

Revised 9/21/07



**LibQUAL<sup>+</sup>**  
*2007 Survey*

CARL

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# **LibQUAL+**<sup>®</sup>

## *2007 Survey*

## CARL

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## 1 Introduction

### 1.1 Acknowledgements

This notebook contains information from the 2007 administration of the LibQUAL+® protocol. The material on the following pages is drawn from the analysis of responses from the participating institutions collected in 2007.

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 the development of this service. From Texas A&M University, the qualitative leadership of Yvonna Lincoln has 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 in the early years. From the Association of Research Libraries, we are appreciative of the past contributions of Consuella Askew, Richard Groves, Amy Hoseth, Mary Jackson, Jonathan Sousa, and Benny Yu.

A New Measures initiative of this scope is possible only as the collaborative effort of many libraries. To the directors and liaisons at all participating libraries goes the largest measure of gratitude. Without your commitment, the development of LibQUAL+® would not have been possible. We would like to extend a special thank you to all administrators at the participating consortia and libraries that are making this project happen effectively across various institutions.

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 (2001-03).

We would also like to acknowledge the support of the National Science Foundation (NSF) for its grant of \$245,737 over a three-year period (2002-04) to adapt the LibQUAL+® instrument for use in the science, math, engineering, and technology education digital library community, an assessment tool in development now called DigiQUAL. We would like to express our thanks for the financial support that has enabled the researchers engaged in this project to exceed all of our expectations in stated goals and objectives and deliver a remarkable assessment tool to the library community.

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## 1.2 LibQUAL+®: a Project from StatsQUAL™

I would personally like to say a word about the development of LibQUAL+® over the last few years and to thank the people that have been involved in this effort. LibQUAL+® would not have been possible without the many people who have offered their time and constructive feedback over the years for the cause of improving library services. In a sense, LibQUAL+® has built three kinds of partnerships: one between ARL and Texas A&M University, a second one among the participating libraries and their staff, and a third one comprising the thousands of users who have provided their valuable survey responses over the years.

LibQUAL+® was initiated in 2000 as an experimental project for benchmarking perceptions of library service quality across 13 ARL libraries under the leadership of Fred Heath and Colleen Cook, then both at Texas A&M University Libraries. It matured quickly into a standard assessment tool that has been applied at more than 1,000 libraries, collecting information on more than half a million library users. Each year since 2003, we have had more than 200 libraries conduct LibQUAL+®, more than 100,000 users respond, and annually more than 50,000 users provide rich comments about the ways they use their libraries.

There have been numerous advancements over the years. In 2005, libraries were able to conduct LibQUAL+® over a two session period (Session I: January to May and Session II: July to December). The LibQUAL+® servers were moved from Texas A&M University to an external hosting facility under the ARL brand known as StatsQUAL™. Through the StatsQUAL™ gateway we will continue to provide innovative tools for libraries to assess and manage their environments in the coming years. In 2006, we added the LibQUAL+® Analytics (for more information, see Section 1.6).

LibQUAL+® findings have engaged thousands of librarians in discussions with colleagues and ARL on what these findings mean for local libraries, for their regions, and for the future of libraries across the globe. Consortia have supported their members' participation in LibQUAL+® in order to offer an informed understanding of the changes occurring in their shared environment. Summary highlights have been published on an annual basis showcasing the rich array of information available through LibQUAL+®:

LibQUAL+® 2006 Survey Highlights  
<<http://www.libqual.org/documents/admin/LibQUALHighlights2006.pdf>>

LibQUAL+® 2005 Survey Highlights  
<<http://www.libqual.org/documents/admin/LibQUALHighlights20051.pdf>>

LibQUAL+® 2004 Survey Highlights  
<<http://www.libqual.org/documents/admin/ExecSummary%201.3.pdf>>

LibQUAL+® 2003 Survey Highlights  
<[http://www.libqual.org/documents/admin/ExecSummary1.1\\_locked.pdf](http://www.libqual.org/documents/admin/ExecSummary1.1_locked.pdf)>

Summary published reports have also been made available:

<<http://www.arl.org/pubscat/libqualpubs.html>>

The socio-economic and technological changes that are taking place around us are affecting the ways users interact with libraries. We used to think that libraries could provide reliable and reasonably complete access to published and scholarly output, yet we now know from LibQUAL+® that users have an insatiable appetite for content. No library can ever have sufficient information content that would come close to satisfying this appetite.

The team at ARL and beyond has worked hard to nurture the community that has been built around LibQUAL+®. We believe that closer collaboration and sharing of resources will bring libraries nearer to meeting the ever changing needs of their demanding users. It is this spirit of collaboration and a willingness to view the world of libraries as an organic, integrated, and cohesive environment that can bring forth major innovations and break new ground. Innovation and aggressive marketing of the role of libraries in benefiting their communities strengthen libraries.

In an example of collaboration, LibQUAL+® participants are sharing their results within the LibQUAL+® community with an openness that nevertheless respects the confidentiality of each institution and its users. LibQUAL+® participants are

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actively shaping our Share Fair gatherings, our in-person events, and our understanding of how the collected data can be used. LibQUAL+® offers a rich resource that can be viewed using many lenses, should be interpreted in multiple ways, and is a powerful tool libraries can use to understand their environment.

LibQUAL+® is a community mechanism for improving libraries and I hope we see an increasing number of libraries utilizing it successfully in the years to come. I look forward to your continuing active involvement in helping us understand the many ways we can improve library services.

With warm regards,

Martha Kyrillidou  
Director, ARL Statistics and Service Quality Programs

### **1.3 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 2007, more than 1,000 libraries have participated in the LibQUAL+® survey, including Canadian government libraries, colleges and universities, community colleges, health sciences and hospital/medical libraries, law libraries, public libraries, and secondary school libraries---some through various consortia, others as independent participants. LibQUAL+® has expanded internationally, with participating institutions in Canada, the U.K. and other European countries as well as Australia and South Africa. It has been translated into a number of languages, including Afrikaans, Chinese (Traditional), Danish, Dutch, Finnish, French, German, Norwegian, and Swedish. 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 for participants
- Access to an online library of LibQUAL+® research articles
- The opportunity to become part of a community interested in developing excellence in library services

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 by 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).

#### **1.4 Web Access to Data**

Data summaries from the 2007 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>>.**

## 1.5 Explanation of Charts and Tables

A working knowledge of how to read and derive relevant information from the tables and charts used in your LibQUAL+® results notebook is essential. In addition to the explanatory text below, you can find a self-paced tutorial on the project web site at:

<http://www.libqual.org/Information/Tools/index.cfm>.

Both the online tutorial and the text below are designed to help you understand your survey results and present and explain those results to others at your library.

### Radar Charts

Radar charts are commonly used throughout the following pages to display both aggregate results and results from individual institutions. 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 three dimensions measured by the survey are grouped together on the radar charts, and each dimension is labeled: Affect of Service (AS), Information Control (IC), and Library as Place (LP).

Radar charts are used in this notebook to present the item summaries (the results from the 22 core survey questions).

#### How to read a radar chart

Radar charts are an effective way to show strengths and weaknesses graphically 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 gap 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 gap 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

The service adequacy gap score 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 gap scores on each item of the survey, as well as for each of the three 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 gap 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**

The service superiority gap score 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 gap scores on each item of the survey, as well as for each of the three 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 gap score indicates that your users' perceived level of service quality is above their desired level of service quality and is printed in green.

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

In consortia 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.

## 1.6 A Few Words about LibQUAL+® 2007

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).

Today, "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+® service (Cook, Heath & B. Thompson, 2002, 2003; Heath, Cook, Kyrillidou & Thompson, 2002; Thompson, Cook & Heath, 2003; Thompson, Cook & Thompson, 2002).

Within a service-quality assessment model, "only customers judge quality; all other judgments are **essentially irrelevant**" (Zeithaml, Parasuraman, Berry, 1990, p. 16). LibQUAL+® was modeled on the 22-item SERVQUAL tool developed by Parasuraman, Berry and Zeithaml (Parasuraman, Berry & Zeithaml, 1991). However, SERVQUAL has been shown to measure some issues not particularly relevant in libraries, and to not measure some issues of considerable interest to library users.

The final 22 LibQUAL+® items were developed through several iterations of studies involving a larger pool of 56 items. The selection of items employed in the LibQUAL+® survey has been grounded in the *users' perspective* as revealed in a series of qualitative studies involving a larger pool of items. The items were identified following qualitative research interviews with student and faculty library users at several different universities (Cook, 2002a; Cook & Heath, 2001).

LibQUAL+® is **not** just a list of 22 standardized items. First, LibQUAL+® offers libraries the ability to select five optional local service quality assessment items. Second, the survey includes a comments box soliciting open-ended user views. *Almost half of the people responding to the LibQUAL+® survey provide valuable feedback through the comments box.* These open-ended comments are helpful for not only (a) understanding **why** users provide certain ratings, but also (b) understanding **what policy changes** users suggest, because many users feel the obligation to be constructive. Participating libraries are finding the real-time access to user comments one of the most useful devices in challenging library administrators to think outside of the box and develop innovative ways for improving library services.

LibQUAL+® is one of 11 ways 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 with regard to peer institutions can provide important insights Berry recommended using multiple listening methods and emphasized that "Ongoing data collection... is a necessity. Transactional surveys, total market surveys, and employee research should always be included" (Berry, 1995, p. 54).

## Score Scaling

"Perceived" scores on the 22 LibQUAL+® core items, the three subscales, and the total score, are all 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. A university-wide retreat with a small-group facilitated discussion to solicit suggestions for improvement is another follow-up mechanism that has been implemented in several LibQUAL+® participating libraries.

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 22 items. LibQUAL+® is 22 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, Kyrillidou, and Askew edited a special issue of the *Journal of Library Administration* (Vol. 40, No. 3/4) reporting additional case studies on the use of LibQUAL+® data to aid the improvement of library service quality. This special issue has also been published by Hayworth Press as a monograph. These publications can be ordered by sending an email to [libqual@arl.org](mailto:libqual@arl.org).

## 2007 Data Screening

The 22 LibQUAL+® core items measure perceptions of total service quality, as well as three sub-dimensions of perceived library quality: (a) *Service Affect* (9 items, such as "willingness to help users"); (b) *Information Control* (8 items, such as "a library Web site enabling me to locate information on my own" and "print and/or electronic journal collections I require for my work"); and (c) *Library as Place* (5 items, such as "a getaway for study, learning, or research").

However, as happens in any survey, in 2007 some users provided incomplete data, 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 22 core items monitors whether a given user has completed all items. On each of these items, in order to submit the survey successfully, 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 22 core items, the software shows the user where missing data are located, and requests complete data. The user may of course abandon the survey without completing all the items. *Only records with complete data on the 22 items and where respondents chose a "user group," if applicable, 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 it was decided that records containing more than 11 "NA" responses should be eliminated from the summary statistics.*

**3. Excessive Inconsistent Responses.** On the LibQUAL+® survey, 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 of 7.5 on the 1-to-9 (9 is highest) scale 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 (i.e., score inversions) 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 "22," was made. *Records containing more than 9 logical inconsistencies were eliminated from the summary statistics.*

### **LibQUAL+® Norms**

An important way to interpret LibQUAL+® data is by examining the zones of tolerance for items, the three 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 2004 and 2005, 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 percent of individual users generated "perceived" ratings lower than 6.5, 6.5 might not be so bad. And if 90 percent 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 rating both (a) "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 for which 90 percent of institutions have a lower gap score is a different gap score than the same -0.5 for a different item in which 90 percent 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 never provide 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 that you make less money than 85 percent 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+® 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 earlier years are available on the Web at the following URLs:

<http://www.coe.tamu.edu/~bthompson/libq2005.htm>  
<http://www.coe.tamu.edu/~bthompson/libq2004.htm>.

### Response Rates

At the American Library Association (ALA) Midwinter Meeting in San Antonio in January 2000, participants were cautioned that response rates on the final LibQUAL+® survey would probably range from 25-33 percent. 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 percent. 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 percent. We don't know the exact response rate.

**Representativeness versus Response Rate.** If 100 percent 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 percent 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 percent 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?

		<b>Alpha University</b>	
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%
		<b>Omega University</b>	
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.

**LibQUAL+® Interactive Statistics**

In addition to the institution and group notebooks and the norms, LibQUAL+® has also provided an interactive environment for data analysis where institutions can mine institutional data for peer comparisons in 2003 and 2004.

The LibQUAL+® Interactive Statistics for these years includes graphing capabilities for all LibQUAL+® scores (total and dimension scores) for each individual institution or groups of institutions. Graphs may be generated in either JPEG format for presentation purposes or flash format that includes more detailed information for online browsing. Tables may also be produced in an interactive fashion for one or multiple selections of variables for all individual institutions or groups of participating institutions. To access the LibQUAL+® Interactive Statistics online, go to:

**<<http://www.libqual.org/Manage/Results/index.cfm>>.**

**LibQUAL+® Analytics**

The LibQUAL+® Analytics is a new tool that permits participants to dynamically create institution-specific tables and charts for different subgroups and across years. The current interface grants access to 2004-2006 statistical data and has two sections:

**(a) Institution Explorer** includes a summary of all questions and dimension means for any combination of user groups and disciplines.

**(b) Longitudinal Analysis** allows participants to perform longitudinal comparisons of their data across survey years.

These two functionalities are only the beginning of our effort to provide more customized analysis. More features are in development based on feedback we receive from our participants.

### **Survey Data**

In addition to the notebooks, the norms, the Interactive Statistics, and the Analytics, LibQUAL+® also makes available (a) raw survey data in SPSS at the request of participating libraries, and (b) raw survey data in Excel for all participating libraries. Additional training using the SPSS data file is available as a follow-up workshop and through the Service Quality Evaluation Academy (see below), which also offers training on analyzing qualitative data. The survey comments are also downloadable in Excel format from the Web site.

### **ARL Service Quality Evaluation 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 ARL Service Quality Evaluation 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 Academy is one more resource for library staff who would like to develop enhanced service-quality assessment skills.

For more information, about LibQUAL+® or the Association of Research Libraries' Statistics and Measurement program, see:

<http://www.libqual.org/>  
<http://www.statsqual.org/>  
<http://www.arl.org/stats/>.

### **References:**

Berry, L.L. (1995). *On great service: A framework for action*. New York: The Free Press.

Cook, C.C., Heath F., Thompson, B. LibQUAL+® from the UK Perspective. 5th Northumbria International Conference Proceedings, Durham, UK, July, 2003.

Cook, C.C. (2002a). A mixed-methods approach to the identification and measurement of academic library service quality constructs: LibQUAL+®. (Doctoral dissertation, Texas A&M University, 2001). *Dissertation Abstracts International*, 62: 2295A. (University Microfilms No. AAT3020024).

Cook, C. (Guest Ed.). (2002b). Library decision-makers speak to their uses of their LibQUAL+® data: Some LibQUAL+® case studies. *Performance Measurement and Metrics*, 3.

Cook, C., & Heath, F. (2001). Users' perceptions of library service quality: A "LibQUAL+®" qualitative study. *Library Trends*, 49: 548-584.

- Cook, C., Heath, F. & Thompson, B. (2002). Score norms for improving library service quality: A LibQUAL+® study. *portal: Libraries and the Academy*, 2: 13-26.
- Cook, C., Heath, F. & Thompson, B. (2003). "Zones of tolerance" in perceptions of library service quality: A LibQUAL+® study. *portal: Libraries and the Academy*, 3: 113-123.
- Cook, C., Heath, F., & Thompson, R.L. (2000). A meta-analysis of response rates in Web- or Internet-based surveys. *Educational and Psychological Measurement*, 60: 821-836.
- Cook, C., & Thompson, B. (2001). Psychometric properties of scores from the Web-based LibQUAL+® study of perceptions of library service quality. *Library Trends*, 49: 585-604.
- Cullen, R. (2001). Perspectives on user satisfaction surveys. *Library Trends*, 49: 662-686.
- Heath, F., Kyrillidou, M. & Askew, C.A. (Guest Eds.). (2004). Libraries report on their LibQUAL+® findings: From Data to Action. *Journal of Library Administration* (40) 3/4 (2004).
- Heath, F., Cook, C., Kyrillidou, M., & Thompson, B. (2002). ARL Index and other validity correlates of LibQUAL+® scores. *portal: Libraries and the Academy*, 2: 27-42.
- Kyrillidou, M. (2005). The globalization of library assessment and the role of LibQUAL+®. From library science to information science: studies in honor of G. Kakouri (Athens, Greece: Tipothito-Giorgos Dardanos, 2005). [in Greek]
- Kyrillidou, M. (2005/2006). Library assessment as a collaborative enterprise. *Resource Sharing and Information Networks*, 18 ½: 73-87.
- Kyrillidou, M. (2006). Measuring library service quality: A perceived outcome for libraries. In Peter Herson (Ed.), Robert E. Dugan (Ed.), and Candy Schwartz (Ed.), *Revisiting Outcomes Assessment in Higher Education* (pp. 351-366). Westport, CT: Library Unlimited.
- Kyrillidou, M., Olshen, T., Heath, F., Bonnelly, C., and Cote, J. P. Cross-cultural implementation of LibQUAL+®: the French language experience. 5th Northumbria International Conference Proceedings, Durham, UK, July, 2003.
- Kyrillidou, M. and Young, M. (2005). ARL Statistics 2003-04. Washington, DC: Association of Research Libraries.
- Nitecki, D.A. (1996). Changing the concept and measure of service quality in academic libraries. *The Journal of Academic Librarianship*, 22: 181-190.
- Parasuraman, A., Berry, L.L., and Zeithaml, V.A. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, 67: 420-450.
- Thompson, B. (2000, October). Representativeness versus response rate: It ain't the response rate! Paper presented at the Association of Research Libraries (ARL) Measuring Service Quality Symposium on the New Culture of Assessment: Measuring Service Quality, Washington, DC.
- Thompson, B., Cook, C., & Heath, F. (2000). The LibQUAL+® gap measurement model: The bad, the ugly, and the good of gap measurement. *Performance Measurement and Metrics*, 1: 165-178.
- Thompson, B., Cook, C., & Heath, F. (2003). Structure of perceptions of service quality in libraries: A LibQUAL+® study. *Structural Equation Modeling*, 10: 456-464.
- Thompson, B., Cook, C., & Thompson, R.L. (2002). Reliability and structure of LibQUAL+® scores: Measuring perceived library service quality. *portal: Libraries and the Academy*, 2: 3-12.
- Thompson, B., Cook, C., & Kyrillidou, M. (2005). Concurrent validity of LibQUAL+® scores: What do LibQUAL+® scores measure? *Journal of Academic Librarianship*, 31: 517-522.

Thompson, B., Cook, C., & Kyrillidou, M. (2006). Using localized survey items to augment standardized benchmarking measures: A LibQUAL+® study. *portal: Libraries and the Academy*, 6(2): 219-230.

Thompson, B., Cook, C., & Kyrillidou, M. (2006). Stability of library service quality benchmarking norms across time and cohorts: A LibQUAL+® study. Paper presented at the Asia-Pacific Conference of Library and Information Education and Practice (A-LIEP), Singapore.

Thompson, B., Cook, C., Kyrillidou, M. (2006). How can you evaluate the integrity of your library assessment data: Intercontinental LibQUAL+® analysis used as concrete heuristic examples. Paper presented at the Library Assessment Conference: Building Effective, Sustainable, and Practical Assessment, Charlottesville, VA.

Zeithaml, V.A., Parasuraman, A., Berry, L.L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. New York: Free Press.

## 2 Respondents by Institution for CARL

Below is a listing of all the consortium institutions that participated in the 2007 LibQUAL+® survey. Where applicable, they have been separated out by library type (e.g. Academic Health Sciences, College or University, Community College). The number of respondents from each institution and the percentage of the total number of consortium respondents that they represent are provided.

Institution Name	Respondent n	Respondent %
<b>Canadian Government</b>		
1) Canada Institute for Scientific and Technical Information	431	1.68%
2) Institut canadien de l'information scientifique et technique	100	0.39%
<b>Sub Total:</b>	<b>531</b>	<b>2.07%</b>
<b>College or University</b>		
3) Carleton University	764	2.98%
4) Concordia University Libraries	949	3.70%
5) Concordia University Libraries - French	18	0.07%
6) Dalhousie University	1,278	4.99%
7) McMaster University Libraries	716	2.79%
8) Memorial University of Newfoundland	819	3.19%
9) Queen's University	1,594	6.22%
10) Université de Montréal	464	1.81%
11) Université de Sherbrooke	2,230	8.70%
12) Université du Québec à Montréal	1,893	7.38%
13) Université Laval	1,177	4.59%
14) University of Alberta - French	10	0.04%
15) University of Alberta Libraries	528	2.06%
16) University of British Columbia Library	711	2.77%
17) University of Calgary Libraries and Cultural Resources	686	2.68%
18) University of Guelph	1,332	5.20%
19) University of Manitoba	963	3.76%
20) University of Manitoba - French	4	0.02%
21) University of New Brunswick	1,120	4.37%
22) University of Ottawa - English	444	1.73%
23) University of Ottawa - French	178	0.69%
24) University of Saskatchewan Library	500	1.95%
25) University of Toronto Libraries	594	2.32%
26) University of Toronto Mississauga	258	1.01%
27) University of Toronto Scarborough Library	227	0.89%
28) University of Victoria Libraries	562	2.19%

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29) University of Waterloo	565	2.20%
30) University of Western Ontario	2,165	8.45%
31) University of Windsor	1,476	5.76%
32) York University Libraries	879	3.43%
<b>Sub Total:</b>	<b>25,104</b>	<b>97.93%</b>
<b>Grand Total:</b>	<b>25,635</b>	<b>100.00%</b>

### 3 College or University Demographic Summary for CARL

#### 3.1 Respondents by User Group

User Group	Respondent n	Respondent %
<b>Undergraduate</b>		
First year	3,385	13.48%
Second year	3,188	12.70%
Third year	3,704	14.75%
Fourth year	3,029	12.07%
Fifth year and above	875	3.49%
Non-degree	215	0.86%
<b>Sub Total:</b>	<b>14,396</b>	<b>57.35%</b>
<b>Graduate</b>		
Masters	3,742	14.91%
Doctoral	2,153	8.58%
Non-degree or Undecided	176	0.70%
<b>Sub Total:</b>	<b>6,071</b>	<b>24.18%</b>
<b>Faculty</b>		
Adjunct Faculty	133	0.53%
Assistant Professor	937	3.73%
Associate Professor	963	3.84%
Lecturer	362	1.44%
Professor	956	3.81%
Other Academic Status	287	1.14%
<b>Sub Total:</b>	<b>3,638</b>	<b>14.49%</b>
<b>Library Staff</b>		
Administrator	8	0.03%
Manager, Head of Unit	33	0.13%
Public Services	149	0.59%
Systems	11	0.04%
Technical Services	34	0.14%
Other	32	0.13%
<b>Sub Total:</b>	<b>267</b>	<b>1.06%</b>
<b>Staff</b>		
Research Staff	298	1.19%
Other staff positions	434	1.73%
<b>Sub Total:</b>	<b>732</b>	<b>2.92%</b>
<b>Total:</b>	<b>25,104</b>	<b>100.00%</b>

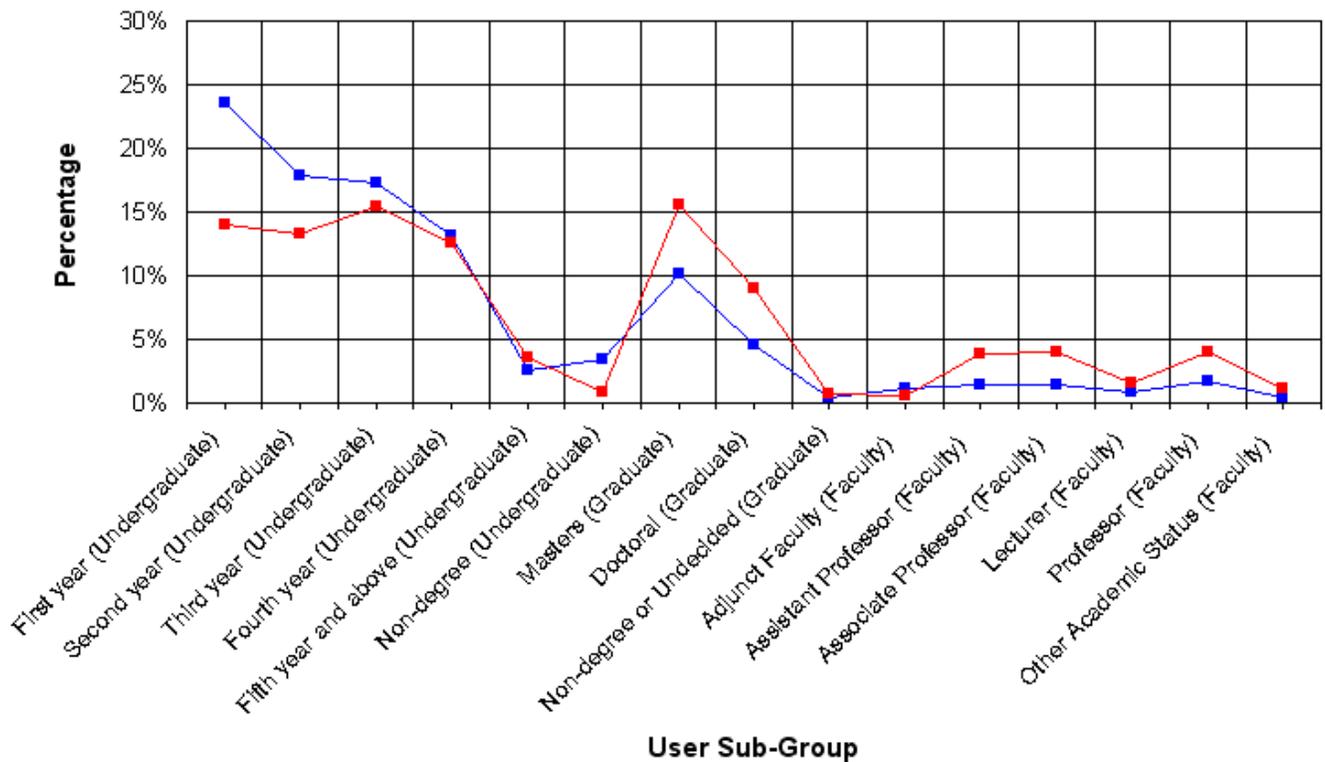
### 3.2 Population and Respondent Profile by User Sub-Group

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 in the online Representativeness section\*.

