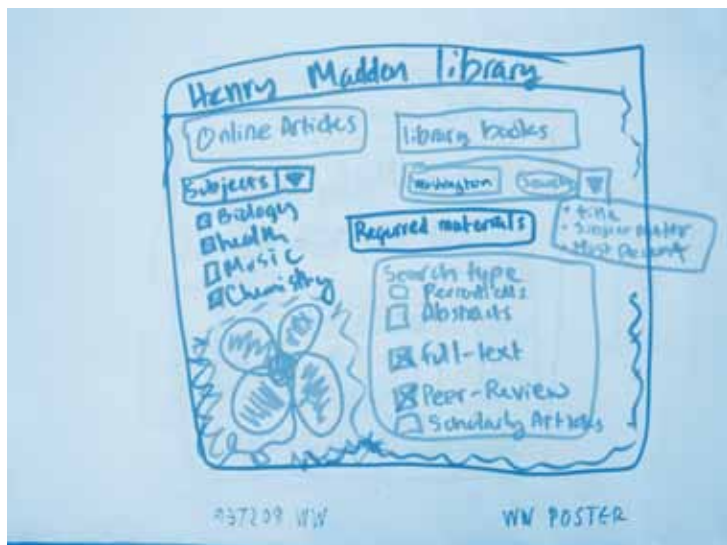
The library could successfully compete with My Fresno State through better design. The My Fresno State web portal looks and feels like a ten year old website. Because it is part of the larger PeopleSoft system, its design is not likely to change soon. An updated and well-designed library website could attract student users over from My Fresno State.

The Madden Library should seek to integrate its website with My Fresno State, pointing students there when necessary, and making it easy for them to return to the library website when they are done (see below, A Web 2.0 Library Website, for more).

¹⁴ Akselbo et al. (2006), in their study of Danish students and academic libraries, found that Google “is not, as far as the users are concerned, a direct competitor with the library: Google is used extensively in the selection of literature, whereas the library is used in the ordering part of the process.”

Search Boxes

In student drawings and mock-ups of ideal library websites, they drew a clear distinction between searching for articles and searching for books. The article-book distinction is likely both commonsensical (the two formats are recognizably different), and reinforced by campus practices. For example, one student noted that sometimes instructors require students to include a certain number of “book books” in their citation lists.



A student's drawing of her ideal library website includes separate search boxes for articles and books

Recommendations

The library should consider including quick, easy (i.e. front page) access to separate search boxes for different types of holdings. Including search boxes for articles, books and perhaps AV holdings will help the library's website mirror students' folk categories for types of information and make their experience with the library's website appear more “commonsensical.”

Search boxes could also be updated to include an auto-complete function, “like the New York Times,” as one student noted. Such changes would bring the library's site more in line with current web user expectations.

Class Tie-Ins

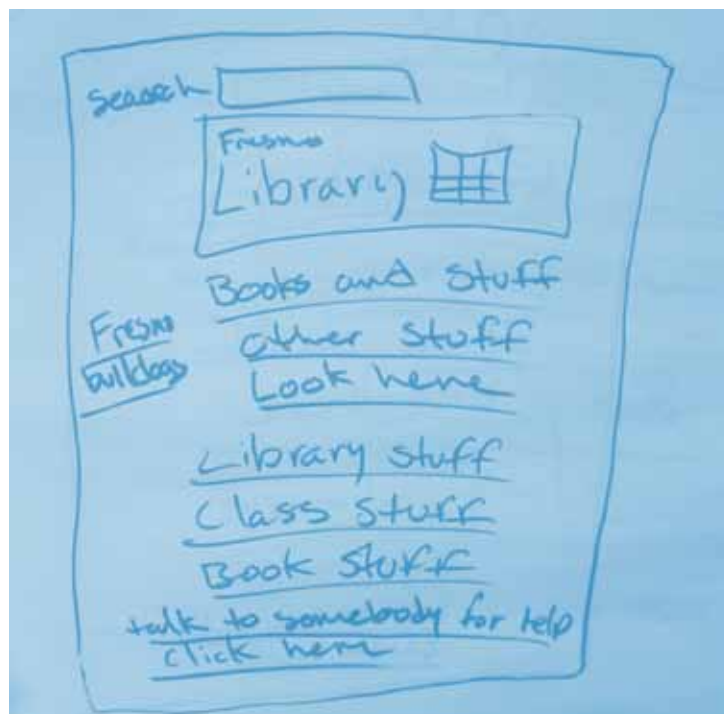
Several students expressed a desire for the library website to include information on required texts for their classes. Student desire for class tie-ins is consistent with a more general demand for personalization (see A Web 2.0 Library Website, below). One student envisioned a way to search for required texts that included output with data about all the ways to get the book in question: Madden Library holdings, ILL, online bookstore, etc.

