



LibQUAL+[®]
2013 Survey

ARL

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LibQUAL⁺

2013 Survey

ARL

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1 Introduction

1.1 Acknowledgements

This notebook contains information from the 2013 administration of the LibQUAL+® protocol. The material on the following pages is drawn from the analysis of responses from the participating institutions collected in 2013.

The LibQUAL+® project requires the skills of a dedicated group. We would like to thank several alumni 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 contributions made by Consuella Askew, MaShana Davis, David Green, 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 that produced valuable insights on the evolution of our work. We would like to express our thanks for the financial support that has enabled the researchers engaged in this project to exceed all of our expectations in stated goals and objectives and deliver a remarkable assessment tool to the library community.

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1.2 LibQUAL+®: A Project from StatsQUAL®

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

LibQUAL+® was initiated in 2000 as an experimental project for benchmarking perceptions of library service quality across 13 ARL libraries under the leadership of Fred Heath and Colleen Cook, then both at Texas A&M University Libraries. It matured quickly into a standard assessment tool that has been applied at more than 1,000 libraries. Through 2012, we have had 2,418 institutional surveys implemented across 1,263 institutions in over 28 countries, 21 language translations, and over 1.7 million respondents. 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 2012, we added Korean, and in 2013 we are testing Arabic with the group of libraries in the Gulf Region.

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>.

In 2010, we introduced a participation fee that rewards systematic periodic participation in LibQUAL+® in a way that the implementation fee gets reduced when a library implements the protocol on an annual or biennial basis. In 2011, we introduced a Membership Subscription fee to support access to the data repository for those years that libraries do not implement a survey and for future enhancement of LibQUAL+® Analytics. In 2012, we introduced the customization feature for the Position/User group categories.

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+® 2012 Survey Highlights

<https://www.libqual.org/documents/LibQual/publications/2012_LibQUAL_Highlights.pdf>

LibQUAL+® 2011 Survey Highlights

<http://www.libqual.org/documents/LibQual/publications/LibQUALHighlights2011_Full.pdf>

<http://www.libqual.org/documents/LibQual/publications/LibQUALHighlights2011_Full_Supplement.pdf>

LibQUAL+® 2010 Survey Highlights

<http://www.libqual.org/documents/LibQual/publications/LibQUALHighlights2010_Full.pdf>

<http://www.libqual.org/documents/LibQual/publications/LibQUALHighlights2010_Full_Supplement.pdf>

LibQUAL+® 2009 Survey Highlights

<http://www.libqual.org/documents/admin/LibQUALHighlights2009_Full.pdf>

<http://www.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_Full_Supplement1.pdf>

LibQUAL+® 2007 Survey Highlights

<http://www.libqual.org/documents/admin/LibQUALHighlights2007_Full1.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>

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. Furthermore, our websites, access technologies and discovery tools are not quite maximizing the value libraries can deliver. There is a lot of room for improvement in this area!*

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, collaborative, complementary and cohesive environment that can bring forth scalable innovations and break new ground. Innovation, demonstrating value and marketing services effectively are key activities contributing to stronger libraries with better services and improved learning and research outcomes for our users.

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. Furthermore, we recognize that this tool is one of the strategic elements of the evolving assessment infrastructure libraries are building, as can be seen from the Library Assessment Conference gatherings.

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

With warm regards,

Martha Kyrillidou, PhD
Senior Director, ARL Statistics and Service Quality Programs
Association of Research Libraries

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 LibQUAL+® 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 2013 iteration of the LibQUAL+® survey will be available to project participants online in the Data Repository via the LibQUAL+® survey management site:

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

1.5 Explanation of Charts and Tables

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

http://www.libqual.org/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+® 2013

Libraries today confront escalating pressure to demonstrate value and 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. 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.’

2013 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 2013 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 LibQUAL+® Web site at::

http://www.libqual.org/resources/norms_tables

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?

Alpha University	
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%
Omega University	
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 tool that permits participants to dynamically create institution-specific tables and charts for different subgroups and across years. The current interface grants access to 2004-2013 statistical data and unifies the legacy Institution Explorer (a summary of all questions and dimension means for any combination of user groups and disciplines) and Longitudinal Analysis (allows participants to perform longitudinal comparisons of their data across survey years) modules to provide a one-stop dynamic shop to interactively analyze results and benchmark with other institutions.

Participants can refine the data by selecting specific years, user groups, and disciplines, view and save the selection in various tables and charts, and download their datasets for further manipulation in their preferred software. These current version of LibQUAL+® Analytics is 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.

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://www.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.

Library Assessment Conference

The growing community of practice related to library assessment is convening regularly in North America through the biennial Library Assessment Conference. Gatherings of this community took place in 2006, 2008, 2010 and 2012. The proceedings and recent information are available at

<<http://www.libraryassessment.org>>

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

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

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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)
English (American)	Count	10,930	26,433	37,363
	% of Protocol	99.92	70.87	77.45
	% of Language	29.25	70.75	100.00
	% of Total Cases	22.66	54.80	77.45
French (Canada)	Count	9	10,867	10,876
	% of Protocol	0.08	29.13	22.55
	% of Language	0.08	99.92	100.00
	% of Total Cases	0.02	22.53	22.55
Total (by Survey Protocol)	Count	10,939	37,300	48,239
	% of Protocol	100.00	100.00	100.00
	% of Language	22.68	77.32	100.00
	% of Total Cases	22.68	77.32	100.00

2 Respondents by Institution for ARL

Below is a listing of all the consortium institutions that participated in the 2013 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 %
College or University		
1) Brigham Young University	2,244	4.65%
2) CALIFORNIA, SANTA BARBARA : University of California, Santa Barbara, Libraries	605	1.25%
3) Columbia University in the City of New York	3,793	7.86%
4) DELAWARE	2,526	5.24%
5) GEORGIA TECH	704	1.46%
6) McGill University Library	1,186	2.46%
7) McMaster University Libraries	620	1.29%
8) Ohio State University Libraries	1,837	3.81%
9) OTTAWA	789	1.64%
10) PENNSYLVANIA STATE	3,600	7.46%
11) Queen's University	614	1.27%
12) Rice University	1,972	4.09%
13) Texas A&M University, College Station	3,301	6.84%
14) Université de Montréal	6,459	13.39%
15) Université Laval	4,082	8.46%
16) University of Arizona Library	305	0.63%
17) University of British Columbia Library	918	1.90%
18) University of Calgary Libraries and Cultural Resources	663	1.37%
19) University of California, Los Angeles	253	0.52%
20) University of Colorado at Boulder Libraries	731	1.52%
21) University of Georgia Libraries	724	1.50%
22) University of Guelph	2,490	5.16%
23) University of Houston Libraries	632	1.31%
24) University of Manitoba Libraries	1,474	3.06%
25) University of Saskatchewan Library	1,954	4.05%
26) University of Tennessee Libraries	992	2.06%
27) University of Toronto Libraries	587	1.22%
28) Western University	1,404	2.91%
29) York University Libraries	780	1.62%
Sub Total	48,239	100.00%
Grand Total:	48,239	100.00%

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

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 %
Undergraduate		
First year	5,564	11.53%
Second year	5,040	10.45%
Third year	7,746	16.06%
Fourth year	4,519	9.37%
Fifth year and above	1,119	2.32%
Non-degree	472	0.98%
Sub Total:	24,460	50.71%
Graduate		
Masters	8,143	16.88%
Doctoral	5,870	12.17%
Non-degree or Undecided	729	1.51%
Sub Total:	14,742	30.56%
Faculty		
Professor	1,791	3.71%
Associate Professor	1,451	3.01%
Assistant Professor	1,042	2.16%
Lecturer	717	1.49%
Adjunct Faculty	317	0.66%
Other Academic Status	1,026	2.13%
Sub Total:	6,344	13.15%
Library Staff		
Administrator	76	0.16%
Manager, Head of Unit	25	0.05%
Public Services	124	0.26%
Systems	5	0.01%
Technical Services	63	0.13%
Other	220	0.46%
Sub Total:	513	1.06%
Staff		
Research Staff	494	1.02%
Other Staff Positions	1,686	3.50%
Sub Total:	2,180	4.52%
Total:	48,239	100.00%

Language: English (American), French (Canada)

Institution Type: College or University

Consortium: ARL

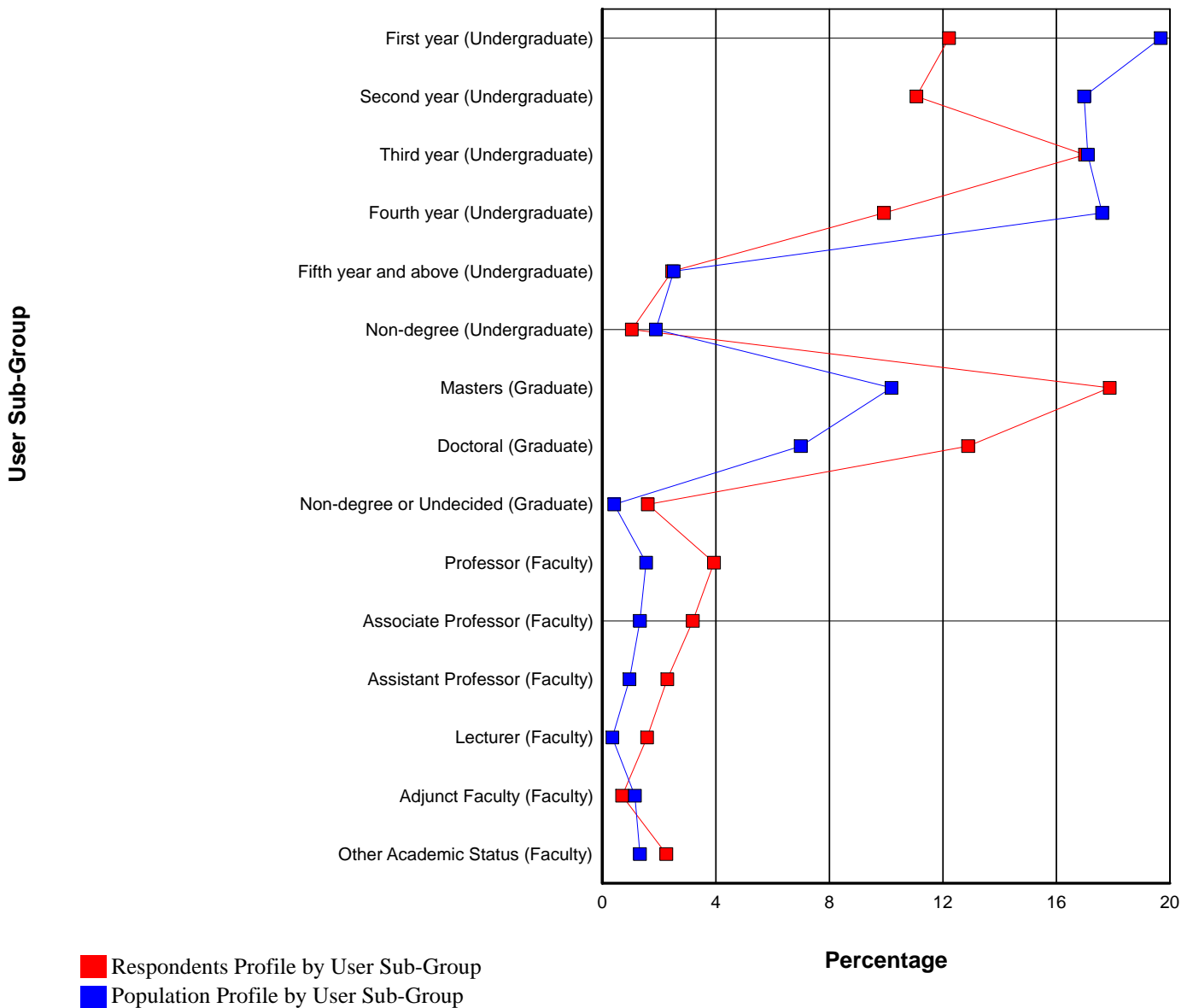
User Group: All

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)

User Sub-Group	Population N	Population %	Respondents n	Respondents %	%N - %n
First year (Undergraduate)	142,548	19.67	5,564	12.22	7.46
Second year (Undergraduate)	123,003	16.98	5,040	11.07	5.91
Third year (Undergraduate)	123,941	17.11	7,746	17.01	0.10
Fourth year (Undergraduate)	127,612	17.61	4,519	9.92	7.69
Fifth year and above (Undergraduate)	18,215	2.51	1,119	2.46	0.06
Non-degree (Undergraduate)	13,644	1.88	472	1.04	0.85
Masters (Graduate)	73,828	10.19	8,143	17.88	-7.69
Doctoral (Graduate)	50,640	6.99	5,870	12.89	-5.90
Non-degree or Undecided (Graduate)	3,001	0.41	729	1.60	-1.19
Professor (Faculty)	11,160	1.54	1,791	3.93	-2.39
Associate Professor (Faculty)	9,585	1.32	1,451	3.19	-1.86
Assistant Professor (Faculty)	6,923	0.96	1,042	2.29	-1.33
Lecturer (Faculty)	2,548	0.35	717	1.57	-1.22
Adjunct Faculty (Faculty)	8,307	1.15	317	0.70	0.45
Other Academic Status (Faculty)	9,586	1.32	1,026	2.25	-0.93
Total:	724,541	100.00	45,546	100.00	0.00

