LibQUAL+™ Spring 2003 Survey

Institution Results

Georgia Tech Library

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1   Introduction

1.1   Acknowledgements

This notebook contains information from the fourth administration of the LibQUAL+™ protocol. The material on the following pages is drawn from the analysis of more than 125,000 responses from 308 participating institutions collected in the spring of 2003.

The LibQUAL+™ project requires the skills of a dedicated group. We would like to thank several members of the LibQUAL+™ team for their key roles in this developmental project. From Texas A&M University, the project management role of Colleen Cook, the quantitative guidance of Bruce Thompson, and the qualitative leadership of Yvonna Lincoln have been key to the project's integrity. The behind-the-scenes roles of Bill Chollet and others from the library Systems and Training units were also formative. From the Association of Research Libraries, the oversight role of Martha Kyrillidou and the day-to-day contributions of Consuella Askew, Jonathan Sousa, and Amy Hoseth were fundamentally important. Julia Blixrud and Kaylyn Hipps were also important contributors.

A New Measures Initiative of this scope is possible only as the collaborative effort of many libraries. To the directors and liaisons at all 308 participating libraries goes the largest measure of gratitude. Without your commitment, the development of LibQUAL+™ would not have been possible. We would also like to extend a special thank you to administrators at several participating consortia, including but not limited to: Tom Sanville and Jeff Gatten from OhioLINK, Diana Cunningham from the American Association of Health Sciences Libraries (AAHSL), Kathy Miller from NY3Rs, and Stephen Town and Toby Bainton from SCONUL. The advisory groups from each consortium were also very helpful. Finally, thanks to Claude Bonnelly at Université Laval and Jean-Pierre Cote at Université de Montréal for their help in translating the survey tool into French.

We would like to acknowledge the role of the Fund for the Improvement of Post-secondary Education (FIPSE), U.S. Department of Education, which provided grant funds of $498,368 over a three-year period towards the LibQUAL+™ project. As we move towards the conclusion of that grant funding in August 2003 we would like to express our thanks for their continued support, which has enabled the project to grow into its present form.

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1.2   LibQUAL+™: Defining and Promoting Library Service Quality

What is LibQUAL+™?

LibQUAL+™ is a suite of services that libraries use to solicit, track, understand, and act upon users' opinions of service quality. These services are offered to the library community by the Association of Research Libraries (ARL). The program's centerpiece is a rigorously tested Web-based survey bundled with training that helps libraries assess and improve library services, change organizational culture, and market the library. The goals of LibQUAL+™ are to:

- Foster a culture of excellence in providing library service
- Help libraries better understand user perceptions of library service quality
- Collect and interpret library user feedback systematically over time
- Provide libraries with comparable assessment information from peer institutions
- Identify best practices in library service
- Enhance library staff members' analytical skills for interpreting and acting on data

As of spring 2003, LibQUAL+™ has more than 400 participating institutions, including colleges and universities, community colleges, health sciences libraries, law libraries, and public libraries -- some through various consortia, others as independent participants. LibQUAL+™ has expanded internationally, with participating institutions in Canada, the U.K., and Europe. The growing LibQUAL+™ community of participants and its extensive dataset are rich resources for improving library services.

How will LibQUAL+™ benefit your library?

Library administrators have successfully used LibQUAL+™ survey data to identify best practices, analyze deficits, and effectively allocate resources. Benefits to participating institutions include:

- Institutional data and reports that enable you to assess whether your library services are meeting user expectations
- Aggregate data and reports that allow you to compare your library's performance with that of peer institutions
- Workshops designed specifically for LibQUAL+™ participants
- Access to an online library of LibQUAL+™ research articles
- Opportunity to become part of a community interested in developing excellence in library services

How does LibQUAL+™ benefit your library users?

LibQUAL+™ gives your library users a chance to tell you where your services need improvement so you can respond to and better manage their expectations. You can develop services that better meet your users' expectations by comparing your library's data with that of peer institutions and examining the practices of those libraries that are evaluated highly by their users.

How is the LibQUAL+™ survey conducted?

Conducting the LibQUAL+™ survey requires little technical expertise on your part. You invite your users to take the survey, distributing the URL for your library's Web form via e-mail. Respondents complete the survey form and their answers are sent to a central database. The data are analyzed and presented to you in reports describing your users' desired, perceived, and minimum expectations of service.

What are the origins of the LibQUAL+™ survey?

The LibQUAL+™ survey evolved from a conceptual model based on the SERVQUAL instrument, a popular tool for assessing service quality in the private sector. The Texas A&M University Libraries and other libraries used modified SERVQUAL instruments for several years; those applications revealed the need for a newly adapted tool that would serve the particular requirements of libraries. ARL, representing the largest research libraries in North America, partnered with Texas A&M University Libraries to develop, test, and refine LibQUAL+™. This effort was supported in part by a three-year grant from the U.S. Department of Education's Fund for the Improvement of Post-Secondary Education (FIPSE).

1.3   Web Access to Data

Data summaries from the 2003 iteration of the LibQUAL+™ survey will be available to project participants online via the LibQUAL+™ survey management site:

http://www.libqual.org/Manage/Results/index.cfm

1.4   Explanation of Charts and Tables

Radar Charts

Radar charts are commonly used throughout the following pages to display both aggregate results and results from individual institutions. A working knowledge of how to read and derive relevant information from these charts is essential. Basic information about radar charts is outlined below, and additional descriptive information is included throughout this notebook.

What is a radar chart?
Radar charts are useful when you want to look at several different factors all related to one item. Sometimes called "spider charts" or "polar charts", radar charts feature multiple axes or "spokes" along which data can be plotted. Variations in the data are shown by distance from the center of the chart. Lines connect the data points for each series, forming a spiral around the center.

In the case of the LibQUAL+™ survey results, each axis represents a different survey question. Questions are identified by a code at the end of each axis. The four dimensions measured by the survey are grouped together on the radar charts, and each dimension is labeled: Access to Information (AI), Affect of Service (AS), Library as Place (LP), and Personal Control (PC).

Radar charts are used in this notebook to present the item summaries (the results from the 25 core survey questions).

How to read a radar chart
Radar charts are an effective way to graphically show strengths and weaknesses by enabling you to observe symmetry or uniformity of data. Points close to the center indicate a low value, while points near the edge indicate a high value. When interpreting a radar chart, it is important to check each individual axis as well as the chart's overall shape in order to gain a complete understanding of its meaning. You can see how much data fluctuates by observing whether the spiral is smooth or has spikes of variability.

Respondents' minimum, desired, and perceived levels of service quality are plotted on each axis of your LibQUAL+™ radar charts. The resulting "gaps" between the three levels are shaded in blue, yellow, green, and red. Generally, a radar graph shaded blue and yellow indicates that users' perceptions of service fall within the "zone of tolerance"; the distance between minimum expectations and perceptions of service quality is shaded in blue, and the distance between their desired and perceived levels of service quality is shown in yellow. When users' perceptions fall outside the "zone of tolerance," the graph will include areas of red and green shading. If the distance between users' minimum expectations and perceptions of service delivery is represented in red, that indicates a negative service adequacy score. If the distance between the desired level of service and perceptions of service delivery is represented in green, that indicates a positive service superiority score.

Means

The mean of a collection of numbers is their arithmetic average, computed by adding them up and dividing by their total number.

In this notebook, means are provided for users' minimum, desired, and perceived levels of service quality for each item on the LibQUAL+™ survey. Means are also provided for the general satisfaction and information literacy

outcomes questions.

Standard Deviation

Standard deviation is a measure of the spread of data around their mean. The standard deviation (SD) depends on calculating the average distance of each score from the mean.

In this notebook, standard deviations are provided for every mean presented in the tables.

Service Adequacy

Service adequacy is calculated by subtracting the minimum score from the perceived score on any given question, for each user. Both means and standard deviations are provided for service adequacy scores on each item of the survey, as well as for each of the four dimensions of library service quality. In general, service adequacy is an indicator of the extent to which you are meeting the minimum expectations of your users. A negative service adequacy score indicates that your users' perceived level of service quality is below their minimum level of service quality and is printed in red.

Service Superiority

Service superiority is calculated by subtracting the desired score from the perceived score on any given question, for each user. Both means and standard deviations are provided for service superiority scores on each item of the survey, as well as for each of the four dimensions of library service quality. In general, service superiority is an indicator of the extent to which you are exceeding the desired expectations of your users. A positive service superiority score indicates that your users' perceived level of service quality is above their desired level of service quality and is printed in green.

Inclusion of Charts and Tables

Sections with charts and tables are omitted from the following pages when there are three or fewer individuals in a specific group.

In the consortium notebooks, institution type summaries are not shown if there is only one library for an institution type. Individual library notebooks are produced separately for each participant.

1.5   A Few Words about LibQUAL+™ 2003

Libraries today confront escalating pressure to demonstrate impact. As Cullen (2001) has noted,

> Academic libraries are currently facing their greatest challenge since the explosion in tertiary education and academic publishing which began after World War II... [T]he emergence of the virtual university, supported by the virtual library, calls into question many of our basic assumptions about the role of the academic library, and the security of its future. Retaining and growing their customer base, and focusing more energy on meeting their customers' expectations is the only way for academic libraries to survive in this volatile environment. (pp. 662-663)

In this environment, "A measure of library quality based solely on collections has become obsolete" (Nitecki, 1996, p. 181).

These considerations have prompted the Association of Research Libraries (ARL) to sponsor a number of "New Measures" initiatives. The New Measures efforts represent a collective determination on the part of the ARL membership to augment the collection-count and fiscal input measures that comprise the ARL Index and ARL Statistics, to date the most consistently collected statistics for research libraries, with outcome measures, such as assessments of service quality and satisfaction.

One New Measures initiative is the LibQUAL+™ project (Cook, Heath & B. Thompson, 2002, 2003; Heath, Cook, Kyrillidou & Thompson, 2002; Thompson, Cook & Heath, 2003; Thompson, Cook & Thompson, 2002). The book by Cook, Heath and Thompson (in press) details much of the related history and research.

Within a service-quality assessment model, "only customers judge quality; all other judgments are **essentially irrelevant**" (Zeithaml, Parasuraman, Berry, 1990, p. 16). Consequently, the selection of items employed with LibQUAL+™ has been grounded in the *users' perspective* as revealed in a series of qualitative studies (Cook, 2002a; Cook & Heath, 2001).

LibQUAL+™ is a "way of listening" to users called a *total market survey*. As Berry (1995) explained,

> When well designed and executed, total market surveys provide a range of information unmatched by any other method... A critical facet of total market surveys (and the reason for using the word 'total') is the measurement of competitors' service quality. This [also] requires using non-customers in the sample to rate the service of their suppliers. (p. 37)

Although (a) measuring perceptions of both users and non-users and (b) collecting perceptions data as regards peer institutions can provide important insights, LibQUAL+™ is only one (i.e., a total market survey) of 11 "ways of listening" (Berry, 1995, pp. 32-61).

Score Scaling

"Perceived" scores on the 25 LibQUAL+™ core items, the four subscales, and the total score, are <u>all</u> scaled 1 to 9, with 9 being the most favorable. Both the gap scores ("Adequacy" = "Perceived" -"Minimum"; "Superiority" = "Perceived" - "Desired") are scaled such that higher scores are more favorable. Thus, an *adequacy* gap score of +1.2 on an item, subscale, or total score is better than an adequacy gap score of +1.0. A *superiority* gap score of -0.5 on an item, subscale, or total score is better than a superiority gap score of -1.0.

Using LibQUAL+™ Data

In some cases LibQUAL+™ data may confirm prior expectations and library staff will readily formulate action plans to remedy perceived deficiencies. But in many cases library decision-makers will seek additional information to corroborate interpretations or to better understand the dynamics underlying user perceptions.

For example, once an interpretation is formulated, library staff might review recent submissions of users to suggestion boxes to evaluate whether LibQUAL+™ data are consistent with interpretations, and the suggestion box data perhaps also provide user suggestions for remedies. User focus groups also provide a powerful way to explore problems and potential solutions.

Indeed, the open-ended comments gathered as part of LibQUAL+™ are themselves useful in fleshing out insights into perceived library service quality. Respondents often use the comments box on the survey to make constructive suggestions on specific ways to address their concerns. Qualitative analysis of these comments can be very fruitful. In short, LibQUAL+™ is not 25 items. LibQUAL+™ is 25 items plus a comments box!

Cook (2002b) provided case study reports of how staff at various libraries have employed data from prior renditions of LibQUAL+™. Heath, Askew and Kyrillidou (in press) edited a special issue of the Journal of Library Administration reporting additional case studies on use of LibQUAL+™ data in aid of improving library service quality.

2003 Data Screening

The 25 LibQUAL+™ core quantitative items measure perceptions of total service quality, as well as four sub-dimensions of perceived library quality: (a) *Service Affect* (9 items, such as "willingness to help users"); (b) *Library as Place* (5 items, such as "a getaway for study, learning, or research"); (c) *Personal Control* (6 items, such as "a library Web site enabling me to locate information on my own"); and (d) *Information Access* (5 items, such as "print and/or electronic journal collections I require for my work" and "convenient service hours").

However, as happens in any survey, in 2003 some users provided incomplete data, or inconsistent data, or both. In compiling the summary data reported here, several criteria were used to determine which respondents to omit from these analyses.

   1. Complete Data. The Web software that presents the 25 core items monitors whether a given user has completed all items. On each of these items, in order to proceed to the next survey page, users must provide a rating of (a) minimally-acceptable service, (b) desired service, and (c) perceived service or rate the item "not applicable" ("NA"). If these conditions are not met, when the user attempts to leave the Web page presenting the 25 core items, the software shows the user where missing data were located, and requests complete data. The user cannot exit the page containing the 25 items (except by abandoning the survey) until all items are completed. *Only records with complete data on the 25 items were retained in summary statistics.*

   2. Excessive "NA" Responses. Because some institutions provided access to a lottery drawing for an incentive (e.g., a Palm PDA) for completing the survey, some users might have selected "NA" choices for all or most of the items rather than reporting their actual perceptions. Or some users may have views on such a narrow range of quality issues that their data are not very informative. *In this survey we made the judgment that records containing*

more than 11 "NA" responses should be deleted.

3. Excessive Inconsistent Responses. On LibQUAL+™ user perceptions can be interpreted by locating "perceived" results within the "zone of tolerance" defined by data from the "minimum" and the "desired" ratings. For example, a mean "perceived" rating on the 1-to-9 ("9" is highest) scale of 7.5 might be very good if the mean "desired" rating is 6.0. But a 7.5 perception score is less satisfactory if the mean "desired" rating is 8.6, or if the mean "minimum" rating is 7.7.

One appealing feature of such a "gap measurement model" is that the rating format provides a check for inconsistencies in the response data (Thompson, Cook & Heath, 2000). Logically, on a given item the "minimum" rating should not be higher than the "desired" rating on the same item. For each user a count of such inconsistencies, ranging from "0" to "25" was made. *Records containing more than 9 logical inconsistencies were deleted.*

LibQUAL+™ Norms

An important way to interpret LibQUAL+™ data is by examining the zones of tolerance for items, the four subscale scores, and the total scores. However, the collection of such a huge number of user perceptions has afforded us with the unique opportunity to create "norms" tables that provide yet another perspective on results.

Norms tell us how scores "stack up" within a particular user group. For example, on the 1-to-9 ("9" is highest) scale, users might provide a mean "perceived" rating of 6.5 on an item, "the printed library materials I need for my work." The same users might provide a mean rating on "minimum" for this item of 7.0, and a mean service-adequacy "gap score" (i.e., "perceived" minus "minimum") of -0.5.

The zone-of-tolerance perspective suggests that this library is not doing well on this item, because "perceived" falls below "minimally acceptable." This is important to know. But there is also a second way (i.e., normatively) to interpret the data. Both perspectives can be valuable.

A total market survey administered to more than 100,000 users, as was LibQUAL+™ in 2003, affords the opportunity to ask normative questions such as, "How does a mean 'perceived' score of 6.5 stack up among all individual users who completed the survey?", or "How does a mean service-adequacy gap score of -0.5 stack up among the gap scores of all institutions participating in the survey?"

If 70% of individual users generated "perceived" ratings lower than 6.5, 6.5 might not be so bad. And if 90% of institutions had service-adequacy gap scores lower than -0.5 (e.g., -0.7, -1.1), a mean gap score of -0.5 might actually be quite good. Users simply may have quite high expectations in this area. They may also communicate their dissatisfaction by both (a) rating "perceived" lower and (b) "minimum" higher.