Recommendations

Compiling required text data for even a fraction of classes offered on campus would be a Herculean task. Some required text data could be acquired from the Kennel Bookstore and Sequoia Textbooks. However, even if this functionality proves unworkable, student desire for tie-ins with their own classes at least reinforces the point that they want to be able to personalize the library website.

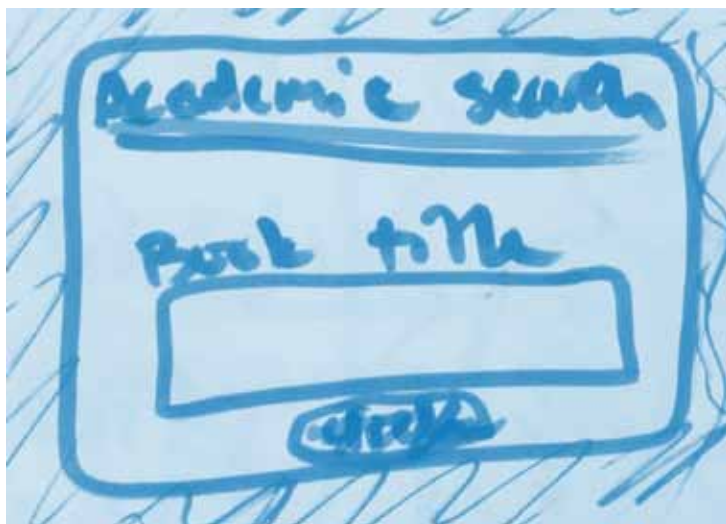
“Stuff”

In their drawings of their ideal library website, most students stayed relatively close to what the current website actually looks like. Rudy, however, broke the mold wide open. In the picture below, Rudy used the everyday term “stuff” to describe a series of links to important services. The categories he created were overlapping (e.g. “books and stuff” and “book stuff”), and probably did not constitute a serious attempt at working out the exact links the site should include. However, Rudy was asking the library website to be casual and colloquial, as well as comprehensive and personalized (i.e. “class stuff”).



Rudy's ideal library website

Note the difference between Rudy's ideal site and the detail below, taken from a peer's representation, from memory, of how she thought the current library website looked. The search box was no ordinary search box, but an “academic search.” Rudy, in his drawing, threw off all expectations of an “academic” appearance to the library website in favor of a library site with the look and feel of popular content-rich sites like Yahoo, Google and Amazon. These sites all clearly signal, “here is information.” We recommend that the library website send the same signal by resembling the sites that today's student users favor to obtain information.



Detail from a student's drawing of how she thinks the existing library website actually looks

Recommendations

The library should attempt a redesign that aims for a less institutional, more youthful and content-rich feel.

A Web 2.0 Library Website Experience

Our primary recommendation is that the Madden Library adopts a Web 2.0 model for its website. Hence, the library's website should be:

- Customizable
- Collaborative
- Integrative

Other academic libraries have begun to move toward a Web 2.0 model, so most of the recommendations below have examples already in practice elsewhere.

