“Librarians are my favorite people to deal with on campus. Their service ethic is so strong that they’ve been able to overcome the university culture that is no longer that way. I love dealing with the librarians.”

-- Fall 2000 Library User Survey Respondent Comment
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Survey Instrument
Project Timeline
Charge to the Committee

In October 1999, University Librarian Gerald Lowell solicited volunteers from among the Library's staff to serve on the Library User Survey Team by way of an electronic mail message to the Library staff reflector, "allusers." Although no formal charge was issued to the Library User Survey Team, in his call for volunteers, Librarian Lowell affirmed the Library's desire to conduct a statistically valid and reliable survey of Berkeley faculty, graduate students, undergraduates, and key academic staff, with the goal of improving library services. Lowell suggested that samples of these groups might be polled on a variety of issues including "satisfaction with basic services, new services desired, needed space and equipment improvements, usage patterns at various libraries, use of electronic services, etc." He further proposed that demographic data be collected for the same categories of users as were used in the 1995-1996 UC San Diego Library Survey, so that survey results might be compared between the two institutions. In addition, the User Survey Team was initially expected to oversee the development of and administration of an "action-oriented follow up to this user survey." Once the Team was appointed, given its relatively small size compared to the proposed scope of the study, Librarian Lowell amended his original assignment to the Team. Undergraduates (because of their sheer numbers) and key academic staff (because of difficulties in defining them and securing the necessary contact information) were dropped from the populations to be surveyed. Later on in the planning process, given the difficulties in developing a survey short enough to encourage recipients to respond to it, Librarian Lowell agreed with the Team's recommendation that the collection of demographic data be kept to a minimum. He also absolved the Team of the responsibility for developing and administering an "action-oriented follow up" to the survey.

Membership of the Committee

The team was co-chaired by Dennis Lieu, Professor of Mechanical Engineering, and Patricia Maughan (TLIB). University Librarian Lowell initially intended the Team be composed of two Academic Senate Library Committee members, five library staff, one graduate student, and one undergraduate. The final Committee roster consisted instead, of co-chairs Dennis Lieu and Pat Maughan, Suzanne Calpestri (ANTH), Bob Liu (LBO, who shortly thereafter resigned from employment with the Library), Nick Robinson (PUBL), and Charlotte Rubens (ILS). A second faculty appointee was never made, nor were the originally proposed graduate student and undergraduate student representatives appointed.
The Team was greatly assisted in administering the survey in Fall 2000 by the Librarian's Office staff, under the leadership of Brenda Krell. Dave Rez of Library Systems Office was instrumental in producing faculty and graduate student lists from which samples could be drawn, as well as developing the database and tracking mechanisms for generating the various survey mailings. Mary Scott of Library Graphics designed the paper copy survey. The Library contracted with the UC Berkeley Survey Research Center to advise on issues of sampling, to draw the survey samples, and to input the responses into machine readable form.

Description of the Gaps Model of Service Quality and SERVQUAL

In the course of preparing its work, the Team researched the field of library satisfaction surveys and read more widely on the topic of evaluating services. In doing so, the Team learned of alternative approaches to evaluating service organizations which had emerged in the business sector, where organizations are increasingly being evaluated in terms of their "service quality." In late 1999 and early 2000, few libraries nationwide had explored methods to assess service quality. A review of the literature revealed that library studies to that point had primarily focussed on "information seeking behaviors" of library users or on surveys of more generally proclaimed levels of user satisfaction or dissatisfaction with particular library services or organizations. Similarly, in early 2000, there were no widely accepted or published user-based criteria for measuring service quality in libraries.

A distinction between the terms customer or client "satisfaction" and "service quality" needs first be made. Satisfaction can be defined as "the emotional reaction to a specific transaction or service encounter;" (1) it is often a short-term measure, and frequently it is not clear exactly what that satisfaction is measuring. In contrast, service quality can be defined as a measure of what customers or clients expect of an organization versus how well they perceive an organization performs in providing that given service or set of services. It is a measure that evolves over time and as a result of multiple encounters between client and service provider. A serious drawback of measuring satisfaction with library performance alone is that little insight is gained into what elements contribute to the clients' satisfaction or dissatisfaction or what problems within the organization may require fixing.

