

**University Libraries Assessment Committee**

**2012-2013 Report**

**LibQUAL+<sup>®</sup> Survey of University Libraries**



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## INTRODUCTION

The University Libraries Assessment Committee is charged with determining how well the University Libraries is meeting patron expectations of service, collections, and facilities. In some years, the committee implements LibQUAL+®, which asks a broad spectrum of questions from all patrons; in other years, the area and population assessed is more focused. In 2012 the Committee performed a very simple exploration of patron use of the University Libraries website, the results of which informed aspects of the University Libraries Planning Framework. The current year was designated for administration of the LibQUAL+® instrument for the fifth time in a decade. The wealth of data generated since 2003 presents opportunities for in-depth analysis; however, this report focuses nearly exclusively on the current data-set, with simple comparisons with the most recent implementation in 2010 for illustrative purposes.

Designed and administered by the Association for Research Libraries (ARL), LibQUAL+® is an online survey that has been used by more than 1,000 libraries over the past decade. The survey has undergone continued refinement and analysis since its inception. For further information on the LibQUAL+® instrument, visit <http://www.libqual.org>.

### LibQUAL+® Survey: Description and Demographics

The LibQUAL+® survey collects both quantitative and qualitative data. The analysis of the quantitative data is presented first in this report, followed by the analysis of the qualitative data. In the final section of the report the two types of data are brought together for a more complete analysis with an exploration of recommended actions in response to the findings.

The LibQUAL+® survey was administered at the University of Northern Colorado (UNC) over a ten-day period during the 2013 Spring semester. The entire campus community was invited to participate via email, generating a convenience sample. Participants were offered the chance to enter a drawing for several prizes as incentive. Eight prizes were awarded: two iPod shuffles, one UNC sweatshirt, and five ten-dollar Bear Bucks Cards. Participation was also encouraged with a News item on the University Libraries website, an advertisement on Facebook, a reminder on computer desktops in the Information Commons and computer labs throughout campus, and through flyers and mini-flyers posted and distributed around campus. In order to broaden participation in the survey, the Committee again implemented “laptop stations” at locations outside the University Libraries. Holmes Dining Hall and the University (student) Center allowed members of the Committee to set up laptop computers in an effort to reach those students who may not routinely visit the University Libraries. A similar model was implemented in Michener Library for “Dorm Night,” during which participants were entered into an additional drawing to win one of the two iPod shuffles, with a winner drawn from the dorm with the most participants.

This year, a shorter version of the full survey, LibQUAL+® Lite, was administered to 100% of participants. One participant chose to complete the paper survey which is the full, non-Lite version. LibQUAL+® Lite utilizes partial or modified matrix sampling to decrease the number of core items on the survey from

twenty-two to eight. Matrix sampling is a well-established method for reducing the time required for participants to complete a survey by assigning different items to different respondents. For administration of LibQUAL+® Lite, three “linking” items, one from each of the dimensions—Affect of Service (AS), Information Control (IC), and Library as Place (LP)—were selected from the twenty-two items on the long version of the survey. These three items were asked of all participants. Another five items were randomly selected (two from AS, two from IC, one from LP) for a total of eight items. By using matrix sampling, feedback was received for all items, and, in theory, the survey completion rate increased. According to Thompson, Kyriallidou & Cook (2009), “The difference between the long and the Lite version of the survey is enough to result in higher participation rates” and “the library still receives data on every survey question.”

The authors of LibQUAL+® also noted that aggregated mean scores calculated from the Full form responses were generally more positive than those calculated from the Lite form responses. “Because greater completion rates were realized with the LibQUAL+® Lite protocol, the data from the Lite protocol might be the most accurate representation of the views of all library users in a given community. Thus our results might be interpreted as meaning that when the longer protocol is used, persons with more positive views are disproportionately likely to respond to the survey. This means that the longer protocol might result in somewhat inflated ratings of library service quality” (Thompson et al., 2009).

They hypothesized that the length of the form was the most significant factor in determining the completion rate, and that respondents with generally favorable views of library services were more likely to complete the longer form, and thus, the responses collected from the long form have an unrealistically positive bias (Thompson et al., 2009). In another (2008) article, the authors suggested that, in order to make valid comparisons of responses received from the two protocols, it is necessary to apply a mathematical conversion formula, but the Assessment Committee conducted some comparisons with 2010 data and found that the differences were insignificant. Therefore, the 2010 data in this report is aggregated from the Full form responses combined with those from the Lite form, with no attempt to convert or reconcile those discrepancies.

Over 1100 (13% of the entire undergraduate population) undergraduate students responded, as did just under 250 (11%) graduate students and just over 150 (25%) faculty members (Figure 1). The total number of respondents numbered 1,529, a 13% response rate. Overall, 75% of respondents are undergraduate students, 15% graduate students, and 10% faculty. Therefore, the aggregated results are overwhelmingly reflective of undergraduate responses. Based on past surveys, undergraduates typically respond favorably in

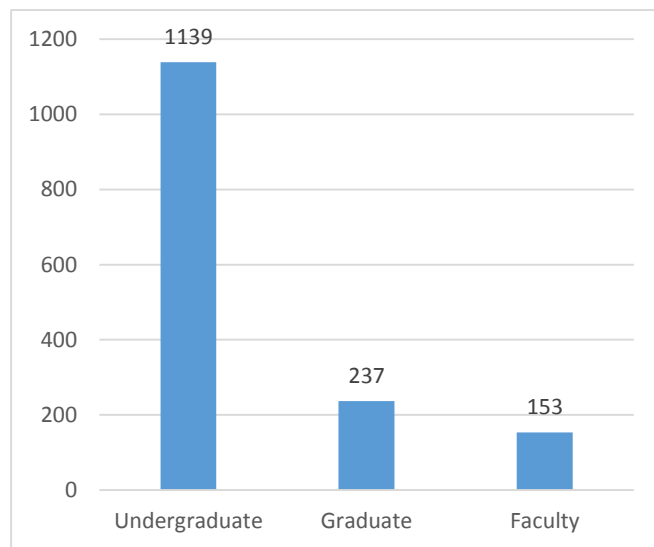


Figure 1 Number of respondents, by status

all service areas, while graduate students and faculty generally report greater dissatisfaction. However, due to the high percentage of undergraduate respondents, this dissatisfaction is imperceptible in the charts that illustrate aggregated data.

Validity of survey results can be measured, to some extent, by how well the overall population of potential respondents (N) is represented in the final set of data. In order to help determine validity of the LibQUAL+® survey, one demographic question involves selection of a discipline, or major area of study. Validity is particularly important when using convenience sampling as it could provide insight in the case of unexpected results. Representativeness, as a test of validity, is illustrated in Figure 2.

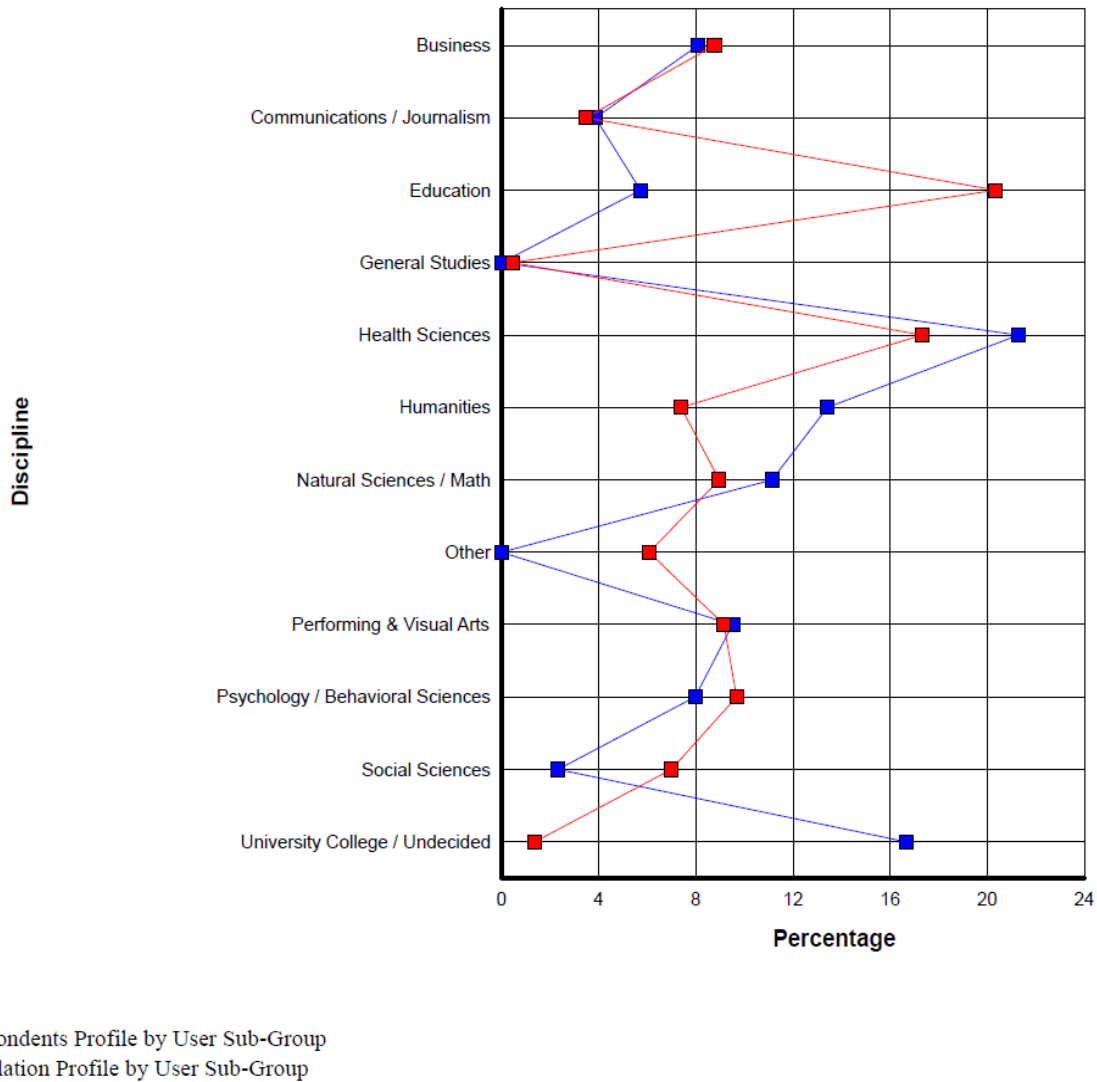


Figure 2 Representativeness: Distribution of respondents by customized discipline