Customizable

Students should be able to arrange the elements of the library web page to suit their own preferences. For example, a student could use her campus login information to access her own unique version of the library website. She applies her own theme and adds the widgets that she finds most useful (a la iGoogle). Widgets could include various arrangements of search boxes, integration with My Fresno State, "my classes," Blackboard, email, Facebook, etc. The result would be a personalized library webpage for every student that could out-compete My Fresno State for student click-through.

Collaborative

The library webpage could provide a variety of collaborative tools, such as a tag system (see for example PennTags, <http://tags.library.upenn.edu/>), user reviews of holdings, or a system that produces results similar to Amazon's "Customers who bought this item also bought..." feature.

The library could also offer online collaboration spaces for group editing of documents. Online collaboration spaces are common to off-campus sites (Google Documents, various wiki sites, etc.), but the library could compete by offering seamless integration between its online collaboration tools and on-campus tutoring services, for example.

Integrative

As implied above, the library webpage could offer students seamless integration with a range of on and off-campus websites, like My Fresno State and Facebook.

Summary of Recommendations

- Compete with My Fresno State for status is the premiere on-campus website for "getting student things done."
- Provide different search boxes for different kinds of holdings.
- Explore ways to allow students to use the library website to search for required texts for their classes and discover options for obtaining them.
- Attempt a redesign that aims for a less institutional, more youthful and content-rich feel.
- Move toward a Web 2.0 model.

Conclusion

Some of the recommendations we have made (e.g. number and type of search boxes, general look and feel of the website) will be subject to debate among the library faculty. However, exercising the Web 2.0 option with the library website means that some of the apparently stark decisions could be left open to student user choice. Students could be allowed to choose their own look and feel and the widgets they find most useful, in the hopes that they will make more regular use of the library website. Whenever a student chooses one option over another in constructing their own personalized library page, library faculty could exercise their teaching function by providing information about the implications of the choice. For example, if a student chooses a library page set-up with multiple search boxes, a pop-up window or brief embedded video from library faculty could be available to explain the basics of catalog searching and the pros and cons of different types of search boxes. In general, the more student traffic on the library website, the more opportunities library faculty will have to inform students about information literacy.

Conclusion

Conclusion



Students in a Bootlegging workshop in February, 2009, performed the skit, “Partying and Studying.” In it, they portrayed five students studying as a group for an exam. Early in the skit, a student named Greg commented, “I am so glad there’s a Starbucks at this library.” A second student, Jeff, added, “I am so hopped up on Starbucks,” which Greg echoed enthusiastically. Jeff then shouted, “I can’t study right now – I gotta party!” His group mates insisted they study, but Jeff claimed that they could study and party at the same time. “It can happen, alright. I’ve seen it been done before,” Jeff assured his skeptical group mates. The rest of the group denied it was possible and they briefly turned to studying. Jeff persisted and convinced the others to follow his lead. He cued some dance music on his cell phone/MP3 player, and said, “You guys, follow my lead, ok?” As the music got rolling, Jeff grabbed his book and stood up, dancing and reading. The others quickly followed. Greg, dancing and reading, said, “We are gonna do so good on this test!” Jeff yelled, “Rites of passage!” and Greg said, “Wait, no, it was in 1892!” They continued to yell a mixture of historical and anthropological facts from their books. The skit ended with Greg slamming his notebook to the table, yelling, “We’re gonna get an A, we’re gonna get an A, that’s how it’s done.”

We have come to see “Partying and Studying” as a classic expression of students’ desire to reconcile their various competing taskscapes. The kind of reconciliation envisioned by Jeff may be radical, but we believe that the Henry Madden Library can successfully make improvements in library services by knowing student users better and responding to their diverse needs and desires.

