



**LibQUAL<sup>+</sup>**  
*2010 Survey*

**ARL**

---

**Association of Research Libraries / Texas A&M University**  
**[www.libqual.org](http://www.libqual.org)**





# **LibQUAL<sup>+</sup>**

## *2010 Survey*

**ARL**

### **Contributors**

**Colleen Cook**  
Texas A&M University

**Fred Heath**  
University of Texas

**Bruce Thompson**  
Texas A&M University

**David Green**  
Association of Research Libraries

**Martha Kyrillidou**  
Association of Research Libraries

**Gary Roebuck**  
Association of Research Libraries

---

**Association of Research Libraries / Texas A&M University**

**[www.libqual.org](http://www.libqual.org)**

Association of Research Libraries

21 Dupont Circle, Suite 800

Washington, DC 20036

Phone 202-296-2296

Fax 202-872-0884

<http://www.libqual.org>

Copyright © 2010 Association of Research Libraries

# 1 Introduction

## 1.1 Acknowledgements

This notebook contains information from the 2010 administration of the LibQUAL+® protocol. The material on the following pages is drawn from the analysis of responses from the participating institutions collected in 2010.

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, MaShana Davis, Richard Groves, Kaylyn Groves, Amy Hoseth, Kristina Justh, 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, a project known as 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.

Colleen Cook  
Texas A&M University

David Green  
Association of Research Libraries

Fred Heath  
University of Texas

Martha Kyrillidou  
Association of Research Libraries

Bruce Thompson  
Texas A&M University

Gary Roebuck  
Association of Research Libraries

## 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. Through 2009, we have had 1,298 surveys implemented in over 20 countries, 20 language translations, and well over 1 million surveys. About 40% of the users who respond to the survey 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 an experimental version of the LibQUAL+® Analytics (for more information, see Section 1.6). Between 2007 and 2010 we incorporated additional languages including non-roman languages like Chinese, Greek, Hebrew, and Japanese. In 2008, we started experimenting with a new technology platform that incorporates many desired enhancements and tested a shorter version of the LibQUAL+® survey known as LibQUAL+® Lite. In 2010, we launched the new platform in our operational environment after researching extensively the LibQUAL+® Lite behavior [see: Kyrillidou, M. (2009). *Item Sampling in Service Quality Assessment Surveys to Improve Rates and Reduce Respondent Burden: The 'LibQUAL+® Lite' Randomized Control Trial (RCT)* (Doctoral dissertation). Retrieved from [https://www.ideals.illinois.edu/bitstream/handle/2142/14570/Kyrillidou\\_Martha.pdf?sequence=3](https://www.ideals.illinois.edu/bitstream/handle/2142/14570/Kyrillidou_Martha.pdf?sequence=3) ].

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+® 2009 Survey Highlights

<[http://libqual.org/documents/admin/LibQUALHighlights2009\\_Full.pdf](http://libqual.org/documents/admin/LibQUALHighlights2009_Full.pdf)>

<[http://libqual.org/documents/admin/LibQUALHighlights2009\\_Full\\_Supplement.pdf](http://libqual.org/documents/admin/LibQUALHighlights2009_Full_Supplement.pdf)>

LibQUAL+® 2008 Survey Highlights

<[http://www.libqual.org/documents/admin/LibQUALHighlights2008\\_Full1.pdf](http://www.libqual.org/documents/admin/LibQUALHighlights2008_Full1.pdf)>

<[http://www.libqual.org/documents/admin/LibQUALHighlights2008\\_Full\\_Supplement1.pdf](http://www.libqual.org/documents/admin/LibQUALHighlights2008_Full_Supplement1.pdf)>

LibQUAL+® 2007 Survey Highlights

<[http://www.libqual.org/documents/admin/LibQUALHighlights2007\\_Full1.pdf](http://www.libqual.org/documents/admin/LibQUALHighlights2007_Full1.pdf)>

<[http://www.libqual.org/documents/admin/2007\\_Highlights\\_Supplemental.pdf](http://www.libqual.org/documents/admin/2007_Highlights_Supplemental.pdf)>

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/resources/pubs/libqualpubs/index.shtml>>

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 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 Kyriallidou

Senior 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 paired with training that helps libraries assess and improve library services, change organizational culture, and market the library. The survey instrument measures library users' minimum, perceived, and desired service levels of service quality across three dimensions: Affect of Service, Information Control, and Library as Place. 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 comparable assessment information from peer institutions
- Identify best practices in library service
- Enhance library staff members' analytical skills for interpreting, and acting on data

Since 2000, more than 1,000 libraries have participated in LibQUAL+®, including college and university libraries, community college libraries, health sciences libraries, academic law libraries, and public libraries---some through various consortia, others as independent participants. LibQUAL+® has expanded internationally, with participating institutions in Africa, Asia, Australia and Europe. It has been translated into a number of languages, including Afrikaans, Chinese (Traditional), Danish, Dutch, Finnish, French, German, Greek, Hebrew, Japanese, Norwegian, Spanish, Swedish, and Welsh. 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. Use our online Management Center to set up and track the progress of your survey. You invite your users to take the survey by distributing the URL for your library's Web form via e-mail or posting a link to your survey on the library's Web site. Respondents complete the survey form and their answers are sent to the LibQUAL+® 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 2010 iteration of the LibQUAL+® survey will be available to project participants online in the Data Repository via the LibQUAL+® survey management site:

**<<http://libqual.org/SurveyInstruments/LibQual/DataRepository.aspx>>**

## 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://libqual.org/about/about\\_survey/tools](http://libqual.org/about/about_survey/tools) >

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. If all users rated an item identically, the SD would be zero. Larger SDs indicate more disparate opinions of the users about library service quality.

In this notebook, standard deviations are provided for every mean presented in the tables. In a very real sense, the SD indicates how well a given numerical mean does at representing all the data. If the SD of the scores about a given mean was zero, the mean perfectly represents everyone's scores, and all the scores and the mean are all identical!

## **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+® 2010

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; Kyrillidou & Cook, 2008; Kyrillidou, Cook, & Rao, 2008; Thompson, Cook & Heath, 2003; Thompson, Cook & Thompson, 2002; Thompson, Kyrillidou & Cook, 2007a, 2007b, 2008).

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).

### **LibQUAL+® Lite**

In 2010, the LibQUAL+® Lite customization feature was introduced, a shorter version of the survey that takes less time to fill in. The Lite protocol uses item sampling methods to gather data on all 22 LibQUAL+® core items, while only requiring a given single user to respond to a subset of the 22 core questions. Every Lite user responds to one "linking" item from each of the subscales (Affect of Service, Information Control, and Library as Place), and to a randomly-selected subset of five items from the remaining 19 core LibQUAL+® items. However, all 22 core items are completed by at least some users on a given campus. As a consequence, because individual Lite users only complete a subset of the core items, survey response times are roughly cut in half, while the library still receives data on every survey question. Each participating library sets a "Lite-view Percentage" to determine what percentage of individuals will randomly receive the Lite versus the long version of the survey.

The mechanics of item sampling strategy and results from pilot testing are described in Martha Kyrillidou's dissertation. Findings indicate that LibQUAL+® Lite is the preferred and improved alternative to the long form of 22 core items that has been established since 2003. The difference between the long and the Lite version of the survey is enough to result in higher participation rates ranging from 3.1 to 10.6 percent more for surveys that reduce average response times from 10 to 6 minutes (Kyrillidou, 2009, Thompson, Kyrillidou & Cook, 2009a; Thompson, Kyrillidou & Cook, 2009b).

### **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. Kyrillidou (2008) edited a compilation of articles that complements and provides an updated perspective on these earlier special issues. These publications can be ordered by sending an email to [libqual@arl.org](mailto:libqual@arl.org). Numerous other articles have been published in the literature and a good number of references can be located on the LibQUAL+® publication page search engine under 'Related articles.'

### 2010 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 2010 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 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" ("N/A"). If these conditions are not met, when the user attempts to leave the Web page presenting the 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 presented core items and where respondents chose a "user group," if applicable, were retained in summary statistics.*

**2. Excessive "N/A" Responses.** Because some institutions provided access to a lottery drawing for an incentive (e.g., an iPod) for completing the survey, some users might have selected "N/A" 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. *It was decided that records of the long version of the survey containing more than 11 "N/A" responses and records of the Lite version containing more than 4 "N/A" 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 was made. *Records of the long version of the survey containing more than 9 logical inconsistencies and records of the Lite version containing more than 3 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 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) Gender Students 53% female Faculty 45% female Disciplines Liberal Arts 40% Science 15% Other 45%	Population (N=16,000) Gender Students 51% female Faculty 41% female Disciplines Liberal Arts 35% Science 20% Other 45%
<b>Omega University</b>	
Completers (n=200 / 800) Gender Students 35% female Faculty 65% female Disciplines Liberal Arts 40% Science 20% Other 40%	Population (N=23,000) Gender Students 59% female Faculty 43% female Disciplines Liberal Arts 15% Science 35% 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+® 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 2004-2010 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. For a subscription to LibQUAL+® Analytics, email [libqual@arl.org](mailto:libqual@arl.org).

### **Survey Data**

In addition to the notebooks, the norms, and the Analytics, LibQUAL+® also makes available (a) raw survey data in SPSS 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 various formats 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://libqual.org/events>](http://libqual.org/events)

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.libqual.org/)

[<http://www.statsqual.org/>](http://www.statsqual.org/)

[<http://www.arl.org/stats/>](http://www.arl.org/stats/)

### **References**

Berry, L.L. *On Great Service: A Framework For Action*. New York: The Free Press, 1995.

Cook, Colleen C., Fred Heath, and Bruce Thompson. LibQUAL+™ from the UK Perspective. 5th Northumbria International Conference Proceedings, Durham, UK, July, 2003.

Cook, Colleen C. (Guest Ed.). "Library Decision-Makers Speak to Their Uses of Their LibQUAL+™ Data: Some LibQUAL+™ Case Studies." *Performance Measurement and Metrics*, 3 (2002b).

Cook, Colleen C. "A Mixed-Methods Approach to the Identification and Measurement of Academic Library Service Quality Constructs: LibQUAL+™." (PhD diss., Texas A&M University, 2001) *Dissertation Abstracts International*, 62 (2002A): 2295A (University Microfilms No. AAT3020024).

Cook, Colleen C., and Fred Heath. "Users' Perceptions of Library Service Quality: A 'LibQUAL+™' Qualitative Study." *Library Trends*, 49 (2001): 548-84.

- Cook, Colleen C., Fred Heath, and Bruce Thompson. "'Zones of tolerance' in Perceptions of Library Service Quality: A LibQUAL+™ Study." *portal: Libraries and the Academy*, 3 (2003): 113-123.
- Cook, Colleen C., Fred Heath and Bruce Thompson.. "Score Norms for Improving Library Service Quality: A LibQUAL+™ Study." *portal: Libraries and the Academy*, 2 (2002): 13-26.
- Cook, Colleen C., Fred Heath, and Russell L. Thompson. "A Meta-Analysis of Response Rates in Web- or Internet-based Surveys." *Educational and Psychological Measurement*, 60 (2000): 821-36.
- Cook, Colleen C., and Bruce Thompson. "Psychometric Properties of Scores from the Web-based LibQUAL+™ Study of Perceptions of Library Service Quality." *Library Trends*, 49 (2001): 585-604.
- Cullen, Rowena. "Perspectives on User Satisfaction Surveys." *Library Trends*, 49 (2002): 662-86.
- Heath, F., Martha Kyrillidou. and Consuella A. Askew (Guest Eds.). "Libraries Report on Their LibQUAL+® Findings: From Data to Action." *Journal of Library Administration* 40 (3/4) (2004).
- Heath, F., Colleen C. Cook, Martha Kyrillidou, and Bruce Thompson. "ARL Index and Other Validity Correlates of LibQUAL+™ Scores." *portal: Libraries and the Academy*, 2 (2002): 27-42.
- Kyrillidou, M. 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, Martha. "Library Assessment As A Collaborative Enterprise." *Resource Sharing and Information Networks*, 18 ½ (2005-2006): 73-87.
- Kyrillidou, Martha. (2006). "Measuring Library Service Quality: A Perceived Outcome for Libraries. This chapter appears in *Revisiting Outcomes Assessment in Higher Education*. Edited by Peter Herson, Robert E. Dugan, and Candy Schwartz (Westport, CT: Library Unlimited, 2006): 351-66.
- Kyrillidou, Martha. (Guest Ed.). "LibQUAL+® and Beyond: Library assessment with a focus on library improvement." *Performance Measurement and Metrics*, 9 (3) (2008).
- Kyrillidou, M. "Item Sampling in Service Quality Assessment Surveys to Improve Response Rates and Reduce Respondent Burden: The "LibQUAL+® Lite" Randomized Control Trial (RCT)" (PhD diss., University of Illinois at Urbana-Champaign, 2009).  
[https://www.ideals.illinois.edu/bitstream/handle/2142/14570/Kyrillidou\\_Martha.pdf?sequence=3](https://www.ideals.illinois.edu/bitstream/handle/2142/14570/Kyrillidou_Martha.pdf?sequence=3)
- Kyrillidou, Martha and Colleen C. Cook. "The evolution of measurement and evaluation of libraries: a perspective from the Association of Research Libraries." *Library Trends* 56 (4) (Spring 2008): 888-909.
- Kyrillidou, Martha and Colleen C. Cook and S. Shyam Sunder Rao. "Measuring the Quality of Library Service through LibQUAL+®." In *Academic Library Research: Perspectives and Current Trends*. Edited by Marie L. Radford and Pamela Snelson (Chicago, IL: ACRL/ALA, 2008): 253-301.
- Kyrillidou, M., Terry Olshen, Fred Heath, Claude Bonnelly, and Jean-Pierre Côte. "Cross-Cultural Implementation of LibQUAL+™: the French Language Experience. *5th Northumbria International Conference Proceedings* (Durham, UK, 2003): 193-99.

- Kyrillidou, M. and Mark Young. ARL Statistics 2003-04. Washington, DC: Association of Research Libraries, 2005.
- Nitecki, D.A. "Changing the Concept and Measure of Service Quality in Academic Libraries." *The Journal of Academic Librarianship*, 22 (1996): 181-90.
- Parasuraman, A., Leonard Berry, and Valerie Zeithaml. "Refinement and Reassessment of the SERVQUAL Scale." *Journal of Retailing*, 67 (1991): 420-50.
- Thompson, B. "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, October 2002.
- Thompson, B., Colleen C. Cook, and Fred Heath. "The LibQUAL+™ Gap Measurement Model: The Bad, the Ugly, and the Good of Gap Measurement." *Performance Measurement and Metrics*, 1 (2002): 165-78.
- Thompson, B., Colleen C. Cook, and Fred Heath. "Structure of Perceptions of Service Quality in Libraries: A LibQUAL+™ Study." *Structural Equation Modeling*, 10 (2003): 456-464.
- Thompson, B., Colleen C. Cook, and Russell L. Thompson. Reliability and Structure of LibQUAL+™ Scores: Measuring Perceived Library Service Quality. *portal: Libraries and the Academy*, 2 (2002): 3-12.
- Thompson, B., Colleen C. Cook, and Martha Kyrillidou. (2005). Concurrent validity of LibQUAL+® scores: What do LibQUAL+® scores measure? *Journal of Academic Librarianship*, 31: 517-22.
- Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "Using Localized Survey Items to Augment Standardized Benchmarking Measures: A LibQUAL+® Study." *portal: Libraries and the Academy*, 6(2) (2006): 219-30.
- Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "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, April 3-4 2006.
- Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "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, August 4-6, 2006.
- Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "On-premises Library versus Google™-Like Information Gateway Usage Patterns: A LibQUAL+® Study." *portal: Libraries and the Academy* 7 (4) (Oct 2007a): 463-480.
- Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "User library service expectations in health science vs. other settings: a LibQUAL+® Study." *Health Information and Libraries Journal* 24 (8) Supplement 1, (Dec 2007b): 38-45.
- Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "Library Users Service Desires: a LibQUAL+® Study." *Library Quarterly* 78 (1) (Jan 2008): 1-18.

Thompson, B., Martha Kyrillidou, and Colleen Cook. "Item sampling in service quality assessment surveys to improve response rates and reduce respondent burden: The "LibQUAL+® Lite" example." Performance Measurement & Metrics, 10 (1) (2009): 6-16.

Thompson, B., Martha Kyrillidou, and Colleen Cook. "Equating scores on Lite and long library user survey forms: The LibQUAL+® Lite randomized control trials." Performance Measurement & Metrics, 10 (3) (2009): 212-219.

Zeithaml, Valerie, A. Parasuraman, and Leonard L. Berry. *Delivering Quality Service: Balancing Customer Perceptions and Expectations*. New York: Free Press, 1990.

## 1.7 Survey Protocol and Language for ARL

The data below indicate the number of valid surveys collected by language and long/Lite breakdowns.

		Long	Lite	Total (by Language)
<b>English (American)</b>	Count	5,956	18,152	24,108
	% of Protocol	99.13	72.12	77.33
	% of Language	24.71	75.29	100.00
	% of Total Cases	19.10	58.22	77.33
<b>French (Canada)</b>	Count	52	7,017	7,069
	% of Protocol	0.87	27.88	22.67
	% of Language	0.74	99.26	100.00
	% of Total Cases	0.17	22.51	22.67
<b>Total</b> (by Survey Protocol)	Count	6,008	25,169	31,177
	% of Protocol	100.00	100.00	100.00
	% of Language	19.27	80.73	100.00
	% of Total Cases	19.27	80.73	100.00

## 2 Respondents by Institution for ARL

Below is a listing of all the consortium institutions that participated in the 2010 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	Respondents n	Respondents %
<b>College or University</b>		
1) McMaster University Libraries	473	1.52%
2) University of Miami	705	2.26%
3) University of Utah	556	1.78%
4) University of Connecticut Libraries	2,484	7.97%
5) Université de Montréal	7,006	22.47%
6) Oklahoma State University	1,955	6.27%
7) University of Saskatchewan Library	2,056	6.59%
8) University of Toronto Libraries	372	1.19%
9) University of Waterloo	789	2.53%
10) University of Houston Libraries	510	1.64%
11) University of Georgia Libraries	918	2.94%
12) University of Texas at Austin	1,319	4.23%
13) University of Calgary Libraries and Cultural Resources	635	2.04%
14) University of Alberta Libraries	830	2.66%
15) University of British Columbia Library	619	1.99%
16) University of Hawaii at Manoa Library	820	2.63%
17) University of Cincinnati Libraries	499	1.60%
18) GEORGIA TECH	1,038	3.33%
19) University of Guelph	2,298	7.37%
20) Texas A&M University, College Station	1,203	3.86%
21) University of Western Ontario	552	1.77%
22) York University Libraries	758	2.43%
23) McGill University Library	1,449	4.65%
24) University of Oregon Libraries	966	3.10%
25) WAYNE STATE	367	1.18%
<b>Sub Total</b>	<b>31,177</b>	<b>100.00%</b>
<b>Grand Total:</b>	<b>31,177</b>	<b>100.00%</b>



### 3 Summary for College or University

#### 3.1 Demographic Summary for College or University

##### 3.1.1 Respondents by User Group

User Group	Respondent n	Respondent %
<b>Undergraduate</b>		
First year	4,825	15.48%
Second year	3,859	12.38%
Third year	3,995	12.82%
Fourth year	2,781	8.92%
Fifth year and above	1,116	3.58%
Non-degree	199	0.64%
<b>Sub Total:</b>	<b>16,775</b>	<b>53.82%</b>
<b>Graduate</b>		
Masters	4,672	14.99%
Doctoral	3,866	12.40%
Non-degree or Undecided	265	0.85%
<b>Sub Total:</b>	<b>8,803</b>	<b>28.24%</b>
<b>Faculty</b>		
Professor	1,466	4.70%
Associate Professor	1,098	3.52%
Assistant Professor	866	2.78%
Lecturer	350	1.12%
Adjunct Faculty	208	0.67%
Other Academic Status	388	1.24%
<b>Sub Total:</b>	<b>4,376</b>	<b>14.04%</b>
<b>Library Staff</b>		
Administrator	14	0.04%
Manager, Head of Unit	43	0.14%
Public Services	129	0.41%
Systems	13	0.04%
Technical Services	54	0.17%
Other	43	0.14%
<b>Sub Total:</b>	<b>296</b>	<b>0.95%</b>
<b>Staff</b>		
Research Staff	417	1.34%
Other Staff Positions	502	1.61%
<b>Sub Total:</b>	<b>919</b>	<b>2.95%</b>
<b>Total:</b>	<b>31,169</b>	<b>100.00%</b>

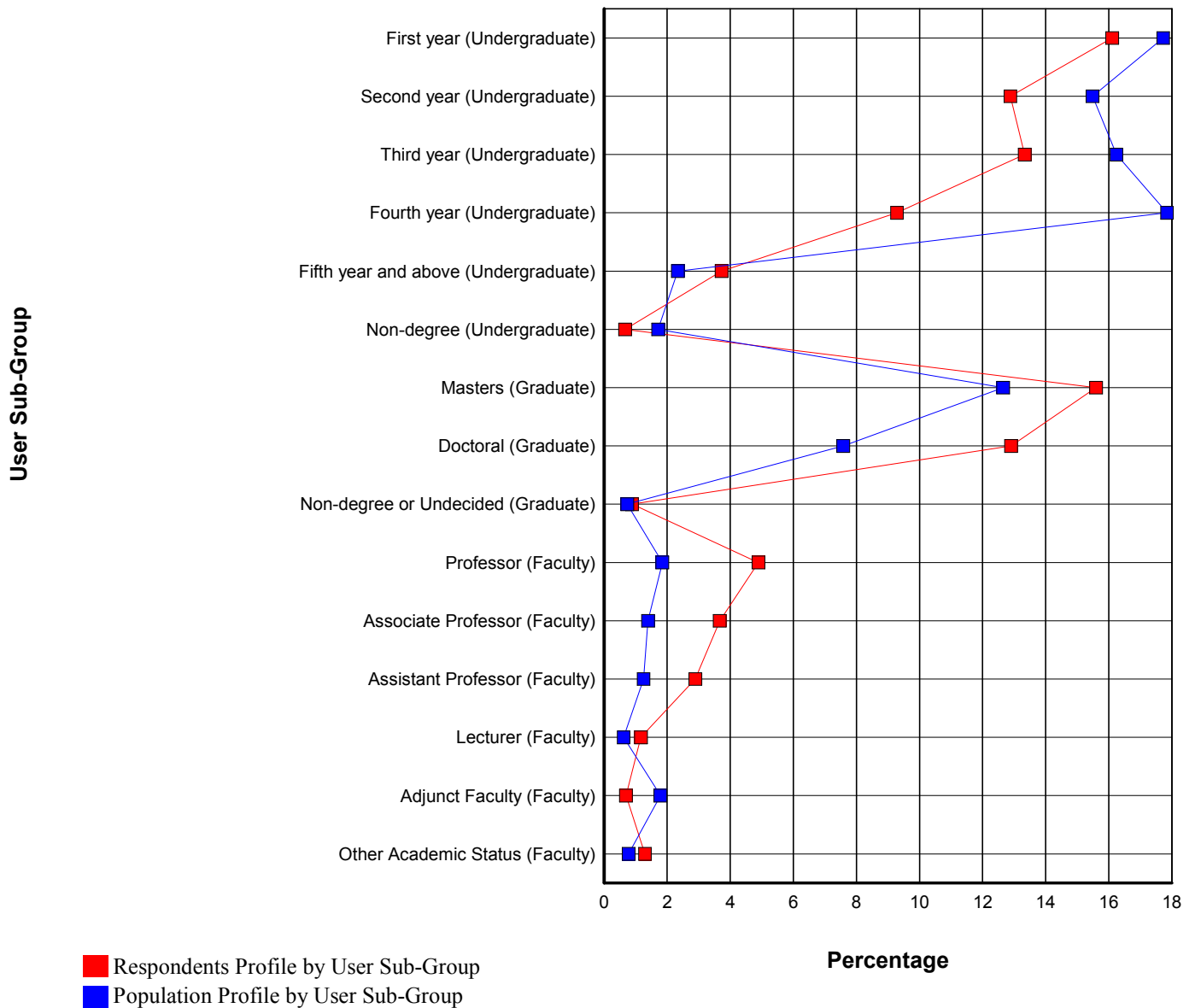
Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: All

### 3.1.2 Population and Respondents 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 the 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.*



Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: All (Excluding Library Staff, Staff)

<b>User Sub-Group</b>	<b>Population N</b>	<b>Population %</b>	<b>Respondents n</b>	<b>Respondents %</b>	<b>%N - %n</b>
First year (Undergraduate)	152,501	17.73	4,825	16.11	1.62
Second year (Undergraduate)	133,249	15.49	3,859	12.88	2.61
Third year (Undergraduate)	139,758	16.25	3,995	13.34	2.91
Fourth year (Undergraduate)	153,540	17.85	2,781	9.28	8.56
Fifth year and above (Undergraduate)	20,095	2.34	1,116	3.73	-1.39
Non-degree (Undergraduate)	14,736	1.71	199	0.66	1.05
Masters (Graduate)	108,856	12.65	4,672	15.60	-2.94
Doctoral (Graduate)	65,256	7.59	3,866	12.91	-5.32
Non-degree or Undecided (Graduate)	6,318	0.73	265	0.88	-0.15
Professor (Faculty)	15,892	1.85	1,466	4.89	-3.05
Associate Professor (Faculty)	11,970	1.39	1,098	3.67	-2.27
Assistant Professor (Faculty)	10,763	1.25	866	2.89	-1.64
Lecturer (Faculty)	5,325	0.62	350	1.17	-0.55
Adjunct Faculty (Faculty)	15,350	1.78	208	0.69	1.09
Other Academic Status (Faculty)	6,686	0.78	388	1.30	-0.52
<b>Total:</b>	<b>860,295</b>	<b>100.00</b>	<b>29,954</b>	<b>100.00</b>	<b>0.00</b>