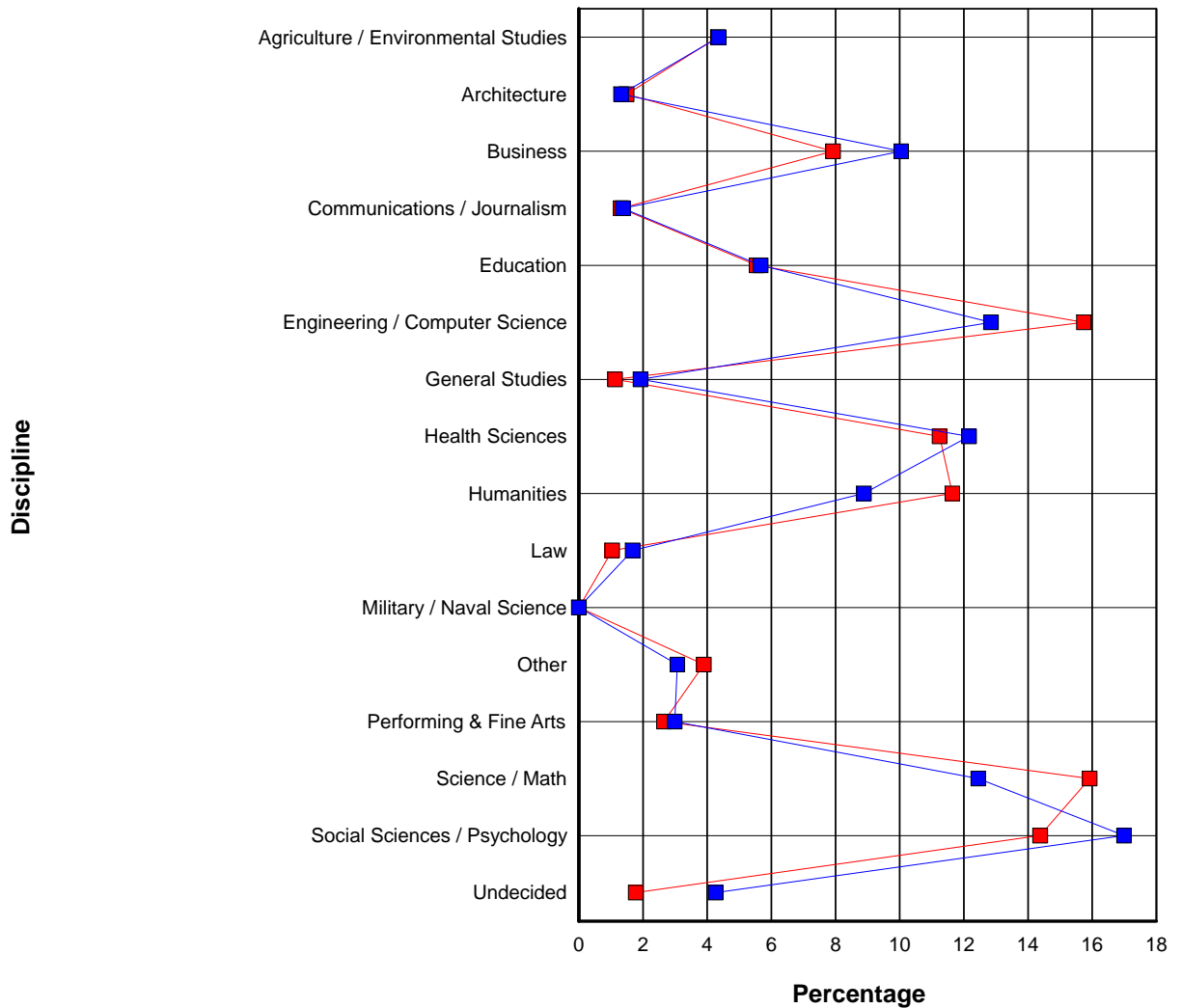
Language: English (American), French (Canada)
Institution Type: College or University
Consortium: ARL
User Group: All (Excluding Library Staff, Staff)

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)

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture / Environmental Studies	40,491	4.36	1,544	4.33	0.03
Architecture	12,182	1.31	531	1.49	-0.18
Business	93,272	10.05	2,824	7.92	2.13
Communications / Journalism	12,724	1.37	465	1.30	0.07
Education	52,597	5.67	1,975	5.54	0.13
Engineering / Computer Science	119,244	12.84	5,611	15.74	-2.90
General Studies	17,823	1.92	402	1.13	0.79
Health Sciences	112,894	12.16	4,008	11.24	0.92
Humanities	82,484	8.88	4,149	11.64	-2.75
Law	15,545	1.67	371	1.04	0.63
Military / Naval Science	0	0.00	1	0.00	0.00
Other	28,492	3.07	1,389	3.90	-0.83
Performing & Fine Arts	27,727	2.99	945	2.65	0.34
Science / Math	115,566	12.45	5,676	15.92	-3.47
Social Sciences / Psychology	157,750	16.99	5,126	14.38	2.61
Undecided	39,577	4.26	632	1.77	2.49
Total:	928,368	100.00	35,649	100.00	0.00

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	146	0.31
18 - 22	19,385	40.63
23 - 30	14,522	30.44
31 - 45	7,754	16.25
46 - 65	5,150	10.79
Over 65	751	1.57
Total:	47,708	100.00

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.

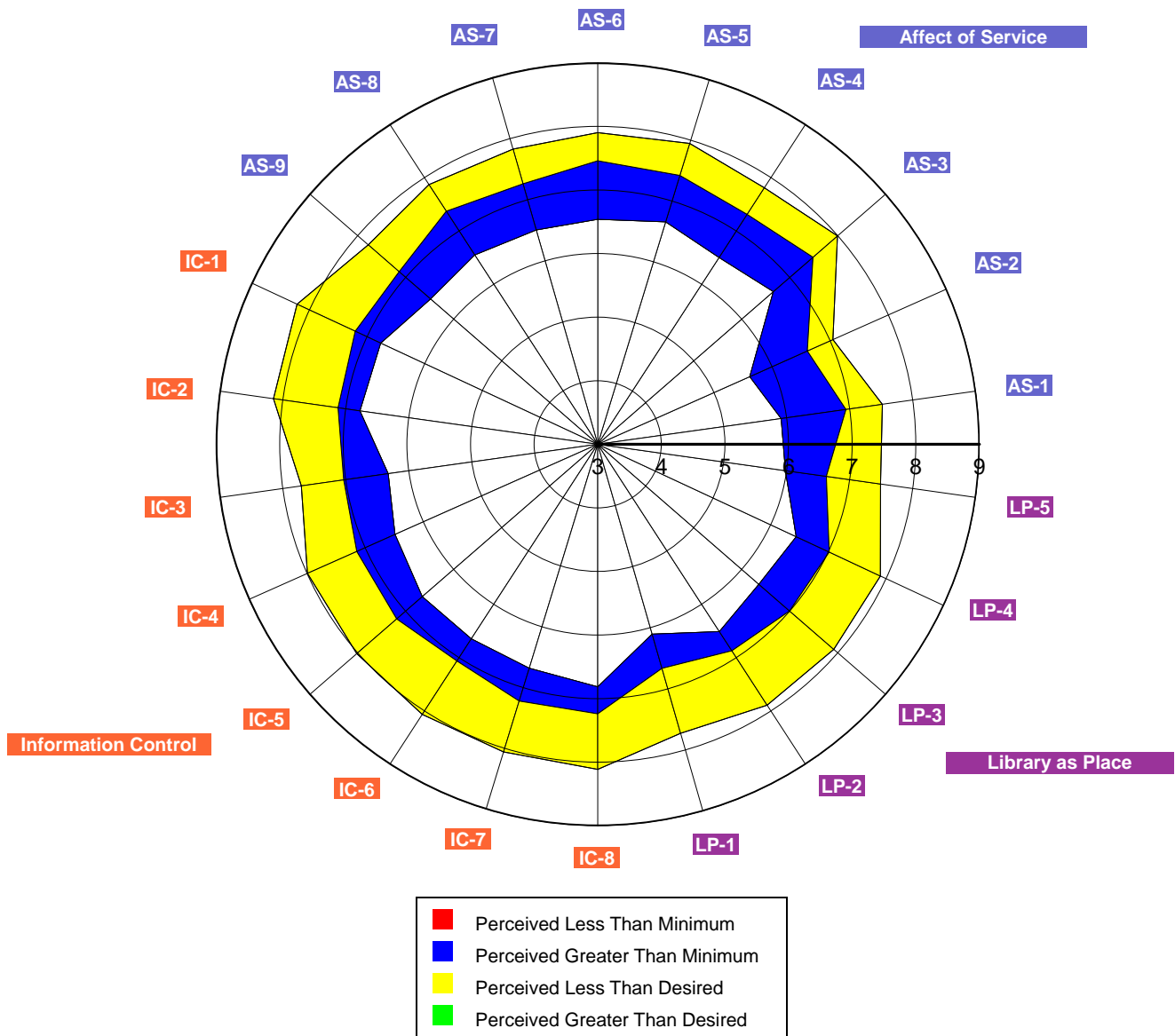
Sex:	Population N	Population %	Respondents n	Respondents %
Female	510,322	51.66	28,014	58.74
Male	477,606	48.34	19,676	41.26
Total:	987,928	100.00	47,690	100.00

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
Affect of Service							
AS-1	Employees who instill confidence in users	5.91	7.52	6.94	1.03	-0.58	18,652
AS-2	Giving users individual attention	5.62	7.05	6.61	0.99	-0.44	17,692
AS-3	Employees who are consistently courteous	6.66	8.00	7.49	0.82	-0.51	18,807
AS-4	Readiness to respond to users' questions	6.50	7.81	7.31	0.81	-0.50	18,308
AS-5	Employees who have the knowledge to answer user questions	6.66	7.95	7.42	0.76	-0.53	18,980
AS-6	Employees who deal with users in a caring fashion	6.54	7.90	7.46	0.92	-0.44	45,251
AS-7	Employees who understand the needs of their users	6.51	7.83	7.26	0.76	-0.57	18,005
AS-8	Willingness to help users	6.55	7.87	7.37	0.82	-0.50	18,576
AS-9	Dependability in handling users' service problems	6.48	7.78	7.14	0.65	-0.64	16,608
Information Control							
IC-1	Making electronic resources accessible from my home or office	6.77	8.21	7.21	0.44	-1.01	21,308
IC-2	A library Web site enabling me to locate information on my own	6.78	8.15	7.12	0.35	-1.03	21,032
IC-3	The printed library materials I need for my work	6.33	7.71	7.03	0.71	-0.67	17,685
IC-4	The electronic information resources I need	6.49	7.99	7.15	0.66	-0.85	46,445
IC-5	Modern equipment that lets me easily access needed information	6.65	8.02	7.19	0.53	-0.83	20,650
IC-6	Easy-to-use access tools that allow me to find things on my own	6.65	8.07	7.07	0.42	-1.00	20,874
IC-7	Making information easily accessible for independent use	6.68	8.06	7.22	0.54	-0.84	19,730
IC-8	Print and/or electronic journal collections I require for my work	6.82	8.11	7.24	0.43	-0.87	20,349
Library as Place							
LP-1	Library space that inspires study and learning	6.11	7.73	6.67	0.56	-1.06	44,914
LP-2	Quiet space for individual activities	6.51	7.89	6.87	0.36	-1.02	18,863
LP-3	A comfortable and inviting location	6.36	7.92	7.00	0.64	-0.92	19,444
LP-4	A getaway for study, learning, or research	6.44	7.91	7.02	0.57	-0.89	18,785
LP-5	Community space for group learning and group study	5.98	7.49	6.63	0.65	-0.86	17,453
Overall:		6.47	7.87	7.14	0.68	-0.73	47,726