References Cited

References Cited

Akselbo, Jeppe Lomholt, and Lise Arnfred, Sten Barfort, Gina Bay, Tine Bagger Christiansen, Jens Hofman Hansen, Henrik Tvermoes Jensen, Gitte Bach Markussen, Anna Mette Morthorst, Michael Poltorak Nielsen

2006 The Hybrid Library: From the Users' Perspective. Mickey Blake, trans. A report for the DEFF project, "The Loaners' Expectations and Demands for the Hybrid Library." Copenhagen: The National Library and Copenhagen University Library

Beyer, Hugh, and Karen Holtzblatt

1998 Contextual Design: Defining Customer-Centered Systems. San Francisco: Morgan Kaufmann.

Blomberg, Jeanette, and Lucy Suchman, Randall H. Trigg

1996 Reflections on a Work-Oriented Design Project. *Human-Computer Interaction* 11:237-265.

California State University, Fresno

2009 Institutional Research, Planning and Assessment: Research. <http://www.csufresno.edu/irap/research/index.shtml>, accessed November 1, 2009.

Cefkin, Melissa, ed.

2009 Ethnography and the Corporate Encounter: Reflections on Research in and of Corporations. New York: Berghahn Books.

Christensen, Clayton M.

1997 The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail. Cambridge, MA: Harvard Business School Press.

Darnton, Robert

2009 Google and the Future of Books. *The New York Times Review of Books* 56:2. <http://www.nybooks.com/articles/22281>, accessed February 12, 2009.

Delcore, Henry D., and James Mullooly

2009 Can't You Just Ask People? <http://theanthroguys.com/2009/09/17/can%e2%80%99t-you-just-ask-people/>, accessed November 1, 2009.

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.

Hobbs, Kendall, and Diane Klare

In press User Driven Design: Using Ethnographic Techniques to Plan Student Study Space. *Technical Services Quarterly*.

Ingold, Tim

1993 The Temporality of the Landscape. *World Archaeology* 25(2):152-174.

Mariampolski, Hy

2006 Ethnography for Marketers: A Guide to Consumer Immersion. Thousand Oaks, CA: Sage Publications.

Rudd, Brittany, and Christina Leimer

2009 First Generation Students: First in the Family, Less Likely to Succeed in College. http://www.csufresno.edu/irap/research/documents/fgscgs_brief.pdf, accessed November 2, 2009.

Setton, Kenneth M.

1960 From Medieval to Modern Library. *Proceedings of the American Philosophical Society* 104 (4):371-390.

Squires, Susan and Bryan Byrne, eds.

2002 Creating Breakthrough Ideas: The Collaboration of Anthropologists and Designers in the Product Development Industry. Westport, CT: Bergin and Garvey.

Suchman, Lucy

1987 Plans and Situated Actions: The Problem of Human-Machine Communication. New York: Cambridge University Press.

2007 Human-Machine Reconfigurations: Plans and Situated Actions. 2nd edition. New York and Cambridge, UK: Cambridge University Press.

Tunstall, Elizabeth

2008 Design Anthropology: What Can It Add to Your Design Practice? http://www.adobe.com/designcenter/thinktank/tt_tunstall.html, accessed November 1, 2009.

2009 Dori's Moblog. <http://dori3.typepad.com/>, accessed November 1, 2009.

University of Rochester

2009 Institutional Research 2008-2009 Factbook. http://www.rochester.edu/provost/ir/2008-09_factbook.html, accessed November 1, 2009.

Varenne, Hervé, and Ray McDermott

1998 Successful Failure: The School America Builds. Boulder: Westview Press.

Villalobos, Dani

2009 Facebook vs. Homework. *The Collegian*, April 29: A1, A2.

Wasson, Christina

2000 Ethnography in the Field of Design. *Human Organization* 59(4):377-388.

Young, Jeffrey R.

2009 Facebook, Grades, and Media Hype. *The Chronicle of Higher Education*, April 24: A13.

Zimmerman, Don H., and D. Lawrence Wieder

1977 The Diary: Diary-Interview Method. *Journal of Contemporary Ethnography* 5:479-498.

Appendix A: Day Mapping Guide

Day Mapping

Materials:

Blank map of campus

Disposable camera

Notebook

Using the map, trace your movements over the course of one day. Draw lines showing all the places you go. Also, fill in the map with the places you visit, and any other places on campus that are most significant to you. There is no right or wrong way to do this – we simply want to know about the places on campus that are important to your day.