SERVQUAL is among the most popular assessment tools for measuring service quality in organizations. It is the result of pioneering work by the marketing research team of A. Parasuraman,
Leonard Berry, and Valarie Zeithaml, who developed a conceptual framework known as the "gaps model" of service quality and a measurement instrument called SERVQUAL. Introduced in 1988, the SERVQUAL instrument usually consists of sets of paired statements. The first component measures customer expectations by asking (e.g., on a scale from one to seven) how important each item is to the provision of an excellent service. The second component measures the respondent's perceptions of how well the service item is being provided by the organization under study. The differences between these two ratings are used to calculate the SERVQUAL "gap." SERVQUAL studies have been replicated in a range of services including credit card services, health care, retail banking, securities brokerage houses, advertising, and equipment repair. They have also been replicated in professional service organizations including physicians offices, and law and dental practices. Modified SERVQUAL instruments have been used in some U.S., Canadian, Australian and British libraries (e.g. Yale, Emory, Carnegie Mellon, Texas A & M). Through numerous studies, five "dimensions" were consistently ranked by customers as most important to service quality. These were:

1. **Reliability** – the ability to perform the promised service dependably and accurately.
2. **Responsiveness** – The staff's willingness and promptness when delivering services.
3. **Assurance** – the knowledge and courtesy of the staff and its ability to earn trust and confidence.
4. **Empathy** – the caring, individual attention that staff provide to users.
5. **Tangibles** – the appearance of facilities, equipment and communications materials.

Marketing scholars and practitioners Parasuraman, Berry and Zeithaml urge that SERVQUAL data not be used as a measure of comparison among institutions. Administering SERVQUAL instruments does not result in the collection of normative data. Instead, the data collected is particular to a group of customers and to a particular institution. The institution measures its success by reducing the size of its SERVQUAL gaps over time. The data derived from the administration of SERVQUAL surveys is rich with practical implications for service managers. It is for this reason that the Team selected this method. Among SERVQUAL's advantages: 1) it targets service elements for improvement; 2) it weights the evaluation of service items relative to the importance users assign to them (using to the previously mentioned five service "dimensions"; 3) it suggests actionable items for improvement; and 4) it suggests organizational training opportunities.
Initially, the Team attempted to design a survey to collect all of the data originally requested by the University Librarian as well as recommendations added by Library staff in a Fall 1999 User Survey Brown Bag Lunch Discussion meeting. It examined similar questionnaires developed by the University of Washington and the University of California, San Diego. These initial attempts resulted in a survey instrument that the Team felt (a perception later confirmed by the Academic Senate Library Committee) was so lengthy that it would dissuade those receiving it from completing and submitting a response.

Throughout Spring 2000, the Team produced 10-plus drafts of the survey instrument. In developing sample statements to be included in the SERVQUAL instrument, the Team relied heavily on the work of Peter Hernon and Ellen Altman, Assessing service quality: satisfying the expectations of library customers (Chicago: American Library Association, 1998). At the same time, the Team developed a timeline for the overall project, anticipating a Fall 2000 administration of the survey. Copies of several versions of the survey instrument were shared with experts in the field, including Peter J. Hernon (Simmons College), Danuta Nitecki (Yale University), Colleen Cook, and Fred Heath (Texas A & M University). Additional refinements were made based on their feedback. The draft survey was pre-tested by the Faculty Senate Library Committee and graduate students in Anthropology and Public Health before being finalized.