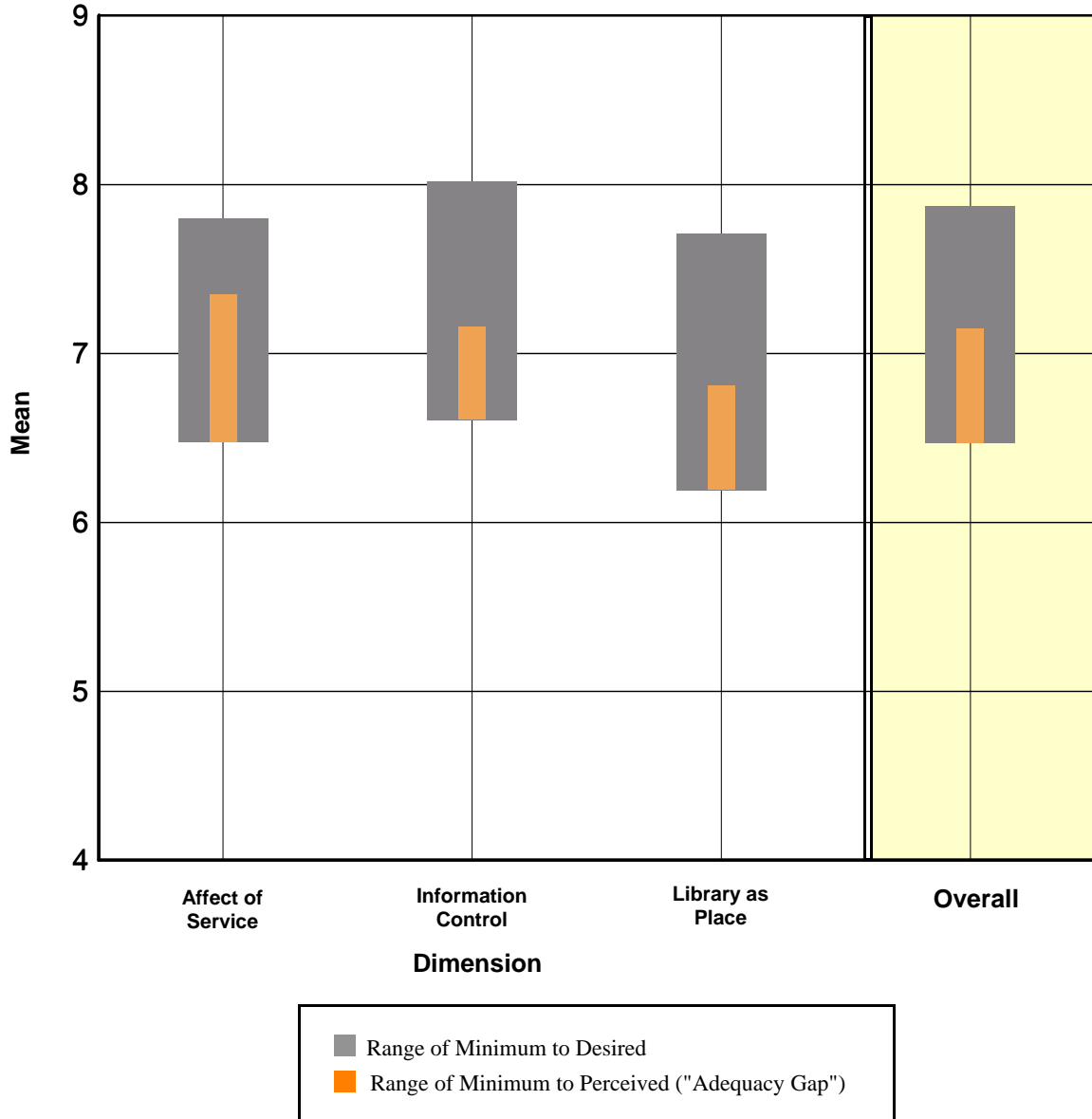
Language: English (American), French (Canada)
Institution Type: College or University
Consortium: ARL
User Group: All (Excluding Library Staff)

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service							
AS-1	Employees who instill confidence in users	1.93	1.58	1.65	1.81	1.66	18,652
AS-2	Giving users individual attention	2.02	1.78	1.75	1.85	1.73	17,692
AS-3	Employees who are consistently courteous	1.80	1.31	1.53	1.88	1.59	18,807
AS-4	Readiness to respond to users' questions	1.73	1.37	1.47	1.75	1.49	18,308
AS-5	Employees who have the knowledge to answer user questions	1.72	1.32	1.44	1.72	1.48	18,980
AS-6	Employees who deal with users in a caring fashion	1.78	1.35	1.48	1.81	1.54	45,251
AS-7	Employees who understand the needs of their users	1.73	1.35	1.46	1.73	1.51	18,005
AS-8	Willingness to help users	1.75	1.35	1.48	1.76	1.50	18,576
AS-9	Dependability in handling users' service problems	1.75	1.41	1.51	1.79	1.59	16,608
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.79	1.25	1.62	1.94	1.70	21,308
IC-2	A library Web site enabling me to locate information on my own	1.67	1.24	1.57	1.89	1.67	21,032
IC-3	The printed library materials I need for my work	1.89	1.60	1.57	1.96	1.79	17,685
IC-4	The electronic information resources I need	1.73	1.36	1.46	1.83	1.62	46,445
IC-5	Modern equipment that lets me easily access needed information	1.67	1.26	1.49	1.83	1.63	20,650
IC-6	Easy-to-use access tools that allow me to find things on my own	1.65	1.21	1.49	1.85	1.62	20,874
IC-7	Making information easily accessible for independent use	1.64	1.20	1.43	1.77	1.53	19,730
IC-8	Print and/or electronic journal collections I require for my work	1.77	1.35	1.48	1.95	1.67	20,349
Library as Place							
LP-1	Library space that inspires study and learning	1.91	1.68	1.81	2.29	2.22	44,914
LP-2	Quiet space for individual activities	1.91	1.57	1.79	2.31	2.15	18,863
LP-3	A comfortable and inviting location	1.79	1.39	1.66	2.09	1.89	19,444
LP-4	A getaway for study, learning, or research	1.84	1.50	1.64	2.03	1.87	18,785
LP-5	Community space for group learning and group study	2.00	1.78	1.79	2.36	2.28	17,453
Overall:		1.35	0.98	1.12	1.38	1.16	47,726

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	6.47	7.80	7.35	0.87	-0.45	46,973
Information Control	6.61	8.02	7.15	0.55	-0.86	47,627
Library as Place	6.19	7.71	6.80	0.61	-0.90	46,028
Overall	6.47	7.87	7.14	0.68	-0.73	47,726

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	1.19	1.30	1.52	1.28	46,973
Information Control	1.44	1.06	1.23	1.52	1.30	47,627
Library as Place	1.72	1.48	1.56	1.97	1.88	46,028
Overall	1.35	0.98	1.12	1.38	1.16	47,726

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	6.34	7.45	6.77	0.43	-0.68	308
Informing me of useful library services	5.71	7.12	6.48	0.76	-0.64	347
An environment that facilitates group study and problem solving	5.59	7.30	6.60	1.01	-0.71	82
Having comprehensive electronic resources	6.76	8.12	7.07	0.31	-1.05	120
Providing help when and where I need it	6.28	7.82	7.05	0.76	-0.78	5,081
Teaching me how to access, evaluate, and use information	5.95	7.36	6.92	0.98	-0.44	4,911
Making me aware of library services	5.68	7.32	6.45	0.77	-0.87	4,756
The right mix of electronic content	6.69	7.79	6.83	0.14	-0.96	111
Library orientations / instruction sessions	5.51	6.65	6.92	1.41	0.26	1,098
Online course support (readings, links, references)	6.08	7.51	6.98	0.90	-0.53	294
Access to rare and historical materials	5.02	6.53	6.45	1.43	-0.08	3,266
Contribution to the intellectual atmosphere of the campus	6.54	7.71	7.16	0.62	-0.55	518
Ready access to computers / Internet / software	6.52	7.87	6.93	0.41	-0.94	799
Library keeping me informed about all of its services	5.58	7.08	6.49	0.90	-0.59	239
The multimedia (CD / DVD / video / audio) collections I need	5.72	7.09	7.00	1.28	-0.09	1,888
An environment conducive to learning through classes, programs, activities, and meetings	5.77	7.32	6.88	1.12	-0.44	77
Helpfulness in dealing with users' IT problems	6.66	7.99	7.38	0.72	-0.61	196
Availability of subject specialist assistance	5.78	7.40	6.69	0.91	-0.71	3,610
Library staff teaching me how to effectively use the electronically available databases, journals, and books	5.22	6.60	6.66	1.44	0.05	129
A library environment that is hospitable and conducive to finding and using information	6.78	8.04	7.21	0.43	-0.83	220
Making me aware of library resources and services	5.99	7.42	6.77	0.78	-0.65	8,642
Teaching me how to locate, evaluate, and use information	6.06	7.43	6.96	0.90	-0.47	49
Convenient service hours	6.65	7.96	7.41	0.76	-0.54	636
Ability to navigate library Web pages easily	6.74	8.17	6.97	0.23	-1.20	11,640
A secure and safe place	7.24	8.26	7.51	0.26	-0.76	3,044
Access to archives, special collections	5.76	7.41	6.96	1.20	-0.45	3,409

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	6.87	8.15	7.24	0.37	-0.91	184
Facilitating self-directed research	6.24	7.71	7.19	0.95	-0.52	582
Full-text delivered electronically to individual users	6.42	7.96	6.68	0.26	-1.28	441
Interdisciplinary library needs being addressed	6.20	7.25	6.58	0.38	-0.66	110
Providing direction to self-navigate the library	6.20	7.77	6.88	0.69	-0.88	772
Providing search tools that permit me to work autonomously	6.75	7.94	7.22	0.48	-0.72	189
Space for group / individual study and research needs	6.42	7.65	6.68	0.26	-0.97	300
Space that facilitates quiet study	6.51	7.81	6.79	0.28	-1.02	410
Visually appealing facilities	5.57	7.35	6.49	0.93	-0.86	297
Personalization features in the electronic library	5.97	7.21	5.97	0.00	-1.24	29
Space for students to study and work in groups	5.95	7.20	6.42	0.48	-0.77	521
Adequate hours of service	6.84	8.08	7.48	0.63	-0.60	3,247
Library staff providing help that assists in finding information needed now while improving my research skills	6.63	7.74	7.22	0.60	-0.52	312
The library provides access to archival materials (documents, manuscripts, and photographs)	5.21	6.91	6.81	1.60	-0.10	284
Ease and timeliness in getting materials from other libraries	6.68	7.94	7.25	0.57	-0.69	2,133
Helpful online guides and tutorials	5.83	7.30	6.70	0.87	-0.60	2,372
An online catalog that is user-friendly for finding materials	6.98	8.32	6.87	-0.11	-1.45	420
Availability of assistance to improve my research skills	5.96	7.53	6.99	1.03	-0.54	2,310
Availability of assistance in addressing issues of copyright and plagiarism	5.74	6.85	6.64	0.90	-0.21	128
Reliable mix of technology to help me complete my work	6.71	7.84	7.00	0.29	-0.84	573
The value of the library's resources and services to me for my academic success	7.08	8.09	7.63	0.55	-0.46	1,013

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	2.07	1.82	1.83	2.18	2.08	308
Informing me of useful library services	2.05	1.72	1.82	2.11	1.93	347
An environment that facilitates group study and problem solving	2.25	2.05	1.72	2.08	1.97	82
Having comprehensive electronic resources	1.68	1.24	1.59	1.89	1.62	120
Providing help when and where I need it	1.76	1.39	1.53	1.77	1.59	5,081
Teaching me how to access, evaluate, and use information	1.90	1.63	1.65	1.90	1.74	4,911
Making me aware of library services	2.00	1.71	1.80	2.17	2.09	4,756
The right mix of electronic content	1.77	1.44	1.58	2.06	1.85	111
Library orientations / instruction sessions	2.30	2.23	1.70	2.15	2.15	1,098
Online course support (readings, links, references)	2.03	1.79	1.63	2.02	1.92	294
Access to rare and historical materials	2.22	2.18	1.73	2.15	2.11	3,266
Contribution to the intellectual atmosphere of the campus	1.80	1.59	1.45	1.76	1.55	518
Ready access to computers / Internet / software	1.97	1.62	1.68	2.23	2.09	799
Library keeping me informed about all of its services	2.07	1.81	1.86	2.27	2.10	239
The multimedia (CD / DVD / video / audio) collections I need	2.15	1.96	1.67	2.18	1.99	1,888
An environment conducive to learning through classes, programs, activities, and meetings	2.12	1.70	1.80	2.08	1.63	77
Helpfulness in dealing with users' IT problems	1.78	1.25	1.52	1.71	1.47	196
Availability of subject specialist assistance	2.03	1.69	1.76	2.03	1.86	3,610
Library staff teaching me how to effectively use the electronically available databases, journals, and books	2.25	2.04	1.79	2.33	2.05	129
A library environment that is hospitable and conducive to finding and using information	1.62	1.21	1.47	1.81	1.65	220
Making me aware of library resources and services	1.88	1.54	1.67	2.01	1.84	8,642
Teaching me how to locate, evaluate, and use information	2.23	1.81	1.94	2.49	2.63	49
Convenient service hours	1.75	1.40	1.52	1.92	1.70	636
Ability to navigate library Web pages easily	1.64	1.17	1.60	2.01	1.76	11,640
A secure and safe place	1.80	1.33	1.55	1.97	1.65	3,044