As you go through the day, take at least twenty pictures of things, places and people on campus that are significant to you. Again, there is no one right way to do this. Be creative. Try to give us some visual images of significant aspects of your day.

Take at least one picture of all the things you carried with you during the day of mapping. You may want to lay everything out somewhere to take this picture.

Finally, using the notebook provided, record some comments on the pictures you take. Why did you take that picture? What does that person, place or thing mean to your day? We want to know how your day went down, so any other comments on significant places and people you encounter are welcome!

Appendix B: Ethnography of Student Life Guide

Anthropology Study

In the course of your 24 hour period, please take pictures of the following. There is no right or wrong – just go with it.

No need to take the pictures in any order. But, please note which number exposure on the camera is connected to which number item below.

1. The things you always carry with you
 2. All the stuff you take to class
 3. Something that you would call “high tech”
 4. Something really weird
 5. Your transportation to and from school
 6. Your favorite place to study
 7. The place you keep your books
 8. A person, any person
 9. Your favorite person or people to study with
 10. Something you’ve noticed that you think others don’t notice
 11. Your communication devices
 12. A picture of your bedroom or dorm room, showing your computer
 13. Dinner
 14. Your favorite part of campus
 15. Your favorite part of the day
 16. The tools you use for writing assignments
 17. Someone/thing that distracts you from studying
 18. Someone/thing that helps you focus on studying
 19. A place where you feel out of place
 20. Something you can’t live without
- The rest ...whatever you want!

Appendix C: Summary of Recommendations

Taskscapes of Student Life

General

We view as positive the relative openness of the new library building to the whole of student life, and encourage the library to continue to seek ways to allow students to attend to their varied taskscapes.

The inclusion of Starbucks in the library is positive in that it facilitates students' ability to fulfill social as well as physical needs. Students use the space of Starbucks and near it as a place to congregate and talk, eat and drink. Since food options on campus are relatively limited, the library should explore other ways to make the library food-friendly.

Services

Extended hours of library operation are crucial to accommodating the packed and sometimes chaotic demands of student lives and schedules.

Some students have their last classes of the week on Wednesday or Thursday. There are some indications that their studying tails off toward the end of the week. Conversely, students expend more time on campus and doing schoolwork on Monday through Wednesday. Library outreach and services could be more concentrated early in week to achieve more efficient use of resources and to coincide with the weekly cycle of student scholarship.

During the closure of the physical library, when books were at a remote location, the library fielded a service whereby users could request an item online and have it delivered to a temporary library circulation point on campus for pick up. When the new library building opened, the library retained the request/pick-up system. The request/pick-up system should remain a part of library services, given the limited time some users have on campus.

Outreach

Not all students see the library as a place friendly to their many taskscapes. The library should undertake measures that draw more students in with the promise of diverse spaces. For example, the library could be more deliberate in branding the character of specific interior spaces. The new "brands" could be used to market the library around campus.

- The space immediately outside Starbucks: "The Café"
- Studio 2: "Group Time" (see below)
- South Wing: "Quiet Study"
- A space not now designated "quiet," perhaps the space outside Starbucks: "Hyde Park" (a place where student clubs and causes are welcome).

Etc.

The library should seek to reach out to students more during "crunch times" (particularly, midterms and finals), when students feel the compression and conflict among their taskscapes most acutely. The following measures would be most likely to succeed at drawing more students to library services if undertaken during crunch times:

- Extended food options for students who are staying on campus at times when they disrupt their normal eating habits.
- A portable reference desk.
- A marketing campaign aimed at increasing website and foot traffic during crunch times.

Assignments: Student Frustration, Uncertainty and Stress

Services

The Madden Library currently offers a variety of ways that students can seek help from librarians, including IM, phone, and (at this writing) a new text-messaging option linked to the IM system. The library should continue and extend these initiatives whenever possible as they accommodate the reality of ubiquitous computing via laptops and smartphones, as well as the harried schedules of many students.