The questionnaire included two sections, labeled “A” and “B.” Section A is a list of 21 features that a library may possess to a greater or lesser degree (for example: The library's online library catalog is a clear source of information about all materials in its collection). Respondents were asked both their opinion of the UC Berkeley Library performance with respect to each feature and their opinion of how essential each feature is to an “excellent library.” Both questions requested a rating on a scale of one to seven. Importance is placed on the “gap” between these two measurements, i.e., the difference between the response for an “excellent library” and for the performance of the UC Berkeley libraries. A positive gap (of 1 or greater) indicates that the UC Berkeley library is under-performing in the particular feature. A negative gap (of below 0) indicates that the UC Berkeley library is exceeding the expectations for an excellent library in the particular feature. Using the observed gap measurements, the Library is able to recognize those features that appear to be most in need of attention.
A unique characteristic of the SERVQUAL method described earlier is to categorize each of the features listed in Section A into one of five broad factors, or dimensions. Section B of the survey asked respondents to rank the relative importance of each of these factors, or dimensions:

1. **Reliability** – the library’s ability to perform the promised service dependably and accurately.
2. **Responsiveness** – the library staff’s willingness and promptness when delivering services.
3. **Assurance** – the knowledge and courtesy of the library’s staff and its ability to earn trust and confidence.
4. **Empathy** – the caring, individual attention that library staff provide to users.
5. **Tangibles** – the appearance of the library’s facilities, equipment and communications materials.

The questionnaire asked respondents to “allocate a total of 100 percent among the five factors,” thus indicating the relative importance of each. This data is summarized in the reports, and was later used to assign importance to the individual features in Section A.

Section B also asked respondents to name the three libraries most visited during the previous twelve months, and the frequency with which they used library resources both in-person and from their office or home. This data is important, as it allows the Library to discover areas of concern at specific subject specialty libraries and other library service points, and allows for the analysis to focus on those users that depend more heavily on the library’s resources.

Finally, the questionnaire included a set of free-text response questions, allowing respondents to be more specific about areas of concern regarding the state of the UC Berkeley libraries. The analysis of these responses is not taken up here but the free-text responses appear following the collection of two page tabular reports included with this report.

**The Sampling Method**

A random sample of faculty and graduate students was created by the UC Berkeley Survey Research Center. The sample included 609 faculty and 792 graduate students.
The method for choosing the faculty was as follows:

1. A list of all faculty members was obtained, organized by primary department. The list then grouped departments by one of five broad academic areas (arts and humanities, biological sciences, engineering, physical sciences, and social sciences). These five broad academic areas correspond to the areas tracked in the UC San Diego User Survey, the results of which Librarian Lowell had hoped to compare the UC Berkeley Library results with.

2. Half of the faculty members from the first four academic areas (arts and humanities, biological sciences, engineering, and physical sciences) were chosen for the sample. This was done by going down the list of faculty from these academic areas and including every second name, randomly choosing whether to start at the first or second name in the list.

3. One-third of the faculty members from the last academic area (social sciences) was chosen for the sample. Again, this was done by choosing a random starting point, and then including every third name from the list of faculty members from the social sciences.

The method for choosing graduate students was as follows:

1. A list of all graduate students was obtained and organized by academic major. Majors were grouped by five broad academic areas (arts and humanities, biological sciences, engineering, physical sciences and social sciences).

2. Ten percent of the graduate students in arts and humanities, engineering and physical sciences were included in the sample.

3. Fifteen percent of the graduate students in the biological sciences were included.

4. Five percent of the graduate students in the social sciences were included.

5. A similar random selection of names was employed as had been used with the faculty lists.

Data Collection

The selected faculty and graduate student names were each divided into three groups. Ninety percent went into the “immediate release” group, while five percent went into each of two “reserve groups.” Three mailings (an initial mailing and two follow up mailings) were made to “the immediate release” group. To increase the overall return rate, both of the “reserve groups” were eventually used and all surveys for all groups were distributed.
In addition, the Task Force used WebSurveyor (licensed by the California Digital Library) to make the survey available for sampled faculty and graduate students who preferred to respond electronically. An alias was created on the Library web to facilitate easy access. Sixteen percent of the respondents chose to reply via the web.

### Survey Results

The following table gives the numbers of faculty and graduate students in each academic area, along with the number sampled and the number of returned surveys. The percents in the "Number Returned" columns indicate the response rates.