This does not mean that a service-adequacy gap score of -0.5 is necessarily a cause for celebration. But a service-adequacy gap score of -0.5 on an item on which 90% of institutions have a lower gap score is a different gap score than the same -0.5 for a different item in which 90% of institutions have a higher service-adequacy gap score.

Only norms give us insight into this comparative perspective. And a local user-satisfaction survey (as against a total market survey) can <u>never</u> give us this insight.

Common Misconception Regarding Norms. An unfortunate and incorrect misconception is that norms make

value statements. Norms do not make value statements! Norms make fact statements. If you are a forest ranger, and you make $25,000 a year, a norms table might inform you of the fact statement that you make less money than 85% of the adults in the United States.

But if you love the outdoors, you do not care very much about money, and you are very service-oriented, this fact statement might not be relevant to you. Or, in the context of your values, you might interpret this fact as being quite satisfactory.

LibQUAL+™ 2003 Norms Tables. Of course, the fact statements made by the LibQUAL+™ norms are only valuable if you care about the dimensions being evaluated by the measure. More background on LibQUAL+™ norms is provided by Cook and Thompson (2001) and Cook, Heath and B. Thompson (2002). LibQUAL+™ norms for 2003 are available on the Web at URL:

<http://www.coe.tamu.edu/~bthompson/libq2003.htm>

Response Rates

At the American Library Association mid-winter meeting in San Antonio in January, 2000, participants were cautioned that response rates on the final LibQUAL+™ survey would probably range from 25% to 33%. Higher response rates can be realized (a) with shorter surveys that (b) are directly action-oriented (Cook, Heath & R.L. Thompson, 2000). For example, a very high response rate could be realized by a library director administering the following one-item survey to users:

> Instructions. Please tell us what time to close the library every day. In the future **we will close at whatever time receives the most votes**.
>
> Should we close the library at?
>
> (A) 10 p.m.   (B) 11 p.m.   (C) midnight   (D) 2 p.m.

Lower response rates will be expected for total market surveys measuring general perceptions of users across institutions, and when an intentional effort is made to solicit perceptions of both users and non-users. Two considerations should govern the evaluation of LibQUAL+™ response rates.

Minimum Response Rates. Response rates are computed by dividing the number of completed surveys at an institution by the number of persons asked to complete the survey. However, we do not know the actual response rates on LibQUAL+™, because we do not know the correct denominators for these calculations.

For example, given inadequacy in records at schools, we are not sure how many e-mail addresses for users are accurate. And we do not know how many messages to invite participation were actually opened. In other words, what we know for LibQUAL+™ is the "lower-bound estimate" of response rates.

For example, if 200 out of 800 solicitations result in completed surveys, we know that the response rate is at least 25%. But because we are not sure whether 800 e-mail addresses were correct or that 800 e-mail messages were opened, we are not sure that 800 is the correct denominator. The response rate involving only correct e-mail addresses might be 35% or 45%. We don't know the exact response rate.

Representativeness Versus Response Rate. If 100% of the 800 people we randomly selected to complete our survey did so, then we can be assured that the results are representative of all users. But if only 25% of the 800 users complete the survey, the representativeness of the results is not assured. Nor is unrepresentativeness assured.

Representativeness is actually a matter of degree. And several institutions each with 25% response rates may have data with different degrees of representativeness.

We can never be sure about how representative our data are as long as not everyone completes the survey. But we can at least address this concern by comparing the demographic profiles of survey completers with the population (Thompson, 2000). At which university below would one feel more confident that LibQUAL+™ results were reasonably representative?

Alpha University

Completers (n=200 / 800)	Population (N=16,000)
Gender	Gender
Students 53% female	Students 51% female
Faculty 45% female	Faculty 41% female
Disciplines	Disciplines
Liberal Arts 40%	Liberal Arts 35%
Science 15%	Science 20%
Other 45%	Other 45%

Omega University

Completers (n=200 / 800)	Population (N=23,000)
Gender	Gender
Students 35% female	Students 59% female
Faculty 65% female	Faculty 43% female
Disciplines	Disciplines
Liberal Arts 40%	Liberal Arts 15%
Science 20%	Science 35%
Other 40%	Other 50%

The persuasiveness of such analyses is greater as the number of variables used in the comparisons is greater. The LibQUAL+™ software has been expanded to automate these comparisons and to output side-by-side graphs and tables comparing sample and population profiles for given institutions. Show these to people who question result representativeness.

However, one caution is in order regarding percentages. When total n is small for an institution, or within a particular subgroup, huge changes in percentages can result from very small shifts in numbers. For 2004 we may develop some summary indices to overcome these dynamics and facilitate evaluations of these representativeness comparisons.

ARL Service Quality Assessment Academy

LibQUAL+™ is an important tool in the New Measures toolbox that librarians can use to improve service quality. But, even more fundamentally, the LibQUAL+™ initiative is more than a single tool. LibQUAL+™ is an effort to create a culture of data-driven service quality assessment and service quality improvement within libraries.

Such a culture must be informed by more than one tool, and by more than only one of the 11 ways of listening to

users. To facilitate a culture of service quality assessment, and to facilitate more informed usage of LibQUAL+™ data, the Association of Research Libraries has created the annual *ARL Service Quality Assessment Academy*. For more information about the Academy, see the LibQUAL+™ events page at

<http://www.libqual.org/Events/index.cfm>.

The intensive, five-day Academy teaches both qualitative and quantitative skills that library staff can use to evaluate and generate service-quality assessment information. The second cohort of Academy participants graduated in May, 2003. The Academy is one more resource for library staff who would like to develop enhanced service-quality assessment skills.

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2   Demographic Summary for Georgia Tech Library

2.1   Respondents by User Group

User Group		Respondent n	Respondent %
Undergraduate			
First year		40	8.64%
Second year		41	8.86%
Third year		48	10.37%
Fourth year		33	7.13%
Fifth year and above		24	5.18%
Non-degree		0	0.00%
	Sub Total:	186	40.17%
Graduate			
Masters		60	12.96%
Doctoral		95	20.52%
Non-degree or Undecided		1	0.22%
	Sub Total:	156	33.69%
Faculty			
Adjunct Faculty		1	0.22%
Assistant Professor		19	4.10%
Associate Professor		35	7.56%
Lecturer		5	1.08%
Professor		47	10.15%
Other Academic Status		10	2.16%
	Sub Total:	117	25.27%
Library Staff			
Administrator		0	0.00%
Manager, Head of Unit		0	0.00%
Public Services		0	0.00%
Systems		0	0.00%
Technical Services		0	0.00%
Other		0	0.00%
	Sub Total:	0	0.00%
Staff			
Research Staff		3	0.65%
Other staff positions		1	0.22%
	Sub Total:	4	0.86%
Total:		**463**	**100.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	All

2.2 Population and Respondent Profiles by User Sub-Group

The chart and table below show a breakdown of survey respondents by sub-group (e.g. First year, Masters, Professor), based on user responses to the demographic questions at the end of the survey instrument and the demographic data provided by institutions through the online Demographics Questionnaire*.

The chart maps percentage of respondents for each user subgroup in red. Population percentages for each user subgroup are mapped in blue. The table shows the number and percentage for each user sub-group for the general population (N) and for survey respondents (n).

Note: Participating institutions were not required to complete the Demographics Questionnaire. When population data is missing or incomplete, it is because this data was not provided to ARL.

■ Respondent Profile by User Sub-Group
■ Population Profile by User Sub-Group
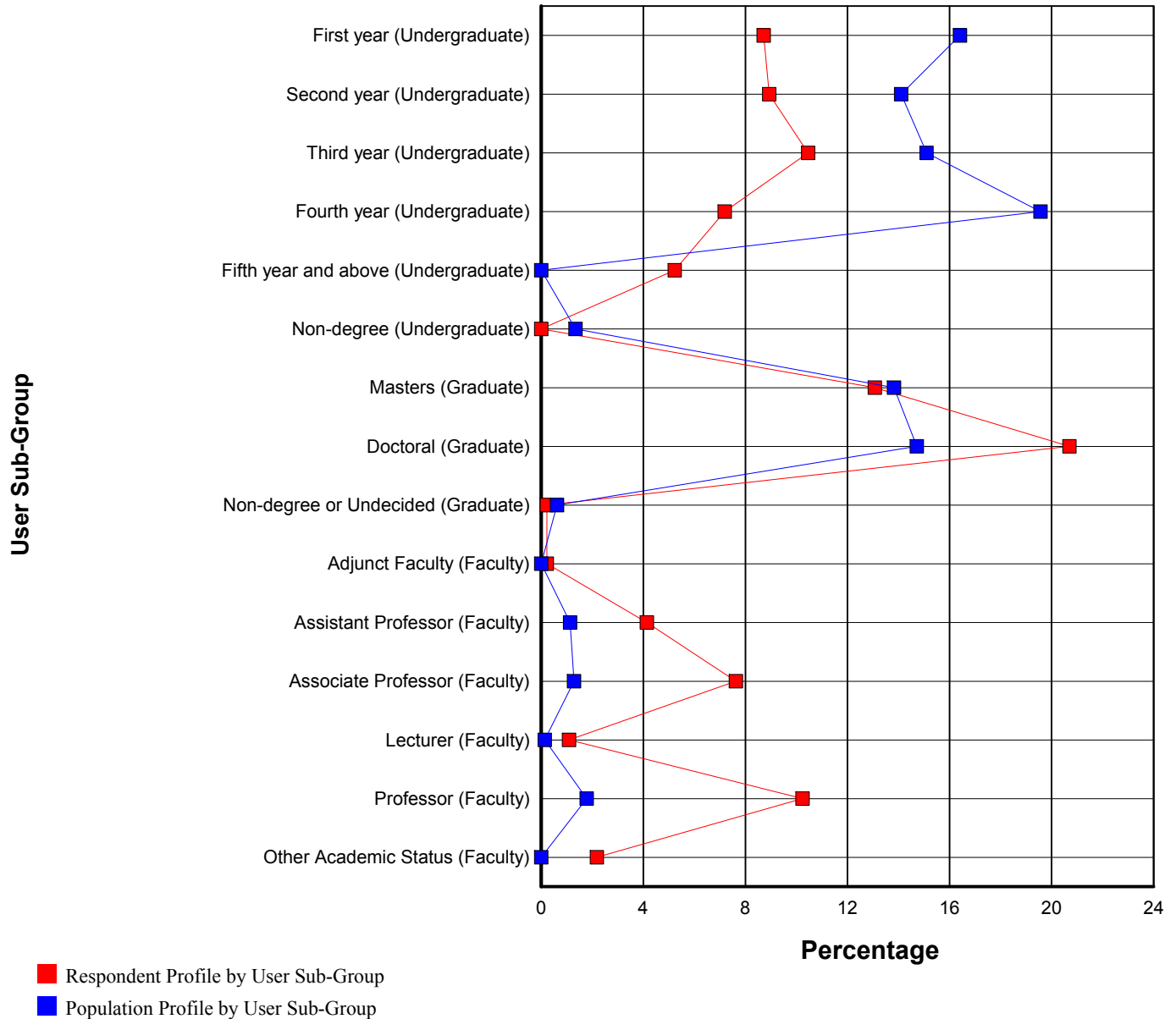
Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	All (Excludes Staff & Library Staff)

User Sub-Group	Population N	Population %	Respondents n	Respondents %	%N - %n
First year (Undergraduate)	2,826	16.41%	40	8.71%	7.69%
Second year (Undergraduate)	2,429	14.10%	41	8.93%	5.17%
Third year (Undergraduate)	2,601	15.10%	48	10.46%	4.64%
Fourth year (Undergraduate)	3,370	19.56%	33	7.19%	12.38%
Fifth year and above (Undergraduate)	0	0.00%	24	5.23%	-5.23%
Non-degree (Undergraduate)	231	1.34%	0	0.00%	1.34%
Masters (Graduate)	2,381	13.82%	60	13.07%	0.75%
Doctoral (Graduate)	2,535	14.72%	95	20.70%	-5.98%
Non-degree or Undecided (Graduate)	106	0.62%	1	0.22%	0.40%
Adjunct Faculty (Faculty)	0	0.00%	1	0.22%	-0.22%
Assistant Professor (Faculty)	195	1.13%	19	4.14%	-3.01%
Associate Professor (Faculty)	221	1.28%	35	7.63%	-6.34%
Lecturer (Faculty)	23	0.13%	5	1.09%	-0.96%
Professor (Faculty)	307	1.78%	47	10.24%	-8.46%
Other Academic Status (Faculty)	0	0.00%	10	2.18%	-2.18%
Total:	**17,225**	**100.00%**	**459**	**100.00%**	**0.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	All (Excludes Staff & Library Staff)

2.3   Population and Respondent Profiles by Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions at the end of the survey instrument and the demographic data provided by institutions through the online Demographics Questionnaire*.

The chart maps percentage of respondents for each discipline in red. Population percentages for each discipline are mapped in blue. The table shows the number and percentage for each discipline, for the general population (N) and for survey respondents (n).

Note: Participating institutions were not required to complete the Demographics Questionnaire. When population data is missing or incomplete, it is because this data was not provided to ARL.

■ Respondent Profile by Discipline
■ Population Profile by Discipline

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	All (Excludes Staff & Library Staff)

Discipline	Population N	Population %	Respondents n	Respondents %	%N – %n
Agriculture / Environmental Studies	0	0.00%	3	0.65%	-0.65%
Architecture	988	5.74%	23	5.01%	0.72%
Business	1,537	8.92%	22	4.79%	4.13%
Communications / Journalism	0	0.00%	1	0.22%	-0.22%
Education	0	0.00%	3	0.65%	-0.65%
Engineering / Computer Science	11,819	68.62%	282	61.44%	7.18%
General Studies	0	0.00%	2	0.44%	-0.44%
Health Sciences	0	0.00%	3	0.65%	-0.65%
Humanities	56	0.33%	16	3.49%	-3.16%
Law	0	0.00%	2	0.44%	-0.44%
Military / Naval Science	0	0.00%	1	0.22%	-0.22%
Performing & Fine Arts	0	0.00%	1	0.22%	-0.22%
Science / Math	1,453	8.44%	70	15.25%	-6.82%
Social Sciences / Psychology	1,141	6.62%	22	4.79%	1.83%
Undecided	231	1.34%	0	0.00%	1.34%
Other	0	0.00%	8	1.74%	-1.74%
Total:	**17,225**	**100.00%**	**459**	**100.00%**	**0.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	All (Excludes Staff & Library Staff)

2.4   Respondent Profile by Age

This table shows a breakdown of survey respondents by age; both the number of respondents (n) and the percentage of the total number of respondents represented by each age group are displayed. Ages are grouped into six categories: Under 18, 18-22, 23-30, 31-45, 46-65, and Over 65.

Age	Respondents n	Respondents %
Under 18	1	0.22%
18 - 22	166	35.93%
23 - 30	144	31.17%
31 - 45	92	19.91%
46 - 65	57	12.34%
Over 65	2	0.43%
Total:	**462**	**100.00%**

2.5   Population and Respondent Profiles by Sex

The table below shows a breakdown of survey respondents by sex, based on user responses to the demographic questions at the end of the survey instrument and the demographic data provided by institutions through the online Demographics Questionnaire*. The number and percentage for each sex are given for the general population and for survey respondents.

*Note: Participating institutions were not required to complete the Demographics Questionnaire. When population data is missing or incomplete, it is because this data was not provided to ARL.