Respondents in 2013 represented the UNC population as a whole fairly well, with the exceptions of Education, Humanities, and University College. Institutional data regarding the population as a whole, provided by the Office of Institutional Reporting and Analysis Services, does not accurately represent

those categories presented as “standard” in the LibQUAL+® survey, nor are those categories with which respondents self-identify. For example, according to the best available data at the time of the LibQUAL+® launch, approximately 6% of the campus is involved in Education as a major, however, 20% of respondents selected Education. This skewed proportion could have resulted from an extremely strong response rate from Education students. However, this might reflect the ways in which UNC offers degrees in “education” which is to have students major in an area, for example, chemistry, and concurrently pursue the teaching certificate. Therefore, these students are not education majors *per se*. However, a majority of students do report being education majors, resulting in a misrepresentation of that population.

The following analysis and discussion examines aggregated results broken out by status as appropriate. In 2010 there was an option to indicate a status of “staff” or “library staff” which was not present in the 2013 implementation; comparison therefore is not exact when examining aggregate data.

## QUANTITATIVE DATA ANALYSIS

### Radar Graphs

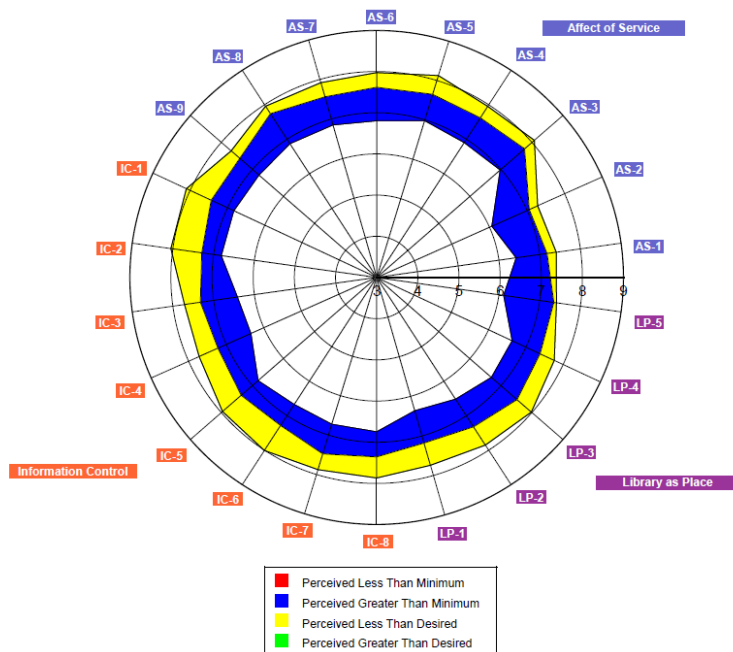


Figure 3 Radar graph of aggregate data

ARL provides reports to institutions implementing LibQUAL+® in any given cycle. These reports rely on radar graphs to show the data collected on each core question in a visual manner. Radar graphs are similar to bar graphs, with the zero value placed at the center and each question occupying a “spoke” around the outer edge of the circular graph (Figure 3). The 22 core questions are grouped into three “dimensions,” represented by the use of color in the radar graph: *Affect of Service* (AS) items are blue, *Information Control* (IC) items are orange, and *Library as Place* (LP) items are purple. The mean of respondents’ minimum

level of service typically falls at the innermost point of the spoke, while the score of the respondents’ desired level of service is often the outermost. The point representing the respondents’ perception of

the University Libraries’ level of service is the boundary along that spoke at which point the color changes from blue to yellow. If the University Libraries does not meet minimum levels of service, this point will be below minimum, and the color of that area is red. If the University Libraries exceeds respondents’ desired level of service, then that point will be at the outermost edge and the color would be green. For the majority of the 2013 UNC dataset the respondents’ perceived level of service is between minimum and desired, and so the inner portion of the spoke is blue and the outer portion is yellow. The greater degree of blue indicates a higher degree of patron satisfaction; the University Libraries exceeds patron minimum levels of expectation but does not quite meet desired levels.

## Analysis of Select Quantitative Data

### Core Dimension Questions

As demonstrated by the aggregate data for all user groups, the University Libraries is meeting user expectations (Figure 3). The three linking questions, i.e. those asked of all participants, also garnered good scores for all populations (see Appendix I). Only when the specific populations of graduate students and faculty are considered separately do we encounter items for which the University Libraries received scores that do not meet minimum expectations. Table 1 summarizes the questions mentioned in the analysis that follows.

Table 1 Core dimension questions discussed in analysis

Item	Complete question
<b>AS-9</b>	Dependability in handling users’ service problems
<b>IC-1</b>	Making electronic resources accessible from my home or office
<b>IC-2</b>	A library Web site enabling me to locate information on my own
<b>IC-5</b>	Modern equipment that lets me easily access needed information
<b>IC-8</b>	Print and/or electronic journal collections I require for my work
<b>LP-2</b>	Quiet space for individual activities
<b>LP-4</b>	A getaway for study, learning, or research

The University Libraries fails to meet minimum expectations for graduate students on several of the core dimension questions (Figure 4). The greatest dissatisfaction is in the Information Control area where less than minimum scores were given for IC-1, IC-2, IC-5, and IC-8. Two questions from the Library as Place dimension, LP-2 and LP-4, also garnered less than minimum scores with this population. In 2010, no item from the core dimensions earned less than minimum scores. Both minimum and desired expectations tend to be high for graduate students, especially in the area of Information Control, and

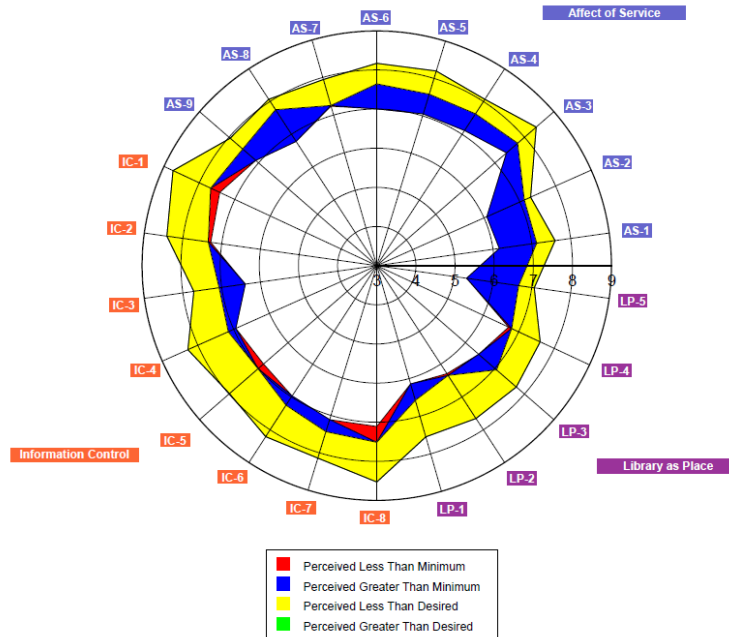


Figure 4 Radar graph of graduate student data

perceived level of service results have fallen since the 2010 survey implementation.

Faculty results show a higher degree of satisfaction than do those of graduate students (Figure 5). Only three of the core questions earned scores that are less than minimum expectations: AS-9, IC-1, and IC-2. There is one question demonstrating significant improvement in faculty results since 2010, IC-8. In 2010, the University Libraries failed to meet the minimum expectations for this question. While the University Libraries still do not exceed faculty expectations for IC-8 in 2013, minimum and desired expectations were more easily met than in previous years.