We recommend institutionalizing the presence of a manned Welcome Desk, which was first employed when the new library building opened. The permanent Welcome Desk should be signed to encourage use (e.g. "Ask Here," "Need Help?" or "Stressed? We Can Help"). If staffing limits impinge on manning the Welcome Desk, then prioritize crunch times, when some students are under the most stress or may enter the library for the first time.

The Madden Library offers a variety of tools that can potentially address stress over research, writing and time constraints. The Assignment Research Calculator helps students calculate when they should accomplish certain tasks given a particular deadline, and LibGuides orient students to resources for specific subject areas. However, the tools available to students need to be better-publicized, through marketing campaigns (see below), library instruction or faculty (e.g. a campaign for inclusion of library study tools into course syllabi).

Outreach

Library marketing to students should recognize the reality of student stress and frustration to publicize ways the library can help.

Outreach efforts should use student folk terms like "stress," "confusion," "frustration" and "having a life" to signal to students

that librarians understand them. Phrases that cut to the core of student concerns include: “Confused by an assignment?”, “Stressed out?”, “Short on time?” and “Don’t let stress ruin your life.”

Outreach efforts that use folk terms related to stress, uncertainty and frustration should be redoubled during crunch times like midterms and finals week.

The library website offers some excellent opportunities to direct students to the right library services. During crunch times, a library website tile or pop-up that says something like, “Stressed??? We can help!” might increase library usage.

The library should redouble efforts to work with faculty to improve the nature of assignment prompts. Faculty outreach could occur through the librarians assigned to specific colleges. However, a “Library Fellows” program provides another option. A Library Fellows program would involve a selection process that draws in faculty who are particularly engaged in library-related issues. Library Fellows would have access to library-sponsored professional development opportunities, and in exchange, they would become point-people for library outreach to faculty in the colleges on issues like assignment prompt design.

What Students Know About the Library

General

Self-study: Henry Madden Library faculty and staff are better equipped than anyone else to explore the legacy of library history on our campus. We recommend that the Dean of the Library lead the faculty and staff in a self-study process focused on building collective awareness of the ways reverential assumptions condition current library norms and practices. As noted above, some library norms and practices are central to the library’s mission. However, future self-study may turn up practices whose benefits are out-weighted by their costs to the student user experience.

Spatial and Way-finding

Minimize the use of terms that inhibit student comprehension of library services. For example, the “Reference Desk” could be re-signed as “Ask Here” or “Need Help?” Building on recommendations from the previous section, some signage and terms could incorporate student concerns with stress and uncertainty.

Service points could also be labeled with the specific kind of expertise of the faculty and staff present at any given time. For example, when a librarian with health science expertise is present, a sign indicating so could be posted as a way to welcome and encourage health science students to seek help there.

Explore options for spatial arrangement of library service points. Spatial arrangements that put students and librarians on the same level, or side by side, may appeal to many users. The Apple Store “Genius Bar” (<http://www.apple.com/retail/geniusbar/>) offers one model, though other models specific to library studies are also available.

Personnel

We recommend that the library establish (and actively publicize) a cadre of Student Docents. Student Docents would be trained specifically to guide fellow students to the service points and resources most relevant to their needs. Student Docents could also be trained to troubleshoot challenges like print station snafus which tend to occupy library faculty time to the distraction of their other duties.

Explore ways for service points to be multi-functional through cross-training of library faculty and staff.

Other

Explore the establishment of a social bookmarking system akin to PennTags (<http://tags.library.upenn.edu/>). Either the tags, or the raw search terms entered into library catalog search boxes, could be projected in real time on a highly visible wall section. The effect would be to make the otherwise esoteric work of searching library holdings into a public, and hence demystified, process.