<table>
<thead>
<tr>
<th>Academic Discipline</th>
<th>Faculty Population Size</th>
<th>Faculty Number Distributed</th>
<th>Faculty Number Returned</th>
<th>Students Population Size</th>
<th>Students Number Distributed</th>
<th>Students Number Returned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts &amp; Humanities</td>
<td>283</td>
<td>142</td>
<td>75 (53%)</td>
<td>1485</td>
<td>149</td>
<td>57 (38%)</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>223</td>
<td>111</td>
<td>52 (47%)</td>
<td>785</td>
<td>118</td>
<td>40 (34%)</td>
</tr>
<tr>
<td>Engineering</td>
<td>195</td>
<td>98</td>
<td>36 (37%)</td>
<td>1819</td>
<td>182</td>
<td>64 (35%)</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>223</td>
<td>111</td>
<td>32 (29%)</td>
<td>1233</td>
<td>123</td>
<td>47 (38%)</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>440</td>
<td>147</td>
<td>64 (44%)</td>
<td>4410</td>
<td>220</td>
<td>58 (26%)</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>1364</strong></td>
<td><strong>609</strong></td>
<td><strong>259 (43%)</strong></td>
<td><strong>9732</strong></td>
<td><strong>792</strong></td>
<td><strong>266 (33%)</strong></td>
</tr>
</tbody>
</table>
Statistical Analysis

The Library User Survey Team wanted to be able to identify where the gaps between user expectations and service delivery were the greatest, both overall, and library-by-library. It also wanted to determine the most important factors overall (reliability, responsiveness, assurance, empathy, and tangibles). And finally, it hoped to prepare succinct reports with a minimum of text. This was no small order. During the spring of 2001, the UC Berkeley Survey Research Center input the data from the 525 returned surveys and produced a total of 89 codebooks, occupying four cartons, and comprising 2.6 linear feet of reports. This represented a massive amount of data, far more than could be distributed or interpreted easily by the staff at large.

The Task Force engaged the services of a consultant, Chad Schafer, a UC Berkeley PhD candidate in statistics. Chad was assigned the task of taking the twenty-two code books containing data on specific campus libraries, the five code books defined by broad academic discipline (arts and humanities, biological sciences, engineering, physical sciences and social sciences) which in turn were comprised of data from academic departments within these disciplines, and the three code books containing summary data from the surveys three user categories (faculty as a whole, graduate students as a whole, and faculty and graduate students combined) and synthesizing 1.33 linear feet of code book data into thirty, two-page tabular reports to streamline interpretation of the survey results. Copies of the Survey Research Center generated code books are available in the University Archives, The Bancroft Library and on the Survey Research Center's web site. The redacted 2-page tabular reports are appended to this report. Statistical methodology was used to summarize the survey results, enabling us to draw conclusions about the opinions of all library users by surveying a subset of the whole.

Non-Response

In any statistical analysis, the validity of the results depends on the appropriateness of assumptions. The critical assumption in this case regards the opinions of the individuals who were sent a survey but did not return it. It is not possible for the Library to know how these people would have responded. Therefore, the Library must ask: Are the individuals who did not respond to the survey different in any important way
from those who did? For example, is it possible that those who did not respond are individuals that were content with the service of the library, and therefore felt no need to voice an opinion? The survey results could then be biased in such a way that showed people were unhappy with the library, when, in fact, they were generally satisfied. This is commonly referred to as non-response bias. Without going back and attempting to determine the opinions of those people that did not respond (an option that is not feasible) the best the Library can do is to be aware of the situation, and proceed with the analysis assuming that those people who did not respond to the survey do not differ from those that did in any important way. Under this assumption, the analysis can proceed as if the returned surveys form a random sample from the overall population.

Concerns regarding the validity of this assumption are real and should not be ignored. Fifty-seven percent of faculty overall failed to respond to the survey, while two-thirds of the graduate students overall did not respond. See the above table for a breakdown of response rates by academic area. The reports contain summary statistics information regarding both the observed sample and extension to the unobserved population. It is only in this extension from the sample to the entire population that the above assumption is important. The reports are described in detail in the following section.

