This study describes a survey of 237 first-year undergraduate students conducted at the University of North Carolina at Chapel Hill. Through this study, the researcher aimed to fill in gaps in librarians’ knowledge about first-year students’ awareness of reference services, and students’ preferred modes of communication with librarians. The results show significant positive relationships between librarians’ verbal promotion of reference services and students’ tendency to ask reference questions in person.

Headings:

- Academic libraries
- College freshmen
- Electronic reference services (Libraries)
- Generation Y
- Library orientation
- Reference librarians
- Reference services (Libraries)
PROMOTION OF LIBRARY REFERENCE SERVICES TO FIRST-YEAR UNDERGRADUATE STUDENTS

by
Karen D. Sobel

A Master’s paper submitted to the faculty of the School of Information and Library Science of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Science in Library Science.

Chapel Hill, North Carolina
November 2007

Approved by

_______________________________________
Dr. Barbara B. Moran
Introduction

In Fall semester 2006, a total of 3,816 students began their first year of college at the University of North Carolina at Chapel Hill (UNC-Chapel Hill).\(^1\) As usual, members of the University Libraries’ Reference and Instructional Services departments tried their hardest to make students aware of the academic assistance they could get through reference services. As a result, a surprisingly large proportion of students took advantage of these opportunities. The reference desk at UNC-Chapel Hill’s R.B. House Undergraduate Library (generally referred to as the Undergraduate Library), primarily used by the university’s first- and second-year undergraduate students, recorded a total of 10,757 questions received during the 2006-7 school year.\(^2\) This figure included questions asked through all media available at that library, including instant messenger, telephone, and face-to-face interactions.

Although the staff considered those figures as indicators of relative success, they aimed as always to increase students’ usage. This paper considered the figures available to the Reference and Instructional Services staff, as well as

---

\(^1\) See UNC-Chapel Hill’s News Services: Compendium of Key Facts: http://www.unc.edu/news/compendium.shtml

\(^2\) Totals provided by Ms. Suchi Mohanty, Reference and Instruction Librarian, R. B. House Undergraduate Library.
the methods used for outreach to first-year students, and searched for gaps in knowledge about the cycle of outreach and usage. Two areas stood out as being in greatest need of further exploration. First, the relative effectiveness of advertising methods. The Reference department counted seven common methods\(^3\) that they actively use to promote services, or ways that users encourage each other to use them, yet they had not assessed which ones affected students’ decisions to ask questions. Second, through which media did students feel most comfortable contacting librarians? Although much current literature focuses on the convenience and versatility of virtual reference, do students really prefer to use it?

Improved service to the Undergraduate Library’s student patrons was the goal at the heart of this study. The practical information discovered through the research will be applied to benefit future students. However, the findings will also apply to other undergraduate libraries, and will hopefully inspire similar research for libraries with other types of clientele.

The most significant relationship uncovered in this study, both in the sense of statistics and relevancy to the Reference and Instructional Services staff’s work, is that librarians’ discussions of reference services during instruction sessions have a very strong influence on students’ choice to later use reference services. Thus this relationship will be a major theme of the paper. Usage of

\(^3\) Verbal publicity during library instruction sessions, “Ask-a-Librarian” links on the Libraries’ Web pages, participating in first-year orientation, professors requiring usage of reference services, recommendations by peers, positive experiences using reference desks at other libraries, and simply noticing the reference desk at a UNC-Chapel Hill Library.
reference services will also be discussed in relation to first-year students’ overall attitudes about academic library usage.

**Background: UNC-Chapel Hill**

Chartered in 1776 and opened for classes in 1795, the University of North Carolina at Chapel Hill is the United States’ oldest state university. Many buildings in the center of campus date back to the late 18th and early 19th centuries. Over two centuries of construction have developed the university into a home for both cutting-edge medicine and technology, and tradition and beauty. Currently, the strongest areas of study at the university include medicine, nursing, and dentistry; the liberal arts; chemistry; biology; foreign languages and literatures; and library science.

The latest available estimates note nearly 17,000 undergraduates (nearly all full-time) and about 11,000 graduate students. Undergraduate standards for admission are rigorous, with a 34% acceptance rate. Peterson’s cites an average high school GPA of 4.0 for students admitted as first-year undergraduates.

UNC-Chapel Hill prides itself on promoting diversity. Approximately 22% of its students are minorities. Seventeen percent of students come from outside North Carolina. The most recent statistics note that students from 48 states and 111 foreign countries currently attend the university. UNC-Chapel Hill is located in historically lower-income region of the country, and has created

---

4 See Carolina: A Brief History at: http://www.unc.edu/about/history.html.
5 Peterson’s, 686.
6 See About the Graduate School: http://gradschool.unc.edu/about/about.html.
7 Peterson’s 686. 34% average calculated from Peterson’s admissions data.
8 Peterson’s, 686.
innovative programs to encourage enrollment among students who otherwise might not be able to afford college preparatory programs, tuition, computers, and other aspects of higher education. For instance, the Carolina Covenant program allows students from low-income families to participate in work-study jobs ten to twelve hours per week, in exchange for guaranteed debt-free graduation. These opportunities lead to greater economic diversity within the student body, and benefits for North Carolina’s families and communities.

**Background: English 101**

Upon entering UNC-Chapel Hill as an undergraduate, students are placed in English composition courses with one of four results. Students may be instructed to take English 100, English 101, or English 102, or test out of the English composition requirement completely. Placement is determined by SAT scores, high school Advanced Placement coursework, and a placement test taken during orientation. The vast majority of UNC-Chapel Hill’s undergraduate students are placed in English 101. Students who place into English 100 or 101 must take all the subsequent courses in the series. Thus, all English 101 students later take English 102, generally during the next semester.

English 101 has three units, each of which focuses on various aspects of college-level writing “across the disciplines.” Students practice writing techniques and learn stages of the writing cycle through the course of three units: popular culture, public issues, and professional communities. The English department requires all teaching assistants to bring their English 101 classes to the

---

9 See Carolina Covenant: http://www.unc.edu/carolinacovenant/.
library for at least one instruction session. Due to the Instructional Services department’s efforts, over the past several years, most teaching assistants have begun bringing their classes at least twice per semester, typically during the public issues and professional communities units. During all sessions, students bring an assignment to work on. Library staff provide instruction on several relevant library resources, then provide assistance during guided work time. For more detail on English 101 and other aspects of UNC-Chapel Hill’s writing program, visit the “Writing Program at UNC-Chapel Hill” Web site (http://english.unc.edu/comp/generalinformation.html).

**Background: The University Libraries**

UNC-Chapel Hill’s University Libraries provide intellectual support for most programs of study. Davis Library (the main campus library), the Undergraduate Library, Louis Round Wilson Library (mainly historical collections) and numerous departmental branch libraries contain over five million volumes, plus over twenty million manuscripts. Several additional libraries at the university are run independently. The Health Sciences Library, the Katherine R. Everett Law Library, and the Park Library of Journalism and Mass Communication, among others, provide support for students in related programs. These and several other independent libraries do not report to the University Libraries, but frequently collaborate.