Also worth exploring are opportunities for library users to network with each other in the library in real time. For example, a user could choose to enter information about the assignment on which they are working and their location in the library, which is then relayed to other users via a display board or dialogue box at individual terminals. While Akselbo et al. (2006:42-43) found that their Danish research participants largely rejected the utility of in-library networking, the library could test the salience of such a system among Fresno State users.

Spaces of Student Scholarship

Given the diversity of both individual student preferences and types of scholarship, the library should provide a range of spaces to ensure its place as a destination on campus.

Different kinds of spaces must be clearly signed and the range of spaces available should be included in library marketing campaigns.

The library has gained a reputation as a relatively “noisy” place; future marketing efforts should stress that the library has all kinds of spaces.

The library should consider a reservation system for at least some of the group study rooms to ensure that they are available for group study (see below, Interior Spaces: Design of Studio 2).

Interior Spaces: Design of Studio 2

Feature 1: Welcome and Reservation Desk

Studio 2 can distinguish itself as a place friendly to collaborative work by maintaining reservations for its group study rooms. Reservations could be maintained by a staff person or student assistant who is also fulfilling other duties. Short of installing an actual desk (or red carpet), Studio 2 could include some other form of welcoming entrance.

Feature 2: Open Areas for Individual or Group Study

Some Studio 2 space should be configured for flexible use by individuals and groups.

Feature 3: Group Study Rooms

Studio 2 should include some group study areas, and consider configuring them in different ways or providing furnishings that can be adapted to multiple purposes.

Feature 4: A Presentation Practice Area

Given space constraints, group study rooms could include equipment and configurations conducive to group presentation practice, as detailed above (Feature 3).

Feature 5: Lounge Area

There may not be room in Studio 2 for a full-blown lounge, but the space should include some area explicitly focused on relaxation and socializing, such as some soft seating, a magazine table and perhaps a vending machine.

Feature 6: Stress Release

Interior designers working on library spaces need to address the student struggle with stress by designing a relaxing environment.

Library Web Design

Competing with My Fresno State

The library could successfully compete with My Fresno State through better design. The My Fresno State web portal looks and feels like a ten year old website. Because it is part of the larger PeopleSoft system, its design is not likely to change soon. An updated and well-designed library website could attract student users over from My Fresno State.

The Madden Library should seek to integrate its website with My Fresno State, pointing students there when necessary, and making it easy for them to return to the Library website when they are done (see below, A Web 2.0 Library Website, for more).

Search Boxes

The library should consider including quick, easy (i.e. front page) access to separate search boxes for different types of holdings. Including search boxes for articles, books and perhaps AV holdings will help the library's website mirror students' folk categories for types of information and make their experience with the library's website appear more "commonsensical."

Search boxes could also be updated to include an auto-complete function, "like the New York Times," as one student noted. Such changes would bring the library's site more in line with current web user expectations.

Class Tie-Ins

Compiling required text data for even a fraction of classes offered on campus would be a Herculean task. Some required text data could be acquired from the Kennel Bookstore and Sequoia Textbooks. However, even if this functionality proves unworkable, student desire for tie-ins with their own classes at least reinforces the point that they want to be able to personalize the library website.

"Stuff"

The library should attempt a redesign that aims for a less institutional, more youthful and content-rich feel.

A Web 2.0 Library Website Experience

Our primary recommendation is that the Library adopts a Web 2.0 model for its website. Hence, the Library's website should be:

- Customizable
- Collaborative
- Integrative

Appendix D: Survey Recommendations

The qualitative methods we have fielded in this study have uncovered some important features of student life and student engagement with the library on the Fresno State campus. Based on our findings, the library can probe the depth and distribution of our findings through a large-scale survey of the student body. Below, we recommend some survey questions that explore our findings in more detail.¹

Cycles of Weeks and Semesters

When do you spend the most time on campus?

- ☐ Monday through Wednesday
- ☐ Monday-Wednesday-Friday
- ☐ Tuesday-Thursday
- ☐ Wednesday through Friday
- ☐ Other (specify) _____

In the course of your week, when have you visited the library? Rank the days below in order from most likely (1) to least likely (6).