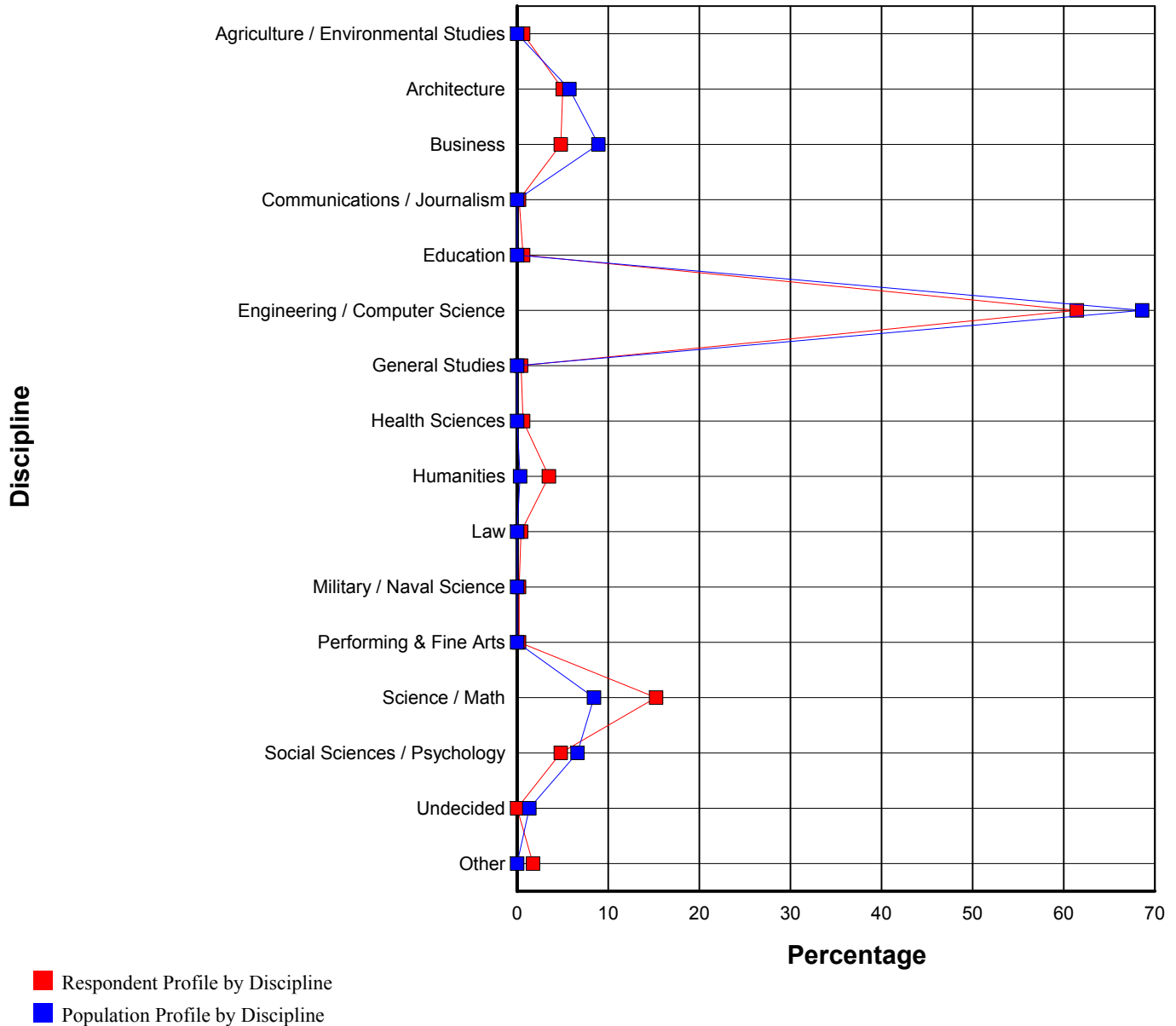| Sex	Population N	Population %	Respondents n	Respondents %
Male	12,652	73.45%	337	72.94%
Female	4,573	26.55%	125	27.06%
Total:	**17,225**	**100.00%**	**462**	**100.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	All (Excludes Library Staff)

3 Survey Item Summary for Georgia Tech Library

3.1 Core Questions Summary

This radar chart shows aggregate results for the 25 core survey questions. Each axis represents one question (a code to identify each question is displayed at the outer point of each axis). While questions for each dimension of library service quality are scattered randomly throughout the survey, here they are grouped in quadrants: Affect of Service, Access to Information, Library as Place, and Personal Control.

On each axis, respondents' minimum, desired, and perceived levels of service quality are plotted, and the resulting "gaps" between the three levels (representing service adequacy or service superiority) are shaded in blue, yellow, green, and red.

The two following tables show mean scores and standard deviations for each question, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction to this notebook.)

Legend:
- **Red** — Perceived Less Than Minimum
- **Blue** — Perceived Greater Than Minimum
- **Yellow** — Perceived Less Than Desired
- **Green** — Perceived Greater Than Desired

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	All (Excludes Library Staff)

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Access to Information							
AI-1	Print and/or electronic journal collections I require for my work	6.44	8.11	6.29	-0.15	-1.82	433
AI-2	Convenient service hours	6.42	7.96	7.19	0.77	-0.78	453
AI-3	The printed library materials I need for my work	6.34	7.94	6.30	-0.04	-1.64	429
AI-4	The electronic information resources I need	6.82	8.31	6.91	0.09	-1.41	452
AI-5	Timely document delivery/interlibrary loan	6.25	7.72	6.67	0.42	-1.05	317
Affect of Service							
AS-1	Employees who instill confidence in users	5.38	7.36	6.25	0.87	-1.11	431
AS-2	Readiness to respond to users' questions	6.32	7.89	6.99	0.67	-0.90	431
AS-3	Willingness to help users	6.39	7.96	7.02	0.63	-0.93	445
AS-4	Dependability in handling users' service problems	6.48	7.93	6.93	0.45	-1.00	417
AS-5	Giving users individual attention	5.61	7.12	6.43	0.83	-0.69	433
AS-6	Employees who have the knowledge to answer user questions	6.48	8.03	7.13	0.66	-0.90	441
AS-7	Employees who are consistently courteous	6.48	7.96	7.19	0.71	-0.77	447
AS-8	Employees who deal with users in a caring fashion	6.16	7.70	6.92	0.77	-0.77	431
AS-9	Employees who understand the needs of their users	6.32	7.83	6.89	0.57	-0.94	429
Library as Place							
LP-1	Quiet space for individual activities	6.04	7.50	6.74	0.70	-0.76	424
LP-2	A comfortable and inviting location	5.89	7.61	6.56	0.67	-1.05	445
LP-3	Library space that inspires study and learning	5.97	7.64	6.48	0.50	-1.16	422
LP-4	Community space for group learning and group study	5.47	7.09	6.49	1.02	-0.59	376
LP-5	A getaway for study, learning, or research	6.02	7.62	6.69	0.66	-0.93	410
Personal Control							
PC-1	Easy-to-use access tools that allow me to find things on my own	6.34	8.22	6.49	0.15	-1.73	459
PC-2	Convenient access to library collections	6.12	7.85	6.52	0.40	-1.34	443
PC-3	A library Web site enabling me to locate information on my own	6.75	8.36	6.91	0.17	-1.44	458
PC-4	Modern equipment that lets me easily access needed information	6.54	8.14	7.18	0.64	-0.96	449
PC-5	Making information easily accessible for independent use	6.54	8.09	6.89	0.35	-1.20	446
PC-6	Making electronic resources accessible from my home or office	6.83	8.31	6.66	-0.17	-1.65	441
Overall:		6.27	7.87	6.76	0.49	-1.11	463

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	All (Excludes Library Staff)

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Access to Information							
AI-1	Print and/or electronic journal collections I require for my work	1.73	1.29	1.89	2.39	2.14	433
AI-2	Convenient service hours	1.67	1.32	1.54	1.92	1.73	453
AI-3	The printed library materials I need for my work	1.73	1.42	1.83	2.31	2.12	429
AI-4	The electronic information resources I need	1.54	1.01	1.68	2.10	1.85	452
AI-5	Timely document delivery/interlibrary loan	1.84	1.54	1.77	2.00	1.88	317
Affect of Service							
AS-1	Employees who instill confidence in users	1.77	1.60	1.58	1.85	1.70	431
AS-2	Readiness to respond to users' questions	1.61	1.34	1.46	1.64	1.57	431
AS-3	Willingness to help users	1.53	1.18	1.52	1.62	1.49	445
AS-4	Dependability in handling users' service problems	1.55	1.17	1.48	1.68	1.54	417
AS-5	Giving users individual attention	1.89	1.65	1.63	1.78	1.63	433
AS-6	Employees who have the knowledge to answer user questions	1.63	1.20	1.47	1.65	1.46	441
AS-7	Employees who are consistently courteous	1.78	1.33	1.59	1.86	1.61	447
AS-8	Employees who deal with users in a caring fashion	1.81	1.41	1.55	1.78	1.60	431
AS-9	Employees who understand the needs of their users	1.69	1.32	1.51	1.74	1.59	429
Library as Place							
LP-1	Quiet space for individual activities	2.08	1.86	1.81	2.17	2.20	424
LP-2	A comfortable and inviting location	1.81	1.45	1.67	2.08	1.90	445
LP-3	Library space that inspires study and learning	1.92	1.59	1.78	2.26	2.05	422
LP-4	Community space for group learning and group study	2.15	2.05	1.67	2.19	2.23	376
LP-5	A getaway for study, learning, or research	2.00	1.77	1.71	2.06	1.98	410
Personal Control							
PC-1	Easy-to-use access tools that allow me to find things on my own	1.55	1.05	1.65	2.06	1.80	459
PC-2	Convenient access to library collections	1.62	1.26	1.61	1.98	1.79	443
PC-3	A library Web site enabling me to locate information on my own	1.65	1.06	1.64	2.14	1.74	458
PC-4	Modern equipment that lets me easily access needed information	1.71	1.18	1.48	1.77	1.50	449
PC-5	Making information easily accessible for independent use	1.54	1.16	1.46	1.76	1.64	446
PC-6	Making electronic resources accessible from my home or office	1.77	1.18	1.87	2.37	2.11	441
Overall:		1.29	0.88	1.09	1.36	1.12	463

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	All (Excludes Library Staff)

3.2   Core Question Dimensions Summary

On the chart below, scores for each dimension of library service quality have been plotted graphically. The blue bars represent the range of minimum to desired scores for each dimension. The interior red bars represent the range of minimum to perceived scores (the service adequacy gap) for each dimension of library service quality.

🟦	Range of Minimum to Desired	
🟥	Range of Minimum to Perceived ("Adequacy Gap")	
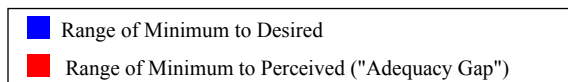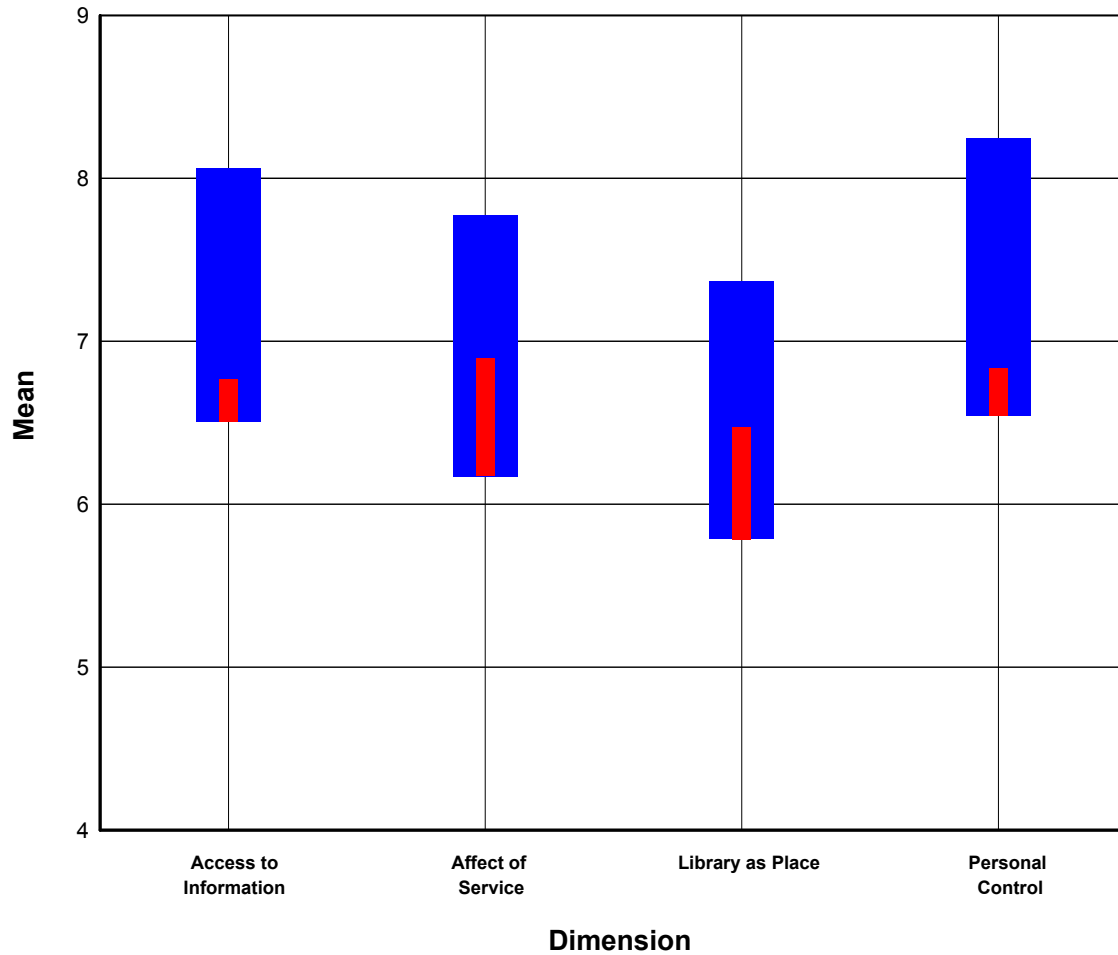
Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	All (Excludes Library Staff)

The following table displays mean scores for each dimension of library service quality measured by the LibQUAL+™ survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix B.

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Access to Information	6.50	8.06	6.76	0.28	-1.35	463
Affect of Service	6.17	7.78	6.89	0.74	-0.88	463
Library as Place	5.78	7.37	6.48	0.70	-0.89	463
Personal Control	6.54	8.25	6.84	0.25	-1.44	463
Overall:	6.27	7.87	6.76	0.49	-1.11	463

The following table displays standard deviation for each dimension of library service quality measured by the LibQUAL+™ survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix B.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Access to Information	1.38	0.97	1.32	1.72	1.44	463
Affect of Service	1.45	1.09	1.27	1.40	1.25	463
Library as Place	1.87	1.75	1.68	1.79	1.70	463
Personal Control	1.39	0.90	1.29	1.68	1.39	463
Overall:	1.29	0.88	1.09	1.36	1.12	463

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	All (Excludes Library Staff)

3.3 General Satisfaction Questions Summary

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where n is the number of respondents for each particular question. These scores are calculated from responses to the general satisfaction questions on the LibQUAL+™ survey, in which respondents rated their levels of general satisfaction on a scale from 1-9.

Satisfaction Question	Mean	SD	n
In general, I am satisfied with the way in which I am treated at the library.	7.08	1.56	463
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	6.43	1.95	463
How would you rate the overall quality of the service provided by the library?	6.71	1.59	462

3.4 Information Literacy Outcomes Questions Summary

This table displays the mean score and standard deviation for each of the information literacy outcomes questions, where n is the number of respondents for each particular question. These scores are calculated from responses to the information literacy outcomes questions on the LibQUAL+™ survey, in which respondents rated their levels of general satisfaction on a scale from 1-9 with 1 being "strongly disagree" and 9 representing "strongly agree".

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	5.66	2.02	463
The library aids my advancement in my academic discipline.	6.27	1.97	463
The library enables me to be more efficient in my academic pursuits.	6.40	1.91	463
The library helps me distinguish between trustworthy and untrustworthy information.	5.21	1.96	463
The library provides me with the information skills I need in my work or study.	5.63	1.96	462

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	All (Excludes Library Staff)

3.5　　Library Use Summary

This chart shows a graphic representation of library use (both on the premises and electronically), as well as use of non-library information gateways such as Yahoo™ and Google™. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the graphic displays the number and percentage of respondents who selected each option.

	Daily	Weekly	Monthly	Quarterly	Never	n / %
How often do you use resources on library premises?	51	168	151	77	16	**463**
	11.02%	36.29%	32.61%	16.63%	3.46%	**100.00%**
How often do you access library resources through a library Web page?	76	203	110	47	27	**463**
	16.41%	43.84%	23.76%	10.15%	5.83%	**100.00%**
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	362	77	14	2	8	**463**
	78.19%	16.63%	3.02%	0.43%	1.73%	**100.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	All (Excludes Library Staff)

4   Undergraduate Summary

4.1   Demographic Summary for Undergraduate

4.1.1   Population and Respondent Profiles for Undergraduate by Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions at the end of the survey instrument and the demographic data provided by institutions through the online Demographics Questionnaire.

The chart maps percentage of respondents for each discipline in red. Population percentages for each discipline are mapped in blue. The table shows the number and percentage for each discipline, for the general population (N) and for survey respondents (n).