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 Representativeness section. When population data is missing or incomplete, it is because this data was not provided.*

\*Excludes Library Staff & Staff



- Respondent Profile by User Sub-Group
- Population Profile by User Sub-Group

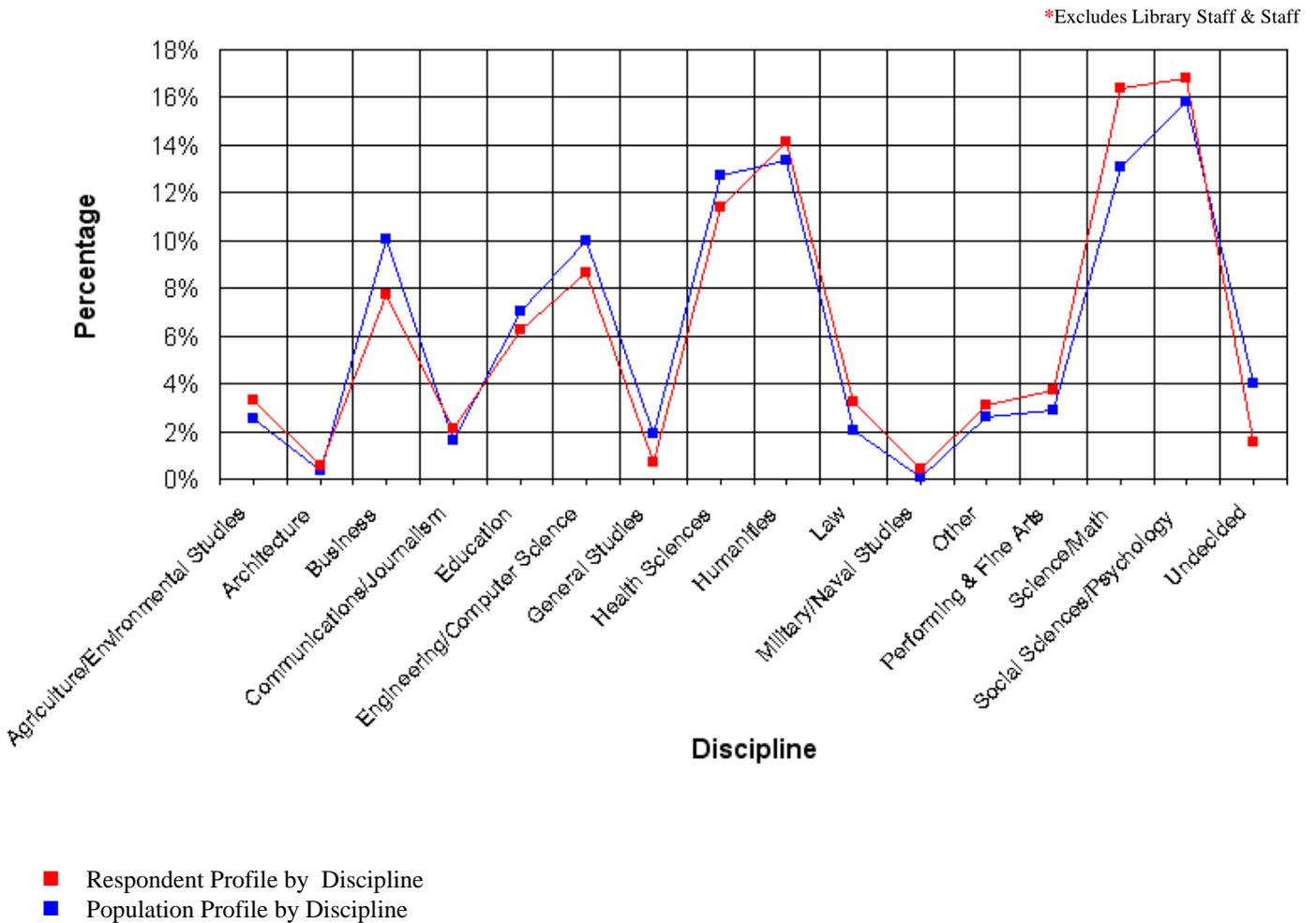
<b>User Group</b>	<b>Population n</b>	<b>Population %</b>	<b>Respondent n</b>	<b>Respondent %</b>	<b>%N - %n</b>
First year (Undergraduate)	188,144	23.57%	3,385	14.04%	9.53%
Second year (Undergraduate)	142,260	17.82%	3,188	13.23%	4.60%
Third year (Undergraduate)	137,839	17.27%	3,704	15.37%	1.90%
Fourth year (Undergraduate)	105,219	13.18%	3,029	12.57%	0.62%
Fifth year and above (Undergraduate)	20,084	2.52%	875	3.63%	-1.11%
Non-degree (Undergraduate)	26,830	3.36%	215	0.89%	2.47%
Masters (Graduate)	81,320	10.19%	3,742	15.52%	-5.34%
Doctoral (Graduate)	36,940	4.63%	2,153	8.93%	-4.30%
Non-degree or Undecided (Graduate)	3,959	0.50%	176	0.73%	-0.23%
Adjunct Faculty (Faculty)	9,647	1.21%	133	0.55%	0.66%
Assistant Professor (Faculty)	11,042	1.38%	937	3.89%	-2.50%
Associate Professor (Faculty)	10,896	1.36%	963	4.00%	-2.63%
Lecturer (Faculty)	7,286	0.91%	362	1.50%	-0.59%
Professor (Faculty)	13,402	1.68%	956	3.97%	-2.29%
Other Academic Status (Faculty)	3,374	0.42%	287	1.19%	-0.77%
<b>Total:</b>	<b>798,242</b>	<b>100.00%</b>	<b>24,105</b>	<b>100.00%</b>	<b>0.00%</b>

### 3.3 Population and Respondent Profiles by Standard Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section\*.

This section shows survey respondents broken down based on the LibQUAL+® standard discipline categories. 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 Representativeness section. When population data is missing or incomplete, it is because this data was not provided.*



<b>Discipline</b>	<b>Population N</b>	<b>Population %</b>	<b>Respondent n</b>	<b>Respondent %</b>	<b>%N - %n</b>
Agriculture/Environmental Studies	21,222	2.56%	792	3.29%	-0.72%
Architecture	2,690	0.33%	130	0.54%	-0.21%
Business	82,949	10.02%	1,857	7.71%	2.32%
Communications/Journalism	13,122	1.59%	508	2.11%	-0.52%
Education	57,903	7.00%	1,509	6.26%	0.73%
Engineering/Computer Science	82,488	9.97%	2,090	8.67%	1.29%
General Studies	15,486	1.87%	177	0.73%	1.14%
Health Sciences	105,529	12.75%	2,748	11.40%	1.35%
Humanities	110,664	13.37%	3,403	14.12%	-0.75%
Law	16,791	2.03%	780	3.24%	-1.21%
Military/Naval Studies	856	0.10%	96	0.40%	-0.29%
Other	21,804	2.63%	739	3.07%	-0.43%
Performing & Fine Arts	23,815	2.88%	890	3.69%	-0.82%
Science/Math	108,105	13.06%	3,953	16.41%	-3.34%
Social Sciences/Psychology	130,934	15.82%	4,049	16.80%	-0.98%
Undecided	33,137	4.00%	375	1.56%	2.45%
<b>Total:</b>	<b>827,495</b>	<b>100.00%</b>	<b>24,096</b>	<b>100.00%</b>	<b>0.00%</b>

### 3.4 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.

\*Excludes Library Staff

Age	Respondent n	Respondent %
Under 18	45	0.18%
18 - 22	9,500	38.26%
23 - 30	8,011	32.26%
31 - 45	4,175	16.82%
46 - 65	2,884	11.62%
Over 65	214	0.86%
<b>Total:</b>	<b>24,829</b>	<b>100.00%</b>

### 3.5 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 and the demographic data provided by institutions in the online Representativeness section.\* 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 Representativeness section. When population data is missing or incomplete, it is because this data was not provided.*

\*Excludes Library Staff

Sex	Population N	Population %	Respondent n	Respondent %
Female	480,475	56.03%	15,271	61.53%
Male	377,054	43.97%	9,548	38.47%
<b>Total:</b>	<b>857,529</b>	<b>100.00%</b>	<b>24,819</b>	<b>100.00%</b>

## 4 College or University Libraries Survey Item Summary for CARL

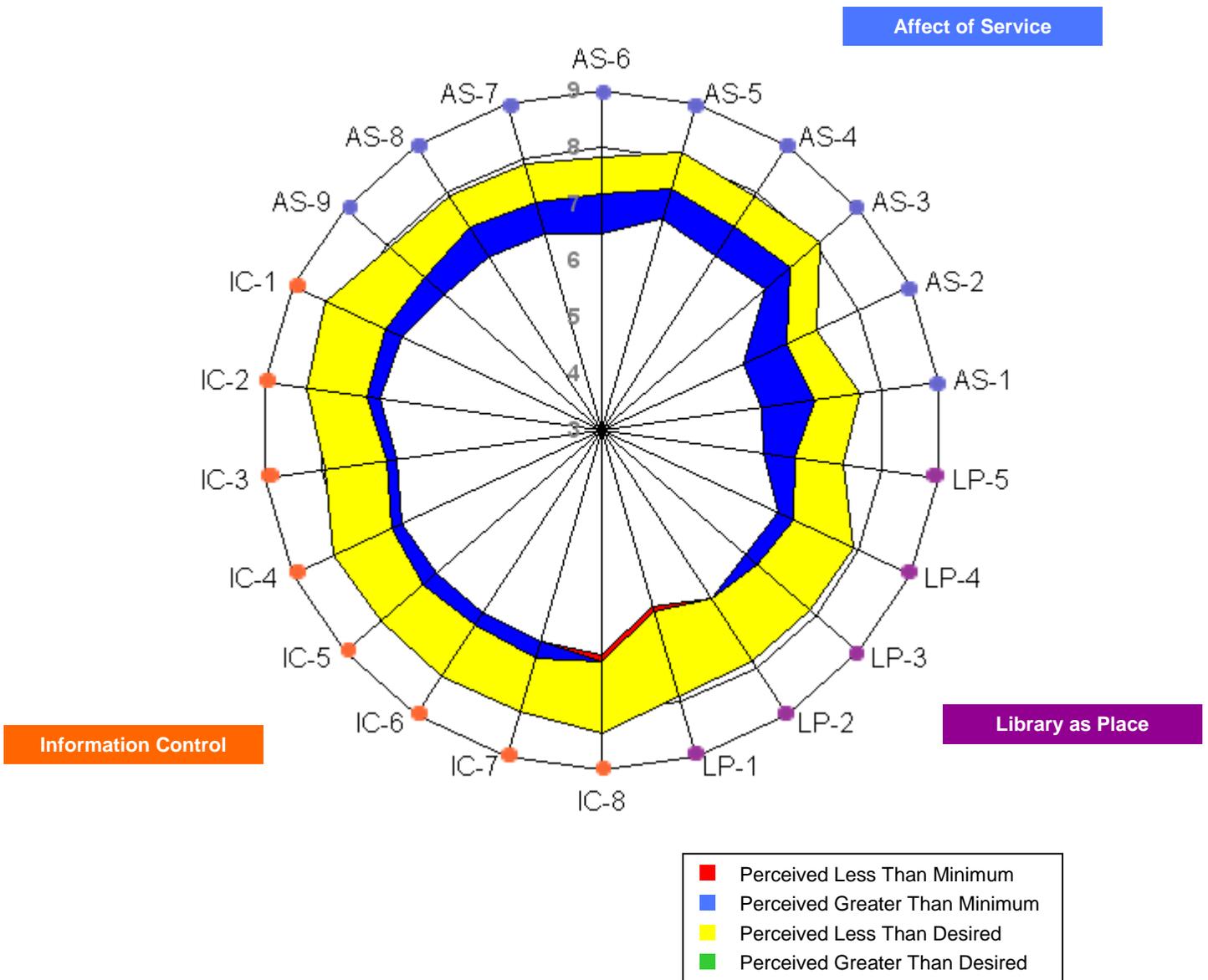
### 4.1 Core Questions Summary

This radar chart shows aggregate results for the 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, on this chart they are grouped into sections: Affect of Service, Library as Place, and Information 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.)

\*Excludes Library Staff



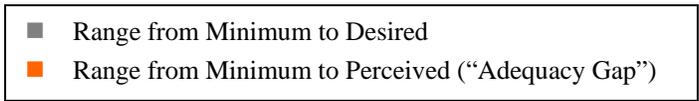
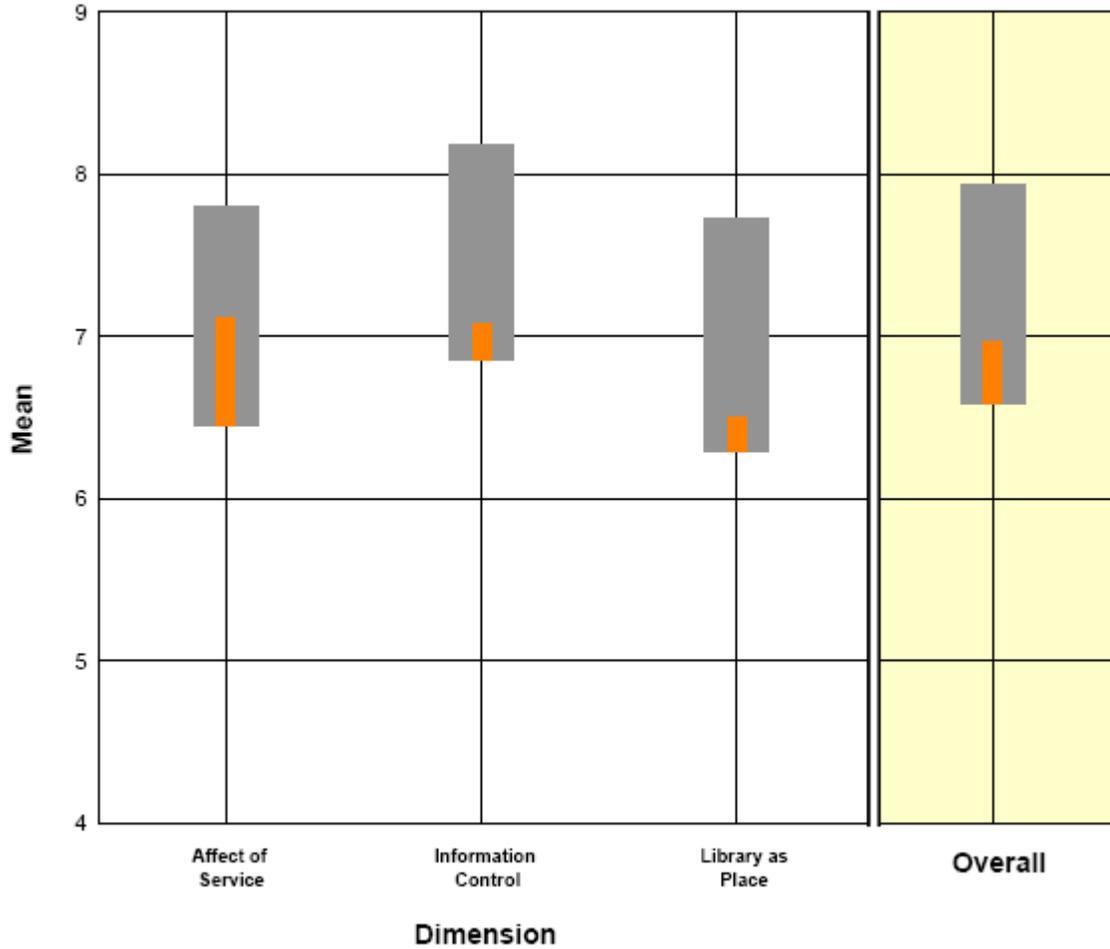
ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	5.83	7.58	6.76	0.93	-0.82	23,665
AS-2	Giving users individual attention	5.76	7.17	6.56	0.80	-0.61	23,595
AS-3	Employees who are consistently courteous	6.80	8.06	7.38	0.58	-0.68	24,426
AS-4	Readiness to respond to users' questions	6.66	7.90	7.27	0.61	-0.64	23,535
AS-5	Employees who have the knowledge to answer user questions	6.87	8.09	7.42	0.55	-0.67	23,662
AS-6	Employees who deal with users in a caring fashion	6.45	7.79	7.15	0.70	-0.65	23,683
AS-7	Employees who understand the needs of their users	6.61	7.86	7.18	0.57	-0.68	23,430
AS-8	Willingness to help users	6.63	7.90	7.24	0.62	-0.66	23,605
AS-9	Dependability in handling users' service problems	6.66	7.91	7.10	0.44	-0.81	19,540
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	6.87	8.36	7.17	0.30	-1.18	24,376
IC-2	A library Web site enabling me to locate information on my own	6.93	8.25	7.14	0.22	-1.11	24,621
IC-3	The printed library materials I need for my work	6.64	7.92	6.81	0.17	-1.11	22,439
IC-4	The electronic information resources I need	6.87	8.21	7.06	0.20	-1.14	24,295
IC-5	Modern equipment that lets me easily access needed information	6.83	8.12	7.15	0.32	-0.96	24,105
IC-6	Easy-to-use access tools that allow me to find things on my own	6.84	8.16	7.09	0.24	-1.07	24,263
IC-7	Making information easily accessible for independent use	6.86	8.16	7.19	0.33	-0.96	24,098
IC-8	Print and/or electronic journal collections I require for my work	7.08	8.33	6.94	-0.13	-1.38	23,352
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	6.29	7.85	6.22	-0.08	-1.63	23,702
LP-2	Quiet space for individual activities	6.54	7.85	6.55	0.01	-1.30	23,252
LP-3	A comfortable and inviting location	6.33	7.83	6.60	0.27	-1.23	23,977
LP-4	A getaway for study, learning, or research	6.43	7.88	6.71	0.29	-1.16	23,239
LP-5	Community space for group learning and group study	5.87	7.26	6.42	0.55	-0.84	20,974
<b>Overall:</b>		<b>6.58</b>	<b>7.94</b>	<b>6.97</b>	<b>0.38</b>	<b>-0.97</b>	<b>24,837</b>

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	1.69	1.41	1.57	1.81	1.65	23,665
AS-2	Giving users individual attention	1.85	1.64	1.69	1.82	1.70	23,595
AS-3	Employees who are consistently courteous	1.67	1.21	1.56	1.93	1.66	24,426
AS-4	Readiness to respond to users' questions	1.58	1.24	1.46	1.73	1.52	23,535
AS-5	Employees who have the knowledge to answer user questions	1.57	1.16	1.40	1.70	1.46	23,662
AS-6	Employees who deal with users in a caring fashion	1.69	1.33	1.49	1.81	1.59	23,683
AS-7	Employees who understand the needs of their users	1.61	1.25	1.43	1.74	1.51	23,430
AS-8	Willingness to help users	1.64	1.25	1.47	1.76	1.53	23,605
AS-9	Dependability in handling users' service problems	1.59	1.25	1.49	1.78	1.59	19,540
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	1.66	1.09	1.60	2.02	1.73	24,376
IC-2	A library Web site enabling me to locate information on my own	1.57	1.10	1.52	1.87	1.62	24,621
IC-3	The printed library materials I need for my work	1.65	1.35	1.56	1.94	1.78	22,439
IC-4	The electronic information resources I need	1.53	1.11	1.40	1.83	1.58	24,295
IC-5	Modern equipment that lets me easily access needed information	1.55	1.15	1.42	1.81	1.57	24,105
IC-6	Easy-to-use access tools that allow me to find things on my own	1.53	1.11	1.40	1.81	1.55	24,263
IC-7	Making information easily accessible for independent use	1.51	1.09	1.35	1.74	1.48	24,098
IC-8	Print and/or electronic journal collections I require for my work	1.57	1.09	1.57	2.04	1.75	23,352
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	1.77	1.50	1.86	2.34	2.24	23,702
LP-2	Quiet space for individual activities	1.83	1.55	1.86	2.39	2.22	23,252
LP-3	A comfortable and inviting location	1.74	1.38	1.75	2.20	2.02	23,977
LP-4	A getaway for study, learning, or research	1.79	1.46	1.67	2.13	1.94	23,239
LP-5	Community space for group learning and group study	2.03	1.88	1.79	2.35	2.26	20,974
<b>Overall:</b>		<b>1.24</b>	<b>0.85</b>	<b>1.05</b>	<b>1.36</b>	<b>1.11</b>	<b>24,837</b>

### 4.2 Core Questions Dimensions Summary

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

\*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 A.

<b>Dimension</b>	<b>Minimum Mean</b>	<b>Desired Mean</b>	<b>Perceived Mean</b>	<b>Adequacy Mean</b>	<b>Superiority Mean</b>	<b>n</b>
Affect of Service	6.46	7.80	7.11	0.65	-0.69	24,807
Information Control	6.86	8.19	7.07	0.21	-1.11	24,834
Library as Place	6.29	7.73	6.51	0.21	-1.22	24,528
<b>Overall:</b>	<b>6.58</b>	<b>7.94</b>	<b>6.97</b>	<b>0.38</b>	<b>-0.97</b>	<b>24,837</b>

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 A.

<b>Dimension</b>	<b>Minimum SD</b>	<b>Desired SD</b>	<b>Perceived SD</b>	<b>Adequacy SD</b>	<b>Superiority SD</b>	<b>n</b>
Affect of Service	1.36	1.01	1.21	1.43	1.23	24,807
Information Control	1.26	0.84	1.10	1.46	1.19	24,834
Library as Place	1.52	1.24	1.44	1.85	1.69	24,528
<b>Overall:</b>	<b>1.24</b>	<b>0.85</b>	<b>1.05</b>	<b>1.36</b>	<b>1.11</b>	<b>24,837</b>

### 4.3 Local Questions Summary

This table shows mean scores for each of the local questions added by the individual libraries or consortium, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction of the notebook.)

\*Excludes Library Staff

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
A secure and safe place	7.09	8.12	7.62	0.53	-0.50	1,899
Ability to navigate library Web pages easily	6.88	8.21	6.94	0.07	-1.27	15,881
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	5.95	7.29	6.33	0.38	-0.96	2,570
Access to rare and historical materials	5.68	7.06	6.48	0.80	-0.58	545
Adequate hours of service	6.83	8.08	7.39	0.56	-0.69	13,506
Assuring users of the accuracy and confidentiality of their transactions	7.30	8.28	7.98	0.68	-0.30	401
Availability of subject specialist assistance	5.65	7.30	6.27	0.62	-1.03	1,312
Comprehensive collections of full text articles online	6.69	8.22	6.62	-0.07	-1.60	777
Convenient business hours	6.86	8.12	7.61	0.75	-0.51	1,940
Ease and timeliness in getting materials from other libraries	6.52	7.93	6.92	0.39	-1.02	9,605
Ease of use of electronic resources	6.64	7.99	7.31	0.67	-0.68	2,153
Electronic resources matching my information needs	6.85	8.17	6.89	0.04	-1.28	2,448
Improving library-use skills as a by-product of seeking assistance from library staff	5.82	7.39	6.91	1.09	-0.48	1,139
Librarians providing help that assists in finding information needed now while improving my research skills	6.55	7.91	7.57	1.02	-0.34	3,281
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	6.62	7.96	7.47	0.85	-0.49	521
Librarians teaching me how to effectively use the electronically available databases, journals, and books	6.47	7.73	7.10	0.63	-0.63	1,673
Library orientations / instruction sessions	5.74	7.01	6.75	1.01	-0.26	2,628
Making me aware of library resources and services	6.02	7.41	6.51	0.49	-0.89	15,218
Online course support (readings, links, references)	6.21	7.81	6.81	0.59	-1.01	1,182
Providing search tools that permit me to work autonomously	6.68	8.05	7.17	0.49	-0.88	1,841
Ready access to computers / Internet / software	6.80	8.13	7.62	0.82	-0.51	2,150
Space for group / individual study and research needs	6.32	7.52	6.12	-0.20	-1.41	576

Space for students to study and work in groups	5.86	7.20	6.00	0.14	-1.20	788
Space that facilitates quiet study	6.48	7.65	6.16	-0.32	-1.49	609
Teaching me how to access, evaluate, and use information	5.96	7.40	6.64	0.68	-0.76	13,630
Teaching me how to locate, evaluate, and use information	6.71	7.94	7.54	0.83	-0.40	762
The library program teaches me how to access, evaluate, and use information	6.15	7.43	6.63	0.48	-0.80	676
Timely document delivery / interlibrary loan	6.85	8.08	7.13	0.28	-0.95	1,647
Timely document delivery/interlibrary loan	6.49	7.92	7.49	1.00	-0.43	1,418

This table displays the standard deviation for each local question added by the individual institution or consortium, where n is the number of respondents for each particular questions. (For a more detailed explanation of the headings, see the Introduction to this notebook.)

\*Excludes Library Staff

<b>Question Text</b>	<b>Minimum SD</b>	<b>Desired SD</b>	<b>Perceived SD</b>	<b>Adequacy SD</b>	<b>Superiority SD</b>	<b>n</b>
A secure and safe place	1.90	1.48	1.42	1.92	1.63	1,899
Ability to navigate library Web pages easily	1.58	1.12	1.56	1.98	1.72	15,881
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	1.77	1.57	1.79	2.12	2.02	2,570
Access to rare and historical materials	2.07	2.01	1.73	2.07	2.10	545
Adequate hours of service	1.68	1.26	1.61	2.13	1.85	13,506
Assuring users of the accuracy and confidentiality of their transactions	1.54	0.99	1.14	1.38	1.10	401
Availability of subject specialist assistance	1.80	1.57	1.72	1.93	1.89	1,312
Comprehensive collections of fulltext articles online	1.61	1.20	1.50	2.03	1.76	777
Convenient business hours	1.49	1.08	1.43	1.89	1.61	1,940
Ease and timeliness in getting materials from other libraries	1.72	1.33	1.63	2.03	1.81	9,605
Ease of use of electronic resources	1.41	1.06	1.35	1.77	1.55	2,153
Electronic resources matching my information needs	1.41	1.04	1.44	1.85	1.66	2,448
Improving library-use skills as a by-product of seeking assistance from library staff	1.79	1.44	1.37	1.77	1.56	1,139
Librarians providing help that assists in finding information needed now while improving my research skills	1.59	1.23	1.41	1.76	1.53	3,281
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	1.61	1.25	1.22	1.57	1.34	521
Librarians teaching me how to effectively use the electronically available databases, journals, and books	1.76	1.40	1.59	1.95	1.72	1,673
Library orientations / instruction sessions	2.03	1.84	1.79	2.06	1.88	2,628
Making me aware of library resources and services	1.79	1.52	1.66	2.01	1.88	15,218
Online course support (readings, links, references)	1.67	1.36	1.40	1.76	1.59	1,182
Providing search tools that permit me to work autonomously	1.38	1.02	1.32	1.64	1.46	1,841
Ready access to computers / Internet / software	1.44	1.02	1.34	1.75	1.46	2,150
Space for group / individual study and research needs	2.08	1.89	1.82	2.61	2.49	576
Space for students to study and work in groups	2.01	1.93	1.89	2.39	2.41	788
Space that facilitates quiet study	2.02	1.82	1.94	2.75	2.57	609

Teaching me how to access, evaluate, and use information	1.83	1.61	1.67	1.97	1.86	13,630
Teaching me how to locate, evaluate, and use information	1.77	1.34	1.43	1.79	1.54	762
The library program teaches me how to access, evaluate, and use information	1.91	1.72	1.69	1.92	1.88	676
Timely document delivery / interlibrary loan	1.67	1.24	1.56	1.89	1.67	1,647
Timely document delivery/interlibrary loan	1.48	1.12	1.36	1.82	1.56	1,418

#### 4.4 General Satisfaction Questions Summary

This table displays 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.