Description of Each Report

Each report is a single two-page summary of the survey responses from individuals that meet a specified set of criteria. For example, there is a report for all users, for all faculty, for all graduate students, for all physical sciences respondents, for all users of a particular subject specialty library, etc. In brief, each report attempts to summarize both characteristics of the sample (the group of individuals that meets the criteria, was sent the survey, and responded) and characteristics of the population (the group of individuals at the University that meets the criteria, regardless of whether or not they were sent a survey). It is important to keep in mind that the role of the sample is to tell something about the population; the observed sample stands in for the unobservable population.
Reading a Report — Basic

Diagram A: A typical line from a report.

1. Service items preceded by a **bold arrow** (label 8) indicate services where there is strong statistical evidence that the gap between user expectations of "an excellent library" and the UC Berkeley Library's performance is one or greater than one. This indicates that the UC Berkeley Library is under-performing in the particular feature.

2. Look at the **height of the bar** (label 2) to the left of each numbered item. The taller the bar, the more important the service is to the respondents.

3. Look at the **number of people who responded to the item relative to the number who did not** (labels 4 and 5). The upper number is the number of individuals who answered the question. The lower number is the number of individuals who did not answer the question but who responded to the survey. If this second number is relatively large by comparison with the second number for other items, this may be an indication that the respondents were either unfamiliar with the particular service, or did not have an opinion about it.
Reading a Report — In Detail

For readers interested in studying the reports in greater detail, we provide the following list of the elements of each report and an explanation of how they should be interpreted. Numbers refer to the labels in Diagram A.

1. The **text of the item** (labels 1 and 3) appears as it did in the survey.

2. The **factor box** (label 2) indicates the importance respondents placed on the factor (e.g. reliability, responsiveness, assurance, etc.) associated with this item. If the average of the responses was 30%, then the red box occupies 30% of the total height.

3. The ordering of the items in the reports was determined by placing the items associated with the most important factor (e.g. reliability, responsiveness, assurance, etc.) first, the items associated with the second most important factor second, and so forth. These were calculated based on data from all respondents to the survey. In other words, what faculty and graduate students as a whole determined to be most important. This was done to avoid a situation wherein individual items had to be re-ordered for each of the reports produced (e.g. faculty as a whole, graduate students as a whole, arts & humanities respondents, users of the Physics Library, etc.) There are a few items in the survey not associated with any of the five factors. They are so indicated by the placement of “NA” in the factor box.

The Gap Column

4. The **number of respondents that gave an opinion on both the UC Berkeley Library and what constitutes an excellent library** (label 4) is the number of respondents used to calculate the gap between the UC Berkeley Libraries and an excellent library’s performance. Results for any item with very few responses should be interpreted carefully.

5. The **number of respondents that did not give either an opinion on the UC Berkeley Library or an opinion on an excellent library** (label 5) is useful because an item where a relatively large number of respondents did not respond indicates an area where people either did not have much knowledge or
experience. It is possible that items towards the bottom of the survey (e.g., items 15-21) will have fewer responses due to survey fatigue.

6. The range of responses box (label 6) extends from the 25th percentile up to the 75th percentile of all of the calculated gaps. The 25th percentile is the point where 25% of the responses fell below. For example, if the 25th percentile rests at -1.0, then 25% of the responses fell below -1.0. The point of specifying a range in this way is to give the reader an indication of the range of opinions, i.e. was their strong agreement or strong disagreement? The wider the bar, the greater the range of opinions; a narrower bar indicates less range in opinions. The entire range is not given, as this would potentially assign too much importance to single responses.

7. The black line at the center of the confidence band (label 7) is the estimate of the population average gap between an excellent and the UC Berkeley library. It is an estimate of what the average response would have been if the entire population had been surveyed, and if the entire population had responded. If the entire population of individuals was surveyed, and had responded, there would be no need for an estimate. This is not simply the average of all opinions of the gap, since weighting was required to take into account the fact that different departments were sampled at different rates.