■ Respondent Profile by Discipline
■ Population Profile by Discipline

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Undergraduate

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture / Environmental Studies	0	0.00%	0	0.00%	0.00%
Architecture	626	5.46%	13	6.99%	-1.53%
Business	1,187	10.36%	11	5.91%	4.45%
Communications / Journalism	0	0.00%	1	0.54%	-0.54%
Education	0	0.00%	0	0.00%	0.00%
Engineering / Computer Science	7,836	68.39%	136	73.12%	-4.72%
General Studies	0	0.00%	1	0.54%	-0.54%
Health Sciences	0	0.00%	1	0.54%	-0.54%
Humanities	0	0.00%	0	0.00%	0.00%
Law	0	0.00%	1	0.54%	-0.54%
Military / Naval Science	0	0.00%	0	0.00%	0.00%
Performing & Fine Arts	0	0.00%	0	0.00%	0.00%
Science / Math	780	6.81%	15	8.06%	-1.26%
Social Sciences / Psychology	797	6.96%	3	1.61%	5.34%
Undecided	231	2.02%	0	0.00%	2.02%
Other	0	0.00%	4	2.15%	-2.15%
Total:	**11,457**	**100.00%**	**186**	**100.00%**	**0.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Undergraduate

4.1.2   Respondent Profile for Undergraduate by Age

This table shows a breakdown of survey respondents by age; both the number of respondents (n) and the percentage of the total number of respondents represented by each age group are displayed. Ages are grouped into six categories: Under 18, 18-22, 23-30, 31-45, 46-65, and Over 65.

Age	Respondents n	Respondents %
Under 18	1	0.54%
18 - 22	162	87.10%
23 - 30	21	11.29%
31 - 45	1	0.54%
46 - 65	1	0.54%
Over 65	0	0.00%
Total:	**186**	**100.00%**

4.1.3   Population and Respondent Profiles for Undergraduate by Sex

The table below shows a breakdown of survey respondents by sex, based on user responses to the demographic questions at the end of the survey instrument and the demographic data provided by institutions through the online Demographics Questionnaire*. The number and percentage for each sex are given for the general population and for survey respondents.

*Note: Participating institutions were not required to complete the Demographics Questionnaire. When population data is missing or incomplete, it is because this data was not provided to ARL.

Sex	Population N	Population %	Respondents n	Respondents %
Male	8,244	71.96%	133	71.51%
Female	3,213	28.04%	53	28.49%
Total:	**11,457**	**100.00%**	**186**	**100.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Undergraduate

4.2 Core Questions Summary for Undergraduate

This radar chart shows aggregate results for the 25 core survey questions. Each axis represents one question (a code to identify each question is displayed at the outer point of each axis). While questions for each dimension of library service quality are scattered randomly throughout the survey, here they are grouped in quadrants: Affect of Service, Access to Information, Library as Place, and Personal Control.

On each axis, respondents' minimum, desired, and perceived levels of service quality are plotted, and the resulting "gaps" between the three levels (representing service adequacy or service superiority) are shaded in blue, yellow, green, and red.

The two following tables show mean scores and standard deviations for each question, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction to this notebook.)

Legend:
- ■ (red) Perceived Less Than Minimum
- ■ (blue) Perceived Greater Than Minimum
- ■ (yellow) Perceived Less Than Desired
- ■ (green) Perceived Greater Than Desired

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Undergraduate

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Access to Information							
AI-1	Print and/or electronic journal collections I require for my work	5.81	7.55	6.45	0.64	-1.09	163
AI-2	Convenient service hours	6.47	8.12	7.44	0.97	-0.68	186
AI-3	The printed library materials I need for my work	5.99	7.71	6.54	0.55	-1.16	173
AI-4	The electronic information resources I need	6.46	8.03	7.21	0.76	-0.82	177
AI-5	Timely document delivery/interlibrary loan	5.89	7.40	6.70	0.81	-0.70	106
Affect of Service							
AS-1	Employees who instill confidence in users	5.02	7.13	6.05	1.04	-1.08	171
AS-2	Readiness to respond to users' questions	6.09	7.77	6.93	0.84	-0.84	171
AS-3	Willingness to help users	6.09	7.81	6.87	0.78	-0.94	178
AS-4	Dependability in handling users' service problems	6.22	7.78	6.89	0.67	-0.89	170
AS-5	Giving users individual attention	5.28	6.97	6.23	0.95	-0.73	173
AS-6	Employees who have the knowledge to answer user questions	6.26	7.89	7.05	0.79	-0.84	174
AS-7	Employees who are consistently courteous	6.33	7.89	7.23	0.90	-0.66	181
AS-8	Employees who deal with users in a caring fashion	6.15	7.76	6.89	0.74	-0.87	177
AS-9	Employees who understand the needs of their users	5.97	7.62	6.94	0.97	-0.67	169
Library as Place							
LP-1	Quiet space for individual activities	6.46	7.96	7.28	0.81	-0.69	185
LP-2	A comfortable and inviting location	6.00	7.86	6.87	0.87	-0.99	184
LP-3	Library space that inspires study and learning	6.27	7.99	6.98	0.71	-1.01	180
LP-4	Community space for group learning and group study	5.92	7.68	6.93	1.01	-0.75	178
LP-5	A getaway for study, learning, or research	6.34	8.03	7.12	0.78	-0.90	178
Personal Control							
PC-1	Easy-to-use access tools that allow me to find things on my own	5.90	8.06	6.49	0.59	-1.57	183
PC-2	Convenient access to library collections	5.81	7.65	6.47	0.66	-1.18	173
PC-3	A library Web site enabling me to locate information on my own	6.30	8.10	6.90	0.60	-1.20	181
PC-4	Modern equipment that lets me easily access needed information	6.54	8.21	7.45	0.92	-0.75	183
PC-5	Making information easily accessible for independent use	6.28	7.94	7.01	0.73	-0.93	180
PC-6	Making electronic resources accessible from my home or office	6.42	8.05	6.88	0.46	-1.17	175
Overall:		6.10	7.82	6.89	0.80	-0.92	186

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Undergraduate

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Access to Information							
AI-1	Print and/or electronic journal collections I require for my work	1.72	1.49	1.51	2.01	1.74	163
AI-2	Convenient service hours	1.52	1.08	1.42	1.71	1.45	186
AI-3	The printed library materials I need for my work	1.67	1.45	1.59	1.90	1.63	173
AI-4	The electronic information resources I need	1.51	1.11	1.42	1.62	1.38	177
AI-5	Timely document delivery/interlibrary loan	1.68	1.47	1.62	1.68	1.56	106
Affect of Service							
AS-1	Employees who instill confidence in users	1.71	1.51	1.57	1.80	1.50	171
AS-2	Readiness to respond to users' questions	1.64	1.38	1.42	1.62	1.42	171
AS-3	Willingness to help users	1.50	1.20	1.50	1.61	1.41	178
AS-4	Dependability in handling users' service problems	1.50	1.21	1.46	1.54	1.40	170
AS-5	Giving users individual attention	1.86	1.74	1.65	1.61	1.57	173
AS-6	Employees who have the knowledge to answer user questions	1.70	1.28	1.50	1.63	1.31	174
AS-7	Employees who are consistently courteous	1.71	1.35	1.41	1.62	1.35	181
AS-8	Employees who deal with users in a caring fashion	1.77	1.43	1.49	1.61	1.36	177
AS-9	Employees who understand the needs of their users	1.73	1.41	1.40	1.67	1.37	169
Library as Place							
LP-1	Quiet space for individual activities	1.84	1.60	1.52	2.00	1.98	185
LP-2	A comfortable and inviting location	1.71	1.22	1.59	1.97	1.71	184
LP-3	Library space that inspires study and learning	1.72	1.38	1.53	1.96	1.61	180
LP-4	Community space for group learning and group study	1.91	1.63	1.45	1.95	1.85	178
LP-5	A getaway for study, learning, or research	1.72	1.32	1.47	1.88	1.58	178
Personal Control							
PC-1	Easy-to-use access tools that allow me to find things on my own	1.45	1.08	1.54	1.80	1.69	183
PC-2	Convenient access to library collections	1.49	1.28	1.59	1.73	1.73	173
PC-3	A library Web site enabling me to locate information on my own	1.61	1.16	1.53	1.91	1.58	181
PC-4	Modern equipment that lets me easily access needed information	1.60	0.96	1.41	1.65	1.29	183
PC-5	Making information easily accessible for independent use	1.52	1.19	1.36	1.54	1.38	180
PC-6	Making electronic resources accessible from my home or office	1.83	1.22	1.57	2.02	1.72	175
Overall:		1.24	0.88	1.01	1.19	0.90	186

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Undergraduate

4.3   Core Question Dimensions Summary for Undergraduate

On the chart below, scores for each dimension of library service quality have been plotted graphically. The blue bars represent the range of minimum to desired scores for each dimension. The interior red bars represent the range of minimum to perceived scores (the service adequacy gap) for each dimension of library service quality.

■	Range of Minimum to Desired
■	Range of Minimum to Perceived ("Adequacy Gap")
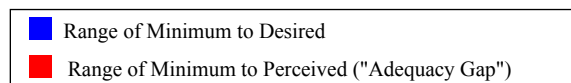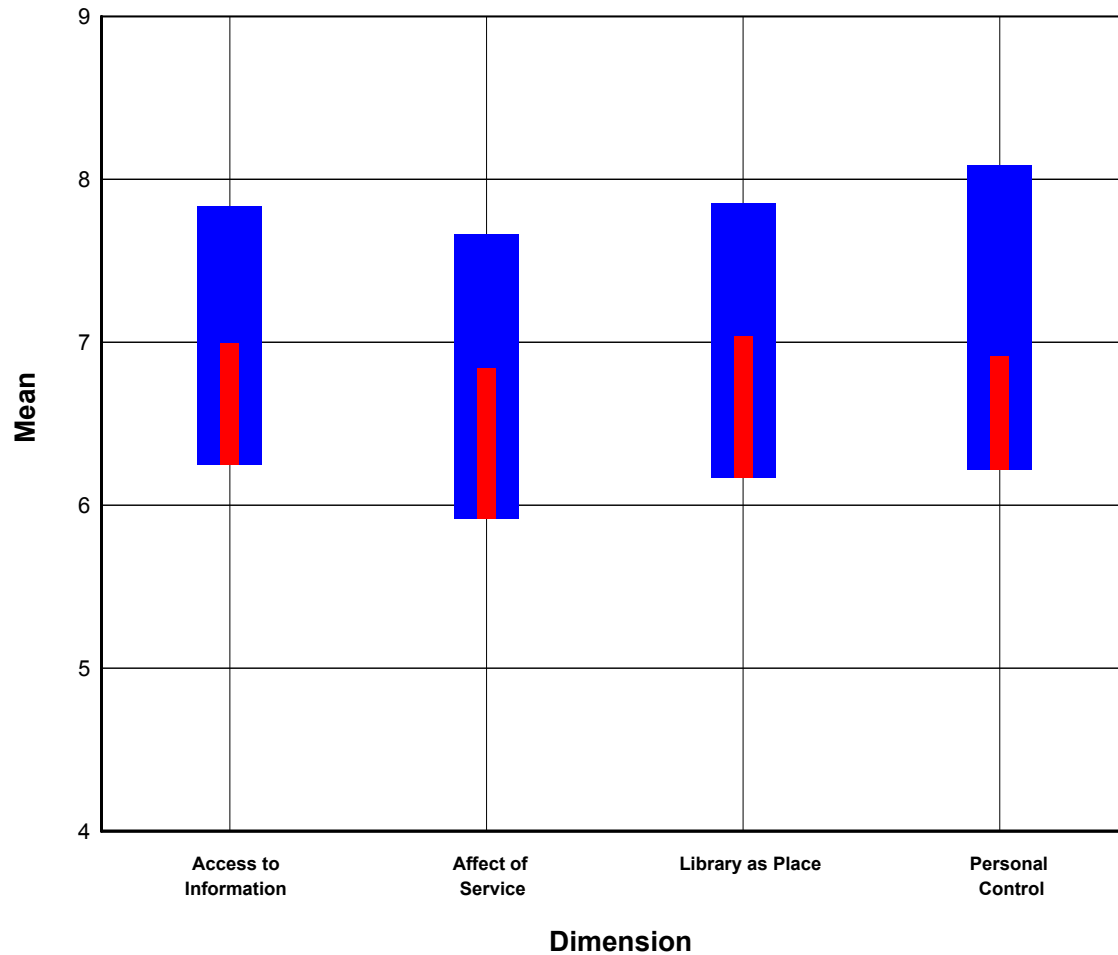
Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Undergraduate

The following table displays mean scores for each dimension of library service quality measured by the LibQUAL+™ survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix B.

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Access to Information	6.25	7.83	6.99	0.84	-0.91	186
Affect of Service	5.91	7.66	6.84	0.89	-0.84	186
Library as Place	6.17	7.85	7.04	0.87	-0.87	186
Personal Control	6.22	8.09	6.91	0.69	-1.20	186
Overall:	6.10	7.82	6.89	0.80	-0.92	186

The following table displays standard deviation for each dimension of library service quality measured by the LibQUAL+™ survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix B.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Access to Information	1.32	1.01	1.16	1.38	1.12	186
Affect of Service	1.45	1.12	1.23	1.28	1.02	186
Library as Place	1.48	1.17	1.21	1.58	1.37	186
Personal Control	1.35	0.93	1.16	1.41	1.15	186
Overall:	1.24	0.88	1.01	1.19	0.90	186

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Undergraduate

4.4   General Satisfaction Questions Summary for Undergraduate

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where n is the number of respondents for each particular question. These scores are calculated from responses to the general satisfaction questions on the LibQUAL+™ survey, in which respondents rated their levels of general satisfaction on a scale from 1-9.

Satisfaction Question	Mean	SD	n
In general, I am satisfied with the way in which I am treated at the library.	7.16	1.42	186
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	6.75	1.64	186
How would you rate the overall quality of the service provided by the library?	6.92	1.39	186

4.5   Information Literacy Outcomes Questions Summary for Undergraduate

This table displays the mean score and standard deviation for each of the information literacy outcomes questions, where n is the number of respondents for each particular question. These scores are calculated from responses to the information literacy outcomes questions on the LibQUAL+™ survey, in which respondents rated their levels of general satisfaction on a scale from 1-9 with 1 being "strongly disagree" and 9 representing "strongly agree".

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	5.37	1.68	186
The library aids my advancement in my academic discipline.	6.19	1.80	186
The library enables me to be more efficient in my academic pursuits.	6.41	1.81	186
The library helps me distinguish between trustworthy and untrustworthy information.	5.42	1.76	186
The library provides me with the information skills I need in my work or study.	5.73	1.81	186

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Undergraduate

4.6   Library Use Summary for Undergraduate

This chart shows a graphic representation of library use (both on the premises and electronically), as well as use of non-library information gateways such as Yahoo™ and Google™. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the graphic displays the number and percentage of respondents who selected each option.

	Daily	Weekly	Monthly	Quarterly	Never	n / %
How often do you use resources on library premises?	32	77	48	26	3	**186**
	17.20%	41.40%	25.81%	13.98%	1.61%	**100.00%**
How often do you access library resources through a library Web page?	6	58	65	37	20	**186**
	3.23%	31.18%	34.95%	19.89%	10.75%	**100.00%**
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	149	29	5	0	3	**186**
	80.11%	15.59%	2.69%	0.00%	1.61%	**100.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Undergraduate

5 Graduate Summary

5.1 Demographic Summary for Graduate

5.1.1 Population and Respondent Profiles for Graduate by Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions at the end of the survey instrument and the demographic data provided by institutions through the online Demographics Questionnaire.

The chart maps percentage of respondents for each discipline in red. Population percentages for each discipline are mapped in blue. The table shows the number and percentage for each discipline, for the general population (N) and for survey respondents (n).