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

Access to archives, special collections	2.13	1.76	1.60	2.13	1.87	3,409
Enabling me to find information myself 24 hours a day	1.60	1.13	1.42	1.73	1.57	184
Facilitating self-directed research	1.74	1.43	1.39	1.68	1.46	582
Full-text delivered electronically to individual users	1.93	1.56	1.75	2.12	2.04	441
Interdisciplinary library needs being addressed	1.94	1.91	1.70	2.04	1.91	110
Providing direction to self-navigate the library	1.77	1.49	1.62	1.98	1.79	772
Providing search tools that permit me to work autonomously	1.73	1.43	1.47	1.76	1.58	189
Space for group / individual study and research needs	1.96	1.80	1.77	2.28	2.33	300
Space that facilitates quiet study	2.00	1.69	1.78	2.34	2.16	410
Visually appealing facilities	1.86	1.66	1.65	2.15	2.11	297
Personalization features in the electronic library	2.10	2.16	1.84	1.83	2.06	29
Space for students to study and work in groups	2.07	2.00	1.77	2.25	2.27	521
Adequate hours of service	1.60	1.20	1.53	1.92	1.65	3,247
Library staff providing help that assists in finding information needed now while improving my research skills	1.74	1.49	1.59	1.71	1.54	312
The library provides access to archival materials (documents, manuscripts, and photographs)	2.31	2.11	1.74	2.21	2.14	284
Ease and timeliness in getting materials from other libraries	1.59	1.28	1.49	1.76	1.60	2,133
Helpful online guides and tutorials	1.90	1.63	1.59	1.91	1.75	2,372
An online catalog that is user-friendly for finding materials	1.60	1.05	1.61	2.08	1.86	420
Availability of assistance to improve my research skills	1.82	1.50	1.47	1.93	1.72	2,310
Availability of assistance in addressing issues of copyright and plagiarism	2.24	2.13	1.88	2.16	2.04	128
Reliable mix of technology to help me complete my work	1.62	1.39	1.46	1.77	1.58	573
The value of the library's resources and services to me for my academic success	1.72	1.32	1.38	1.72	1.41	1,013

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.	7.63	1.38	29,181
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.27	1.47	29,354
How would you rate the overall quality of the service provided by the library?	7.40	1.24	47,714

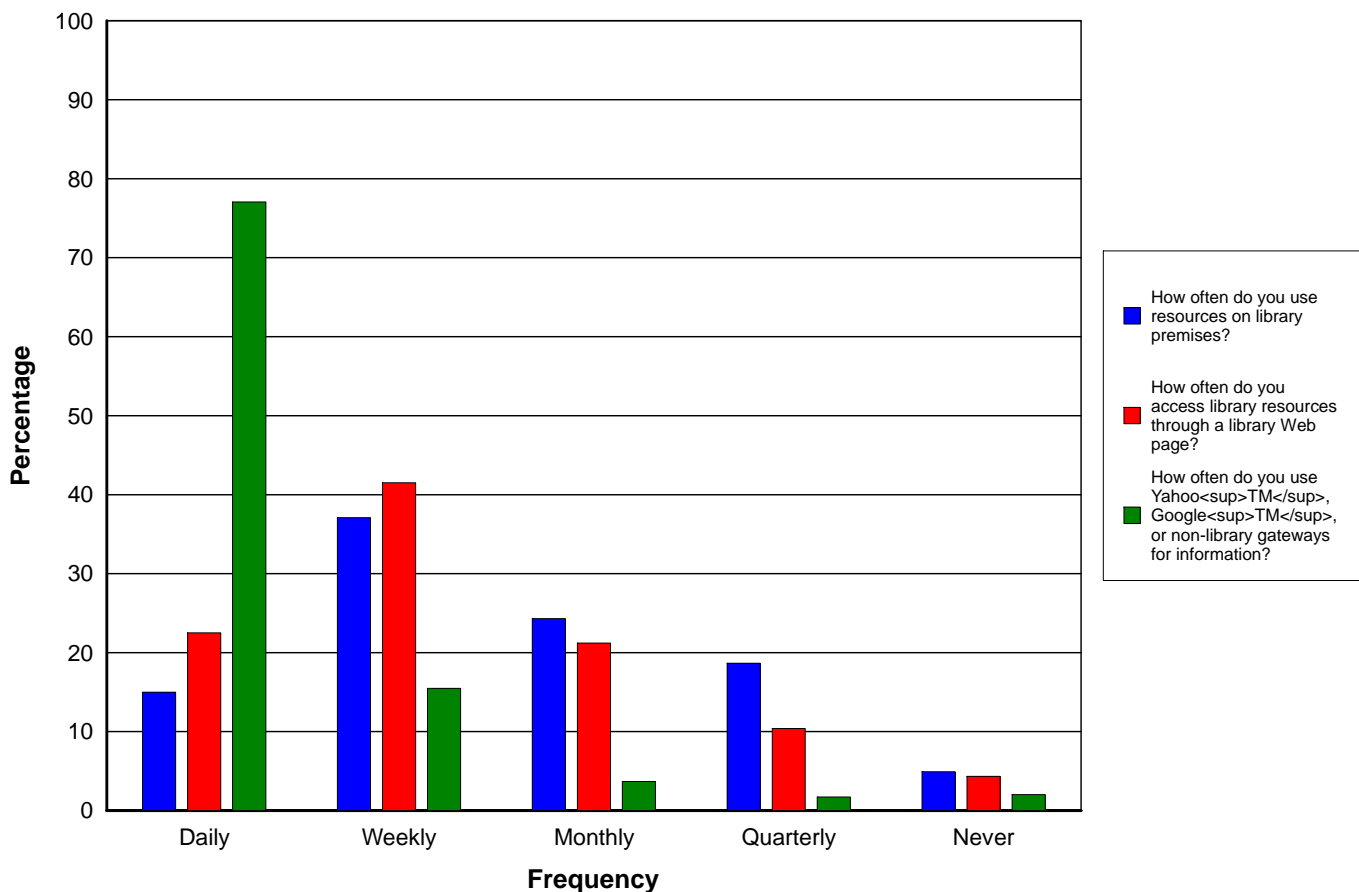
3.6 Information Literacy Outcomes Questions Summary for ARL

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.	6.33	1.85	23,717
The library aids my advancement in my academic discipline or work.	7.21	1.55	26,640
The library enables me to be more efficient in my academic pursuits or work.	7.25	1.56	27,192
The library helps me distinguish between trustworthy and untrustworthy information.	6.29	1.85	26,838
The library provides me with the information skills I need in my work or study.	6.79	1.65	23,483

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?	7,160 15.00%	17,705 37.10%	11,603 24.31%	8,902 18.65%	2,352 4.93%	47,722 100.00%
How often do you access library resources through a library Web page?	10,745 22.52%	19,811 41.52%	10,126 21.22%	4,965 10.40%	2,073 4.34%	47,720 100.00%
How often do you use Yahoo™, Google™, or non-library gateways for information?	36,774 77.07%	7,384 15.47%	1,761 3.69%	826 1.73%	973 2.04%	47,718 100.00%

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

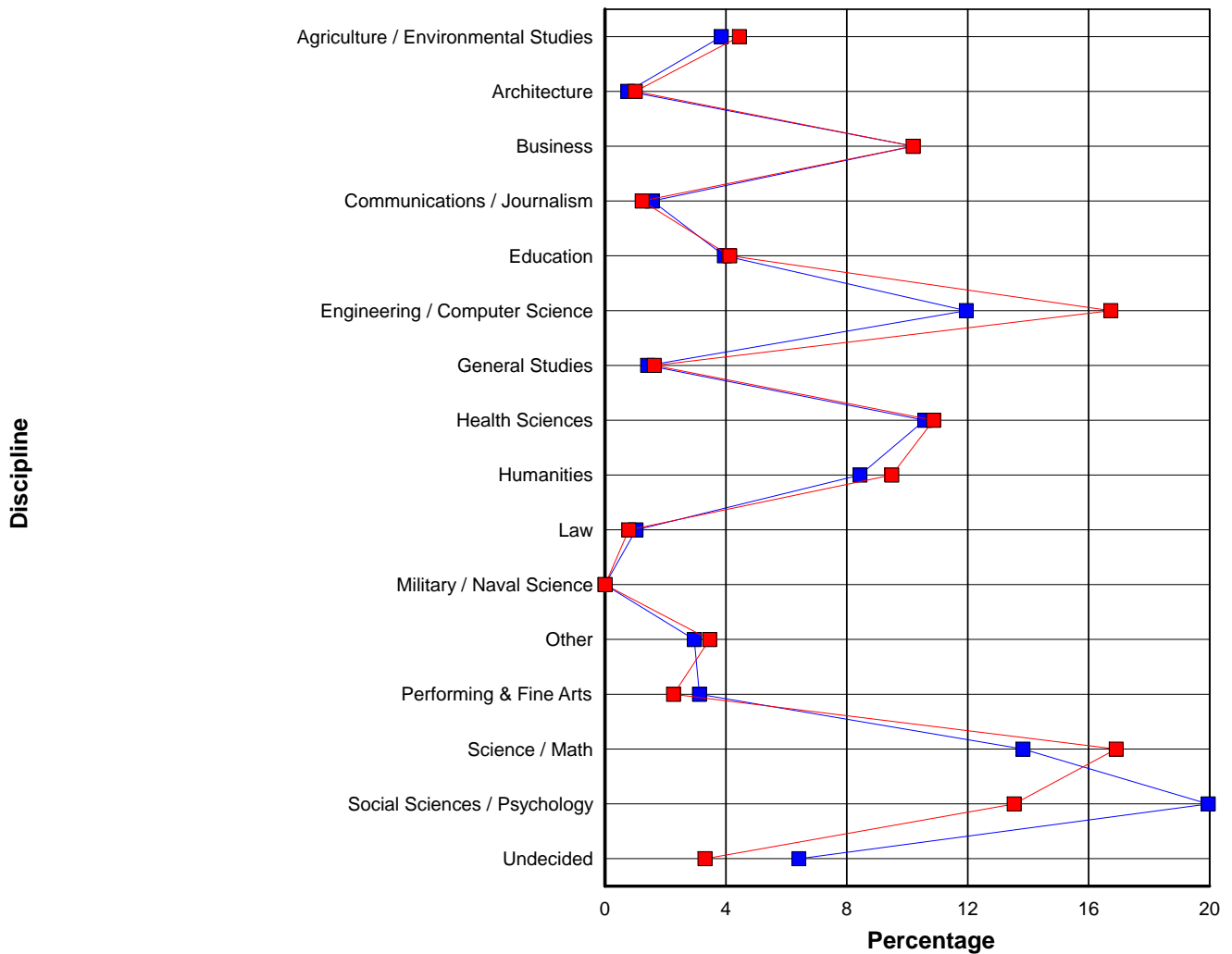
4 Summary for Undergraduate

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

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture / Environmental Studies	22,981	3.85	808	4.45	-0.60
Architecture	4,524	0.76	182	1.00	-0.24
Business	60,896	10.20	1,852	10.19	0.01
Communications / Journalism	9,306	1.56	223	1.23	0.33
Education	23,571	3.95	750	4.13	-0.18
Engineering / Computer Science	71,328	11.95	3,040	16.73	-4.78
General Studies	8,431	1.41	296	1.63	-0.22
Health Sciences	63,130	10.58	1,975	10.87	-0.29
Humanities	50,347	8.44	1,724	9.49	-1.05
Law	6,122	1.03	143	0.79	0.24
Military / Naval Science	0	0.00	1	0.01	-0.01
Other	17,625	2.95	629	3.46	-0.51
Performing & Fine Arts	18,655	3.13	412	2.27	0.86
Science / Math	82,544	13.83	3,072	16.91	-3.08
Social Sciences / Psychology	119,109	19.96	2,459	13.54	6.42
Undecided	38,268	6.41	601	3.31	3.10
Total:	596,837	100.00	18,167	100.00	0.00

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.

Age:	Respondents n	Respondents %
Under 18	132	0.54
18 - 22	18,293	74.79
23 - 30	4,488	18.35
31 - 45	1,185	4.84
46 - 65	327	1.34
Over 65	35	0.14
Total:	24,460	100.00

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.