8. Service items preceded by a bold arrow (label 8) indicate services where there is strong statistical evidence that the gap between user expectations of “an excellent library” and the UC Berkeley Library’s performance is one or greater than one. This indicates that the UC Berkeley Library is under-performing in the particular feature. Without data on the entire population, it is impossible to know with surety whether or not the population average gap is greater than 1.0. However, a sufficient number of responses indicating that people believe that the UC Berkeley library is under-performing do allow us to make such claims and rarely be incorrect. There are also cases where the total population’s average gap is greater than 1.0 but due to an insufficient amount of data it cannot be confidently stated that the UC Berkeley library is under-performing.

9. The confidence band (label 9) which extends on either side of the black line in the center, is a critical component of the estimate of the population average gap. The estimate given by the center black line in label 7 (above) is not exact. We are confident (in this case, 95% confident) that the range specified by this band includes the population average gap. In other words, this band was calculated using a method that 95% of the time returns a range that includes the population average gap. A wider band indicates less certainty in the estimate.
The UC Berkeley Library column

10. The upper number is the **number of respondents that gave an opinion on the UC Berkeley Library** (label [10]). See 4 of this list.
11. The lower number is the **number of respondents that did not give an opinion on the UC Berkeley Library** (label [11]). See 5 of this list.
12. The **range of responses box** (label [12]) extends from the 25th percentile up to the 75th percentile of all responses on the opinion of the local library. See 6 of this list.
13. The **black line at the center of the confidence band** (label [13]) is the estimate of the population average opinion of the UC Berkeley Library. See 7 of this list.
14. The **confidence band** (label [14]) is a range that with 95% confidence includes the population average opinion of the UC Berkeley Library. See 9 of this list.

The “Excellent Library” column

15. The upper number is the **number of respondents that gave an opinion on an excellent library** (label [15]). See 4 of this list.
16. The lower number is the **number of respondents that did not give an opinion on an excellent library** (label [16]). See 5 of this list.
17. The **range of responses box** (label [17]) extends from the 25th percentile up to the 75th percentile of all responses on the opinion of an excellent library. See 6 of this list.
18. The **black line at the center of the confidence band** (label [17]) is the estimate of the population average opinion of an excellent library. See 7 of this list.
19. The **confidence band** (label [19]) is a range that with 95% confidence includes the population average opinion of an excellent library. See 9 of this list.

The relationship between the positioning of the estimate of the population average (labels 7, 13 and 18) and the edges of the “range of responses boxes” (labels 6, 12 and 17) needs some additional explanation. Nothing requires
that the estimate be at the center of the range of responses boxes, though generally it will tend to be. Occasionally, the estimate is outside of the range of responses box. There are different reasons for this.

First, the range of responses boxes are based only on the sample responses, while the estimate of the population average is formed in such a way as to take into consideration the different sampling fractions for different departments. Second, the average is a measurement that is affected by the extreme values in the sample, while a percentile (represented by the range of responses box) is not. For example, if in a group of responses 25% of the responses are less than 5, then the 25th percentile is 5, regardless of what those bottom 25% responded. Alternatively, the value of the average will depend heavily on those bottom values.

The bottom of each report includes a series of graphs describing the distribution of certain characteristics among the members of the sample that meet the current criteria for the particular report. The specific graphs included depend on the situation, but include such things as descriptions of the academic departments of the respondents, the libraries most often used by the respondents, the frequency of office/home and in-person usage, and so forth. The specific plots to include were chosen at the time of report creation.

**Broad Based Findings**

More faculty and graduate students report using the library from their homes or offices than they report visiting the libraries in person. Across all disciplines, 73% of faculty report using the libraries remotely and 41% report in- person use of the libraries ONE OR MORE TIMES PER WEEK. Across all disciplines, 65% of graduate students report using the libraries remotely ONE OR MORE TIMES PER WEEK, and 53% report in-person use of the libraries with the same frequency. These percentages change when faculty and graduate students are examined by broad discipline.
Weekly (or more) Use of the UC Berkeley Libraries
Faculty & Graduate Students by Discipline