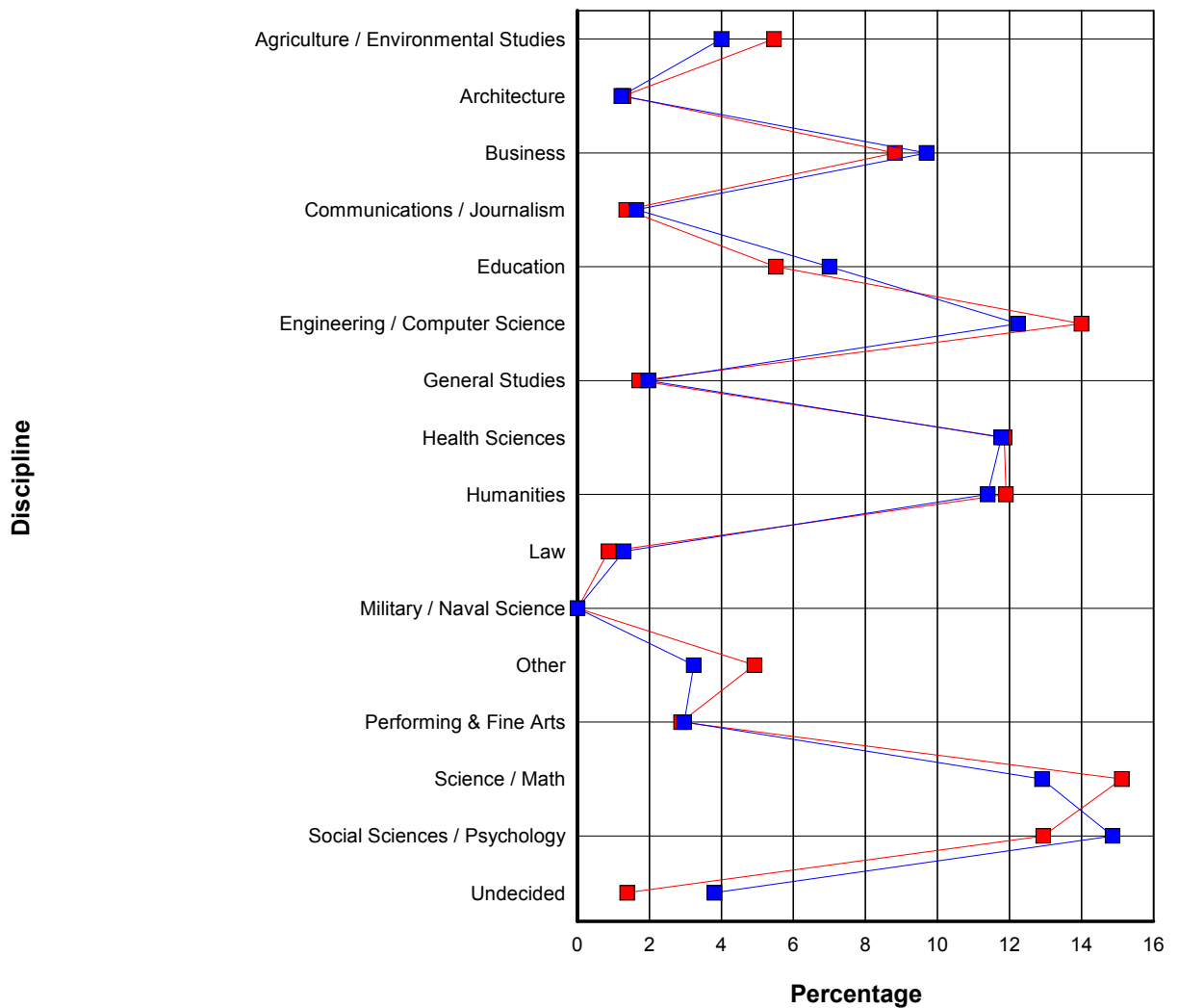
Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: All (Excluding Library Staff, Staff)

### 3.1.3 Population and Respondents 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

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: All (Excluding Library Staff, Staff)

<b>Discipline</b>	<b>Population N</b>	<b>Population %</b>	<b>Respondents n</b>	<b>Respondents %</b>	<b>%N - %n</b>
Agriculture / Environmental Studies	36,517	4.00	1,523	5.46	-1.46
Architecture	11,127	1.22	356	1.28	-0.06
Business	88,466	9.70	2,460	8.82	0.88
Communications / Journalism	14,961	1.64	378	1.35	0.29
Education	63,851	7.00	1,538	5.51	1.49
Engineering / Computer Science	111,662	12.24	3,905	14.00	-1.76
General Studies	17,959	1.97	478	1.71	0.26
Health Sciences	107,443	11.78	3,309	11.86	-0.08
Humanities	103,966	11.40	3,321	11.90	-0.51
Law	11,771	1.29	242	0.87	0.42
Military / Naval Science	38	0.00	2	0.01	0.00
Other	29,459	3.23	1,372	4.92	-1.69
Performing & Fine Arts	27,046	2.96	804	2.88	0.08
Science / Math	117,703	12.90	4,219	15.12	-2.22
Social Sciences / Psychology	135,609	14.86	3,609	12.94	1.93
Undecided	34,743	3.81	385	1.38	2.43
<b>Total:</b>	<b>912,321</b>	<b>100.00</b>	<b>27,901</b>	<b>100.00</b>	<b>0.00</b>

Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: All (Excluding Library Staff, Staff)

### 3.1.4 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.

Age:	Respondents n	Respondents %
Under 18	77	0.25
18 - 22	12,822	41.55
23 - 30	9,034	29.27
31 - 45	5,042	16.34
46 - 65	3,484	11.29
Over 65	403	1.31
<b>Total:</b>	<b>30,862</b>	<b>100.00</b>

### 3.1.5 Respondent Profile 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.

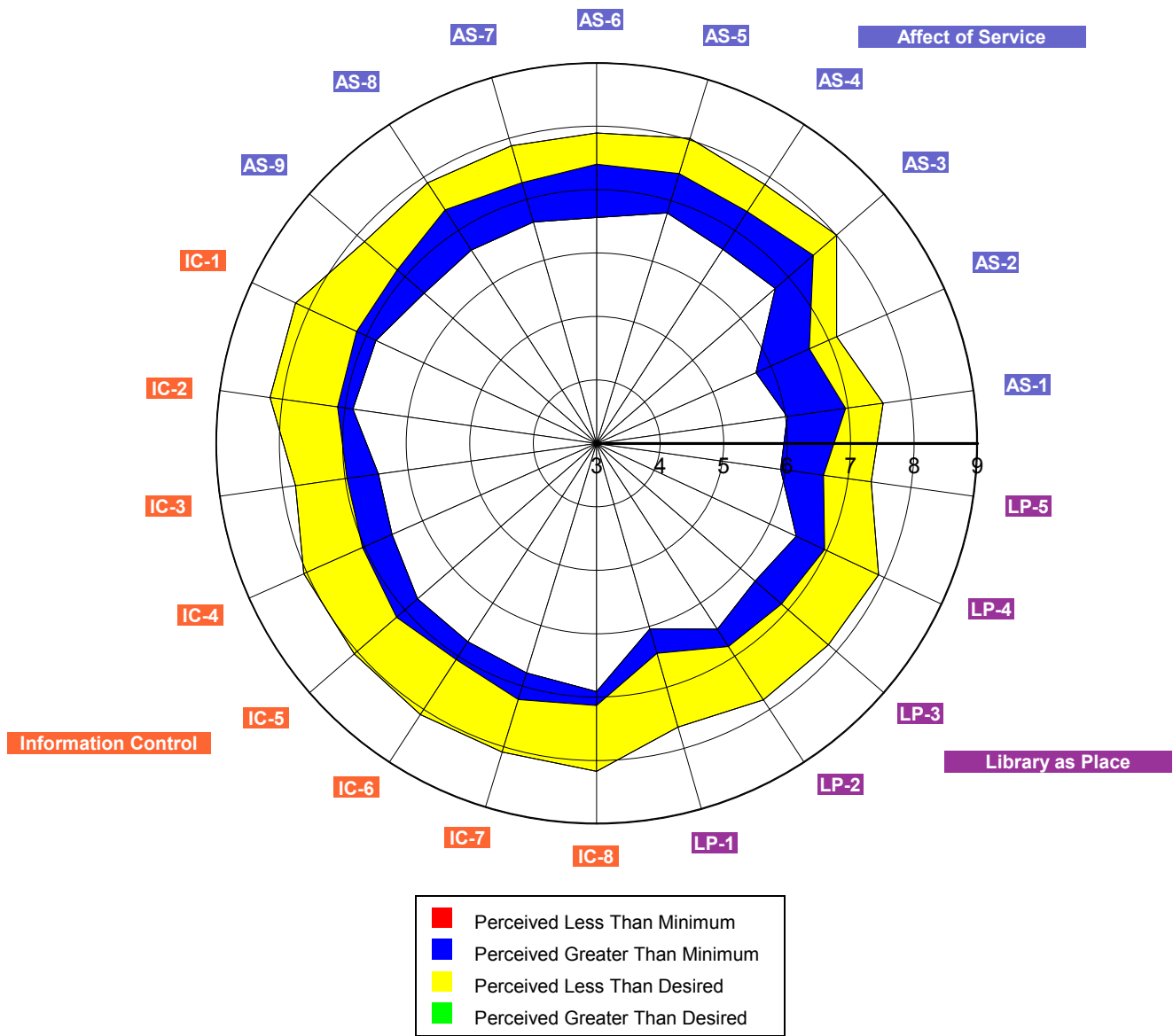
Sex:	Population N	Population %	Respondents n	Respondents %
Female	440,326	51.58	17,786	57.67
Male	413,387	48.42	13,057	42.33
<b>Total:</b>	<b>853,713</b>	<b>100.00</b>	<b>30,843</b>	<b>100.00</b>

### 3.2 Core Questions Summary for ARL

This radar chart shows the 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, Information Control, and Library as Place.

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



Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: All (Excluding 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	6.03	7.56	6.96	0.93	-0.60	11,138
AS-2	Giving users individual attention	5.75	7.14	6.67	0.92	-0.47	10,977
AS-3	Employees who are consistently courteous	6.73	8.01	7.52	0.79	-0.49	11,770
AS-4	Readiness to respond to users' questions	6.65	7.86	7.36	0.71	-0.51	11,383
AS-5	Employees who have the knowledge to answer user questions	6.80	8.03	7.45	0.65	-0.58	11,512
AS-6	Employees who deal with users in a caring fashion	6.56	7.89	7.40	0.84	-0.49	29,471
AS-7	Employees who understand the needs of their users	6.63	7.88	7.28	0.65	-0.60	11,375
AS-8	Willingness to help users	6.63	7.90	7.39	0.76	-0.51	11,437
AS-9	Dependability in handling users' service problems	6.61	7.85	7.17	0.56	-0.68	10,145
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	6.84	8.24	7.17	0.33	-1.06	12,443
IC-2	A library Web site enabling me to locate information on my own	6.88	8.20	7.12	0.24	-1.08	13,053
IC-3	The printed library materials I need for my work	6.47	7.79	6.98	0.50	-0.82	11,792
IC-4	The electronic information resources I need	6.53	8.05	7.04	0.51	-1.01	30,285
IC-5	Modern equipment that lets me easily access needed information	6.74	8.06	7.18	0.44	-0.88	12,642
IC-6	Easy-to-use access tools that allow me to find things on my own	6.73	8.10	7.06	0.34	-1.03	12,734
IC-7	Making information easily accessible for independent use	6.78	8.09	7.22	0.44	-0.87	12,611
IC-8	Print and/or electronic journal collections I require for my work	6.91	8.17	7.13	0.22	-1.04	12,228
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	6.04	7.65	6.44	0.40	-1.21	28,972
LP-2	Quiet space for individual activities	6.49	7.82	6.82	0.32	-1.00	11,350
LP-3	A comfortable and inviting location	6.31	7.84	6.86	0.55	-0.98	11,855
LP-4	A getaway for study, learning, or research	6.47	7.90	6.96	0.49	-0.94	11,388
LP-5	Community space for group learning and group study	5.93	7.37	6.61	0.68	-0.76	10,565
<b>Overall:</b>		<b>6.48</b>	<b>7.85</b>	<b>7.03</b>	<b>0.56</b>	<b>-0.82</b>	<b>30,873</b>

Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: All (Excluding Library Staff)

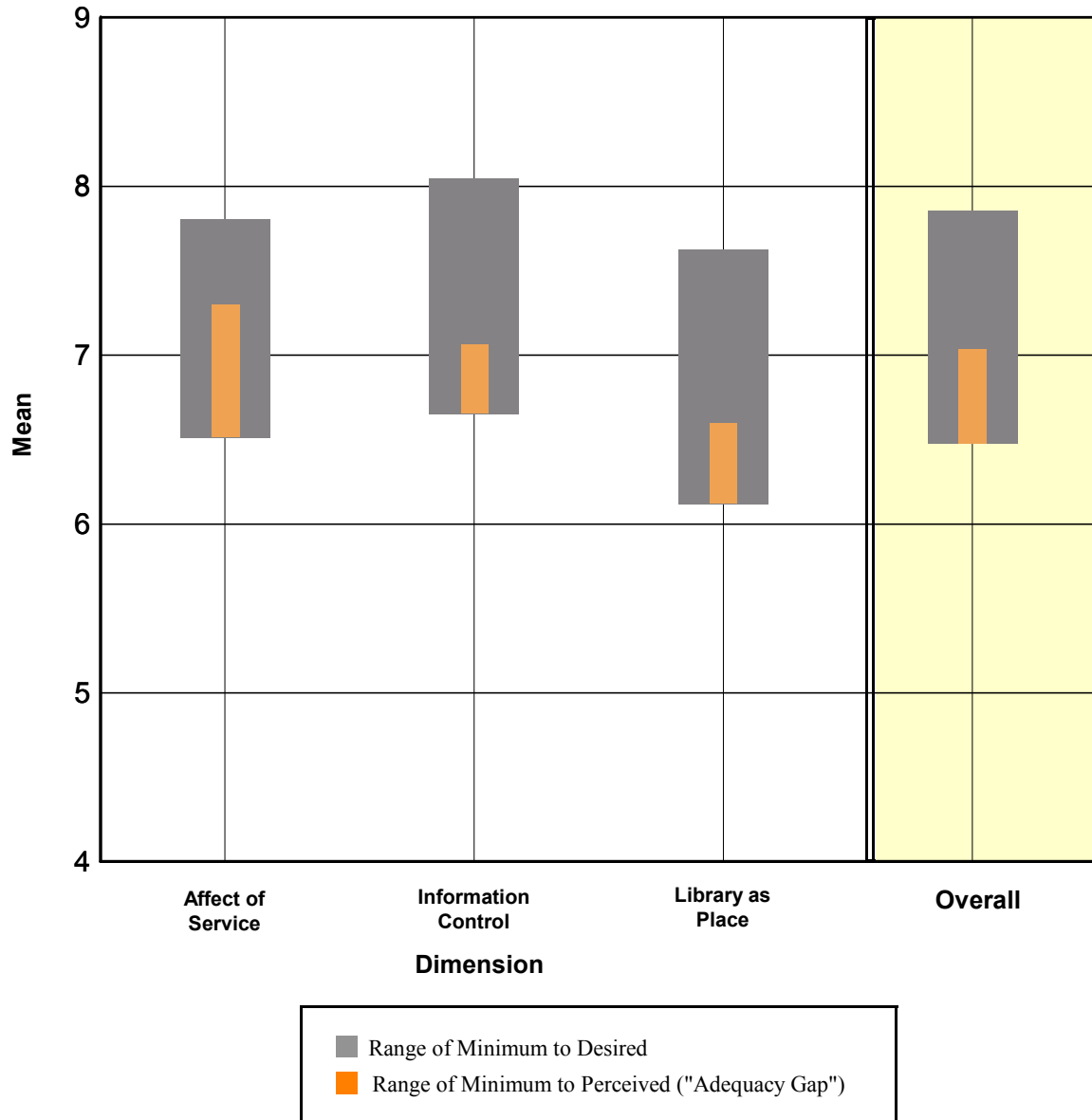


ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
<b>Affect of Service</b>							
AS-1	Employees who instill confidence in users	1.88	1.55	1.60	1.80	1.63	11,138
AS-2	Giving users individual attention	1.97	1.73	1.71	1.85	1.73	10,977
AS-3	Employees who are consistently courteous	1.76	1.29	1.49	1.85	1.57	11,770
AS-4	Readiness to respond to users' questions	1.67	1.32	1.46	1.69	1.49	11,383
AS-5	Employees who have the knowledge to answer user questions	1.67	1.26	1.41	1.68	1.44	11,512
AS-6	Employees who deal with users in a caring fashion	1.77	1.36	1.49	1.81	1.58	29,471
AS-7	Employees who understand the needs of their users	1.71	1.33	1.45	1.74	1.51	11,375
AS-8	Willingness to help users	1.73	1.33	1.48	1.74	1.50	11,437
AS-9	Dependability in handling users' service problems	1.71	1.38	1.50	1.77	1.58	10,145
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	1.77	1.26	1.65	2.00	1.74	12,443
IC-2	A library Web site enabling me to locate information on my own	1.64	1.19	1.57	1.91	1.69	13,053
IC-3	The printed library materials I need for my work	1.81	1.52	1.57	1.95	1.81	11,792
IC-4	The electronic information resources I need	1.69	1.30	1.49	1.87	1.67	30,285
IC-5	Modern equipment that lets me easily access needed information	1.64	1.24	1.49	1.80	1.63	12,642
IC-6	Easy-to-use access tools that allow me to find things on my own	1.62	1.20	1.48	1.85	1.62	12,734
IC-7	Making information easily accessible for independent use	1.60	1.18	1.44	1.76	1.53	12,611
IC-8	Print and/or electronic journal collections I require for my work	1.72	1.31	1.53	1.96	1.71	12,228
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	1.93	1.74	1.85	2.31	2.29	28,972
LP-2	Quiet space for individual activities	1.94	1.64	1.83	2.33	2.18	11,350
LP-3	A comfortable and inviting location	1.80	1.43	1.70	2.07	1.93	11,855
LP-4	A getaway for study, learning, or research	1.85	1.52	1.66	2.06	1.91	11,388
LP-5	Community space for group learning and group study	2.04	1.90	1.84	2.35	2.30	10,565
<b>Overall:</b>		1.33	0.98	1.12	1.37	1.18	30,873

Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: All (Excluding Library Staff)

### 3.3 Core Question Dimensions Summary for ARL

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.



Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: All (Excluding 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.

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	6.51	7.81	7.30	0.78	-0.51	30,445
Information Control	6.65	8.05	7.06	0.41	-0.99	30,837
Library as Place	6.12	7.63	6.60	0.48	-1.03	29,713
<b>Overall</b>	6.48	7.85	7.03	0.56	-0.82	30,873

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.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service	1.56	1.19	1.30	1.52	1.31	30,445
Information Control	1.42	1.04	1.24	1.55	1.34	30,837
Library as Place	1.75	1.56	1.62	2.02	1.96	29,713
<b>Overall</b>	1.33	0.98	1.12	1.37	1.18	30,873

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: All (Excluding Library Staff)

### 3.4 Local Question Summary for ARL

This table shows mean scores of each of the local questions added by the individual library or consortium, 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.

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Availability of online help when using my library's electronic resources	6.38	7.66	7.01	0.63	-0.65	286
Informing me of useful library services	5.92	7.20	6.85	0.92	-0.35	239
Ease of use of electronic resources	7.31	8.21	7.44	0.13	-0.77	52
Providing help when and where I need it	6.46	7.80	7.39	0.94	-0.41	764
Teaching me how to access, evaluate, and use information	6.13	7.52	6.93	0.80	-0.59	4,783
The right mix of electronic content	6.89	8.29	7.21	0.32	-1.07	108
Online course support (readings, links, references)	6.73	7.99	7.10	0.37	-0.89	670
Collections of online full-text articles sufficient to meet my needs	7.07	8.32	6.96	-0.10	-1.36	107
Electronic resources matching my information needs	6.96	8.19	7.42	0.46	-0.77	2,227
Access to rare and historical materials	5.26	6.71	6.46	1.20	-0.25	1,477
Contribution to the intellectual atmosphere of the campus	7.08	8.04	7.11	0.04	-0.92	141
Ready access to computers / Internet / software	6.59	7.99	6.96	0.37	-1.04	194
Library staff teaching me how to find information	6.28	7.80	6.76	0.48	-1.04	50
Library keeping me informed about all of its services	5.44	6.89	6.34	0.90	-0.55	616
The multimedia (CD / DVD / video / audio) collections I need	5.26	6.99	6.54	1.28	-0.45	232
Access to photocopying and printing facilities	5.86	7.35	6.47	0.61	-0.88	259
Helpfulness in dealing with users' IT problems	6.71	7.99	7.26	0.55	-0.73	245
Availability of subject specialist assistance	5.45	6.99	6.27	0.81	-0.72	166
Library staff teaching me how to effectively use the electronically available databases, journals, and books	6.29	7.68	7.28	0.99	-0.41	1,995
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	6.01	7.11	6.67	0.67	-0.44	186
A library environment that is hospitable and conducive to finding and using information	6.62	8.00	7.35	0.74	-0.65	2,187
Making me aware of library resources and services	6.09	7.51	6.80	0.71	-0.71	5,662
Teaching me how to locate, evaluate, and use information	5.99	7.21	6.88	0.88	-0.33	394
Convenient service hours	6.75	7.93	7.65	0.90	-0.28	640
Ability to navigate library Web pages easily	6.85	8.20	6.87	0.02	-1.34	5,910
A secure and safe place	7.24	8.29	7.77	0.53	-0.52	2,593

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: All (Excluding Library Staff)

Enabling me to find information myself 24 hours a day	6.85	8.07	7.25	0.40	-0.82	934
Facilitating self-directed research	6.95	8.16	7.23	0.29	-0.93	91
Full-text delivered electronically to individual users	6.81	8.19	6.84	0.03	-1.35	292
Librarians providing assistance that addresses only the user's immediate information needs, and not providing general instruction on using libraries	6.38	7.64	6.91	0.53	-0.73	453
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	6.55	7.77	7.31	0.76	-0.46	709
Providing direction to self-navigate the library	6.37	7.57	7.03	0.66	-0.55	194
Providing search tools that permit me to work autonomously	7.23	8.34	7.44	0.21	-0.90	110
Space for group / individual study and research needs	6.17	7.14	6.11	-0.06	-1.03	66
Space that facilitates quiet study	6.52	7.89	6.74	0.22	-1.15	424
Timely document delivery / interlibrary loan	6.31	7.80	7.13	0.82	-0.67	266
Visually appealing facilities	5.50	7.32	6.72	1.22	-0.59	365
Space for students to study and work in groups	6.36	7.81	7.25	0.89	-0.56	411
Adequate hours of service	6.79	8.01	7.42	0.63	-0.59	2,999
Timely delivery of the articles and documents that I need	7.27	8.10	7.50	0.23	-0.60	62
The library provides access to archival materials (documents, manuscripts, and photographs)	6.50	7.79	7.12	0.62	-0.67	401
Ease and timeliness in getting materials from other libraries	6.57	7.93	7.14	0.58	-0.79	3,666
Helpful online guides and tutorials	5.78	7.23	6.42	0.64	-0.81	770
An online catalog that is user-friendly for finding materials	6.90	8.16	7.17	0.26	-1.00	2,445
Availability of assistance to improve my research skills	6.00	7.27	6.85	0.85	-0.42	229

Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: All (Excluding Library Staff)

This table shows the standard deviations for each of the local questions added by the individual library or consortium, 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.

Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Availability of online help when using my library's electronic resources	1.83	1.52	1.78	1.89	1.83	286
Informing me of useful library services	2.08	1.75	1.63	1.99	1.82	239
Ease of use of electronic resources	1.90	1.43	1.65	1.60	1.80	52
Providing help when and where I need it	1.78	1.46	1.43	1.68	1.45	764
Teaching me how to access, evaluate, and use information	1.88	1.59	1.60	1.91	1.75	4,783
The right mix of electronic content	1.34	1.01	1.47	1.63	1.53	108
Online course support (readings, links, references)	1.78	1.39	1.58	1.93	1.69	670
Collections of online full-text articles sufficient to meet my needs	1.67	1.31	1.63	2.23	1.89	107
Electronic resources matching my information needs	1.66	1.18	1.42	1.79	1.50	2,227
Access to rare and historical materials	2.19	2.09	1.70	2.16	2.11	1,477
Contribution to the intellectual atmosphere of the campus	1.73	1.32	1.62	2.02	1.74	141
Ready access to computers / Internet / software	1.86	1.45	1.58	1.96	1.75	194
Library staff teaching me how to find information	2.29	1.59	2.22	1.98	2.23	50
Library keeping me informed about all of its services	2.09	1.94	1.79	2.15	2.08	616
The multimedia (CD / DVD / video / audio) collections I need	2.21	1.99	1.65	2.35	2.15	232
Access to photocopying and printing facilities	2.24	1.86	1.90	2.37	2.07	259
Helpfulness in dealing with users' IT problems	1.86	1.46	1.58	1.87	1.76	245
Availability of subject specialist assistance	2.05	1.72	1.70	2.02	2.07	166
Library staff teaching me how to effectively use the electronically available databases, journals, and books	1.97	1.54	1.66	1.97	1.74	1,995
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	2.08	2.06	1.91	2.09	2.24	186
A library environment that is hospitable and conducive to finding and using information	1.72	1.31	1.45	1.78	1.52	2,187
Making me aware of library resources and services	1.88	1.55	1.67	2.02	1.87	5,662
Teaching me how to locate, evaluate, and use information	2.04	1.91	1.78	2.07	2.04	394
Convenient service hours	1.88	1.47	1.46	1.98	1.63	640
Ability to navigate library Web pages easily	1.55	1.10	1.58	1.96	1.77	5,910

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: All (Excluding Library Staff)

A secure and safe place	1.70	1.19	1.28	1.71	1.39	2,593
Enabling me to find information myself 24 hours a day	1.79	1.36	1.59	1.94	1.67	934
Facilitating self-directed research	1.70	1.26	1.46	1.71	1.56	91
Full-text delivered electronically to individual users	1.87	1.35	1.66	2.16	1.96	292
Librarians providing assistance that addresses only the user's immediate information needs, and not providing general instruction on using libraries	1.97	1.66	1.69	2.06	1.78	453
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	1.84	1.50	1.56	1.94	1.66	709
Providing direction to self-navigate the library	1.84	1.69	1.58	2.00	2.00	194
Providing search tools that permit me to work autonomously	1.46	0.95	1.33	1.88	1.40	110
Space for group / individual study and research needs	2.18	2.23	1.95	2.37	2.09	66
Space that facilitates quiet study	2.02	1.56	1.95	2.51	2.29	424
Timely document delivery / interlibrary loan	1.80	1.43	1.46	1.66	1.61	266
Visually appealing facilities	2.09	1.70	1.73	2.27	2.16	365
Space for students to study and work in groups	1.97	1.51	1.65	2.04	1.91	411
Adequate hours of service	1.62	1.28	1.58	1.94	1.75	2,999
Timely delivery of the articles and documents that I need	1.71	1.40	1.41	1.52	1.34	62
The library provides access to archival materials (documents, manuscripts, and photographs)	1.86	1.53	1.66	1.98	1.75	401
Ease and timeliness in getting materials from other libraries	1.67	1.30	1.54	1.88	1.65	3,666
Helpful online guides and tutorials	2.01	1.87	1.71	2.02	1.99	770
An online catalog that is user-friendly for finding materials	1.69	1.23	1.56	1.94	1.69	2,445
Availability of assistance to improve my research skills	2.00	1.79	1.71	2.11	2.02	229

Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: All (Excluding Library Staff)

### 3.5 General Satisfaction Questions Summary for ARL

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where  $n$  is the number of respondents for each 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.	7.59	1.38	18,612
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.19	1.51	18,233
How would you rate the overall quality of the service provided by the library?	7.29	1.27	30,868

### 3.6 Information Literacy Outcomes Questions Summary for ARL

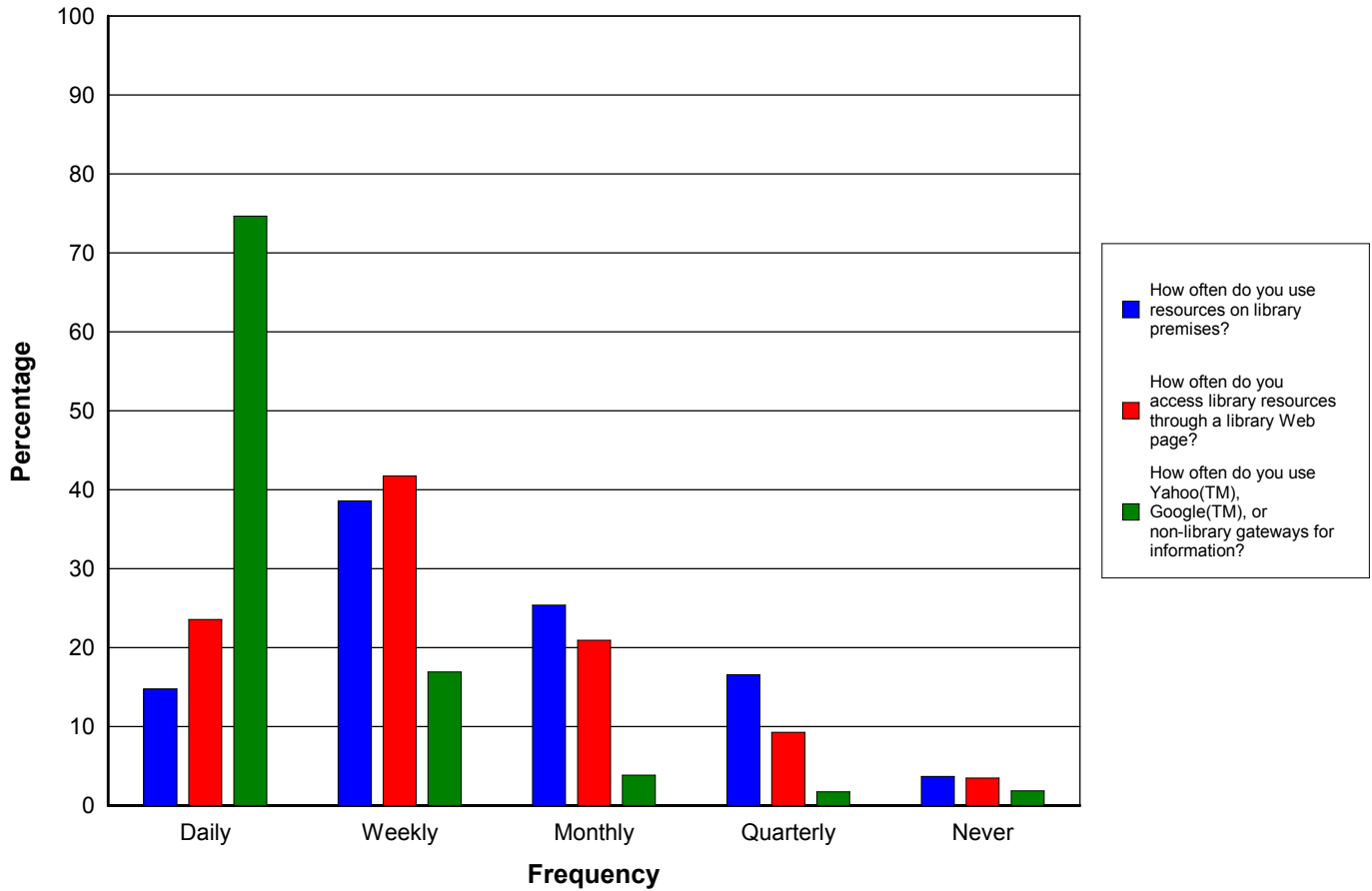
This table displays the mean score and standard deviation for each of the information literacy outcomes questions, where  $n$  is the number of respondents for each question. These scores are calculated from responses to the information literacy outcomes questions on the LibQUAL+® survey, in which respondents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

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	6.31	1.82	15,917
The library aids my advancement in my academic discipline or work.	7.18	1.55	15,780
The library enables me to be more efficient in my academic pursuits or work.	7.19	1.55	16,072
The library helps me distinguish between trustworthy and untrustworthy information.	6.23	1.86	15,913
The library provides me with the information skills I need in my work or study.	6.77	1.65	15,979



### 3.7 Library Use Summary for ARL

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



	Daily	Weekly	Monthly	Quarterly	Never	Total
How often do you use resources on library premises?	4,610 14.93%	12,030 38.97%	7,917 25.65%	5,166 16.74%	1,145 3.71%	30,868 100.00%
How often do you access library resources through a library Web page?	7,350 23.81%	13,007 42.14%	6,526 21.14%	2,890 9.36%	1,091 3.53%	30,864 100.00%
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	23,274 75.41%	5,271 17.08%	1,203 3.90%	541 1.75%	576 1.87%	30,865 100.00%

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: All (Excluding Library Staff)

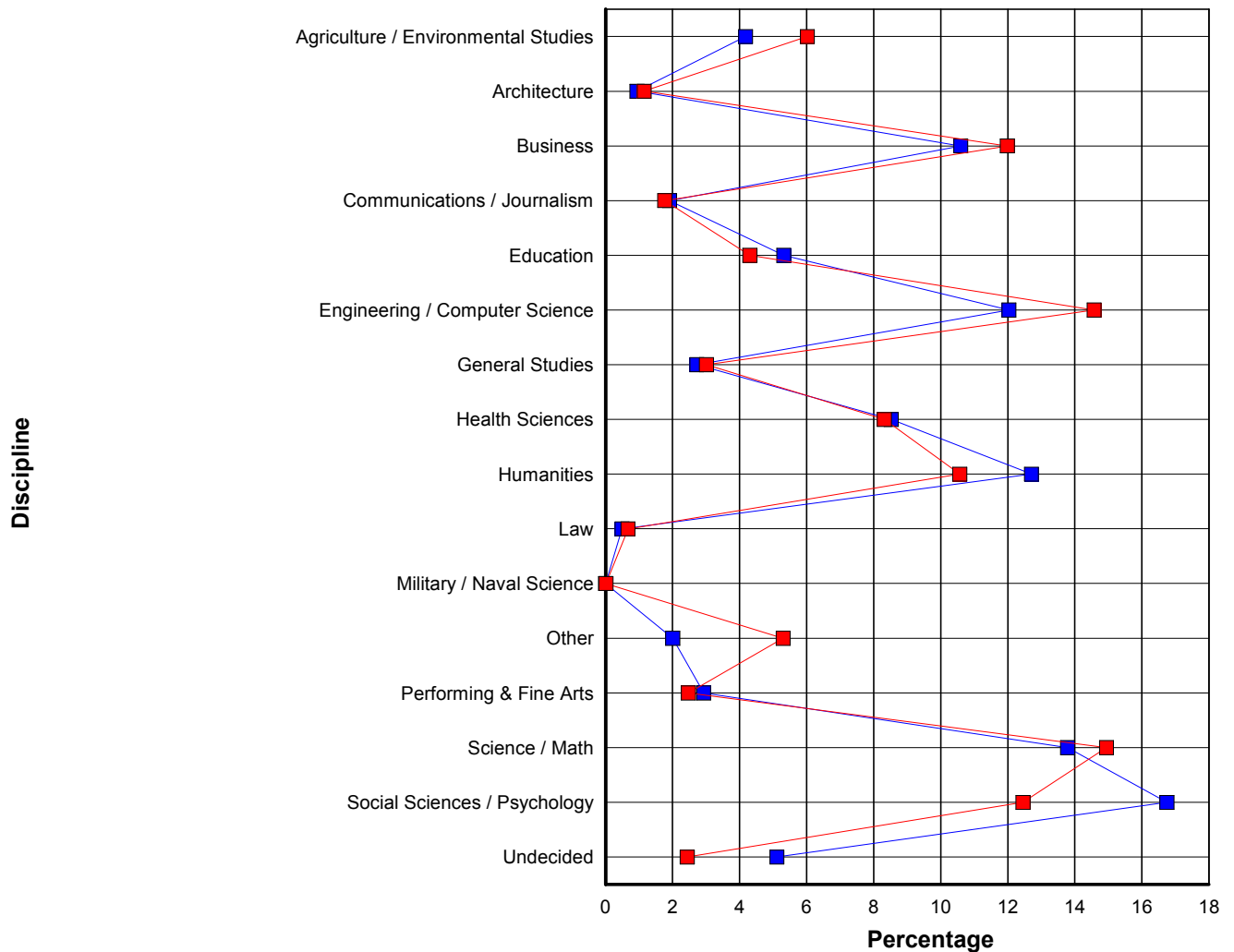
## 4 Summary for Undergraduate

### 4.1 Demographic Summary for Undergraduate

#### 4.1.1 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).



- Respondent Profile by Discipline
- Population Profile by Discipline

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Undergraduate

<b>Discipline</b>	<b>Population N</b>	<b>Population %</b>	<b>Respondents n</b>	<b>Respondents %</b>	<b>%N - %n</b>
Agriculture / Environmental Studies	26,721	4.18	862	6.02	-1.84
Architecture	6,006	0.94	165	1.15	-0.21
Business	67,731	10.60	1,715	11.99	-1.39
Communications / Journalism	12,202	1.91	253	1.77	0.14
Education	33,989	5.32	616	4.31	1.01
Engineering / Computer Science	76,929	12.03	2,085	14.57	-2.54
General Studies	17,424	2.73	431	3.01	-0.29
Health Sciences	54,462	8.52	1,190	8.32	0.20
Humanities	81,216	12.71	1,512	10.57	2.14
Law	3,147	0.49	96	0.67	-0.18
Military / Naval Science	0	0.00	2	0.01	-0.01
Other	12,816	2.00	758	5.30	-3.29
Performing & Fine Arts	18,724	2.93	354	2.47	0.46
Science / Math	88,111	13.78	2,138	14.94	-1.16
Social Sciences / Psychology	107,052	16.75	1,782	12.45	4.29
Undecided	32,683	5.11	349	2.44	2.67
<b>Total:</b>	<b>639,213</b>	<b>100.00</b>	<b>14,308</b>	<b>100.00</b>	<b>0.00</b>

Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: Undergraduate

#### 4.1.2 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.

<b>Age:</b>	<b>Respondents n</b>	<b>Respondents %</b>
Under 18	88	0.47
18 - 22	13,972	74.43
23 - 30	3,550	18.91
31 - 45	865	4.61
46 - 65	289	1.54
Over 65	9	0.05
<b>Total:</b>	<b>18,773</b>	<b>100.00</b>

#### 4.1.3 Respondent Profile 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.

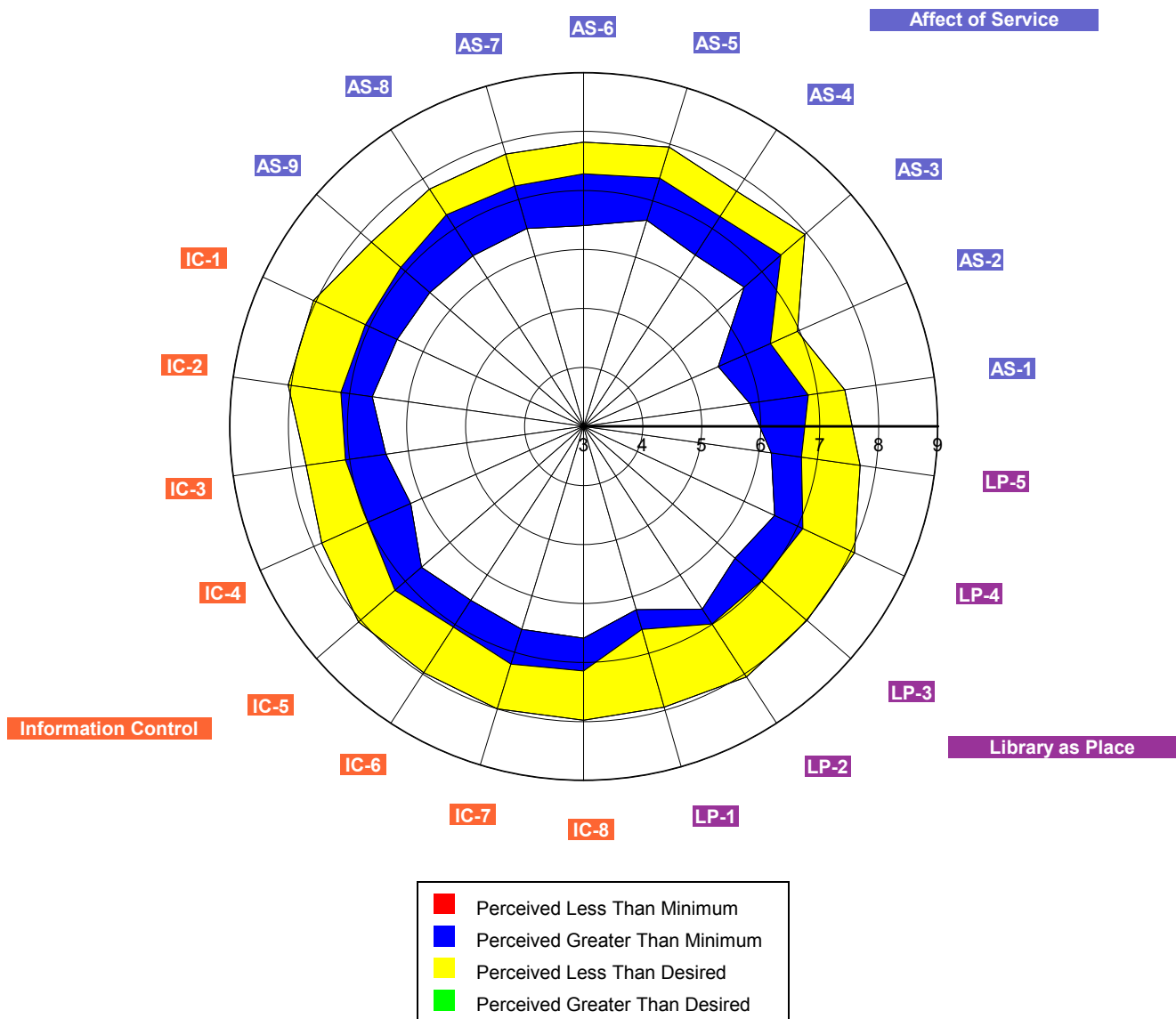
<b>Sex:</b>	<b>Population N</b>	<b>Population %</b>	<b>Respondents n</b>	<b>Respondents %</b>
Female	329,041	52.95	11,606	61.83
Male	292,360	47.05	7,166	38.17
<b>Total:</b>	<b>621,401</b>	<b>100.00</b>	<b>18,772</b>	<b>100.00</b>

## 4.2 Core Questions Summary for Undergraduate

This radar chart shows the 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, Information Control, and Library as Place.

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



Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Undergraduate

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
<b>Affect of Service</b>							
AS-	Employees who instill confidence in users	5.84	7.47	6.84	1.00	-0.62	6,423
AS-	Giving users individual attention	5.50	6.97	6.46	0.97	-0.50	6,346
AS-	Employees who are consistently courteous	6.60	7.96	7.43	0.83	-0.53	6,787
AS-	Readiness to respond to users' questions	6.47	7.76	7.24	0.78	-0.52	6,450
AS-	Employees who have the knowledge to answer user questions	6.66	7.95	7.40	0.75	-0.55	6,559
AS-	Employees who deal with users in a caring fashion	6.40	7.82	7.28	0.88	-0.53	15,923
AS-	Employees who understand the needs of their users	6.49	7.80	7.24	0.75	-0.56	6,490
AS-	Willingness to help users	6.45	7.80	7.28	0.83	-0.52	6,592
AS-	Dependability in handling users' service problems	6.46	7.76	7.11	0.65	-0.66	5,786
<b>Information Control</b>							
IC-	Making electronic resources accessible from my home or office	6.49	8.05	7.08	0.59	-0.97	7,046
IC-	A library Web site enabling me to locate information on my own	6.62	8.05	7.15	0.53	-0.90	7,413
IC-	The printed library materials I need for my work	6.38	7.75	7.08	0.69	-0.68	6,713
IC-	The electronic information resources I need	6.21	7.86	7.00	0.79	-0.86	16,345
IC-	Modern equipment that lets me easily access needed information	6.64	8.05	7.23	0.59	-0.82	7,341
IC-	Easy-to-use access tools that allow me to find things on my own	6.52	7.98	7.05	0.54	-0.92	7,249
IC-	Making information easily accessible for independent use	6.59	8.00	7.21	0.62	-0.79	7,237
IC-	Print and/or electronic journal collections I require for my work	6.59	7.98	7.14	0.56	-0.83	6,790
<b>Library as Place</b>							
LP-	Library space that inspires study and learning	6.23	7.95	6.58	0.35	-1.37	16,556
LP-	Quiet space for individual activities	6.69	8.06	6.99	0.30	-1.07	6,890
LP-	A comfortable and inviting location	6.40	8.01	6.99	0.59	-1.02	6,983
LP-	A getaway for study, learning, or research	6.57	8.06	7.10	0.53	-0.97	6,875
LP-	Community space for group learning and group study	6.21	7.73	6.73	0.52	-1.00	6,777
<b>Overall:</b>		6.35	7.83	7.02	0.66	-0.81	16,775

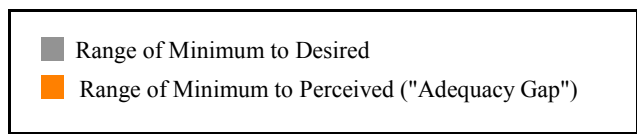
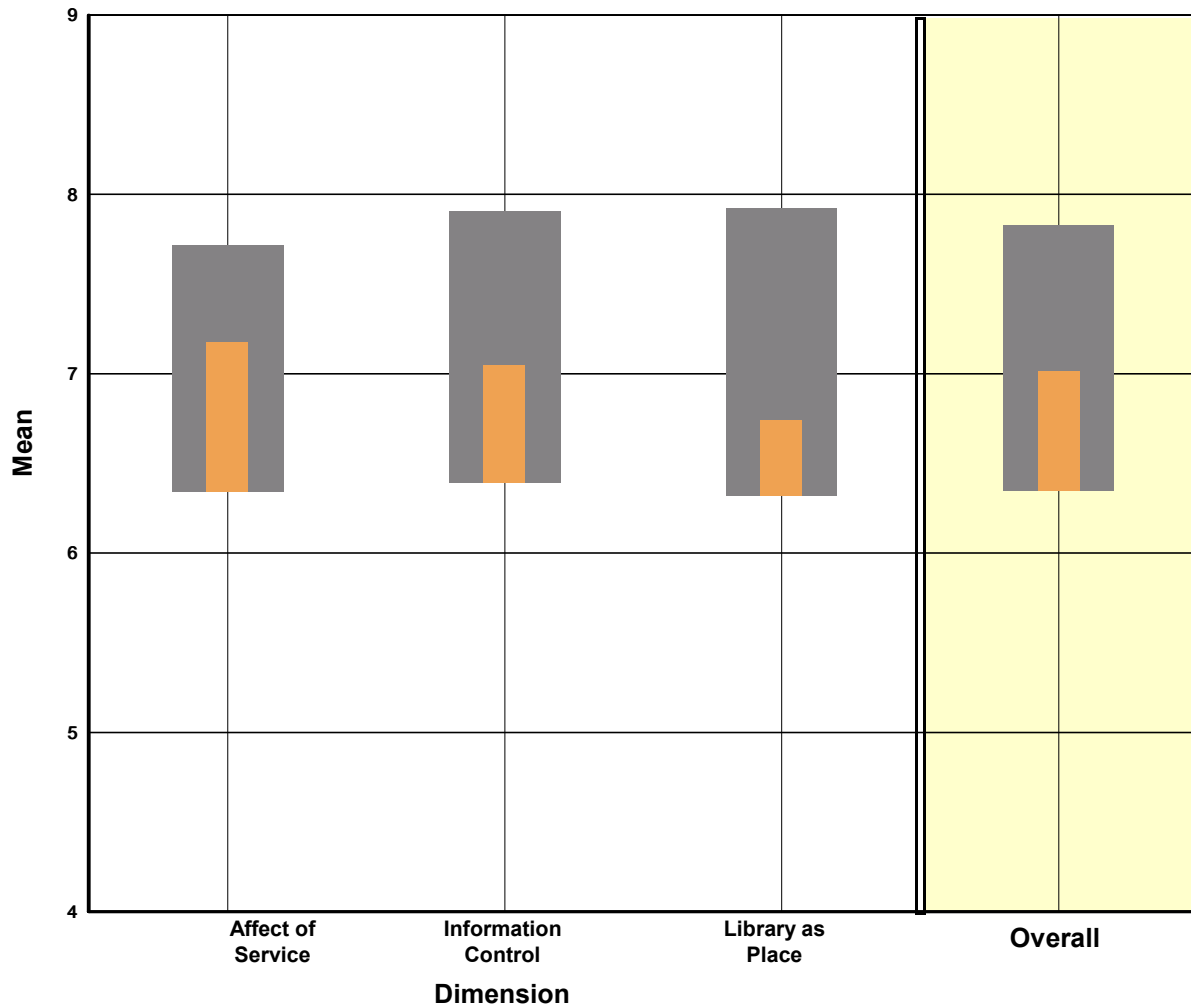
Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: Undergraduate

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	1.86	1.53	1.60	1.79	1.61	6,423
AS-2	Giving users individual attention	1.98	1.78	1.74	1.85	1.76	6,346
AS-3	Employees who are consistently courteous	1.77	1.30	1.52	1.86	1.59	6,787
AS-4	Readiness to respond to users' questions	1.68	1.35	1.46	1.69	1.49	6,450
AS-5	Employees who have the knowledge to answer user questions	1.69	1.30	1.40	1.68	1.44	6,559
AS-6	Employees who deal with users in a caring fashion	1.79	1.39	1.53	1.84	1.61	15,923
AS-7	Employees who understand the needs of their users	1.71	1.35	1.44	1.71	1.49	6,490
AS-8	Willingness to help users	1.74	1.36	1.47	1.74	1.48	6,592
AS-9	Dependability in handling users' service problems	1.71	1.39	1.49	1.75	1.55	5,786
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	1.81	1.37	1.66	2.01	1.77	7,046
IC-2	A library Web site enabling me to locate information on my own	1.67	1.27	1.54	1.87	1.67	7,413
IC-3	The printed library materials I need for my work	1.81	1.51	1.54	1.90	1.73	6,713
IC-4	The electronic information resources I need	1.69	1.37	1.49	1.83	1.67	16,345
IC-5	Modern equipment that lets me easily access needed information	1.64	1.22	1.47	1.78	1.58	7,341
IC-6	Easy-to-use access tools that allow me to find things on my own	1.65	1.26	1.47	1.82	1.60	7,249
IC-7	Making information easily accessible for independent use	1.62	1.22	1.43	1.74	1.51	7,237
IC-8	Print and/or electronic journal collections I require for my work	1.76	1.40	1.51	1.91	1.68	6,790
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	1.77	1.40	1.80	2.19	2.06	16,556
LP-2	Quiet space for individual activities	1.78	1.35	1.78	2.26	2.03	6,890
LP-3	A comfortable and inviting location	1.74	1.25	1.65	2.02	1.81	6,983
LP-4	A getaway for study, learning, or research	1.74	1.31	1.62	2.02	1.79	6,875
LP-5	Community space for group learning and group study	1.85	1.55	1.83	2.30	2.19	6,777
<b>Overall:</b>		1.34	0.99	1.11	1.36	1.15	16,775

Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: Undergraduate

### 4.3 Core Question Dimensions Summary for Undergraduate

On the chart below, scores for each dimension of library service quality have been plotted graphically. The 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.



Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Undergraduate



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

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	6.34	7.71	7.18	0.83	-0.54	16,510
Information Control	6.39	7.91	7.05	0.66	-0.86	16,746
Library as Place	6.32	7.92	6.74	0.42	-1.18	16,700
<b>Overall</b>	6.35	7.83	7.02	0.66	-0.81	16,775

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.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service	1.56	1.21	1.31	1.51	1.30	16,510
Information Control	1.42	1.10	1.22	1.50	1.32	16,746
Library as Place	1.57	1.20	1.56	1.89	1.74	16,700
<b>Overall</b>	1.34	0.99	1.11	1.36	1.15	16,775

## 4.4 Local Question Summary for Undergraduate

This table shows mean scores of each of the local questions added by the individual library or consortium, 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.