---

While the libraries have a sizeable permanent staff, daily operations and special programming are enhanced by collaboration with the university’s School of Information and Library Science (SILS). The library science program was ranked number one in the nation on U.S. News and World Report’s 2008 list. The most recent statistics provided by SILS list enrolment of 268 master’s degree students, 53 Ph.D. candidates, and 35 undergraduates.\textsuperscript{11}

The majority of master’s students work in libraries, both at the university and throughout local communities. The researcher for this project is a Graduate Assistant in the Instructional Services department, which is housed in the Undergraduate Library.

Numerous permanent staff and graduate students work for Instructional Services. While there is only one full-time Reference and Instruction Librarian, many general reference, subject specialist, and outreach librarians frequently lead instruction sessions. Approximately ten graduate students help provide library instruction, the bulk of which serves two levels of “freshman composition,” English 101 and English 102.

**Rationale**

The rationale for performing this study was simple. UNC-Chapel Hill receives approximately 3,800 new first-year students during each school year.\textsuperscript{12} The Libraries, most particularly the Undergraduate Library, aim to begin teaching all of them to use their resources as effectively as possible, as early as possible.

\textsuperscript{11} See About UNC SILS: SILS at a Glance: http://sil.s.unc.edu/about/glance.html
\textsuperscript{12} Peterson’s, 686.
Each library keeps statistics on numbers of reference questions asked each semester. The Undergraduate Library, which provided some statistics for this study, breaks its question logs into topical categories. None of the Libraries collect or ask for demographic information on their users. Also, the Libraries have not asked active users what has sparked their interest in using reference services, or what their preferences are for media of communication with reference librarians. Clearly there are many practical questions that stand to be answered.

Raising raw numbers of users or questions is not a primary inspiration for this research. However, higher numbers would suggest increased awareness of library resources and information literacy, which are major goals. Learning students’ preferences, giving these additional emphasis, and identifying areas of outreach that need improvement will likely both improve usage and awareness and raise numbers of users.

**Operational Definitions**

The following operational definitions are used for this study:

“Ask A Librarian” links—distinctive logos on the UNC-Chapel Hill Libraries’ web pages, which link to contact information for the reference desks. example:

Buddy stickers—stickers with an easily identifiable design imitating a “Hello, my name is…” sticker that are given to students to publicize the UNC-Chapel Hill Libraries’ instant messenger chat reference service. These have the reference desks’ “buddy names,” or instant messenger chat aliases, written on them. example:
First-year students, or first-years—students enrolled in the first or second full-time semesters of their undergraduate education.

In-person reference service—includes all questions by people visiting the reference desks at UNC-Chapel Hill Libraries. Questions asked during group instruction sessions will NOT be included.

Librarian—for the purposes of this study, any UNC-Chapel Hill Libraries staff member holding an MSLS, MSIS, or MLS degree, or any student member of the instructional services staff working toward one of these degrees. UNC-Chapel Hill Libraries’ tradition is not to differentiate between permanent at graduate student staff members while instructing undergraduates.

Library instruction sessions—all bibliographic instruction sessions arranged through the Instruction Request Forms (http://www.lib.unc.edu/eforms.html), held at Davis or the Undergraduate Library, and taught for semester-long for-credit classes by librarians.

Research- or school-related questions—all in-person questions not classified as “miscellaneous” on the question logs at the UNC-Chapel Hill Libraries’ reference desks. Also includes all questions asked via virtual reference systems.

UNC-Chapel Hill Libraries—all libraries having a separate reference desk and/or a staff member whose duties explicitly include reference assistance.

UNC-Chapel Hill Libraries’ web pages—any web pages that have addresses beginning with “http://www.lib.unc.edu”.

Undergraduate students—any students enrolled full-time at UNC-Chapel Hill and working toward a bachelor’s degree.

Verbal publicity—any spoken statement made by a librarian that explicitly encourages students to use in-person or virtual reference services. This study does not differentiate between whether the speaker’s words or any printed materials such as “buddy stickers” handed out while speaking proved a stronger influence. Instances in which library staff members received questions through their personal e-mail accounts were not counted.
Virtual reference services—librarians or library staff answering research- or school-related questions through the media of e-mail, Instant Messengers, or proprietary chat software.

**Objective of the Study**

This research explored three related questions based staff observations at the Undergraduate Library. They are:

1) What percentage of first-year undergraduate students are aware of reference services?

2) What percentage of first-years seek information from reference librarians?

3) Through which media of communication are first-years comfortable communicating with reference librarians?
Literature Review

Although the question of how first-year college students choose whether
to use reference services sounds simple, it actually involves many complex
factors. For instance, in the case of students it includes their previous experience
with libraries and librarians, their academic courses and goals, and their levels of
library-related anxiety. For librarians, it involves subtleties of their personal
interactions with students, their drive to learn and use new technologies, and
endless time and patience. For an academic library as an organization, it involves
ties between the library and various academic departments, funding for staff and
training, and the range of images that the university projects. The following
literature provides background on these complex, interlocking elements.

Library Anxiety

Library anxiety may be the most important factor in students’ decisions on
whether or not to utilize reference services. Constance A. Mellon’s 1986 work
formally defines library anxiety.\(^{13}\) Her main goal was to legitimize the concept
and thus better enable librarians to understand it and work to minimize it.\(^{14}\) She
notes that other academic phobias and anxieties, such as those relating to

---
\(^{13}\) Mellon 160.
\(^{14}\) Mellon 163.
mathematics or test taking, have been successfully addressed following similar research and definition efforts.\textsuperscript{15}

Sharon L. Bostick’s Library Anxiety Scale has become a standard for the quantification and discussion of anxiety and discomfort among library patrons. Along with colleagues Anthony J. Ongwuegbuzie and Qun G. Jiao, Bostick has further explored library anxiety through personality theories designed by psychologists. One of the aspects of their research most relevant to this study is the concept of state anxiety versus trait anxiety.\textsuperscript{16} In very basic terms, state anxiety is anxiety resulting from the situation a person is currently in. Trait anxiety is a tendency to feel anxious in many, varied situations.\textsuperscript{17}

Another relevant piece of Bostick’s work with the Library Anxiety Scale is her list of five dimensions of library anxiety. The dimensions are “barriers with staff, affective barriers, comfort with the library, knowledge of the library, and mechanical barriers.”\textsuperscript{18} The first two factors relate most strongly to the questions involved in this study.

Statistics from various studies on library anxiety provide additional impetus for this study. For instance, Joanne E. Callinan’s 2005 study at University College Dublin, a highly regarded Irish university, revealed that 56\% of students prefer to ask library-related questions of their friends rather than librarians.\textsuperscript{19} What if librarians were able to help all those students build greater

\textsuperscript{15} Mellon 163.
\textsuperscript{16} Ongwuegbuzie, Jiao, and Bostick 26.
\textsuperscript{17} Ongwuegbuzie, Jiao, and Bostick 26.
\textsuperscript{18} Ongwuegbuzie, Jiao, and Bostick 35-36.
\textsuperscript{19} Callinan 88.
comfort levels with the library? Such outreach could vastly increase usage of reference services, and prove a huge academic benefit to students.