<table>
<thead>
<tr>
<th></th>
<th>Percent reporting In-person Use once or more/week</th>
<th>Percent reporting Home/Office Use Once or more/week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts &amp; Humanities</td>
<td>64%</td>
<td>72%</td>
</tr>
<tr>
<td>Biological Sciences</td>
<td>43%</td>
<td>78%</td>
</tr>
<tr>
<td>Engineering</td>
<td>41%</td>
<td>61%</td>
</tr>
<tr>
<td>Physical Sciences</td>
<td>40%</td>
<td>71%</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>42%</td>
<td>64%</td>
</tr>
</tbody>
</table>

The order of importance of the various service dimensions were ranked almost identically by faculty and graduate students, with Reliability (the Library’s ability to perform the promised service dependably and accurately) ranking highest in importance. This was followed (in order of importance) by Responsiveness (the staff’s willingness and promptness when delivering services), and Assurance (the knowledge and courtesy of the library’s staff and their ability to earn the users’ trust and confidence). In the case of the faculty, Empathy (individualized attention by staff) ranked next in importance followed by Tangibles (the appearance of the library’s facilities, equipment and communication materials). Graduate students ranked the importance of facilities 1% above the importance of individualized attention by library staff. The relative importance attached to these service dimensions by UC Berkeley library users are consistent with the findings in other SERVQUAL surveys in other libraries and service industries.

There were only two service items that received a gap of one or more from both the faculty as a whole and graduate students as a whole: Item 1 – “The library’s online catalog is a clear source of information about all material in the collections,” and Item 3 – “The materials in the library are usually in their proper places on the shelves or can be accounted for.” For graduate students as a whole, two additional items scored a gap of one or more: Item 14 – “When I enter the library, I can readily see where to go for what I need,” and Item 19 – “The library provides popular items in sufficient copies.” With respect to Item 11 – “Knowledgeable staff are available to assist whenever the library is open,” a gap of 1 or more was perceived by faculty and graduate students as a whole in both the Arts and Humanities and the Social Sciences, but not in the Biological Sciences, Engineering, or Physical Sciences. As you begin to analyze the results within subsets of these groupings, more areas deserving
of attention by individual libraries or within particular disciplines begin to emerge. For example, while photocopiers in the library being in good working order, library signage, or the range of materials provided by the library being sufficient to their needs does not appear to be problematic for faculty as a whole, these items did receive a gap of one or greater for faculty in the Arts and Humanities, who incidentally, scored the largest number of service gaps in excess of one of any sub-group studied. In a number of unit library reports, none of the survey items received a gap of one or more, indicating that faculty and graduate students were generally positive about the library’s service quality.

The free text responses to questions A-22 (List additional service expectations you have for an excellent research library.), F-8 (If there is anything else NOT included among these five factors which you find important in evaluating the quality of research library services, please describe here.), and U-4 (If the UC Berkeley Libraries could do only one thing to improve, what would that be?) appended to this report warrant further examination. Recurrent themes found in the free text responses include the need for longer library hours and the importance of expanding the collections. These are reminiscent of responses to the 1997 Survey of Faculty and Graduate Student Library Use and Satisfaction. However, with the Fall 2000 SERQUAL survey, a new theme appears to have emerged more widely among the free text responses. Time and again, respondents mentioned the need for constant, dependable and knowledgeable librarian staff to be provided at library reference desks. This represents something new in user comments.

Not surprisingly, as in the past, a number of respondents suggested instituting services which already exist in the library and about which respondents seemed to be unaware (e.g. delivering articles and books for a fee, providing access to electronic journals, and offering drop-in instructional sessions on online sources). Some questions arise, too, in the free text responses as to whether faculty and graduate student respondents are aware that there is a web-based version of the GLADIS database. Some interesting suggestions were made for new library based services, including customized notifications of new books and journals in the faculty member’s or graduate student’s particular area of interest, placing holds online for needed materials and standardized, electronic notification of new library services and electronic sources.

Communication With Staff and Campus

The Library User Survey Team both initiated and responded to invitations from several library and other staff groups with discussions and updates of its work in progress, including:
A web site documenting the project and the findings will reside at: www.lib.berkeley.edu/UserSurvey.