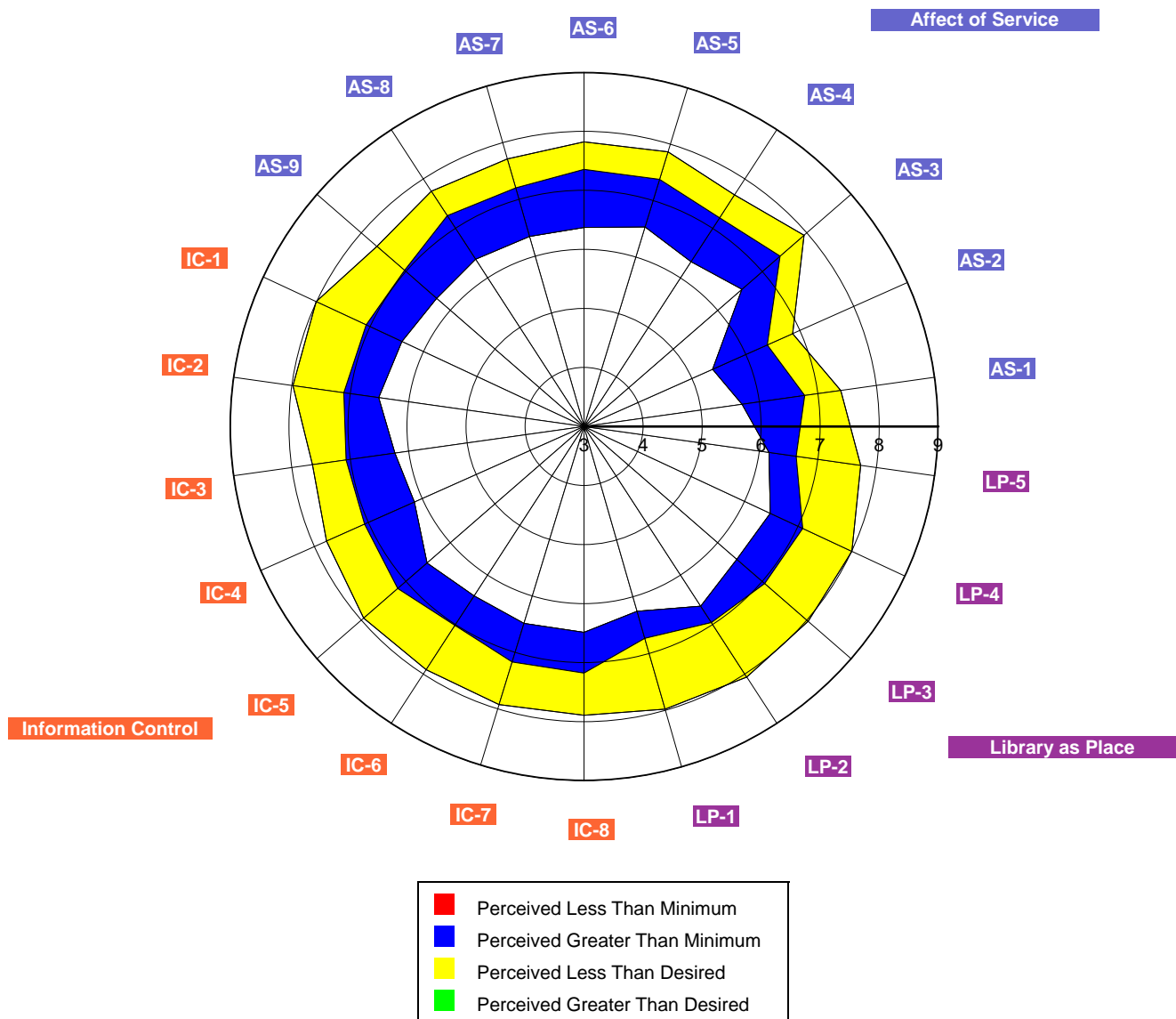
Sex:	Population N	Population %	Respondents n	Respondents %
Female	373,708	53.17	15,544	63.56
Male	329,107	46.83	8,913	36.44
Total:	702,815	100.00	24,457	100.00

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.)



ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Employees who instill confidence in users	5.71	7.39	6.78	1.07	-0.62	9,641
AS-2	Giving users individual attention	5.38	6.87	6.40	1.02	-0.47	9,178
AS-3	Employees who are consistently courteous	6.54	7.94	7.40	0.86	-0.54	9,819
AS-4	Readiness to respond to users' questions	6.33	7.68	7.22	0.89	-0.46	9,413
AS-5	Employees who have the knowledge to answer user questions	6.53	7.87	7.38	0.84	-0.49	9,791
AS-6	Employees who deal with users in a caring fashion	6.37	7.82	7.36	0.98	-0.47	22,969
AS-7	Employees who understand the needs of their users	6.35	7.72	7.20	0.85	-0.51	9,333
AS-8	Willingness to help users	6.38	7.75	7.26	0.88	-0.49	9,657
AS-9	Dependability in handling users' service problems	6.31	7.65	7.03	0.72	-0.62	8,599
Information Control							
IC-1	Making electronic resources accessible from my home or office	6.41	8.01	7.07	0.67	-0.93	10,827
IC-2	A library Web site enabling me to locate information on my own	6.51	7.98	7.11	0.60	-0.87	10,879
IC-3	The printed library materials I need for my work	6.24	7.65	7.07	0.83	-0.57	9,207
IC-4	The electronic information resources I need	6.15	7.78	7.07	0.92	-0.70	23,555
IC-5	Modern equipment that lets me easily access needed information	6.53	7.95	7.18	0.66	-0.77	10,843
IC-6	Easy-to-use access tools that allow me to find things on my own	6.42	7.91	7.02	0.60	-0.90	10,804
IC-7	Making information easily accessible for independent use	6.49	7.93	7.17	0.68	-0.75	10,282
IC-8	Print and/or electronic journal collections I require for my work	6.49	7.89	7.18	0.69	-0.71	10,365
Library as Place							
LP-1	Library space that inspires study and learning	6.26	7.98	6.73	0.48	-1.25	24,079
LP-2	Quiet space for individual activities	6.63	8.06	6.96	0.33	-1.10	10,376
LP-3	A comfortable and inviting location	6.43	8.03	7.06	0.63	-0.98	10,358
LP-4	A getaway for study, learning, or research	6.48	8.01	7.09	0.61	-0.92	10,153
LP-5	Community space for group learning and group study	6.17	7.73	6.63	0.46	-1.10	10,019
Overall:		6.32	7.82	7.08	0.76	-0.74	24,460

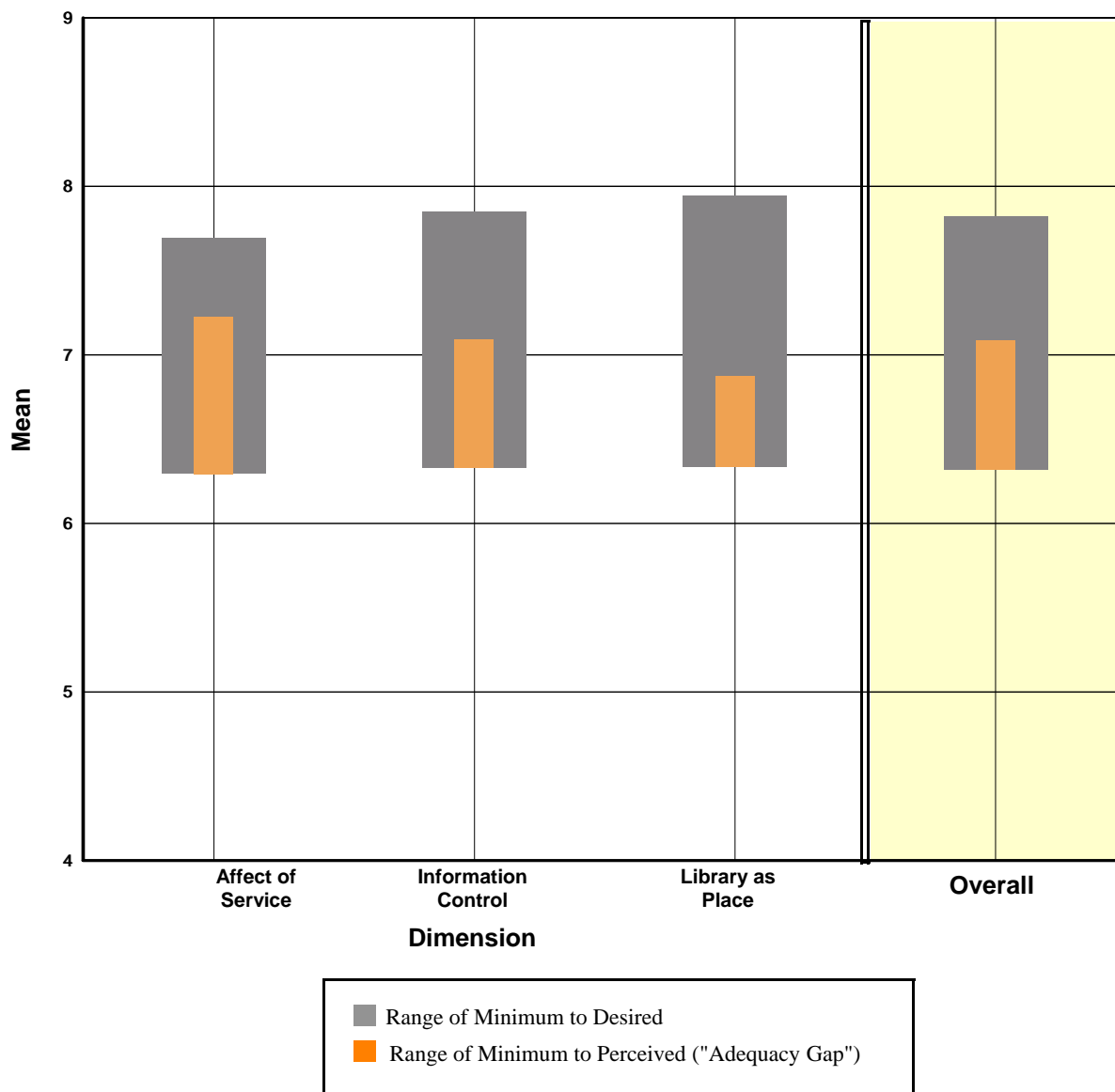
Language: English (American), French (Canada)
Institution Type: College or University
Consortium: ARL
User Group: Undergraduate

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service							
AS-1	Employees who instill confidence in users	1.92	1.60	1.68	1.82	1.69	9,641
AS-2	Giving users individual attention	2.01	1.81	1.77	1.84	1.74	9,178
AS-3	Employees who are consistently courteous	1.80	1.33	1.55	1.88	1.58	9,819
AS-4	Readiness to respond to users' questions	1.75	1.41	1.47	1.76	1.49	9,413
AS-5	Employees who have the knowledge to answer user questions	1.74	1.35	1.45	1.73	1.47	9,791
AS-6	Employees who deal with users in a caring fashion	1.79	1.37	1.51	1.83	1.56	22,969
AS-7	Employees who understand the needs of their users	1.73	1.39	1.44	1.71	1.50	9,333
AS-8	Willingness to help users	1.76	1.39	1.48	1.77	1.52	9,657
AS-9	Dependability in handling users' service problems	1.76	1.46	1.51	1.80	1.62	8,599
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.83	1.37	1.65	1.95	1.74	10,827
IC-2	A library Web site enabling me to locate information on my own	1.72	1.33	1.57	1.84	1.66	10,879
IC-3	The printed library materials I need for my work	1.87	1.57	1.55	1.88	1.70	9,207
IC-4	The electronic information resources I need	1.73	1.43	1.48	1.82	1.64	23,555
IC-5	Modern equipment that lets me easily access needed information	1.67	1.28	1.49	1.80	1.62	10,843
IC-6	Easy-to-use access tools that allow me to find things on my own	1.67	1.28	1.50	1.85	1.65	10,804
IC-7	Making information easily accessible for independent use	1.66	1.26	1.44	1.74	1.53	10,282
IC-8	Print and/or electronic journal collections I require for my work	1.81	1.45	1.49	1.94	1.69	10,365
Library as Place							
LP-1	Library space that inspires study and learning	1.77	1.38	1.78	2.18	2.02	24,079
LP-2	Quiet space for individual activities	1.79	1.35	1.76	2.23	2.00	10,376
LP-3	A comfortable and inviting location	1.75	1.26	1.62	2.04	1.79	10,358
LP-4	A getaway for study, learning, or research	1.76	1.35	1.60	1.96	1.75	10,153
LP-5	Community space for group learning and group study	1.88	1.53	1.82	2.32	2.19	10,019
Overall:		1.35	0.99	1.12	1.37	1.14	24,460

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.