**Marketing of Library Services**

Librarians have written a massive body of literature on the advertisement of library services, in the forms of both case studies and theory. Antony Brewerton, a major theorist in the field of library public relations and advertising, has integrated his theories with applicable cases from his own university, Oxford Brookes, in the United Kingdom. Reference services are one of the main aspects that he has studied. One of Brewerton's major points about promotion of reference services is that librarians tend to imagine their patrons as a "captive audience," so no matter the quality of promotional efforts, these patrons will find and use the services out of necessity. However, in reality, some patrons use them well, some use them poorly, some never find the services, and some use alternatives.

Brewerton has also emphasized the need to reach out to new patrons—in his case, mostly first-year students and new faculty, and get them involved with the library early on. In his advertising theories, Brewerton emphasizes avoiding usage of the word "library," and creating humorous and often edgy advertisements. UNC-Chapel Hill has far different philosophies, and this study aims to indirectly explore the efficacy of our methods by quantifying usage of our reference services among subjects. Typically, the university’s Libraries use a

---

20 Brewerton 268.
21 Brewerton 269.
22 Brewerton 271-2.
professional yet often playful tone in their advertising materials. Experienced staff have informed the researcher that hypothetical ads similar to Brewerton’s would likely be deemed inappropriate by some faculty and library staff at UNC-Chapel Hill.

Jeanie M. Welch wrote a detailed analysis on the placement of linked logos, such as "Ask-a-Librarian" links. Many of her examples explicitly parallel tactics that UNC-Chapel Hill Libraries use.

Ramlogan and Tedd have studied the practical after-effects of poor or ineffective library marketing campaigns. Their studies found that some patrons developed a false sense of the scope of resources and services available to them. They cited a 1995 survey by J.M. Roberts which found that faculty members at a particular university were aware of an average of 47% of total resources and services. Thus patrons may have been quite familiar with databases in their specific subject areas, but unaware that reference librarians could give advice on how to improve searches.

Use and Non-Use of Library Services

The survey used for this study gathered information both on use and non-use of library services. Two resources on non-usage inspired the philosophies behind this survey’s design. Patricia A. Cannon approaches the attitudes behind non-use in the greater context of university education. One of her most helpful concepts is that of “potential users and hard-core nonusers,” the work of George

---

23 Ramlogan and Tedd 497.
24 Cannon 121.
D’Elia. This study considers all students as potential users. No patterns of hard-core non-usage could be determined using the survey questions. Cannon’s classifications of users are much broader than Song’s. Basically they are undergraduate students, graduate students, and faculty, though she sometimes reorganizes them according to academic discipline.  

Finally, Ramlogan and Tedd detail their own research on non-usage. They take a two-tiered approach to their studies. Certain non-users identified during a basic survey agreed to provide additional, detailed information on the reasons behind their feedback, in exchange for small rewards. This provided an interesting model for gathering similar feedback. They also give a useful discussion of ethical issues surrounding the gathering of data on non-usage, which was an issue approached in this research, albeit not explored explicitly.

**Library Usage and Needs Across the Undergraduate Career**

Determining needs and actual usage across the undergraduate career are two crucial aspects of evaluating the effectiveness of library services for undergraduates. The issue of “needs” affects the planning of library services in many important ways. Richard M. Doughterty’s writing on “user-responsive research libraries” suggests that services and methods of retrieving information

---

25 See Cannon, 123.  
26 Ramlogan and Tedd 34-35.  
27 Ramlogan and Tedd 35.  
28 Dougherty, from article title.
must be designed around users’ “actual abilities.”

Granted, his context was more sophisticated scholars, but the point remains valid for meeting needs of all patrons.

Pamela T. Harris posits that basic library skills should be taught during the first year of college, but that librarians and professors should expect these skills to grow throughout the college career. Freshmen will not have fully-formed skills.

Byerly, Downey, and Ramin discuss planting seeds for more effective research across the career by teaching first-year students how librarians can help with their research.

Experienced reference librarians discuss reasons for use or non-use of reference services not only as a result of library anxiety, but as a result of motivations. Marjorie E. Murfin details relevant theories of motivation as discussed by Brehm and Self in 1989. Academic majors and disciplines also play large roles in motivating usage. Murfin notes that most general reference librarians receive far more questions in the social sciences and humanities than in the sciences and technology. She suggests that science and technology courses require less library research. This statement may be expanded with the idea that science and technology students may become used to patterns of study and research that do not involve library usage, starting relatively early in their careers. Encouraging them to use the library during early, common classes such as composition may help to foster more library-positive patterns.

29 Dougherty 60.
30 Harris 67.
31 Byerly, Downey, and Ramin 590.
32 Murfin 26.
33 Murfin 26.
Joanne E. Callinan’s research profiles the library usage of biology majors in their first and final years of college. She shares many pieces of motivation as self-reported by students. Callinan the successfulness of the open-ended questions about usage and motivation in her survey in providing useful, and detailed feedback.\textsuperscript{34} Callinan also notes that very few studies have addressed differences in usage patterns of students in various years of college.\textsuperscript{35} This type of information does appear to be scarce, based on searches.

Callinan notes that many biology students developed a significantly stronger pattern of library usage during their college careers. She provides statistics on frequency of library visits by day, week, and month. Perhaps most relevant to this research is her finding that 25\% of first-year students reported using the library one or fewer times per month. Under 10\% of final-year students reported the same thing.\textsuperscript{36}

Theories of personal epistemology help build a framework for understanding students’ research habits. Troy Swanson explains that personal epistemology defines how “individuals’ understanding of knowledge impacts knowledge construction and learning,”\textsuperscript{37} both crucial to academic librarians. He discusses W.G. Perry’s theories of “intellectual and moral relativism”\textsuperscript{38} among college students. According to Perry, early in college, students respond to college culture by changing from seeing things in terms of right and wrong to seeing them

\textsuperscript{34} Callinan 87.
\textsuperscript{35} Callinan 87.
\textsuperscript{36} Callinan 91.
\textsuperscript{37} Swanson 93.
\textsuperscript{38} Perry 95.
in context. By extension, students’ personal ideas on where to find information or knowledge change and broaden.

Outreach to First-Year Students

Marjorie E. Murfin explains that “the reference department is, in a sense, the expert on library users, on their knowledge, abilities, problems, and responses.” Published discussion of outreach specifically to first-year students is limited to a relatively small number of methods. The most popular are bibliographic instruction sessions, optional or required sessions during orientation, online instructional materials, special first-year help stations or staff, and special activities such as scavenger hunts. The literature discussed below represents a typical range of methods and advice on outreach to first years.