\*Excludes Library Staff

<b>Satisfaction Question</b>	<b>Mean</b>	<b>SD</b>	<b>n</b>
In general, I am satisfied with the way in which I am treated at the library.	7.38	1.52	24,835
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.03	1.58	24,833
How would you rate the overall quality of the service provided by the library?	7.12	1.30	24,834

#### 4.5 Information Literacy Outcomes Questions Summary

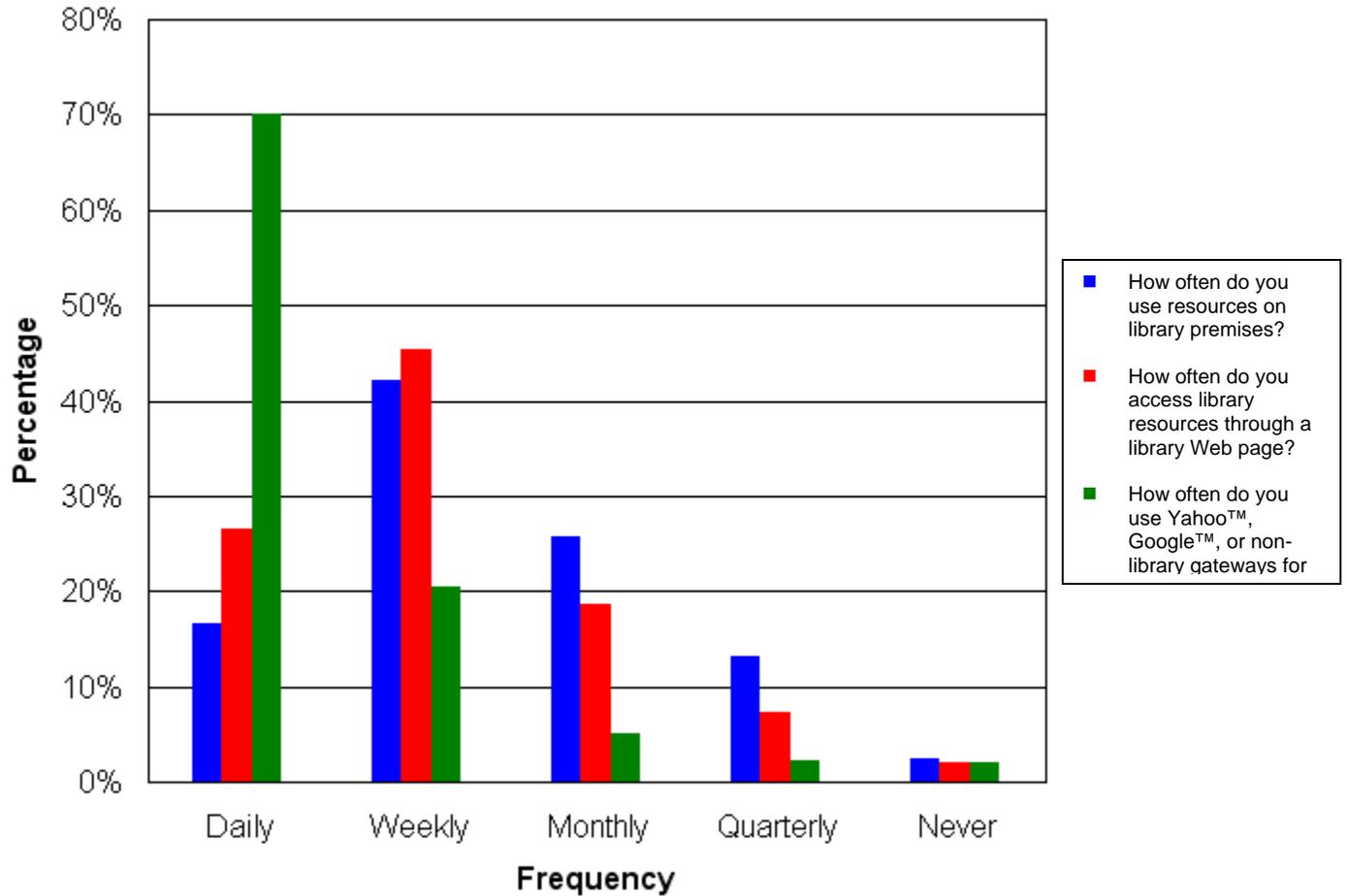
This table displays mean score and standard deviation for each of the information literacy outcomes questions, where n is the number of respondents for each particular question. These scores are calculated from responses to the information literacy outcomes questions on the LibQUAL+® survey, in which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

\*Excludes Library Staff

<b>Information Literacy Outcome Question</b>	<b>Mean</b>	<b>SD</b>	<b>n</b>
The library helps me stay abreast of developments in my field(s) of interest.	6.22	1.79	24,835
The library aids my advancement in my academic discipline.	6.89	1.64	24,835
The library enables me to be more efficient in my academic pursuits.	6.97	1.64	24,833
The library helps me distinguish between trustworthy and untrustworthy information.	6.01	1.94	24,832
The library provides me with the information skills I need in my work or study.	6.36	1.78	24,833

#### 4.6 Library Use Summary

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



\*Excludes Library Staff

	Daily	Weekly	Monthly	Quarterly	Never	n / %
How often do you use resources on library premises?	4,118 16.58%	10,467 42.14%	6,401 25.77%	3,267 13.15%	584 2.35%	24,837 100.00%
How often do you access library resources through a library Web page?	6,600 26.58%	11,282 45.43%	4,613 18.57%	1,816 7.31%	524 2.11%	24,835 100.00%
How often do you use Yahoo™, Google™, or non-library gateways for information?	17,408 70.09%	5,077 20.44%	1,257 5.06%	573 2.31%	520 2.09%	24,835 100.00%

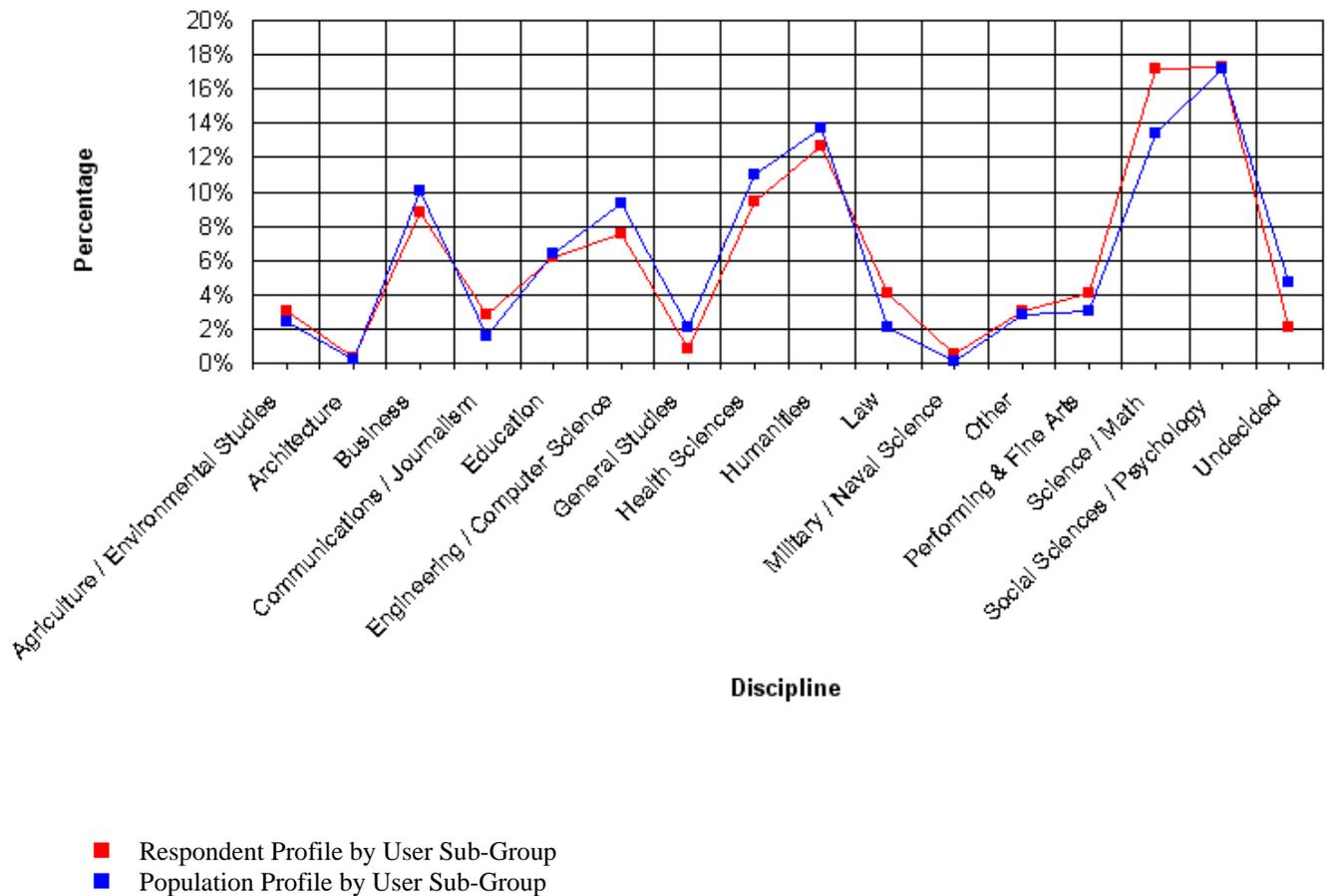
## 5.0 College or University Libraries Undergraduate Summary for CARL

### 5.1 Demographic Summary for Undergraduate

#### 5.1.1 Population and Respondent Profiles for Undergraduate Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.

This section shows survey respondents broken down based on the LibQUAL+® standard discipline categories. 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).



<b>Discipline</b>	<b>Population N</b>	<b>Population %</b>	<b>Respondent n</b>	<b>Respondent %</b>	<b>%N - %n</b>
Agriculture/Environmental Studies	15,823	2.40%	437	3.04%	-0.63%
Architecture	1,116	0.17%	49	0.34%	-0.17%
Business	66,016	10.02%	1,272	8.84%	1.18%
Communications/Journalism	10,592	1.61%	400	2.78%	-1.17%
Education	42,373	6.43%	884	6.14%	0.29%
Engineering/Computer Science	61,486	9.33%	1,089	7.57%	1.77%
General Studies	14,141	2.15%	128	0.89%	1.26%
Health Sciences	72,208	10.96%	1,362	9.46%	1.50%
Humanities	90,280	13.70%	1,830	12.71%	0.99%
Law	13,530	2.05%	588	4.09%	-2.03%
Military/Naval Studies	789	0.12%	76	0.53%	-0.41%
Other	18,311	2.78%	430	2.99%	-0.21%
Performing & Fine Arts	19,687	2.99%	583	4.05%	-1.06%
Science/Math	88,019	13.36%	2,474	17.19%	-3.83%
Social Sciences/Psychology	113,395	17.21%	2,488	17.28%	-0.08%
Undecided	31,192	4.73%	304	2.11%	2.62%
<b>Total:</b>	<b>658,958</b>	<b>100.00%</b>	<b>14,394</b>	<b>100.00%</b>	<b>0.00%</b>

### 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.

Age	Respondent n	Respondent %
Under 18	42	0.29%
18 - 22	9,279	64.46%
23 - 30	3,952	27.45%
31 - 45	862	5.99%
46 - 65	244	1.70%
Over 65	16	0.11%
<b>Total:</b>	<b>14,395</b>	<b>100.00%</b>

### 5.1.2 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 and the demographic data provided by institutions in the online Representativeness section\*. The number and percentage for each sex are given for the general population and for survey respondents.

\*Note: Participating institutions were not required to be completed the Representativeness section. When population data is missing or incomplete, it is because this data was not provided.

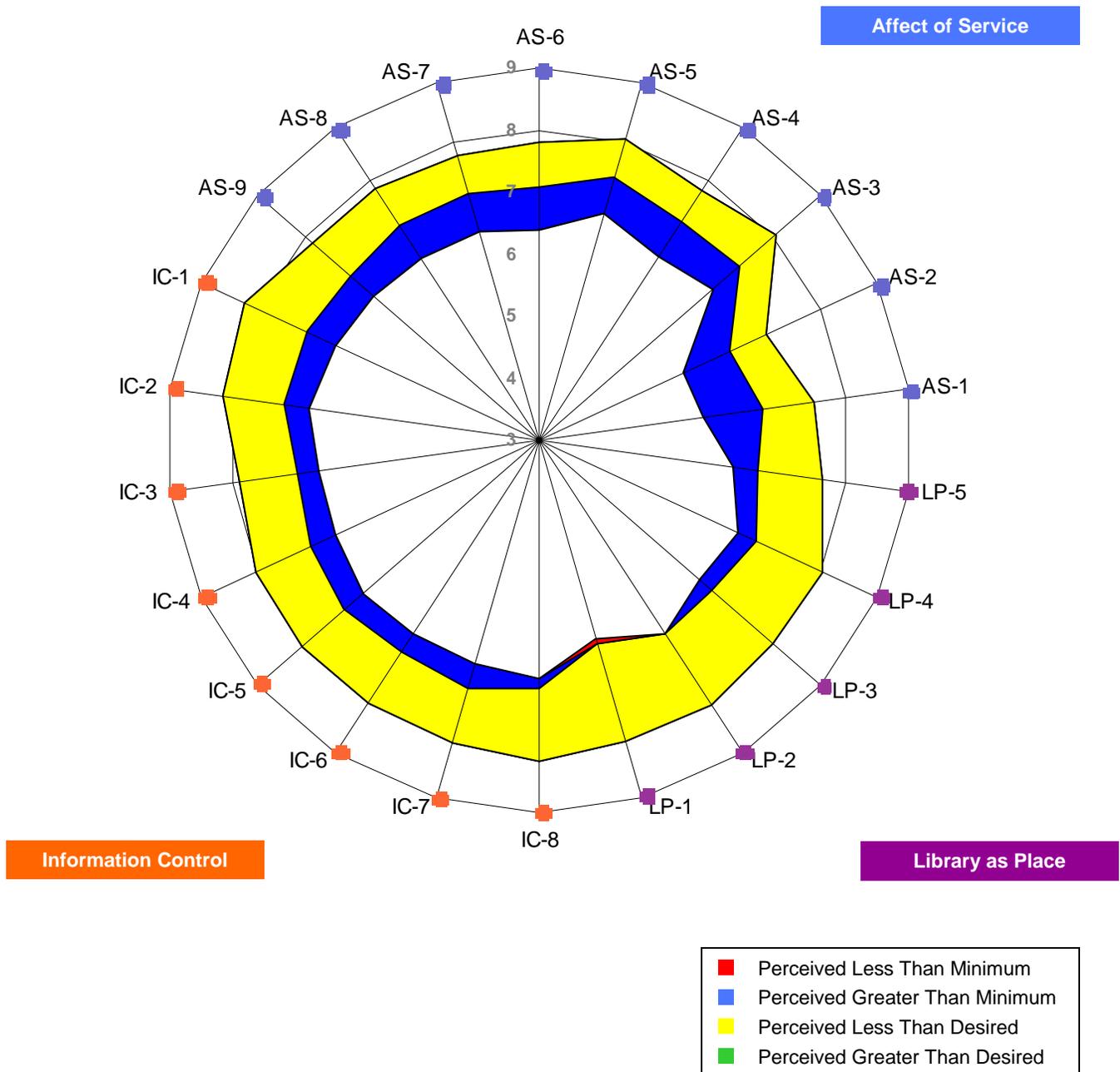
Sex	Population N	Population %	Respondent n	Respondent %
Female	397,654	58.04%	9,649	67.03%
Male	287,460	41.96%	4,745	32.97%
<b>Total:</b>	<b>685,114</b>	<b>100.00%</b>	<b>14,394</b>	<b>100.00%</b>

## 5.2 Core Questions Summary for Undergraduate

This radar chart shows aggregate results for the 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, on this chart they are grouped into sections: Affect of Service, Library as Place, and Information 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.)

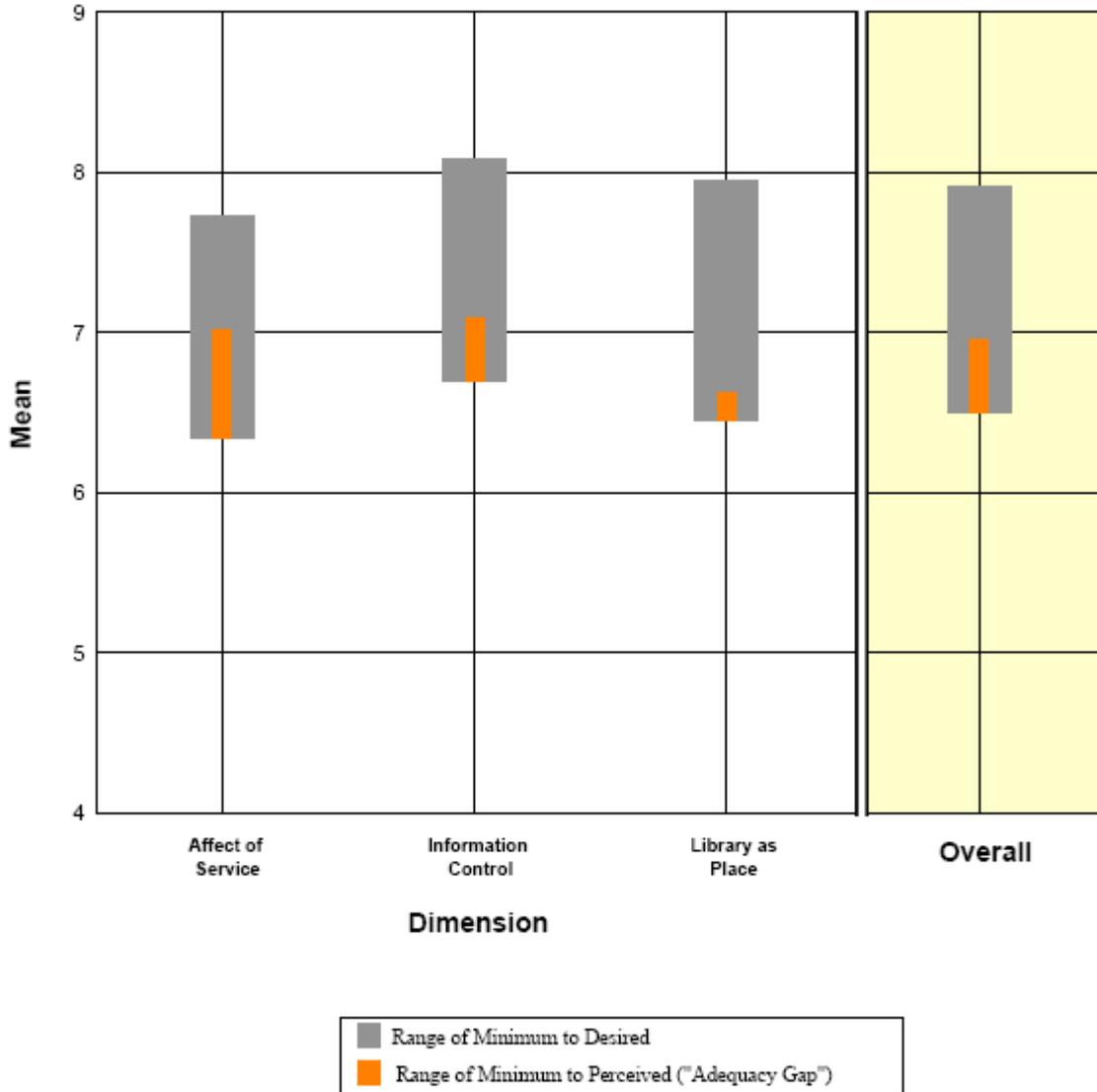


ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	5.68	7.48	6.63	0.96	-0.85	13,775
AS-2	Giving users individual attention	5.57	7.04	6.39	0.82	-0.65	13,635
AS-3	Employees who are consistently courteous	6.72	8.03	7.27	0.55	-0.76	14,163
AS-4	Readiness to respond to users' questions	6.52	7.81	7.18	0.66	-0.63	13,523
AS-5	Employees who have the knowledge to answer user questions	6.78	8.04	7.41	0.62	-0.63	13,654
AS-6	Employees who deal with users in a caring fashion	6.40	7.79	7.08	0.69	-0.71	13,739
AS-7	Employees who understand the needs of their users	6.49	7.78	7.13	0.64	-0.65	13,548
AS-8	Willingness to help users	6.51	7.83	7.13	0.63	-0.70	13,660
AS-9	Dependability in handling users' service problems	6.54	7.83	7.03	0.49	-0.81	11,063
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	6.63	8.24	7.13	0.50	-1.11	14,082
IC-2	A library Web site enabling me to locate information on my own	6.73	8.15	7.16	0.43	-0.98	14,263
IC-3	The printed library materials I need for my work	6.58	7.88	6.91	0.33	-0.97	12,992
IC-4	The electronic information resources I need	6.64	8.05	7.05	0.42	-1.00	14,011
IC-5	Modern equipment that lets me easily access needed information	6.75	8.08	7.17	0.42	-0.91	14,125
IC-6	Easy-to-use access tools that allow me to find things on my own	6.69	8.06	7.08	0.38	-0.98	14,064
IC-7	Making information easily accessible for independent use	6.73	8.06	7.17	0.45	-0.89	14,028
IC-8	Print and/or electronic journal collections I require for my work	6.85	8.18	7.00	0.14	-1.18	13,304
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	6.41	8.04	6.34	-0.08	-1.70	14,213
LP-2	Quiet space for individual activities	6.73	8.09	6.71	-0.02	-1.38	14,185
LP-3	A comfortable and inviting location	6.42	7.97	6.69	0.27	-1.28	14,229
LP-4	A getaway for study, learning, or research	6.53	8.03	6.85	0.31	-1.18	14,020
LP-5	Community space for group learning and group study	6.14	7.60	6.55	0.41	-1.05	13,401
<b>Overall:</b>		<b>6.50</b>	<b>7.91</b>	<b>6.96</b>	<b>0.46</b>	<b>-0.95</b>	<b>14,396</b>

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	1.67	1.42	1.58	1.80	1.65	13,775
AS-2	Giving users individual attention	1.86	1.66	1.71	1.84	1.73	13,635
AS-3	Employees who are consistently courteous	1.68	1.22	1.60	1.98	1.70	14,163
AS-4	Readiness to respond to users' questions	1.59	1.27	1.46	1.74	1.53	13,523
AS-5	Employees who have the knowledge to answer user questions	1.59	1.17	1.40	1.71	1.46	13,654
AS-6	Employees who deal with users in a caring fashion	1.68	1.30	1.50	1.82	1.59	13,739
AS-7	Employees who understand the needs of their users	1.62	1.27	1.42	1.75	1.50	13,548
AS-8	Willingness to help users	1.65	1.25	1.49	1.79	1.54	13,660
AS-9	Dependability in handling users' service problems	1.61	1.27	1.49	1.79	1.59	11,063
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	1.68	1.16	1.62	2.02	1.76	14,082
IC-2	A library Web site enabling me to locate information on my own	1.59	1.14	1.52	1.83	1.61	14,263
IC-3	The printed library materials I need for my work	1.63	1.31	1.50	1.85	1.67	12,992
IC-4	The electronic information resources I need	1.55	1.16	1.39	1.80	1.56	14,011
IC-5	Modern equipment that lets me easily access needed information	1.57	1.15	1.43	1.81	1.56	14,125
IC-6	Easy-to-use access tools that allow me to find things on my own	1.55	1.15	1.41	1.80	1.56	14,064
IC-7	Making information easily accessible for independent use	1.54	1.13	1.35	1.75	1.49	14,028
IC-8	Print and/or electronic journal collections I require for my work	1.62	1.16	1.55	2.00	1.72	13,304
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	1.70	1.28	1.82	2.26	2.10	14,213
LP-2	Quiet space for individual activities	1.70	1.27	1.82	2.32	2.09	14,185
LP-3	A comfortable and inviting location	1.69	1.22	1.73	2.17	1.94	14,229
LP-4	A getaway for study, learning, or research	1.68	1.24	1.61	2.08	1.82	14,020
LP-5	Community space for group learning and group study	1.87	1.58	1.77	2.32	2.17	13,401
<b>Overall:</b>		<b>1.65</b>	<b>1.26</b>	<b>1.55</b>	<b>1.92</b>	<b>1.70</b>	<b>14,396</b>

### 5.3 Core Question Dimensions Summary for Undergraduate

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



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 A.

<b>Dimension</b>	<b>Minimum Mean</b>	<b>Desired Mean</b>	<b>Perceived Mean</b>	<b>Adequacy Mean</b>	<b>Superiority Mean</b>	<b>n</b>
Affect of Service	6.34	7.73	7.02	0.68	-0.71	14,371
Information Control	6.70	8.09	7.09	0.39	-1.00	14,394
Library as Place	6.45	7.95	6.63	0.18	-1.32	14,371
<b>Overall:</b>	<b>6.50</b>	<b>7.92</b>	<b>6.95</b>	<b>0.45</b>	<b>-0.96</b>	<b>14,396</b>

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 A.

<b>Dimension</b>	<b>Minimum SD</b>	<b>Desired SD</b>	<b>Perceived SD</b>	<b>Adequacy SD</b>	<b>Superiority SD</b>	<b>n</b>
Affect of Service	1.35	1.00	1.20	1.43	1.22	14,371
Information Control	1.28	0.87	1.08	1.42	1.16	14,394
Library as Place	1.40	1.00	1.39	1.79	1.56	14,371
<b>Overall:</b>	<b>1.25</b>	<b>0.85</b>	<b>1.04</b>	<b>1.36</b>	<b>1.09</b>	<b>14,396</b>

## 5.4 Local Questions Summary for Undergraduate

This table shows mean scores for each of the local questions added by the individual libraries or consortium, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction of the notebook.)

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
A secure and safe place	7.27	8.29	7.79	0.52	-0.51	1,085
Ability to navigate library Web pages easily	6.69	8.10	6.98	0.29	-1.13	8,724
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	5.94	7.31	6.36	0.43	-0.95	1,893
Access to rare and historical materials	5.53	7.03	6.38	0.85	-0.65	314
Adequate hours of service	6.84	8.16	7.41	0.57	-0.76	7,872
Assuring users of the accuracy and confidentiality of their transactions	7.34	8.31	7.97	0.63	-0.33	192
Availability of subject specialist assistance	5.54	7.36	6.16	0.63	-1.20	536
Comprehensive collections of full text articles online	6.38	8.11	6.56	0.19	-1.55	431
Convenient business hours	6.86	8.16	7.65	0.80	-0.51	1,200
Ease and timeliness in getting materials from other libraries	6.28	7.73	6.78	0.49	-0.96	4,853
Ease of use of electronic resources	6.50	7.90	7.34	0.84	-0.56	1,331
Electronic resources matching my information needs	6.73	8.04	7.03	0.31	-1.00	1,520
Improving library-use skills as a by-product of seeking assistance from library staff	5.77	7.36	6.89	1.13	-0.47	738
Librarians providing help that assists in finding information needed now while improving my research skills	6.45	7.87	7.52	1.07	-0.35	1,744
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	6.46	7.88	7.50	1.04	-0.38	274
Librarians teaching me how to effectively use the electronically available databases, journals, and books	6.43	7.68	7.19	0.76	-0.49	1,226
Library orientations / instruction sessions	5.68	6.95	6.74	1.06	-0.21	2,029
Making me aware of library resources and services	5.92	7.35	6.45	0.53	-0.90	9,050
Online course support (readings, links, references)	6.21	7.87	6.81	0.61	-1.06	819
Providing search tools that permit me to work autonomously	6.60	7.98	7.23	0.63	-0.75	1,335
Ready access to computers / Internet / software	6.72	8.11	7.57	0.85	-0.54	1,359
Space for group / individual study and research needs	6.91	8.14	6.14	-0.78	-2.01	228
Space for students to study and work in groups	6.04	7.44	6.23	0.20	-1.21	392

Space that facilitates quiet study	6.98	8.27	6.33	-0.65	-1.94	233
Teaching me how to access, evaluate, and use information	5.90	7.38	6.61	0.71	-0.77	8,686
Teaching me how to locate, evaluate, and use information	6.64	7.97	7.51	0.87	-0.46	447
The library program teaches me how to access, evaluate, and use information	6.34	7.63	6.33	-0.01	-1.30	220
Timely document delivery / interlibrary loan	6.59	7.88	7.03	0.44	-0.86	674
Timely document delivery/interlibrary loan	6.30	7.78	7.44	1.14	-0.34	760

This table shows mean scores for each of the local questions added by the individual libraries or consortium, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction of the notebook.)

<b>Question Text</b>	<b>Minimum SD</b>	<b>Desired SD</b>	<b>Perceived SD</b>	<b>Adequacy SD</b>	<b>Superiority SD</b>	<b>n</b>
A secure and safe place	1.78	1.26	1.38	1.84	1.46	1,085
Ability to navigate library Web pages easily	1.61	1.16	1.55	1.96	1.71	8,724
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	1.80	1.57	1.75	2.13	2.03	1,893
Access to rare and historical materials	2.10	2.00	1.72	2.00	2.06	314
Adequate hours of service	1.70	1.20	1.67	2.21	1.89	7,872
Assuring users of the accuracy and confidentiality of their transactions	1.66	0.98	1.26	1.46	1.06	192
Availability of subject specialist assistance	1.76	1.45	1.68	1.88	1.81	536
Comprehensive collections of full text articles online	1.68	1.31	1.54	2.08	1.83	431
Convenient business hours	1.48	1.01	1.44	1.90	1.59	1,200
Ease and timeliness in getting materials from other libraries	1.77	1.41	1.64	2.05	1.84	4,853
Ease of use of electronic resources	1.45	1.10	1.33	1.73	1.55	1,331
Electronic resources matching my information needs	1.39	1.06	1.37	1.79	1.58	1,520
Improving library-use skills as a by-product of seeking assistance from library staff	1.79	1.40	1.34	1.77	1.50	738
Librarians providing help that assists in finding information needed now while improving my research skills	1.58	1.22	1.47	1.82	1.57	1,744
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	1.63	1.25	1.23	1.49	1.35	274
Librarians teaching me how to effectively use the electronically available databases, journals, and books	1.76	1.41	1.54	1.90	1.66	1,226
Library orientations / instruction sessions	2.03	1.84	1.82	2.12	1.94	2,029
Making me aware of library resources and services	1.81	1.52	1.68	2.05	1.91	9,050
Online course support (readings, links, references)	1.65	1.26	1.40	1.76	1.56	819
Providing search tools that permit me to work autonomously	1.35	1.03	1.28	1.57	1.42	1,335
Ready access to computers / Internet / software	1.44	1.00	1.39	1.80	1.51	1,359
Space for group / individual study and research needs	1.75	1.37	1.94	2.60	2.48	228
Space for students to study and work in groups	1.89	1.72	1.86	2.34	2.30	392
Space that facilitates quiet study	1.81	1.16	2.01	2.81	2.38	233

Teaching me how to access, evaluate, and use information	1.81	1.56	1.67	1.97	1.85	8,686
Teaching me how to locate, evaluate, and use information	1.75	1.29	1.43	1.78	1.53	447
The library program teaches me how to access, evaluate, and use information	1.72	1.35	1.83	2.09	1.96	220
Timely document delivery / interlibrary loan	1.70	1.30	1.58	1.92	1.69	674
Timely document delivery/interlibrary loan	1.55	1.18	1.39	1.86	1.56	760

### 5.5 General Satisfaction Questions Summary for Undergraduate

The table displays 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 respondent 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.