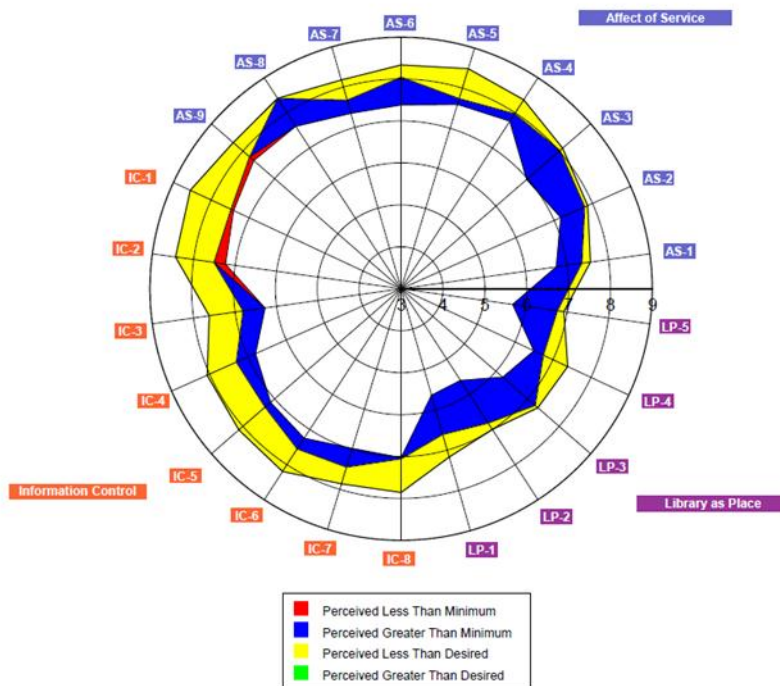


Figure 5 Radar graph of faculty data

### General Satisfaction and Information Literacy Outcomes Questions

The General Satisfaction questions and Information Literacy Outcomes questions are presented on the LibQUAL+® survey as Likert scales and therefore lack minimum, desired, and perceived scores. Participants rate their levels of satisfaction on a scale from 1-9, with 9 representing the most satisfied. As with the core dimension questions, the items in these two categories were matrix sampled with only one of the questions being asked of all participants, *How would you rate the overall quality of the service provided by the library.* Overall, there was only minimal change in results for both the General Satisfaction and Information Literacy Outcomes since 2010 (Appendix II).

The University Libraries demonstrates consistently high scores for these questions. Figure 6 demonstrates that, for most disciplines, the scores for the common question, *How would you rate the overall quality of the service provided by the library,* have risen since 2010. For implementations in both 2010 and 2013 scores are consistently higher than 7, which correspond with “strongly agrees” on the survey form, for all disciplines.

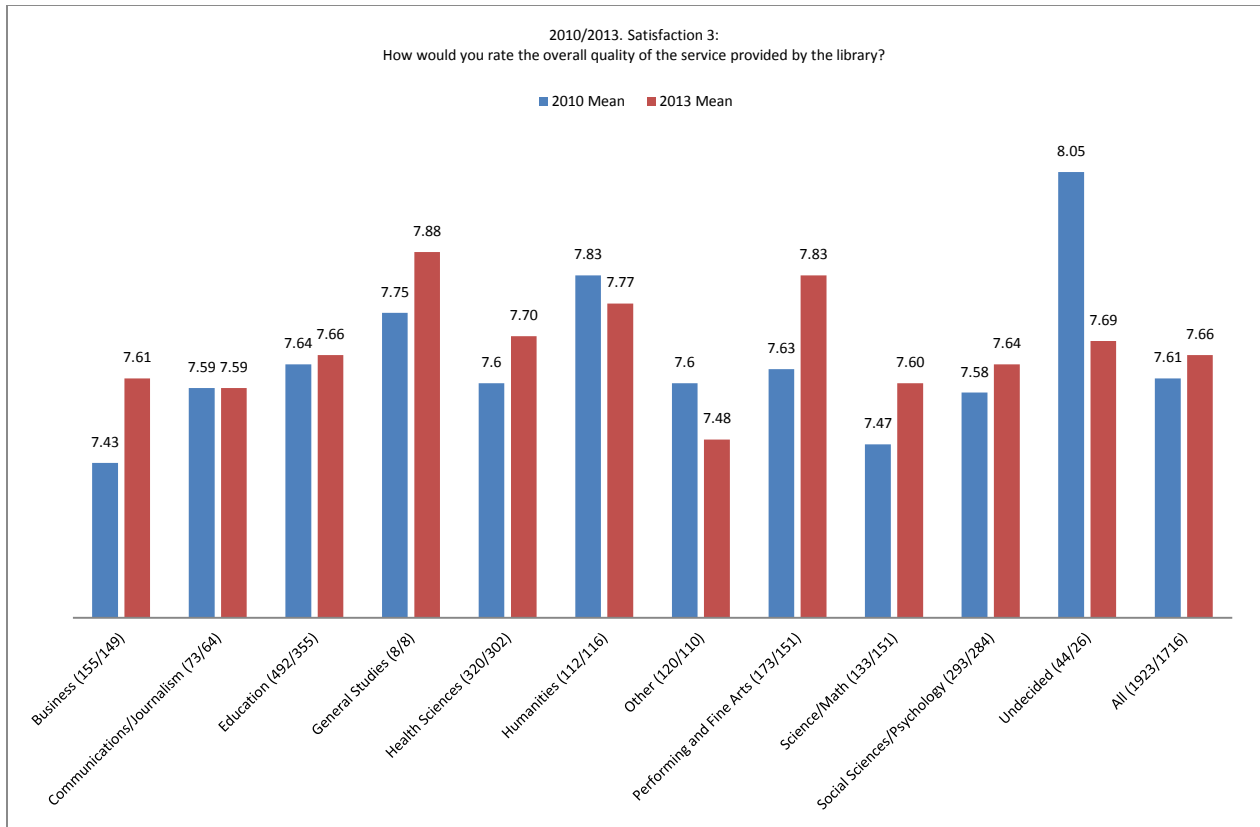


Figure 6 Results by discipline for General Satisfaction Question 3

### Local Questions

Each library participating in the LibQUAL+® survey has the opportunity to select five additional questions from a list to present to survey participants. These questions are referred to as the “local questions.” The University Libraries took advantage of this option again in 2013, selecting five questions, four of which were also used in 2010 (Appendix II). As with the standard survey questions, LibQUAL+® Lite implements matrix sampling in the delivery of the five questions to survey participants.

As in 2010, the question about the University Libraries website, *Ability to navigate library Web pages easily*, yielded results that indicate user dissatisfaction (Figure 7). Scores for this question fell for all populations except faculty, but faculty continue to be the population most frustrated with the website.

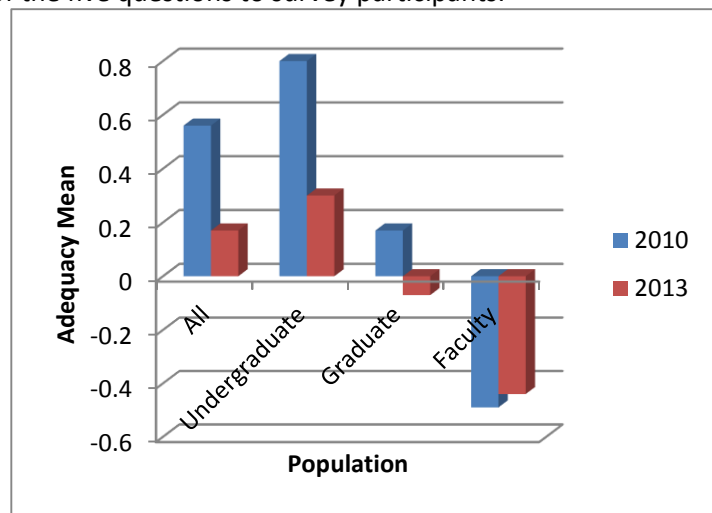
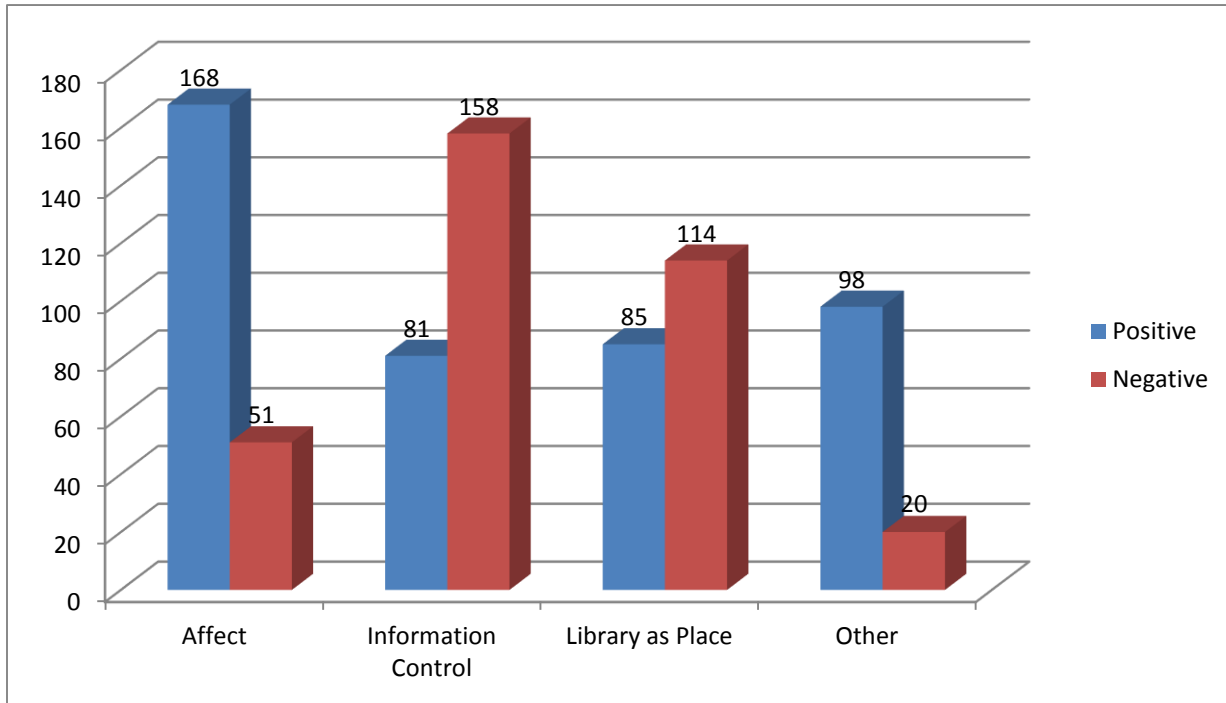