Byerly, Downey, and Ramin discuss the challenges of spreading basic library knowledge at large universities, where students choose from an immense variety of courses, and may end up having little bibliographic instruction. Among the very few courses that most students take are two levels of composition. Many authors have discussed first-year composition courses as rare opportunities to make basic bibliographic instruction reach the majority of students. The three aforementioned authors list the following methods for seeking research help as parts of their standard composition class bibliographic instruction: “showing them the reference desk, phone numbers for the reference desk, and how to e-mail the

39 Swanson 95.
40 Murfin 24.
41 Byerly, Downey, and Ramin 589.
virtual reference desk.” They also eloquently note that “One of the primary goals of our library instruction sessions is to impress upon students the importance of making use of the most valuable resource in the library, the librarians.” Recent research shows that libraries and librarians could perform significantly better in this area. Joanne Callinan’s research found that in her library, 67% of first years and 96% of final years list their friends, rather than librarians, as their main source of information on how to use the library effectively.

**Raising Students’ Comfort Levels in the Reference Department**

Lorenzen and Lucas describe a comfort level that students must develop in working with librarians. In their research with student athletes, who face many special needs and challenges related to college learning, they discuss librarians’ visibility and proximity to students as major factors in building comfort with student athletes. Not all of the students in their study were in their first year of college. (However, the authors’ analyses or students’ emotions and reactions proved useful to this research.) When the athletes were introduced to a librarian who was assigned to provide them with special assistance, they initially avoided her help. However, after spending several weeks in her presence, far greater numbers of students sought her help.

---

42 Byerly, Downey, and Ramin 591.
43 Byerly, Downey, and Ramin 595.
44 Callinan 93.
Several articles discuss staffing and special advertising of the reference desk. Diane Dallis and Carolyn Walters detail one such effort at Indiana University at Bloomington (IUB). At IUB’s library Information Commons, students ask all types of questions at a single desk, which is labeled “Ask questions here.” Staff provide advice from standard reference work to minor technical questions to detailed assistance with multimedia software. The authors give statistics of 22,000 reference questions and 37,000 requests for IT assistance asked at the desk in one year. Perhaps students develop a sense of comfort in being able to meet all needs at one location, or being able to request many sorts of help from familiar staff members, though they may be referred to others. However, an IUB library survey showed that only 6% of students self-report choosing to work in the library because of the variety of services available there.

Becky Imamoto of the University of Colorado at Boulder describes a special reference desk created for first-year composition students. While this desk functioned much like a typical reference station, staff working at the desk had special training in working with the composition class’s assignments, and in working with beginning students. Approximately 20% of students enrolled in the course during the 2003-4 school year chose to visit this desk. In optional surveys given to students after using the desk, students commented on their

---

46 Dallis and Walters 252-253.  
47 Dallis and Walters 252-253.  
48 Dallis and Walters, 253.  
49 Dallis and Walters, 253.  
50 Dallis and Walters, 257.  
51 Imamoto, 9.
appreciation for one-on-one help, and on the convenience of simply being able to “drop in” for help without an appointment.

Another option is reaching beyond the boundaries of the library to students’ residences. Teresa Neely wrote an excellent, early paper on this topic in 1999; the practice has become far more prevalent since her paper’s publication. Neely discusses dormitory Internet access, as well as the prevalence of class Web pages, as good opportunities for library outreach. She explains that sometimes outreach can be most effective when it enters the dormitory through the Internet.

She also suggests outreach through library content or links in teaching assistants’ class Web pages. Finally, she discusses outreach to students in all years of college through special interest groups. At her university, librarians have had special success working with extracurricular organizations for minority students.

Available literature covers the background of this survey well. However, it does not directly address all of the questions that the researcher has planned to address. Most importantly, it does not yet detail the media through which undergraduate students are most comfortable communicating with reference librarians. This knowledge is crucial in an age where new media arrive frequently, and where librarians strive to both explore technological innovations and provide the most satisfying reference service possible. Hence the inspiration for this study.

52 Imamoto, 13.
53 Imamoto, 12.
54 Neely, 277.
55 Neely, 278.
56 Neely, 279-280.
Methodology

Sample

The research began with surveying 14 sections of English 101 at UNC-Chapel Hill. Each section had 19 available seats. According to its initial design, the survey would be administered to ten sections of English 101. These sections were identified using an online random number generator\(^57\) to generate numbers representing sections. Instructors of these sections were sent a request for participation, plus explanatory information, via e-mail. (See Appendix D for the text of this e-mail.) Questions the instructors sent received answers on a case-by-case basis with no set text.

Originally, the researcher had planned to survey only one section per instructor. However, several instructors kindly offered the opportunity to survey each of two sections. After exploring the possible statistics implications of doing so, the researcher took these instructors up on their offers.

Since the vast majority of first-year students (around 85\%) take English 101, the subjects’ racial, ethnic, gender, age, and socioeconomic status should closely mirror those of the UNC-Chapel Hill student body as a whole. Although students were not asked to note their age in years, nearly all students appeared to be of traditional age, between approximately 17 and 19 years. Students under age 18 were instructed not to complete the survey for legal reasons.

\(^{57}\) Random.org (http://www.random.org/), designed and operated by Dr. Mads Haahr of Trinity College Dublin’s School of Computer Science and Statistics.
Ninety-seven percent of subjects (230) were in their first year of undergraduate education. Of the survey participants, 51.9% (123) were male, and 48.1% (114) were female. This differs significantly from UNC-Chapel Hill’s overall male-female ratio of 41 to 59.\textsuperscript{58} The College Board’s (administrator of the SAT) data on North Carolina students’ performance on the SAT Writing section shows female students outperforming males since the Writing section was first offered in 2006. Both years, women outperformed men by 11 points (492 to 502 and 489 to 500).\textsuperscript{59} Since SATs are used in placement, this may relate strongly to the differences in gender ratios of English 101 and UNC-Chapel Hill overall. More females may have placed into English 102, or out of composition entirely.

**Survey**

This survey was not pre-tested in a traditional sense. The researcher finished designing the survey in early summer 2007. Because sections of English 101 offered over the summer semester are many weeks shorter than sections held in the fall, students would likely have had significantly different rates of interaction with librarians than the intended subjects. Thus the study was instead prepared by gathering critiques from several professors in the School of Information and Library Science and the researcher’s colleagues at the Undergraduate Library.

\textsuperscript{58} Peterson’s, 686.
The survey was designed to take a fairly direct approach at answering each of the three questions detailed in the Objectives section. It also directly gathered demographic information. Finally, it gathered a few pieces of information indicating students’ attitudes toward reference services and librarians in general. The survey is available as Appendix C.

**Administration of Survey**

The survey was administered during the second and third weeks of September, 2007. As per Institutional Review Board (IRB) policies, surveys were given during the last five minutes of each section’s regular meeting time. (Regulations limit researchers to using the last five minutes of a class period. Instructors must indicate that students have finished their lessons and work for the day.) Students were allowed to stay after class if they needed additional time to complete the survey. They were offered candy to eat while completing the survey (or opting out).

The survey was provided on paper, so that all students had the opportunity to participate (i.e., no laptop problems). A copy of the Informed Consent Form was included at the beginning of the survey is shown in Appendix B. A copy of the questions and choices of responses is available in Appendix C.