<b>Satisfaction Question</b>	<b>Mean</b>	<b>SD</b>	<b>n</b>
In general, I am satisfied with the way in which I am treated at the library.	7.30	1.55	14,395
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.01	1.54	14,396
How would you rate the overall quality of the service provided by the library?	7.08	1.27	14,395

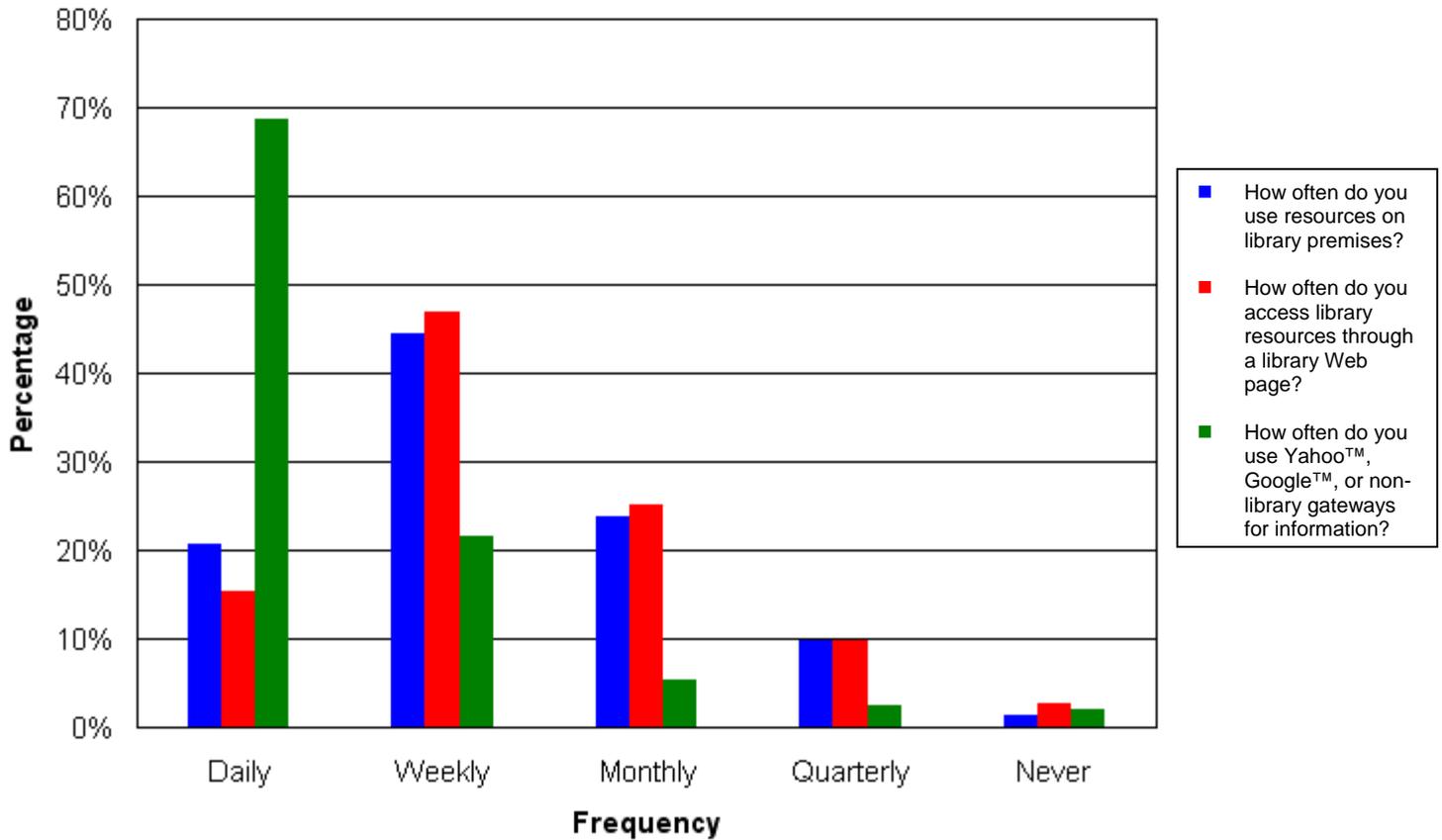
### 5.6 Information Literacy Outcomes Questions Summary for Undergraduate

The tables 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”.

<b>Information Literacy Outcomes Question</b>	<b>Mean</b>	<b>SD</b>	<b>n</b>
The library helps me stay abreast of developments in my field(s) of interest.	6.10	1.70	14,396
The library aids my advancement in my academic discipline.	6.84	1.59	14,396
The library enables me to be more efficient in my academic pursuits.	6.93	1.61	14,395
The library helps me distinguish between trustworthy and untrustworthy information.	6.25	1.86	14,394
The library provides me with the information skills I need in my work or study.	6.45	1.71	14,395

### 5.7 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 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 chart 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?	2,960 20.56%	6,410 44.53%	3,410 23.69%	1,417 9.84%	199 1.38%	14,396 100.00%
How often do you access library resources through a library Web page?	2,210 15.35%	6,766 47.00%	3,605 25.04%	1,422 9.88%	393 2.73%	14,396 100.00%
How often do you use Yahoo™, Google™, or non-library gateways for information?	9,894 68.73%	3,108 21.59%	766 5.32%	337 2.34%	290 2.01%	14,395 100.00%

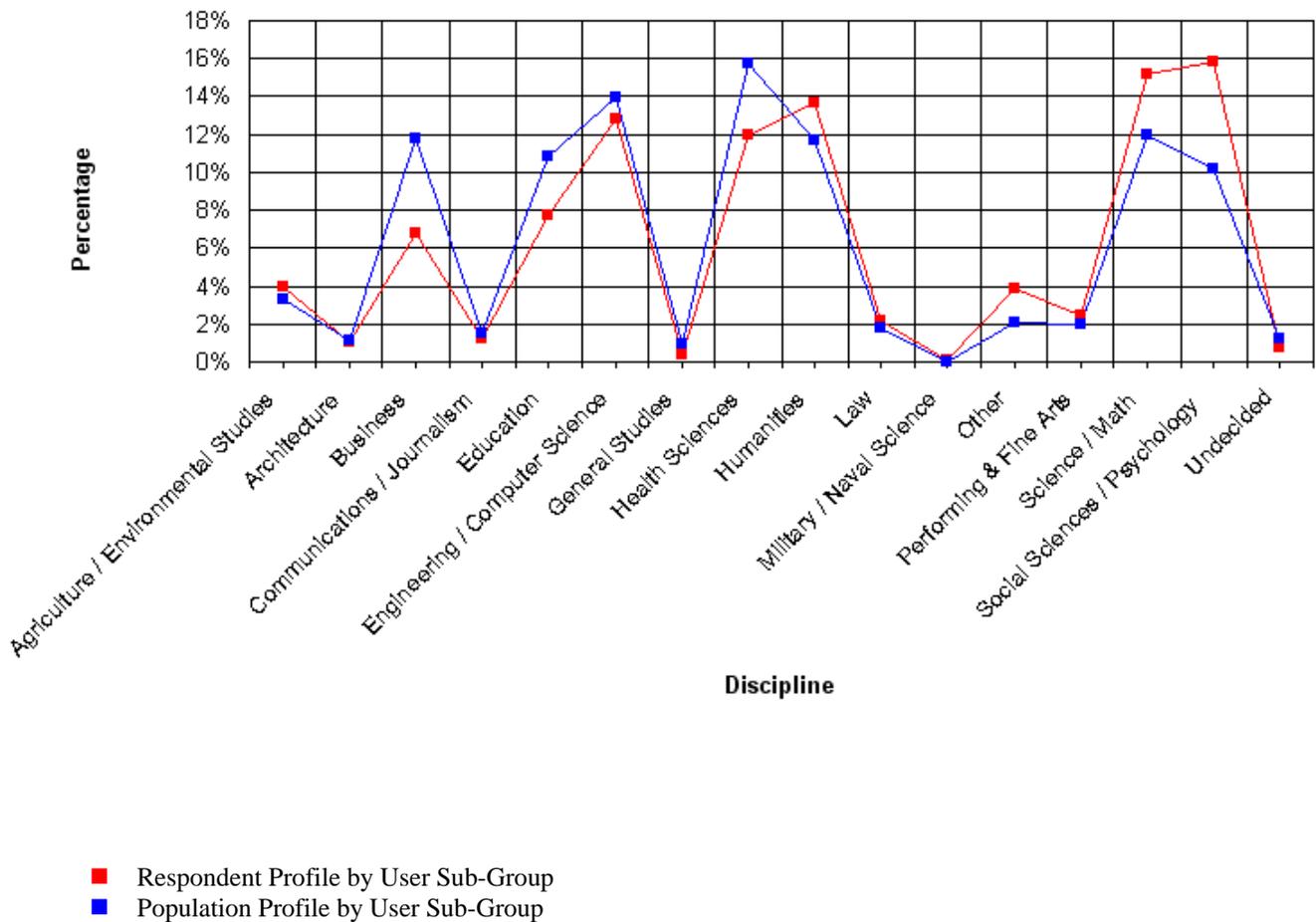
## 6.0 College or University Libraries Graduate Summary for CARL

### 6.1 Demographic Summary for Graduate

#### 6.1.1 Population and Respondent Profiles for Graduate Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.

This section shows survey respondents broken down based on the LibQUAL+® standard discipline categories. 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).



<b>Discipline</b>	<b>Population N</b>	<b>Population %</b>	<b>Respondent n</b>	<b>Respondent %</b>	<b>%N - %n</b>
Agriculture/Environmental Studies	4,056	3.29%	243	4.00%	-0.71%
Architecture	1,389	1.13%	61	1.00%	0.12%
Business	14,533	11.79%	412	6.79%	5.00%
Communications/Journalism	1,831	1.48%	74	1.22%	0.27%
Education	13,344	10.82%	470	7.74%	3.08%
Engineering/Computer Science	17,165	13.92%	778	12.82%	1.11%
General Studies	1,124	0.91%	24	0.40%	0.52%
Health Sciences	19,369	15.71%	726	11.96%	3.75%
Humanities	14,435	11.71%	831	13.69%	-1.98%
Law	2,260	1.83%	131	2.16%	-0.32%
Military/Naval Studies	48	0.04%	8	0.13%	-0.09%
Other	2,510	2.04%	232	3.82%	-1.79%
Performing & Fine Arts	2,455	1.99%	150	2.47%	-0.48%
Science/Math	14,755	11.97%	922	15.19%	-3.22%
Social Sciences/Psychology	12,516	10.15%	961	15.83%	-5.68%
Undecided	1,514	1.23%	48	0.79%	0.44%
<b>Total:</b>	<b>123,304</b>	<b>100.00%</b>	<b>6,071</b>	<b>100.00%</b>	<b>0.00%</b>

### 6.1.2 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.

Age	Respondent n	Respondent %
Under 18	1	0.02%
18 - 22	213	3.51%
23 - 30	3,820	62.94%
31 - 45	1,641	27.04%
46 - 65	384	6.33%
Over 65	10	0.16%
<b>Total:</b>	<b>6,069</b>	<b>100.00%</b>

### 6.1.3 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 and the demographic data provided by institutions in the online Representativeness section\*. The number and percentage for each sex are given for the general population and for survey respondents.

\*Note: Participating institutions were not required to be completed the Representativeness section. When population data is missing or incomplete, it is because this data was not provided.

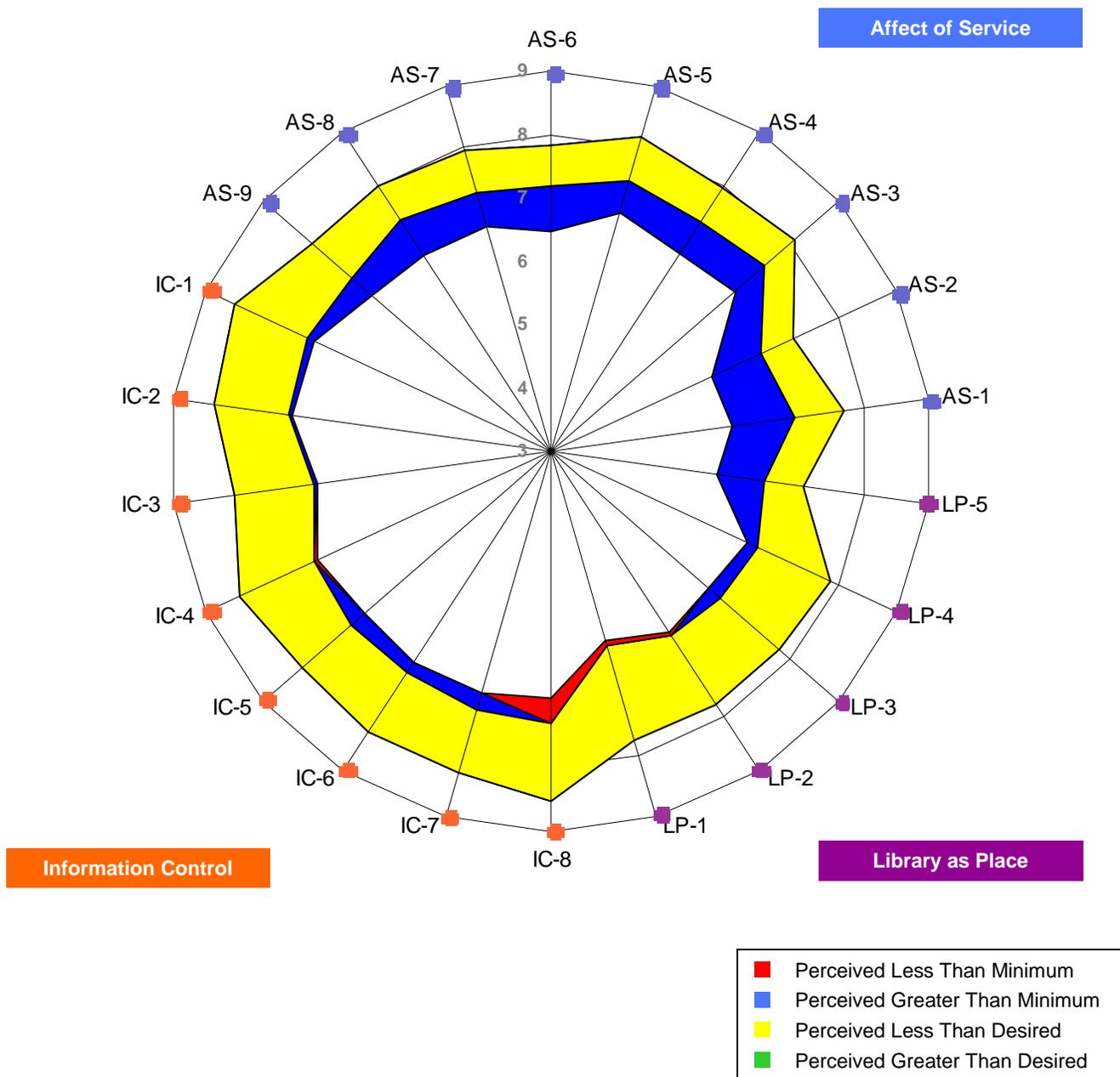
Sex	Population N	Population %	Respondent n	Respondent %
Female	66,995	53.21%	3,614	59.55%
Male	58,920	46.79%	2,455	40.45%
<b>Total:</b>	<b>125,915</b>	<b>100.00%</b>	<b>6,069</b>	<b>100.00%</b>

## 6.2 Core Questions Summary for Graduate

This radar chart shows aggregate results for the 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, on this chart they are grouped into sections: Affect of Service, Library as Place, and Information 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.)

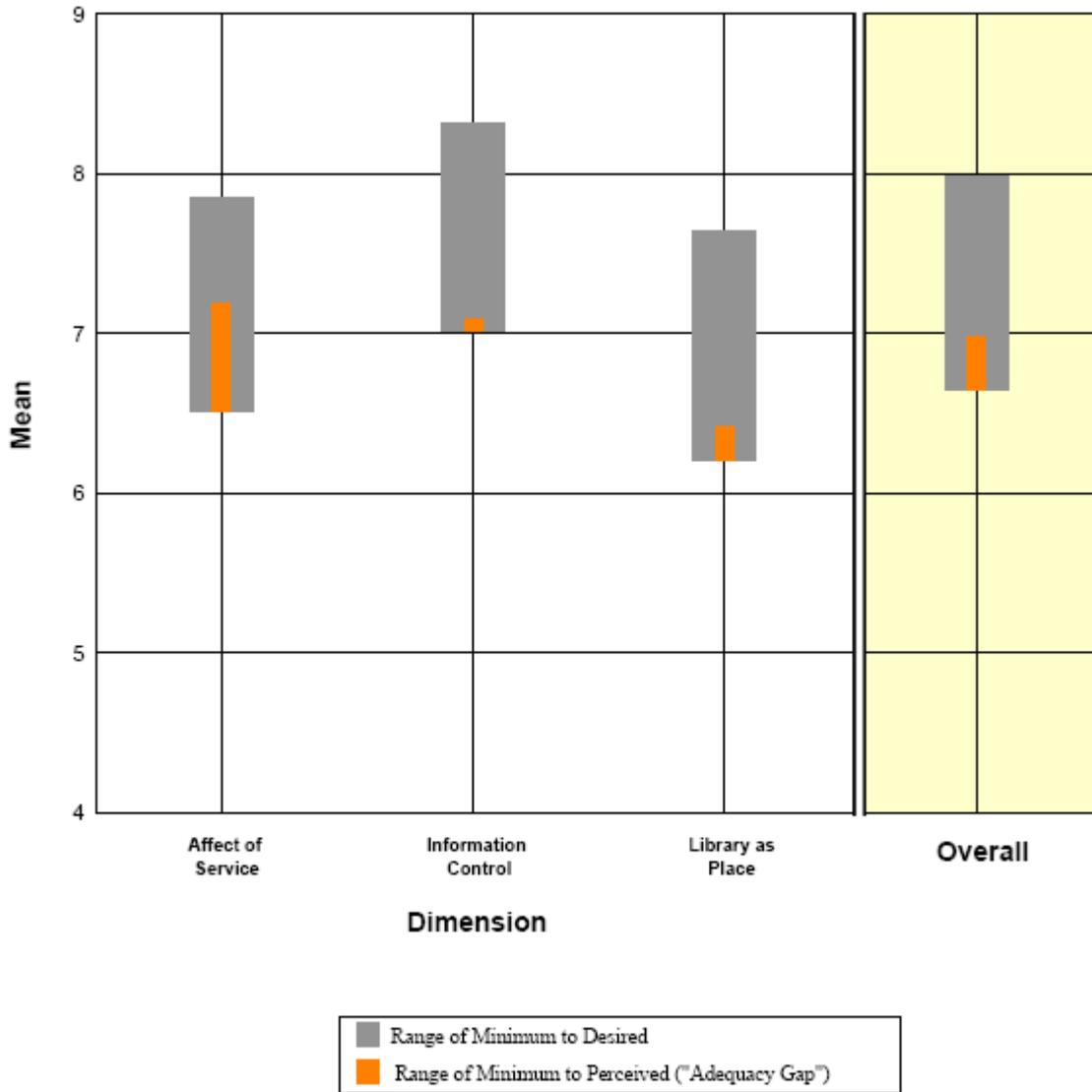


ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	5.88	7.66	6.87	0.99	-0.79	5,751
AS-2	Giving users individual attention	5.81	7.21	6.66	0.85	-0.56	5,769
AS-3	Employees who are consistently courteous	6.84	8.10	7.45	0.62	-0.65	5,969
AS-4	Readiness to respond to users' questions	6.71	7.97	7.33	0.62	-0.64	5,803
AS-5	Employees who have the knowledge to answer user questions	6.91	8.14	7.42	0.52	-0.72	5,802
AS-6	Employees who deal with users in a caring fashion	6.46	7.81	7.19	0.73	-0.62	5,805
AS-7	Employees who understand the needs of their users	6.67	7.93	7.23	0.57	-0.70	5,728
AS-8	Willingness to help users	6.69	7.98	7.34	0.64	-0.64	5,794
AS-9	Dependability in handling users' service problems	6.74	7.99	7.17	0.42	-0.82	4,845
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	7.09	8.50	7.23	0.14	-1.27	6,016
IC-2	A library Web site enabling me to locate information on my own	7.10	8.37	7.18	0.08	-1.18	6,036
IC-3	The printed library materials I need for my work	6.72	8.03	6.75	0.04	-1.28	5,519
IC-4	The electronic information resources I need	7.10	8.41	7.07	-0.04	-1.35	6,002
IC-5	Modern equipment that lets me easily access needed information	6.90	8.20	7.18	0.28	-1.02	5,870
IC-6	Easy-to-use access tools that allow me to find things on my own	6.98	8.28	7.16	0.18	-1.12	5,941
IC-7	Making information easily accessible for independent use	6.97	8.28	7.24	0.27	-1.04	5,899
IC-8	Print and/or electronic journal collections I require for my work	7.30	8.51	6.90	-0.40	-1.61	5,901
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	6.20	7.74	6.09	-0.11	-1.65	5,742
LP-2	Quiet space for individual activities	6.46	7.77	6.40	-0.05	-1.36	5,632
LP-3	A comfortable and inviting location	6.28	7.77	6.54	0.26	-1.23	5,840
LP-4	A getaway for study, learning, or research	6.40	7.86	6.60	0.19	-1.26	5,641
LP-5	Community space for group learning and group study	5.63	6.99	6.37	0.74	-0.61	4,832
<b>Overall:</b>		<b>6.63</b>	<b>7.98</b>	<b>6.97</b>	<b>0.34</b>	<b>-1.01</b>	<b>6,071</b>

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	1.68	1.37	1.55	1.81	1.63	5,751
AS-2	Giving users individual attention	1.84	1.63	1.65	1.79	1.67	5,769
AS-3	Employees who are consistently courteous	1.65	1.18	1.51	1.87	1.61	5,969
AS-4	Readiness to respond to users' questions	1.56	1.21	1.43	1.72	1.51	5,803
AS-5	Employees who have the knowledge to answer user questions	1.54	1.13	1.38	1.70	1.47	5,802
AS-6	Employees who deal with users in a caring fashion	1.66	1.31	1.46	1.79	1.57	5,805
AS-7	Employees who understand the needs of their users	1.57	1.22	1.41	1.70	1.50	5,728
AS-8	Willingness to help users	1.59	1.22	1.43	1.72	1.50	5,794
AS-9	Dependability in handling users' service problems	1.55	1.21	1.48	1.75	1.59	4,845
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	1.59	0.99	1.57	2.00	1.69	6,016
IC-2	A library Web site enabling me to locate information on my own	1.52	1.04	1.52	1.85	1.60	6,036
IC-3	The printed library materials I need for my work	1.63	1.32	1.57	1.96	1.80	5,519
IC-4	The electronic information resources I need	1.46	0.99	1.41	1.83	1.57	6,002
IC-5	Modern equipment that lets me easily access needed information	1.50	1.10	1.40	1.77	1.55	5,870
IC-6	Easy-to-use access tools that allow me to find things on my own	1.47	1.04	1.37	1.77	1.51	5,941
IC-7	Making information easily accessible for independent use	1.44	1.01	1.33	1.70	1.43	5,899
IC-8	Print and/or electronic journal collections I require for my work	1.45	0.95	1.58	2.02	1.74	5,901
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	1.81	1.56	1.88	2.41	2.33	5,742
LP-2	Quiet space for individual activities	1.86	1.60	1.87	2.46	2.30	5,632
LP-3	A comfortable and inviting location	1.74	1.41	1.75	2.20	2.05	5,840
LP-4	A getaway for study, learning, or research	1.78	1.46	1.70	2.14	1.99	5,641
LP-5	Community space for group learning and group study	2.08	1.97	1.73	2.35	2.29	4,832
<b>Overall:</b>		<b>1.64</b>	<b>1.27</b>	<b>1.54</b>	<b>1.92</b>	<b>1.72</b>	<b>6,071</b>

### 6.3 Core Question Dimensions Summary for Graduate

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



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 A.

<b>Dimension</b>	<b>Minimum Mean</b>	<b>Desired Mean</b>	<b>Perceived Mean</b>	<b>Adequacy Mean</b>	<b>Superiority Mean</b>	<b>n</b>
Affect of Service	6.51	7.86	7.18	0.67	-0.67	6,066
Information Control	7.02	8.32	7.09	0.07	-1.23	6,071
Library as Place	6.20	7.64	6.42	0.22	-1.22	5,985
<b>Overall:</b>	<b>6.64</b>	<b>7.99</b>	<b>6.98</b>	<b>0.34</b>	<b>-1.01</b>	<b>6,071</b>

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 A.

<b>Dimension</b>	<b>Minimum SD</b>	<b>Desired SD</b>	<b>Perceived SD</b>	<b>Adequacy SD</b>	<b>Superiority SD</b>	<b>n</b>
Affect of Service	1.34	0.98	1.19	1.42	1.23	6,066
Information Control	1.22	0.79	1.09	1.43	1.18	6,071
Library as Place	1.54	1.27	1.45	1.87	1.74	5,985
<b>Overall:</b>	<b>1.21</b>	<b>0.83</b>	<b>1.04</b>	<b>1.34</b>	<b>1.11</b>	<b>6,071</b>

## 6.4 Local Questions Summary for Graduate

This table shows mean scores for each of the local questions added by the individual libraries or consortium, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction of the notebook.)

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
A secure and safe place	7.04	8.12	7.49	0.45	-0.63	429
Ability to navigate library Web pages easily	7.02	8.35	7.00	-0.03	-1.35	3,909
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	5.96	7.26	6.33	0.37	-0.92	499
Access to rare and historical materials	5.88	7.07	6.64	0.76	-0.42	153
Adequate hours of service	6.89	8.11	7.45	0.55	-0.66	3,131
Assuring users of the accuracy and confidentiality of their transactions	7.29	8.27	8.03	0.74	-0.24	131
Availability of subject specialist assistance	5.71	7.30	6.29	0.58	-1.01	561
Comprehensive collections of full text articles online	7.13	8.44	6.67	-0.46	-1.77	236
Convenient business hours	6.87	8.14	7.61	0.74	-0.53	509
Ease and timeliness in getting materials from other libraries	6.71	8.16	7.10	0.39	-1.06	2,535
Ease of use of electronic resources	6.77	8.14	7.31	0.54	-0.83	602
Electronic resources matching my information needs	6.98	8.37	6.66	-0.32	-1.71	571
Improving library-use skills as a by-product of seeking assistance from library staff	5.92	7.50	6.92	1.01	-0.57	260
Librarians providing help that assists in finding information needed now while improving my research skills	6.59	7.98	7.64	1.05	-0.33	1,154
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	6.79	8.13	7.49	0.70	-0.64	193
Librarians teaching me how to effectively use the electronically available databases, journals, and books	6.54	7.85	6.83	0.29	-1.02	378
Library orientations / instruction sessions	5.97	7.26	6.81	0.83	-0.45	464
Making me aware of library resources and services	6.12	7.52	6.57	0.45	-0.95	3,329
Online course support (readings, links, references)	6.10	7.70	6.73	0.63	-0.97	235
Providing search tools that permit me to work autonomously	6.81	8.21	7.05	0.24	-1.16	419
Ready access to computers / Internet / software	6.90	8.18	7.77	0.87	-0.41	593
Space for group / individual study and research needs	6.32	7.64	6.30	-0.02	-1.34	142
Space for students to study and work in groups	5.86	7.13	5.95	0.08	-1.19	258

Space that facilitates quiet study	6.70	7.80	5.99	-0.70	-1.81	151
Teaching me how to access, evaluate, and use information	6.08	7.50	6.68	0.60	-0.81	2,792
Teaching me how to locate, evaluate, and use information	6.90	7.98	7.49	0.59	-0.49	220
The library program teaches me how to access, evaluate, and use information	6.11	7.38	6.79	0.68	-0.59	217
Timely document delivery / interlibrary loan	7.09	8.32	7.25	0.16	-1.07	563
Timely document delivery/interlibrary loan	6.62	8.09	7.60	0.98	-0.49	472

This table shows mean scores for each of the local questions added by the individual libraries or consortium, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction of the notebook.)