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	6.29	7.69	7.23	0.93	-0.47	23,936
Information Control	6.33	7.85	7.09	0.76	-0.76	24,396
Library as Place	6.33	7.94	6.87	0.54	-1.07	24,311
Overall	6.32	7.82	7.08	0.76	-0.74	24,460

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	1.57	1.20	1.31	1.51	1.27	23,936
Information Control	1.44	1.11	1.23	1.49	1.30	24,396
Library as Place	1.56	1.18	1.50	1.86	1.67	24,311
Overall	1.35	0.99	1.12	1.37	1.14	24,460

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	6.28	7.29	6.68	0.40	-0.61	178
Informing me of useful library services	5.42	6.90	6.36	0.93	-0.54	92
An environment that facilitates group study and problem solving	5.89	7.47	6.74	0.84	-0.74	19
Having comprehensive electronic resources	6.22	7.88	6.84	0.63	-1.04	51
Providing help when and where I need it	6.20	7.73	7.00	0.81	-0.73	1,748
Teaching me how to access, evaluate, and use information	5.77	7.28	6.82	1.04	-0.46	3,021
Making me aware of library services	5.55	7.25	6.40	0.85	-0.85	1,820
The right mix of electronic content	6.16	7.41	6.79	0.63	-0.63	56
Library orientations / instruction sessions	5.50	6.64	6.94	1.44	0.30	432
Online course support (readings, links, references)	5.95	7.67	6.85	0.90	-0.82	60
Access to rare and historical materials	4.91	6.42	6.43	1.52	0.01	2,408
Contribution to the intellectual atmosphere of the campus	6.54	7.72	7.16	0.62	-0.56	119
Ready access to computers / Internet / software	6.42	8.06	6.76	0.34	-1.30	341
Library keeping me informed about all of its services	5.01	6.68	6.37	1.36	-0.32	73
The multimedia (CD / DVD / video / audio) collections I need	5.60	7.03	7.04	1.44	0.01	1,280
An environment conducive to learning through classes, programs, activities, and meetings	5.95	7.52	6.52	0.57	-1.00	21
Helpfulness in dealing with users' IT problems	6.18	7.95	7.10	0.92	-0.85	62
Availability of subject specialist assistance	5.60	7.35	6.69	1.09	-0.66	1,219
Library staff teaching me how to effectively use the electronically available databases, journals, and books	5.21	6.20	6.61	1.39	0.41	61
A library environment that is hospitable and conducive to finding and using information	6.56	7.95	7.26	0.70	-0.69	80
Making me aware of library resources and services	5.85	7.35	6.70	0.86	-0.65	5,371
Teaching me how to locate, evaluate, and use information	5.60	7.30	5.90	0.30	-1.40	10
Convenient service hours	6.52	7.95	7.36	0.84	-0.60	194

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

Ability to navigate library Web pages easily	6.57	8.06	7.03	0.46	-1.03	5,820
A secure and safe place	7.17	8.23	7.47	0.30	-0.76	1,942
Access to archives, special collections	5.39	7.17	6.85	1.46	-0.31	1,131
Enabling me to find information myself 24 hours a day	6.03	7.76	6.89	0.85	-0.87	62
Facilitating self-directed research	5.97	7.61	7.13	1.17	-0.48	307
Full-text delivered electronically to individual users	6.00	7.84	6.32	0.32	-1.52	233
Interdisciplinary library needs being addressed	6.32	6.93	6.50	0.18	-0.43	28
Providing direction to self-navigate the library	6.01	7.73	6.73	0.72	-0.99	472
Providing search tools that permit me to work autonomously	6.06	7.43	6.81	0.75	-0.62	68
Space for group / individual study and research needs	6.71	8.14	6.38	-0.33	-1.77	138
Space that facilitates quiet study	6.86	8.03	7.09	0.23	-0.94	208
Visually appealing facilities	5.65	7.39	6.53	0.89	-0.85	178
Personalization features in the electronic library	6.00	7.00	6.00	0.00	-1.00	6
Space for students to study and work in groups	6.24	7.53	6.42	0.18	-1.11	330
Adequate hours of service	6.80	8.09	7.48	0.68	-0.61	1,896
Library staff providing help that assists in finding information needed now while improving my research skills	6.22	7.63	6.93	0.71	-0.70	134
The library provides access to archival materials (documents, manuscripts, and photographs)	4.71	6.63	6.66	1.95	0.04	164
Ease and timeliness in getting materials from other libraries	6.59	7.83	7.19	0.60	-0.64	963
Helpful online guides and tutorials	5.74	7.23	6.68	0.95	-0.55	1,729
An online catalog that is user-friendly for finding materials	6.65	8.11	6.82	0.17	-1.30	185
Availability of assistance to improve my research skills	5.89	7.49	6.95	1.06	-0.54	1,755
Availability of assistance in addressing issues of copyright and plagiarism	5.22	6.76	6.24	1.03	-0.51	37
Reliable mix of technology to help me complete my work	6.50	7.73	6.97	0.47	-0.76	223
The value of the library's resources and services to me for my academic success	6.74	7.80	7.50	0.76	-0.30	471

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	2.09	1.86	1.87	2.06	2.03	178
Informing me of useful library services	1.88	1.66	1.92	2.06	2.01	92
An environment that facilitates group study and problem solving	1.94	1.58	1.56	1.83	1.56	19
Having comprehensive electronic resources	1.90	1.26	1.77	2.17	1.84	51
Providing help when and where I need it	1.82	1.47	1.58	1.81	1.63	1,748
Teaching me how to access, evaluate, and use information	1.87	1.61	1.69	1.92	1.76	3,021
Making me aware of library services	2.07	1.75	1.87	2.20	2.18	1,820
The right mix of electronic content	1.76	1.62	1.57	2.06	1.66	56
Library orientations / instruction sessions	2.40	2.16	1.78	2.22	2.10	432
Online course support (readings, links, references)	1.60	1.24	1.72	2.18	1.87	60
Access to rare and historical materials	2.20	2.16	1.71	2.09	2.05	2,408
Contribution to the intellectual atmosphere of the campus	1.86	1.50	1.51	1.95	1.70	119
Ready access to computers / Internet / software	1.79	1.33	1.72	2.28	2.11	341
Library keeping me informed about all of its services	2.12	2.00	1.84	2.04	1.87	73
The multimedia (CD / DVD / video / audio) collections I need	2.12	1.94	1.63	2.14	1.92	1,280
An environment conducive to learning through classes, programs, activities, and meetings	1.88	1.29	1.72	1.99	1.48	21
Helpfulness in dealing with users' IT problems	1.47	1.19	1.62	1.64	1.57	62
Availability of subject specialist assistance	2.08	1.70	1.73	2.10	1.97	1,219
Library staff teaching me how to effectively use the electronically available databases, journals, and books	2.43	2.28	1.71	2.36	1.97	61
A library environment that is hospitable and conducive to finding and using information	1.54	1.17	1.24	1.54	1.34	80
Making me aware of library resources and services	1.89	1.55	1.70	2.04	1.87	5,371
Teaching me how to locate, evaluate, and use information	2.37	1.57	2.08	3.33	2.76	10
Convenient service hours	1.80	1.35	1.61	1.97	1.69	194
Ability to navigate library Web pages easily	1.65	1.21	1.56	1.93	1.72	5,820
A secure and safe place	1.82	1.35	1.56	1.94	1.61	1,942
Access to archives, special collections	2.24	1.91	1.67	2.21	2.06	1,131
Enabling me to find information myself 24 hours a day	1.55	1.33	1.47	1.81	1.62	62
Facilitating self-directed research	1.70	1.38	1.36	1.68	1.45	307
Full-text delivered electronically to individual users	1.92	1.64	1.70	2.27	2.17	233

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

Interdisciplinary library needs being addressed	2.20	1.92	2.05	2.36	1.99	28
Providing direction to self-navigate the library	1.73	1.45	1.64	2.03	1.83	472
Providing search tools that permit me to work autonomously	1.84	1.73	1.57	1.67	1.71	68
Space for group / individual study and research needs	1.71	1.29	1.79	2.41	2.25	138
Space that facilitates quiet study	1.81	1.37	1.59	2.26	2.06	208
Visually appealing facilities	1.83	1.56	1.54	2.19	2.08	178
Personalization features in the electronic library	2.00	1.90	0.89	2.28	2.10	6
Space for students to study and work in groups	1.90	1.71	1.80	2.21	2.18	330
Adequate hours of service	1.57	1.15	1.54	1.96	1.67	1,896
Library staff providing help that assists in finding information needed now while improving my research skills	1.81	1.44	1.67	1.88	1.60	134
The library provides access to archival materials (documents, manuscripts, and photographs)	2.26	2.17	1.73	2.12	2.12	164
Ease and timeliness in getting materials from other libraries	1.61	1.30	1.53	1.68	1.50	963
Helpful online guides and tutorials	1.87	1.62	1.56	1.91	1.74	1,729
An online catalog that is user-friendly for finding materials	1.56	1.22	1.54	1.99	1.84	185
Availability of assistance to improve my research skills	1.79	1.47	1.46	1.90	1.67	1,755
Availability of assistance in addressing issues of copyright and plagiarism	2.19	2.02	2.03	1.79	1.61	37
Reliable mix of technology to help me complete my work	1.71	1.37	1.51	1.75	1.51	223
The value of the library's resources and services to me for my academic success	1.77	1.40	1.45	1.61	1.40	471

Language: English (American), French (Canada)

Institution Type: College or University

Consortium: ARL

User Group: Undergraduate

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.	7.60	1.36	15,166
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.22	1.45	15,090
How would you rate the overall quality of the service provided by the library?	7.35	1.21	24,457

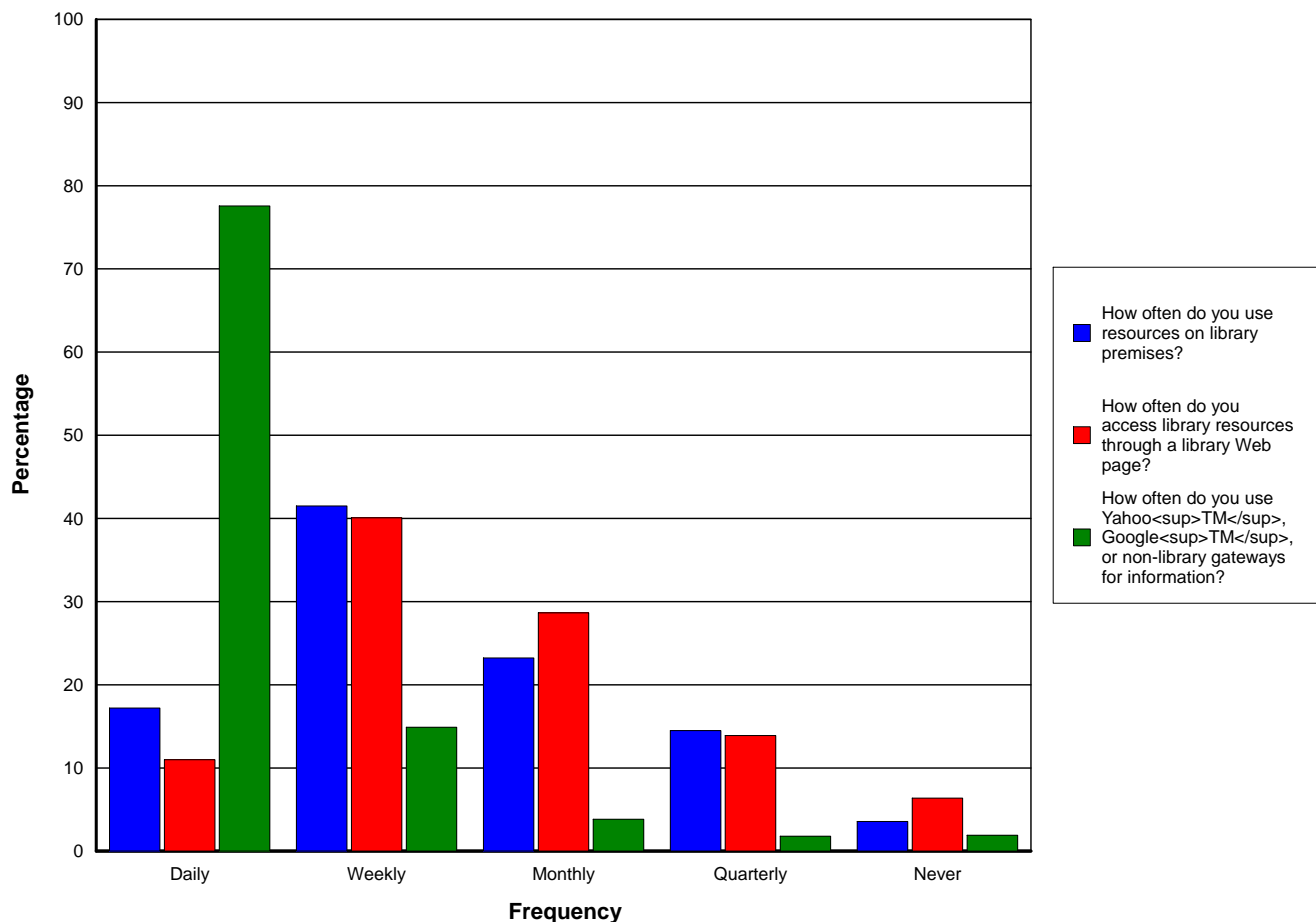
4.6 Information Literacy Outcomes Questions Summary for Undergraduate

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.	6.19	1.78	12,291
The library aids my advancement in my academic discipline or work.	7.07	1.55	13,828
The library enables me to be more efficient in my academic pursuits or work.	7.18	1.56	14,118
The library helps me distinguish between trustworthy and untrustworthy information.	6.47	1.77	13,901
The library provides me with the information skills I need in my work or study.	6.81	1.61	12,170

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?	4,208 17.20%	10,151 41.50%	5,681 23.23%	3,545 14.49%	874 3.57%	24,459 100.00%
How often do you access library resources through a library Web page?	2,690 11.00%	9,803 40.08%	7,007 28.65%	3,398 13.89%	1,560 6.38%	24,458 100.00%
How often do you use YahooTM, GoogleTM, or non-library gateways for information?	18,969 77.56%	3,643 14.90%	938 3.84%	438 1.79%	468 1.91%	24,456 100.00%