Discipline

- Agriculture / Environmental Studies
- Architecture
- Business
- Communications / Journalism
- Education
- Engineering / Computer Science
- General Studies
- Health Sciences
- Humanities
- Law
- Military / Naval Science
- Performing & Fine Arts
- Science / Math
- Social Sciences / Psychology
- Undecided
- Other

Percentage (0 10 20 30 40 50 60 70 80)

■ Respondent Profile by Discipline
■ Population Profile by Discipline

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Graduate

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture / Environmental Studies	0	0.00%	1	0.64%	-0.64%
Architecture	320	6.37%	8	5.13%	1.24%
Business	306	6.09%	6	3.85%	2.25%
Communications / Journalism	0	0.00%	0	0.00%	0.00%
Education	0	0.00%	2	1.28%	-1.28%
Engineering / Computer Science	3,586	71.41%	103	66.03%	5.38%
General Studies	0	0.00%	1	0.64%	-0.64%
Health Sciences	0	0.00%	0	0.00%	0.00%
Humanities	0	0.00%	3	1.92%	-1.92%
Law	0	0.00%	0	0.00%	0.00%
Military / Naval Science	0	0.00%	0	0.00%	0.00%
Performing & Fine Arts	0	0.00%	0	0.00%	0.00%
Science / Math	534	10.63%	22	14.10%	-3.47%
Social Sciences / Psychology	276	5.50%	7	4.49%	1.01%
Undecided	0	0.00%	0	0.00%	0.00%
Other	0	0.00%	3	1.92%	-1.92%
Total:	**5,022**	**100.00%**	**156**	**100.00%**	**0.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Graduate

5.1.2   Respondent Profile for Graduate by Age

This table shows a breakdown of survey respondents by age; both the number of respondents (n) and the percentage of the total number of respondents represented by each age group are displayed. Ages are grouped into six categories: Under 18, 18-22, 23-30, 31-45, 46-65, and Over 65.

Age	Respondents n	Respondents %
Under 18	0	0.00%
18 - 22	4	2.56%
23 - 30	121	77.56%
31 - 45	29	18.59%
46 - 65	2	1.28%
Over 65	0	0.00%
Total:	**156**	**100.00%**

5.1.3   Population and Respondent Profiles for Graduate by Sex

The table below shows a breakdown of survey respondents by sex, based on user responses to the demographic questions at the end of the survey instrument and the demographic data provided by institutions through the online Demographics Questionnaire*. The number and percentage for each sex are given for the general population and for survey respondents.

*Note: Participating institutions were not required to complete the Demographics Questionnaire. When population data is missing or incomplete, it is because this data was not provided to ARL.

Sex	Population N	Population %	Respondents n	Respondents %
Male	3,775	75.17%	108	69.23%
Female	1,247	24.83%	48	30.77%
Total:	**5,022**	**100.00%**	**156**	**100.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Graduate

5.2 Core Questions Summary for Graduate

This radar chart shows aggregate results for the 25 core survey questions. Each axis represents one question (a code to identify each question is displayed at the outer point of each axis). While questions for each dimension of library service quality are scattered randomly throughout the survey, here they are grouped in quadrants: Affect of Service, Access to Information, Library as Place, and Personal Control.

On each axis, respondents' minimum, desired, and perceived levels of service quality are plotted, and the resulting "gaps" between the three levels (representing service adequacy or service superiority) are shaded in blue, yellow, green, and red.

The two following tables show mean scores and standard deviations for each question, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction to this notebook.)

Legend:
- Perceived Less Than Minimum (red)
- Perceived Greater Than Minimum (blue)
- Perceived Less Than Desired (yellow)
- Perceived Greater Than Desired (green)

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Graduate

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Access to Information							
AI-1	Print and/or electronic journal collections I require for my work	6.52	8.37	6.53	0.01	-1.84	150
AI-2	Convenient service hours	6.44	7.99	7.07	0.64	-0.92	154
AI-3	The printed library materials I need for my work	6.43	8.04	6.42	-0.01	-1.63	142
AI-4	The electronic information resources I need	6.90	8.46	6.94	0.04	-1.52	155
AI-5	Timely document delivery/interlibrary loan	5.99	7.65	6.42	0.43	-1.24	101
Affect of Service							
AS-1	Employees who instill confidence in users	5.31	7.31	6.23	0.92	-1.08	144
AS-2	Readiness to respond to users' questions	6.19	7.85	6.87	0.68	-0.98	145
AS-3	Willingness to help users	6.43	7.99	7.01	0.57	-0.99	150
AS-4	Dependability in handling users' service problems	6.39	7.84	6.84	0.45	-1.00	131
AS-5	Giving users individual attention	5.53	7.07	6.51	0.98	-0.56	145
AS-6	Employees who have the knowledge to answer user questions	6.37	8.01	7.04	0.67	-0.97	151
AS-7	Employees who are consistently courteous	6.48	7.99	7.04	0.56	-0.95	152
AS-8	Employees who deal with users in a caring fashion	6.02	7.67	6.86	0.84	-0.81	146
AS-9	Employees who understand the needs of their users	6.35	7.76	6.83	0.47	-0.93	144
Library as Place							
LP-1	Quiet space for individual activities	6.02	7.59	6.51	0.49	-1.08	146
LP-2	A comfortable and inviting location	5.86	7.56	6.55	0.69	-1.01	153
LP-3	Library space that inspires study and learning	5.82	7.61	6.28	0.46	-1.34	148
LP-4	Community space for group learning and group study	5.44	6.94	6.39	0.95	-0.56	126
LP-5	A getaway for study, learning, or research	6.01	7.59	6.66	0.64	-0.94	140
Personal Control							
PC-1	Easy-to-use access tools that allow me to find things on my own	6.29	8.22	6.62	0.33	-1.60	156
PC-2	Convenient access to library collections	6.13	7.91	6.67	0.55	-1.24	150
PC-3	A library Web site enabling me to locate information on my own	6.80	8.49	7.12	0.31	-1.37	156
PC-4	Modern equipment that lets me easily access needed information	6.43	8.07	7.04	0.61	-1.03	153
PC-5	Making information easily accessible for independent use	6.53	8.12	6.95	0.42	-1.18	148
PC-6	Making electronic resources accessible from my home or office	6.89	8.39	6.67	-0.22	-1.71	147
Overall:		6.23	7.88	6.73	0.50	-1.15	156

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Graduate

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Access to Information							
AI-1	Print and/or electronic journal collections I require for my work	1.67	1.08	1.92	2.13	1.99	150
AI-2	Convenient service hours	1.74	1.27	1.64	2.19	1.94	154
AI-3	The printed library materials I need for my work	1.80	1.39	1.84	2.37	2.19	142
AI-4	The electronic information resources I need	1.52	0.90	1.63	2.04	1.81	155
AI-5	Timely document delivery/interlibrary loan	2.06	1.77	2.00	2.30	2.18	101
Affect of Service							
AS-1	Employees who instill confidence in users	1.78	1.67	1.59	1.94	1.98	144
AS-2	Readiness to respond to users' questions	1.61	1.41	1.51	1.59	1.73	145
AS-3	Willingness to help users	1.59	1.15	1.60	1.74	1.67	150
AS-4	Dependability in handling users' service problems	1.59	1.19	1.47	1.70	1.69	131
AS-5	Giving users individual attention	1.90	1.60	1.53	1.85	1.69	145
AS-6	Employees who have the knowledge to answer user questions	1.54	1.16	1.49	1.71	1.64	151
AS-7	Employees who are consistently courteous	1.83	1.31	1.79	2.08	1.86	152
AS-8	Employees who deal with users in a caring fashion	1.77	1.32	1.60	1.90	1.78	146
AS-9	Employees who understand the needs of their users	1.69	1.31	1.50	1.70	1.62	144
Library as Place							
LP-1	Quiet space for individual activities	2.16	1.83	2.08	2.50	2.55	146
LP-2	A comfortable and inviting location	1.88	1.43	1.63	2.09	1.98	153
LP-3	Library space that inspires study and learning	2.12	1.52	1.80	2.39	2.12	148
LP-4	Community space for group learning and group study	2.30	2.14	1.72	2.43	2.52	126
LP-5	A getaway for study, learning, or research	2.08	1.67	1.71	2.00	1.72	140
Personal Control							
PC-1	Easy-to-use access tools that allow me to find things on my own	1.60	1.11	1.59	1.94	1.66	156
PC-2	Convenient access to library collections	1.76	1.25	1.43	1.83	1.53	150
PC-3	A library Web site enabling me to locate information on my own	1.67	0.95	1.56	2.03	1.58	156
PC-4	Modern equipment that lets me easily access needed information	1.73	1.26	1.53	1.81	1.66	153
PC-5	Making information easily accessible for independent use	1.48	1.10	1.34	1.61	1.60	148
PC-6	Making electronic resources accessible from my home or office	1.78	1.21	2.01	2.25	2.23	147
Overall:		1.34	0.88	1.06	1.33	1.16	156

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Graduate

5.3   Core Question Dimensions Summary for Graduate

On the chart below, scores for each dimension of library service quality have been plotted graphically. The blue bars represent the range of minimum to desired scores for each dimension. The interior red bars represent the range of minimum to perceived scores (the service adequacy gap) for each dimension of library service quality.
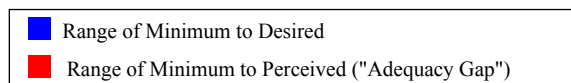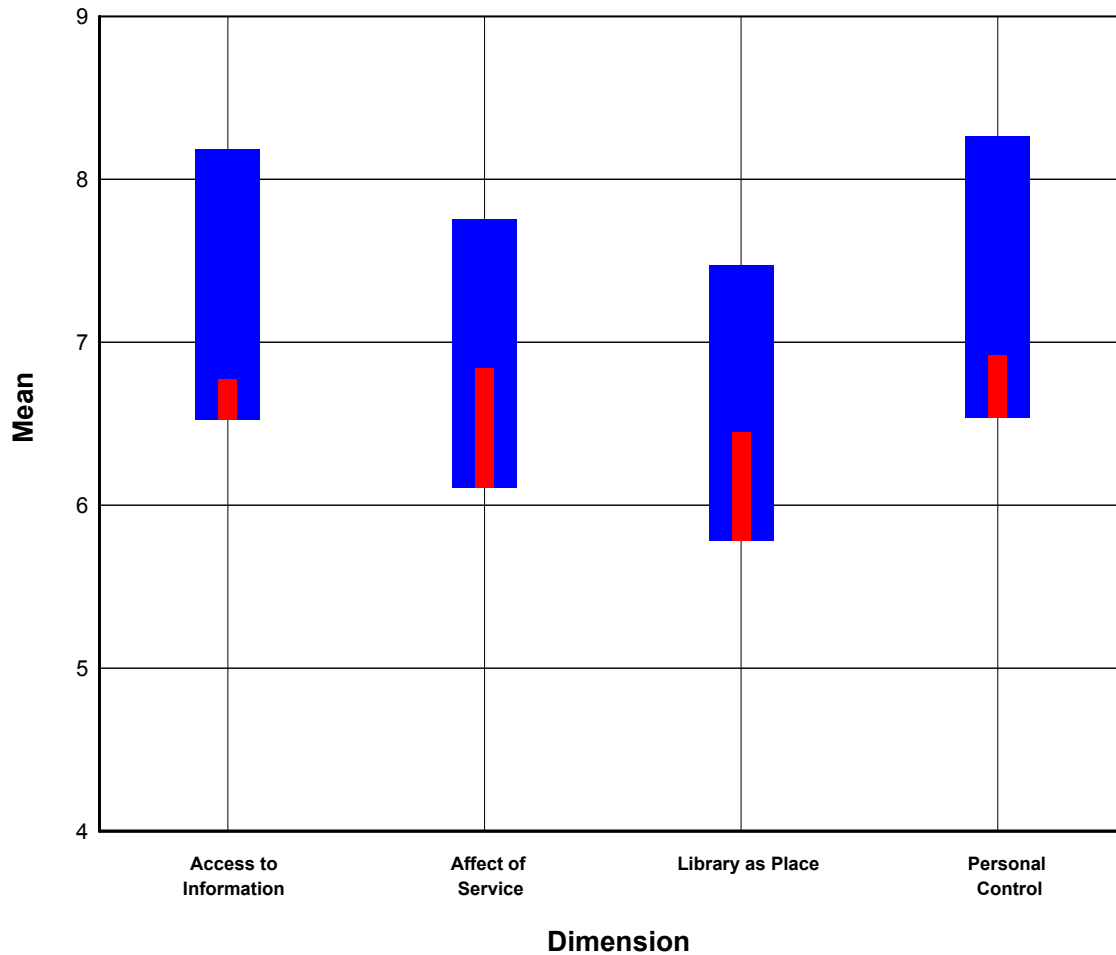
Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Graduate

The following table displays mean scores for each dimension of library service quality measured by the LibQUAL+™ survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix B.

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Access to Information	6.53	8.19	6.78	0.22	-1.47	156
Affect of Service	6.11	7.76	6.84	0.76	-0.92	156
Library as Place	5.78	7.47	6.45	0.69	-1.01	156
Personal Control	6.54	8.27	6.92	0.33	-1.40	156
Overall:	6.23	7.88	6.73	0.50	-1.15	156

The following table displays standard deviation for each dimension of library service quality measured by the LibQUAL+™ survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix B.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Access to Information	1.45	0.91	1.35	1.74	1.48	156
Affect of Service	1.40	1.06	1.29	1.46	1.44	156
Library as Place	1.86	1.49	1.54	1.92	1.80	156
Personal Control	1.37	0.91	1.22	1.50	1.36	156
Overall:	1.34	0.88	1.06	1.33	1.16	156

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Graduate

5.4 General Satisfaction Questions Summary for Graduate

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where n is the number of respondents for each particular question. These scores are calculated from responses to the general satisfaction questions on the LibQUAL+™ survey, in which respondents rated their levels of general satisfaction on a scale from 1-9.

Satisfaction Question	Mean	SD	n
In general, I am satisfied with the way in which I am treated at the library.	7.00	1.60	156
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	6.57	1.87	156
How would you rate the overall quality of the service provided by the library?	6.76	1.47	155

5.5 Information Literacy Outcomes Questions Summary for Graduate

This table displays the mean score and standard deviation for each of the information literacy outcomes questions, where n is the number of respondents for each particular question. These scores are calculated from responses to the information literacy outcomes questions on the LibQUAL+™ survey, in which respondents rated their levels of general satisfaction on a scale from 1-9 with 1 being "strongly disagree" and 9 representing "strongly agree".

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	6.20	1.90	156
The library aids my advancement in my academic discipline.	6.72	1.66	156
The library enables me to be more efficient in my academic pursuits.	6.55	1.74	156
The library helps me distinguish between trustworthy and untrustworthy information.	5.24	2.05	156
The library provides me with the information skills I need in my work or study.	5.81	1.94	156

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Graduate

5.6   Library Use Summary for Graduate

This chart shows a graphic representation of library use (both on the premises and electronically), as well as use of non-library information gateways such as Yahoo™ and Google™. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the graphic displays the number and percentage of respondents who selected each option.

	Daily	Weekly	Monthly	Quarterly	Never	n / %
How often do you use resources on library premises?	17	62	62	13	2	**156**
	10.90%	39.74%	39.74%	8.33%	1.28%	**100.00%**
How often do you access library resources through a library Web page?	41	84	26	2	3	**156**
	26.28%	53.85%	16.67%	1.28%	1.92%	**100.00%**
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	127	25	2	1	1	**156**
	81.41%	16.03%	1.28%	0.64%	0.64%	**100.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Graduate

6   Faculty Summary

6.1   Demographic Summary for Faculty

6.1.1   Population and Respondent Profiles for Faculty by Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions at the end of the survey instrument and the demographic data provided by institutions through the online Demographics Questionnaire.

The chart maps percentage of respondents for each discipline in red. Population percentages for each discipline are mapped in blue. The table shows the number and percentage for each discipline, for the general population (N) and for survey respondents (n).

■ Respondent Profile by Discipline
■ Population Profile by Discipline

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Faculty

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture / Environmental Studies	0	0.00%	2	1.71%	-1.71%
Architecture	42	5.63%	2	1.71%	3.92%
Business	44	5.90%	5	4.27%	1.62%
Communications / Journalism	0	0.00%	0	0.00%	0.00%
Education	0	0.00%	1	0.85%	-0.85%
Engineering / Computer Science	397	53.22%	43	36.75%	16.47%
General Studies	0	0.00%	0	0.00%	0.00%
Health Sciences	0	0.00%	2	1.71%	-1.71%
Humanities	56	7.51%	13	11.11%	-3.60%
Law	0	0.00%	1	0.85%	-0.85%
Military / Naval Science	0	0.00%	1	0.85%	-0.85%
Performing & Fine Arts	0	0.00%	1	0.85%	-0.85%
Science / Math	139	18.63%	33	28.21%	-9.57%
Social Sciences / Psychology	68	9.12%	12	10.26%	-1.14%
Undecided	0	0.00%	0	0.00%	0.00%
Other	0	0.00%	1	0.85%	-0.85%
Total:	**746**	**100.00%**	**117**	**100.00%**	**0.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Faculty

6.1.2   Respondent Profile for Faculty by Age

This table shows a breakdown of survey respondents by age; both the number of respondents (n) and the percentage of the total number of respondents represented by each age group are displayed. Ages are grouped into six categories: Under 18, 18-22, 23-30, 31-45, 46-65, and Over 65.