<b>Question Text</b>	<b>Minimum SD</b>	<b>Desired SD</b>	<b>Perceived SD</b>	<b>Adequacy SD</b>	<b>Superiority SD</b>	<b>n</b>
A secure and safe place	1.78	1.33	1.39	1.83	1.57	429
Ability to navigate library Web pages easily	1.52	1.02	1.55	1.91	1.67	3,909
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	1.65	1.47	1.85	2.07	2.01	499
Access to rare and historical materials	1.94	2.01	1.60	2.01	2.10	153
Adequate hours of service	1.63	1.22	1.52	2.02	1.76	3,131
Assuring users of the accuracy and confidentiality of their transactions	1.37	0.99	1.02	1.35	1.15	131
Availability of subject specialist assistance	1.82	1.59	1.80	1.95	1.89	561
Comprehensive collections of full text articles online	1.37	0.98	1.50	1.87	1.68	236
Convenient business hours	1.51	1.14	1.42	1.87	1.58	509
Ease and timeliness in getting materials from other libraries	1.63	1.18	1.61	1.98	1.75	2,535
Ease of use of electronic resources	1.33	1.00	1.36	1.82	1.54	602
Electronic resources matching my information needs	1.40	0.94	1.52	1.89	1.70	571
Improving library-use skills as a by-product of seeking assistance from library staff	1.78	1.46	1.35	1.74	1.58	260
Librarians providing help that assists in finding information needed now while improving my research skills	1.57	1.20	1.31	1.64	1.44	1,154
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	1.56	1.07	1.21	1.52	1.19	193
Librarians teaching me how to effectively use the electronically available databases, journals, and books	1.80	1.35	1.72	2.04	1.83	378
Library orientations / instruction sessions	1.94	1.77	1.69	1.80	1.66	464
Making me aware of library resources and services	1.76	1.49	1.61	1.92	1.82	3,329
Online course support (readings, links, references)	1.63	1.49	1.38	1.72	1.58	235
Providing search tools that permit me to work autonomously	1.43	1.01	1.40	1.74	1.49	419
Ready access to computers / Internet / software	1.43	1.04	1.21	1.63	1.37	593
Space for group / individual study and research needs	1.84	1.64	1.65	2.52	2.31	142
Space for students to study and work in groups	1.89	1.94	1.76	2.35	2.46	258
Space that facilitates quiet study	1.84	1.60	1.97	2.79	2.55	151

Teaching me how to access, evaluate, and use information	1.79	1.59	1.65	1.91	1.83	2,792
Teaching me how to locate, evaluate, and use information	1.76	1.31	1.51	1.74	1.44	220
The library program teaches me how to access, evaluate, and use information	1.95	1.71	1.53	1.92	1.91	217
Timely document delivery / interlibrary loan	1.62	1.05	1.49	1.79	1.54	563
Timely document delivery/interlibrary loan	1.35	1.02	1.31	1.73	1.58	472

## 6.5 General Satisfaction Questions Summary for Graduate

The table displays 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 respondent 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.	7.45	1.46	6,071
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.08	1.57	6,070
How would you rate the overall quality of the service provided by the library?	7.14	1.31	6,071

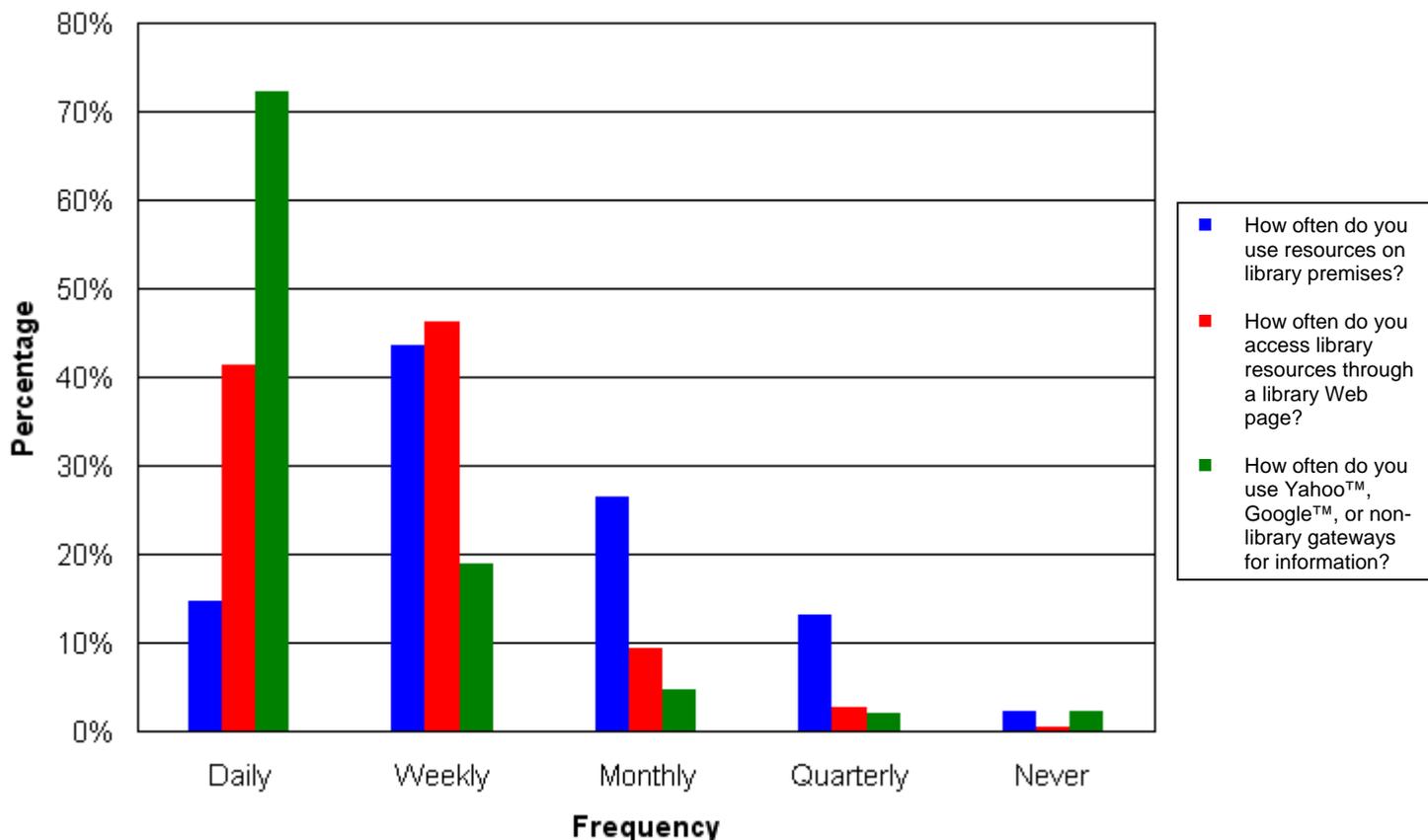
## 6.6 Information Literacy Outcomes Questions Summary for Graduate

The tables 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 Question	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	6.29	1.87	6,071
The library aids my advancement in my academic discipline.	7.02	1.62	6,071
The library enables me to be more efficient in my academic pursuits.	7.03	1.63	6,070
The library helps me distinguish between trustworthy and untrustworthy information.	5.77	1.95	6,071
The library provides me with the information skills I need in my work or study.	6.32	1.79	6,071

### 6.7 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 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 chart 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?	892 14.69%	2,646 43.58%	1,599 26.34%	796 13.11%	138 2.27%	6,071 100.00%
How often do you access library resources through a library Web page?	2,512 41.38%	2,802 46.15%	570 9.39%	156 2.57%	31 0.51%	6,071 100.00%
How often do you use Yahoo™, Google™, or non-library gateways for information?	4,383 72.20%	1,152 18.98%	284 4.68%	120 1.98%	132 2.17%	6,071 100.00%

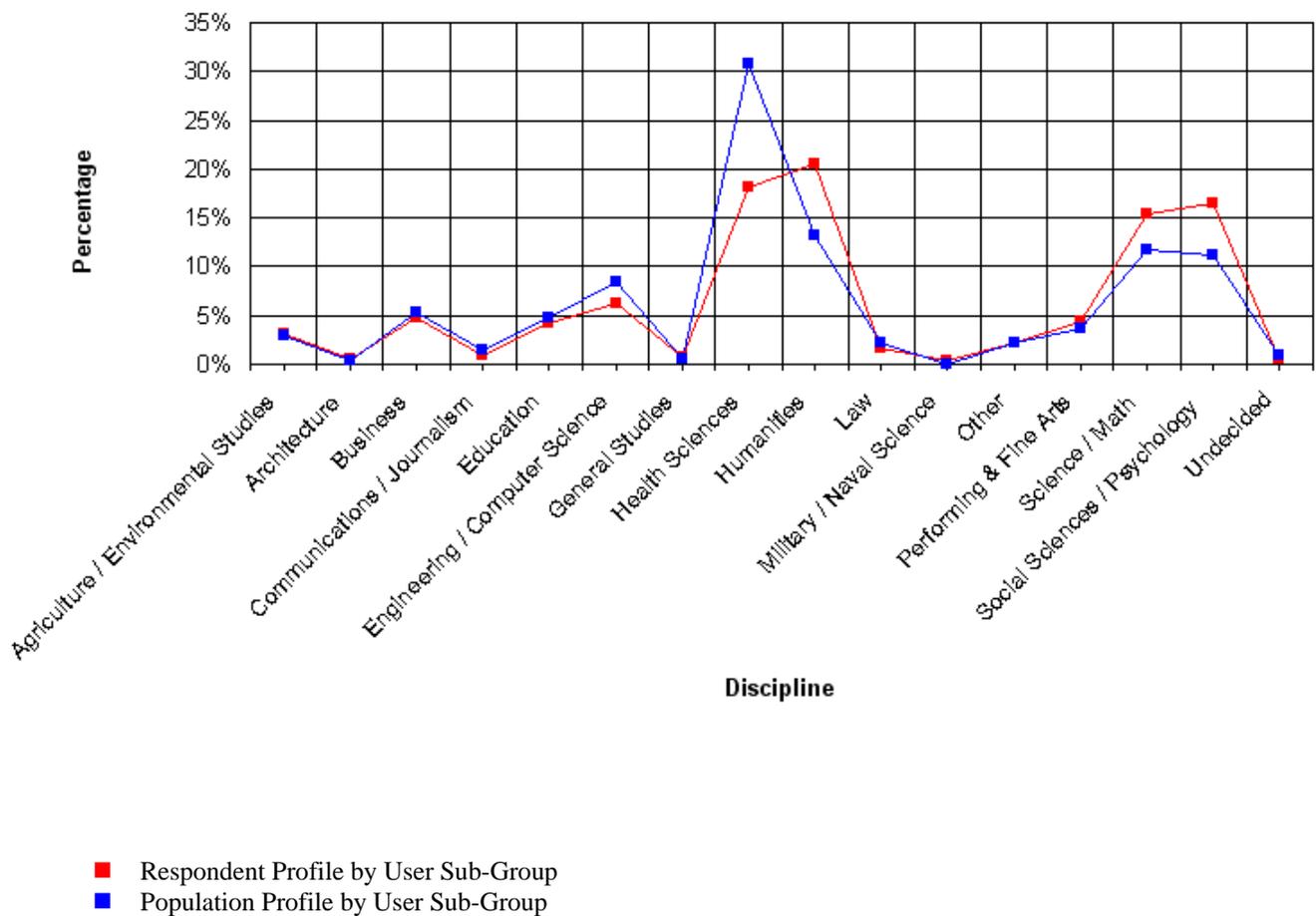
## 7.0 College or University Libraries Faculty Summary for CARL

### 7.1 Demographic Summary for Faculty

#### 7.1.1 Population and Respondent Profiles for Faculty Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.

This section shows survey respondents broken down based on the LibQUAL+® standard discipline categories. 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).



<b>Discipline</b>	<b>Population N</b>	<b>Population %</b>	<b>Respondent n</b>	<b>Respondent %</b>	<b>%N - %n</b>
Agriculture/Environmental Studies	1,343	2.97%	112	3.08%	-0.12%
Architecture	185	0.41%	20	0.55%	-0.14%
Business	2,400	5.31%	173	4.76%	0.54%
Communications/Journalism	699	1.55%	34	0.94%	0.61%
Education	2,186	4.83%	155	4.27%	0.56%
Engineering/Computer Science	3,837	8.48%	223	6.14%	2.34%
General Studies	221	0.49%	25	0.69%	-0.20%
Health Sciences	13,952	30.84%	660	18.18%	12.67%
Humanities	5,949	13.15%	742	20.44%	-7.28%
Law	1,001	2.21%	61	1.68%	0.53%
Military/Naval Studies	19	0.04%	12	0.33%	-0.29%
Other	983	2.17%	77	2.12%	0.05%
Performing & Fine Arts	1,673	3.70%	157	4.32%	-0.63%
Science/Math	5,331	11.79%	557	15.34%	-3.55%
Social Sciences/Psychology	5,023	11.10%	600	16.52%	-5.42%
Undecided	431	0.95%	23	0.63%	0.32%
<b>Total:</b>	<b>45,233</b>	<b>100.00%</b>	<b>3,631</b>	<b>100.00%</b>	<b>0.00%</b>

### 7.1.2 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.

Age	Respondent n	Respondent %
Under 18	2	0.06%
18 - 22	-	0.00%
23 - 30	99	2.72%
31 - 45	1,366	37.57%
46 - 65	1,986	54.62%
Over 65	183	5.03%
<b>Total:</b>	<b>3,636</b>	<b>100.00%</b>

### 7.1.3 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 and the demographic data provided by institutions in the online Representativeness section\*. The number and percentage for each sex are given for the general population and for survey respondents.

\*Note: Participating institutions were not required to be completed the Representativeness section. When population data is missing or incomplete, it is because this data was not provided.

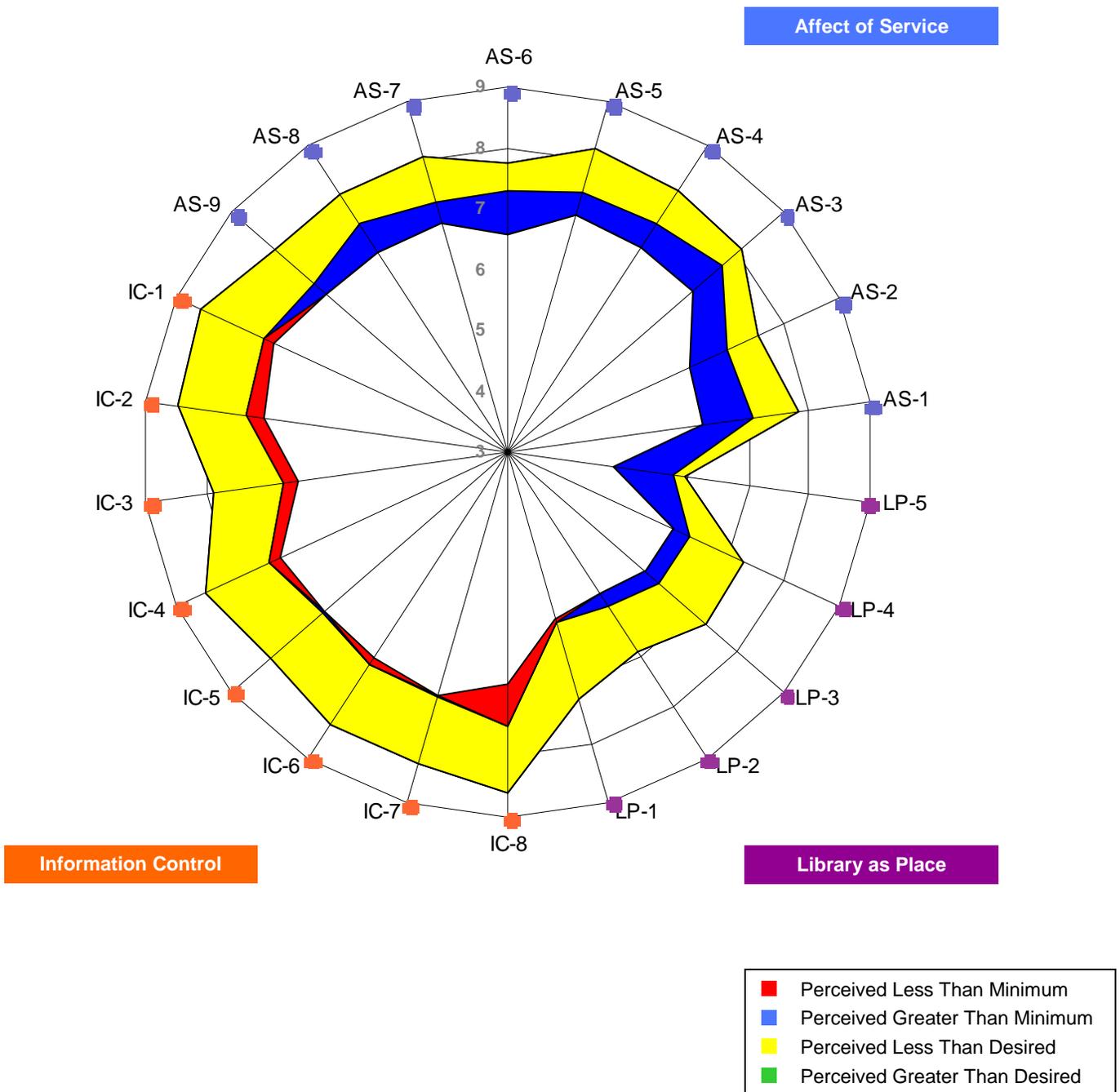
Sex	Population N	Population %	Respondent n	Respondent %
Female	15,826	34.03%	1,536	42.35%
Male	30,674	65.97%	2,091	57.65%
<b>Total:</b>	<b>46,500</b>	<b>100.00%</b>	<b>3,627</b>	<b>100.00%</b>

## 7.2 Core Questions Summary for Faculty

This radar chart shows aggregate results for the 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, on this chart they are grouped into sections: Affect of Service, Library as Place, and Information 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.)

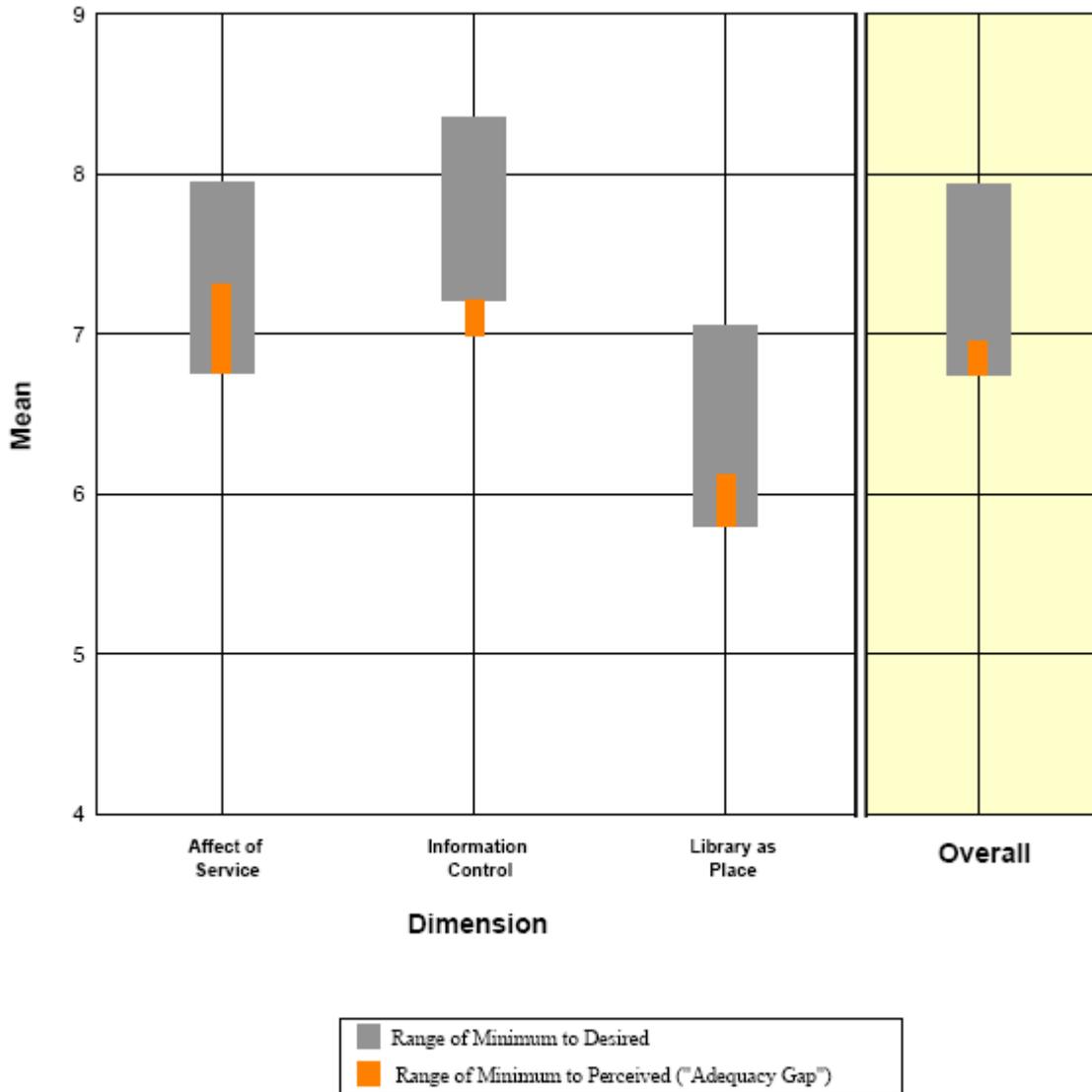


ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	6.23	7.83	7.05	0.82	-0.78	3,440
AS-2	Giving users individual attention	6.31	7.54	6.99	0.68	-0.56	3,482
AS-3	Employees who are consistently courteous	7.03	8.10	7.66	0.63	-0.44	3,570
AS-4	Readiness to respond to users' questions	7.01	8.11	7.48	0.47	-0.63	3,501
AS-5	Employees who have the knowledge to answer user questions	7.06	8.19	7.44	0.38	-0.76	3,501
AS-6	Employees who deal with users in a caring fashion	6.56	7.74	7.29	0.73	-0.45	3,427
AS-7	Employees who understand the needs of their users	6.91	8.05	7.26	0.34	-0.79	3,452
AS-8	Willingness to help users	6.91	8.04	7.49	0.58	-0.55	3,446
AS-9	Dependability in handling users' service problems	6.94	8.08	7.23	0.29	-0.85	3,029
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	7.42	8.58	7.25	-0.17	-1.33	3,585
IC-2	A library Web site enabling me to locate information on my own	7.34	8.46	7.02	-0.32	-1.44	3,599
IC-3	The printed library materials I need for my work	6.71	7.89	6.46	-0.25	-1.43	3,331
IC-4	The electronic information resources I need	7.33	8.48	7.10	-0.23	-1.37	3,590
IC-5	Modern equipment that lets me easily access needed information	7.00	8.14	7.02	0.02	-1.12	3,415
IC-6	Easy-to-use access tools that allow me to find things on my own	7.16	8.33	7.02	-0.13	-1.31	3,543
IC-7	Making information easily accessible for independent use	7.16	8.33	7.19	0.03	-1.14	3,472
IC-8	Print and/or electronic journal collections I require for my work	7.52	8.59	6.81	-0.71	-1.78	3,537
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	5.91	7.22	5.85	-0.06	-1.37	3,105
LP-2	Quiet space for individual activities	5.78	6.93	6.02	0.24	-0.90	2,836
LP-3	A comfortable and inviting location	5.98	7.31	6.28	0.30	-1.03	3,234
LP-4	A getaway for study, learning, or research	5.98	7.27	6.29	0.32	-0.97	2,959
LP-5	Community space for group learning and group study	4.77	5.93	5.74	0.97	-0.19	2,261
<b>Overall:</b>		<b>6.68</b>	<b>7.87</b>	<b>6.91</b>	<b>0.22</b>	<b>-0.96</b>	<b>3,638</b>

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	1.71	1.42	1.53	1.82	1.67	3,440
AS-2	Giving users individual attention	1.72	1.54	1.59	1.80	1.68	3,482
AS-3	Employees who are consistently courteous	1.65	1.24	1.46	1.83	1.56	3,570
AS-4	Readiness to respond to users' questions	1.51	1.16	1.46	1.72	1.53	3,501
AS-5	Employees who have the knowledge to answer user questions	1.52	1.13	1.41	1.66	1.45	3,501
AS-6	Employees who deal with users in a caring fashion	1.78	1.50	1.50	1.81	1.63	3,427
AS-7	Employees who understand the needs of their users	1.57	1.23	1.50	1.77	1.58	3,452
AS-8	Willingness to help users	1.61	1.29	1.43	1.73	1.53	3,446
AS-9	Dependability in handling users' service problems	1.51	1.21	1.48	1.74	1.58	3,029
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	1.50	0.90	1.56	1.93	1.65	3,585
IC-2	A library Web site enabling me to locate information on my own	1.46	0.97	1.53	1.90	1.65	3,599
IC-3	The printed library materials I need for my work	1.73	1.53	1.74	2.17	2.08	3,331
IC-4	The electronic information resources I need	1.42	0.97	1.42	1.85	1.58	3,590
IC-5	Modern equipment that lets me easily access needed information	1.58	1.23	1.47	1.86	1.63	3,415
IC-6	Easy-to-use access tools that allow me to find things on my own	1.45	1.02	1.42	1.86	1.58	3,543
IC-7	Making information easily accessible for independent use	1.43	1.02	1.38	1.77	1.50	3,472
IC-8	Print and/or electronic journal collections I require for my work	1.41	0.92	1.65	2.07	1.80	3,537
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	1.98	2.00	1.92	2.53	2.59	3,105
LP-2	Quiet space for individual activities	2.16	2.17	1.93	2.63	2.66	2,836
LP-3	A comfortable and inviting location	1.88	1.77	1.83	2.35	2.31	3,234
LP-4	A getaway for study, learning, or research	2.15	2.07	1.79	2.35	2.36	2,959
LP-5	Community space for group learning and group study	2.31	2.47	1.86	2.43	2.58	2,261
<b>Overall:</b>		<b>1.68</b>	<b>1.40</b>	<b>1.59</b>	<b>1.98</b>	<b>1.83</b>	<b>3,638</b>

### 7.3 Core Question Dimensions Summary for Faculty

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



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 A.

<b>Dimension</b>	<b>Minimum Mean</b>	<b>Desired Mean</b>	<b>Perceived Mean</b>	<b>Adequacy Mean</b>	<b>Superiority Mean</b>	<b>n</b>
Affect of Service	6.76	7.95	7.31	0.55	-0.64	3,638
Information Control	7.21	8.35	6.99	-0.22	-1.36	3,638
Library as Place	5.80	7.05	6.12	0.32	-0.93	3,468
<b>Overall:</b>	<b>6.75</b>	<b>7.93</b>	<b>6.95</b>	<b>0.20</b>	<b>-0.98</b>	<b>3,638</b>

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 A.

<b>Dimension</b>	<b>Minimum SD</b>	<b>Desired SD</b>	<b>Perceived SD</b>	<b>Adequacy SD</b>	<b>Superiority SD</b>	<b>n</b>
Affect of Service	1.36	1.04	1.25	1.45	1.29	3,638
Information Control	1.17	0.75	1.17	1.49	1.25	3,638
Library as Place	1.77	1.72	1.57	2.04	2.03	3,468
<b>Overall:</b>	<b>1.20</b>	<b>0.89</b>	<b>1.11</b>	<b>1.37</b>	<b>1.19</b>	<b>3,638</b>

## 7.4 Local Questions Summary for Faculty

This table shows mean scores for each of the local questions added by the individual libraries or consortium, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction of the notebook.)

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
A secure and safe place	6.50	7.53	7.20	0.70	-0.33	262
Ability to navigate library Web pages easily	7.21	8.37	6.76	-0.45	-1.61	2,719
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	5.94	6.98	5.70	-0.24	-1.29	115
Access to rare and historical materials	5.89	7.11	6.48	0.60	-0.63	62
Adequate hours of service	6.69	7.79	7.22	0.53	-0.57	2,184
Assuring users of the accuracy and confidentiality of their transactions	7.19	8.21	7.90	0.70	-0.31	77
Availability of subject specialist assistance	5.60	7.12	6.46	0.86	-0.66	145
Comprehensive collections of full text articles online	7.08	8.22	6.76	-0.33	-1.46	83
Convenient business hours	6.87	7.89	7.29	0.42	-0.61	178
Ease and timeliness in getting materials from other libraries	6.86	8.16	6.99	0.13	-1.18	1,908
Ease of use of electronic resources	7.18	8.14	7.04	-0.13	-1.09	137
Electronic resources matching my information needs	7.24	8.49	6.62	-0.62	-1.87	233
Improving library-use skills as a by-product of seeking assistance from library staff	5.89	7.31	6.91	1.03	-0.40	116
Librarians providing help that assists in finding information needed now while improving my research skills	6.73	7.82	7.53	0.80	-0.29	249
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	6.77	7.81	7.26	0.49	-0.55	53
Librarians teaching me how to effectively use the electronically available databases, journals, and books	6.82	7.90	7.00	0.18	-0.90	50
Library orientations / instruction sessions	5.96	7.17	6.96	1.00	-0.21	100
Making me aware of library resources and services	6.22	7.42	6.63	0.42	-0.79	2,476
Online course support (readings, links, references)	6.42	7.64	6.89	0.48	-0.74	113
Providing search tools that permit me to work autonomously	7.29	8.41	6.76	-0.52	-1.65	63
Ready access to computers / Internet / software	6.97	8.01	7.42	0.45	-0.59	122
Space for group / individual study and research needs	5.42	6.66	5.68	0.27	-0.98	130
Space for students to study and work in groups	5.41	6.65	5.19	-0.22	-1.46	104

Space that facilitates quiet study	5.59	6.82	5.88	0.29	-0.94	138
Teaching me how to access, evaluate, and use information	5.98	7.28	6.68	0.70	-0.61	1,834
Teaching me how to locate, evaluate, and use information	6.50	7.67	7.70	1.20	0.03	70
The library program teaches me how to access, evaluate, and use information	6.00	7.30	6.76	0.76	-0.54	239
Timely document delivery / interlibrary loan	6.95	8.09	7.12	0.17	-0.97	385
Timely document delivery/interlibrary loan	6.98	8.02	7.31	0.34	-0.71	122

This table shows mean scores for each of the local questions added by the individual libraries or consortium, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction of the notebook.)