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Availability of online help when using my library's electronic resources	6.36	7.69	7.29	0.93	-0.41	59
Informing me of useful library services	5.65	6.83	6.54	0.89	-0.28	81
Ease of use of electronic resources	6.89	7.44	7.44	0.56	0.00	9
Providing help when and where I need it	6.21	7.65	7.20	0.98	-0.45	369
Teaching me how to access, evaluate, and use information	6.05	7.53	6.92	0.88	-0.61	2,923
The right mix of electronic content	6.72	8.00	7.36	0.64	-0.64	36
Online course support (readings, links, references)	6.65	8.03	7.10	0.44	-0.94	418
Collections of online full-text articles sufficient to meet my needs	6.71	7.92	7.07	0.36	-0.85	59
Electronic resources matching my information needs	6.73	8.02	7.37	0.64	-0.65	1,451
Access to rare and historical materials	5.22	6.74	6.50	1.28	-0.24	1,127
Contribution to the intellectual atmosphere of the campus	7.11	8.21	7.14	0.04	-1.07	56
Ready access to computers / Internet / software	6.82	8.30	7.24	0.42	-1.07	89
Library staff teaching me how to find information	6.40	7.90	6.90	0.50	-1.00	10
Library keeping me informed about all of its services	5.12	6.65	6.16	1.04	-0.49	200
The multimedia (CD / DVD / video / audio) collections I need	5.52	7.38	6.65	1.13	-0.73	132
Access to photocopying and printing facilities	6.48	7.88	7.52	1.04	-0.36	50
Helpfulness in dealing with users' IT problems	6.51	7.94	7.43	0.91	-0.51	47
Availability of subject specialist assistance	5.27	6.76	6.23	0.95	-0.54	84
Library staff teaching me how to effectively use the electronically available databases, journals, and books	6.16	7.60	7.16	1.01	-0.44	1,362
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	6.20	7.51	6.75	0.56	-0.75	81
A library environment that is hospitable and conducive to finding and using information	6.52	7.95	7.38	0.86	-0.57	1,441
Making me aware of library resources and services	5.97	7.49	6.76	0.78	-0.73	3,364
Teaching me how to locate, evaluate, and use information	5.89	7.17	6.48	0.59	-0.70	151

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Undergraduate

Convenient service hours	6.75	7.98	7.63	0.88	-0.35	488
Ability to navigate library Web pages easily	6.66	8.11	7.00	0.34	-1.11	3,462
A secure and safe place	7.21	8.31	7.83	0.62	-0.48	1,907
Enabling me to find information myself 24 hours a day	6.58	7.92	7.20	0.62	-0.72	508
Facilitating self-directed research	6.43	7.79	7.43	1.00	-0.36	14
Full-text delivered electronically to individual users	6.30	7.90	6.95	0.65	-0.95	60
Librarians providing assistance that addresses only the user's immediate information needs, and not providing general instruction on using libraries	6.28	7.62	6.83	0.55	-0.79	291
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	6.47	7.74	7.27	0.80	-0.47	449
Providing direction to self-navigate the library	6.19	7.68	7.05	0.87	-0.63	75
Providing search tools that permit me to work autonomously	6.75	7.75	7.00	0.25	-0.75	8
Space for group / individual study and research needs	7.14	8.00	6.45	-0.68	-1.55	22
Space that facilitates quiet study	6.54	8.00	6.91	0.36	-1.09	372
Timely document delivery / interlibrary loan	5.97	7.56	6.98	1.01	-0.59	128
Visually appealing facilities	5.49	7.31	6.72	1.22	-0.59	363
Space for students to study and work in groups	6.36	7.80	7.25	0.89	-0.55	408
Adequate hours of service	6.82	8.11	7.46	0.64	-0.64	1,549
Timely delivery of the articles and documents that I need	5.36	7.18	6.45	1.09	-0.73	11
The library provides access to archival materials (documents, manuscripts, and photographs)	6.47	7.84	7.20	0.74	-0.64	269
Ease and timeliness in getting materials from other libraries	6.39	7.80	7.05	0.66	-0.75	2,080
Helpful online guides and tutorials	5.60	7.17	6.36	0.75	-0.81	349
An online catalog that is user-friendly for finding materials	6.70	8.01	7.15	0.44	-0.86	1,560
Availability of assistance to improve my research skills	6.17	7.47	6.95	0.78	-0.53	112

This table displays the standard deviations of each of the local questions added by the individual library or consortium, 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.

Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Availability of online help when using my library's electronic resources	1.88	1.32	1.64	1.96	1.70	59
Informing me of useful library services	2.25	1.88	1.94	2.29	2.10	81
Ease of use of electronic resources	1.83	2.13	1.59	1.01	1.12	9
Providing help when and where I need it	1.83	1.50	1.50	1.73	1.46	369
Teaching me how to access, evaluate, and use information	1.85	1.54	1.61	1.91	1.71	2,923
The right mix of electronic content	1.37	1.15	1.27	1.25	1.05	36
Online course support (readings, links, references)	1.79	1.34	1.63	1.93	1.65	418
Collections of online full-text articles sufficient to meet my needs	1.74	1.51	1.76	2.19	1.86	59
Electronic resources matching my information needs	1.72	1.27	1.45	1.81	1.52	1,451
Access to rare and historical materials	2.20	2.09	1.68	2.18	2.13	1,127
Contribution to the intellectual atmosphere of the campus	1.56	1.17	1.68	2.10	1.86	56
Ready access to computers / Internet / software	1.76	1.12	1.45	1.59	1.33	89
Library staff teaching me how to find information	2.50	1.85	2.60	1.27	1.49	10
Library keeping me informed about all of its services	2.18	2.10	1.80	2.42	2.32	200
The multimedia (CD / DVD / video / audio) collections I need	2.22	1.71	1.61	2.38	1.97	132
Access to photocopying and printing facilities	2.28	1.33	1.39	2.10	1.12	50
Helpfulness in dealing with users' IT problems	1.94	1.61	1.33	2.00	1.73	47
Availability of subject specialist assistance	2.07	1.55	1.73	2.02	1.95	84
Library staff teaching me how to effectively use the electronically available databases, journals, and books	1.98	1.54	1.68	2.02	1.80	1,362
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	1.89	1.69	1.97	1.94	1.97	81
A library environment that is hospitable and conducive to finding and using information	1.73	1.33	1.42	1.75	1.49	1,441
Making me aware of library resources and services	1.89	1.53	1.71	2.04	1.89	3,364
Teaching me how to locate, evaluate, and use information	1.89	1.95	1.82	1.87	2.07	151
Convenient service hours	1.89	1.44	1.50	1.95	1.59	488
Ability to navigate library Web pages easily	1.57	1.13	1.50	1.81	1.64	3,462
A secure and safe place	1.69	1.16	1.25	1.68	1.34	1,907
Enabling me to find information myself 24 hours a day	1.83	1.42	1.57	1.97	1.64	508
Facilitating self-directed research	1.50	0.97	0.76	1.80	1.15	14

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Undergraduate

Full-text delivered electronically to individual users	1.72	1.22	1.78	2.14	1.91	60
Librarians providing assistance that addresses only the user's immediate information needs, and not providing general instruction on using libraries	2.01	1.61	1.71	2.12	1.72	291
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	1.89	1.49	1.60	1.98	1.66	449
Providing direction to self-navigate the library	1.79	1.54	1.52	1.99	1.98	75
Providing search tools that permit me to work autonomously	1.28	1.39	1.31	1.91	1.49	8
Space for group / individual study and research needs	1.36	1.77	1.77	2.10	1.60	22
Space that facilitates quiet study	2.01	1.38	1.82	2.39	2.05	372
Timely document delivery / interlibrary loan	1.81	1.54	1.43	1.62	1.57	128
Visually appealing facilities	2.08	1.70	1.73	2.28	2.16	363
Space for students to study and work in groups	1.97	1.51	1.65	2.03	1.90	408
Adequate hours of service	1.53	1.17	1.65	1.99	1.79	1,549
Timely delivery of the articles and documents that I need	2.06	2.27	1.69	1.38	1.27	11
The library provides access to archival materials (documents, manuscripts, and photographs)	1.85	1.47	1.59	1.94	1.73	269
Ease and timeliness in getting materials from other libraries	1.71	1.36	1.56	1.91	1.68	2,080
Helpful online guides and tutorials	1.99	1.90	1.72	2.00	1.98	349
An online catalog that is user-friendly for finding materials	1.74	1.32	1.57	1.93	1.70	1,560
Availability of assistance to improve my research skills	1.75	1.57	1.73	1.87	1.87	112

#### 4.5 General Satisfaction Questions Summary for Undergraduate

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where *n* is the number of respondents for each 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.	7.55	1.37	10,313
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.18	1.47	10,226
How would you rate the overall quality of the service provided by the library?	7.26	1.22	16,773

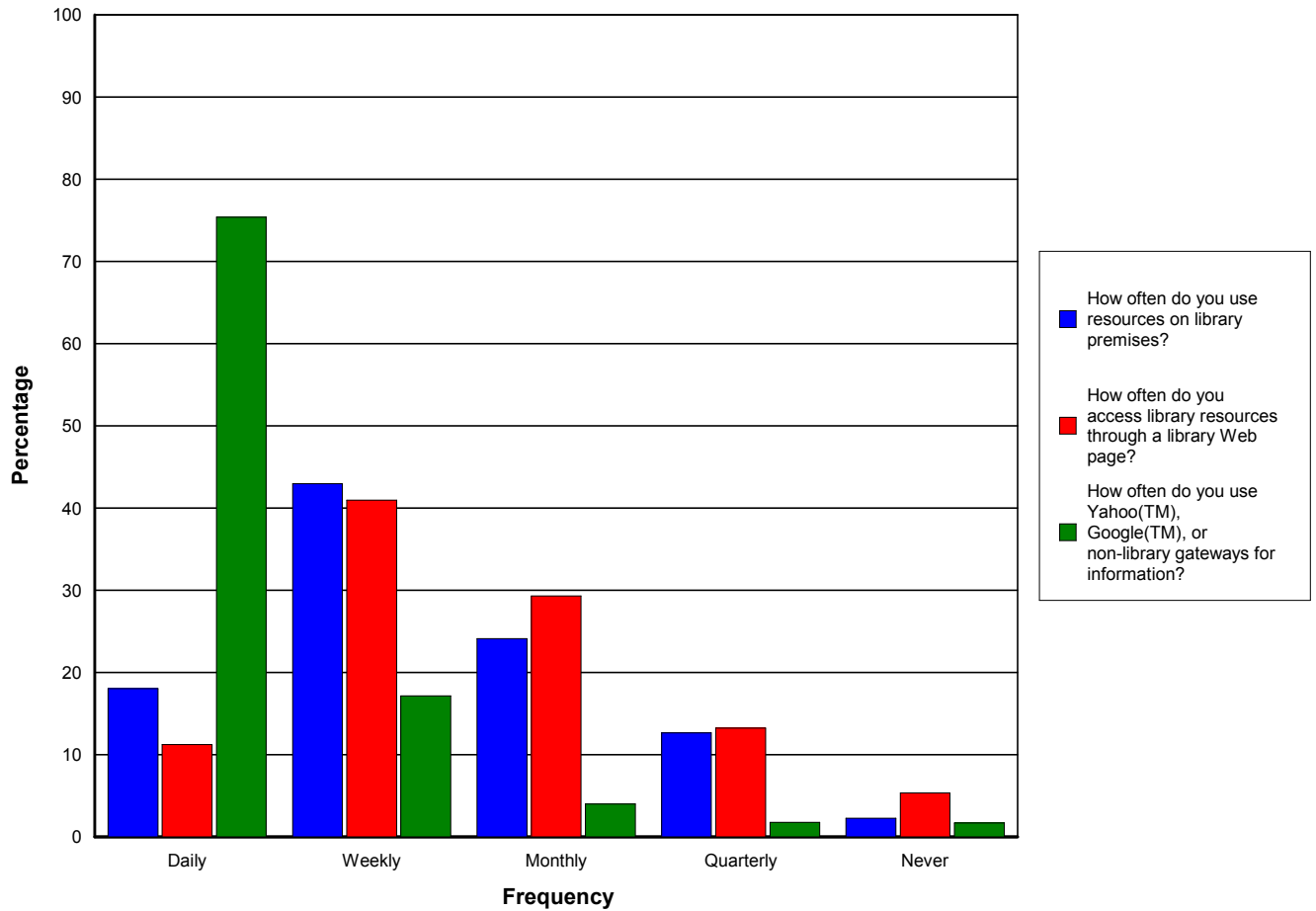
#### 4.6 Information Literacy Outcomes Questions Summary for Undergraduate

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

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	6.18	1.74	8,923
The library aids my advancement in my academic discipline or work.	7.03	1.52	8,928
The library enables me to be more efficient in my academic pursuits or work.	7.12	1.54	9,044
The library helps me distinguish between trustworthy and untrustworthy information.	6.46	1.75	8,960
The library provides me with the information skills I need in my work or study.	6.79	1.59	8,989

### 4.7 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 information gateways such as Yahoo™ and Google™. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the chart displays the number and percentage of respondents who selected each option.



	Daily	Weekly	Monthly	Quarterly	Never	Total
How often do you use resources on library premises?	3,024 18.03%	7,205 42.96%	4,041 24.10%	2,122 12.65%	378 2.25%	16,770 100.00%
How often do you access library resources through a library Web page?	1,885 11.24%	6,865 40.94%	4,911 29.28%	2,216 13.21%	893 5.32%	16,770 100.00%
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	12,641 75.38%	2,877 17.16%	670 4.00%	298 1.78%	284 1.69%	16,770 100.00%

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Undergraduate

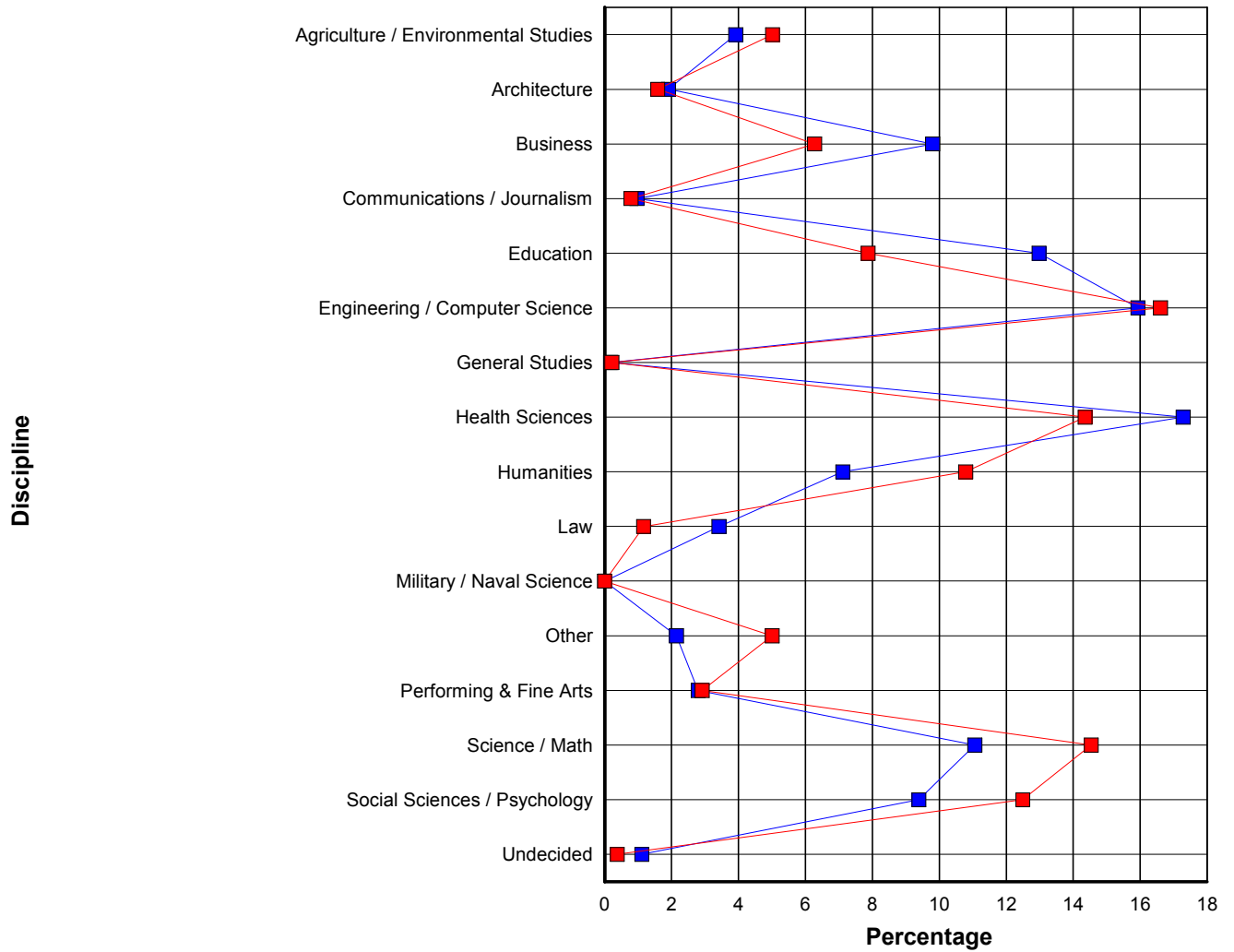
## 5 Summary for Graduate

### 5.1 Demographic Summary for Graduate

#### 5.1.1 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).



- Respondent Profile by Discipline
- Population Profile by Discipline

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Graduate



<b>Discipline</b>	<b>Population N</b>	<b>Population %</b>	<b>Respondents n</b>	<b>Respondents %</b>	<b>%N - %n</b>
Agriculture / Environmental Studies	7,047	3.92	439	5.02	-1.10
Architecture	3,438	1.91	139	1.59	0.32
Business	17,631	9.80	549	6.27	3.53
Communications / Journalism	1,736	0.96	69	0.79	0.18
Education	23,353	12.98	689	7.87	5.11
Engineering / Computer Science	28,665	15.93	1,453	16.61	-0.67
General Studies	318	0.18	19	0.22	-0.04
Health Sciences	31,100	17.29	1,256	14.35	2.93
Humanities	12,801	7.11	944	10.79	-3.67
Law	6,150	3.42	102	1.17	2.25
Military / Naval Science	0	0.00	0	0.00	0.00
Other	3,865	2.15	438	5.01	-2.86
Performing & Fine Arts	5,027	2.79	255	2.91	-0.12
Science / Math	19,898	11.06	1,272	14.54	-3.48
Social Sciences / Psychology	16,892	9.39	1,093	12.49	-3.10
Undecided	1,998	1.11	33	0.38	0.73
<b>Total:</b>	<b>179,919</b>	<b>100.00</b>	<b>8,750</b>	<b>100.00</b>	<b>0.00</b>

Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: Graduate

### 5.1.2 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.

<b>Age:</b>	<b>Respondents n</b>	<b>Respondents %</b>
Under 18	2	0.02
18 - 22	609	5.71
23 - 30	6,623	62.10
31 - 45	2,779	26.06
46 - 65	640	6.00
Over 65	12	0.11
<b>Total:</b>	<b>10,665</b>	<b>100.00</b>

### 5.1.3 Respondent Profile 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.

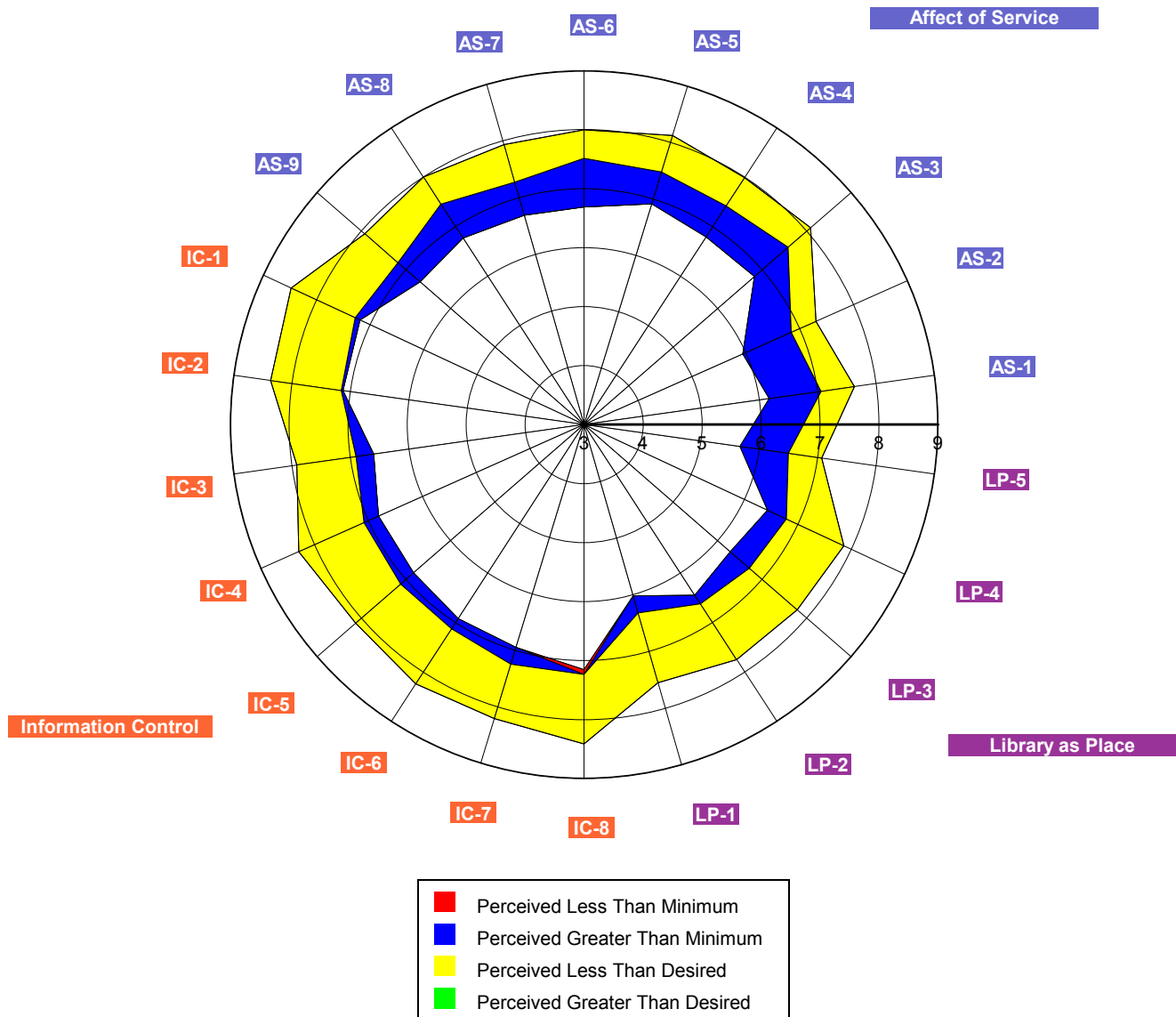
<b>Sex:</b>	<b>Population N</b>	<b>Population %</b>	<b>Respondents n</b>	<b>Respondents %</b>
Female	88,924	51.24	6,032	56.57
Male	84,626	48.76	4,630	43.43
<b>Total:</b>	<b>173,550</b>	<b>100.00</b>	<b>10,662</b>	<b>100.00</b>

## 5.2 Core Questions Summary for Graduate

This radar chart shows the 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, Information Control, and Library as Place.