Figure 7 Results by population for website navigability question

## QUALITATIVE DATA ANALYSIS



**Figure 8 Summary of comment frequency**

A total of 594 comments were collected from students, staff, faculty, and community library users. If a single comment mentioned several areas, it was disaggregated. Therefore, 839 comments were grouped, like the quantitative data, broadly under the three LibQUAL+® dimensions: Affect of Service, Information Control, Library as Place; Other was applied as needed. Overall, 432 comments were positive, and 343 comments were negative (Figure 8). Forty comments were blank while a further 36 were designated as neutral comments as no positive or negative connotation of the comment could be determined. Under each dimension comments were further grouped into “categories” and determined to be positive, negative, or neutral. The area receiving most commentary was the Service category (Affect of Service dimension), with 140 positive comments. Other areas of note include the Access category (Information Control dimension with 52 negative and 14 positive comments), and Space (Library as Place dimension, 67 positive and 59 negative comments). The distribution of positive and negative comments within these three dimensions closely resembles the results from the qualitative data from 2010. (Further comparisons with 2010 data cannot be made as coding processes were different.) Respondents provided many areas for growth, attention, and praise, citing numerous individuals specifically as assets to the University Libraries and as discussed in further detail below.

### Affect of Service

The Affect of Service dimension includes the categories of Circulation, ILL (Interlibrary Loan), Instruction, Policy, Reference and Service (Figure 9). The majority of the comments in this dimension relate to Service and were positive (82%) indicating that the staff and librarians are friendly and helpful. One

faculty respondent stated, the *...library provides one of the best service-oriented library experiences I have encountered in academia. The personnel are dedicated to serving UNC students and faculty.* Several comments specifically mentioned service to distance students. One respondent commented, *...I am a distance ed master's student and I have been truly amazed by how helpful and efficient the*

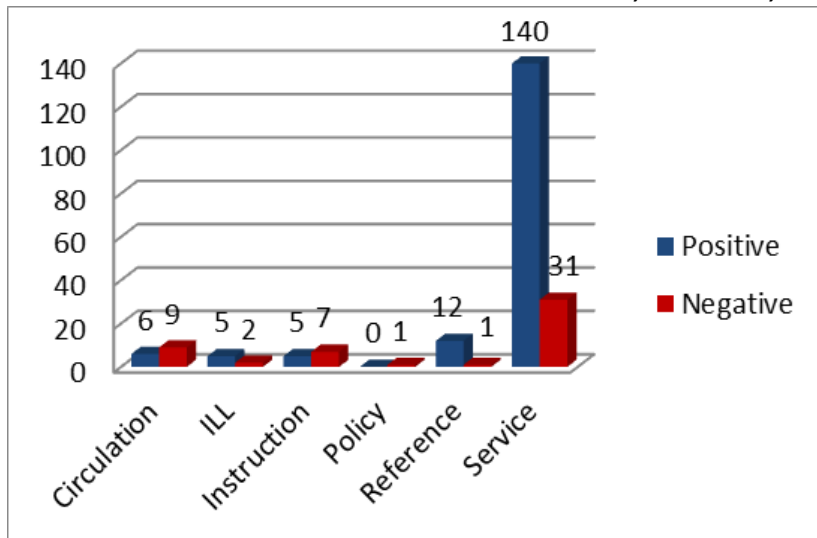


Figure 9 Affect of Service dimension, category frequencies

*librarians at UNC are in providing wonderful service to distance students. They are extremely responsive. The library services provided, especially for a distance student, are truly wonderful!* Another said, *...I accessed the library on campus for several years and was totally satisfied with the services. Now, as a distance student, I am just as satisfied....*

Also encouraging were the 26 positive comments identifying individual staff members or library faculty by name. Several staff members received multiple positive comments.

Respondents did, however, identify a few areas of improvement with regard to service. Specifically mentioned were dissatisfactory interactions with student workers (*...the student staff tend to be very unfriendly and unhelpful...*). Another area mentioned was the training of student workers. One respondent stated, *...some of the student workers need to be better trained in their positions...* Another said, *...sometimes the student workers don't know what they are talking about and give wrong information.* Similar negative comments relating to student workers' customer service skills and training were seen in the category of Circulation.

The positive comments in the Circulation category referred to specific services provided. One respondent commented *...There have been a couple of times when the articles were available at the physical library only. The library staff has always been very helpful with copying these articles and e-mailing a PDF to me.* Another said, *...request book/holding at front desk when ready is perfect! I use it every week when I have to get 3-4 books every week.*

Remarks concerning interactions with subject librarians were categorized under Service or Reference depending on the clarity of the comment. Respondents were overwhelmingly positive with regard to reference services provided by the subject librarians. One respondent stated *...The resource librarians are top notch! I have always received excellent support on the phone and for occasional face-to-face visits....* Online chat was identified specifically as a positive reference service. One respondent said, *...I am currently living in Germany and working on my degree through an on-line program that is offered by*

*the School of Psychology. My experience with the library personnel has been through the on-line chat option and I found the person who was chatting with me to be extremely helpful and knowledgeable....*

Comments in the category of Instruction referred to bibliographic instruction either from credit-bearing courses, such as Introduction to Undergraduate Research (LIB150), one time, subject-specific sessions or individual instruction sessions. The positive comments indicate that instruction and those who provide it are greatly valued. One respondent commented *...I have always been pleased with the receptiveness of library faculty to teach one of my classes about your services....* Another said, *...I had an opportunity to have a class in which a librarian came in and taught us all about the archives and accessing materials that were completely technology based. It was a wonderful opportunity!*

While Instruction is appreciated, respondents desire increased promotion of services and newly acquired resources. One respondent commented, *...if the Library can arrange a couple days a month for students to attend an "informational" seminar on how to use their services, it would help...* Another stated, *...one thing I would like would be hands-on training on the new resources available....*

### Information Control

The dimension of Information Control includes the categories of Access, Audiovisual, Catalog, Circulation Policy, Collection, E-journals, ILL, Information Technology, Printing, Prospector, Reserves, Stacks, and Website. There were 247 comments total in the Information Control dimension. Of these, 66% indicate areas that need attention (Figure 10). Eight neutral comments were excluded from the following analysis.

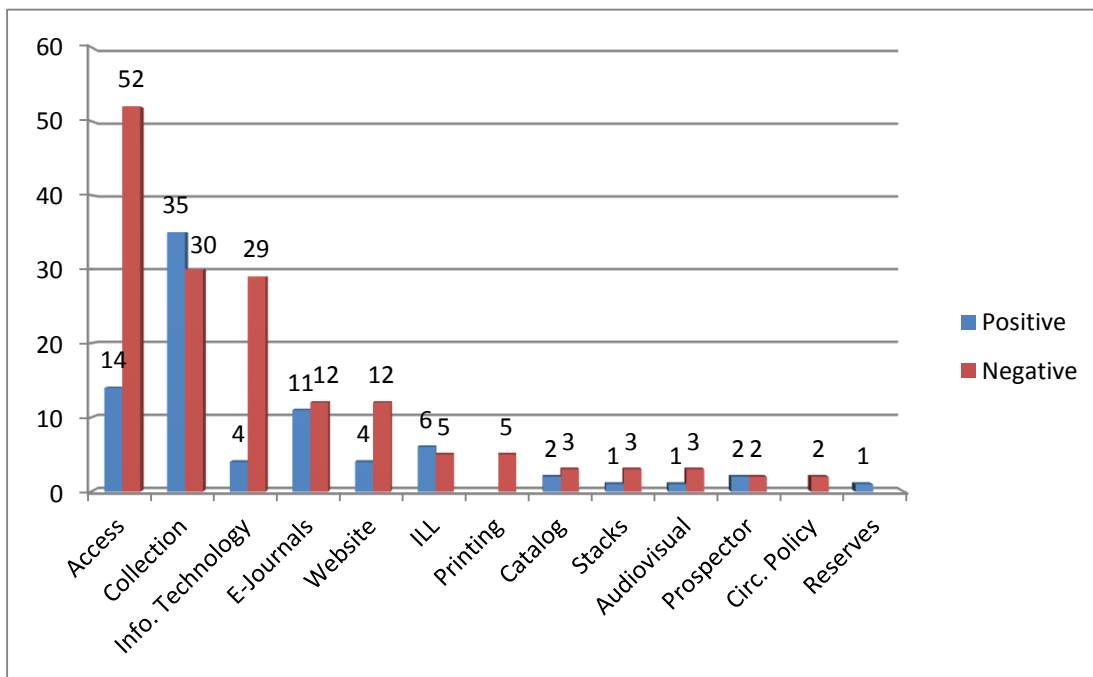


Figure 10 Information Control, category frequency

The two categories that garnered the most attention were Access and Collection with 66 and 65 comments respectively. Comments in the Access category concerned the ability to find, retrieve, or use either print or electronic resources. Collection comments concerned the composition of the University Libraries' resources, either print or electronic. If a comment was about either the collection or access and specifically mentioned online journals/articles, it was categorized with E-Journals.