<b>Question Text</b>	<b>Minimum SD</b>	<b>Desired SD</b>	<b>Perceived SD</b>	<b>Adequacy SD</b>	<b>Superiority SD</b>	<b>n</b>
A secure and safe place	2.28	2.04	1.56	2.18	2.08	262
Ability to navigate library Web pages easily	1.51	1.08	1.59	2.00	1.76	2,719
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	1.97	1.84	1.99	2.26	2.16	115
Access to rare and historical materials	2.32	2.22	2.08	2.51	2.34	62
Adequate hours of service	1.68	1.43	1.53	2.01	1.81	2,184
Assuring users of the accuracy and confidentiality of their transactions	1.53	1.00	1.06	1.25	1.12	77
Availability of subject specialist assistance	1.90	1.88	1.63	2.24	2.22	145
Comprehensive collections of full text articles online	1.56	1.17	1.40	1.99	1.74	83
Convenient business hours	1.53	1.35	1.47	1.88	1.80	178
Ease and timeliness in getting materials from other libraries	1.60	1.23	1.61	2.02	1.79	1,908
Ease of use of electronic resources	1.26	0.92	1.55	1.80	1.60	137
Electronic resources matching my information needs	1.44	0.97	1.56	1.95	1.77	233
Improving library-use skills as a by-product of seeking assistance from library staff	1.78	1.62	1.64	1.93	1.96	116
Librarians providing help that assists in finding information needed now while improving my research skills	1.80	1.51	1.51	1.93	1.72	249
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	1.68	1.71	1.16	1.99	1.73	53
Librarians teaching me how to effectively use the electronically available databases, journals, and books	1.79	1.33	1.70	2.13	1.74	50
Library orientations / instruction sessions	2.14	1.88	1.69	2.09	1.84	100
Making me aware of library resources and services	1.74	1.56	1.66	1.96	1.87	2,476
Online course support (readings, links, references)	1.94	1.71	1.45	1.78	1.77	113
Providing search tools that permit me to work autonomously	1.36	0.78	1.49	1.69	1.58	63
Ready access to computers / Internet / software	1.54	1.15	1.35	1.83	1.42	122
Space for group / individual study and research needs	2.37	2.29	1.88	2.82	2.67	130
Space for students to study and work in groups	2.41	2.34	2.14	2.61	2.72	104
Space that facilitates quiet study	2.14	2.27	1.98	2.80	2.88	138

Teaching me how to access, evaluate, and use information	1.95	1.85	1.64	2.01	1.98	1,834
Teaching me how to locate, evaluate, and use information	1.96	1.59	1.22	1.95	1.72	70
The library program teaches me how to access, evaluate, and use information	2.02	2.00	1.67	1.67	1.69	239
Timely document delivery / interlibrary loan	1.61	1.31	1.62	1.94	1.79	385
Timely document delivery/interlibrary loan	1.40	1.06	1.32	1.75	1.47	122

## 7.5 General Satisfaction Questions Summary for Faculty

The table displays 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 respondent 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.

<b>Satisfaction Question</b>	<b>Mean</b>	<b>SD</b>	<b>n</b>
In general, I am satisfied with the way in which I am treated at the library.	7.53	1.50	3,637
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	6.99	1.72	3,636
How would you rate the overall quality of the service provided by the library?	7.21	1.39	3,636

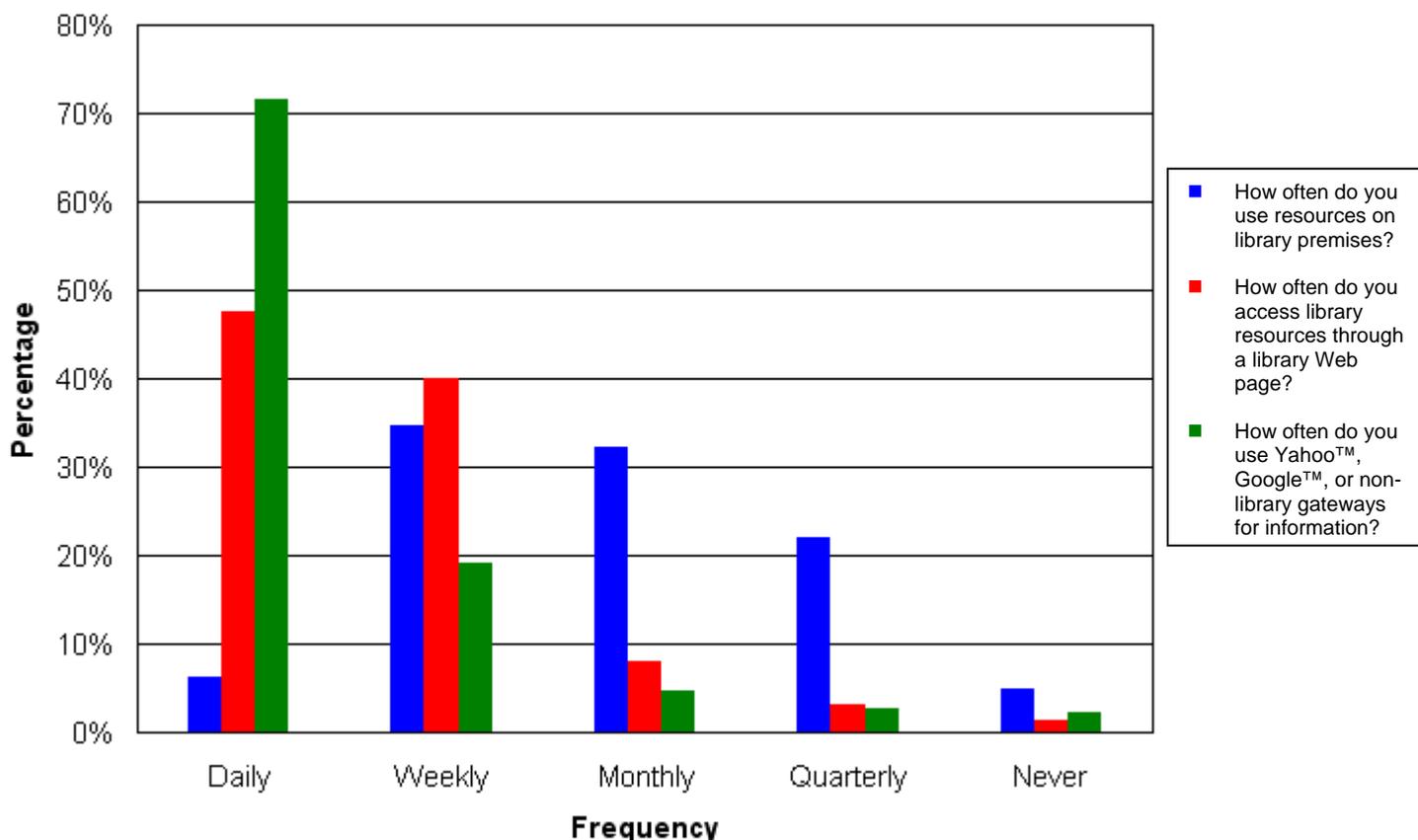
## 7.6 Information Literacy Outcomes Questions Summary for Faculty

The tables 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”.

<b>Information Literacy Outcomes Question</b>	<b>Mean</b>	<b>SD</b>	<b>n</b>
The library helps me stay abreast of developments in my field(s) of interest.	6.53	1.96	3,637
The library aids my advancement in my academic discipline.	6.89	1.82	3,637
The library enables me to be more efficient in my academic pursuits.	7.03	1.77	3,637
The library helps me distinguish between trustworthy and untrustworthy information.	5.51	2.07	3,636
The library provides me with the information skills I need in my work or study.	6.03	1.96	3,636

### 7.7 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 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 chart 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?	227 6.24%	1,265 34.77%	1,170 32.16%	799 21.96%	177 4.87%	3,638 100.00%
How often do you access library resources through a library Web page?	1,728 47.52%	1,452 39.93%	291 8.00%	116 3.19%	49 1.35%	3,636 100.00%
How often do you use Yahoo™, Google™, or non-library gateways for information?	2,603 71.57%	692 19.03%	170 4.67%	95 2.61%	77 2.12%	3,637 100.00%

## 8.0 College or University Libraries Library Staff Summary for CARL

### 8.1 Demographic Summary for Library Staff

#### 8.1.1 Respondent Profile for Library 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.

Age	Respondent n	Respondent %
Under 18	0	0.00%
18 - 22	3	1.12%
23 - 30	36	13.48%
31 - 45	89	33.33%
46 - 65	137	51.31%
Over 65	2	0.75%
<b>Total:</b>	<b>267</b>	<b>100.00%</b>

#### 8.1.2 Respondent Profile for Library Staff by Sex

The table below shows a breakdown of survey respondents by sex, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section\*. The number and percentage for each sex are given for the general population and for survey respondents.

\*Note: Participating institutions were not required to be completed the Representativeness section. When population data is missing or incomplete, it is because this data was not provided.

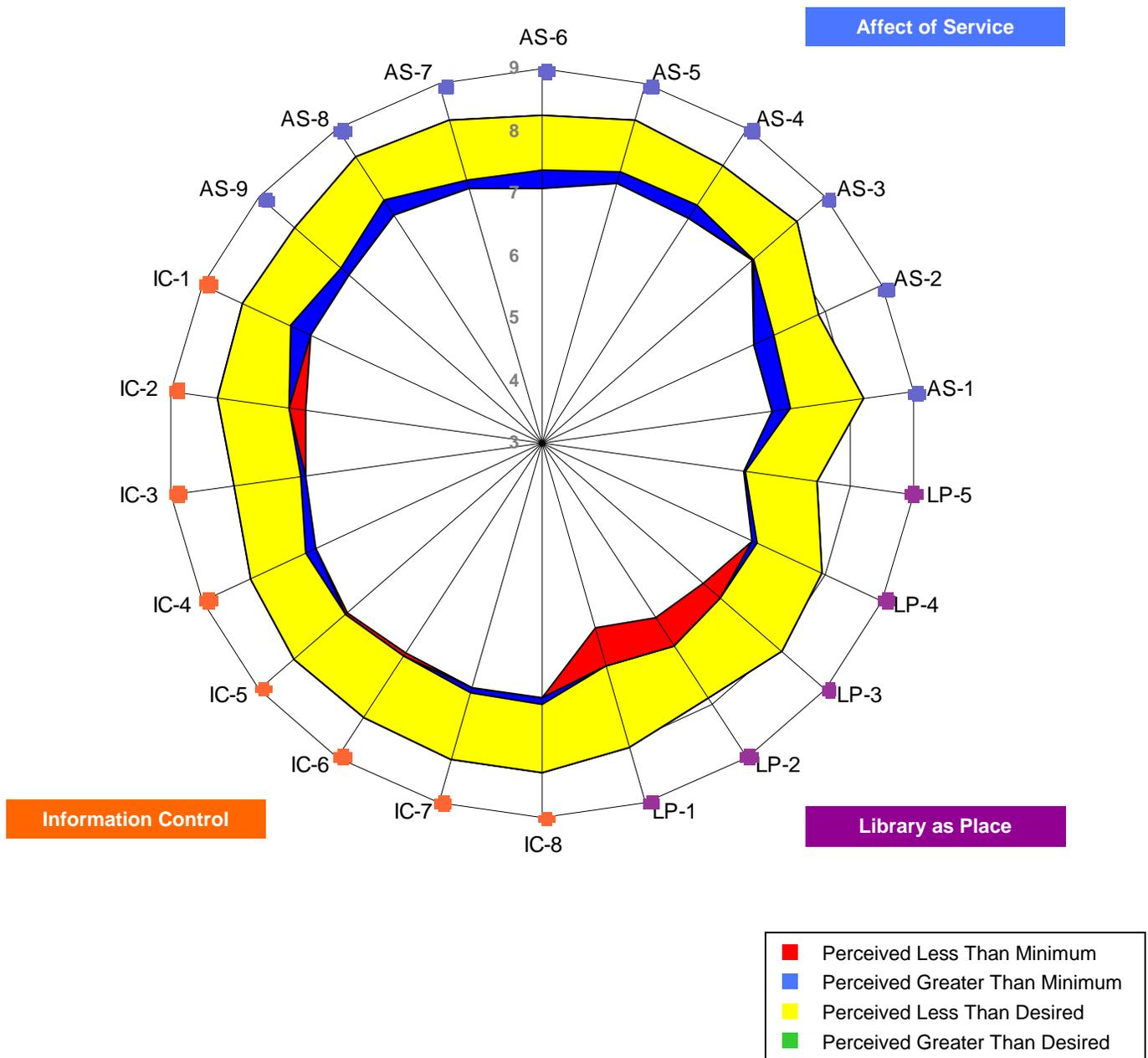
Sex	Respondent n	Respondent %
Female	205	76.78%
Male	62	23.22%
<b>Total:</b>	<b>267</b>	<b>100.00%</b>

## 8.2 Core Questions Summary for Library Staff

This radar chart shows aggregate results for the 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, on this chart they are grouped into sections: Affect of Service, Library as Place, and Information 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.)

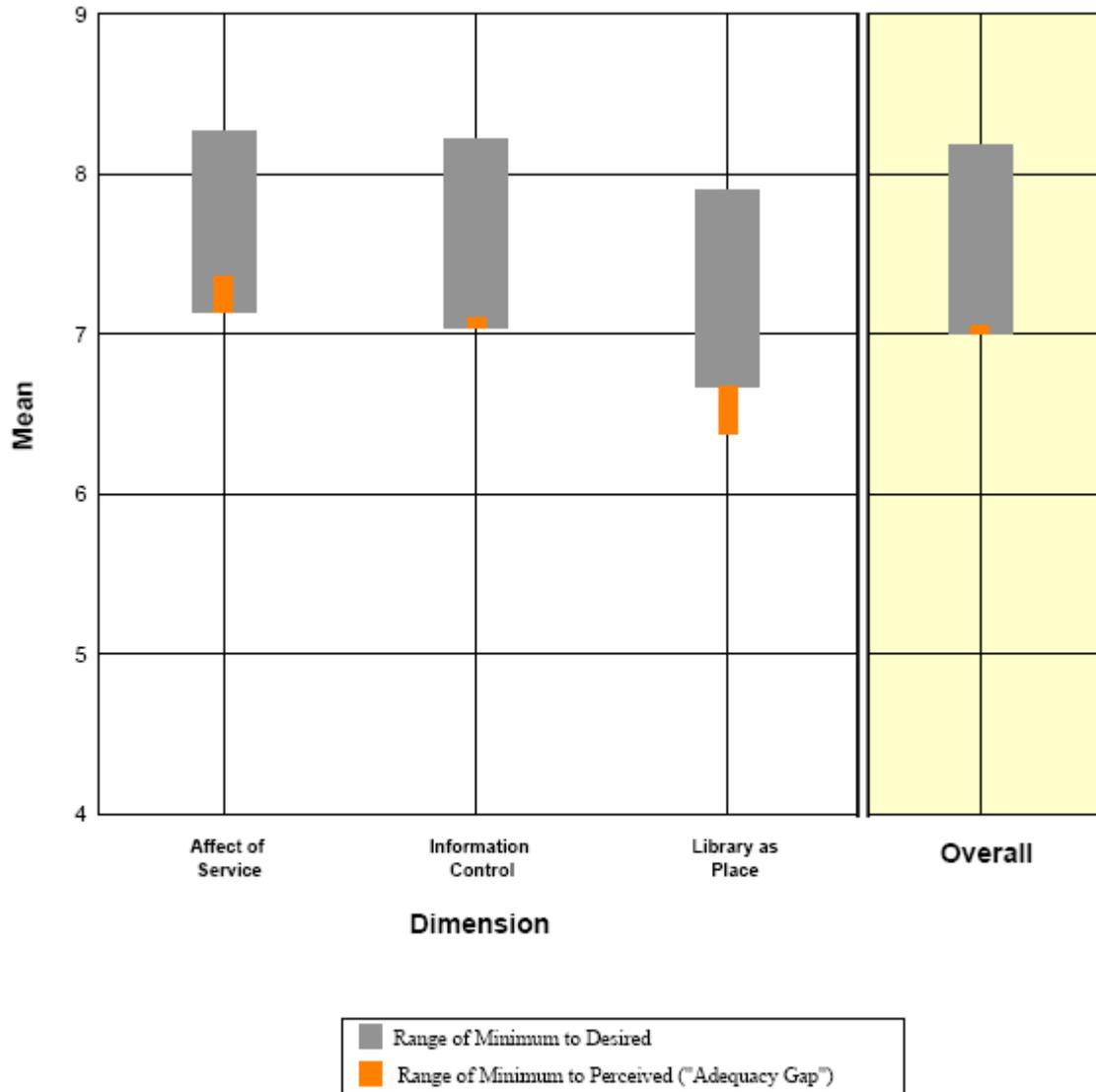


ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	6.70	8.20	7.00	0.30	-1.19	259
AS-2	Giving users individual attention	6.74	7.89	7.09	0.34	-0.80	262
AS-3	Employees who are consistently courteous	7.48	8.41	7.47	-0.02	-0.94	264
AS-4	Readiness to respond to users' questions	7.30	8.30	7.56	0.25	-0.75	259
AS-5	Employees who have the knowledge to answer user questions	7.31	8.40	7.52	0.21	-0.87	261
AS-6	Employees who deal with users in a caring fashion	7.08	8.26	7.38	0.29	-0.88	258
AS-7	Employees who understand the needs of their users	7.24	8.38	7.36	0.12	-1.02	258
AS-8	Willingness to help users	7.34	8.46	7.65	0.31	-0.82	261
AS-9	Dependability in handling users' service problems	7.11	8.25	7.27	0.16	-0.98	258
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	7.07	8.31	7.46	0.40	-0.85	254
IC-2	A library Web site enabling me to locate information on my own	7.08	8.25	6.81	-0.26	-1.44	265
IC-3	The printed library materials I need for my work	6.80	7.99	6.90	0.09	-1.09	248
IC-4	The electronic information resources I need	6.99	8.14	7.20	0.20	-0.95	255
IC-5	Modern equipment that lets me easily access needed information	7.19	8.29	7.13	-0.06	-1.16	266
IC-6	Easy-to-use access tools that allow me to find things on my own	7.08	8.26	7.00	-0.07	-1.25	264
IC-7	Making information easily accessible for independent use	7.09	8.27	7.17	0.08	-1.10	265
IC-8	Print and/or electronic journal collections I require for my work	7.07	8.28	7.19	0.12	-1.09	243
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	6.71	8.07	6.07	-0.63	-1.99	257
LP-2	Quiet space for individual activities	6.88	7.89	6.34	-0.53	-1.55	251
LP-3	A comfortable and inviting location	6.79	8.09	6.41	-0.38	-1.68	261
LP-4	A getaway for study, learning, or research	6.71	7.94	6.79	0.08	-1.15	249
LP-5	Community space for group learning and group study	6.26	7.46	6.27	0.02	-1.19	242
<b>Overall:</b>		<b>7.00</b>	<b>8.17</b>	<b>7.05</b>	<b>0.05</b>	<b>-1.12</b>	<b>267</b>

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	1.45	1.03	1.27	1.65	1.34	259
AS-2	Giving users individual attention	1.44	1.19	1.34	1.60	1.49	262
AS-3	Employees who are consistently courteous	1.45	0.95	1.23	1.64	1.38	264
AS-4	Readiness to respond to users' questions	1.31	0.91	1.02	1.40	1.14	259
AS-5	Employees who have the knowledge to answer user questions	1.26	0.87	1.05	1.50	1.27	261
AS-6	Employees who deal with users in a caring fashion	1.42	1.00	1.21	1.61	1.28	258
AS-7	Employees who understand the needs of their users	1.30	0.81	1.10	1.47	1.23	258
AS-8	Willingness to help users	1.34	0.86	1.16	1.50	1.27	261
AS-9	Dependability in handling users' service problems	1.31	0.93	1.21	1.52	1.29	258
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	1.54	1.04	1.19	1.47	1.25	254
IC-2	A library Web site enabling me to locate information on my own	1.45	1.11	1.49	1.77	1.59	265
IC-3	The printed library materials I need for my work	1.34	1.17	1.35	1.63	1.44	248
IC-4	The electronic information resources I need	1.39	1.20	1.26	1.39	1.21	255
IC-5	Modern equipment that lets me easily access needed information	1.34	1.09	1.39	1.73	1.51	266
IC-6	Easy-to-use access tools that allow me to find things on my own	1.29	1.05	1.24	1.55	1.37	264
IC-7	Making information easily accessible for independent use	1.31	1.00	1.14	1.42	1.28	265
IC-8	Print and/or electronic journal collections I require for my work	1.33	0.99	1.21	1.55	1.27	243
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	1.50	1.23	1.63	2.17	2.03	257
LP-2	Quiet space for individual activities	1.55	1.43	1.76	2.08	2.07	251
LP-3	A comfortable and inviting location	1.42	1.16	1.53	1.90	1.77	261
LP-4	A getaway for study, learning, or research	1.55	1.35	1.42	1.77	1.73	249
LP-5	Community space for group learning and group study	1.82	1.77	1.79	2.18	2.01	242
<b>Overall:</b>		<b>1.41</b>	<b>1.10</b>	<b>1.32</b>	<b>1.66</b>	<b>1.46</b>	<b>267</b>

### 8.3 Core Question Dimensions Summary for Library Staff

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



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 A.

<b>Dimension</b>	<b>Minimum Mean</b>	<b>Desired Mean</b>	<b>Perceived Mean</b>	<b>Adequacy Mean</b>	<b>Superiority Mean</b>	<b>n</b>
Affect of Service	7.14	8.28	7.36	0.22	-0.91	266
Information Control	7.05	8.22	7.11	0.06	-1.12	267
Library as Place	6.68	7.90	6.38	-0.30	-1.53	267
<b>Overall:</b>	<b>7.01</b>	<b>8.18</b>	<b>7.05</b>	<b>0.04</b>	<b>-1.13</b>	<b>267</b>

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 A.

<b>Dimension</b>	<b>Minimum SD</b>	<b>Desired SD</b>	<b>Perceived SD</b>	<b>Adequacy SD</b>	<b>Superiority SD</b>	<b>n</b>
Affect of Service	1.14	0.74	0.93	1.26	1.03	266
Information Control	1.12	0.83	0.88	1.13	0.92	267
Library as Place	1.28	1.04	1.24	1.56	1.40	267
<b>Overall:</b>	<b>1.09</b>	<b>0.75</b>	<b>0.83</b>	<b>1.15</b>	<b>0.90</b>	<b>267</b>

## 8.4 Local Questions Summary for Library Staff

This table shows mean scores for each of the local questions added by the individual libraries or consortium, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction of the notebook.)

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
A secure and safe place	7.58	8.06	7.08	-0.50	-0.98	48
Ability to navigate library Web pages easily	7.04	8.18	6.53	-0.51	-1.65	175
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	6.53	7.41	6.50	-0.03	-0.91	32
Access to rare and historical materials	6.13	7.50	6.50	0.38	-1.00	8
Adequate hours of service	6.99	8.13	7.66	0.67	-0.46	110
Assuring users of the accuracy and confidentiality of their transactions	4.00	9.00	9.00	5.00	0.00	1
Availability of subject specialist assistance	6.92	7.83	7.67	0.75	-0.17	12
Comprehensive collections of fulltext articles online	7.38	8.88	7.38	0.00	-1.50	8
Convenient business hours	7.29	8.29	7.71	0.43	-0.57	14
Ease and timeliness in getting materials from other libraries	6.87	8.28	7.35	0.48	-0.94	113
Ease of use of electronic resources	6.85	7.85	7.00	0.15	-0.85	27
Electronic resources matching my information needs	6.34	7.76	6.66	0.31	-1.10	67
Improving library-use skills as a by-product of seeking assistance from library staff	6.00	7.00	6.50	0.50	-0.50	2
Librarians providing help that assists in finding information needed now while improving my research skills	7.21	8.15	8.21	1.00	0.05	39
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	9.00	9.00	6.00	-3.00	-3.00	1
Librarians teaching me how to effectively use the electronically available databases, journals, and books	6.76	8.57	7.76	1.00	-0.81	21
Library orientations / instruction sessions	6.65	7.82	7.47	0.82	-0.35	34
Making me aware of library resources and services	6.76	7.97	6.71	-0.06	-1.26	127
Online course support (readings, links, references)	5.00	7.00	7.00	2.00	0.00	1

Providing search tools that permit me to work autonomously	6.30	7.83	7.13	0.83	-0.70	23
Ready access to computers / Internet / software	7.03	8.07	7.72	0.69	-0.34	29
Space for group / individual study and research needs	6.74	7.64	5.55	-1.19	-2.10	42
Space for students to study and work in groups	6.68	7.89	6.11	-0.58	-1.79	19
Space that facilitates quiet study	6.59	7.61	5.30	-1.30	-2.32	44
Teaching me how to access, evaluate, and use information	6.63	7.99	6.91	0.28	-1.09	139
Teaching me how to locate, evaluate, and use information	7.00	8.00	6.75	-0.25	-1.25	8
Timely document delivery / interlibrary loan	7.00	8.71	7.43	0.43	-1.29	7
Timely document delivery/interlibrary loan	7.08	8.00	7.77	0.69	-0.23	26

This table shows mean scores for each of the local questions added by the individual libraries or consortium, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction of the notebook.)

Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
A secure and safe place	1.56	1.37	1.58	1.79	1.38	48
Ability to navigate library Web pages easily	1.37	1.27	1.59	1.79	1.74	175
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	1.52	1.66	1.72	1.40	1.28	32
Access to rare and historical materials	2.03	0.93	0.53	1.77	0.93	8
Adequate hours of service	1.36	1.02	1.32	1.64	1.47	110
Assuring users of the accuracy and confidentiality of their transactions						1
Availability of subject specialist assistance	1.44	1.19	1.23	1.06	1.11	12
Comprehensive collections of fulltext articles online	1.19	0.35	0.52	1.31	0.76	8

Convenient business hours	1.38	1.14	1.64	1.50	1.16	14
Ease and timeliness in getting materials from other libraries	1.28	0.92	1.28	1.66	1.62	113
Ease of use of electronic resources	1.20	1.17	1.07	1.17	0.72	27
Electronic resources matching my information needs	1.48	1.40	1.24	1.42	1.22	67
Improving library-use skills as a by-product of seeking assistance from library staff	1.41	1.41	0.71	0.71	0.71	2
Librarians providing help that assists in finding information needed now while improving my research skills	1.22	0.99	0.86	1.10	0.72	39
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches						1
Librarians teaching me how to effectively use the electronically available databases, journals, and books	1.81	0.51	1.22	1.95	1.33	21
Library orientations / instruction sessions	1.84	1.36	1.52	1.95	1.43	34
Making me aware of library resources and services	1.36	1.09	1.32	1.67	1.57	127
Online course support (readings, links, references)						1
Providing search tools that permit me to work autonomously	1.52	1.07	0.97	1.40	0.97	23
Ready access to computers / Internet / software	1.02	0.92	0.75	1.23	0.97	29
Space for group / individual study and research needs	1.27	1.62	1.89	1.95	2.05	42
Space for students to study and work in groups	1.73	1.20	1.91	2.29	2.18	19
Space that facilitates quiet study	1.57	1.56	2.06	2.14	2.12	44
Teaching me how to access, evaluate, and use information	1.58	1.14	1.22	1.82	1.43	139
Teaching me how to locate, evaluate, and use information	1.93	1.41	1.67	2.31	1.98	8
Timely document delivery / interlibrary loan	1.00	0.49	1.27	1.72	1.11	7
Timely document delivery/interlibrary loan	0.93	0.80	0.99	1.23	0.82	26

### 8.5 General Satisfaction Questions Summary for Library Staff

The table displays 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 respondent 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.