**Assessment of the Project**

Overall, the project was a success. Although on occasion there seemed to be complications (mostly for reasons external to the library), decisions that were made both early on and during execution of the action plan helped the project proceed relatively smoothly and with valid, useable results. For example, decisions about which faculty appointments to include (e.g. ladder rank? emeritus? adjunct? lecturers?); how to construct the survey; how to construct the ID Code; how many mailings to do and on what schedule; how to track the mailings; whether to offer multiple forms of the survey (i.e. paper copy, email, web), etc. all had to be made early on in the planning process. All of these decisions resulted in very useable results. There were, however, a several of problems encountered along the way, mostly involving difficulties in securing accurate and consistent data:

There were not enough people on the team to execute the ambitious plan. A full complement of team members was never appointed, leaving essentially five people to complete the entire project. As mentioned earlier in this report, the scope of the project had to be narrowed because of this. If such a survey were undertaken again, we would recommend appointing a larger group. For comparison, the 1995 UC San Diego Libraries User Survey Team consisted of nine members plus an outside consultant.
We needed to conduct the survey during the fall semester. This resulted in the need to secure data about the survey population by the end of August 2000. This turned out to be extremely difficult in our large and complex organization, for at least three reasons: a) it was very difficult just to figure out who had access on the campus to the information we needed; b) faculty and graduate student data is not complete and is very difficult to acquire until well into the semester; and c) it just so happened that the campus was changing its financial and personnel systems at that time, resulting in difficulties extracting data in the usual ways and the ability to produce the needed reports. We would recommend conducting such a survey during spring semester when the data for most faculty and graduate students is stable, more easily available, and when non-library administrative staff is under less stress. It took us weeks just to find the correct contact person for the faculty list.

Producing mailing labels required close coordination between Library Systems staff, who receive automated data from the library patron files, and the Survey Research Center. Given the timeline necessary for providing faculty and graduate student data to SRC to draw the needed samples, once we did track down the data to produce a file for SRC, it was still very difficult to produce useable files. When we did finally receive a list, it required a lot of “cleanup,” for a number of reasons including eliminating duplicate names as a result of dual appointments (i.e., either in multiple departments or administrative/faculty appointments) and cleaning up mailing and email addresses for both faculty and graduate students. We lost 3-4% of the graduate sample pulled because accurate information was missing from campus master files.

It turned out that at UCB faculty are appointed by department, while graduate students are listed by major, not department. The changes in automated systems (over summer 2000) from which we were trying to secure the data resulted in codes for these two groups being very different (e.g., faculty departments which had previously contained six character numeric numbers became 6 character alphas. This required construction of a conversion table.) Graduate student major codes, on the other hand, consisted of three numbers, and they did not always correlate to each other easily. We were told by the Graduate Division not to even attempt such a correlation, However we tried to do so.

The ID Code assigned to recipients of the survey comprised eleven characters, including a single numeric discipline code (1-5) which correlated to the disciplines used in the UC San Diego survey (Arts & Humanities, Biological Sciences, Engineering, Physical Sciences, and Social Sciences). Unfortunately, this numeric had to be assigned by hand to each department and major, so a conversion file could be made which would automatically assign the code into the constructed ID code.
We decided to do an initial mailing and two follow-up mailings to remind subjects to respond and therefore increase the number of respondents. For this same reason, we also used the two reserve lists created by Survey Research Center. We constructed a database from which we produced mailing labels and in which we kept track of responses received. This worked well overall, but it did require some fine handling because of the survey was available in two formats (paper copy and web). An overwhelming majority of respondents chose to complete the paper copy survey over the Web based version. This came as a surprise.

**Project Budget**

An overall budget of up to $20,000 for the project was approved by University Librarian Gerald Lowell. Of this amount, $16,350 was allocated for Survey Research Center charges covering consultation services, data reduction and sampling. The unpaid balance of this amount was used to hire the statistical consultant who designed and produced the redacted, web mountable reports. In addition, $1,000 was allocated for raffle prizes awarded in a drawing of names from the pool of respondents. Cost of copying, office supplies, postage, and the library staff time devoted to this project was not factored into the budget.

**NOTES**