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



Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Graduate

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
<b>Affect of Service</b>							
AS-	Employees who instill confidence in users	6.17	7.63	7.06	0.89	-0.57	2,850
AS-	Giving users individual attention	5.95	7.30	6.84	0.90	-0.46	2,816
AS-	Employees who are consistently courteous	6.83	8.09	7.58	0.76	-0.50	3,015
AS-	Readiness to respond to users' questions	6.79	7.99	7.42	0.63	-0.57	2,977
AS-	Employees who have the knowledge to answer user questions	6.91	8.13	7.48	0.56	-0.65	2,968
AS-	Employees who deal with users in a caring fashion	6.69	8.00	7.51	0.82	-0.48	8,442
AS-	Employees who understand the needs of their users	6.69	7.93	7.27	0.58	-0.66	2,931
AS-	Willingness to help users	6.77	8.00	7.46	0.68	-0.55	2,932
AS-	Dependability in handling users' service problems	6.69	7.93	7.18	0.49	-0.75	2,587
<b>Information Control</b>							
IC-	Making electronic resources accessible from my home or office	7.19	8.48	7.28	0.09	-1.20	3,316
IC-	A library Web site enabling me to locate information on my own	7.13	8.37	7.16	0.03	-1.21	3,450
IC-	The printed library materials I need for my work	6.60	7.92	6.91	0.30	-1.01	3,078
IC-	The electronic information resources I need	6.81	8.29	7.08	0.27	-1.21	8,735
IC-	Modern equipment that lets me easily access needed information	6.83	8.13	7.12	0.29	-1.01	3,285
IC-	Easy-to-use access tools that allow me to find things on my own	6.92	8.24	7.13	0.20	-1.11	3,317
IC-	Making information easily accessible for independent use	6.95	8.21	7.25	0.30	-0.96	3,299
IC-	Print and/or electronic journal collections I require for my work	7.24	8.41	7.15	-0.08	-1.26	3,317
<b>Library as Place</b>							
LP-	Library space that inspires study and learning	6.02	7.55	6.32	0.30	-1.23	8,176
LP-	Quiet space for individual activities	6.45	7.75	6.62	0.17	-1.13	2,913
LP-	A comfortable and inviting location	6.28	7.79	6.71	0.43	-1.07	3,010
LP-	A getaway for study, learning, or research	6.43	7.86	6.78	0.35	-1.08	2,909
LP-	Community space for group learning and group study	5.67	7.07	6.50	0.83	-0.57	2,532
<b>Overall:</b>		6.60	7.94	7.06	0.46	-0.88	8,803

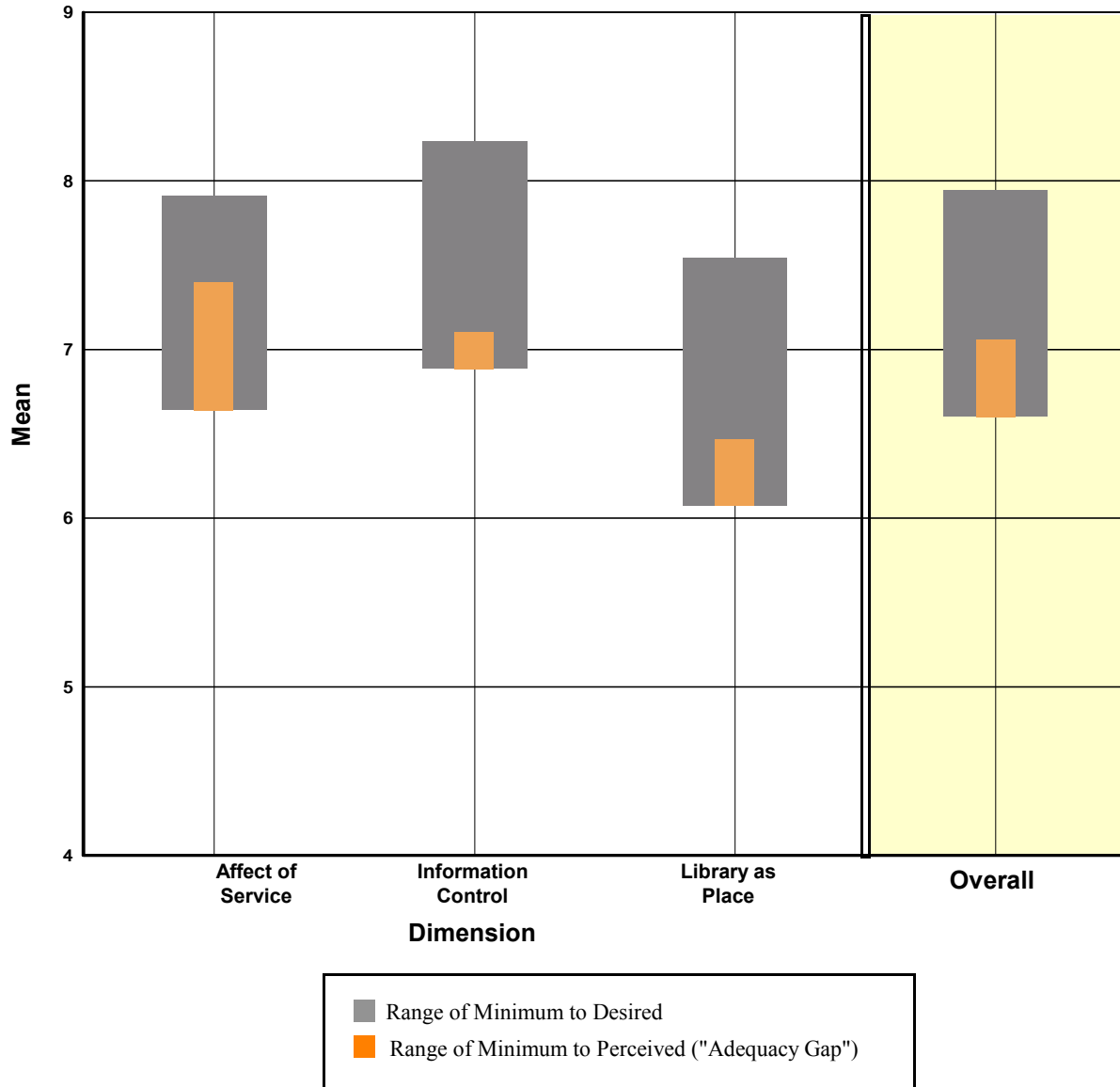
Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: Graduate

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	1.87	1.56	1.57	1.80	1.65	2,850
AS-2	Giving users individual attention	1.91	1.64	1.63	1.81	1.67	2,816
AS-3	Employees who are consistently courteous	1.71	1.23	1.45	1.84	1.54	3,015
AS-4	Readiness to respond to users' questions	1.60	1.23	1.45	1.72	1.51	2,977
AS-5	Employees who have the knowledge to answer user questions	1.62	1.20	1.40	1.65	1.44	2,968
AS-6	Employees who deal with users in a caring fashion	1.70	1.30	1.42	1.76	1.52	8,442
AS-7	Employees who understand the needs of their users	1.68	1.30	1.48	1.76	1.55	2,931
AS-8	Willingness to help users	1.68	1.27	1.50	1.75	1.57	2,932
AS-9	Dependability in handling users' service problems	1.66	1.34	1.51	1.72	1.59	2,587
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	1.60	1.04	1.63	1.94	1.69	3,316
IC-2	A library Web site enabling me to locate information on my own	1.52	1.07	1.54	1.83	1.62	3,450
IC-3	The printed library materials I need for my work	1.76	1.47	1.54	1.89	1.79	3,078
IC-4	The electronic information resources I need	1.59	1.14	1.47	1.82	1.61	8,735
IC-5	Modern equipment that lets me easily access needed information	1.61	1.21	1.52	1.78	1.67	3,285
IC-6	Easy-to-use access tools that allow me to find things on my own	1.55	1.11	1.48	1.81	1.61	3,317
IC-7	Making information easily accessible for independent use	1.54	1.11	1.42	1.72	1.50	3,299
IC-8	Print and/or electronic journal collections I require for my work	1.60	1.15	1.50	1.90	1.65	3,317
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	1.93	1.77	1.87	2.35	2.36	8,176
LP-2	Quiet space for individual activities	1.94	1.72	1.85	2.35	2.29	2,913
LP-3	A comfortable and inviting location	1.77	1.44	1.70	2.01	1.94	3,010
LP-4	A getaway for study, learning, or research	1.87	1.54	1.64	2.04	1.95	2,909
LP-5	Community space for group learning and group study	2.12	2.00	1.83	2.39	2.36	2,532
<b>Overall:</b>		1.29	0.93	1.10	1.36	1.17	8,803

Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: Graduate

### 5.3 Core Question Dimensions Summary for Graduate

On the chart below, scores for each dimension of library service quality have been plotted graphically. The 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.



Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Graduate

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

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	6.64	7.91	7.40	0.76	-0.51	8,683
Information Control	6.89	8.23	7.10	0.22	-1.13	8,801
Library as Place	6.08	7.55	6.47	0.39	-1.08	8,424
<b>Overall</b>	6.60	7.94	7.06	0.46	-0.88	8,803

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.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service	1.51	1.13	1.26	1.52	1.30	8,683
Information Control	1.34	0.93	1.23	1.51	1.31	8,801
Library as Place	1.77	1.59	1.65	2.06	2.04	8,424
<b>Overall</b>	1.29	0.93	1.10	1.36	1.17	8,803

## 5.4 Local Question Summary for Graduate

This table shows mean scores of each of the local questions added by the individual library or consortium, 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.

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Availability of online help when using my library's electronic resources	5.90	7.47	6.57	0.67	-0.90	89
Informing me of useful library services	6.29	7.60	7.11	0.82	-0.48	99
Ease of use of electronic resources	7.04	8.22	7.09	0.04	-1.13	23
Providing help when and where I need it	6.60	7.82	7.60	1.00	-0.22	236
Teaching me how to access, evaluate, and use information	6.29	7.57	7.02	0.73	-0.55	1,149
The right mix of electronic content	6.89	8.38	7.15	0.26	-1.23	53
Online course support (readings, links, references)	6.88	7.94	7.18	0.30	-0.76	188
Collections of online full-text articles sufficient to meet my needs	7.41	8.68	7.00	-0.41	-1.68	22
Electronic resources matching my information needs	7.29	8.49	7.49	0.20	-0.99	552
Access to rare and historical materials	5.39	6.70	6.21	0.82	-0.49	169
Contribution to the intellectual atmosphere of the campus	6.96	7.82	6.93	-0.04	-0.89	55
Ready access to computers / Internet / software	6.63	7.94	6.77	0.13	-1.17	82
Library staff teaching me how to find information	6.36	8.00	6.36	0.00	-1.64	14
Library keeping me informed about all of its services	5.51	7.05	6.46	0.95	-0.59	199
The multimedia (CD / DVD / video / audio) collections I need	4.79	6.37	6.46	1.68	0.10	71
Access to photocopying and printing facilities	5.53	7.33	6.25	0.72	-1.08	85
Helpfulness in dealing with users' IT problems	6.54	8.09	7.21	0.67	-0.88	82
Availability of subject specialist assistance	5.64	7.33	6.11	0.47	-1.22	64
Library staff teaching me how to effectively use the electronically available databases, journals, and books	6.42	7.74	7.36	0.94	-0.38	460
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	6.11	7.34	6.87	0.75	-0.48	61
A library environment that is hospitable and conducive to finding and using information	6.73	8.06	7.23	0.50	-0.83	523
Making me aware of library resources and services	6.17	7.57	6.84	0.67	-0.73	1,447
Teaching me how to locate, evaluate, and use information	6.11	7.24	7.16	1.05	-0.08	123

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Graduate



Convenient service hours	7.08	8.02	7.61	0.53	-0.41	96
Ability to navigate library Web pages easily	7.01	8.30	6.79	-0.21	-1.51	1,454
A secure and safe place	7.24	8.31	7.55	0.30	-0.76	377
Enabling me to find information myself 24 hours a day	7.11	8.23	7.21	0.10	-1.01	274
Facilitating self-directed research	7.09	8.09	7.16	0.07	-0.93	43
Full-text delivered electronically to individual users	6.88	8.48	6.61	-0.28	-1.87	94
Librarians providing assistance that addresses only the user's immediate information needs, and not providing general instruction on using libraries	6.56	7.63	6.96	0.40	-0.67	125
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	6.64	7.77	7.29	0.65	-0.48	184
Providing direction to self-navigate the library	6.46	7.52	6.98	0.52	-0.54	81
Providing search tools that permit me to work autonomously	7.12	8.42	7.62	0.50	-0.81	52
Space for group / individual study and research needs	6.04	7.17	6.30	0.26	-0.87	23
Space that facilitates quiet study	7.42	8.50	5.92	-1.50	-2.58	12
Timely document delivery / interlibrary loan	6.63	8.10	7.24	0.61	-0.86	114
Visually appealing facilities	6.00	8.50	7.50	1.50	-1.00	2
Space for students to study and work in groups	6.67	8.33	7.33	0.67	-1.00	3
Adequate hours of service	6.84	8.09	7.39	0.55	-0.71	916
Timely delivery of the articles and documents that I need	7.82	8.35	7.82	0.00	-0.53	17
The library provides access to archival materials (documents, manuscripts, and photographs)	6.68	7.71	6.96	0.28	-0.75	102
Ease and timeliness in getting materials from other libraries	6.75	8.13	7.26	0.51	-0.87	953
Helpful online guides and tutorials	5.90	7.41	6.51	0.61	-0.90	200
An online catalog that is user-friendly for finding materials	7.15	8.43	7.22	0.07	-1.21	634
Availability of assistance to improve my research skills	5.92	7.33	6.78	0.86	-0.56	72

Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: Graduate

This table displays the standard deviations of each of the local questions added by the individual library or consortium, 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.

Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Availability of online help when using my library's electronic resources	1.98	1.81	1.92	2.23	2.01	89
Informing me of useful library services	2.00	1.52	1.43	1.86	1.56	99
Ease of use of electronic resources	2.31	1.38	2.00	1.87	2.18	23
Providing help when and where I need it	1.66	1.38	1.33	1.62	1.46	236
Teaching me how to access, evaluate, and use information	1.87	1.60	1.55	1.83	1.72	1,149
The right mix of electronic content	1.38	0.92	1.60	1.87	1.72	53
Online course support (readings, links, references)	1.77	1.49	1.48	1.78	1.65	188
Collections of online full-text articles sufficient to meet my needs	1.62	1.09	1.66	2.32	2.10	22
Electronic resources matching my information needs	1.47	0.95	1.38	1.70	1.47	552
Access to rare and historical materials	2.17	2.09	1.84	1.92	1.99	169
Contribution to the intellectual atmosphere of the campus	1.88	1.50	1.70	2.02	1.81	55
Ready access to computers / Internet / software	1.85	1.54	1.69	2.24	2.04	82
Library staff teaching me how to find information	2.34	1.62	2.65	2.63	2.98	14
Library keeping me informed about all of its services	2.11	1.82	1.76	2.03	1.95	199
The multimedia (CD / DVD / video / audio) collections I need	2.35	2.25	1.77	2.45	2.32	71
Access to photocopying and printing facilities	2.23	1.87	1.90	2.49	2.05	85
Helpfulness in dealing with users' IT problems	1.93	1.35	1.49	1.86	1.62	82
Availability of subject specialist assistance	2.03	1.85	1.74	1.89	2.07	64
Library staff teaching me how to effectively use the electronically available databases, journals, and books	1.92	1.59	1.63	1.88	1.71	460
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	2.14	1.92	1.74	1.89	1.94	61
A library environment that is hospitable and conducive to finding and using information	1.64	1.28	1.49	1.68	1.49	523
Making me aware of library resources and services	1.86	1.57	1.62	1.97	1.87	1,447
Teaching me how to locate, evaluate, and use information	1.96	1.74	1.68	1.98	1.91	123
Convenient service hours	1.78	1.33	1.42	1.96	1.53	96
Ability to navigate library Web pages easily	1.50	1.07	1.63	1.98	1.84	1,454
A secure and safe place	1.65	1.23	1.38	1.79	1.61	377
Enabling me to find information myself 24 hours a day	1.65	1.25	1.64	1.89	1.73	274
Facilitating self-directed research	1.95	1.54	1.79	1.89	1.75	43

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Graduate

Full-text delivered electronically to individual users	2.03	1.10	1.67	2.37	1.98	94
Librarians providing assistance that addresses only the user's immediate information needs, and not providing general instruction on using libraries	1.79	1.79	1.62	1.88	1.95	125
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	1.76	1.60	1.50	1.78	1.71	184
Providing direction to self-navigate the library	1.88	1.74	1.70	2.12	2.11	81
Providing search tools that permit me to work autonomously	1.52	0.91	1.22	1.73	1.44	52
Space for group / individual study and research needs	2.23	2.12	1.69	2.28	2.14	23
Space that facilitates quiet study	1.24	0.80	2.11	1.98	2.15	12
Timely document delivery / interlibrary loan	1.76	1.25	1.53	1.70	1.67	114
Visually appealing facilities	4.24	0.71	2.12	2.12	1.41	2
Space for students to study and work in groups	2.52	1.15	2.08	3.79	3.00	3
Adequate hours of service	1.63	1.22	1.52	1.94	1.71	916
Timely delivery of the articles and documents that I need	1.33	0.93	1.13	1.27	1.07	17
The library provides access to archival materials (documents, manuscripts, and photographs)	1.87	1.64	1.80	1.84	1.76	102
Ease and timeliness in getting materials from other libraries	1.61	1.22	1.46	1.86	1.60	953
Helpful online guides and tutorials	2.03	1.83	1.77	1.85	1.84	200
An online catalog that is user-friendly for finding materials	1.55	1.01	1.49	1.89	1.64	634
Availability of assistance to improve my research skills	2.07	1.74	1.72	2.26	1.96	72

## 5.5 General Satisfaction Questions Summary for Graduate

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where *n* is the number of respondents for each 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.	7.60	1.36	5,115
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.20	1.49	4,946
How would you rate the overall quality of the service provided by the library?	7.30	1.27	8,802

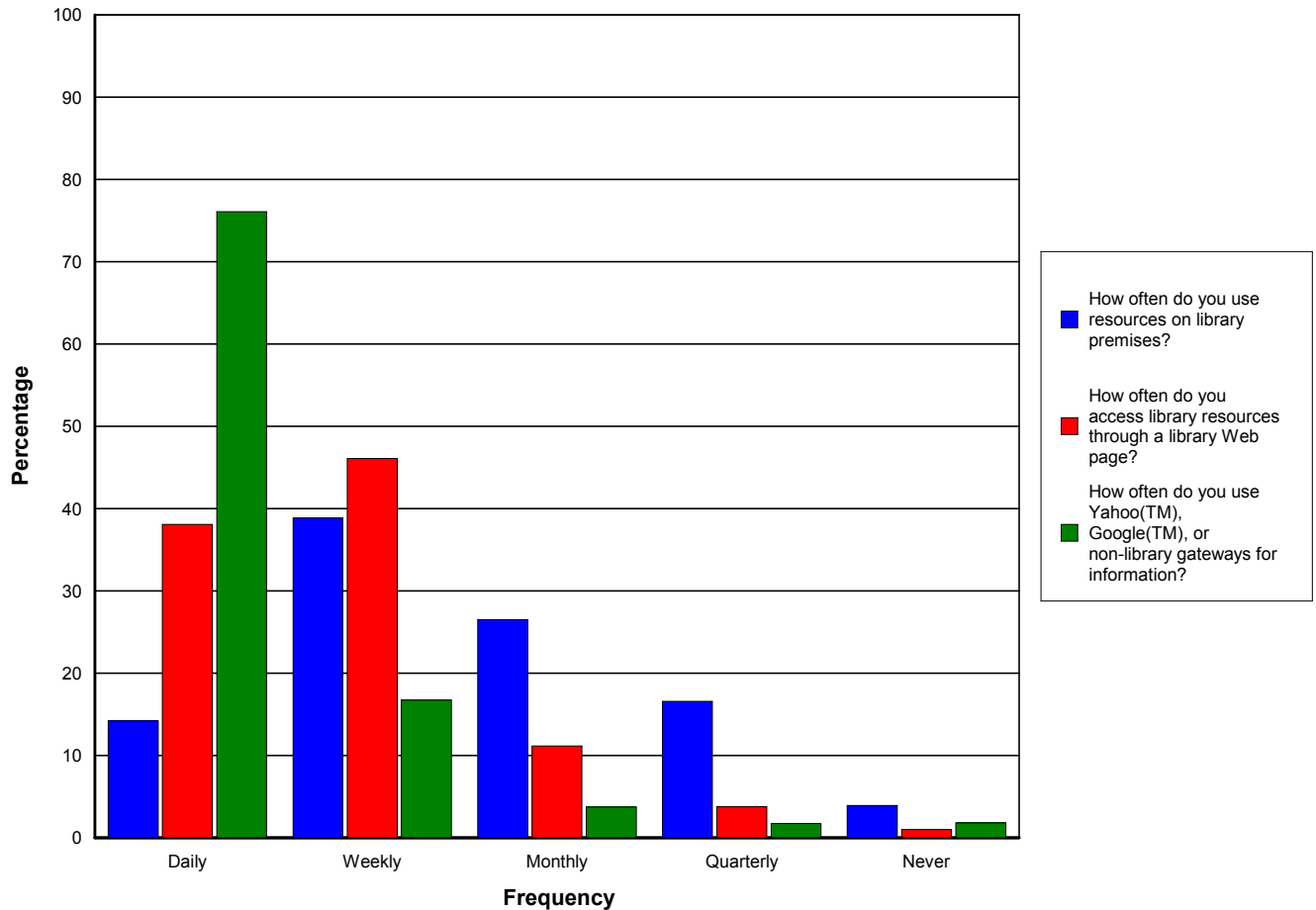
## 5.6 Information Literacy Outcomes Questions Summary for Graduate

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

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	6.41	1.87	4,313
The library aids my advancement in my academic discipline or work.	7.37	1.50	4,220
The library enables me to be more efficient in my academic pursuits or work.	7.23	1.54	4,264
The library helps me distinguish between trustworthy and untrustworthy information.	6.02	1.88	4,303
The library provides me with the information skills I need in my work or study.	6.82	1.65	4,279

### 5.7 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 information gateways such as Yahoo™ and Google™. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the chart displays the number and percentage of respondents who selected each option.



	Daily	Weekly	Monthly	Quarterly	Never	Total
How often do you use resources on library premises?	1,249 14.19%	3,418 38.83%	2,333 26.50%	1,457 16.55%	346 3.93%	8,803 100.00%
How often do you access library resources through a library Web page?	3,350 38.06%	4,055 46.06%	982 11.16%	330 3.75%	86 0.98%	8,803 100.00%
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	6,696 76.06%	1,471 16.71%	329 3.74%	150 1.70%	157 1.78%	8,803 100.00%

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Graduate

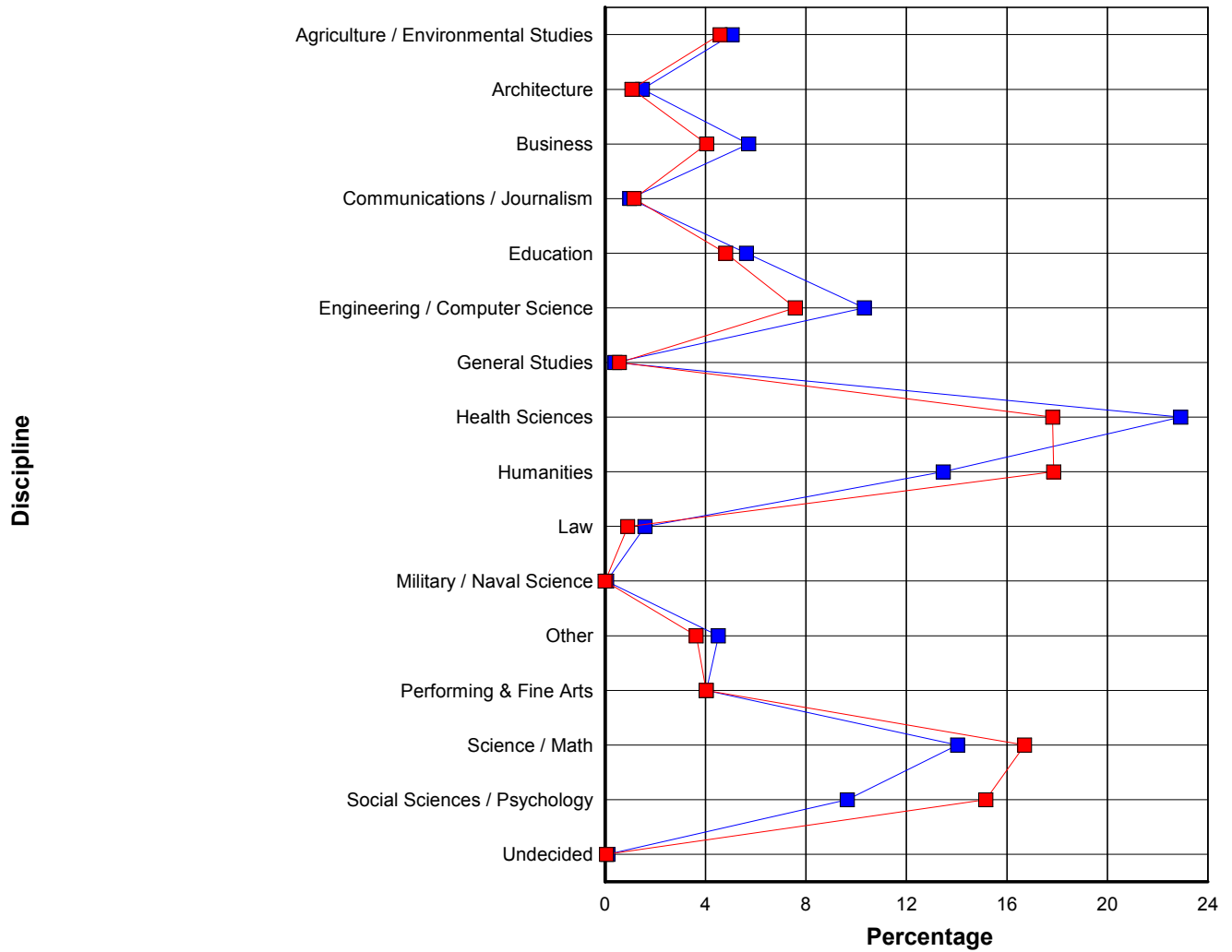
## 6 Summary for Faculty

### 6.1 Demographic Summary for Faculty

#### 6.1.1 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).



- Respondent Profile by Discipline
- Population Profile by Discipline

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Faculty

<b>Discipline</b>	<b>Population N</b>	<b>Population %</b>	<b>Respondents n</b>	<b>Respondents %</b>	<b>%N - %n</b>
Agriculture / Environmental Studies	2,749	5.06	222	4.58	0.48
Architecture	810	1.49	52	1.07	0.42
Business	3,104	5.72	196	4.05	1.67
Communications / Journalism	536	0.99	56	1.16	-0.17
Education	3,058	5.63	233	4.81	0.82
Engineering / Computer Science	5,604	10.32	367	7.58	2.75
General Studies	217	0.40	28	0.58	-0.18
Health Sciences	12,440	22.92	863	17.82	5.10
Humanities	7,310	13.47	865	17.86	-4.39
Law	863	1.59	44	0.91	0.68
Military / Naval Science	38	0.07	0	0.00	0.07
Other	2,451	4.52	176	3.63	0.88
Performing & Fine Arts	2,190	4.03	195	4.03	0.01
Science / Math	7,618	14.03	809	16.70	-2.67
Social Sciences / Psychology	5,235	9.64	734	15.16	-5.51
Undecided	62	0.11	3	0.06	0.05
<b>Total:</b>	<b>54,285</b>	<b>100.00</b>	<b>4,843</b>	<b>100.00</b>	<b>0.00</b>

Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: Faculty

### 6.1.2 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.

<b>Age:</b>	<b>Respondents n</b>	<b>Respondents %</b>
Under 18	7	0.13
18 - 22	3	0.06
23 - 30	145	2.79
31 - 45	1,842	35.46
46 - 65	2,728	52.51
Over 65	470	9.05
<b>Total:</b>	<b>5,195</b>	<b>100.00</b>

### 6.1.3 Respondent Profile 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.

<b>Sex:</b>	<b>Population N</b>	<b>Population %</b>	<b>Respondents n</b>	<b>Respondents %</b>
Female	22,361	38.05	2,151	41.55
Male	36,401	61.95	3,026	58.45
<b>Total:</b>	<b>58,762</b>	<b>100.00</b>	<b>5,177</b>	<b>100.00</b>

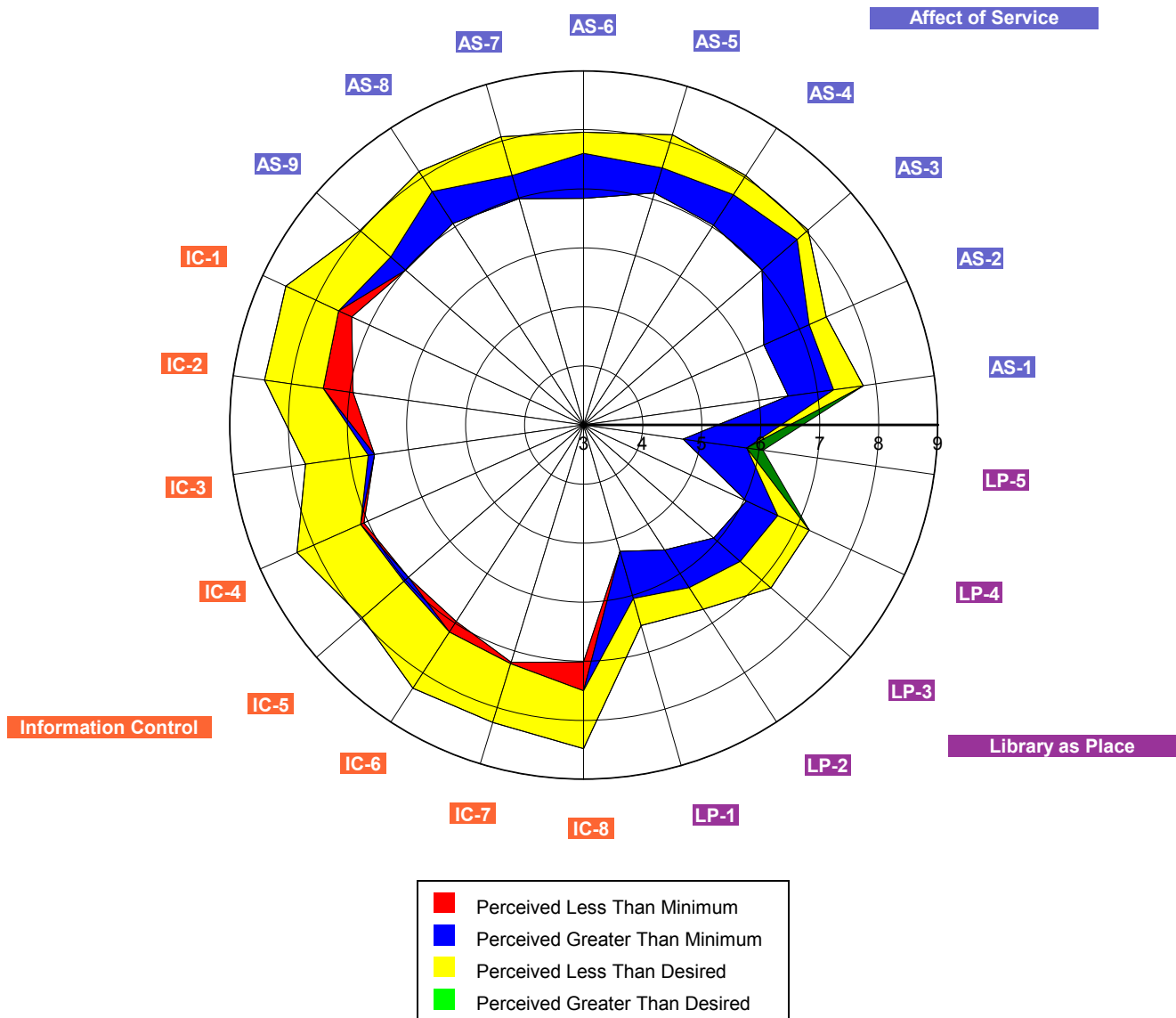


## 6.2 Core Questions Summary for Faculty

This radar chart shows the 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, Information Control, and Library as Place.