<b>Satisfaction Question</b>	<b>Mean</b>	<b>SD</b>	<b>n</b>
In general, I am satisfied with the way in which I am treated at the library.	7.41	1.38	267
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.15	1.43	267
How would you rate the overall quality of the service provided by the library?	7.36	1.10	267

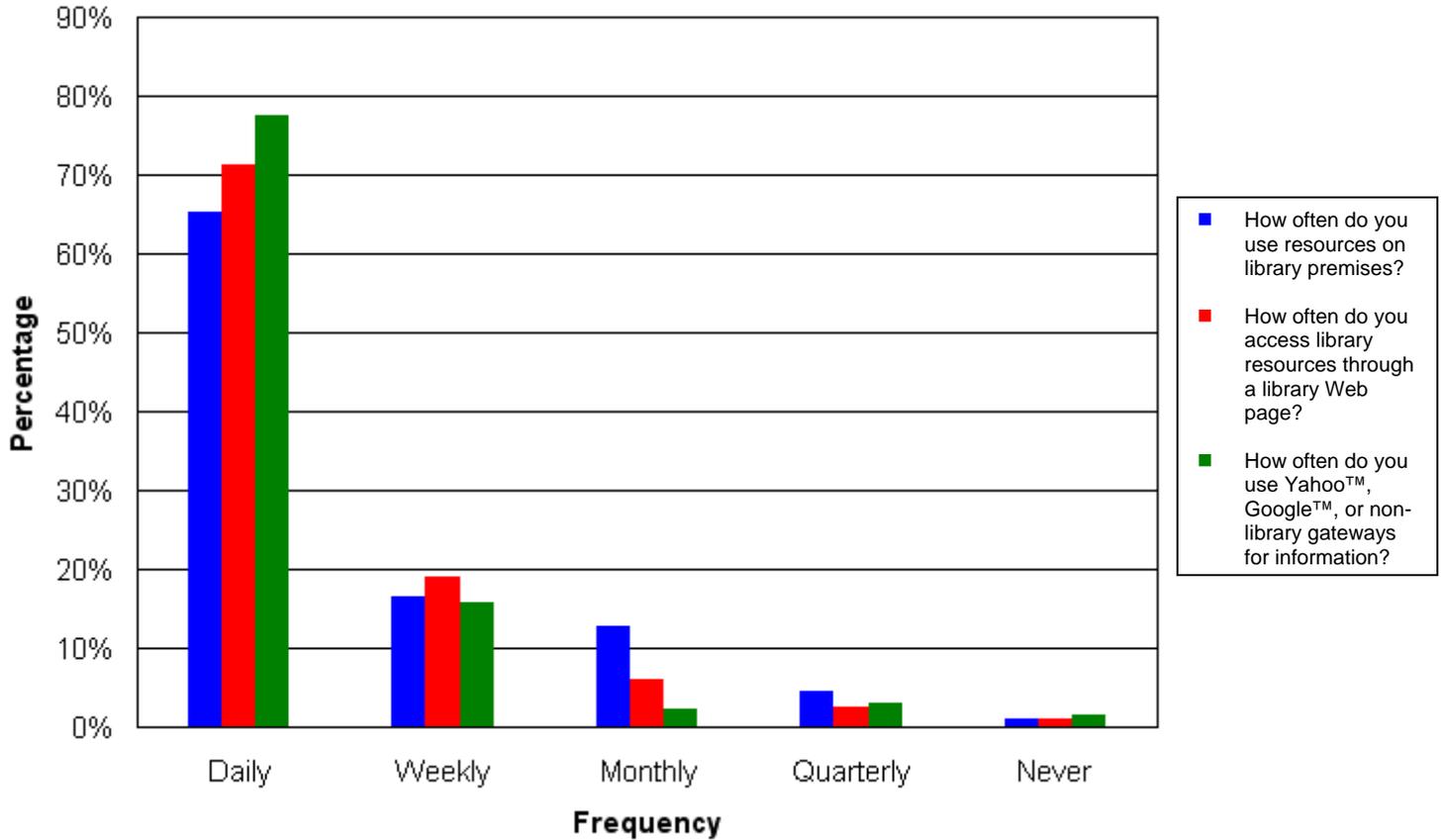
### 8.6 Information Literacy Outcomes Questions Summary for Library Staff

The tables 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”.

<b>Information Literacy Outcomes Question</b>	<b>Mean</b>	<b>SD</b>	<b>n</b>
The library helps me stay abreast of developments in my field(s) of interest.	6.79	1.47	267
The library aids my advancement in my academic discipline.	7.04	1.32	267
The library enables me to be more efficient in my academic pursuits.	7.14	1.37	267
The library helps me distinguish between trustworthy and untrustworthy information.	6.59	1.76	267
The library provides me with the information skills I need in my work or study.	6.91	1.57	267

### 8.7 Library Use Summary for Library Staff

This chart shows a graphic representation of library use (both on the premises and electronically), as well as use of non-library 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 chart 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?	174 65.17%	44 16.48%	34 12.73%	12 4.49%	3 1.12%	267 100.00%
How often do you access library resources through a library Web page?	190 71.16%	51 19.10%	16 5.99%	7 2.62%	3 1.12%	267 100.00%
How often do you use Yahoo™, Google™, or non-library gateways for information?	207 77.53%	42 15.73%	6 2.25%	8 3.00%	4 1.50%	267 100.00%

## 9.0 College or University Libraries Staff Summary for CARL

### 9.1 Demographic Summary for Staff

#### 9.1.1 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.

Age	Respondent n	Respondent %
Under 18	0	0.00%
18 - 22	8	1.10%
23 - 30	140	19.20%
31 - 45	306	41.98%
46 - 65	270	37.04%
Over 65	5	0.69%
<b>Total:</b>	<b>729</b>	<b>100.00%</b>

#### 9.1.2 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 and the demographic data provided by institutions in the online Representativeness section\*. The number and percentage for each sex are given for the general population and for survey respondents.

\*Note: Participating institutions were not required to be completed the Representativeness section. When population data is missing or incomplete, it is because this data was not provided.

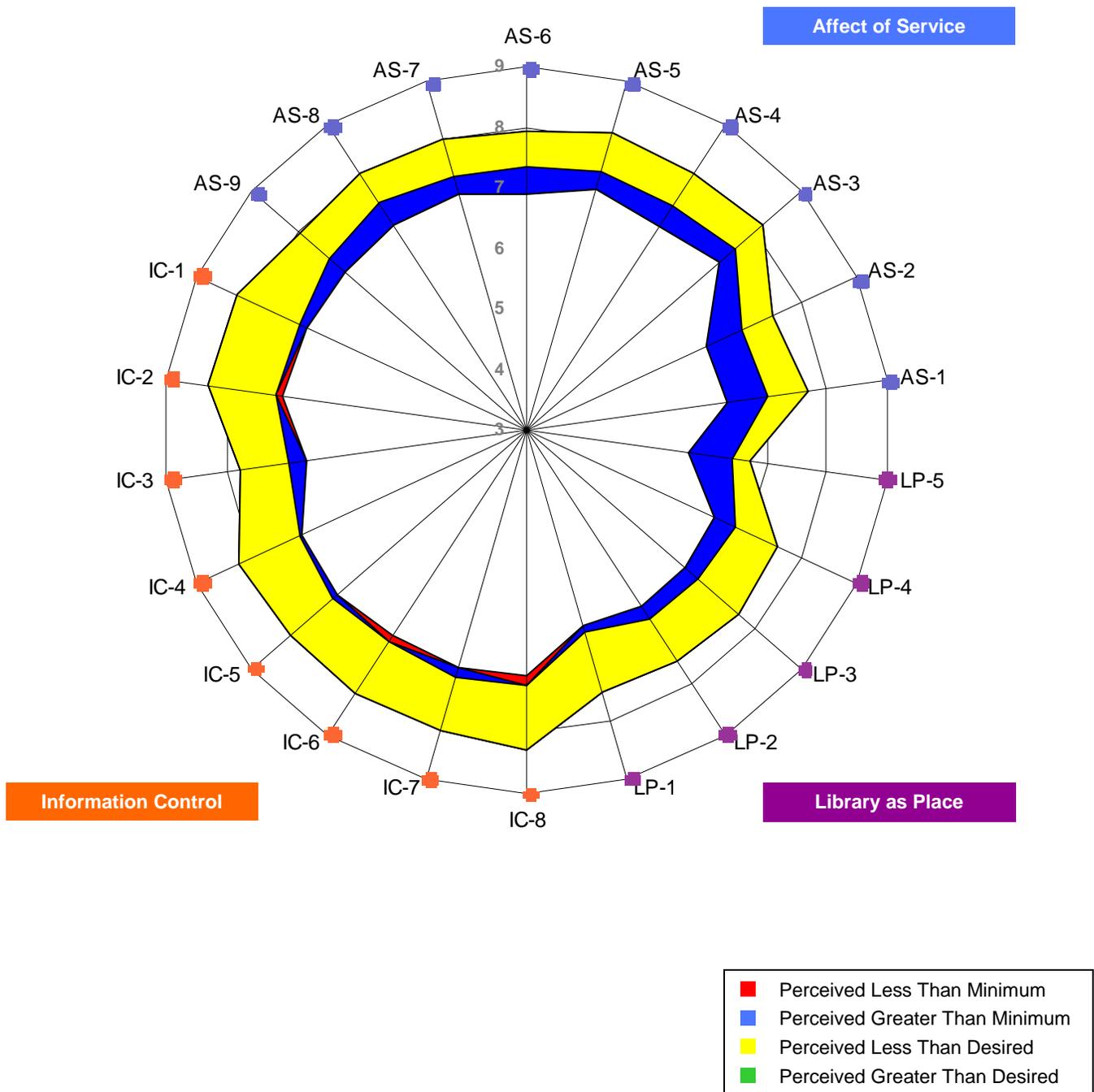
Sex	Respondent n	Respondent %
Female	472	64.75%
Male	257	35.25%
<b>Total:</b>	<b>729</b>	<b>100.00%</b>

## 9.2 Core Questions Summary for Staff

This radar chart shows aggregate results for the 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, on this chart they are grouped into sections: Affect of Service, Library as Place, and Information 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.)

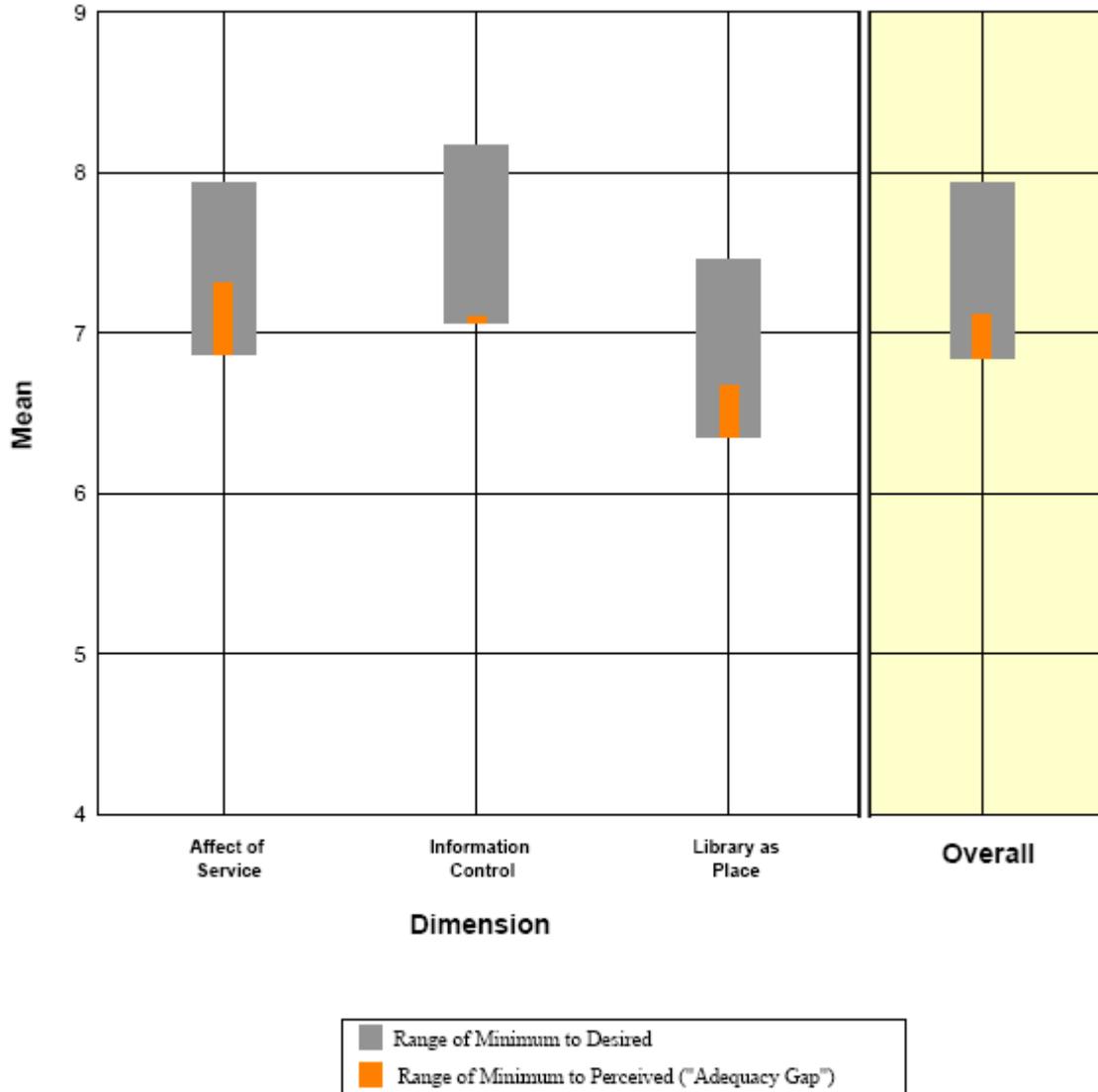


ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	6.34	7.70	7.00	0.66	-0.70	699
AS-2	Giving users individual attention	6.29	7.48	6.93	0.64	-0.55	709
AS-3	Employees who are consistently courteous	7.20	8.16	7.57	0.37	-0.59	724
AS-4	Readiness to respond to users' questions	7.01	8.05	7.42	0.41	-0.63	708
AS-5	Employees who have the knowledge to answer user questions	7.13	8.10	7.43	0.30	-0.68	705
AS-6	Employees who deal with users in a caring fashion	6.89	7.93	7.35	0.45	-0.58	712
AS-7	Employees who understand the needs of their users	7.04	8.00	7.36	0.31	-0.64	702
AS-8	Willingness to help users	7.02	8.04	7.48	0.46	-0.56	705
AS-9	Dependability in handling users' service problems	6.96	7.97	7.29	0.32	-0.68	603
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	7.00	8.29	7.13	0.13	-1.16	693
IC-2	A library Web site enabling me to locate information on my own	7.18	8.30	7.07	-0.11	-1.24	723
IC-3	The printed library materials I need for my work	6.65	7.76	6.94	0.29	-0.82	597
IC-4	The electronic information resources I need	7.08	8.22	7.13	0.05	-1.09	692
IC-5	Modern equipment that lets me easily access needed information	7.13	8.15	7.24	0.12	-0.90	695
IC-6	Easy-to-use access tools that allow me to find things on my own	7.15	8.18	7.06	-0.09	-1.12	715
IC-7	Making information easily accessible for independent use	7.09	8.18	7.23	0.14	-0.95	699
IC-8	Print and/or electronic journal collections I require for my work	7.22	8.27	7.04	-0.18	-1.23	610
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	6.37	7.50	6.46	0.09	-1.04	642
LP-2	Quiet space for individual activities	6.48	7.55	6.73	0.25	-0.82	599
LP-3	A comfortable and inviting location	6.48	7.64	6.73	0.25	-0.91	674
LP-4	A getaway for study, learning, or research	6.41	7.56	6.80	0.39	-0.76	619
LP-5	Community space for group learning and group study	5.69	6.71	6.42	0.73	-0.29	480
<b>Overall:</b>		<b>6.81</b>	<b>7.90</b>	<b>7.08</b>	<b>0.27</b>	<b>-0.81</b>	<b>732</b>

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	1.66	1.39	1.49	1.86	1.64	699
AS-2	Giving users individual attention	1.74	1.41	1.54	1.85	1.60	709
AS-3	Employees who are consistently courteous	1.60	1.16	1.37	1.79	1.52	724
AS-4	Readiness to respond to users' questions	1.54	1.18	1.39	1.66	1.47	708
AS-5	Employees who have the knowledge to answer user questions	1.52	1.17	1.39	1.68	1.40	705
AS-6	Employees who deal with users in a caring fashion	1.61	1.25	1.36	1.70	1.49	712
AS-7	Employees who understand the needs of their users	1.52	1.18	1.36	1.68	1.45	702
AS-8	Willingness to help users	1.57	1.16	1.40	1.72	1.45	705
AS-9	Dependability in handling users' service problems	1.57	1.22	1.42	1.77	1.57	603
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	1.63	1.08	1.59	1.97	1.70	693
IC-2	A library Web site enabling me to locate information on my own	1.47	1.03	1.51	1.87	1.69	723
IC-3	The printed library materials I need for my work	1.62	1.33	1.52	1.91	1.73	597
IC-4	The electronic information resources I need	1.44	1.02	1.35	1.74	1.53	692
IC-5	Modern equipment that lets me easily access needed information	1.44	1.02	1.30	1.75	1.47	695
IC-6	Easy-to-use access tools that allow me to find things on my own	1.41	1.05	1.41	1.81	1.59	715
IC-7	Making information easily accessible for independent use	1.45	0.99	1.31	1.71	1.45	699
IC-8	Print and/or electronic journal collections I require for my work	1.48	1.10	1.48	1.92	1.64	610
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	1.78	1.65	1.81	2.32	2.25	642
LP-2	Quiet space for individual activities	1.83	1.67	1.73	2.13	2.12	599
LP-3	A comfortable and inviting location	1.76	1.45	1.74	2.17	1.99	674
LP-4	A getaway for study, learning, or research	1.88	1.70	1.60	1.94	1.83	619
LP-5	Community space for group learning and group study	2.18	2.13	1.77	2.21	2.17	480
<b>Overall:</b>		<b>1.62</b>	<b>1.29</b>	<b>1.49</b>	<b>1.87</b>	<b>1.67</b>	<b>732</b>

### 9.3 Core Question Dimensions Summary for Staff

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



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 A.

<b>Dimension</b>	<b>Minimum Mean</b>	<b>Desired Mean</b>	<b>Perceived Mean</b>	<b>Adequacy Mean</b>	<b>Superiority Mean</b>	<b>n</b>
Affect of Service	6.87	7.94	7.32	0.44	-0.62	732
Information Control	7.07	8.17	7.11	0.04	-1.07	731
Library as Place	6.36	7.46	6.67	0.32	-0.78	704
<b>Overall:</b>	<b>6.85</b>	<b>7.93</b>	<b>7.11</b>	<b>0.26</b>	<b>-0.82</b>	<b>732</b>

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 A.

<b>Dimension</b>	<b>Minimum SD</b>	<b>Desired SD</b>	<b>Perceived SD</b>	<b>Adequacy SD</b>	<b>Superiority SD</b>	<b>n</b>
Affect of Service	1.33	0.96	1.19	1.46	1.24	732
Information Control	1.22	0.78	1.13	1.49	1.23	731
Library as Place	1.60	1.39	1.48	1.83	1.71	704
<b>Overall:</b>	<b>1.23</b>	<b>0.84</b>	<b>1.10</b>	<b>1.37</b>	<b>1.14</b>	<b>732</b>

## 9.4 Local Questions Summary for Staff

This table shows mean scores for each of the local questions added by the individual libraries or consortium, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction of the notebook.)

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
A secure and safe place	6.98	7.76	7.49	0.51	-0.28	123
Ability to navigate library Web pages easily	7.19	8.25	6.94	-0.25	-1.31	529
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	6.06	7.33	6.43	0.37	-0.90	63
Access to rare and historical materials	5.81	7.38	6.81	1.00	-0.56	16
Adequate hours of service	6.90	7.79	7.50	0.61	-0.28	319
Assuring users of the accuracy and confidentiality of their transactions	9.00	9.00	9.00	0.00	0.00	1
Availability of subject specialist assistance	6.19	7.30	6.64	0.46	-0.66	70
Comprehensive collections of full text articles online	6.78	8.07	6.63	-0.15	-1.44	27
Convenient business hours	6.75	7.83	7.75	1.00	-0.08	53
Ease and timeliness in getting materials from other libraries	6.72	7.87	7.14	0.42	-0.73	309
Ease of use of electronic resources	7.05	8.06	7.27	0.22	-0.80	83
Electronic resources matching my information needs	7.00	8.22	6.73	-0.27	-1.49	124
Improving library-use skills as a by-product of seeking assistance from library staff	5.96	7.28	7.12	1.16	-0.16	25
Librarians providing help that assists in finding information needed now while improving my research skills	7.03	7.99	7.62	0.59	-0.37	134
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	7.00	7.00	7.00	0.00	0.00	1
Librarians teaching me how to effectively use the electronically available databases, journals, and books	6.79	7.89	6.95	0.16	-0.95	19
Library orientations / instruction sessions	5.54	6.94	6.26	0.71	-0.69	35
Making me aware of library resources and services	6.38	7.52	6.62	0.24	-0.90	363
Online course support (readings, links, references)	6.80	7.73	7.20	0.40	-0.53	15
Providing search tools that permit me to work autonomously	6.96	8.25	6.75	-0.21	-1.50	24
Ready access to computers / Internet / software	7.18	8.21	7.62	0.43	-0.59	76
Space for group / individual study and research needs	6.05	6.92	6.46	0.41	-0.46	76
Space for students to study and work in groups	5.26	6.62	6.24	0.97	-0.38	34

Space that facilitates quiet study	6.15	7.06	6.44	0.29	-0.62	87
Teaching me how to access, evaluate, and use information	6.30	7.53	6.66	0.36	-0.87	318
Teaching me how to locate, evaluate, and use information	6.92	7.80	8.16	1.24	0.36	25
Timely document delivery / interlibrary loan	6.88	7.84	7.20	0.32	-0.64	25
Timely document delivery/interlibrary loan	6.89	8.05	7.66	0.77	-0.39	64

This table shows mean scores for each of the local questions added by the individual libraries or consortium, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction of the notebook.)

Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
A secure and safe place	2.17	1.90	1.38	2.19	2.08	123
Ability to navigate library Web pages easily	1.47	1.05	1.52	1.99	1.64	529
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	1.57	1.55	1.70	1.82	1.68	63
Access to rare and historical materials	1.72	1.45	1.38	2.13	1.75	16
Adequate hours of service	1.65	1.34	1.42	1.93	1.61	319
Assuring users of the accuracy and confidentiality of their transactions						1
Availability of subject specialist assistance	1.53	1.45	1.49	1.48	1.53	70
Comprehensive collections of full text articles online	1.50	1.11	1.33	2.21	1.25	27
Convenient business hours	1.54	1.05	1.16	1.84	1.34	53
Ease and timeliness in getting materials from other libraries	1.75	1.34	1.60	2.04	1.72	309
Ease of use of electronic resources	1.18	0.92	1.16	1.58	1.41	83
Electronic resources matching my information needs	1.39	1.07	1.44	1.69	1.51	124
Improving library-use skills as a by-product of seeking assistance from library staff	1.93	1.54	1.13	1.21	1.14	25
Librarians providing help that assists in finding information needed now while improving my research skills	1.31	0.98	1.16	1.44	1.31	134
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches						1
Librarians teaching me how to effectively use the electronically available databases, journals, and books	1.40	1.33	1.43	1.80	1.81	19
Library orientations / instruction sessions	2.19	1.88	1.62	1.82	1.35	35
Making me aware of library resources and services	1.79	1.47	1.65	2.02	1.73	363
Online course support (readings, links, references)	1.26	1.16	1.97	2.10	1.85	15
Providing search tools that permit me to work autonomously	1.37	0.79	1.36	1.86	1.32	24
Ready access to computers / Internet / software	1.12	0.84	1.21	1.58	1.28	76
Space for group / individual study and research needs	2.27	2.21	1.50	2.10	2.09	76
Space for students to study and work in groups	2.53	2.27	1.76	2.48	2.06	34
Space that facilitates quiet study	2.13	2.14	1.54	2.13	2.19	87

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Teaching me how to access, evaluate, and use information	1.86	1.45	1.68	2.08	1.82	318
Teaching me how to locate, evaluate, and use information	1.44	1.55	0.94	1.54	1.85	25
Timely document delivery / interlibrary loan	1.86	1.25	1.50	2.14	1.78	25
Timely document delivery/interlibrary loan	1.39	0.97	1.43	1.75	1.55	64

### 9.5 General Satisfaction Questions Summary for Staff

The table displays 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 respondent 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.	7.51	1.42	732
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.12	1.59	731
How would you rate the overall quality of the service provided by the library?	7.34	1.22	732

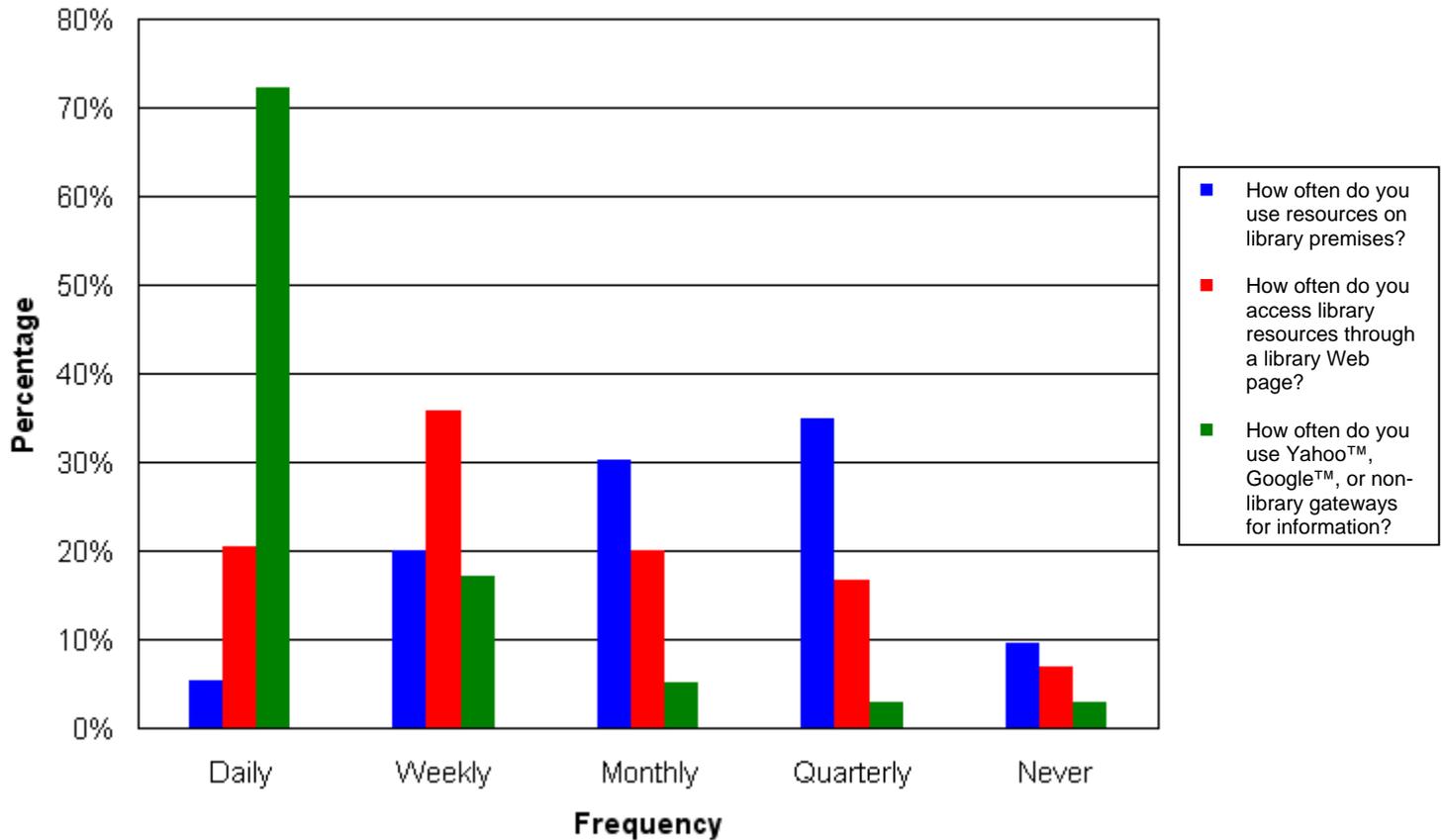
### 9.6 Information Literacy Outcomes Questions Summary for Staff

The tables 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 Question	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	6.48	1.77	731
The library aids my advancement in my academic discipline.	6.70	1.68	731
The library enables me to be more efficient in my academic pursuits.	6.84	1.67	731
The library helps me distinguish between trustworthy and untrustworthy information.	5.96	1.86	731
The library provides me with the information skills I need in my work or study.	6.42	1.76	731

### 9.7 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 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 chart 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?	39 5.33%	146 19.95%	222 30.33%	255 34.84%	70 9.56%	732 100.00%
How often do you access library resources through a library Web page?	150 20.49%	262 35.79%	147 20.08%	122 16.67%	51 6.97%	732 100.00%
How often do you use Yahoo™, Google™, or non-library gateways for information?	528 72.13%	125 17.08%	37 5.05%	21 2.87%	21 2.87%	732 100.00%

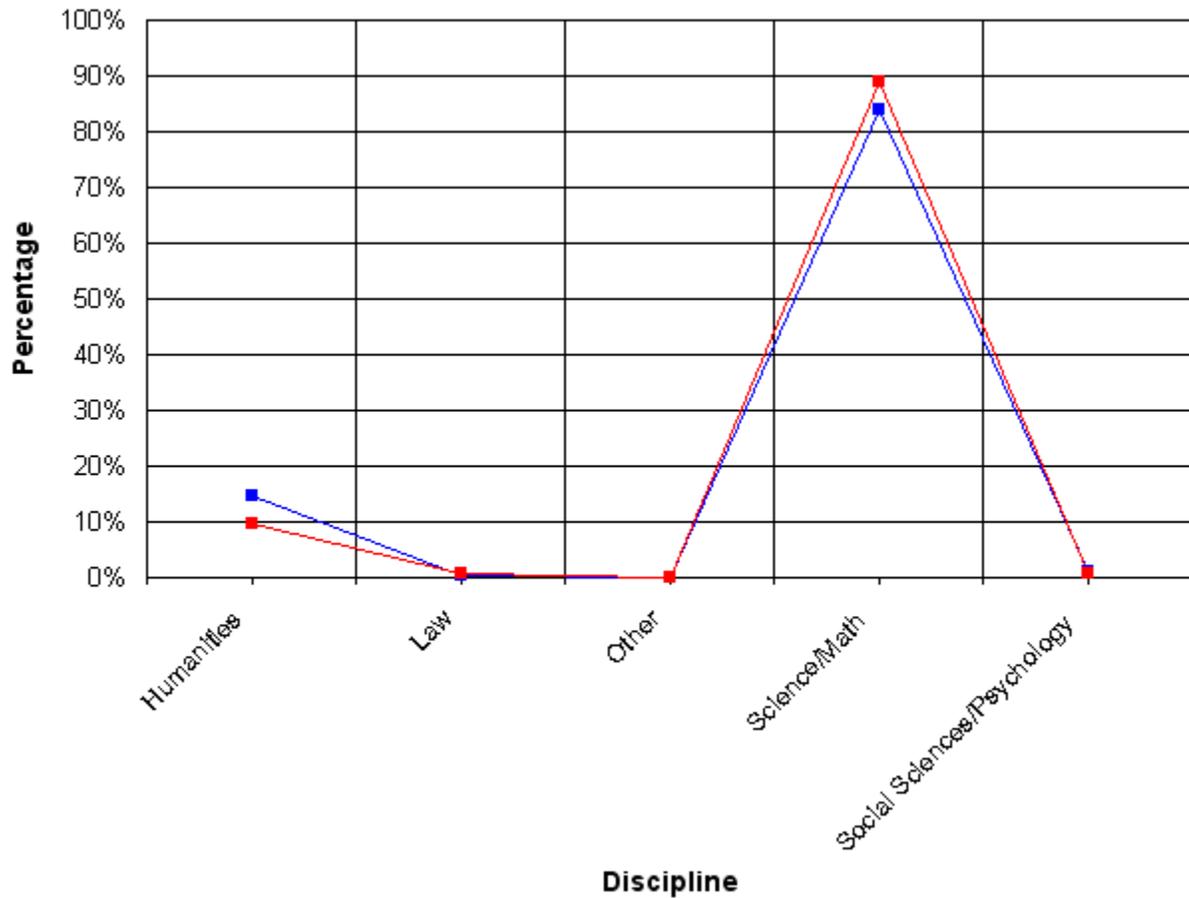
## 10.0 Canadian Government Demographic Summary for CARL

### 10.1 Population and Respondent Profiles by Standard Discipline

The chart and table below show a breakdown of survey respondents by discipline, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section\*.