Positive responses in the Access category primarily addressed the ease of use of both electronic and print resources. One respondent wrote, *I love being able to access these things from home, too, because between work, family, and school hours, I don't always have the time to spend in the library. With these variety of resources, I can study in the library the days I'm on-campus and at home the rest of the week.* In contrast, many suggestions for improvement in the Access category focused on the need for more online access. Some respondents addressed specific resources they found particularly difficult to use, including Summon, PsycINFO, and Ebsco E-books. One respondent stated, *I access the majority of my materials online and frequently, I will type in my search into the library search engine and a magnitude of articles will come up, but my particular search is a needle in the haystack ...*

Responses in the Collection category were the most positive of all categories in the Information Control dimension with 35 positive comments and 30 negative comments. Respondents were pleased with the depth and breadth of the collection. Some respondents referred to their experiences with specific resource types or collections, such as elementary education: *Great job on providing useful and educational elementary education books.* Of the negative responses, 37% - all undergraduates - of those requested that the University Libraries collect newer or more updated materials. One undergraduate wrote, *...many of the books are very old, printed in the '80's and older. I feel that updated versions of some of the books could be bought.*

Comments in the Information Technology category suggested that there is room for improvement in this area. Of the 29 negative comments in this category 24 of them (83%) concerned the wifi/internet or the computers. Most of these comments indicated a desire for faster computers and more reliable internet connectivity. Unsurprisingly, the majority of respondents in this category were undergraduates (73%) who identified a physical library location – either Michener or Skinner – as their primary access point.

Undergraduates were the most represented group in the three categories discussed above – Access, Collection, and Information Technology – accounting for 62% of comments. This user group expressed concerns in the Access and Information Technology categories, but was generally pleased in the Collection category. Graduate students were also very vocal in the Access category (Figure 11).

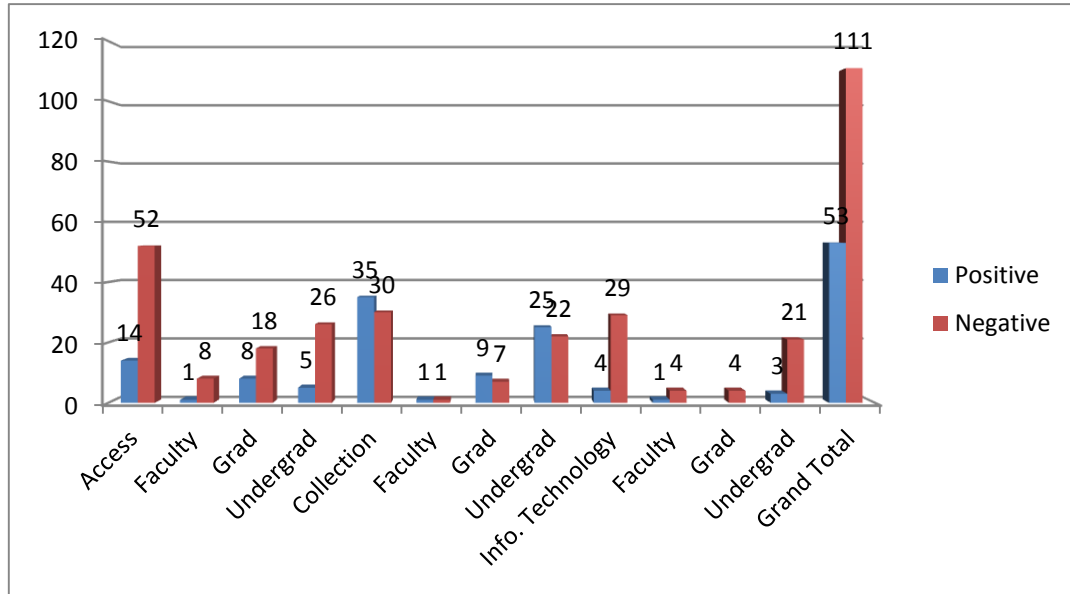


Figure 11 Information Control, select categories by respondent group

### Library as Place

For Library as Place, there were a total of 199 comments. Of these, 43% were positive and 57% negative. The categories receiving the highest number of comments were Hours (24), Noise (37), and Space (126) (Figure 12). There were 3 positive comments about the Mari Michener Gallery and 2 negative comments regarding parking and the security gates. Commentary about the Coffee Corner focused on the service and hours. The majority of comments were about Michener Library with Skinner Music Library being mentioned in only three comments in the Space category.

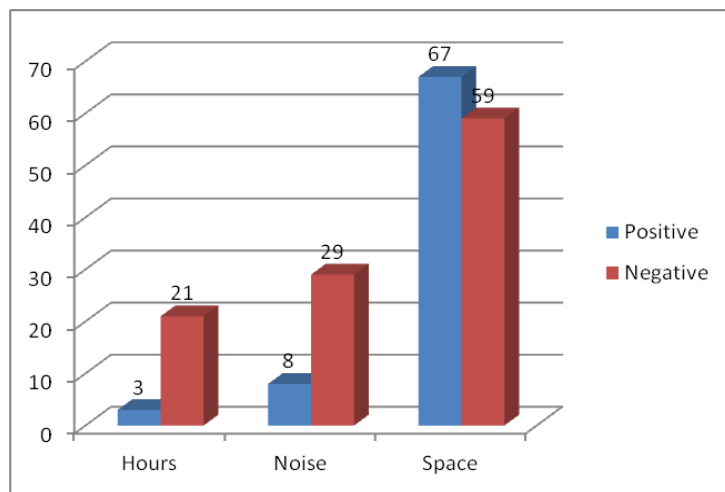


Figure 12 Library as Place, category frequencies

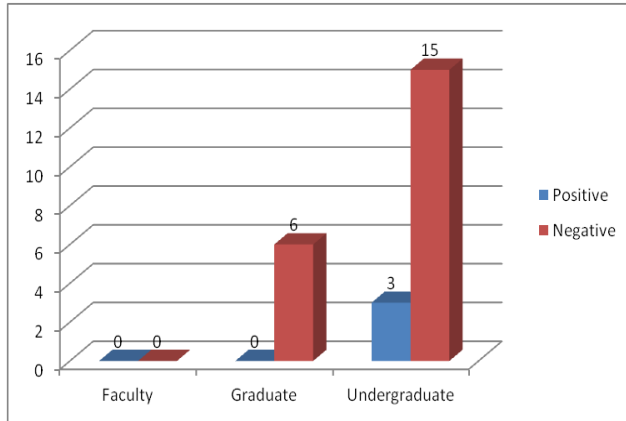


Figure 13 Comments relating to hours, by respondent group

Comments about library hours were largely negative (87.5%) and from undergraduate students (Figure 13). Not surprisingly, all the negative comments (21) were requests for longer hours of operation. One patron wrote, *I would love to have more access to the libraries with more available open times...it can be difficult to get into the library during open hours with all of the other stuff I am doing as a student...* Within the 21 negative comments, nine specifically mentioned extended weekend hours. Four comments expressed the need for the library to

be open 24 hours a day.

Of the 37 comments regarding Noise in the Michener Library, 78% were negative (Figure 14). These included statements that the library is generally loud, and several specifically mentioned the third floor. One fourth-year undergraduate commented, *The third floor rule has become a guideline that is ignored. It would be helpful if large study groups were made to study on the second floor instead of the third floor.* Areas not designated as quiet areas were also considered to be too noisy, including the computer areas, the first floor and the lower level. Twelve comments addressed the lack of enforcement of quiet on the 3<sup>rd</sup> floor, and 2 comments requested additional quiet areas. Of the positive comments, four specifically mentioned the third floor being a good quiet place to study. One student stated, *When I work and read I need complete silence and the third floor of the library gives me just that.*

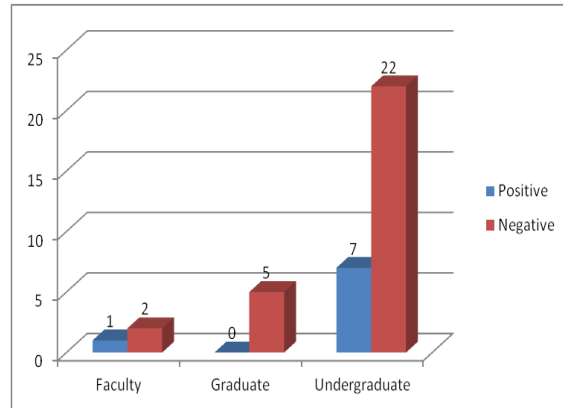
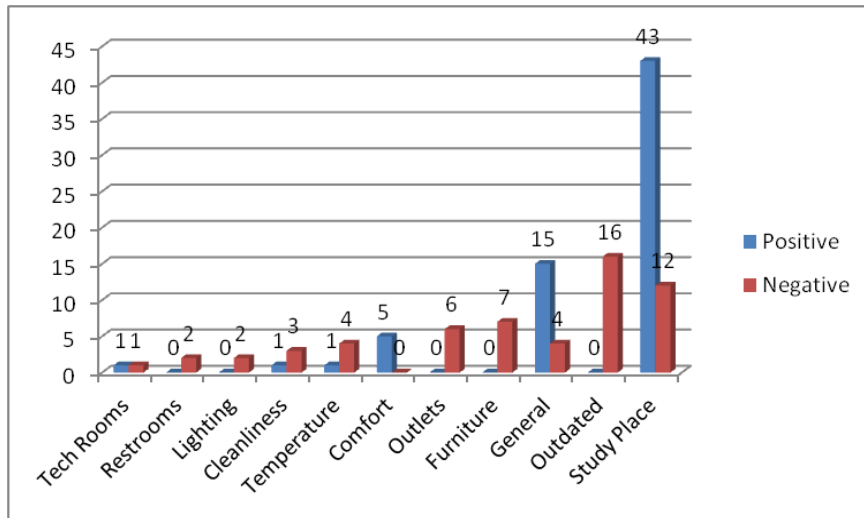


Figure 14 Comments relating to noise, by respondent group

The bulk of the comments about Space referenced the Michener Library, and only three comments were about Skinner Music Library. Two were negative in nature, expressing the need for more comfortable reading space and more private study areas in Skinner. On the positive side, an undergraduate wrote, *...the library itself is beautiful, open and invokes learning!*



The 123 comments about Michener cover numerous areas within the library. Figure 15 shows the breakdown of comments into sub-categories with 35% identifying Michener as a good place to study - *I like the library, it is a great environment for studying and getting assignments done.* Eleven percent reflected positively on the general atmosphere of Michener - *I really appreciate the library's abundance of open space to either relax and read or to study...It has a very welcoming environment.*



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On the other hand, 13% stated that Michener is outdated. A third-year undergraduate

Figure 15 Comments relating to study space in Michener Library, frequencies

wrote, *I believe the library needs to be updated to create an environment that attracts students to actually want to study. When in the library, I feel like I am stuck in time and prison.* Twelve comments (9.7%) addressed the need for more study space, both individual and group.