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



Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Faculty

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
<b>Affect of Service</b>							
AS-	Employees who instill confidence in users	6.50	7.78	7.28	0.77	-0.50	1,453
AS-	Giving users individual attention	6.34	7.50	7.18	0.84	-0.31	1,440
AS-	Employees who are consistently courteous	7.01	8.04	7.79	0.78	-0.25	1,560
AS-	Readiness to respond to users' questions	7.04	8.04	7.65	0.62	-0.38	1,558
AS-	Employees who have the knowledge to answer user questions	7.11	8.14	7.56	0.45	-0.58	1,590
AS-	Employees who deal with users in a caring fashion	6.84	7.96	7.60	0.76	-0.36	4,222
AS-	Employees who understand the needs of their users	6.99	8.08	7.40	0.41	-0.68	1,555
AS-	Willingness to help users	7.07	8.12	7.71	0.65	-0.41	1,519
AS-	Dependability in handling users' service problems	7.00	8.02	7.33	0.33	-0.69	1,417
<b>Information Control</b>							
IC-	Making electronic resources accessible from my home or office	7.58	8.57	7.34	-0.24	-1.23	1,673
IC-	A library Web site enabling me to locate information on my own	7.46	8.46	6.94	-0.51	-1.52	1,733
IC-	The printed library materials I need for my work	6.58	7.76	6.69	0.11	-1.07	1,635
IC-	The electronic information resources I need	7.14	8.31	7.08	-0.06	-1.24	4,331
IC-	Modern equipment that lets me easily access needed information	6.93	7.97	7.04	0.10	-0.94	1,612
IC-	Easy-to-use access tools that allow me to find things on my own	7.18	8.31	6.97	-0.21	-1.35	1,740
IC-	Making information easily accessible for independent use	7.23	8.26	7.20	-0.02	-1.06	1,631
IC-	Print and/or electronic journal collections I require for my work	7.50	8.48	7.01	-0.49	-1.47	1,737
<b>Library as Place</b>							
LP-	Library space that inspires study and learning	5.23	6.53	6.05	0.82	-0.48	3,488
LP-	Quiet space for individual activities	5.53	6.72	6.29	0.76	-0.44	1,195
LP-	A comfortable and inviting location	5.92	7.20	6.52	0.60	-0.69	1,470
LP-	A getaway for study, learning, or research	6.04	7.21	6.63	0.59	-0.58	1,252
LP-	Community space for group learning and group study	4.70	5.79	6.07	1.37	0.28	974
<b>Overall:</b>		6.66	7.78	7.03	0.36	-0.75	4,376

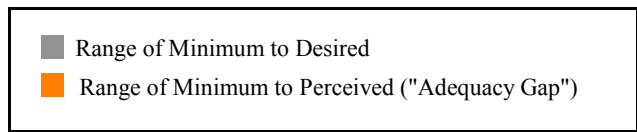
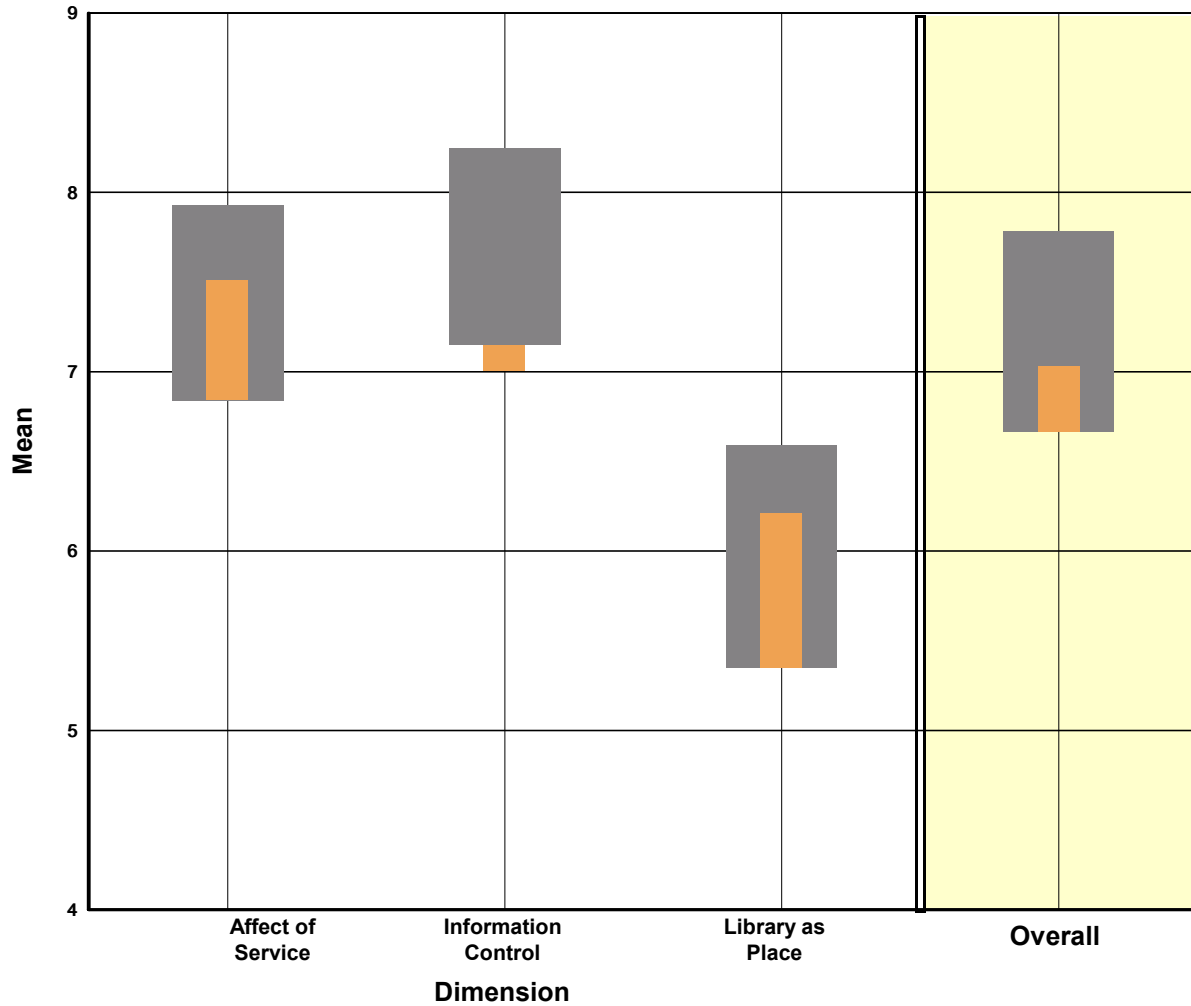
Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: Faculty

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	1.86	1.63	1.58	1.83	1.70	1,453
AS-2	Giving users individual attention	1.89	1.66	1.60	1.86	1.67	1,440
AS-3	Employees who are consistently courteous	1.74	1.36	1.38	1.80	1.52	1,560
AS-4	Readiness to respond to users' questions	1.67	1.34	1.41	1.67	1.46	1,558
AS-5	Employees who have the knowledge to answer user questions	1.65	1.25	1.44	1.74	1.46	1,590
AS-6	Employees who deal with users in a caring fashion	1.77	1.41	1.46	1.80	1.57	4,222
AS-7	Employees who understand the needs of their users	1.67	1.30	1.49	1.84	1.58	1,555
AS-8	Willingness to help users	1.69	1.31	1.45	1.74	1.47	1,519
AS-9	Dependability in handling users' service problems	1.69	1.41	1.60	1.90	1.71	1,417
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	1.53	0.98	1.61	1.93	1.71	1,673
IC-2	A library Web site enabling me to locate information on my own	1.52	1.04	1.71	1.99	1.80	1,733
IC-3	The printed library materials I need for my work	1.88	1.66	1.68	2.18	2.10	1,635
IC-4	The electronic information resources I need	1.61	1.21	1.57	1.92	1.76	4,331
IC-5	Modern equipment that lets me easily access needed information	1.71	1.42	1.54	1.89	1.78	1,612
IC-6	Easy-to-use access tools that allow me to find things on my own	1.50	1.08	1.56	1.88	1.68	1,740
IC-7	Making information easily accessible for independent use	1.52	1.10	1.54	1.83	1.65	1,631
IC-8	Print and/or electronic journal collections I require for my work	1.53	1.10	1.66	2.04	1.81	1,737
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	2.34	2.44	2.00	2.74	2.92	3,488
LP-2	Quiet space for individual activities	2.41	2.34	1.95	2.67	2.66	1,195
LP-3	A comfortable and inviting location	2.07	1.94	1.89	2.42	2.42	1,470
LP-4	A getaway for study, learning, or research	2.30	2.20	1.85	2.34	2.36	1,252
LP-5	Community space for group learning and group study	2.42	2.57	1.91	2.49	2.57	974
<b>Overall:</b>		1.34	1.07	1.19	1.43	1.28	4,376

Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: Faculty

### 6.3 Core Question Dimensions Summary for Faculty

On the chart below, scores for each dimension of library service quality have been plotted graphically. The 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.



Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Faculty

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

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	6.84	7.93	7.51	0.67	-0.42	4,342
Information Control	7.15	8.25	7.00	-0.14	-1.24	4,373
Library as Place	5.35	6.59	6.21	0.86	-0.38	3,768
<b>Overall</b>	6.66	7.78	7.03	0.36	-0.75	4,376

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.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service	1.58	1.25	1.32	1.57	1.37	4,342
Information Control	1.35	0.97	1.35	1.61	1.45	4,373
Library as Place	2.20	2.22	1.82	2.42	2.54	3,768
<b>Overall</b>	1.34	1.07	1.19	1.43	1.28	4,376

## 6.4 Local Question Summary for Faculty

This table shows mean scores of each of the local questions added by the individual library or consortium, 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.

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Availability of online help when using my library's electronic resources	6.63	7.77	6.97	0.34	-0.81	88
Informing me of useful library services	5.68	7.03	6.81	1.14	-0.22	59
Ease of use of electronic resources	7.58	8.42	7.75	0.17	-0.67	12
Providing help when and where I need it	6.77	8.07	7.48	0.71	-0.59	148
Teaching me how to access, evaluate, and use information	6.20	7.34	6.85	0.65	-0.49	518
The right mix of electronic content	7.12	8.53	7.00	-0.12	-1.53	17
Online course support (readings, links, references)	6.83	7.81	6.88	0.06	-0.92	52
Collections of online full-text articles sufficient to meet my needs	7.56	8.92	6.68	-0.88	-2.24	25
Electronic resources matching my information needs	7.67	8.61	7.57	-0.10	-1.04	203
Access to rare and historical materials	5.17	6.50	6.30	1.13	-0.20	92
Contribution to the intellectual atmosphere of the campus	7.24	8.10	7.34	0.10	-0.76	29
Ready access to computers / Internet / software	4.91	6.36	6.18	1.27	-0.18	11
Library staff teaching me how to find information	6.40	7.67	7.27	0.87	-0.40	15
Library keeping me informed about all of its services	5.68	6.89	6.28	0.60	-0.61	163
The multimedia (CD / DVD / video / audio) collections I need	5.25	6.67	6.17	0.92	-0.50	24
Access to photocopying and printing facilities	5.76	7.13	6.04	0.28	-1.09	79
Helpfulness in dealing with users' IT problems	7.04	8.12	7.08	0.04	-1.04	74
Availability of subject specialist assistance	6.25	7.08	7.08	0.83	0.00	12
Library staff teaching me how to effectively use the electronically available databases, journals, and books	7.00	8.16	7.97	0.97	-0.19	161
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	5.40	5.95	6.23	0.83	0.28	40
A library environment that is hospitable and conducive to finding and using information	6.98	8.22	7.44	0.45	-0.78	198
Making me aware of library resources and services	6.43	7.51	6.93	0.49	-0.58	720
Teaching me how to locate, evaluate, and use information	5.97	7.25	7.23	1.26	-0.02	101

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Faculty

Convenient service hours	6.20	7.33	7.93	1.73	0.60	55
Ability to navigate library Web pages easily	7.34	8.43	6.42	-0.91	-2.01	724
A secure and safe place	7.45	8.13	7.85	0.40	-0.28	161
Enabling me to find information myself 24 hours a day	7.31	8.25	7.53	0.22	-0.72	124
Facilitating self-directed research	6.97	8.39	7.27	0.30	-1.12	33
Full-text delivered electronically to individual users	7.24	8.41	6.89	-0.34	-1.52	93
Librarians providing assistance that addresses only the user's immediate information needs, and not providing general instruction on using libraries	6.56	7.89	7.52	0.96	-0.37	27
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	6.92	8.03	7.64	0.72	-0.39	61
Providing direction to self-navigate the library	6.47	7.44	6.97	0.50	-0.47	36
Providing search tools that permit me to work autonomously	7.43	8.33	7.33	-0.10	-1.00	49
Space for group / individual study and research needs	4.88	6.19	5.06	0.19	-1.13	16
Space that facilitates quiet study	5.55	6.27	4.27	-1.27	-2.00	22
Timely document delivery / interlibrary loan	6.65	7.71	7.65	1.00	-0.06	17
Adequate hours of service	6.61	7.55	7.30	0.70	-0.24	437
Timely delivery of the articles and documents that I need	7.85	8.60	7.70	-0.15	-0.90	20
The library provides access to archival materials (documents, manuscripts, and photographs)	6.23	7.68	6.73	0.50	-0.95	22
Ease and timeliness in getting materials from other libraries	6.97	8.19	7.26	0.30	-0.93	430
Helpful online guides and tutorials	5.99	7.22	6.48	0.49	-0.74	207
An online catalog that is user-friendly for finding materials	7.55	8.52	7.13	-0.42	-1.39	233
Availability of assistance to improve my research skills	5.55	6.55	6.65	1.10	0.10	40

This table displays the standard deviations of each of the local questions added by the individual library or consortium, 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.

Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Availability of online help when using my library's electronic resources	1.68	1.45	1.80	1.57	1.90	88
Informing me of useful library services	1.92	1.82	1.44	1.79	1.83	59
Ease of use of electronic resources	1.38	1.24	1.14	1.85	1.83	12
Providing help when and where I need it	1.77	1.46	1.36	1.66	1.44	148
Teaching me how to access, evaluate, and use information	2.02	1.85	1.66	2.09	2.02	518
The right mix of electronic content	1.17	0.94	1.54	1.62	1.70	17
Online course support (readings, links, references)	1.73	1.48	1.64	2.48	2.07	52
Collections of online full-text articles sufficient to meet my needs	1.39	0.40	1.31	2.09	1.45	25
Electronic resources matching my information needs	1.41	0.79	1.29	1.66	1.33	203
Access to rare and historical materials	2.40	2.38	1.83	2.35	2.32	92
Contribution to the intellectual atmosphere of the campus	1.84	1.23	1.34	1.95	1.35	29
Ready access to computers / Internet / software	2.30	2.06	1.60	2.65	2.36	11
Library staff teaching me how to find information	2.50	1.63	1.71	2.20	1.99	15
Library keeping me informed about all of its services	1.89	1.85	1.75	1.84	1.96	163
The multimedia (CD / DVD / video / audio) collections I need	1.75	2.28	1.63	2.02	2.47	24
Access to photocopying and printing facilities	2.24	1.90	1.86	2.56	2.62	79
Helpfulness in dealing with users' IT problems	1.65	1.40	1.83	1.88	2.05	74
Availability of subject specialist assistance	2.01	2.11	1.00	1.99	2.34	12
Library staff teaching me how to effectively use the electronically available databases, journals, and books	1.88	1.33	1.36	1.81	1.27	161
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	2.34	2.59	2.08	2.65	2.99	40
A library environment that is hospitable and conducive to finding and using information	1.77	1.21	1.63	2.11	1.80	198
Making me aware of library resources and services	1.89	1.63	1.60	1.98	1.78	720
Teaching me how to locate, evaluate, and use information	2.26	1.97	1.70	2.21	2.04	101
Convenient service hours	1.94	1.81	1.07	2.15	1.96	55
Ability to navigate library Web pages easily	1.42	0.96	1.76	2.20	1.98	724
A secure and safe place	1.81	1.40	1.30	1.67	1.30	161
Enabling me to find information myself 24 hours a day	1.73	1.35	1.47	1.78	1.62	124
Facilitating self-directed research	1.45	0.90	1.23	1.38	1.41	33

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Faculty



Full-text delivered electronically to individual users	1.56	1.09	1.60	1.87	1.77	93
Librarians providing assistance that addresses only the user's immediate information needs, and not providing general instruction on using libraries	2.33	1.63	1.81	2.38	1.71	27
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	1.71	1.24	1.53	2.14	1.54	61
Providing direction to self-navigate the library	1.87	1.92	1.42	1.78	1.86	36
Providing search tools that permit me to work autonomously	1.44	0.90	1.45	2.02	1.37	49
Space for group / individual study and research needs	2.50	2.51	2.35	2.95	2.31	16
Space that facilitates quiet study	2.18	2.45	2.25	3.53	4.12	22
Timely document delivery / interlibrary loan	1.84	1.49	1.06	1.32	1.09	17
Adequate hours of service	1.81	1.60	1.45	1.89	1.73	437
Timely delivery of the articles and documents that I need	1.31	0.88	1.26	1.27	1.07	20
The library provides access to archival materials (documents, manuscripts, and photographs)	2.11	1.81	2.03	3.02	2.13	22
Ease and timeliness in getting materials from other libraries	1.52	1.14	1.60	1.82	1.62	430
Helpful online guides and tutorials	1.98	1.85	1.61	2.07	2.02	207
An online catalog that is user-friendly for finding materials	1.44	0.88	1.69	1.94	1.71	233
Availability of assistance to improve my research skills	2.52	2.32	1.73	2.55	2.53	40

## 6.5 General Satisfaction Questions Summary for Faculty

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where  $n$  is the number of respondents for each 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.	7.73	1.43	2,579
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.22	1.69	2,491
How would you rate the overall quality of the service provided by the library?	7.39	1.41	4,375

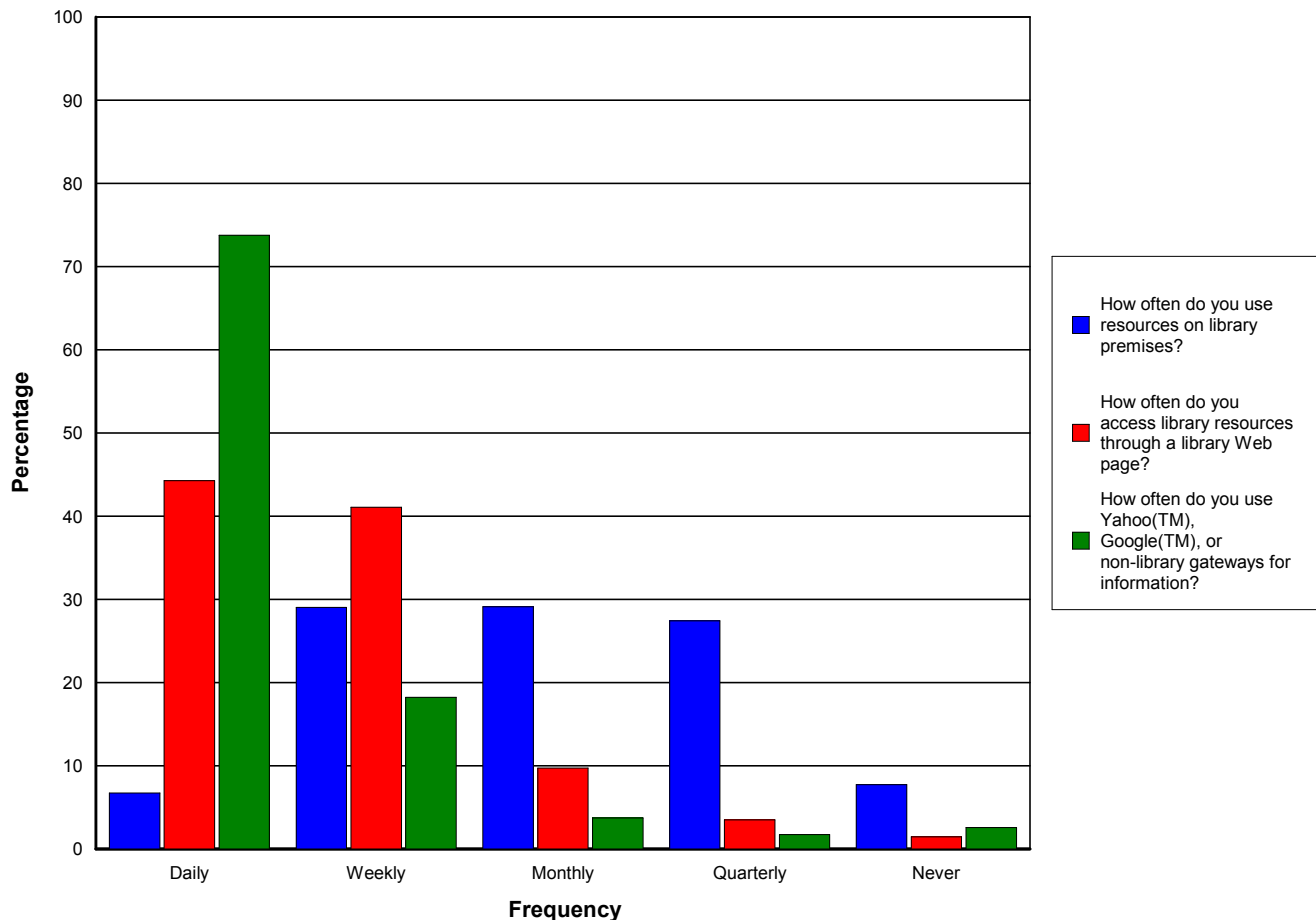
## 6.6 Information Literacy Outcomes Questions Summary for Faculty

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

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	6.61	2.01	2,175
The library aids my advancement in my academic discipline or work.	7.43	1.65	2,098
The library enables me to be more efficient in my academic pursuits or work.	7.41	1.61	2,230
The library helps me distinguish between trustworthy and untrustworthy information.	5.70	2.09	2,133
The library provides me with the information skills I need in my work or study.	6.60	1.85	2,198

### 6.7 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 information gateways such as Yahoo™ and Google™. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the chart displays the number and percentage of respondents who selected each option.