The researcher left the room after speaking to students and passing out study materials. Students were invited to ask any questions they had outside the room, if questions arose while taking the survey.
Data Analysis

After collecting data from all fourteen sections of English 101, the researcher entered the numbers into SPSS software. Once all of the data was entered, raw totals provided interesting insight. Thus, much attention is focused on these numbers.

Staff at UNC-Chapel Hill’s Odum Institute for Research in Social Science provided guidance on the analysis for each desired pairing of variables. They noted that, although chi-square tests showed that some of the important pairings were not statistically significant, the relatively large sample size and distinct patterns in the data made them meaningful. These combinations of data are shown as graphs, based on cross-tabulations performed using SPSS software.
Results

Demographics

As previously stated, 51.9% (123) of the subjects were male, while 48.1% were female. Exactly 97% (230) were first-year students. Students who were not first-years were not asked to further specify their class standing.

Year in School

Only seven out of 237 students (1.3%) reported being in their second year of school or beyond. This division did not significantly affect any statistics. Thus, these students have been grouped with the first-years for all analyses and discussion.

Gender

One question that arose early in this study was the relationship between gender and preference for in-person interactions with librarians. Popular culture and numerous reputable sources discuss differences in communication styles between males and females. Academic library staff often display an imbalance of gender. The American Library Association’s Public Information Office states that, as of their most recent count, 68% of academic librarians were female.\(^6^0\)

However, results from this study do not show a significant relationship between gender and comfort levels with in-person communication in the library. The two genders show strikingly similar patterns in reported comfort levels, as shown in Table 1, where the answers “Definitely not” and “Probably not” were collapsed. The chi-square value was 2.619, which indicates that there is no relationship between gender and comfort level.

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely not/</td>
<td>15.7%</td>
<td>9.6%</td>
<td>12.7%</td>
</tr>
<tr>
<td>Probably not</td>
<td>N=19</td>
<td>N=11</td>
<td>N=30</td>
</tr>
<tr>
<td>Maybe</td>
<td>19.0%</td>
<td>16.5%</td>
<td>17.8%</td>
</tr>
<tr>
<td></td>
<td>N=23</td>
<td>N=19</td>
<td>N=42</td>
</tr>
<tr>
<td>Probably</td>
<td>35.5%</td>
<td>39.1%</td>
<td>37.3%</td>
</tr>
<tr>
<td></td>
<td>N=43</td>
<td>N=45</td>
<td>N=88</td>
</tr>
<tr>
<td>Definitely</td>
<td>29.8%</td>
<td>34.8%</td>
<td>32.2%</td>
</tr>
<tr>
<td></td>
<td>N=36</td>
<td>N=40</td>
<td>N=76</td>
</tr>
</tbody>
</table>

Table 1: “Are you more comfortable communicating with a librarian in person than by chat, e-mail, or phone?,” analyzed by gender $\chi^2=2.619$, $p>.05$, df=3

Because of the strong similarity in masculine and feminine responses on this topic, male and female responses will be grouped together in all other sections of the discussion.

**Awareness of Advertising**

Of the subjects, 64.6% (153) reported that they had noticed at least one form of advertisement for UNC-Chapel Hill Libraries’ reference services. (See Figure 1 for details.) These students were asked to mark all methods of
advertising that they had seen. Many marked more than one. The remaining
35.4% of students (84) had not noticed any forms of advertisement. See Table 2 for details.

<table>
<thead>
<tr>
<th>Percentage of subjects</th>
<th>Number of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal pitch during an instruction session</td>
<td>18.1%</td>
</tr>
<tr>
<td>“Ask A Librarian” link on a library Web page</td>
<td>30.4%</td>
</tr>
<tr>
<td>Other verbal or visual advertisement</td>
<td>37.1%</td>
</tr>
</tbody>
</table>

Table 2: Comparative Awareness of Advertising Methods
Students were asked which types of advertisements for reference services they have noticed at UNC-Chapel Hill’s Libraries.

**History of Usage**

Students were asked whether they had used reference services (in-person or virtual) at any UNC-Chapel Hill Library. Students who answered “yes” were asked which of a list of factors had encouraged them to use reference services. They were allowed to mark more than one factor. A total of 35% (83) students reported having used these services already. Total usage and breakdown by factor are shown in Table 3.
<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage of subjects</th>
<th>Number of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Librarian mentioned services during instruction session</td>
<td>8.4%</td>
<td>20</td>
</tr>
<tr>
<td>Noticed the “Ask A Librarian” link on a library Web page</td>
<td>6.8%</td>
<td>16</td>
</tr>
<tr>
<td>Spoke with a librarian during orientation</td>
<td>4.6%</td>
<td>11</td>
</tr>
<tr>
<td>Required by a professor or teaching assistant</td>
<td>16.5%</td>
<td>39</td>
</tr>
<tr>
<td>Recommended by a classmate or friend</td>
<td>9.7%</td>
<td>23</td>
</tr>
<tr>
<td>Had used reference services at another library</td>
<td>4.6%</td>
<td>11</td>
</tr>
<tr>
<td>Noticed the reference desk</td>
<td>11.8%</td>
<td>28</td>
</tr>
<tr>
<td>Other</td>
<td>0.8%</td>
<td>2</td>
</tr>
<tr>
<td>Total usage</td>
<td>35.0%</td>
<td>83</td>
</tr>
</tbody>
</table>

Table 3: Factors that influenced students to use reference services (self-reported)

Librarians have indirect but notable control over the top three factors. Strong extant relationships with faculty and other students lead to recommendations or requirements of using the reference desk. Simply making the desk welcoming and accessible also goes a long way.

Of factors over which librarians have direct control, the influence of discussing reference services during instruction sessions is the strongest. This is an encouraging statistic, as librarians can easily provide a brief introduction to these services, pass out any promotional materials (such as the Undergraduate Library’s buddy stickers), and answer students’ reference-related questions in only a few minutes.
Among students who had not learned about reference services during an instruction session (194), 30.9% (60) had used reference services. (It is important to note that some of these students had not yet attended an instruction session at all, while others had attended an instruction session where the librarian did not discuss reference services. Others may simply not have remembered whether or not the librarian leading the session discussed reference.) However, among students who recalled a discussion of reference services (43), 53.5% (23) had asked a question of a librarian. The chi-square test for this relationship provided a chi-square value of 7.873, where \( p=0.005 \) and \( df=1 \). See Table 4 for percentages and raw figures.

<table>
<thead>
<tr>
<th>Have not learned about reference services during an instruction session</th>
<th>Have not used reference services</th>
<th>N=134</th>
<th>Have used reference services</th>
<th>N=20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have not learned about reference services during an instruction session</td>
<td>69.1%</td>
<td></td>
<td>46.5%</td>
<td></td>
</tr>
<tr>
<td>Have learned about reference services during an instruction session</td>
<td>30.9%</td>
<td>N=60</td>
<td>53.5%</td>
<td>N=23</td>
</tr>
</tbody>
</table>

Table 4: The relationship between learning about reference services during library instruction sessions and using reference services \( x^2=7.873, p=.005, df=1 \)

**In-Person versus Virtual or Voice Communication with Librarians**

On the survey, students indicated their levels of comfort asking a question to a librarian face-to-face, as opposed to virtual or voice methods (e-mail, instant
messenger, chat, or telephone). Students’ levels of preference for in-person communication are shown in Figure 1.