Additional negative comments about Michener furniture (7) included that more tables are needed for both individual and group study as well as newer furniture. Six patrons commented that more electrical outlets are needed. A third-year undergraduate stated, *The only restriction that I feel like hinders my library experience would be the lack of outlets.*

Figure 16 shows that undergraduates have a more positive outlook on the space at Michener Library than graduate students or faculty. Of the 97 comments made by undergraduates, 60% revealed that they were pleased with Michener Library space overall. This is significant as undergraduates are the largest population the library serves. One first-year student wrote, *I really like the Michener Library. It is so cozy and great...It is a warm and inviting place overall and somewhere I feel like I can go to study and learn.*

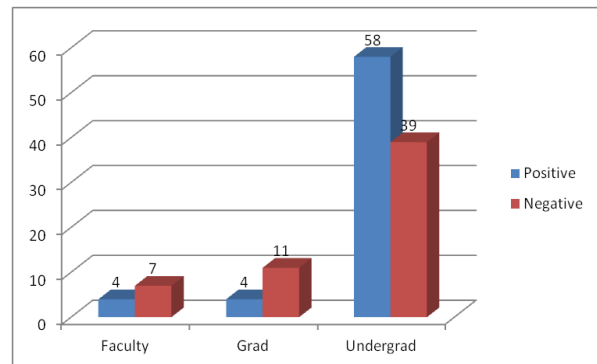


Figure 16 Comments relating to space in Michener Library, by respondent group

### Other Comments

In addition to comments that were general in nature, the Other dimension includes comments regarding Funding, Public Relations, and the Survey (Figure 17). A majority of the comments within the General category (83%) were positive, such as this one: *All of my experiences using the libraries at UNC have been positive.* Only 17% of comments in the Other dimension were negative in nature. Twelve of those

comments were about the survey itself, eight were related to public relations concerns, such as *The library needs to make its resources more known.*

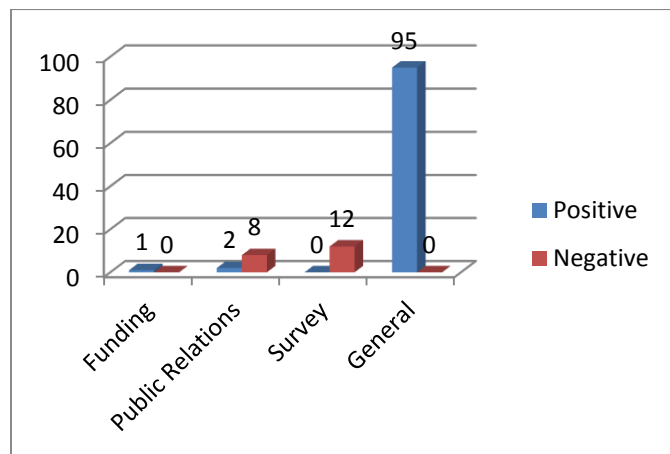


Figure 17 Other comments, frequencies

## FINDINGS

Quantitative results reveal that all groups tend to score *Affect of Service* questions highly, with an aggregated score of 7.53. Faculty, as a group, rate the Libraries higher than any other group in this dimension. However, service problems revealed by the written comments suggest that well-meaning student employees may not be adequately trained or that they are attempting to handle questions they should be referring to full-time University Libraries personnel. It should be noted that library users' interactions with student employees has increased over time due to the changing nature of staffing at the library service points. As interactions with student workers increases there is a greater probability that a negative interaction could occur.

*Information Control* scores are favorable in the aggregate with a score of 7.31 for perceived level of service across all IC questions, a comparable score to Library as Place (7.29) and Affect of Service (7.53). Qualitative data suggest that users are satisfied with collections with 58% positive comments in this category, but are dissatisfied with access to electronic resources. Lower scores on select items as well as written responses from faculty and graduate students suggest room for improvement in this area. Faculty and graduate student comments indicated a desire for more online access to academic journals. One graduate student commented, *Would like to see the libraries at UNC have a greater virtual presence, with more on-the-shelf resources available digitally.* Summon was another point of concern for faculty and graduate students, garnering five negative comments, most regarding the number of irrelevant sources brought up by a Summon search. Although two thirds of comments in the Information Control dimension were negative, quantitative data points to a general level of satisfaction with users' ability to access and navigate the University Libraries resources.

*Library as Place* scores are favorable in the aggregate, with a quantitative score of 7.29, indicating that generally, respondents are satisfied with the University Libraries as a place in which to study, get away,

enjoy quiet surroundings, and find places for individual or group work. There are lower quantitative scores from graduate students suggesting room for improvement in select areas; these are reflected in some comments. Specifically, graduate students commented on aesthetics: *I suggest improving the atmosphere of michner [sic] library. Its decor isn't very relaxing or soothing for a long day of study. I tend to go elsewhere for that reason.* Graduate students also indicated that specific study spaces could be improved: *. . . need more updated study rooms, maybe just update the whole place while your [sic] at it. Its years behind other schools and I would like to see updated furniture (desk carrels and chairs) at the library.* Of the 126 comments about space, a slight majority were positive, again reflecting an overall high degree of satisfaction among respondents. There were some negative comments about other aspects of the Library as Place, including dissatisfaction with hours and noise, but these were not supported by the quantitative data.

## RECOMMENDATIONS

The combined data indicates that, while there are many areas in which the University Libraries is meeting patron needs, there are some clear areas for focus to improve patron perceptions and satisfaction. The University Libraries should

- examine training procedures for student workers staffing public service points.
- explore methods to better educate users in the use of various discovery interfaces.
- strive to create better user space, including improved furnishings and solo- and group-study space to support patron comfort and productivity.
- continue to make electronic resources more accessible by improving the efficiency and usability of online resource portals - the University Libraries website, Summon, Encore, and LibGuides.
- continue to collaborate with campus Information Management and Technology to provide more updated computers and Internet access.
- continue to grow and promote electronic collections in response to faculty and graduate student needs.

The Committee is aware that there are broad implications for each of these recommendations, however we are confident that the data supports attention to the recommended areas as University Libraries Administration moves forward with planning for the future.

## SOURCES

- Thompson, B., Kyrillidou, M., Cook, C. (2008). Library users service desires: a LibQUAL+® study. *The Library Quarterly*, 78(1), 1-18.
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## **Appendix I**

**LibQUAL+® results from 2010 and 2013: Comparing select items from the core questions**

**Note: Excludes library staff from 2010 implementation; other campus staff respondents are included in the 2010 aggregate data.**

<b>AS-6 - Employees who deal with users in a caring fashion (LINKING QUESTION)</b>												
	minimum mean	desired mean	perceived mean	adequacy mean	superiority mean	n	minimum SD	desired SD	perceived SD	adequacy SD	superiority SD	
all												
2010	6.59	7.92	7.54	0.94	-0.38	1686	1.9	1.38	1.48	1.88	1.52	
2013	6.81	7.98	7.62	0.81	-0.36	1465	1.85	1.39	1.52	1.8	1.59	
undergraduates												
2010	6.45	7.83	7.44	0.99	-0.38	1228	1.93	1.4	1.48	1.91	1.53	
2013	6.69	7.89	7.55	0.87	-0.33	1091	1.87	1.43	1.53	1.83	1.56	
graduates												
2010	6.85	8.09	7.68	0.82	-0.42	247	1.77	1.37	1.54	1.84	1.57	
2013	7.0	8.17	7.64	0.64	-0.52	225	1.77	1.21	1.44	1.83	1.41	
faculty												
2010	7.15	8.26	8.04	0.89	-0.22	130	1.72	1.13	1.18	1.72	1.27	
2013	7.38	8.34	8.05	0.66	-0.29	149	1.67	1.24	1.48	1.54	1.41	
<b>AS-9 – Dependability in handling users' service problems</b>												
	minimum mean	desired mean	perceived mean	adequacy mean	superiority mean	n	minimum SD	desired SD	perceived SD	adequacy SD	superiority SD	
all												
2010	6.43	7.77	7.3	0.87	-0.47	613	1.87	1.54	1.44	1.8	1.54	
2013	6.79	7.69	7.41	0.62	-0.28	321	1.83	1.5	1.5	1.73	1.44	
undergraduates												
2010	6.37	7.69	7.29	0.92	-0.41	462	1.88	1.56	1.39	1.82	1.58	
2013	6.60	7.55	7.35	0.75	-0.2	240	1.91	1.58	1.53	1.8	1.5	
graduates												
2010	6.52	7.86	7.28	0.76	-0.59	87	1.84	1.5	1.55	1.67	1.32	
2013	7.1	7.96	7.54	0.44	-0.42	52	1.56	1.24	1.35	1.38	1.11	
faculty												
2010	6.9	8.33	7.63	0.73	-0.7	40	1.98	1.49	1.79	1.91	1.47	
2013	7.79	8.31	7.66	<b>-0.14</b>	-0.66	29	1.15	0.93	1.52	1.55	1.42	