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

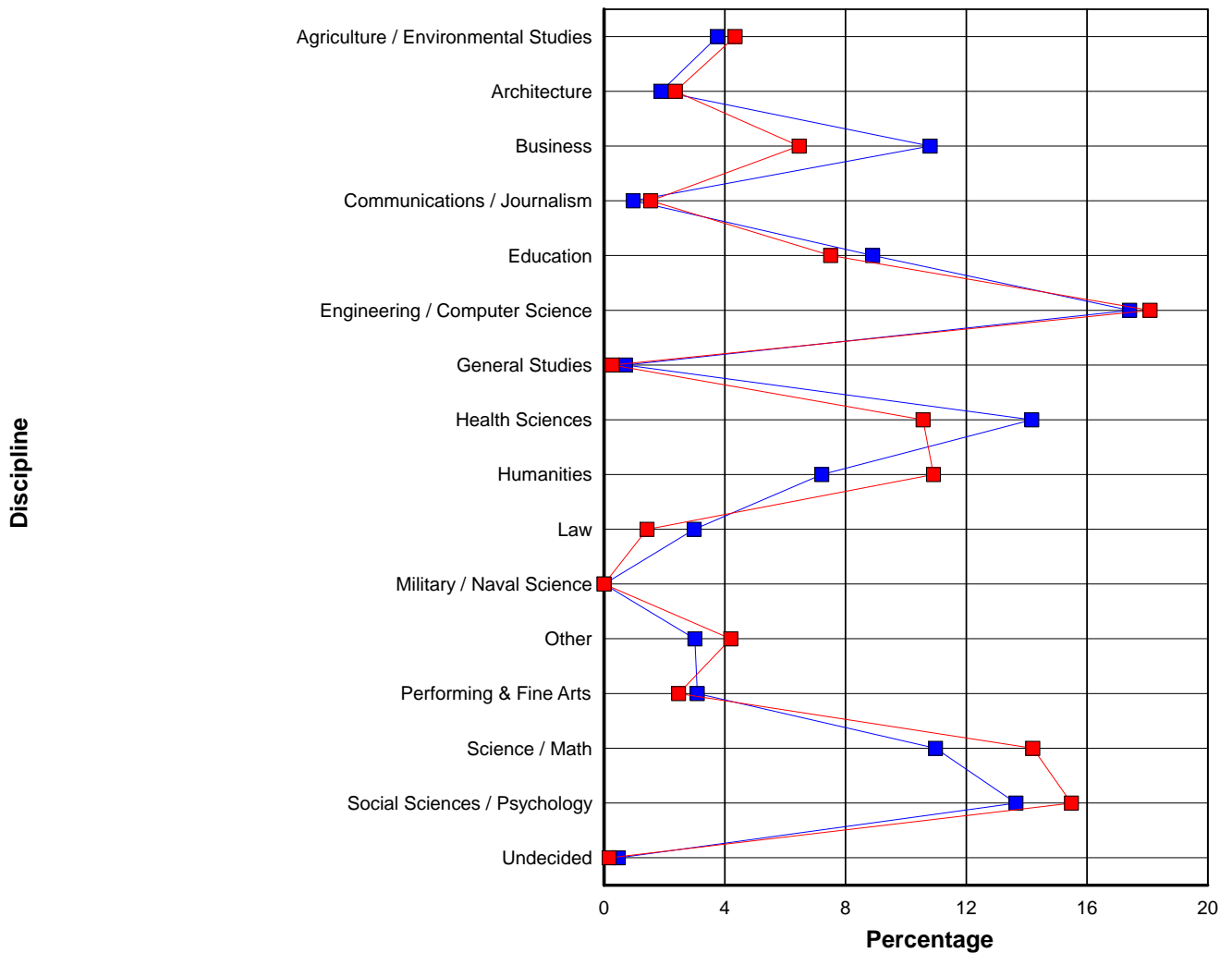
5 Summary for Graduate

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

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture / Environmental Studies	5,431	3.76	512	4.34	-0.58
Architecture	2,724	1.89	278	2.36	-0.47
Business	15,607	10.80	762	6.46	4.34
Communications / Journalism	1,393	0.96	182	1.54	-0.58
Education	12,855	8.90	885	7.51	1.39
Engineering / Computer Science	25,159	17.41	2,133	18.09	-0.67
General Studies	1,024	0.71	32	0.27	0.44
Health Sciences	20,473	14.17	1,246	10.57	3.60
Humanities	10,420	7.21	1,287	10.91	-3.70
Law	4,310	2.98	168	1.42	1.56
Military / Naval Science	0	0.00	0	0.00	0.00
Other	4,347	3.01	495	4.20	-1.19
Performing & Fine Arts	4,463	3.09	291	2.47	0.62
Science / Math	15,867	10.98	1,675	14.20	-3.22
Social Sciences / Psychology	19,717	13.65	1,826	15.49	-1.84
Undecided	683	0.47	20	0.17	0.30
Total:	144,473	100.00	11,792	100.00	0.00

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.

Age:	Respondents n	Respondents %
Under 18	2	0.01
18 - 22	1,056	7.17
23 - 30	9,377	63.64
31 - 45	3,484	23.65
46 - 65	777	5.27
Over 65	38	0.26
Total:	14,734	100.00

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.

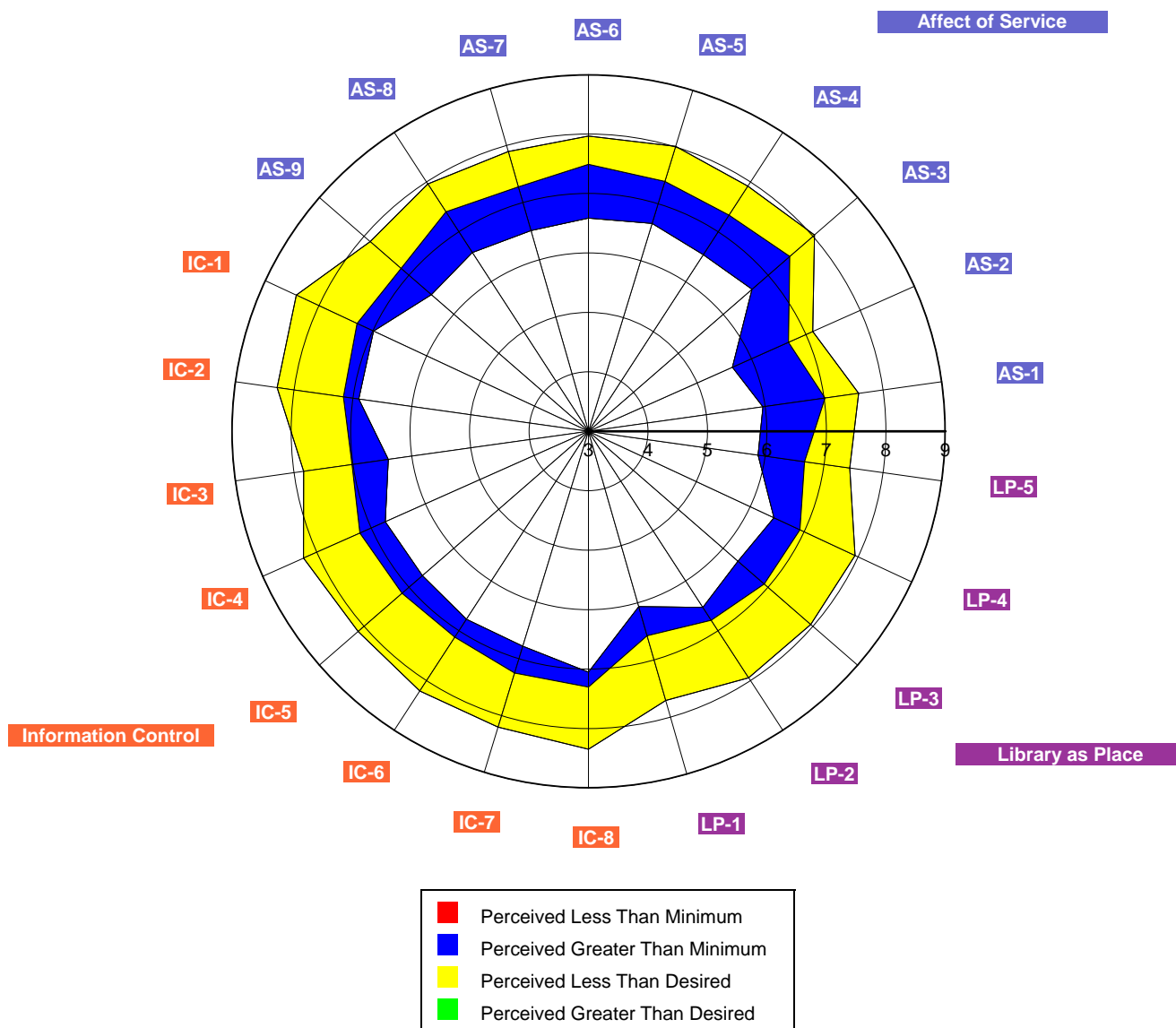
Sex:	Population N	Population %	Respondents n	Respondents %
Female	77,316	51.58	8,383	56.91
Male	72,582	48.42	6,347	43.09
Total:	149,898	100.00	14,730	100.00

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.)



ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Employees who instill confidence in users	5.96	7.59	7.02	1.05	-0.57	6,047
AS-2	Giving users individual attention	5.65	7.13	6.68	1.03	-0.45	5,731
AS-3	Employees who are consistently courteous	6.64	8.03	7.48	0.84	-0.55	6,048
AS-4	Readiness to respond to users' questions	6.54	7.92	7.34	0.79	-0.58	5,924
AS-5	Employees who have the knowledge to answer user questions	6.66	8.01	7.40	0.74	-0.62	6,046
AS-6	Employees who deal with users in a caring fashion	6.59	7.96	7.49	0.91	-0.47	14,086
AS-7	Employees who understand the needs of their users	6.51	7.89	7.28	0.77	-0.62	5,793
AS-8	Willingness to help users	6.59	7.96	7.40	0.82	-0.56	5,935
AS-9	Dependability in handling users' service problems	6.50	7.86	7.18	0.67	-0.69	5,291
Information Control							
IC-1	Making electronic resources accessible from my home or office	6.99	8.42	7.29	0.30	-1.13	6,936
IC-2	A library Web site enabling me to locate information on my own	6.90	8.29	7.16	0.26	-1.12	6,694
IC-3	The printed library materials I need for my work	6.40	7.84	7.02	0.62	-0.82	5,730
IC-4	The electronic information resources I need	6.74	8.25	7.21	0.47	-1.04	14,557
IC-5	Modern equipment that lets me easily access needed information	6.70	8.13	7.16	0.45	-0.98	6,630
IC-6	Easy-to-use access tools that allow me to find things on my own	6.77	8.21	7.13	0.36	-1.08	6,743
IC-7	Making information easily accessible for independent use	6.78	8.20	7.25	0.47	-0.95	6,322
IC-8	Print and/or electronic journal collections I require for my work	7.05	8.35	7.30	0.25	-1.04	6,688
Library as Place							
LP-1	Library space that inspires study and learning	6.07	7.71	6.58	0.51	-1.13	13,896
LP-2	Quiet space for individual activities	6.53	7.94	6.79	0.26	-1.15	6,061
LP-3	A comfortable and inviting location	6.33	7.95	6.91	0.58	-1.04	6,252
LP-4	A getaway for study, learning, or research	6.44	7.94	6.92	0.48	-1.02	6,017
LP-5	Community space for group learning and group study	5.88	7.44	6.67	0.79	-0.77	5,432
Overall:		6.55	7.97	7.17	0.62	-0.80	14,742