A striking total of 69.2% of students stated that they “probably” or “definitely” prefer in-person communication. When students who answered “maybe” are factored in, the total becomes 86.9%. While virtual methods of communication, as well as the telephone, are important options, it’s important to see just how much these students desire human contact in meeting their information needs.

**Preferred Media of Communication with Librarians**

Students were asked to specify which media of communication they would be comfortable using to ask questions of a librarian. They were allowed to choose as many as they felt were applicable. See Table 5 for subjects’ responses.
Table 5: First-years’ preferred media for communication with reference librarians

<table>
<thead>
<tr>
<th>Media</th>
<th>Percentage of subjects</th>
<th>Number of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instant messenger</td>
<td>30.4%</td>
<td>72</td>
</tr>
<tr>
<td>Proprietary chat</td>
<td>22.4%</td>
<td>53</td>
</tr>
<tr>
<td>Telephone</td>
<td>27.0%</td>
<td>64</td>
</tr>
<tr>
<td>E-Mail</td>
<td>59.1%</td>
<td>140</td>
</tr>
<tr>
<td>Class or group setting</td>
<td>41.8%</td>
<td>99</td>
</tr>
<tr>
<td>Reference desk</td>
<td>93.7%</td>
<td>222</td>
</tr>
</tbody>
</table>

Clearly, visiting the reference desk in person is first-years’ preference. This outpaces the next most popular option, e-mail, by 34.6%. The third most popular method, asking questions in a class or group setting such as instruction, received a notably higher response than the methods below it.

Librarians who staff the Undergraduate Library’s reference desk often note that many questions students bring to the reference desk are simple things such as “Where is the restroom?” During the 2005-6 school year, 15.7% of questions asked at the Undergraduate Library were about locations of specific rooms or objects within the library, such as restrooms, screening rooms, study rooms, and so on. While it is easy to minimize the value of these questions, they do serve practical purposes, and also increase students’ comfort with both reference services and the library as a whole.

The stated preference for e-mail reference assistance is interesting because it actually does not play a major role in reference work at UNC-Chapel Hill’s Libraries. Instructors including the researcher note that students virtually never contact them by e-mail for one-on-one assistance, though they are invited to do so at nearly all instruction sessions. The e-mail service provided through the Ask-A-

61 Provided by Suchi Mohanty.
Librarian page is also relatively unpopular. Anecdotally, the librarians who answer these e-mails report that there are many days when they do not receive any questions through this medium.

**Attitudinal Questions**

Three questions probed students’ basic attitudes toward libraries and reference services. Results from these questions provide background, and interesting correlations with the awareness and usage questions. All were conducted using a five-point Likert scale.

![Figure 2: "Do you think that a librarian would be able to help you with most of the research- or school-related questions that you have?"]

The question “Do you think that a librarian would be able to help you with most of the research- or school-related questions that you have?” drew an overwhelmingly positive response. Results are shown in Figure 2. Over 80% of subjects displayed decidedly positive attitudes toward reference librarians’ capabilities to help with their information needs. A sizeable group, 14.8%, were unsure of the potential; however, as they have just begun their college educations,
their uncertainty about many factors is to be expected. Given the degrees of influence that librarians, professors, and classmates have over their decisions to use reference services, many of these students will likely give reference a chance.

The question “Do you worry that the librarian will think you should know more than you do?” also displayed strong levels of trust in the librarians. Results are shown in Figure 3. Nearly 60% of subjects were confident that reference librarians “definitely” or “probably” do not believe that they should know more than they do. As this is an important cause of library anxiety, UNC-Chapel Hill students’ strong level of confidence is a very positive sign.

In the case of this question, the additional 30.8% of students who answered “maybe” are a good sign. Again, librarians, professors, and peers have great opportunities to help build these students’ confidence levels.
The question “Have librarians at this library or others usually been helpful with your research in the past?” displays a positive attitude toward reference services. Results are shown in Figure 4. Two strong and probable conclusions can be drawn from this question. First of all, over half the students have already used a reference desk, with positive results. These students may already have asked a question at UNC-Chapel Hill, or they may be thinking of a school or public library. Whatever the case, these students will be inclined to use reference services in the future, and also encourage their classmates to do so.

Second, many students have not yet used a reference desk. This is to be expected, as nearly all are coming straight out of high school. These students have likely had working relationships with school or public librarians during their prior education, but often have not asked for reference assistance. During instruction sessions, students often indicate that they feel unsure about the types of questions they can ask librarians. Again, this leaves plenty of opportunity to sway these students toward positive perceptions.
Discussion

Since this study functions as an exploration of reference service to first-year students at the Undergraduate Library, focusing on the patterns that emerged, rather than searching for predetermined findings, is most appropriate.

Preference for Face-to-Face Interactions with Librarians

_Educating the Net Generation_, published by EDUCAUSE, sheds some light on why today’s Web-savvy undergraduates may still strongly prefer face-to-face interactions with librarians. In the chapter titled “Using Technology as a Learning Tool, Not Just the Cool New Thing,” college senior Ben McNeely discusses his peers’ preference for studying together in person, rather than through all the communication technologies available to them. He discusses social interaction, which he clearly differentiates from technology-aided interaction, as an integral part of the learning process for this generation. In a telling statement, he explains, “While they may use technology in their daily lives, relationships are a driving force in the learning process.”

He furthers his argument by quoting an MBA student, Arman Assa, who is president of his university’s Mac Users’ Group, on the subject of online communication as part of

---

62 Neely, 4.5.
college courses. Assa commented, “Some instructors argue that chat rooms, message board, and instant messaging are good substitutes, but they are by no means replacements for the exchange of tacit knowledge.”  Although McNeely and Assa’s commentary focuses on the classroom and course-related study practices, many of the communication technologies being used in the classroom are the same ones used to communicate with librarians. Also, students’ attitudes toward usage of communication technologies in one educational situation may carry over into other related scenarios, such as communicating with librarians.

**Attitudes and Usage of Reference Services**

One of the most striking sets of statistics in this study reflected students’ confidence in librarians’ willingness and abilities to help them with schoolwork. A total of 73.4% of students responded that librarians “probably” or “definitely” could help them with the majority of their questions. When the students who answered that librarians could “maybe” help, the total comes to 88.2%. These figures are especially interesting because the vast majority of students reported not having successfully received help at other libraries’ reference desks as of the present time. The overwhelmingly positive attitude seems either to reflect past positive interactions with librarians in other capacities, or a quick development of positive attitudes during their first few weeks at UNC-Chapel Hill.