<b>IC-1 – Making electronic resources accessible from my home or office</b>												
	minimum mean	desired mean	perceived mean	adequacy mean	superiority mean	n	minimum SD	desired SD	perceived SD	adequacy SD	superiority SD	
all												
2010	6.68	8.12	7.53	0.85	-0.59	762	1.89	1.26	1.44	1.85	1.4	
2013	6.83	8.1	7.44	0.61	-0.66	442	1.86	1.29	1.56	1.83	1.61	
undergraduates												
2010	6.43	7.97	7.45	1.02	-0.52	557	1.93	1.33	1.49	1.93	1.47	
2013	6.54	7.89	7.45	0.9	-0.44	320	1.94	1.4	1.5	1.84	1.53	
graduates												
2010	7.43	8.53	7.7	0.27	-0.83	128	1.65	0.95	1.38	1.48	1.19	
2013	7.68	8.74	7.42	<b>-0.26</b>	-1.32	66	1.31	0.56	1.71	1.65	1.74	
faculty												
2010	7.49	8.68	7.96	0.47	-0.72	53	1.32	0.64	1.11	1.5	1.15	
2013	7.48	8.55	7.41	<b>-0.07</b>	-1.14	56	1.46	0.81	1.7	1.44	1.63	
<b>IC-2 – A library Web site enabling me to locate information on my own</b>												
	minimum mean	desired mean	perceived mean	adequacy mean	superiority mean	n	minimum SD	desired SD	perceived SD	adequacy SD	superiority SD	
all												
2010	6.86	8.2	7.45	0.59	-0.76	800	1.86	1.23	1.51	2.02	1.58	
2013	6.81	8.05	7.29	0.48	-0.76	442	1.84	1.36	1.66	1.95	1.67	
undergraduates												
2010	6.66	8.12	7.51	0.85	-0.61	585	1.92	1.29	1.46	2.0	1.51	
2013	6.61	7.92	7.3	0.69	-0.62	328	1.88	1.44	1.67	1.93	1.67	
graduates												
2010	7.23	8.42	7.29	0.06	-1.13	127	1.68	1.12	1.68	1.96	1.77	
2013	7.35	8.41	7.28	<b>-0.07</b>	-1.13	75	1.66	1.07	1.69	1.95	1.56	
faculty												
2010	7.82	8.67	7.67	<b>-0.15</b>	-1.0	55	1.35	0.64	1.25	1.77	1.45	
2013	7.51	8.44	7.23	<b>-0.28</b>	-1.21	39	1.52	0.94	1.48	1.78	1.66	

<b>IC-4 - The electronic information resources I need (LINKING QUESTION)</b>											
	minimum mean	desired mean	perceived mean	adequacy mean	superiority mean	n	minimum SD	desired SD	perceived SD	adequacy SD	superiority SD
all											
2010	6.24	7.76	7.18	0.94	-0.58	1708	1.85	1.48	1.43	1.94	1.66
2013	6.35	7.72	7.22	0.88	-0.5	1493	1.87	1.55	1.51	1.89	1.72
undergraduates											
2010	6.02	7.6	7.17	1.14	-0.44	1245	1.86	1.51	1.42	1.94	1.63
2013	6.16	7.56	7.23	1.07	-0.33	1109	1.91	1.62	1.49	1.89	1.7
graduates											
2010	6.9	8.36	7.21	0.31	-1.15	257	1.56	1.06	1.47	1.69	1.56
2013	6.94	8.28	7.15	0.21	-1.13	235	1.64	1.13	1.52	1.86	1.55
faculty											
2010	6.98	8.22	7.38	0.41	-0.83	130	1.69	1.31	1.24	1.94	1.66
2013	6.81	8.07	7.31	0.5	-0.76	149	1.6	1.3	1.61	1.65	1.86
<b>IC-5 – Modern equipment that lets me easily access needed information</b>											
	minimum mean	desired mean	perceived mean	adequacy mean	superiority mean	n	minimum SD	desired SD	perceived SD	adequacy SD	superiority SD
all											
2010	6.77	8.08	7.49	0.72	-0.58	798	1.77	1.21	1.42	1.77	1.48
2013	6.82	7.96	7.36	0.54	-0.6	452	1.78	1.38	1.5	1.65	1.55
undergraduates											
2010	6.7	8.04	7.59	0.89	-0.45	588	1.81	1.23	1.33	1.74	1.39
2013	6.74	7.94	7.46	0.72	-0.48	347	1.78	1.36	1.45	1.66	1.54
graduates											
2010	6.99	8.26	7.21	0.21	-1.05	112	1.68	1.17	1.62	1.91	1.68
2013	7.02	7.98	6.83	<b>-0.19</b>	-1.15	59	1.9	1.53	1.67	1.7	1.44
faculty											
2010	7.05	8.28	7.45	0.41	-0.83	64	1.46	0.98	1.44	1.58	1.7
2013	7.13	8.13	7.3	0.17	-0.83	46	1.6	1.34	1.5	1.2	1.69



<b>IC-8 - Print and/or electronic journal collections I require for my work</b>											
	minimum mean	desired mean	perceived mean	adequacy mean	superiority mean	n	minimum SD	desired SD	perceived SD	adequacy SD	superiority SD
all											
2010	6.67	7.98	7.3	0.63	-0.68	702	1.92	1.44	1.44	2	1.71
2013	6.75	7.87	7.36	0.61	-0.51	431	1.96	1.58	1.41	1.95	1.8
undergraduates											
2010	6.46	7.86	7.35	0.9	-0.51	518	1.97	1.45	1.41	2	1.68
2013	6.54	7.72	7.45	0.91	-0.27	322	2.02	1.66	1.39	1.91	1.73
graduates											
2010	7.28	8.41	7.3	0.003	-1.11	112	1.54	1.19	1.42	1.74	1.58
2013	7.51	8.53	7.11	<b>-0.41</b>	-1.42	74	1.56	0.78	1.5	1.8	1.57
faculty											
2010	7.43	8.5	7.02	<b>-0.41</b>	-1.48	56	1.45	0.95	1.66	1.8	1.83
2013	7.03	7.86	7.06	0.03	-0.8	35	1.71	1.78	1.3	1.9	2.22

<b>LP-1 - Library space that inspires study and learning (LINKING QUESTION)</b>											
	minimum mean	desired mean	perceived mean	adequacy mean	superiority mean	n	minimum SD	desired SD	perceived SD	adequacy SD	superiority SD
all											
2010	6.13	7.71	7.15	1.01	-0.57	1665	1.99	1.58	1.73	2.2	1.96
2013	6.37	7.74	7.18	0.81	-0.56	1455	1.95	1.6	1.73	2.06	1.96
undergraduates											
2010	6.19	7.81	7.32	1.13	-0.49	1256	1.98	1.47	1.64	2.12	1.81
2013	6.49	7.84	7.36	0.86	-0.49	1123	1.9	1.49	1.64	2.0	1.84
graduates											
2010	6.08	7.62	6.64	0.56	-0.99	231	1.97	1.79	1.95	2.46	2.36
2013	6.14	7.55	6.58	0.44	-0.97	204	1.96	1.79	1.84	2.17	2.12
faculty											
2010	5.81	7.1	6.56	0.75	-0.54	108	2.03	1.95	1.84	2.27	2.41
2013	5.64	7.17	6.62	0.98	-0.55	128	2.17	1.97	1.97	2.36	2.62

LP-2 – Quiet space for individual activities												
	minimum mean	desired mean	perceived mean	adequacy mean	superiority mean	n	minimum SD	desired SD	perceived SD	adequacy SD	superiority SD	
all												
2010	6.49	7.83	7.42	0.93	-0.4	739	2.01	1.54	1.65	2.29	1.9	
2013	6.52	7.85	7.32	0.8	-0.53	365	1.95	1.6	1.73	2.06	1.96	
undergraduates												
2010	6.56	7.91	7.56	1.0	-0.35	571	2.02	1.42	1.57	2.23	1.72	
2013	6.65	7.98	7.57	0.93	-0.4	282	1.95	1.43	1.43	1.89	1.59	
graduates												
2010	6.39	7.82	6.81	0.43	-1.01	108	1.99	1.65	1.88	2.45	2.17	
2013	6.35	7.65	6.29	-0.05	-1.36	55	2.42	1.62	1.73	2.7	1.98	
faculty												
2010	5.75	7.08	7.28	1.53	0.2	40	1.75	1.9	1.55	2.2	2.33	
2013	5.61	7.0	6.82	1.21	-0.18	28	2.06	1.94	1.52	2.25	2.31	
LP-4 – A getaway for study, learning, or research												
	minimum mean	desired mean	perceived mean	adequacy mean	superiority mean	n	minimum SD	desired SD	perceived SD	adequacy SD	superiority SD	
all												
2010	6.42	7.87	7.32	0.89	-0.55	606	2.05	1.45	1.6	2.15	1.71	
2013	6.64	7.76	7.38	0.75	-0.38	370	2.0	1.67	1.66	1.94	1.82	
undergraduates												
2010	6.48	7.96	7.52	1.04	-0.44	440	2.03	1.33	1.45	2.11	1.58	
2013	6.62	7.84	7.6	0.98	-0.24	278	1.99	1.58	1.44	1.78	1.49	
graduates												
2010	6.56	7.96	6.88	0.32	-1.08	93	1.99	1.46	1.91	2.31	2.14	
2013	6.8	7.61	6.71	-0.09	-0.89	56	2.13	1.9	2.12	2.25	2.49	
faculty												
2010	5.9	7.25	6.59	0.69	-0.67	51	2.11	1.98	1.79	1.95	1.81	
2013	6.5	7.39	6.75	0.25	-0.64	36	1.89	1.93	2.03	2.2	2.65	

## **Appendix II**

**LibQUAL+® results from 2010 and 2013:**

**General Satisfaction and Information Literacy Outcomes Questions**

**&**

**Local Questions (four asked in both 2010 and 2013)**

**Note: Excludes library staff from 2010 implementation; other campus staff are included in the 2010 aggregate data.**

## GENERAL SATISFACTION

These items are delivered on a Likert scale in which respondents rate their levels of general satisfaction on a scale from 1-9 with 1 being "strongly disagree" and 9 representing "strongly agree."