	Daily	Weekly	Monthly	Quarterly	Never	Total
How often do you use resources on library premises?	294 6.72%	1,271 29.04%	1,273 29.09%	1,200 27.42%	338 7.72%	4,376 100.00%
How often do you access library resources through a library Web page?	1,936 44.27%	1,796 41.07%	425 9.72%	152 3.48%	64 1.46%	4,373 100.00%
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	3,226 73.75%	797 18.22%	163 3.73%	75 1.71%	113 2.58%	4,374 100.00%

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Faculty

## 7 Summary for Library Staff

### 7.1 Demographic Summary for Library Staff

#### 7.1.1 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:	Respondents n	Respondents %
Under 18	0	0.00
18 - 22	2	0.53
23 - 30	50	13.19
31 - 45	112	29.55
46 - 65	207	54.62
Over 65	8	2.11
<b>Total:</b>	<b>379</b>	<b>100.00</b>

#### 7.1.2 Respondent Profile 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.

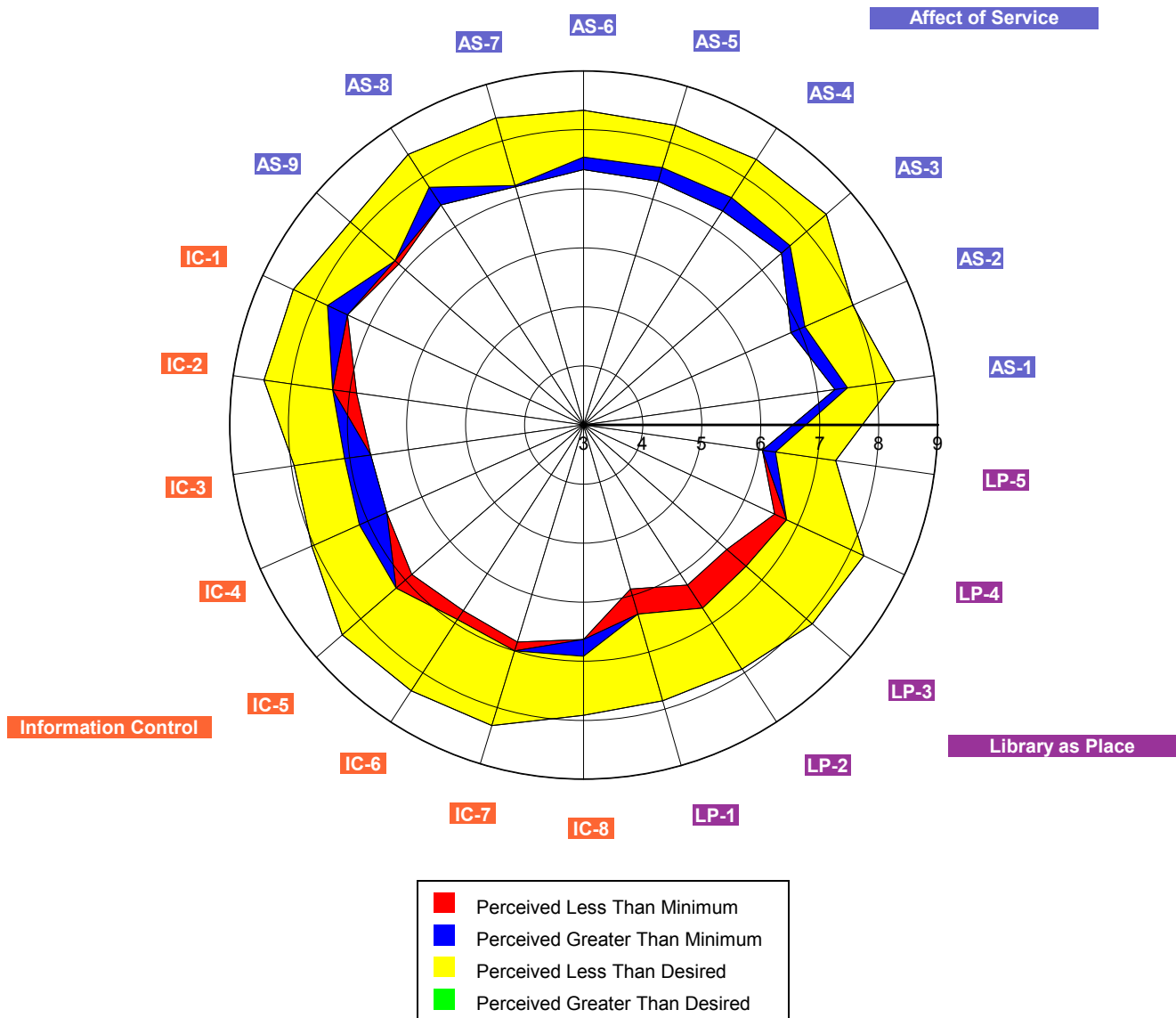
Sex:	Respondents n	Respondents %
Female	248	65.44
Male	131	34.56
<b>Total:</b>	<b>379</b>	<b>100.00</b>

## 7.2 Core Questions Summary for Library Staff

This radar chart shows the 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, Information Control, and Library as Place.

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



Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Library Staff

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
<b>Affect of Service</b>							
AS-	Employees who instill confidence in users	7.30	8.32	7.52	0.22	-0.81	93
AS-	Giving users individual attention	6.85	7.99	7.10	0.26	-0.89	97
AS-	Employees who are consistently courteous	7.44	8.44	7.63	0.19	-0.81	95
AS-	Readiness to respond to users' questions	7.32	8.36	7.59	0.27	-0.77	74
AS-	Employees who have the knowledge to answer user questions	7.32	8.31	7.56	0.24	-0.75	95
AS-	Employees who deal with users in a caring fashion	7.33	8.33	7.54	0.21	-0.79	289
AS-	Employees who understand the needs of their users	7.20	8.41	7.22	0.02	-1.19	86
AS-	Willingness to help users	7.44	8.46	7.80	0.36	-0.66	97
AS-	Dependability in handling users' service problems	7.24	8.24	7.15	-0.08	-1.08	84
<b>Information Control</b>							
IC-	Making electronic resources accessible from my home or office	7.42	8.43	7.79	0.37	-0.64	103
IC-	A library Web site enabling me to locate information on my own	7.30	8.47	6.89	-0.41	-1.58	122
IC-	The printed library materials I need for my work	6.64	7.95	7.09	0.45	-0.86	87
IC-	The electronic information resources I need	6.65	8.04	7.16	0.51	-0.89	280
IC-	Modern equipment that lets me easily access needed information	7.21	8.42	6.86	-0.35	-1.56	106
IC-	Easy-to-use access tools that allow me to find things on my own	6.93	8.37	6.75	-0.18	-1.62	71
IC-	Making information easily accessible for independent use	7.00	8.32	6.84	-0.16	-1.48	103
IC-	Print and/or electronic journal collections I require for my work	6.63	7.92	6.92	0.28	-1.00	95
<b>Library as Place</b>							
LP-	Library space that inspires study and learning	6.33	7.86	5.89	-0.44	-1.97	276
LP-	Quiet space for individual activities	6.70	7.93	6.23	-0.47	-1.70	96
LP-	A comfortable and inviting location	6.65	8.13	6.21	-0.43	-1.92	113
LP-	A getaway for study, learning, or research	6.79	8.24	6.57	-0.22	-1.66	68
LP-	Community space for group learning and group study	6.06	7.31	6.28	0.23	-1.03	71
<b>Overall:</b>		6.91	8.12	6.97	0.06	-1.15	296

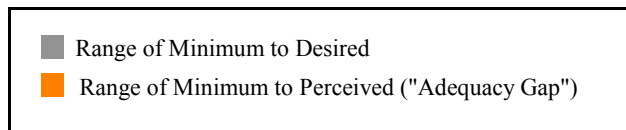
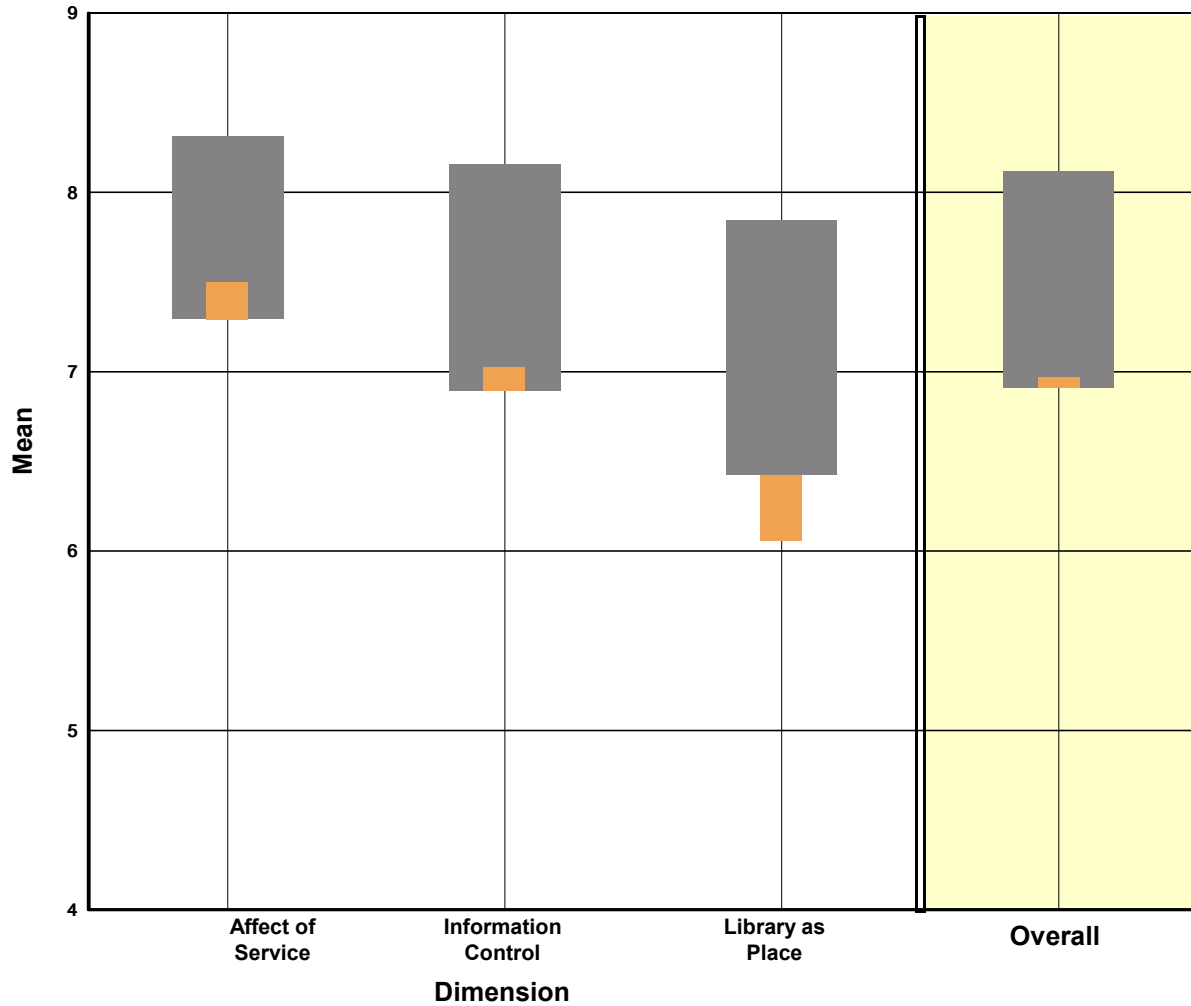
Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Library Staff

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	1.48	0.99	1.35	1.40	1.20	93
AS-2	Giving users individual attention	1.52	1.30	1.65	1.90	1.72	97
AS-3	Employees who are consistently courteous	1.56	0.86	1.25	1.83	1.33	95
AS-4	Readiness to respond to users' questions	1.68	0.87	1.43	1.93	1.57	74
AS-5	Employees who have the knowledge to answer user questions	1.36	0.93	1.19	1.53	1.61	95
AS-6	Employees who deal with users in a caring fashion	1.38	0.97	1.27	1.49	1.38	289
AS-7	Employees who understand the needs of their users	1.47	0.85	1.77	2.17	1.83	86
AS-8	Willingness to help users	1.49	1.04	1.25	1.65	1.44	97
AS-9	Dependability in handling users' service problems	1.17	0.87	1.43	1.61	1.61	84
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	1.56	1.10	1.33	1.41	1.21	103
IC-2	A library Web site enabling me to locate information on my own	1.14	0.74	1.63	1.97	1.75	122
IC-3	The printed library materials I need for my work	1.58	1.45	1.61	1.84	2.00	87
IC-4	The electronic information resources I need	1.43	1.23	1.34	1.57	1.60	280
IC-5	Modern equipment that lets me easily access needed information	1.25	0.75	1.72	1.85	1.89	106
IC-6	Easy-to-use access tools that allow me to find things on my own	1.33	0.83	1.72	1.93	1.80	71
IC-7	Making information easily accessible for independent use	1.24	0.87	1.49	1.70	1.64	103
IC-8	Print and/or electronic journal collections I require for my work	1.50	1.34	1.49	2.02	1.83	95
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	1.58	1.43	2.03	2.40	2.37	276
LP-2	Quiet space for individual activities	1.75	1.33	2.03	2.35	2.17	96
LP-3	A comfortable and inviting location	1.39	1.09	1.93	2.09	2.22	113
LP-4	A getaway for study, learning, or research	1.46	0.99	1.79	2.11	2.06	68
LP-5	Community space for group learning and group study	1.93	1.97	1.95	2.34	2.38	71
<b>Overall:</b>		1.10	0.78	1.06	1.25	1.13	296

Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: Library Staff

### 7.3 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.



Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: 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.

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	7.29	8.31	7.50	0.21	-0.81	296
Information Control	6.89	8.16	7.02	0.13	-1.13	294
Library as Place	6.42	7.84	6.06	-0.36	-1.78	286
<b>Overall</b>	6.91	8.12	6.97	0.06	-1.15	296

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.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service	1.22	0.79	1.18	1.42	1.25	296
Information Control	1.14	0.90	1.18	1.34	1.31	294
Library as Place	1.46	1.27	1.81	2.08	2.02	286
<b>Overall</b>	1.10	0.78	1.06	1.25	1.13	296

## 7.4 Local Question Summary for Library Staff

This table shows mean scores of each of the local questions added by the individual library or consortium, 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.

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Availability of online help when using my library's electronic resources	6.90	8.00	7.40	0.50	-0.60	10
Ease of use of electronic resources	6.92	7.92	7.31	0.38	-0.62	13
Providing help when and where I need it	6.60	8.00	6.20	-0.40	-1.80	5
Teaching me how to access, evaluate, and use information	6.74	7.91	7.52	0.78	-0.39	23
The right mix of electronic content	6.00	6.00	6.00	0.00	0.00	1
Online course support (readings, links, references)	7.33	8.00	7.00	-0.33	-1.00	3
Collections of online full-text articles sufficient to meet my needs	6.63	8.13	6.88	0.25	-1.25	8
Electronic resources matching my information needs	7.67	8.44	7.89	0.22	-0.56	9
Access to rare and historical materials	6.00	6.50	7.33	1.33	0.83	6
Library staff teaching me how to find information	7.70	8.70	7.80	0.10	-0.90	10
Library keeping me informed about all of its services	6.13	7.63	6.75	0.63	-0.88	16
The multimedia (CD / DVD / video / audio) collections I need	6.00	9.00	7.00	1.00	-2.00	1
Access to photocopying and printing facilities	7.00	7.40	7.20	0.20	-0.20	10
Helpfulness in dealing with users' IT problems	6.92	8.33	6.75	-0.17	-1.58	12
Library staff teaching me how to effectively use the electronically available databases, journals, and books	9.00	9.00	9.00	0.00	0.00	1
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	7.00	8.50	8.00	1.00	-0.50	2
A library environment that is hospitable and conducive to finding and using information	6.71	8.29	7.43	0.71	-0.86	7
Making me aware of library resources and services	6.55	7.80	6.85	0.30	-0.95	20
Teaching me how to locate, evaluate, and use information	7.00	7.75	7.00	0.00	-0.75	4
Convenient service hours	5.00	7.00	7.00	2.00	0.00	1
Ability to navigate library Web pages easily	7.00	8.20	6.70	-0.30	-1.50	44
A secure and safe place	7.43	8.14	7.71	0.29	-0.43	7
Enabling me to find information myself 24 hours a day	7.00	8.42	7.33	0.33	-1.08	12

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Library Staff

Full-text delivered electronically to individual users	6.88	8.13	7.38	0.50	-0.75	8
Librarians providing assistance that addresses only the user's immediate information needs, and not providing general instruction on using libraries	7.50	8.50	8.50	1.00	0.00	2
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	9.00	8.00	9.00	0.00	1.00	3
Space for group / individual study and research needs	5.17	6.83	6.50	1.33	-0.33	6
Space that facilitates quiet study	6.50	7.75	4.00	-2.50	-3.75	4
Adequate hours of service	6.86	8.03	7.72	0.86	-0.31	36
Timely delivery of the articles and documents that I need	7.00	8.71	7.57	0.57	-1.14	7
The library provides access to archival materials (documents, manuscripts, and photographs)	7.00	8.00	9.00	2.00	1.00	2
Ease and timeliness in getting materials from other libraries	7.35	8.29	8.18	0.82	-0.12	17
Helpful online guides and tutorials	5.27	6.93	6.53	1.27	-0.40	15
An online catalog that is user-friendly for finding materials	8.00	8.86	7.29	-0.71	-1.57	7
Availability of assistance to improve my research skills	5.67	6.67	6.67	1.00	0.00	3

This table displays the standard deviations of each of the local questions added by the individual library or consortium, 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.

Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Availability of online help when using my library's electronic resources	1.29	1.25	1.07	1.35	0.84	10
Ease of use of electronic resources	1.44	1.44	1.18	1.12	1.12	13
Providing help when and where I need it	2.30	1.41	1.30	1.34	0.84	5
Teaching me how to access, evaluate, and use information	1.51	1.00	1.04	1.28	1.12	23
The right mix of electronic content						1
Online course support (readings, links, references)	1.53	1.00	2.65	2.52	1.73	3
Collections of online full-text articles sufficient to meet my needs	1.06	1.36	1.13	0.89	1.04	8
Electronic resources matching my information needs	1.50	0.73	0.93	1.09	0.73	9
Access to rare and historical materials	2.53	1.76	1.51	2.34	1.33	6
Library staff teaching me how to find information	1.25	0.48	1.03	1.66	1.20	10
Library keeping me informed about all of its services	1.54	1.50	1.29	1.86	1.96	16
The multimedia (CD / DVD / video / audio) collections I need						1
Access to photocopying and printing facilities	1.83	2.01	0.79	1.93	2.15	10
Helpfulness in dealing with users' IT problems	1.24	0.98	1.60	1.75	1.68	12
Library staff teaching me how to effectively use the electronically available databases, journals, and books						1
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	1.41	0.71	0.00	1.41	0.71	2
A library environment that is hospitable and conducive to finding and using information	1.38	0.76	1.27	1.38	1.21	7
Making me aware of library resources and services	2.14	1.44	2.01	2.43	2.58	20
Teaching me how to locate, evaluate, and use information	1.41	1.26	1.63	0.82	0.50	4
Convenient service hours						1
Ability to navigate library Web pages easily	1.38	1.13	1.55	1.71	1.66	44
A secure and safe place	2.15	1.57	1.38	2.75	2.07	7
Enabling me to find information myself 24 hours a day	1.13	0.79	1.61	1.61	1.88	12
Full-text delivered electronically to individual users	0.83	0.64	0.74	1.20	0.89	8
Librarians providing assistance that addresses only the user's immediate information needs, and not providing general instruction on using libraries	2.12	0.71	0.71	1.41	0.00	2
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	0.00	1.73	0.00	0.00	1.73	3
Space for group / individual study and research needs	0.98	0.98	1.05	1.03	1.86	6

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Library Staff

Space that facilitates quiet study	1.29	1.89	2.16	2.38	1.50	4
Adequate hours of service	1.50	1.03	1.19	1.71	1.45	36
Timely delivery of the articles and documents that I need	1.00	0.49	0.53	0.79	0.90	7
The library provides access to archival materials (documents, manuscripts, and photographs)	2.83	1.41	0.00	2.83	1.41	2
Ease and timeliness in getting materials from other libraries	1.32	0.77	0.64	1.38	0.70	17
Helpful online guides and tutorials	1.98	1.62	1.60	1.62	1.88	15
An online catalog that is user-friendly for finding materials	1.00	0.38	1.70	1.38	1.81	7
Availability of assistance to improve my research skills	4.16	3.21	3.21	1.00	0.00	3

## 7.5 General Satisfaction Questions Summary for Library Staff

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where *n* is the number of respondents for each 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.	7.46	1.57	170
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.45	1.29	152
How would you rate the overall quality of the service provided by the library?	7.40	1.19	296

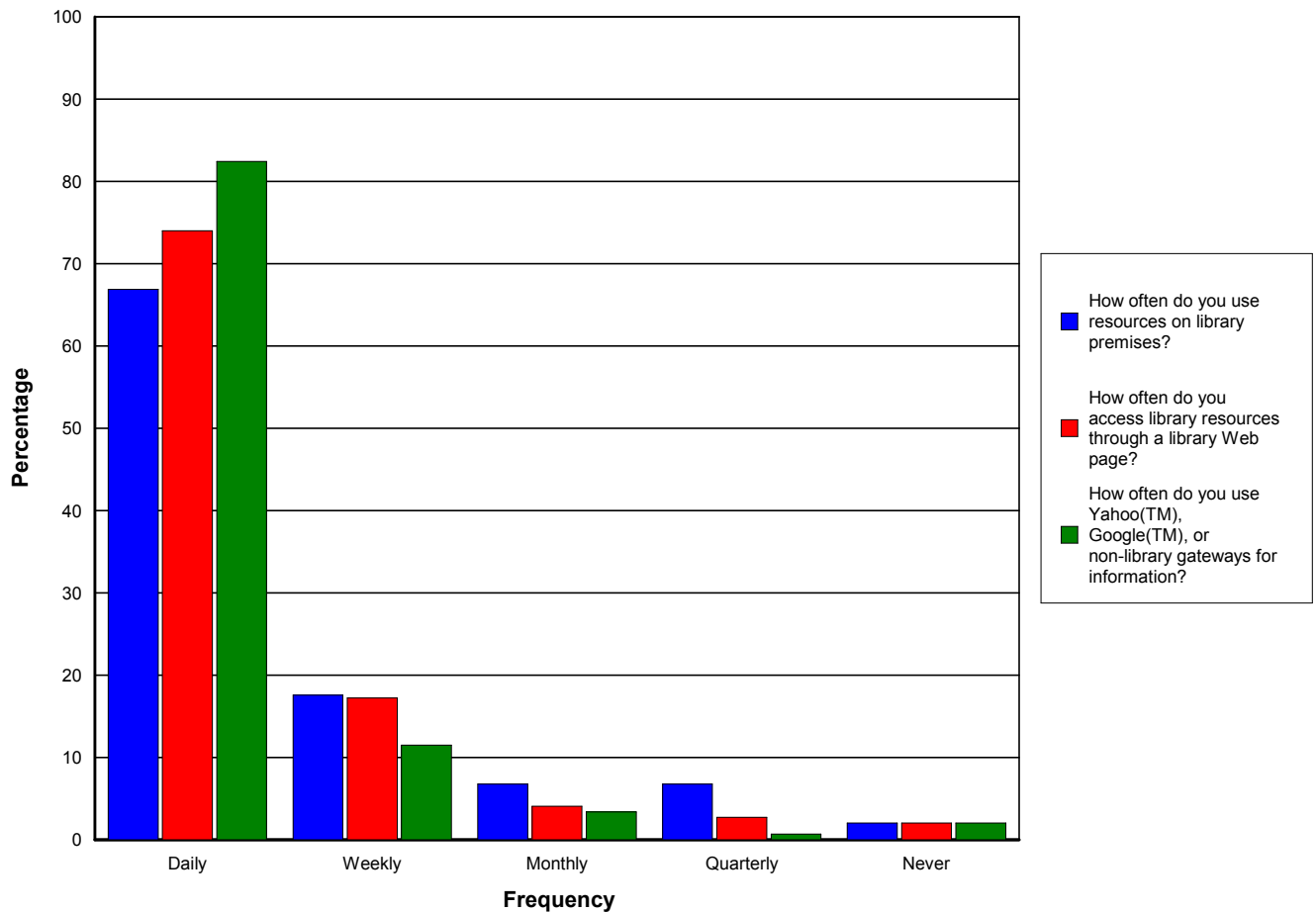
## 7.6 Information Literacy Outcomes Questions Summary for Library Staff

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

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	6.93	1.63	141
The library aids my advancement in my academic discipline or work.	7.46	1.35	138
The library enables me to be more efficient in my academic pursuits or work.	7.47	1.44	123
The library helps me distinguish between trustworthy and untrustworthy information.	6.72	1.68	140
The library provides me with the information skills I need in my work or study.	7.11	1.53	128

### 7.7 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 information gateways such as Yahoo™ and Google™. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the chart displays the number and percentage of respondents who selected each option.