This section shows survey respondents broken down based on the LibQUAL+® standard discipline categories. 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 Representativeness section. When population data is missing or incomplete, it is because this data was not provided.*



- Respondent Profile by Discipline
- Population Profile by Discipline

<b>Discipline</b>	<b>Population N</b>	<b>Population %</b>	<b>Respondent n</b>	<b>Respondent %</b>	<b>%N - %n</b>
Humanities	1,236	14.62%	52	9.79%	4.83%
Law	22	0.26%	4	0.75%	-0.49%
Other	0	0.00%	0	0.00%	0.00%
Science/Math	7,105	84.05%	472	88.89%	-4.48%
Social Sciences/Psychology	90	1.06%	3	0.56%	0.50%
<b>Total:</b>	<b>8,453</b>	<b>100.00%</b>	<b>531</b>	<b>100.00%</b>	<b>0.00%</b>

### 10.2 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.

Age	Respondent n	Respondent %
Under 18	0	0.00%
18 - 22	6	1.13%
23 - 30	44	8.32%
31 - 45	224	42.34%
46 - 65	244	46.12%
Over 65	11	2.08%
<b>Total:</b>	<b>529</b>	<b>100.00%</b>

### 10.3 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 and the demographic data provided by institutions in the online Representativeness section.\* 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 Representativeness section. When population data is missing or incomplete, it is because this data was not provided.*

Sex	Population N	Population %	Respondent n	Respondent %
Female	5,604	65.19%	136	25.81%
Male	2,992	34.81%	391	74.19%
<b>Total:</b>	<b>8,596</b>	<b>100.00%</b>	<b>527</b>	<b>100.00%</b>

#### 10.4 Population and Respondent Profiles by Level of Education

The table below shows a breakdown of survey respondents by education level, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.\* 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 Representativeness section. When population data is missing or incomplete, it is because this data was not provided.*

Education Level	Population N	Population %	Respondent n	Respondent %
High school	0	0	13	2.45%
Associates degree	0	0	29	5.47%
Bachelors degree	0	0	79	14.91%
Masters degree	0	0	140	26.42%
Professional degree	0	0	13	2.45%
PhD	0	0	256	48.30%
<b>Total:</b>	<b>0</b>	<b>0</b>	<b>530</b>	<b>100.00%</b>

#### 10.5 Population and Respondent Profiles by Employment Status

The table below shows a breakdown of survey respondents by employment status, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.\* 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 Representativeness section. When population data is missing or incomplete, it is because this data was not provided.*

Employment Status	Population N	Population %	Respondent n	Respondent %
Permanent	5,144	59.84%	404	76.08%
Term or casual	1,178	13.70%	75	14.12%
Contractor	1,730	20.13%	29	5.46%
Student	544	6.33%	23	4.33%
<b>Total:</b>	<b>8,596</b>	<b>100.00%</b>	<b>531</b>	<b>100.00%</b>

## 10.6 Population and Respondent Profiles by Profession

The table below shows a breakdown of survey respondents by profession, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.\* 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 Representativeness section. When population data is missing or incomplete, it is because this data was not provided.*

\*Excludes Library Staff & Staff

Profession	Population N	Population %	Respondent n	Respondent %
Administration professional or support	1,382	16.08%	43	8.13%
Library / Information Management / Museum collection specialist	336	3.91%	15	2.84%
Museum exhibition programs and planning	0	0.00%	0	0.00%
Manager	390	4.54%	34	6.43%
Lawyer	22	0.26%	0	0.00%
Policy / Program analyst	978	11.38%	12	2.27%
Research Scientist or professional	4,474	52.05%	337	63.71%
Research Technician	944	10.98%	72	13.61%
Senior Manager	70	0.81%	16	3.02%
<b>Total:</b>	<b>8,596</b>	<b>100.00%</b>	<b>529</b>	<b>100.00%</b>

## 10.7 Population and Respondent Profiles by Primary Access Method

The table below shows a breakdown of survey respondents by primary access method, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.\* 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 Representativeness section. When population data is missing or incomplete, it is because this data was not provided.*

\*Excludes Library Staff & Staff

Primary Access Method	Population N	Population %	Respondent n	Respondent %
Physical library	796	9.26%	80	15.07%
Phone	216	2.51%	3	0.56%
E-mail	1,464	17.03%	40	7.53%
Internet/Intranet/Virtual Library	5,904	68.68%	408	76.84%
Telephone	216	2.51%	0	0.00%
<b>Total:</b>	<b>8,596</b>	<b>100.00%</b>	<b>531</b>	<b>100.00%</b>

### 10.8 Population and Respondent Profiles by Internal Network

The table below shows a breakdown of survey respondents by internal network, based on user responses to the demographic questions and the demographic data provided by institutions in the online Representativeness section.\* 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 Representativeness section. When population data is missing or incomplete, it is because this data was not provided.*

\*Excludes Library Staff & Staff

<b>Internal Network</b>	<b>Population N</b>	<b>Population %</b>	<b>Respondent n</b>	<b>Respondent %</b>
Yes	8,596	100.00%	322	60.75%
No	0	0.00%	208	39.25%
<b>Total:</b>	<b>8,596</b>	<b>100.00%</b>	<b>530</b>	<b>100.00%</b>

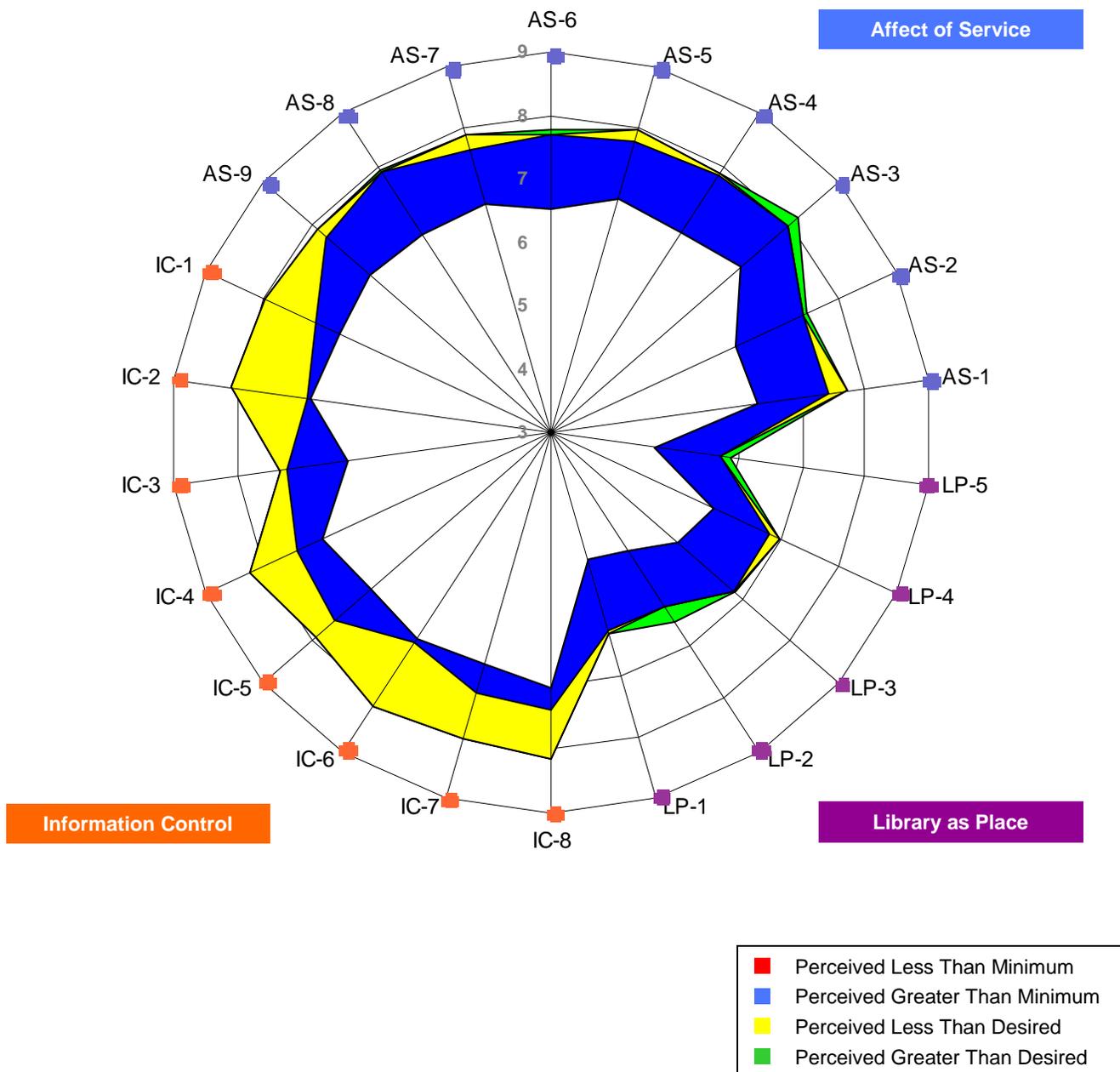
## 11.0 Canadian Government Survey Item Summary for CARL

### 11.1 Core Question Summary

This radar chart shows aggregate results for the 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, on this chart they are grouped into sections: Affect of Service, Library as Place, and Information 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.)

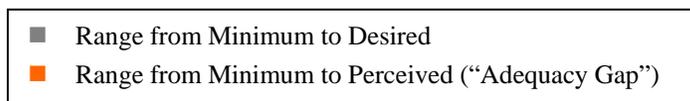
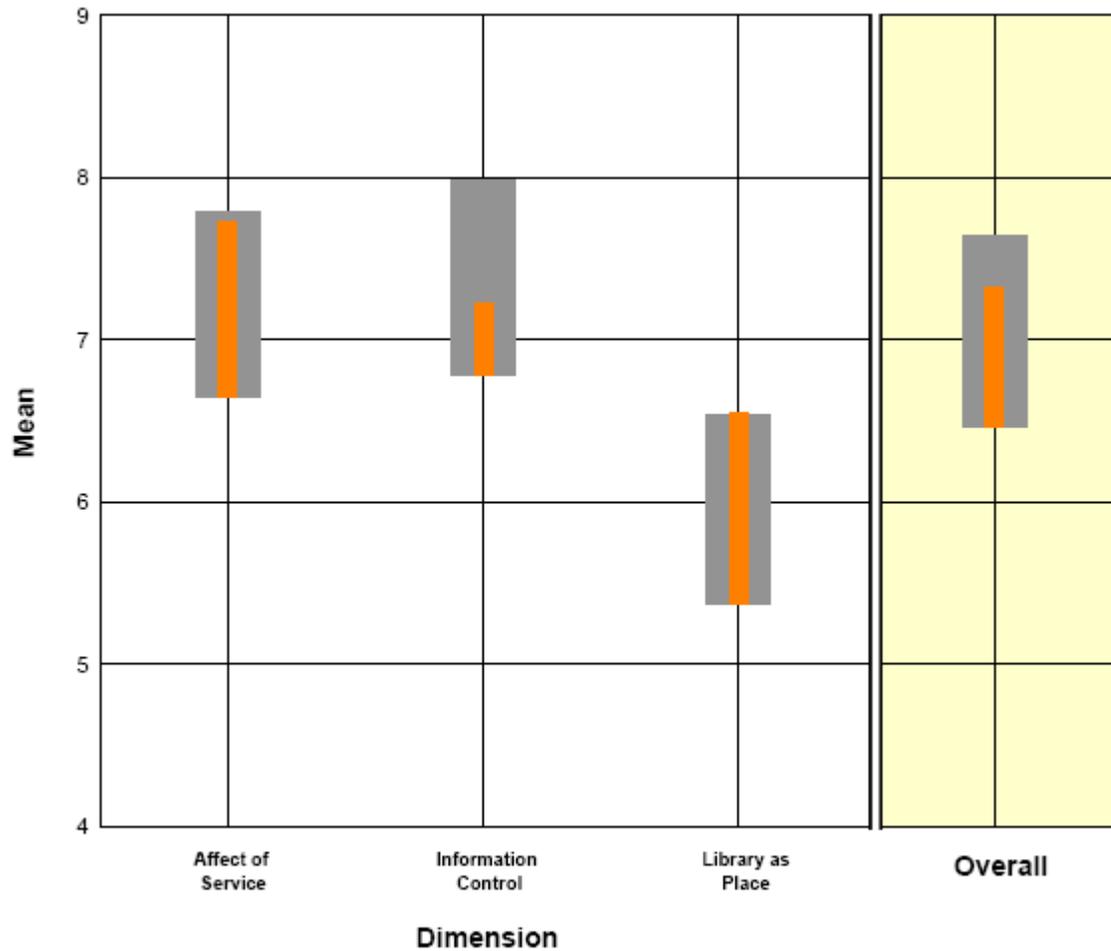


ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	6.29	7.71	7.43	1.14	-0.28	494
AS-2	Giving users individual attention	6.21	7.38	7.46	1.25	0.08	517
AS-3	Employees who are consistently courteous	6.98	7.96	8.16	1.18	0.20	519
AS-4	Readiness to respond to users' questions	6.77	7.89	7.82	1.05	-0.07	517
AS-5	Employees who have the knowledge to answer user questions	6.84	7.97	7.77	0.94	-0.20	519
AS-6	Employees who deal with users in a caring fashion	6.52	7.68	7.78	1.26	0.09	507
AS-7	Employees who understand the needs of their users	6.73	7.87	7.65	0.92	-0.22	514
AS-8	Willingness to help users	6.74	7.90	7.92	1.18	0.02	517
AS-9	Dependability in handling users' service problems	6.78	7.87	7.70	0.92	-0.18	455
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	6.68	8.00	7.08	0.40	-0.92	503
IC-2	A library Web site enabling me to locate information on my own	6.82	8.10	6.87	0.05	-1.22	514
IC-3	The printed library materials I need for my work	6.23	7.33	7.22	0.99	-0.11	492
IC-4	The electronic information resources I need	6.98	8.23	7.39	0.41	-0.83	521
IC-5	Modern equipment that lets me easily access needed information	6.76	7.89	7.50	0.74	-0.39	474
IC-6	Easy-to-use access tools that allow me to find things on my own	6.88	8.14	6.95	0.08	-1.19	506
IC-7	Making information easily accessible for independent use	6.82	8.01	7.26	0.44	-0.75	490
IC-8	Print and/or electronic journal collections I require for my work	7.01	8.14	7.38	0.37	-0.75	499
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	5.08	6.31	6.24	1.16	-0.07	425
LP-2	Quiet space for individual activities	5.21	6.28	6.58	1.36	0.30	392
LP-3	A comfortable and inviting location	5.63	6.80	6.84	1.21	0.04	426
LP-4	A getaway for study, learning, or research	5.84	6.98	6.80	0.96	-0.19	435
LP-5	Community space for group learning and group study	4.64	5.69	5.85	1.21	0.15	340
<b>Overall:</b>		<b>6.38</b>	<b>7.55</b>	<b>7.26</b>	<b>0.87</b>	<b>-0.29</b>	<b>531</b>

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	1.68	1.43	1.58	1.67	1.55	494
AS-2	Giving users individual attention	1.80	1.51	1.61	1.73	1.51	517
AS-3	Employees who are consistently courteous	1.62	1.28	1.17	1.53	1.26	519
AS-4	Readiness to respond to users' questions	1.54	1.23	1.37	1.64	1.47	517
AS-5	Employees who have the knowledge to answer user questions	1.48	1.14	1.36	1.68	1.43	519
AS-6	Employees who deal with users in a caring fashion	1.73	1.37	1.38	1.70	1.44	507
AS-7	Employees who understand the needs of their users	1.58	1.21	1.38	1.66	1.49	514
AS-8	Willingness to help users	1.51	1.19	1.29	1.60	1.30	517
AS-9	Dependability in handling users' service problems	1.53	1.21	1.36	1.50	1.32	455
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	1.81	1.40	1.91	1.96	1.94	503
IC-2	A library Web site enabling me to locate information on my own	1.55	1.22	1.71	2.03	1.88	514
IC-3	The printed library materials I need for my work	1.88	1.77	1.66	1.73	1.67	492
IC-4	The electronic information resources I need	1.49	1.06	1.49	1.77	1.60	521
IC-5	Modern equipment that lets me easily access needed information	1.61	1.35	1.40	1.75	1.59	474
IC-6	Easy-to-use access tools that allow me to find things on my own	1.50	1.13	1.65	1.99	1.82	506
IC-7	Making information easily accessible for independent use	1.51	1.16	1.59	1.84	1.67	490
IC-8	Print and/or electronic journal collections I require for my work	1.61	1.30	1.56	1.85	1.68	499
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	2.25	2.17	1.94	2.32	2.39	425
LP-2	Quiet space for individual activities	2.26	2.26	1.81	2.12	2.13	392
LP-3	A comfortable and inviting location	2.10	1.94	1.73	2.17	2.08	426
LP-4	A getaway for study, learning, or research	2.09	2.07	1.73	1.95	1.95	435
LP-5	Community space for group learning and group study	2.32	2.39	2.06	2.28	2.37	340
<b>Overall:</b>		<b>1.75</b>	<b>1.49</b>	<b>1.58</b>	<b>1.84</b>	<b>1.71</b>	<b>531</b>

### 11.2 Core Questions Dimensions Summary

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



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 A.

<b>Dimension</b>	<b>Minimum Mean</b>	<b>Desired Mean</b>	<b>Perceived Mean</b>	<b>Adequacy Mean</b>	<b>Superiority Mean</b>	<b>n</b>
Affect of Service	6.64	7.80	7.73	1.09	-0.06	531
Information Control	6.78	7.99	7.22	0.44	-0.76	531
Library as Place	5.37	6.53	6.54	1.18	0.01	492
<b>Overall:</b>	<b>6.46</b>	<b>7.64</b>	<b>7.32</b>	<b>0.86</b>	<b>-0.32</b>	<b>531</b>

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 A.

<b>Dimension</b>	<b>Minimum SD</b>	<b>Desired SD</b>	<b>Perceived SD</b>	<b>Adequacy SD</b>	<b>Superiority SD</b>	<b>n</b>
Affect of Service	1.35	1.02	1.19	1.34	1.14	531
Information Control	1.27	0.94	1.28	1.46	1.35	531
Library as Place	1.93	1.86	1.58	1.78	1.81	492
<b>Overall:</b>	<b>1.27</b>	<b>0.97</b>	<b>1.14</b>	<b>1.28</b>	<b>1.12</b>	<b>531</b>

### 11.3 Local Questions Summary

This table shows mean scores for each of the local questions added by the individual libraries or consortium, where n is the number of respondents for each particular question. (For a more detailed explanation of the headings, see the Introduction of the notebook.)

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Ability to navigate library Web pages easily	6.93	8.10	6.77	-0.16	-1.33	511
Adequate hours of service	6.27	7.42	7.36	1.08	-0.06	368
Convenient service hours	6.44	7.47	7.57	1.13	0.10	88
Ease and timeliness in getting materials from other libraries	6.51	7.87	7.52	1.01	-0.35	401
Librarians teaching me how to effectively use the electronically available databases, journals, and books	6.57	7.71	7.45	0.88	-0.26	86
Library keeping me informed about all of its services	6.10	7.26	7.01	0.91	-0.25	100
Making me aware of library resources and services	6.06	7.36	6.98	0.92	-0.38	423
Teaching me how to access, evaluate, and use information	5.76	7.09	6.87	1.11	-0.23	416
Timely document delivery / interlibrary loan	6.82	8.14	7.86	1.04	-0.28	93

Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Ability to navigate library Web pages easily	1.46	1.14	1.77	2.01	1.94	511
Adequate hours of service	1.81	1.58	1.54	1.73	1.52	368
Convenient service hours	1.47	1.69	1.17	1.33	1.42	88
Ease and timeliness in getting materials from other libraries	1.60	1.21	1.47	1.77	1.49	401
Librarians teaching me how to effectively use the electronically available databases, journals, and books	1.56	1.56	1.58	1.40	1.21	86
Library keeping me informed about all of its services	1.44	1.44	1.45	1.61	1.49	100
Making me aware of library resources and services	1.82	1.62	1.71	1.91	1.84	423
Teaching me how to access, evaluate, and use information	1.98	1.86	1.74	2.03	2.04	416
Timely document delivery / interlibrary loan	1.23	1.05	1.18	1.37	1.25	93

#### 11.4 General Satisfaction Questions Summary

This table displays 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.	8.01	1.24	530
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.68	1.44	529
How would you rate the overall quality of the service provided by the library?	7.79	1.20	531

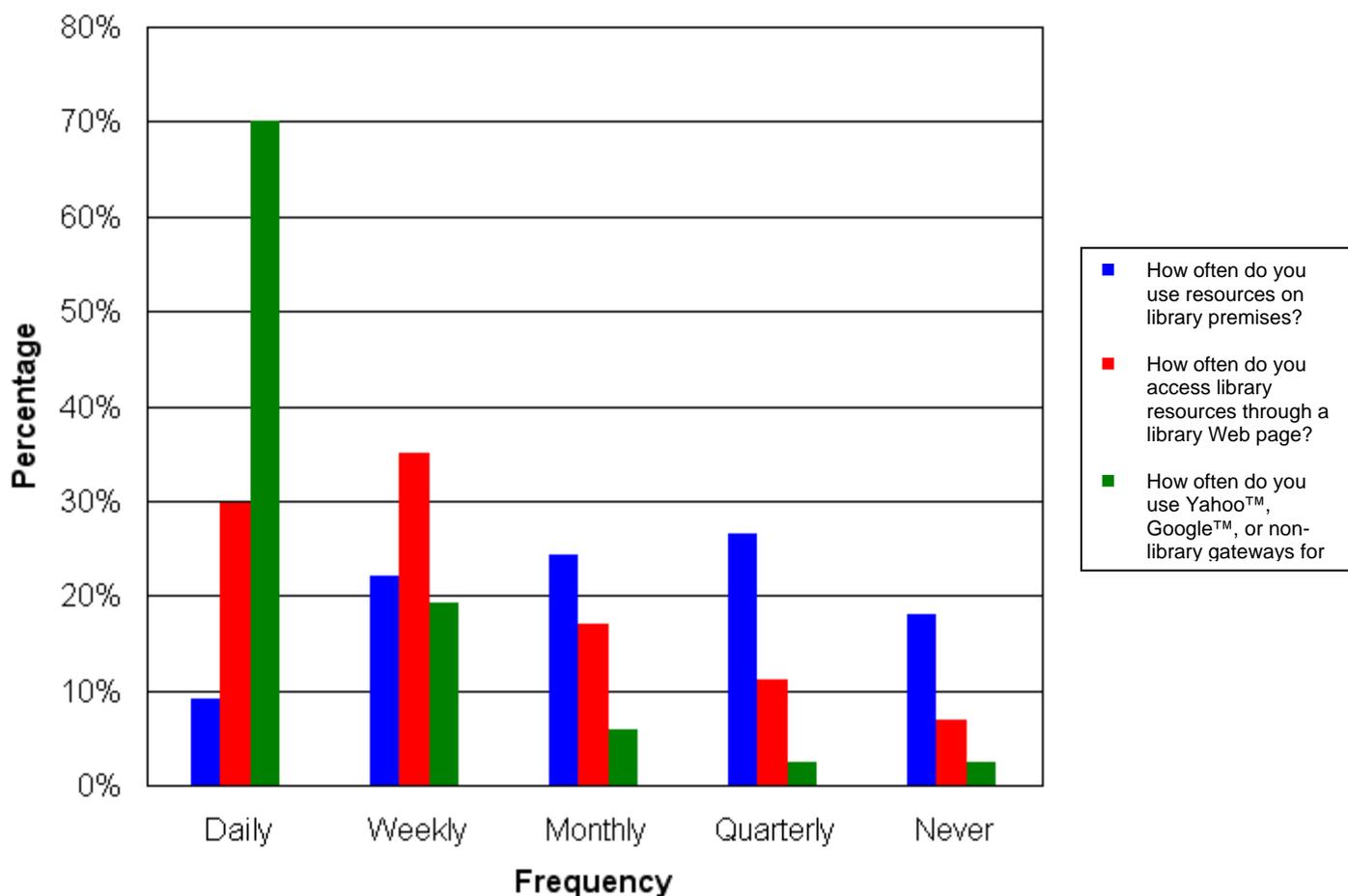
#### 11.5 Information Literacy Outcomes Questions Summary

This table displays 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 being “strongly agree.”

Information Literacy Outcome Question	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	7.17	1.72	531
The library aids my advancement in my academic discipline.	7.07	1.79	531
The library enables me to be more efficient in my academic pursuits.	7.15	1.75	528
The library helps me distinguish between trustworthy and untrustworthy information.	6.06	1.99	530
The library provides me with the information skills I need in my work or study.	6.68	1.75	529

### 11.6 Library Use Summary

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



	Daily	Weekly	Monthly	Quarterly	Never	n / %
How often do you use resources on library premises?	48 9.04%	117 22.03%	129 24.29%	141 26.55%	96 18.08%	531 100.00%
How often do you access library resources through a library Web page?	158 29.81%	186 35.09%	90 16.98%	59 11.13%	37 6.98%	530 100.00%
How often do you use Yahoo™, Google™, or non-library gateways for information?	372 70.06%	102 19.21%	31 5.84%	13 2.45%	13 2.45%	531 100.00%



## 12 Appendix A: 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/>](http://www.libqual.org/Publications/)). The LibQUAL+® survey dimensions have evolved with each iteration, becoming more refined and focused for application to the library context. 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 and 2003 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 four dimensions were retained, their titles were changed slightly to more clearly represent the questions and data. The same four dimensions were also used on the 2003 survey:

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

### LibQUAL+® 2004 - 2007 Dimensions

After the 2003 survey was completed, factor and reliability analyses on the resulting data revealed that two of the dimensions measured by the survey-Access to Information and Personal Control-had collapsed into one. The following three dimensions have been measured since then: Affect of Service, Information Control, and Library as Place. In addition, three core items were eliminated from the 2003 version of the survey, leaving 22 core items on the final survey instrument.

The list below displays the dimensions used to present the results in the 2007 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.*)

**Affect of Service**

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

**Information Control**

- [IC-1] Making electronic resources accessible from my home or office
- [IC-2] A library Web site enabling me to locate information on my own
- [IC-3] The printed library materials I need for my work
- [IC-4] The electronic information resources I need
- [IC-5] Modern equipment that lets me easily access needed information
- [IC-6] Easy-to-use access tools that allow me to find things on my own
- [IC-7] Making information easily accessible for independent use
- [IC-8] Print and/or electronic journal collections I require for my work

**Library as Place**

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





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