Age	Respondents n	Respondents %
Under 18	0	0.00%
18 - 22	0	0.00%
23 - 30	2	1.72%
31 - 45	60	51.72%
46 - 65	52	44.83%
Over 65	2	1.72%
Total:	**116**	**100.00%**

6.1.3   Population and Respondent Profiles for Faculty by Sex

The table below shows a breakdown of survey respondents by sex, based on user responses to the demographic questions at the end of the survey instrument and the demographic data provided by institutions through the online Demographics Questionnaire*. The number and percentage for each sex are given for the general population and for survey respondents.

*Note: Participating institutions were not required to complete the Demographics Questionnaire. When population data is missing or incomplete, it is because this data was not provided to ARL.

Sex	Population N	Population %	Respondents n	Respondents %
Male	633	84.85%	92	79.31%
Female	113	15.15%	24	20.69%
Total:	**746**	**100.00%**	**116**	**100.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Faculty

6.2 Core Questions Summary for Faculty

This radar chart shows aggregate results for the 25 core survey questions. Each axis represents one question (a code to identify each question is displayed at the outer point of each axis). While questions for each dimension of library service quality are scattered randomly throughout the survey, here they are grouped in quadrants: Affect of Service, Access to Information, Library as Place, and Personal Control.

On each axis, respondents' minimum, desired, and perceived levels of service quality are plotted, and the resulting "gaps" between the three levels (representing service adequacy or service superiority) are shaded in blue, yellow, green, and red.

The two following tables show mean scores and standard deviations for each question, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction to this notebook.)

Legend:
- Perceived Less Than Minimum (Red)
- Perceived Greater Than Minimum (Blue)
- Perceived Less Than Desired (Yellow)
- Perceived Greater Than Desired (Green)

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Faculty

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Access to Information							
AI-1	Print and/or electronic journal collections I require for my work	7.22	8.55	5.78	-1.44	-2.78	116
AI-2	Convenient service hours	6.34	7.69	6.93	0.59	-0.76	109
AI-3	The printed library materials I need for my work	6.76	8.15	5.77	-0.99	-2.38	110
AI-4	The electronic information resources I need	7.27	8.56	6.38	-0.89	-2.18	116
AI-5	Timely document delivery/interlibrary loan	6.83	8.08	6.86	0.03	-1.23	106
Affect of Service							
AS-1	Employees who instill confidence in users	5.99	7.75	6.59	0.60	-1.16	112
AS-2	Readiness to respond to users' questions	6.86	8.12	7.22	0.36	-0.90	111
AS-3	Willingness to help users	6.81	8.14	7.27	0.46	-0.87	113
AS-4	Dependability in handling users' service problems	7.00	8.25	7.11	0.11	-1.14	112
AS-5	Giving users individual attention	6.20	7.42	6.65	0.45	-0.77	111
AS-6	Employees who have the knowledge to answer user questions	6.95	8.26	7.38	0.43	-0.88	112
AS-7	Employees who are consistently courteous	6.75	8.04	7.35	0.61	-0.68	110
AS-8	Employees who deal with users in a caring fashion	6.36	7.63	7.07	0.71	-0.56	104
AS-9	Employees who understand the needs of their users	6.80	8.26	6.93	0.13	-1.33	112
Library as Place							
LP-1	Quiet space for individual activities	5.24	6.44	5.99	0.75	-0.45	89
LP-2	A comfortable and inviting location	5.73	7.24	5.97	0.24	-1.27	104
LP-3	Library space that inspires study and learning	5.66	6.99	5.75	0.09	-1.24	91
LP-4	Community space for group learning and group study	4.38	5.80	5.49	1.12	-0.30	69
LP-5	A getaway for study, learning, or research	5.42	6.86	5.83	0.41	-1.03	88
Personal Control							
PC-1	Easy-to-use access tools that allow me to find things on my own	7.08	8.46	6.33	-0.75	-2.13	116
PC-2	Convenient access to library collections	6.56	8.07	6.34	-0.22	-1.72	116
PC-3	A library Web site enabling me to locate information on my own	7.36	8.57	6.66	-0.70	-1.91	117
PC-4	Modern equipment that lets me easily access needed information	6.71	8.14	6.94	0.24	-1.19	109
PC-5	Making information easily accessible for independent use	6.97	8.27	6.63	-0.34	-1.64	114
PC-6	Making electronic resources accessible from my home or office	7.39	8.60	6.31	-1.08	-2.29	115
Overall:		6.59	7.93	6.59	0.00	-1.34	117

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Faculty
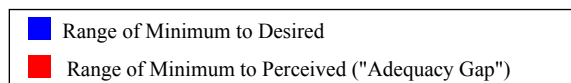
ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Access to Information							
AI-1	Print and/or electronic journal collections I require for my work	1.49	0.91	2.23	2.67	2.45	116
AI-2	Convenient service hours	1.83	1.67	1.54	1.88	1.87	109
AI-3	The printed library materials I need for my work	1.67	1.40	2.08	2.51	2.48	110
AI-4	The electronic information resources I need	1.51	0.88	2.00	2.46	2.21	116
AI-5	Timely document delivery/interlibrary loan	1.63	1.29	1.69	1.97	1.86	106
Affect of Service							
AS-1	Employees who instill confidence in users	1.73	1.58	1.57	1.84	1.60	112
AS-2	Readiness to respond to users' questions	1.49	1.17	1.46	1.71	1.61	111
AS-3	Willingness to help users	1.42	1.16	1.44	1.49	1.39	113
AS-4	Dependability in handling users' service problems	1.48	1.02	1.56	1.84	1.57	112
AS-5	Giving users individual attention	1.80	1.56	1.71	1.90	1.66	111
AS-6	Employees who have the knowledge to answer user questions	1.58	1.13	1.40	1.59	1.44	112
AS-7	Employees who are consistently courteous	1.80	1.33	1.61	1.90	1.64	110
AS-8	Employees who deal with users in a caring fashion	1.98	1.53	1.62	1.92	1.69	104
AS-9	Employees who understand the needs of their users	1.52	1.10	1.69	1.79	1.75	112
Library as Place							
LP-1	Quiet space for individual activities	2.17	2.00	1.58	1.90	1.98	89
LP-2	A comfortable and inviting location	1.88	1.76	1.72	2.14	2.11	104
LP-3	Library space that inspires study and learning	1.94	1.86	1.89	2.54	2.62	91
LP-4	Community space for group learning and group study	2.09	2.26	1.64	2.32	2.59	69
LP-5	A getaway for study, learning, or research	2.24	2.36	1.86	2.47	2.91	88
Personal Control							
PC-1	Easy-to-use access tools that allow me to find things on my own	1.39	0.87	1.90	2.34	2.09	116
PC-2	Convenient access to library collections	1.55	1.21	1.86	2.37	2.13	116
PC-3	A library Web site enabling me to locate information on my own	1.49	0.95	1.91	2.39	2.06	117
PC-4	Modern equipment that lets me easily access needed information	1.88	1.39	1.46	1.84	1.60	109
PC-5	Making information easily accessible for independent use	1.58	1.16	1.73	2.10	1.97	114
PC-6	Making electronic resources accessible from my home or office	1.52	0.99	2.07	2.75	2.33	115
Overall:		1.27	0.88	1.25	1.53	1.34	117

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Faculty

6.3   Core Question Dimensions Summary for Faculty

On the chart below, scores for each dimension of library service quality have been plotted graphically. The blue bars represent the range of minimum to desired scores for each dimension. The interior red bars represent the range of minimum to perceived scores (the service adequacy gap) for each dimension of library service quality.

■	Range of Minimum to Desired
■	Range of Minimum to Perceived ("Adequacy Gap")
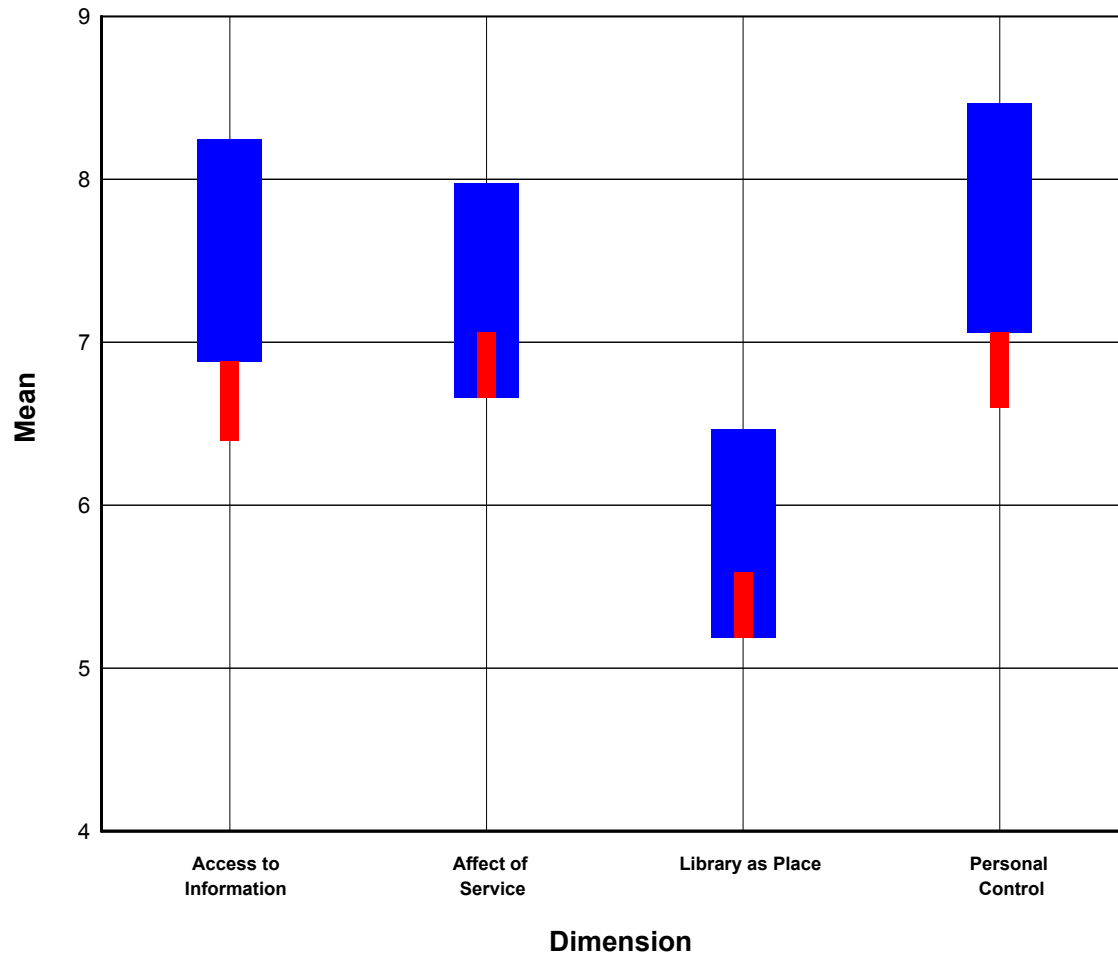
Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Faculty

The following table displays mean scores for each dimension of library service quality measured by the LibQUAL+™ survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix B.

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Access to Information	6.88	8.25	6.39	-0.53	-1.86	117
Affect of Service	6.66	7.97	7.06	0.48	-0.90	117
Library as Place	5.19	6.47	5.59	0.41	-0.80	117
Personal Control	7.06	8.47	6.60	-0.53	-1.88	117
Overall:	6.59	7.93	6.59	0.00	-1.34	117

The following table displays standard deviation for each dimension of library service quality measured by the LibQUAL+™ survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix B.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Access to Information	1.31	0.92	1.47	1.86	1.66	117
Affect of Service	1.44	1.05	1.31	1.49	1.30	117
Library as Place	2.24	2.41	2.09	1.88	2.01	117
Personal Control	1.33	0.82	1.55	2.02	1.65	117
Overall:	1.27	0.88	1.25	1.53	1.34	117

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Faculty

6.4 General Satisfaction Questions Summary for Faculty

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where n is the number of respondents for each particular question. These scores are calculated from responses to the general satisfaction questions on the LibQUAL+™ survey, in which respondents rated their levels of general satisfaction on a scale from 1-9.

Satisfaction Question	Mean	SD	n
In general, I am satisfied with the way in which I am treated at the library.	7.07	1.75	117
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	5.76	2.36	117
How would you rate the overall quality of the service provided by the library?	6.30	1.95	117

6.5 Information Literacy Outcomes Questions Summary for Faculty

This table displays the mean score and standard deviation for each of the information literacy outcomes questions, where n is the number of respondents for each particular question. These scores are calculated from responses to the information literacy outcomes questions on the LibQUAL+™ survey, in which respondents rated their levels of general satisfaction on a scale from 1-9 with 1 being "strongly disagree" and 9 representing "strongly agree".

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	5.43	2.47	117
The library aids my advancement in my academic discipline.	5.85	2.41	117
The library enables me to be more efficient in my academic pursuits.	6.26	2.22	117
The library helps me distinguish between trustworthy and untrustworthy information.	4.84	2.09	117
The library provides me with the information skills I need in my work or study.	5.27	2.16	116

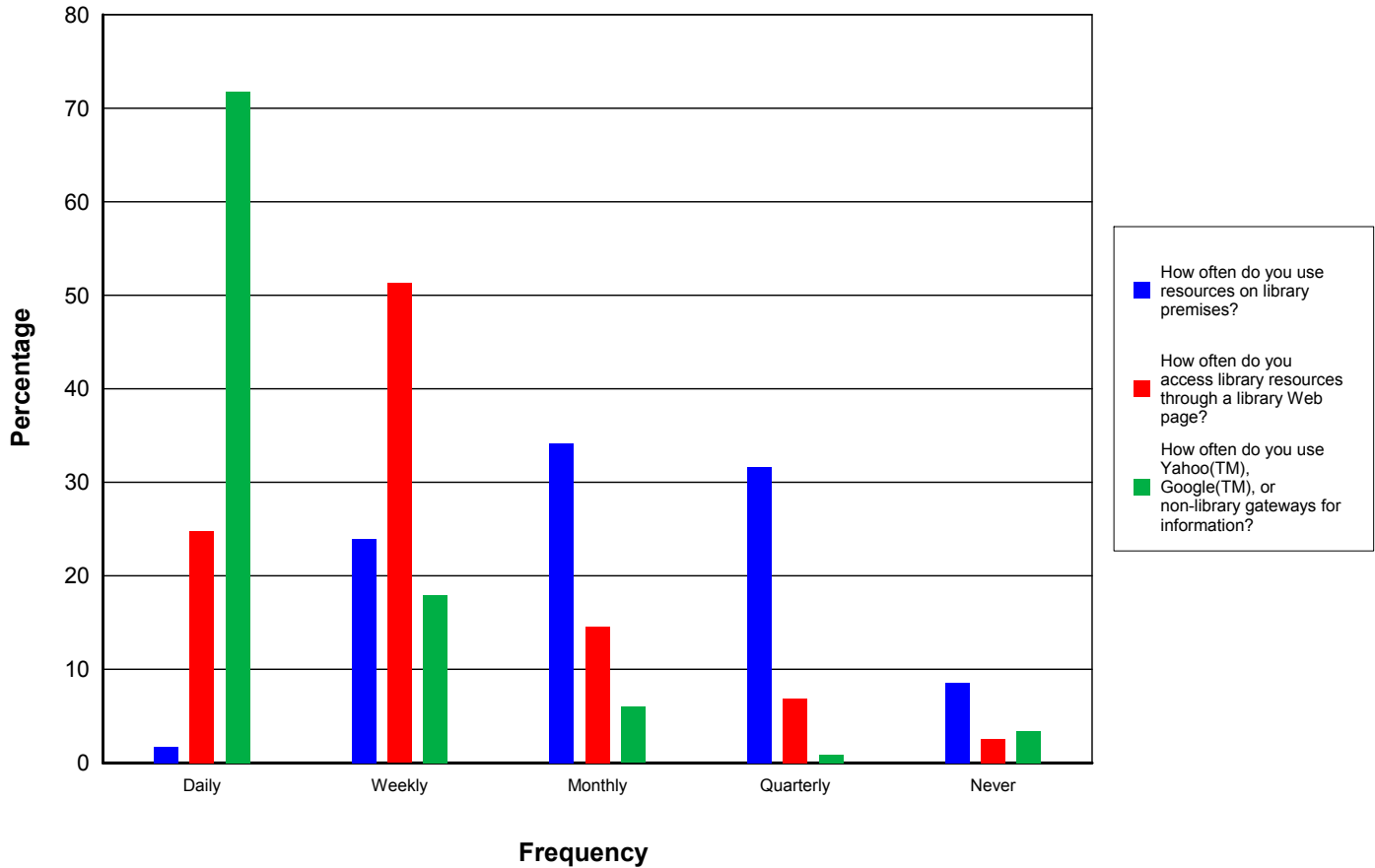|	
Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Faculty

6.6   Library Use Summary for Faculty

This chart shows a graphic representation of library use (both on the premises and electronically), as well as use of non-library information gateways such as Yahoo™ and Google™. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the graphic displays the number and percentage of respondents who selected each option.