	Daily	Weekly	Monthly	Quarterly	Never	Total
How often do you use resources on library premises?	198 66.89%	52 17.57%	20 6.76%	20 6.76%	6 2.03%	296 100.00%
How often do you access library resources through a library Web page?	219 73.99%	51 17.23%	12 4.05%	8 2.70%	6 2.03%	296 100.00%
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	244 82.43%	34 11.49%	10 3.38%	2 0.68%	6 2.03%	296 100.00%

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Library Staff

## 8 Summary for Staff

### 8.1 Demographic Summary for Staff

#### 8.1.1 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:	Respondents n	Respondents %
Under 18	0	0.00
18 - 22	30	1.63
23 - 30	431	23.49
31 - 45	694	37.82
46 - 65	660	35.97
Over 65	20	1.09
<b>Total:</b>	<b>1,835</b>	<b>100.00</b>

#### 8.1.2 Respondent Profile 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:	Respondents n	Respondents %
Female	1,207	65.81
Male	627	34.19
<b>Total:</b>	<b>1,834</b>	<b>100.00</b>

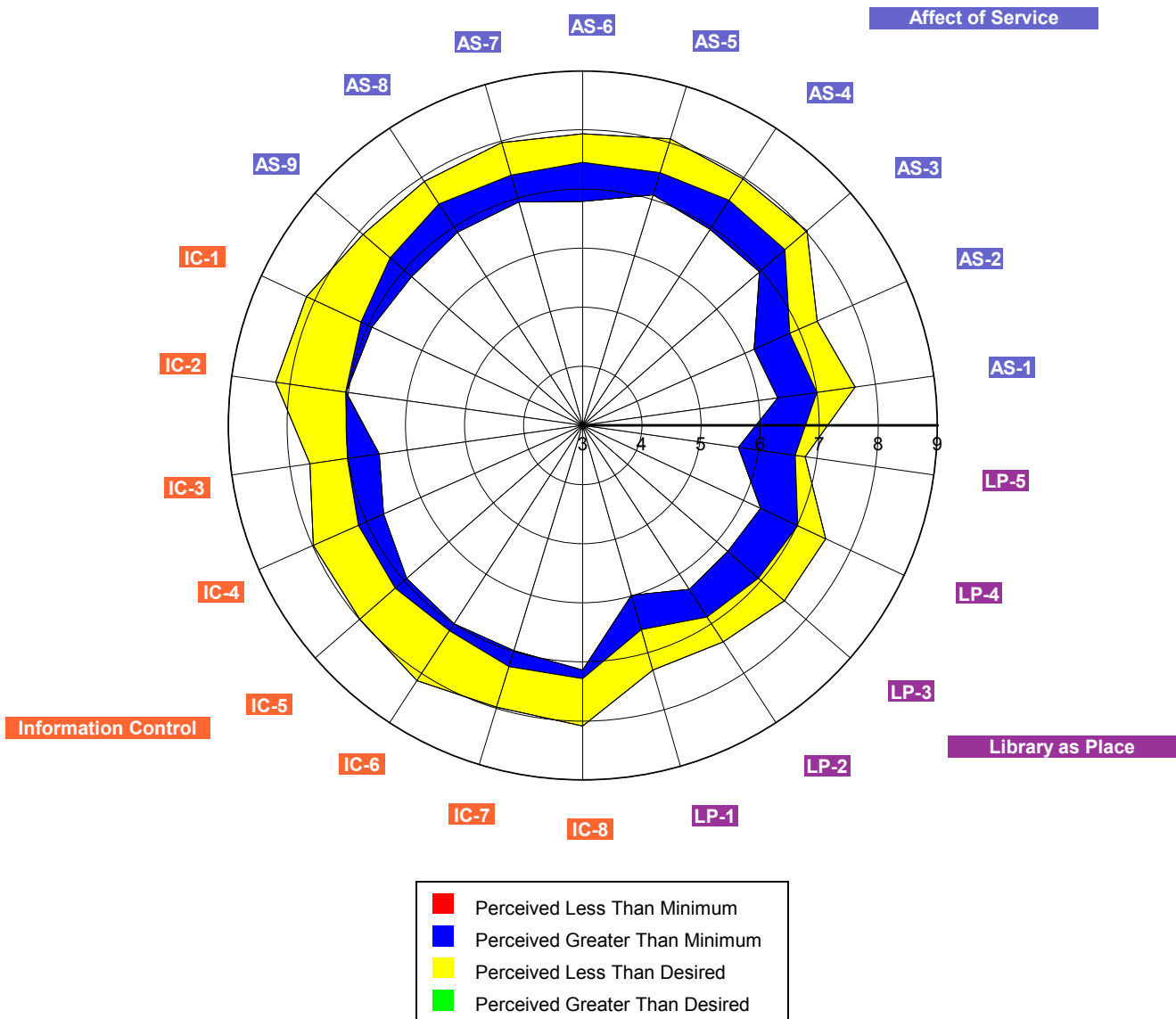


## 8.2 Core Questions Summary for Staff

This radar chart shows the 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, Information Control, and Library as Place.

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



Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: Staff

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
<b>Affect of Service</b>							
AS-	Employees who instill confidence in users	6.33	7.65	7.00	0.67	-0.65	412
AS-	Giving users individual attention	6.17	7.34	6.83	0.66	-0.51	375
AS-	Employees who are consistently courteous	6.96	8.02	7.53	0.57	-0.49	408
AS-	Readiness to respond to users' questions	6.96	7.97	7.54	0.58	-0.43	398
AS-	Employees who have the knowledge to answer user questions	7.08	8.07	7.47	0.39	-0.60	395
AS-	Employees who deal with users in a caring fashion	6.79	7.94	7.45	0.66	-0.48	884
AS-	Employees who understand the needs of their users	6.93	7.98	7.41	0.47	-0.57	399
AS-	Willingness to help users	6.90	7.92	7.47	0.57	-0.45	394
AS-	Dependability in handling users' service problems	6.84	7.92	7.32	0.48	-0.61	355
<b>Information Control</b>							
IC-	Making electronic resources accessible from my home or office	6.94	8.15	7.14	0.20	-1.01	408
IC-	A library Web site enabling me to locate information on my own	7.05	8.24	7.04	-0.01	-1.20	457
IC-	The printed library materials I need for my work	6.48	7.66	7.02	0.55	-0.64	366
IC-	The electronic information resources I need	6.69	7.99	7.15	0.47	-0.84	874
IC-	Modern equipment that lets me easily access needed information	6.95	8.00	7.20	0.25	-0.80	404
IC-	Easy-to-use access tools that allow me to find things on my own	7.00	8.15	7.14	0.14	-1.01	428
IC-	Making information easily accessible for independent use	6.98	7.98	7.27	0.28	-0.72	444
IC-	Print and/or electronic journal collections I require for my work	7.14	8.09	7.28	0.14	-0.80	384
<b>Library as Place</b>							
LP-	Library space that inspires study and learning	5.99	7.31	6.59	0.60	-0.72	752
LP-	Quiet space for individual activities	6.31	7.36	6.86	0.56	-0.50	352
LP-	A comfortable and inviting location	6.25	7.52	6.94	0.69	-0.58	392
LP-	A getaway for study, learning, or research	6.32	7.54	7.01	0.69	-0.52	352
LP-	Community space for group learning and group study	5.66	6.80	6.63	0.97	-0.17	282
<b>Overall:</b>		6.64	7.80	7.15	0.51	-0.64	919

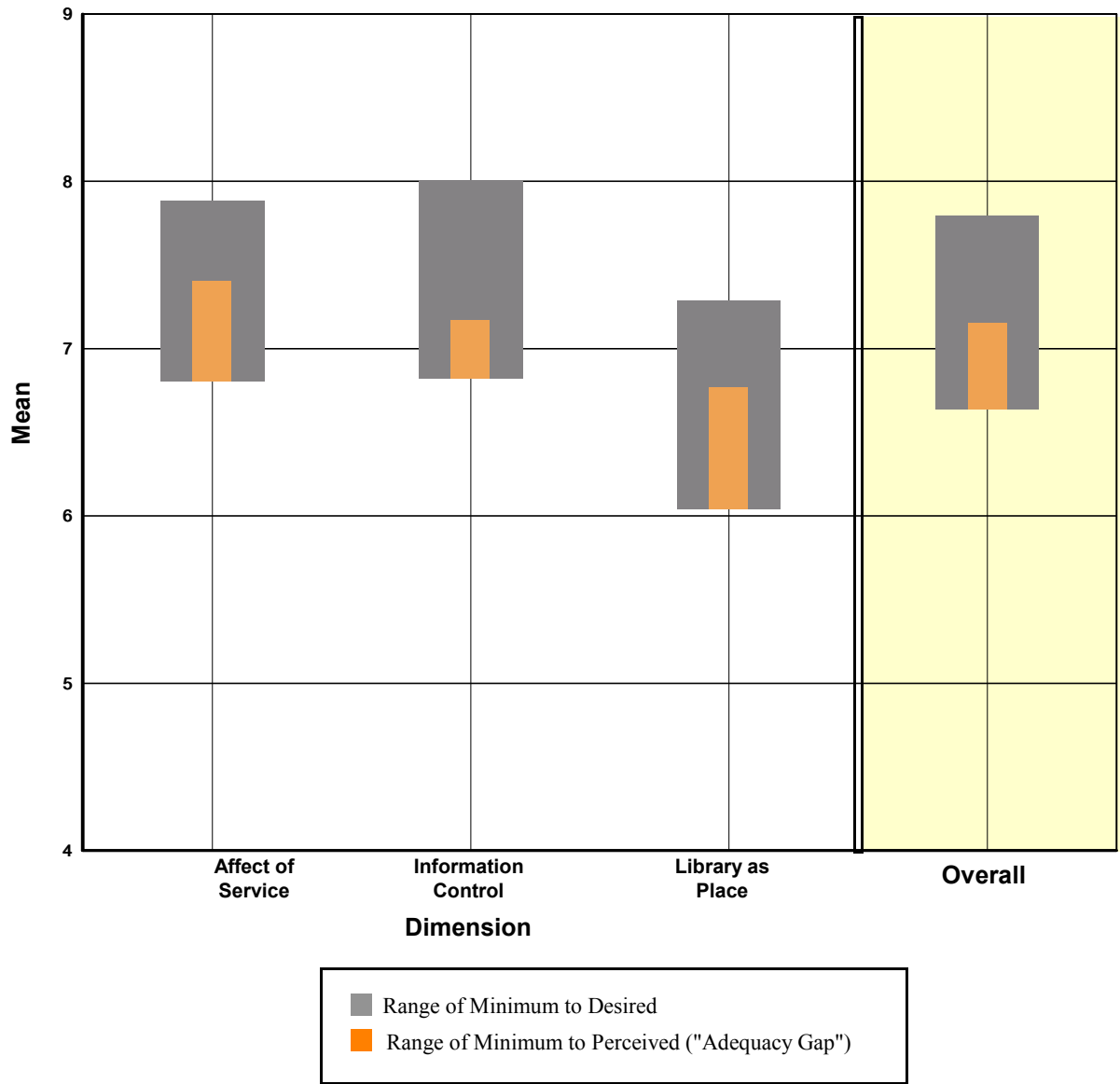
Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Staff

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	1.88	1.46	1.57	1.77	1.67	412
AS-2	Giving users individual attention	1.82	1.51	1.69	1.99	1.76	375
AS-3	Employees who are consistently courteous	1.69	1.31	1.42	1.83	1.55	408
AS-4	Readiness to respond to users' questions	1.57	1.22	1.44	1.68	1.55	398
AS-5	Employees who have the knowledge to answer user questions	1.52	1.16	1.36	1.52	1.43	395
AS-6	Employees who deal with users in a caring fashion	1.70	1.29	1.40	1.69	1.50	884
AS-7	Employees who understand the needs of their users	1.67	1.24	1.34	1.63	1.39	399
AS-8	Willingness to help users	1.66	1.24	1.44	1.69	1.50	394
AS-9	Dependability in handling users' service problems	1.79	1.16	1.32	1.72	1.37	355
<b>Information Control</b>							
IC-1	Making electronic resources accessible from my home or office	1.69	1.30	1.58	1.81	1.57	408
IC-2	A library Web site enabling me to locate information on my own	1.52	1.10	1.58	1.82	1.67	457
IC-3	The printed library materials I need for my work	1.76	1.49	1.54	1.82	1.69	366
IC-4	The electronic information resources I need	1.69	1.30	1.43	1.89	1.67	874
IC-5	Modern equipment that lets me easily access needed information	1.52	1.11	1.28	1.61	1.43	404
IC-6	Easy-to-use access tools that allow me to find things on my own	1.58	1.06	1.45	1.86	1.64	428
IC-7	Making information easily accessible for independent use	1.48	1.18	1.38	1.63	1.49	444
IC-8	Print and/or electronic journal collections I require for my work	1.64	1.34	1.37	1.77	1.60	384
<b>Library as Place</b>							
LP-1	Library space that inspires study and learning	1.95	1.82	1.68	2.11	2.20	752
LP-2	Quiet space for individual activities	1.97	1.72	1.67	2.00	1.95	352
LP-3	A comfortable and inviting location	1.82	1.43	1.50	1.92	1.76	392
LP-4	A getaway for study, learning, or research	1.90	1.58	1.55	2.03	1.96	352
LP-5	Community space for group learning and group study	2.26	2.23	1.52	2.22	2.31	282
<b>Overall:</b>		1.34	0.97	1.07	1.32	1.16	919

Language: English (American), French (Canada)  
Institution Type: College or University  
Consortium: ARL  
User Group: Staff

### 8.3 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.



Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Staff

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

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	6.81	7.88	7.40	0.60	-0.48	910
Information Control	6.82	8.01	7.17	0.35	-0.84	917
Library as Place	6.04	7.29	6.77	0.73	-0.51	821
<b>Overall</b>	6.64	7.80	7.15	0.51	-0.64	919

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.

Dimension	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service	1.53	1.12	1.24	1.47	1.26	910
Information Control	1.37	1.00	1.19	1.50	1.32	917
Library as Place	1.82	1.63	1.42	1.81	1.83	821
<b>Overall</b>	1.34	0.97	1.07	1.32	1.16	919

## 8.4 Local Question Summary for Staff

This table shows mean scores of each of the local questions added by the individual library or consortium, 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.

Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Availability of online help when using my library's electronic resources	6.84	7.74	7.52	0.68	-0.22	50
Ease of use of electronic resources	8.13	8.75	8.00	-0.13	-0.75	8
Providing help when and where I need it	7.36	8.82	8.36	1.00	-0.45	11
Teaching me how to access, evaluate, and use information	6.30	7.60	6.78	0.48	-0.81	193
The right mix of electronic content	8.00	9.00	8.00	0.00	-1.00	2
Online course support (readings, links, references)	6.58	7.83	6.92	0.33	-0.92	12
Collections of online full-text articles sufficient to meet my needs	8.00	9.00	7.00	-1.00	-2.00	1
Electronic resources matching my information needs	7.10	8.14	7.33	0.24	-0.81	21
Access to rare and historical materials	5.62	6.61	6.63	1.01	0.02	89
Contribution to the intellectual atmosphere of the campus	7.00	8.00	9.00	2.00	1.00	1
Ready access to computers / Internet / software	6.08	7.58	6.92	0.83	-0.67	12
Library staff teaching me how to find information	5.91	7.64	6.45	0.55	-1.18	11
Library keeping me informed about all of its services	5.65	7.19	6.78	1.13	-0.41	54
The multimedia (CD / DVD / video / audio) collections I need	5.20	7.20	6.40	1.20	-0.80	5
Access to photocopying and printing facilities	5.96	7.18	6.47	0.51	-0.71	45
Helpfulness in dealing with users' IT problems	6.69	7.64	7.50	0.81	-0.14	42
Availability of subject specialist assistance	4.33	6.33	6.83	2.50	0.50	6
Library staff teaching me how to effectively use the electronically available databases, journals, and books	6.67	7.83	7.42	0.75	-0.42	12
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	6.50	7.25	6.50	0.00	-0.75	4
A library environment that is hospitable and conducive to finding and using information	6.84	7.92	7.44	0.60	-0.48	25
Making me aware of library resources and services	6.12	7.50	6.69	0.56	-0.81	131
Teaching me how to locate, evaluate, and use information	6.16	7.00	6.32	0.16	-0.68	19
Convenient service hours	6.00	6.00	7.00	1.00	1.00	1

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Staff

Ability to navigate library Web pages easily	7.08	8.26	6.79	-0.29	-1.47	270
A secure and safe place	7.32	8.18	7.45	0.13	-0.73	148
Enabling me to find information myself 24 hours a day	7.21	8.39	7.36	0.14	-1.04	28
Facilitating self-directed research	7.00	9.00	6.00	-1.00	-3.00	1
Full-text delivered electronically to individual users	6.44	7.51	7.04	0.60	-0.47	45
Librarians providing assistance that addresses only the user's immediate information needs, and not providing general instruction on using libraries	6.40	7.60	6.80	0.40	-0.80	10
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	6.20	7.47	7.33	1.13	-0.13	15
Providing direction to self-navigate the library	7.50	8.00	9.00	1.50	1.00	2
Providing search tools that permit me to work autonomously	7.00	9.00	7.00	0.00	-2.00	1
Space for group / individual study and research needs	6.60	6.20	7.00	0.40	0.80	5
Space that facilitates quiet study	6.67	7.28	6.89	0.22	-0.39	18
Timely document delivery / interlibrary loan	6.57	7.57	6.86	0.29	-0.71	7
Adequate hours of service	6.78	7.84	7.49	0.71	-0.34	97
Timely delivery of the articles and documents that I need	7.29	7.79	7.64	0.36	-0.14	14
The library provides access to archival materials (documents, manuscripts, and photographs)	6.00	7.25	7.25	1.25	0.00	8
Ease and timeliness in getting materials from other libraries	6.71	7.88	7.30	0.59	-0.58	203
Helpful online guides and tutorials	5.50	6.43	5.93	0.43	-0.50	14
An online catalog that is user-friendly for finding materials	6.94	7.78	7.33	0.39	-0.44	18
Availability of assistance to improve my research skills	7.20	7.60	7.40	0.20	-0.20	5

This table displays the standard deviations of each of the local questions added by the individual library or consortium, 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.

Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Availability of online help when using my library's electronic resources	1.56	1.27	1.50	1.65	1.37	50
Ease of use of electronic resources	1.25	0.46	1.20	0.83	0.89	8
Providing help when and where I need it	1.29	0.40	0.67	0.89	0.69	11
Teaching me how to access, evaluate, and use information	1.80	1.44	1.51	1.80	1.74	193
The right mix of electronic content	1.41	0.00	1.41	0.00	1.41	2
Online course support (readings, links, references)	1.62	1.40	1.51	1.72	1.93	12
Collections of online full-text articles sufficient to meet my needs						1
Electronic resources matching my information needs	1.18	1.06	1.39	1.67	1.69	21
Access to rare and historical materials	1.97	1.74	1.41	2.06	1.78	89
Contribution to the intellectual atmosphere of the campus						1
Ready access to computers / Internet / software	1.62	1.31	1.38	1.64	1.67	12
Library staff teaching me how to find information	2.02	1.43	2.02	1.21	2.04	11
Library keeping me informed about all of its services	2.22	2.00	1.89	2.32	2.03	54
The multimedia (CD / DVD / video / audio) collections I need	0.84	1.48	1.14	1.10	1.30	5
Access to photocopying and printing facilities	2.14	2.19	2.10	2.05	1.77	45
Helpfulness in dealing with users' IT problems	1.94	1.59	1.50	1.57	1.35	42
Availability of subject specialist assistance	1.75	1.51	1.72	2.88	2.43	6
Library staff teaching me how to effectively use the electronically available databases, journals, and books	2.15	0.94	1.44	2.22	1.56	12
Access to equipment that is not readily available in my department, e.g., scanners, CD burners, PDAs, syncing stations	1.29	1.50	1.29	1.83	2.22	4
A library environment that is hospitable and conducive to finding and using information	1.75	1.12	1.08	2.12	1.48	25
Making me aware of library resources and services	1.70	1.41	1.80	2.02	1.93	131
Teaching me how to locate, evaluate, and use information	2.50	2.38	1.92	2.87	2.29	19
Convenient service hours						1
Ability to navigate library Web pages easily	1.39	1.04	1.54	1.93	1.80	270
A secure and safe place	1.78	1.32	1.30	1.89	1.32	148
Enabling me to find information myself 24 hours a day	1.73	1.07	1.81	1.96	1.73	28
Facilitating self-directed research						1
Full-text delivered electronically to individual users	2.13	2.03	1.61	2.03	2.03	45

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Staff



Librarians providing assistance that addresses only the user's immediate information needs, and not providing general instruction on using libraries	1.78	1.51	1.62	1.58	1.69	10
Librarians providing help that both assists in finding the information needed now, and improves skills useful in future information searches	1.61	1.68	1.29	1.96	1.85	15
Providing direction to self-navigate the library	2.12	1.41	0.00	2.12	1.41	2
Providing search tools that permit me to work autonomously						1
Space for group / individual study and research needs	2.19	2.68	1.58	1.82	2.59	5
Space that facilitates quiet study	2.09	2.65	2.05	2.80	3.35	18
Timely document delivery / interlibrary loan	1.51	1.51	1.57	1.98	2.14	7
Adequate hours of service	1.79	1.44	1.56	1.38	1.09	97
Timely delivery of the articles and documents that I need	1.33	1.31	1.45	2.02	1.92	14
The library provides access to archival materials (documents, manuscripts, and photographs)	1.51	1.28	1.16	0.71	0.93	8
Ease and timeliness in getting materials from other libraries	1.57	1.11	1.45	1.76	1.56	203
Helpful online guides and tutorials	2.18	1.87	2.20	3.65	3.50	14
An online catalog that is user-friendly for finding materials	1.55	1.31	1.41	1.82	1.65	18
Availability of assistance to improve my research skills	0.45	0.89	0.55	0.84	0.45	5

## 8.5 General Satisfaction Questions Summary for Staff

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where  $n$  is the number of respondents for each 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.	7.54	1.36	605
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.26	1.41	570
How would you rate the overall quality of the service provided by the library?	7.39	1.24	918

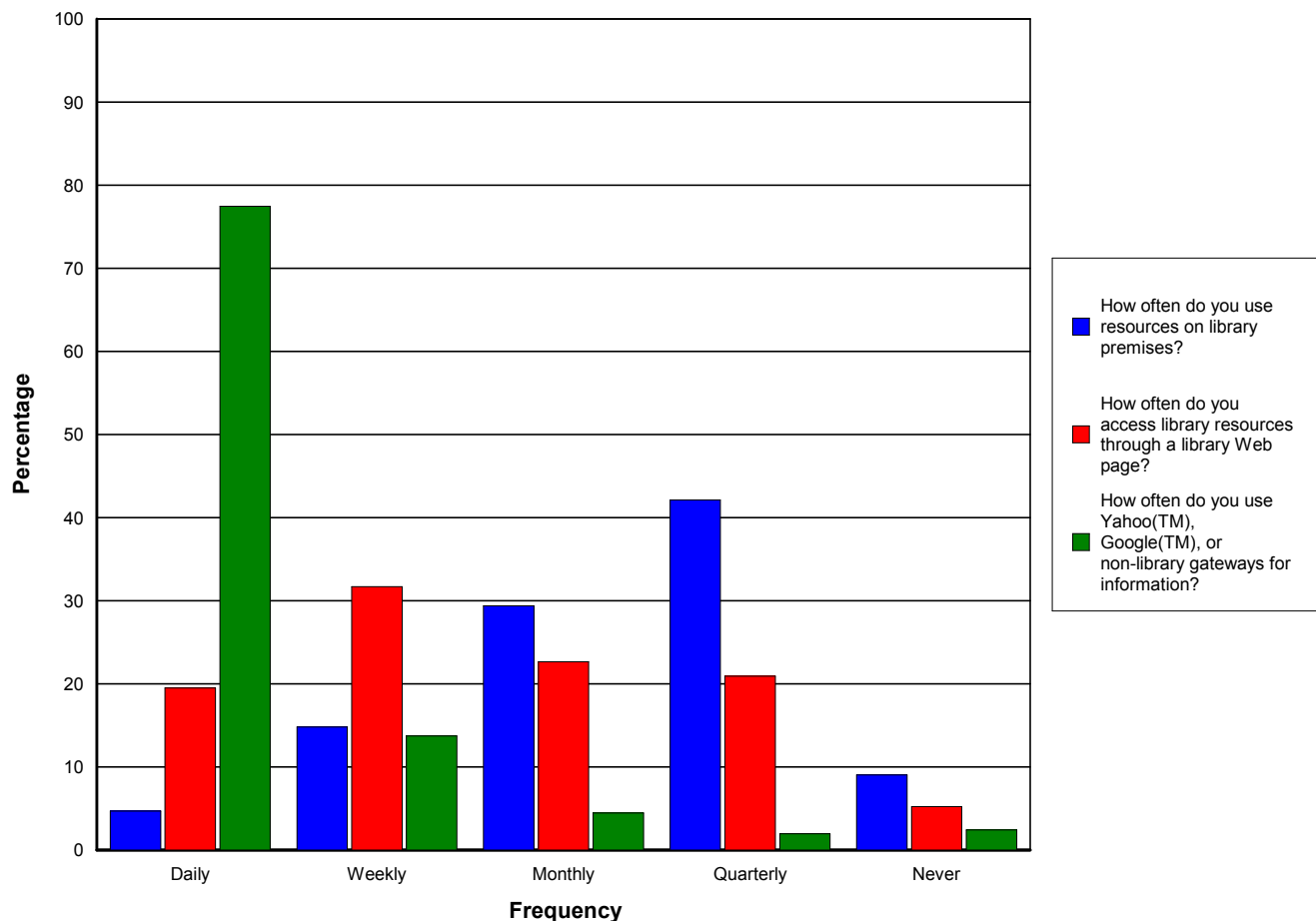
## 8.6 Information Literacy Outcomes Questions Summary for Staff

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

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	6.52	1.74	506
The library aids my advancement in my academic discipline or work.	7.07	1.58	534
The library enables me to be more efficient in my academic pursuits or work.	7.12	1.51	534
The library helps me distinguish between trustworthy and untrustworthy information.	6.24	1.85	517
The library provides me with the information skills I need in my work or study.	6.65	1.68	513

### 8.7 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 information gateways such as Yahoo™ and Google™. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the chart displays the number and percentage of respondents who selected each option.



	Daily	Weekly	Monthly	Quarterly	Never	Total
How often do you use resources on library premises?	43 4.68%	136 14.80%	270 29.38%	387 42.11%	83 9.03%	919 100.00%
How often do you access library resources through a library Web page?	179 19.50%	291 31.70%	208 22.66%	192 20.92%	48 5.23%	918 100.00%
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	711 77.45%	126 13.73%	41 4.47%	18 1.96%	22 2.40%	918 100.00%

Language: English (American), French (Canada)  
 Institution Type: College or University  
 Consortium: ARL  
 User Group: Staff

## 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/>). 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 - Present 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 2010 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







**Association of Research Libraries**

**21 Dupont Circle, Suite 800**

**Washington, DC 20036**

**Phone 202-296-2296**

**Fax 202-872-0884**

**<http://www.libqual.org>**

**Copyright © 2010 Association of Research Libraries**