This pairing of information—attitudes and usage levels—would be interesting to explore through a more extensive survey, a longitudinal study, or a comparison of underclassmen and upperclassmen. For instance, do students’

---

63 Neely, 4.5.
expectations of the reference interactions closely match what actually happens? How many times do students need to interact with reference librarians to form a lasting personal research style that consistently includes consultation with librarians? Better understanding the connection between unsupported student attitudes and eventual interactions would help librarians plan to both work with students’ expectations in mind and educate students about the possibilities of library assistance.

Examining students’ attitudes toward librarians’ capabilities to help begs the question of how many students actually request their help. The cross-tabulation of students’ beliefs on this factor and their usage of UNC-Chapel Hill Libraries’ reference services is shown in Figure 10. Remember that although the majority of first-year students at UNC-Chapel Hill use the Undergraduate Library, use of reference services at any of the university’s nineteen libraries counted for this study.

<table>
<thead>
<tr>
<th>“Do you think that a librarian can help with most of the research- or school-related questions that you have?”</th>
<th>Have used reference services</th>
<th>Have not used reference services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely not</td>
<td>0% N=0</td>
<td>1.3% N=2</td>
</tr>
<tr>
<td>Probably not</td>
<td>4.8% N=4</td>
<td>3.2% N=5</td>
</tr>
<tr>
<td>Maybe</td>
<td>18.1% N=15</td>
<td>13.0% N=20</td>
</tr>
<tr>
<td>Probably</td>
<td>57.8% N=48</td>
<td>64.3% N=99</td>
</tr>
<tr>
<td>Definitely</td>
<td>19.3% N=16</td>
<td>18.2% N=28</td>
</tr>
</tbody>
</table>

Table 6: The relationship between students’ beliefs on whether a librarian can answer their questions and usage of reference services
Interestingly, the differences in usage are not significant. Several factors could play major roles. First, students may not have had a chance to act on their beliefs yet. Those who believe that a librarian could help them may not have needed to ask a school-related question yet.

Another possibility relates to the types of questions that students tend to ask at the libraries, especially in the beginning of their academic careers. Many may have asked librarians for help locating a building on campus, or some such question. While this would relate to some degree of confidence in librarians’ abilities, it would not necessarily connect with trust in their potential to answer academic questions. During the 2006-7 school year, the Undergraduate Library’s reference desk recorded a total of 8971 questions. Of these, only 2473 (27.6%) fell into the two categories most strongly related to schoolwork: Research and Citing Information. That left a large proportion in the other categories: Library Information, Building Directional, Campus Information, Computer/Printer/Copier Problems, Reserves, the Media Resources Center, and “Miscellaneous.” These students may not have perceived themselves as having a meaningful (or memorable) interaction with a librarian. However, assuming that the librarians successfully aided them with their information needs, these students are probably more comfortable with the idea of requesting a librarian’s help than are their peers. Thus these interactions are indeed meaningful in the students’ educational careers.

Provided by Suchi Mohanty.
**Introducing Reference Services During Library Instruction Sessions**

One question the researcher has had while working at the Undergraduate Library has been the effectiveness of mentioning reference services during library instruction sessions. The university’s English department requires all sections of English 101 to hold at least one session at the library. However, as this survey was conducted in late September, many sections had not yet visited the library as a group.

Table 7 shows the relationship between learning about reference services during a session and feeling comfortable conducting reference interviews face to face. Notably, students who had learned about reference services during a library instruction session showed steadily increasing levels of confidence. Students who had not learned about reference services during a session peaked at “probably,” then went down at the “definitely” level.

<table>
<thead>
<tr>
<th>“Are you more comfortable communicating with a librarian in person rather than by chat, e-mail, or phone?”</th>
<th>Did not discuss reference services during an instruction session</th>
<th>Discussed reference services during an instruction session</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely not</td>
<td>3.1% (N=6)</td>
<td>2.3% (N=1)</td>
</tr>
<tr>
<td>Probably not</td>
<td>9.3% (N=18)</td>
<td>11.6% (N=5)</td>
</tr>
<tr>
<td>Maybe</td>
<td>18.7% (N=36)</td>
<td>14.0% (N=6)</td>
</tr>
<tr>
<td>Probably</td>
<td>38.3% (N=7)</td>
<td>32.6% (N=14)</td>
</tr>
<tr>
<td>Definitely</td>
<td>30.6% (N=59)</td>
<td>39.5% (N=17)</td>
</tr>
</tbody>
</table>

Table 7: Does introducing reference services during instruction sessions encourage students to communicate with librarians in person?
It is not necessarily advantageous for students to prefer in-person reference contact. However, since students indicated an overall preference for face-to-face interactions, instruction sessions’ role in increasing students’ confidence in using these methods should be taken as a positive.

Summary

This research has explored the relationships among promotion of reference services, usage of these services, and students’ relevant attitudes. The most striking theme that has emerged has been the importance of face-to-face contact in two ways. Most importantly, the majority of students still prefer to ask their questions to librarians in person. Unexpectedly, they also seem to respond most strongly to promotions given in person. While conversations between first-years and library staff at orientation only left a small mark—4.6% of students recalled these interactions—discussions held during instruction sessions held major sway over students’ choices.

Virtual communication is still an important option in academic libraries. Students work from their dormitory rooms, travel the world, or sometimes just prefer communicating from the desk where they’ve settled to study in the library. However, often in-person communication is an option, and librarians and libraries must create many opportunities for it, both in the instruction lab and at the reference desk.
Future Research

This work provides numerous suggestions for future, related research. The most important may be exploring similar attitudes among upperclassmen. Perhaps students who have had the opportunity to try several methods of reference interaction will note preferences at different rates. They may also work from a distance more often, as they frequently live off-campus or take part in study abroad.

Librarians at other types of libraries may want to conduct similar research. Public libraries often provide options for virtual communication with librarians. Although their users will be located off-site more often, their attitudes toward different types of reference services would be useful to note.
Bibliography


About the Graduate School. 2007. The Graduate School, University of North Carolina at Chapel Hill, Chapel Hill, NC. 3 Nov. 2007 <http://gradschool.unc.edu/about/about.html>.


Carolina—A Brief History. Adapted from an article by William Powell. [undated]. University Libraries, University of North Carolina at Chapel Hill, Chapel Hill, NC. 3 Nov. 2007 <http://www.unc.edu/about/history.html>.


Appendix A

Karen Sobel
IRB number 07-1098

Script for Classroom Visits

“Hi My name is Karen Sobel, and I am a graduate student in the library science program here at UNC. Today I am conducting a research study as part of my master’s thesis.

“You may have seen me around the Undergraduate Library. I work in the reference and instruction department. Today I am administering surveys on how well we promote our reference services at the library. By reference services, I mean asking questions at the reference desk, or by e-mail or instant messenger. If you haven’t used any of these services, please don’t worry. Learning why some people choose not to use reference services helps as much as learning why others do. Either way, I will not connect your name or other identifying information with your answers. You will notice that there is no space for your name, PID, or other personally identifying information on the survey itself. I will not share individual or class responses with your teacher. However, anyone including your teacher, and yourselves, may read my completed thesis at the end of the semester. It will be posted on my web space at http://www.unc.edu/~ksobel. Please feel free to copy the address down and visit later if you are interested. I am writing my email address on the blackboard. Please feel free to contact me if you have any questions or concerns about the study later, or if you have questions about the libraries’ reference services. Does anyone have questions now?