- ☐ Monday
- ☐ Tuesday
- ☐ Wednesday
- ☐ Thursday
- ☐ Friday
- ☐ Saturday or Sunday

In the course of a semester, when do you visit the library? Rank the periods below in order from most likely (1) to least likely (4).

- ☐ I don't visit the library (skip to the next question)
- ☐ early in the semester (August-September)
- ☐ midterms
- ☐ late in the semester (November-December)
- ☐ finals

In the course of a semester, when are you most likely to seek the help of a Reference Librarian? Rank the periods below in order from most likely (1) to least likely (4).

- ☐ I don't seek help from Reference Librarians (skip to the next question)
- ☐ early in the semester (August-September)
- ☐ midterms
- ☐ late in the semester (November-December)
- ☐ finals

Contacting the Library

When you need help from a Reference Librarian, how would you most like to contact one? Rank the items below in order from most preferred (1) to least preferred (5).

- ☐ in the library, by walking up to the Reference Desk
- ☐ in the library, by appointment
- ☐ by text messaging
- ☐ by instant messaging (IM)
- ☐ by phone
- ☐ I don't seek help from Reference Librarians

¹ This appendix is not meant as a stand-alone survey; the questions can be used as part of a larger, more exhaustive survey.

Library Services

Which library services would be most helpful to you? Rank the items below in order from most helpful (1) to least helpful (5).

- _____ a Welcome Desk by the main entrance to help guide you to the right service or location
- _____ help interpreting instructor assignment guides
- _____ help finding library resources for completing assignments
- _____ a student assistant who can guide you to the right service or location in the library
- _____ help figuring out what information (books, articles, online resources, etc.) is reliable

Study Spaces

When you have to read for school, what type of environment do you prefer? Rank the items below in order from most preferred (1) to least preferred (6).

- _____ quiet
- _____ alone
- _____ music on
- _____ TV on
- _____ surrounded by others
- _____ loud

When you have to study for an exam, what type of environment do you prefer? Rank the items below in order from most preferred (1) to least preferred (6).

- _____ quiet
- _____ alone
- _____ music on
- _____ TV on
- _____ surrounded by others
- _____ loud

When you have to do homework, what type of environment do you prefer? Rank the items below in order from most preferred (1) to least preferred (6).

- _____ quiet
- _____ alone
- _____ music on
- _____ TV on
- _____ surrounded by others
- _____ loud

The Place of the Library on Campus

The library on campus is a place where....

	DISAGREE STRONGLY	DISAGREE SOMEWHAT	NEUTRAL	AGREE SOMEWHAT	AGREE STRONGLY
I can study quietly	1	2	3	4	5
I can socialize	1	2	3	4	5
I can hang out	1	2	3	4	5
I can rest	1	2	3	4	5
I can read	1	2	3	4	5
I can do homework	1	2	3	4	5
I can study	1	2	3	4	5
I can do research	1	2	3	4	5
I can eat and drink	1	2	3	4	5
I can get help with schoolwork	1	2	3	4	5

When I think about going to the library, I feel....

	DISAGREE STRONGLY	DISAGREE SOMEWHAT	NEUTRAL	AGREE SOMEWHAT	AGREE STRONGLY
Confident	1	2	3	4	5
Nervous	1	2	3	4	5
Uncertain	1	2	3	4	5
Stressed	1	2	3	4	5
Frustrated	1	2	3	4	5
Relaxed	1	2	3	4	5
Hopeful	1	2	3	4	5
Discouraged	1	2	3	4	5

Stress

When it comes to school, what is the most serious source of stress for you? Rank the items below in order from most serious (1) to least serious (8).

- _____ heavy course load
- _____ desire to get good grades
- _____ uncertainty about instructor assignments and expectations
- _____ procrastination
- _____ health concerns
- _____ lack of time
- _____ family obligations
- _____ social life
- _____ other: please specify _____