<b>In general, I am satisfied with the way in which I am treated at the library.</b>			
	Mean	SD	n
all			
2010	7.82	1.32	1114
2013	7.94	1.2	735
undergraduates			
2010	7.81	1.3	830
2013	7.97	1.16	552
graduates			
2010	7.73	1.38	164
2013	7.87	1.18	107
faculty			
2010	8.06	1.34	79
2013	7.87	1.48	76

<b>How would you rate the overall quality of the service provided by the library?</b>			
	Mean	SD	n
all			
2010	7.64	1.21	1751
2013	7.69	1.2	1529
undergraduates			
2010	7.67	1.15	1279
2013	7.73	1.18	1139
graduates			
2010	7.52	1.34	259
2013	7.46	1.27	237
faculty			
2010	7.73	1.22	131
2013	7.82	1.24	153

<b>In general, I am satisfied with library support for my learning, research and /or teaching needs.</b>			
	Mean	SD	n
all			
2010	7.52	1.42	1010
2013	7.55	1.43	795
undergraduates			
2010	7.59	1.32	723
2013	7.56	1.44	587
graduates			
2010	7.42	1.53	161
2013	7.44	1.45	131
faculty			
2010	7.45	1.52	78
2013	7.6	1.39	77

## INFORMATION LITERACY OUTCOMES

These items are delivered on a Likert scale in which respondents rate their levels of general satisfaction on a scale from 1-9 with 1 being "strongly disagree" and 9 representing "strongly agree."

<b>The library helps me stay abreast of developments in my field(s) of interest.</b>			
	Mean	SD	N
all			
2010	6.55	1.7	869
2013	6.63	1.84	507
undergraduates			
2010	6.54	1.65	635
2013	6.69	1.78	387
graduates			
2010	6.88	1.66	136
2013	6.28	2.16	72
faculty			
2010	6.3	1.88	66
2013	6.65	1.83	48

<b>The library enables me to be more efficient in my academic pursuits or work.</b>			
	Mean	SD	n
all			
2010	7.38	1.46	938
2013	7.57	1.42	706
undergraduates			
2010	7.44	1.38	681
2013	7.52	1.44	518
graduates			
2010	7.46	1.5	149
2013	7.7	1.26	120
faculty			
2010	6.8	1.75	61
2013	7.71	1.49	68

<b>The library aids my advancement in my academic discipline or work.</b>			
	Mean	SD	N
all			
2010	7.23	1.51	902
2013	7.43	1.49	704
undergraduates			
2010	7.21	1.47	655
2013	7.35	1.5	527
graduates			
2010	7.64	1.35	146
2013	7.72	1.41	116
faculty			
2010	7.17	1.69	63
2013	7.57	1.49	61

<b>The library helps me distinguish between trustworthy and untrustworthy information.</b>			
	Mean	SD	n
all			
2010	6.6	1.72	929
2013	6.81	1.72	654
undergraduates			
2010	6.71	1.63	683
2013	6.9	1.71	479
graduates			
2010	6.48	1.85	145
2013	6.73	1.7	98
faculty			
2010	5.92	2.05	71
2013	6.3	1.78	77

<b>The library provides me with the information skills I need in my work or study.</b>			
	Mean	SD	N
all			
2010	7.12	1.53	982
2013	7.36	1.46	489
undergraduates			
2010	7.21	1.48	726
2013	7.43	1.47	367
graduates			
2010	6.92	1.64	140
2013	7.1	1.45	71
faculty			
2010	6.9	1.71	79
2013	7.25	1.38	51

### LOCAL QUESTIONS

These items are delivered to respondents in the same fashion as the core questions, seeking a minimum, desired, and perceived score. These are calculated to create an adequacy mean.

Ability to navigate library web pages easily												
	minimum mean	desired mean	perceived mean	adequacy mean	superiority mean	n	minimum SD	desired SD	perceived SD	adequacy SD	superiority SD	
all												
2010	6.6	8.04	7.17	0.56	-0.87	599	1.79	1.26	1.44	1.93	1.52	
2013	7.18	8.22	7.35	0.17	-0.87	288	1.62	1.17	1.57	1.81	1.61	
undergraduates												
2010	6.42	7.93	7.22	0.8	-0.71	434	1.86	1.33	1.41	1.95	1.49	
2013	7.09	8.11	7.38	0.3	-0.73	216	1.69	1.23	1.61	1.79	1.58	
graduates												
2010	6.99	8.34	7.17	0.17	-1.17	103	1.52	0.97	1.51	1.52	1.42	
2013	7.44	8.58	7.38	-0.07	-1.2	45	1.49	0.87	1.57	2.07	1.71	
faculty												
2010	7.38	8.38	6.89	-0.49	-1.49	45	1.42	1.11	1.43	1.95	1.84	
2013	7.44	8.48	7.0	-0.44	-1.48	27	1.09	0.98	1.21	1.37	1.48	

Ease and timeliness in getting materials from other libraries												
	minimum mean	desired mean	perceived mean	adequacy mean	superiority mean	n	minimum SD	desired SD	perceived SD	adequacy SD	superiority SD	
all												
2010	6.44	7.87	7.37	0.93	-0.5	499	1.88	1.38	1.53	1.9	1.53	
2013	6.68	7.82	7.31	0.63	-0.5	239	1.84	1.49	1.73	1.97	1.81	
undergraduates												
2010	6.31	7.78	7.29	0.98	-0.48	351	1.92	1.4	1.58	1.97	1.62	
2013	6.56	7.72	7.42	0.85	-0.3	163	1.86	1.47	1.62	1.88	1.77	
graduates												
2010	6.67	8.02	7.48	0.82	-0.54	87	1.79	1.49	1.52	1.65	1.3	
2013	6.59	7.98	6.7	0.11	-1.27	44	1.85	1.58	1.97	2.19	1.73	
faculty												
2010	7.04	8.24	7.67	0.63	-0.57	46	1.56	0.87	1.17	1.73	1.17	
2013	7.41	8.09	7.63	0.22	-0.47	32	1.62	1.51	1.79	1.98	1.87	

## LOCAL QUESTIONS

Helpful online guides & tutorials											
	minimum mean	desired mean	perceived mean	adequacy mean	superiority mean	n	minimum SD	desired SD	perceived SD	adequacy SD	superiority SD
all											
2010	5.99	7.28	6.91	0.92	-0.37	537	2.07	1.73	1.55	2.03	1.75
2013	5.98	7.28	6.84	0.87	-0.43	307	2.12	1.9	1.82	2.03	1.89
undergraduates											
2010	5.88	7.16	6.99	1.12	-0.16	391	2.14	1.76	1.5	2.04	1.73
2013	6.0	7.25	6.95	0.95	-0.31	236	2.09	1.9	1.78	2.01	1.88
graduates											
2010	6.41	7.63	6.78	0.37	-0.85	86	1.76	1.58	1.72	1.86	1.77
2013	5.84	7.18	6.48	0.64	-0.7	44	2.45	2.12	2.15	2.14	1.91
faculty											
2010	6.12	7.66	6.78	0.66	-0.88	41	1.99	1.77	1.51	1.84	1.47
2013	6.04	7.63	6.52	0.48	-1.11	27	1.79	1.57	1.53	2.06	1.74

Teaching me how to locate, evaluate, and use information											
	minimum mean	desired mean	perceived mean	adequacy mean	superiority mean	n	minimum SD	desired SD	perceived SD	adequacy SD	superiority SD
all											
2010	6.19	7.58	7.19	1.01	-0.39	575	2.1	1.68	1.61	2.05	1.73
2013	6.39	7.61	7.42	1.03	-0.19	291	2.1	1.52	1.65	1.98	1.66
undergraduates											
2010	6.12	7.53	7.2	1.08	-0.32	425	2.09	1.66	1.56	2.05	1.73
2013	6.3	7.58	7.42	1.12	-0.16	221	2.14	1.58	1.72	1.95	1.71
graduates											
2010	6.32	7.74	7.22	0.9	-0.52	92	2.13	1.73	1.68	2.05	1.74
2013	6.48	7.72	7.22	0.74	-0.5	46	2.14	1.31	1.49	2.23	1.38
faculty											
2010	6.51	7.83	7.09	0.57	-0.74	35	2.24	1.85	2.06	2.23	1.9
2013	7.0	7.63	7.83	0.83	0.21	24	1.56	1.35	1.13	1.83	1.67