“Here are copies of my survey, and a consent form that explains what you’re agreeing to if you complete the survey. Please read that through carefully before completing the survey.

“You will probably be able to complete the survey by the end of class time. However, you may stay after class if you need additional time.

“If and when you have completed the survey, please place it and your signed consent form in this manila envelope. When everyone has left the room, I will take the envelope. These surveys will be kept in a locked drawer in my office, and destroyed once I complete my master’s paper. Do you have any questions?”

[Depart the classroom with the instructor.]
Appendix B

Karen Sobel
IRB number 07-1098

Information Sheet for Subjects

IRB Study #07-1098
Consent Form Version Date: 08 July 2007

Title of Study: Promotion of Library Reference Services to Undergraduate Students

Principal Investigator: Karen Sobel
UNC-Chapel Hill Department: Information and Library Science
UNC-Chapel Hill Phone number: 919-962-8366
Faculty Advisor: Dr. Barbara Moran

IRB Contact Information:
Medical School Building 52
105 Mason Farm Road
CB # 7097
Chapel Hill, NC 27599-7097
Telephone: 919-966-3113
Fax: 919-966-7879

Study Contact telephone number: Karen Sobel: (o): 919-962-1355
Study Contact email: ksobel@email.unc.edu

Dear English 101 Student:

What is the purpose of this study?

Today I am collecting data on undergraduate students’ usage of UNC-Chapel Hill Libraries’ Reference Services. The survey I am administering today is a research study to support my master’s thesis in library science. The purpose of this study is to gather and analyze information about English 101 students’ usage of UNC-Chapel Hill Libraries’ reference services. The knowledge gained from this survey will help the Libraries’ staff better inform students about available services in the future.

You may choose whether or not to participate.

Ten sections of English 101 will complete the survey during this semester. Your instructor has agreed to allow me to give the survey to your class. However, you are free to choose not to participate in this study. If you prefer not to
participate, simply return your survey and this letter to the manila envelope unmarked. You may stop participating at any point in the survey, or decline to answer any question for any reason. If you choose to stop early, please return your survey and this letter to the manila folder. Your teacher and the investigator will have no way of knowing whether or not you have participated. Please do not complete this survey if you are under 18 years of age.

How will your privacy be protected?
If you choose to take part in this study, you will provide the investigator with information through completion of your survey. Surveys will NOT be identified with individuals by name, PID, or any other personal information. Please do not include any information that could be used to identify you in the free response box or anywhere else on the materials. After all ten sections I am working with have completed their surveys, I will begin to analyze the data of all sections together. I will not analyze responses of individuals or individual sections.

How can you access the final results?
I will not inform English 101 instructors of any results until the paper is available to the general public. Overall results from the study will be made available through the School of Information and Library Science’s thesis archive, the Libraries’ thesis archive, and the investigator’s personal web space (http://www.unc.edu/~ksobel) once the paper is submitted at the end of the semester.

How will you benefit from this study?
You and your fellow students may benefit from improved promotion and awareness of the Libraries’ reference services in the future. There are no risks involved with the completion of this survey.

What if you have questions or concerns about this study?
If you have any questions about this study, please contact either the investigator or her advisor at the telephone numbers or e-mail address listed above.

Return of the completed survey connotes your consent to participate.

Sincerely,

Karen Sobel
Appendix C

Karen Sobel
IRB number 07-1098

Survey: Promotion of Library Reference Services to Undergraduate Students

Please complete the following questions whether or not you have used reference services at UNC-Chapel Hill’s Libraries. Using reference services includes asking a research- or school-related question at the reference desk at one of UNC-Chapel Hill’s Libraries, or asking reference librarians a question by Instant Messenger (buddy names undergradref or davisrefdesk), e-mail, or chat.

1. Gender: __male __female
2. Year at UNC-CH: __first year __second year or beyond
3. Have you noticed any advertisements (verbal or visual) for UNC-Chapel Hill Libraries’ reference services?
   __yes, in an instruction session
   __yes, on the library’s Web site
   __yes, somewhere else
   __no, I have not noticed any
4. Have you used reference services at UNC-Chapel Hill? __no __yes
   4a. If you answered yes, which of the following methods of promotion helped you become aware of reference services:
      __librarian mentioned it during a class visit to the library
      __noticed the “Ask-a-Librarian” link on the Libraries’ web page:
      __spoke with a librarian or received promotional materials during orientation
      __required by a professor/TA
      __recommended by a classmate or friend
had a good experience with reference services at another library in the past
noticed the reference desk
other (Please specify.): _______________________________

5. Do you think that a librarian would be able to help you with most of the research- or school-related questions that you have?
definitely not
probably not
maybe
probably
definitely

6. Do you worry that the librarian will think you should know more than you do?
definitely not
probably not
maybe
probably
definitely

7. Have librarians at this library or others usually been helpful with your research in the past?
not at all helpful
not very helpful
no opinion
a little bit helpful
very helpful

8. Are you more comfortable communicating with a librarian in person than by chat, e-mail, or phone?
definitely not
probably not
maybe
probably
definitely
9. How would you feel comfortable asking a librarian for research help? Please check all that apply.
   __by instant messenger
   __by a chat service run by the library
   __by telephone
   __by e-mail
   __in person during a group instruction session
   __in person at the reference desk

10. Anything else you’d like to tell us?
Appendix D

Karen Sobel
IRB number 07-1098

Recruitment E-Mail Sent to Select English 101 Teaching Fellows

Dear [name]:

My name is Karen Sobel. I am conducting a research study in preparation for my master’s thesis, and would like to request your assistance.

I am a graduate student working toward my Master of Science in Library Science degree. I also work in the Reference and Instruction Department at the Undergraduate Library, although that department has no direct connection with this work. I am writing to request your assistance in collecting data for analysis in my master’s paper.

For my master’s paper, I plan to survey ten sections of English 101. My brief survey will ask students whether or not they have used reference services available through UNC-Chapel Hill’s Libraries. Reference services include questions related to academics or to student life, asked at a UNC-Chapel Hill reference desk or through a chat service. More details will be provided to students prior to completing the survey. I will analyze the data from all ten sections together; I will not analyze individual students or individual course sections.

Would you be willing to allow me to survey your class? My introduction and administration of the survey will require a total of about five minutes of class time. I will come to the sections that are being surveyed and administer the survey myself during the last five minutes of class time. My advisor estimates that the entire process can be completed during this time; however, students may stay after class if they need a few extra minutes.

Please let me know whether you will consider allowing me to survey your English 101 class. I will gladly answer any questions you have, and provide you with a copy of the survey if you would like me to. Please contact me by e-mail or phone (919-962-1355).

Thank you!

Sincerely,
Karen Sobel