	Daily	Weekly	Monthly	Quarterly	Never	n / %
How often do you use resources on library premises?	2	28	40	37	10	**117**
	1.71%	23.93%	34.19%	31.62%	8.55%	**100.00%**
How often do you access library resources through a library Web page?	29	60	17	8	3	**117**
	24.79%	51.28%	14.53%	6.84%	2.56%	**100.00%**
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	84	21	7	1	4	**117**
	71.79%	17.95%	5.98%	0.85%	3.42%	**100.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Faculty

7   Staff Summary

7.1   Demographic Summary for Staff

7.1.1   Respondent Profile for Staff by Age

This table shows a breakdown of survey respondents by age; both the number of respondents (n) and the percentage of the total number of respondents represented by each age group are displayed. Ages are grouped into six categories: Under 18, 18-22, 23-30, 31-45, 46-65, and Over 65.

Age	Respondents n	Respondents %
Under 18	0	0.00%
18 - 22	0	0.00%
23 - 30	0	0.00%
31 - 45	2	50.00%
46 - 65	2	50.00%
Over 65	0	0.00%
Total:	**4**	**100.00%**

7.1.2   Respondent Profile for Staff by Sex

The table below shows a breakdown of survey respondents by sex, based on user responses to the demographic questions at the end of the survey instrument and the demographic data provided by institutions through the online Demographics Questionnaire*. The number and percentage for each sex are given for the general population and for survey respondents.

*Note: Participating institutions were not required to complete the Demographics Questionnaire. When population data is missing or incomplete, it is because this data was not provided to ARL.

Sex	Respondents n	Respondents %
Male	4	100.00%
Female	0	0.00%
Total:	**4**	**100.00%**

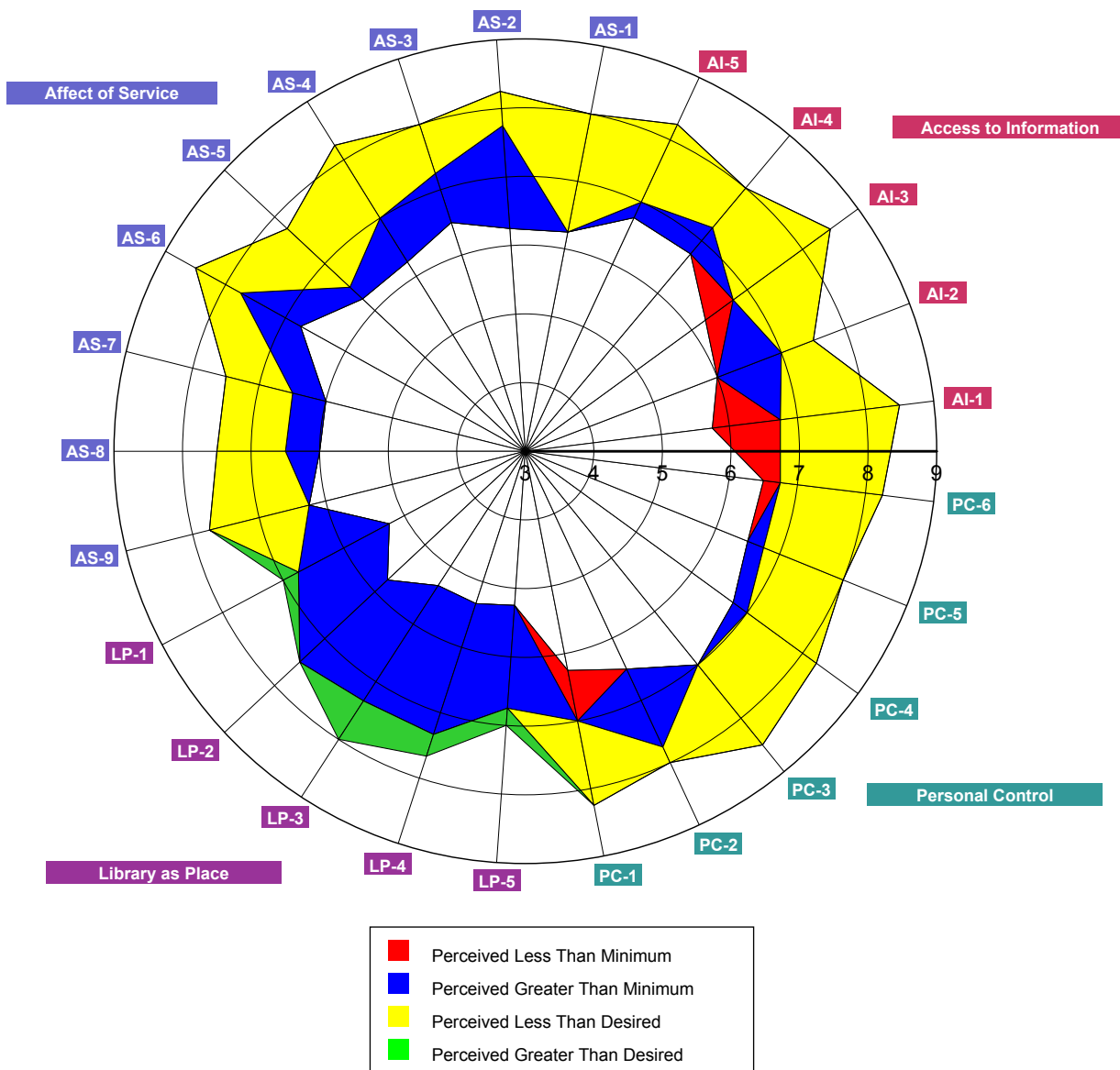|	
Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Staff

7.2   Core Questions Summary for Staff

This radar chart shows aggregate results for the 25 core survey questions. Each axis represents one question (a code to identify each question is displayed at the outer point of each axis). While questions for each dimension of library service quality are scattered randomly throughout the survey, here they are grouped in quadrants: Affect of Service, Access to Information, Library as Place, and Personal Control.

On each axis, respondents' minimum, desired, and perceived levels of service quality are plotted, and the resulting "gaps" between the three levels (representing service adequacy or service superiority) are shaded in blue, yellow, green, and red.

The two following tables show mean scores and standard deviations for each question, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction to this notebook.)

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Staff

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Access to Information							
AI-1	Print and/or electronic journal collections I require for my work	6.75	8.50	5.75	-1.00	-2.75	4
AI-2	Convenient service hours	6.00	7.50	7.00	1.00	-0.50	4
AI-3	The printed library materials I need for my work	6.75	8.50	6.25	-0.50	-2.25	4
AI-4	The electronic information resources I need	6.75	8.00	7.25	0.50	-0.75	4
AI-5	Timely document delivery/interlibrary loan	6.75	8.25	7.00	0.25	-1.25	4
Affect of Service							
AS-1	Employees who instill confidence in users	6.25	8.00	6.25	0.00	-1.75	4
AS-2	Readiness to respond to users' questions	6.25	8.25	7.75	1.50	-0.50	4
AS-3	Willingness to help users	6.50	8.00	7.25	0.75	-0.75	4
AS-4	Dependability in handling users' service problems	6.25	8.25	7.00	0.75	-1.25	4
AS-5	Giving users individual attention	6.25	7.75	6.50	0.25	-1.25	4
AS-6	Employees who have the knowledge to answer user questions	6.75	8.50	7.75	1.00	-0.75	4
AS-7	Employees who are consistently courteous	6.00	7.50	6.50	0.50	-1.00	4
AS-8	Employees who deal with users in a caring fashion	6.00	7.50	6.50	0.50	-1.00	4
AS-9	Employees who understand the needs of their users	6.25	7.75	6.25	0.00	-1.50	4
Library as Place							
LP-1	Quiet space for individual activities	5.25	6.75	7.00	1.75	0.25	4
LP-2	A comfortable and inviting location	5.75	7.50	7.50	1.75	0.00	4
LP-3	Library space that inspires study and learning	5.33	7.33	8.00	2.67	0.67	3
LP-4	Community space for group learning and group study	5.33	7.33	7.67	2.33	0.33	3
LP-5	A getaway for study, learning, or research	5.25	6.75	7.00	1.75	0.25	4
Personal Control							
PC-1	Easy-to-use access tools that allow me to find things on my own	7.00	8.25	6.25	-0.75	-2.00	4
PC-2	Convenient access to library collections	6.50	8.00	7.75	1.25	-0.25	4
PC-3	A library Web site enabling me to locate information on my own	7.00	8.50	7.00	0.00	-1.50	4
PC-4	Modern equipment that lets me easily access needed information	6.75	8.25	7.00	0.25	-1.25	4
PC-5	Making information easily accessible for independent use	6.50	8.00	6.75	0.25	-1.25	4
PC-6	Making electronic resources accessible from my home or office	6.75	8.25	6.50	-0.25	-1.75	4
Overall:		6.30	7.88	6.92	0.61	-0.96	4

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Staff

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Access to Information							
AI-1	Print and/or electronic journal collections I require for my work	1.26	0.58	2.22	2.00	2.22	4
AI-2	Convenient service hours	1.83	1.29	0.82	1.15	1.00	4
AI-3	The printed library materials I need for my work	1.26	0.58	1.71	1.73	1.71	4
AI-4	The electronic information resources I need	1.26	1.41	0.50	1.00	1.89	4
AI-5	Timely document delivery/interlibrary loan	1.71	0.96	0.82	0.96	1.50	4
Affect of Service							
AS-1	Employees who instill confidence in users	1.26	1.41	0.96	0.82	1.71	4
AS-2	Readiness to respond to users' questions	0.96	0.96	0.96	1.73	1.00	4
AS-3	Willingness to help users	1.29	1.41	0.96	0.96	0.96	4
AS-4	Dependability in handling users' service problems	1.50	0.96	0.82	0.96	1.50	4
AS-5	Giving users individual attention	0.96	0.96	0.58	0.50	1.50	4
AS-6	Employees who have the knowledge to answer user questions	1.71	1.00	0.96	2.45	0.96	4
AS-7	Employees who are consistently courteous	1.15	1.00	1.00	1.00	2.00	4
AS-8	Employees who deal with users in a caring fashion	0.82	1.29	1.29	1.00	2.00	4
AS-9	Employees who understand the needs of their users	1.26	1.26	1.71	0.82	2.38	4
Library as Place							
LP-1	Quiet space for individual activities	2.06	2.06	1.63	2.63	1.26	4
LP-2	A comfortable and inviting location	2.22	1.29	1.29	3.30	1.63	4
LP-3	Library space that inspires study and learning	1.53	1.53	1.00	2.31	1.15	3
LP-4	Community space for group learning and group study	2.52	2.08	1.53	2.08	0.58	3
LP-5	A getaway for study, learning, or research	2.06	2.06	1.41	2.36	2.06	4
Personal Control							
PC-1	Easy-to-use access tools that allow me to find things on my own	1.41	0.96	1.50	1.50	2.31	4
PC-2	Convenient access to library collections	1.00	1.15	0.96	1.89	0.50	4
PC-3	A library Web site enabling me to locate information on my own	1.41	0.58	1.15	1.41	1.73	4
PC-4	Modern equipment that lets me easily access needed information	1.26	0.96	0.00	1.26	0.96	4
PC-5	Making information easily accessible for independent use	1.29	1.41	0.96	0.50	1.50	4
PC-6	Making electronic resources accessible from my home or office	1.26	0.96	1.29	1.26	2.06	4
Overall:		1.16	0.89	0.20	1.02	0.96	4

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Staff

7.3   Core Question Dimensions Summary for Staff

On the chart below, scores for each dimension of library service quality have been plotted graphically. The blue bars represent the range of minimum to desired scores for each dimension. The interior red bars represent the range of minimum to perceived scores (the service adequacy gap) for each dimension of library service quality.

■	Range of Minimum to Desired
■	Range of Minimum to Perceived ("Adequacy Gap")
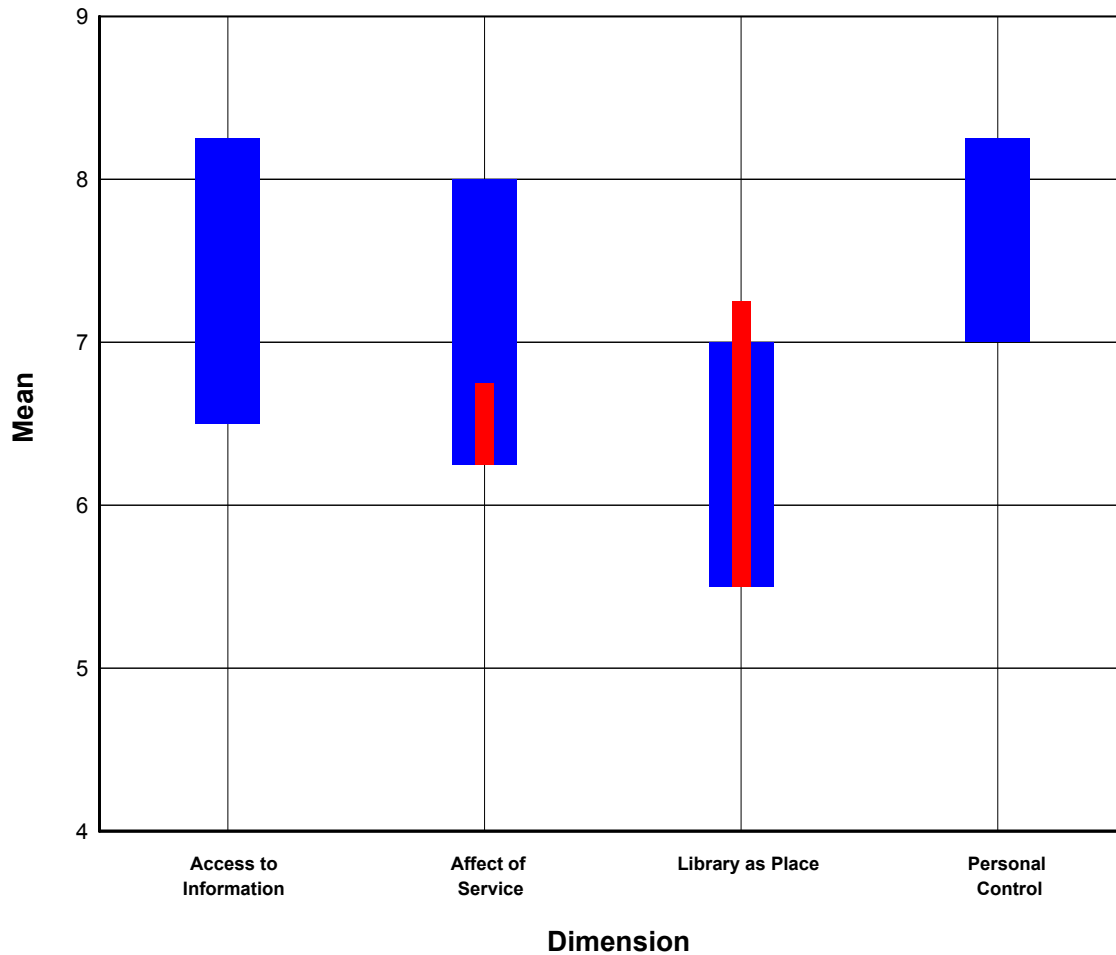
Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Staff

The following table displays mean scores for each dimension of library service quality measured by the LibQUAL+™ survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix B.

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Access to Information	6.50	8.25	6.50	0.00	-1.50	4
Affect of Service	6.25	8.00	6.75	0.50	-1.00	4
Library as Place	5.50	7.00	7.25	1.75	0.25	4
Personal Control	7.00	8.25	7.00	0.00	-1.50	4
Overall:	6.30	7.88	6.92	0.61	-0.96	4

The following table displays standard deviation for each dimension of library service quality measured by the LibQUAL+™ survey, where n is the number of respondents for each particular dimension. (For a more detailed explanation of the headings, see the Introduction to this notebook.) A complete listing of the survey questions and their dimensions can be found in Appendix B.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Access to Information	1.29	0.50	0.58	1.41	1.29	4
Affect of Service	1.26	0.82	0.50	0.58	1.41	4
Library as Place	2.08	1.83	1.26	2.63	1.26	4
Personal Control	1.41	0.96	0.82	0.82	1.73	4
Overall:	1.16	0.89	0.20	1.02	0.96	4

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Staff

7.4   General Satisfaction Questions Summary for Staff

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where n is the number of respondents for each particular question. These scores are calculated from responses to the general satisfaction questions on the LibQUAL+™ survey, in which respondents rated their levels of general satisfaction on a scale from 1-9.

Satisfaction Question	Mean	SD	n
In general, I am satisfied with the way in which I am treated at the library.	6.50	1.00	4
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	5.50	1.29	4
How would you rate the overall quality of the service provided by the library?	7.00	0.00	4

7.5   Information Literacy Outcomes Questions Summary for Staff

This table displays the mean score and standard deviation for each of the information literacy outcomes questions, where n is the number of respondents for each particular question. These scores are calculated from responses to the information literacy outcomes questions on the LibQUAL+™ survey, in which respondents rated their levels of general satisfaction on a scale from 1-9 with 1 being "strongly disagree" and 9 representing "strongly agree".

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	4.75	2.87	4
The library aids my advancement in my academic discipline.	4.75	2.87	4
The library enables me to be more efficient in my academic pursuits.	4.50	2.65	4
The library helps me distinguish between trustworthy and untrustworthy information.	4.50	2.38	4
The library provides me with the information skills I need in my work or study.	4.00	2.16	4

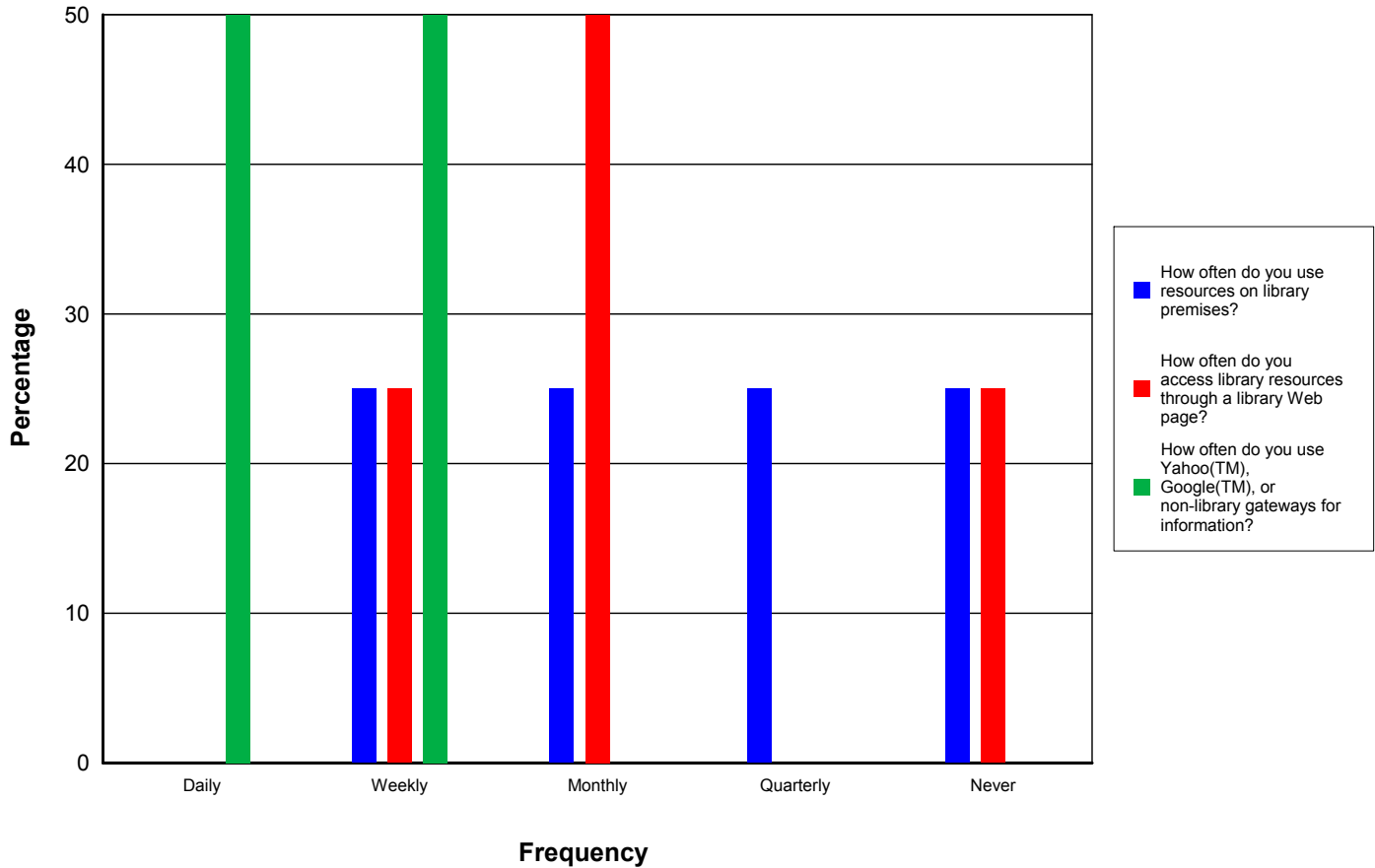|	
Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Staff

7.6   Library Use Summary for Staff

This chart shows a graphic representation of library use (both on the premises and electronically), as well as use of non-library information gateways such as Yahoo™ and Google™. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the graphic displays the number and percentage of respondents who selected each option.

	Daily	Weekly	Monthly	Quarterly	Never	n / %
How often do you use resources on library premises?	0	1	1	1	1	**4**
	0.00%	25.00%	25.00%	25.00%	25.00%	**100.00%**
How often do you access library resources through a library Web page?	0	1	2	0	1	**4**
	0.00%	25.00%	50.00%	0.00%	25.00%	**100.00%**
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	2	2	0	0	0	**4**
	50.00%	50.00%	0.00%	0.00%	0.00%	**100.00%**

Language:	American English
Institution Type:	College or University
Consortium:	None
User Group:	Staff

8   Appendix A: Print Version of the Survey

Survey Print Version - American English - College or University Libraries - Page 1

Welcome!

We are committed to improving your library services. Better understanding your expectations will help us tailor those services to your needs.

We are conducting this survey to measure library service quality and identify best practices through the Association of Research Libraries' LibQUAL+™ program. Partial funding for this project is provided by the U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE).

Please answer all items. The survey will take about **10 minutes** to complete. Thank you for your participation!

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Library Service Quality Survey

Important instructions:

Please rate the following statements (1 is lowest, 9 is highest) by indicating:

- *Minimum* -- the number that represents the *minimum* level of service that you would find acceptable.
- *Desired* -- the number that represents the level of service that *you personally want*.
- *Perceived* -- the number that represents the level of service that *you believe* our library currently provides.

You must EITHER rate all three columns OR identify the item as N/A (not applicable).

When it comes to…		My Minimum Service Level Is *low high*	My Desired Service Level Is *low high*	Perceived Service Performance Is *low high*	N/A
1)	Employees who instill confidence in users	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
2)	Easy-to-use access tools that allow me to find things on my own	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
3)	Print and/or electronic journal collections I require for my work	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
4)	Readiness to respond to users' questions	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
5)	Quiet space for individual activities	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
6)	Convenient access to library collections	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
7)	Willingness to help users	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
8)	Convenient service hours	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
9)	A comfortable and inviting location	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
10)	Dependability in handling users' service problems	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A

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	When it comes to…	My Minimum Service Level Is *low* *high*	My Desired Service Level Is *low* *high*	Perceived Service Performance Is *low* *high*	N/A
11)	A library Web site enabling me to locate information on my own	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
12)	Giving users individual attention	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
13)	Library space that inspires study and learning	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
14)	The printed library materials I need for my work	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
15)	Employees who have the knowledge to answer user questions	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
16)	Modern equipment that lets me easily access needed information	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
17)	Employees who are consistently courteous	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
18)	The electronic information resources I need	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
19)	Community space for group learning and group study	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
20)	Employees who deal with users in a caring fashion	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
21)	Making information easily accessible for independent use	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
22)	Timely document delivery/interlibrary loan	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
23)	Employees who understand the needs of their users	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
24)	A getaway for study, learning, or research	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A
25)	Making electronic resources accessible from my home or office	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	1 2 3 4 5 6 7 8 9	N/A

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	Please indicate the degree to which you agree with the following statements:									
1)	The library helps me stay abreast of developments in my field(s) of interest	1 2 3 4 5 6 7 8 9 Strongly Disagree Strongly Agree								
2)	The library aids my advancement in my academic discipline	1 2 3 4 5 6 7 8 9 Strongly Disagree Strongly Agree								
3)	The library enables me to be more efficient in my academic pursuits	1 2 3 4 5 6 7 8 9 Strongly Disagree Strongly Agree								
4)	The library helps me distinguish between trustworthy and untrustworthy information	1 2 3 4 5 6 7 8 9 Strongly Disagree Strongly Agree								
5)	The library provides me with the information skills I need in my work or study	1 2 3 4 5 6 7 8 9 Strongly Disagree Strongly Agree								
6)	In general, I am satisfied with the way in which I am treated at the library.	1 2 3 4 5 6 7 8 9 Strongly Disagree Strongly Agree								
7)	In general, I am satisfied with library support for my learning, research, and/or teaching needs.	1 2 3 4 5 6 7 8 9 Strongly Disagree Strongly Agree								
8)	How would you rate the overall quality of the service provided by the library?	1 2 3 4 5 6 7 8 9 Extremely Poor Extremely Good								

Survey Print Version - American English - College or University Libraries - Page 5

Please indicate your library usage patterns:

How often do you use resources on library premises?

- ◻ Daily
- ◻ Weekly
- ◻ Monthly
- ◻ Quarterly
- ◻ Never

How often do you access library resources through a library Web page?

- ◻ Daily
- ◻ Weekly
- ◻ Monthly
- ◻ Quarterly
- ◻ Never

How often do you use Yahoo™, Google™, or non-library gateways for information?

- ◻ Daily
- ◻ Weekly
- ◻ Monthly
- ◻ Quarterly
- ◻ Never

Survey Print Version - American English - College or University Libraries - Page 6

Demographic Information

Your responses will only be used for aggregate survey analyses and we will treat them with the strictest confidentiality. Individual responses will not be given to anyone for any purpose. For each item, please select the value that most closely describes you.

1. Age:
   - ❑ Under 18
   - ❑ 18-22
   - ❑ 23-30
   - ❑ 31-45
   - ❑ 46-65
   - ❑ Over 65

2. Sex:
   - ❑ Male
   - ❑ Female

3. Discipline:
   - ❑ Agriculture / Environmental Studies
   - ❑ Architecture
   - ❑ Business
   - ❑ Communications / Journalism
   - ❑ Education
   - ❑ Engineering / Computer Science
   - ❑ General Studies
   - ❑ Health Sciences
   - ❑ Humanities
   - ❑ Law
   - ❑ Military/Naval Science
   - ❑ Performing & Fine Arts
   - ❑ Science / Math
   - ❑ Social Sciences / Psychology
   - ❑ Undecided
   - ❑ Other

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4. Position: (check the one option that best describes you)

Undergraduate
- ❑ First year
- ❑ Second year
- ❑ Third year
- ❑ Fourth year
- ❑ Fifth year and above
- ❑ Non-degree

Graduate:
- ❑ Masters
- ❑ Doctoral
- ❑ Non-degree or Undecided

Faculty:
- ❑ Adjunct Faculty
- ❑ Assistant Professor
- ❑ Associate Professor
- ❑ Lecturer
- ❑ Professor
- ❑ Other Academic Status

Library Staff:
- ❑ Administrator
- ❑ Manager, Head of Unit
- ❑ Public Services
- ❑ Systems
- ❑ Technical Services
- ❑ Other

Staff:
- ❑ Research staff
- ❑ Other staff positions

Survey Print Version - American English - College or University Libraries - Page 8

Please enter any comments about library services below.

_____
_____
_____
_____
_____
_____
_____
_____

Please provide your e-mail address below if you would like to enter an optional drawing for a prize (not required).

E-mail address: _____

Thank you for completing the survey!

9   Appendix B: LibQUAL+™ Dimensions

LibQUAL+™ measures dimensions of perceived library quality - that is, each survey question is part of a broader category (a dimension), and scores within those categories are analyzed in order to derive more general information about library users' perceptions of service. These dimensions were first based on the original SERVQUAL survey instrument (the framework for the LibQUAL+™ survey tool; for more information on the origins of LibQUAL+™, go to <http://www.libqual.org/Publications/>). The LibQUAL+™ survey dimensions have evolved with each iteration, becoming more refined and focused for application specifically to the research library context. The 2003 iteration of the LibQUAL+™ survey has four dimensions. Dimensions for each iteration of the LibQUAL+™ survey are outlined below.

LibQUAL+™ 2000 Dimensions

The 2000 iteration of the LibQUAL+™ survey, which had 41 questions, measured eight separate dimensions:

- Assurance (the knowledge and courtesy of employees, and their ability to convey trust and confidence)
- Empathy (caring, individual attention)
- Library as Place (library as a sanctuary/haven or site for learning and contemplation)
- Reliability (ability to perform the promised service dependably and accurately)
- Responsiveness (willingness to help customers and provide prompt service)
- Tangibles (appearance of physical facilities, equipment, personnel and communications materials)
- Instructions/Custom Items
- Self-Reliance

LibQUAL+™ 2001 Dimensions

After careful analysis of the results from the 2000 survey, the dimensions were further refined to re-ground the SERVQUAL items in the library context. Four sub-dimensions resulted for the 2001 iteration:

- Service Affect (nine items, such as "willingness to help users")
- Library as Place (five items, such as "a haven for quiet and solitude")
- Personal Control (six items, such as "website enabling me to locate information on my own"), and
- Information Access (five items, such as "comprehensive print collections" and "convenient business hours")

LibQUAL+™ 2002 Dimensions

For the 2002 iteration of the LibQUAL+™ survey, the dimensions were once again refined based on analysis of the previous year's results. While the same four dimensions were retained, their titles were changed slightly to more clearly represent the questions and data:

- Access to Information
- Affect of Service
- Library as Place
- Personal Control

LibQUAL+™ 2003 Dimensions

In this notebook the results are presented along the same dimensions that were derived from the 2002 iteration. The wording of six questions was changed slightly compared to 2002; a validity and reliability analysis, which will identify whether the same four dimensions are replicated in 2003, is forthcoming. The list below displays the dimensions used to present the results in the 2003 notebooks, along with the questions that relate to each dimension. (Note: the questions below are those used in the College and University implementation of the survey, American English version.)

Access to Information

3. [AI-1] Print and/or electronic journal collections I require for my work
8. [AI-2] Convenient service hours
14. [AI-3] The printed library materials I need for my work
18. [AI-4] The electronic information resources I need
22. [AI-5] Timely document delivery/interlibrary loan

Affect of Service

1. [AS-1] Employees who instill confidence in users
4. [AS-2] Readiness to respond to users' questions
7. [AS-3] Willingness to help users
10. [AS-4] Dependability in handling users' service problems
12. [AS-5] Giving users individual attention
15. [AS-6] Employees who have the knowledge to answer user questions
17. [AS-7] Employees who are consistently courteous
20. [AS-8] Employees who deal with users in a caring fashion
23. [AS-9] Employees who understand the needs of their users

Library as Place

5. [LP-1] Quiet space for individual activities
9. [LP-2] A comfortable and inviting location
13. [LP-3] Library space that inspires study and learning
19. [LP-4] Community space for group learning and group study
24. [LP-5] A getaway for study, learning or research

Personal Control

2. [PC-1] Easy-to-use access tools that allow me to find things on my own
6. [PC-2] Convenient access to library collections
11. [PC-3] A library Web site enabling me to locate information on my own
16. [PC-4] Modern equipment that lets me easily access needed information
21. [PC-5] Making information easily accessible for independent use
25. [PC-6] Making electronic resources accessible from my home or office