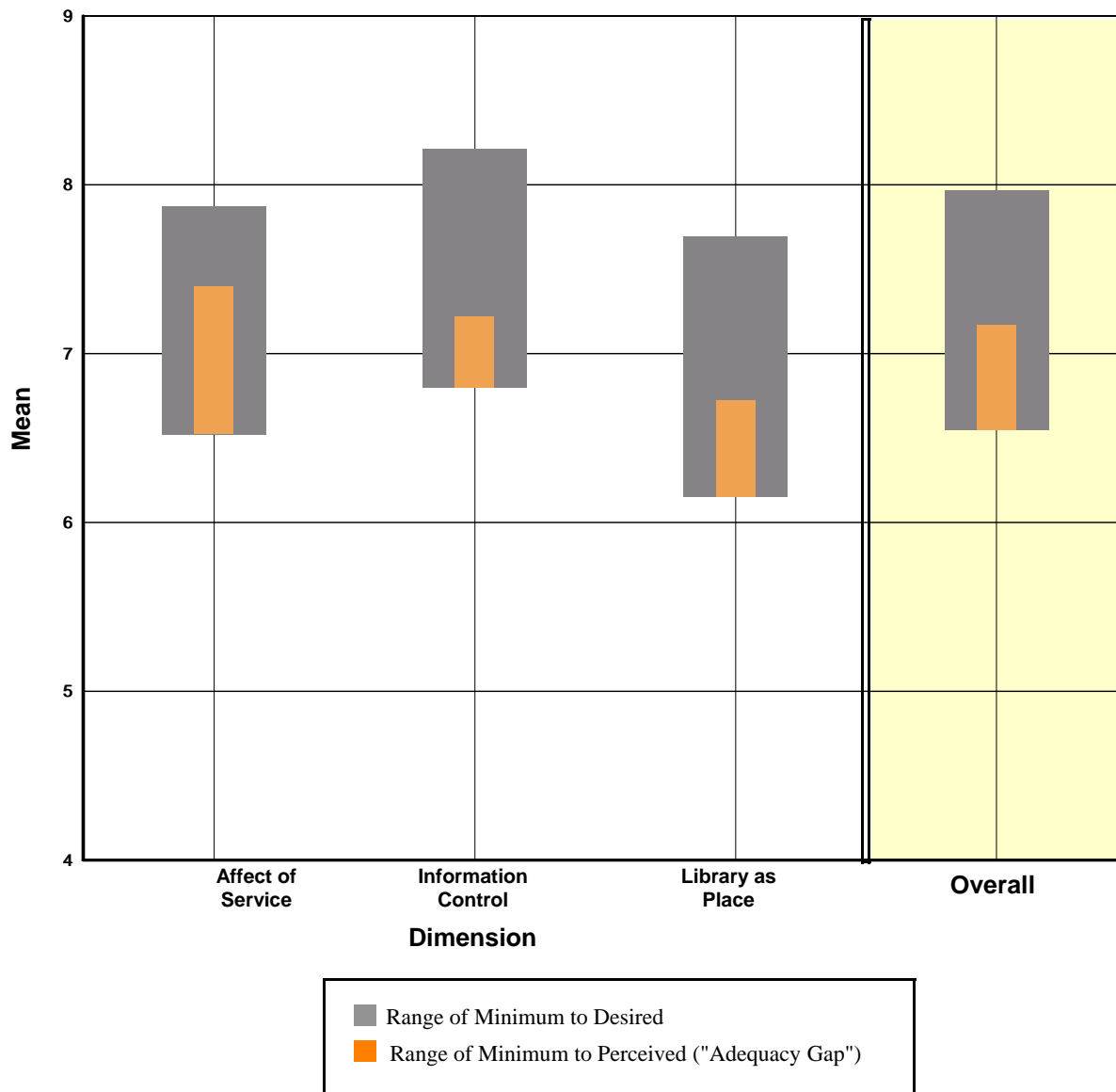
Language: English (American), French (Canada)
Institution Type: College or University
Consortium: ARL
User Group: Graduate

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service							
AS-1	Employees who instill confidence in users	1.89	1.54	1.59	1.76	1.61	6,047
AS-2	Giving users individual attention	2.00	1.75	1.73	1.85	1.70	5,731
AS-3	Employees who are consistently courteous	1.78	1.27	1.53	1.89	1.62	6,048
AS-4	Readiness to respond to users' questions	1.71	1.31	1.47	1.73	1.48	5,924
AS-5	Employees who have the knowledge to answer user questions	1.69	1.26	1.45	1.69	1.45	6,046
AS-6	Employees who deal with users in a caring fashion	1.74	1.30	1.46	1.78	1.52	14,086
AS-7	Employees who understand the needs of their users	1.71	1.31	1.45	1.73	1.51	5,793
AS-8	Willingness to help users	1.74	1.29	1.48	1.78	1.48	5,935
AS-9	Dependability in handling users' service problems	1.72	1.35	1.49	1.77	1.52	5,291
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.68	1.06	1.59	1.92	1.66	6,936
IC-2	A library Web site enabling me to locate information on my own	1.59	1.14	1.52	1.80	1.61	6,694
IC-3	The printed library materials I need for my work	1.86	1.55	1.55	1.98	1.79	5,730
IC-4	The electronic information resources I need	1.61	1.17	1.41	1.77	1.54	14,557
IC-5	Modern equipment that lets me easily access needed information	1.64	1.18	1.50	1.86	1.62	6,630
IC-6	Easy-to-use access tools that allow me to find things on my own	1.59	1.11	1.45	1.79	1.55	6,743
IC-7	Making information easily accessible for independent use	1.60	1.11	1.42	1.79	1.52	6,322
IC-8	Print and/or electronic journal collections I require for my work	1.64	1.14	1.45	1.88	1.58	6,688
Library as Place							
LP-1	Library space that inspires study and learning	1.92	1.69	1.81	2.32	2.26	13,896
LP-2	Quiet space for individual activities	1.89	1.51	1.82	2.36	2.18	6,061
LP-3	A comfortable and inviting location	1.76	1.35	1.70	2.11	1.92	6,252
LP-4	A getaway for study, learning, or research	1.83	1.44	1.65	2.07	1.90	6,017
LP-5	Community space for group learning and group study	2.05	1.81	1.74	2.36	2.26	5,432
Overall:		1.32	0.92	1.09	1.37	1.14	14,742

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.



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	6.52	7.87	7.40	0.88	-0.48	14,569
Information Control	6.80	8.21	7.22	0.42	-0.99	14,729
Library as Place	6.15	7.70	6.72	0.57	-0.97	14,244
Overall	6.55	7.97	7.17	0.62	-0.80	14,742

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	1.55	1.14	1.28	1.50	1.26	14,569
Information Control	1.36	0.92	1.19	1.47	1.24	14,729
Library as Place	1.73	1.47	1.57	2.01	1.91	14,244
Overall	1.32	0.92	1.09	1.37	1.14	14,742

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	6.78	7.97	6.94	0.16	-1.03	68
Informing me of useful library services	5.92	7.27	6.54	0.62	-0.73	134
An environment that facilitates group study and problem solving	5.53	7.33	6.52	0.98	-0.81	58
Having comprehensive electronic resources	7.17	8.32	7.36	0.19	-0.96	53
Providing help when and where I need it	6.22	7.87	7.01	0.80	-0.85	2,547
Teaching me how to access, evaluate, and use information	6.16	7.52	7.08	0.92	-0.44	1,222
Making me aware of library services	5.70	7.37	6.43	0.73	-0.94	2,350
The right mix of electronic content	7.23	8.31	6.91	-0.31	-1.40	35
Library orientations / instruction sessions	5.41	6.76	6.84	1.43	0.08	309
Online course support (readings, links, references)	6.04	7.56	7.07	1.03	-0.49	135
Access to rare and historical materials	5.20	6.82	6.37	1.17	-0.45	523
Contribution to the intellectual atmosphere of the campus	6.40	7.76	7.10	0.71	-0.65	191
Ready access to computers / Internet / software	6.60	7.98	7.08	0.48	-0.89	254
Library keeping me informed about all of its services	5.80	7.33	6.90	1.10	-0.43	81
The multimedia (CD / DVD / video / audio) collections I need	5.67	7.12	6.81	1.14	-0.32	366
An environment conducive to learning through classes, programs, activities, and meetings	5.82	7.32	6.96	1.14	-0.36	50
Helpfulness in dealing with users' IT problems	6.97	8.17	7.78	0.81	-0.39	64
Availability of subject specialist assistance	5.79	7.41	6.63	0.85	-0.78	1,968
Library staff teaching me how to effectively use the electronically available databases, journals, and books	5.44	7.02	6.79	1.35	-0.23	43
A library environment that is hospitable and conducive to finding and using information	6.92	8.17	7.33	0.42	-0.83	96
Making me aware of library resources and services	6.16	7.54	6.92	0.76	-0.63	2,082
Teaching me how to locate, evaluate, and use information	6.64	7.82	7.55	0.91	-0.27	11
Convenient service hours	6.72	8.11	7.33	0.61	-0.79	233

Ability to navigate library Web pages easily	6.80	8.23	6.98	0.18	-1.25	4,128
A secure and safe place	7.26	8.41	7.50	0.24	-0.92	666
Access to archives, special collections	5.87	7.52	6.97	1.10	-0.55	1,844
Enabling me to find information myself 24 hours a day	7.26	8.33	7.36	0.10	-0.97	97
Facilitating self-directed research	6.39	7.78	7.16	0.77	-0.63	174
Full-text delivered electronically to individual users	6.83	8.17	7.10	0.27	-1.07	137
Interdisciplinary library needs being addressed	5.90	7.28	6.90	1.00	-0.38	40
Providing direction to self-navigate the library	6.40	7.94	7.14	0.74	-0.80	178
Providing search tools that permit me to work autonomously	7.01	8.20	7.32	0.31	-0.88	94
Space for group / individual study and research needs	6.67	7.74	7.10	0.42	-0.64	73
Space that facilitates quiet study	6.45	7.85	6.72	0.27	-1.13	130
Visually appealing facilities	5.52	7.48	6.57	1.06	-0.91	87
Personalization features in the electronic library	6.60	8.10	7.00	0.40	-1.10	10
Space for students to study and work in groups	5.55	6.79	6.44	0.89	-0.35	133
Adequate hours of service	6.92	8.14	7.51	0.58	-0.64	934
Library staff providing help that assists in finding information needed now while improving my research skills	6.85	7.97	7.33	0.49	-0.64	72
The library provides access to archival materials (documents, manuscripts, and photographs)	5.96	7.40	6.99	1.02	-0.41	83
Ease and timeliness in getting materials from other libraries	6.68	8.07	7.23	0.55	-0.84	688
Helpful online guides and tutorials	5.91	7.40	6.76	0.85	-0.63	394
An online catalog that is user-friendly for finding materials	7.11	8.41	7.26	0.15	-1.15	133
Availability of assistance to improve my research skills	6.15	7.71	7.14	0.99	-0.57	357
Availability of assistance in addressing issues of copyright and plagiarism	5.77	6.63	6.97	1.20	0.33	60
Reliable mix of technology to help me complete my work	6.87	8.05	7.17	0.31	-0.88	183
The value of the library's resources and services to me for my academic success	7.27	8.40	7.78	0.51	-0.62	289

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	1.87	1.51	1.76	1.96	1.75	68
Informing me of useful library services	2.13	1.70	1.85	2.24	1.83	134
An environment that facilitates group study and problem solving	2.34	2.16	1.80	2.14	2.06	58
Having comprehensive electronic resources	1.37	1.12	1.44	1.56	1.43	53
Providing help when and where I need it	1.71	1.32	1.50	1.73	1.55	2,547
Teaching me how to access, evaluate, and use information	1.93	1.63	1.56	1.85	1.68	1,222
Making me aware of library services	1.93	1.67	1.76	2.12	2.02	2,350
The right mix of electronic content	1.82	1.08	1.72	2.00	2.03	35
Library orientations / instruction sessions	2.22	2.19	1.62	2.10	2.18	309
Online course support (readings, links, references)	1.96	1.73	1.42	1.86	1.77	135
Access to rare and historical materials	2.23	2.12	1.74	2.25	2.10	523
Contribution to the intellectual atmosphere of the campus	1.85	1.64	1.46	1.83	1.56	191
Ready access to computers / Internet / software	1.98	1.56	1.74	2.21	2.08	254
Library keeping me informed about all of its services	2.12	1.81	1.66	2.08	2.00	81
The multimedia (CD / DVD / video / audio) collections I need	2.23	2.01	1.74	2.21	2.08	366
An environment conducive to learning through classes, programs, activities, and meetings	2.18	1.89	1.86	1.96	1.57	50
Helpfulness in dealing with users' IT problems	1.73	1.32	1.49	1.81	1.44	64
Availability of subject specialist assistance	1.98	1.67	1.74	1.98	1.76	1,968
Library staff teaching me how to effectively use the electronically available databases, journals, and books	2.16	1.74	1.87	2.47	2.18	43
A library environment that is hospitable and conducive to finding and using information	1.66	1.21	1.50	1.93	1.76	96
Making me aware of library resources and services	1.87	1.54	1.58	1.94	1.79	2,082
Teaching me how to locate, evaluate, and use information	1.57	1.25	1.44	2.07	2.20	11
Convenient service hours	1.63	1.24	1.52	1.93	1.70	233
Ability to navigate library Web pages easily	1.63	1.16	1.57	1.98	1.71	4,128
A secure and safe place	1.75	1.13	1.55	2.03	1.71	666
Access to archives, special collections	2.02	1.66	1.55	2.04	1.73	1,844
Enabling me to find information myself 24 hours a day	1.49	0.98	1.41	1.67	1.58	97
Facilitating self-directed research	1.75	1.59	1.47	1.65	1.51	174
Full-text delivered electronically to individual users	1.78	1.36	1.58	1.93	1.78	137

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

Interdisciplinary library needs being addressed	1.81	1.88	1.41	1.50	1.39	40
Providing direction to self-navigate the library	1.81	1.53	1.50	1.90	1.71	178
Providing search tools that permit me to work autonomously	1.54	1.20	1.46	1.92	1.63	94
Space for group / individual study and research needs	1.89	1.73	1.83	2.05	2.28	73
Space that facilitates quiet study	1.89	1.62	1.77	2.15	1.98	130
Visually appealing facilities	1.72	1.39	1.73	2.09	2.00	87
Personalization features in the electronic library	1.71	0.99	2.00	1.35	2.08	10
Space for students to study and work in groups	2.10	2.13	1.76	2.20	2.27	133
Adequate hours of service	1.54	1.17	1.51	1.83	1.61	934
Library staff providing help that assists in finding information needed now while improving my research skills	1.42	1.20	1.35	1.48	1.24	72
The library provides access to archival materials (documents, manuscripts, and photographs)	2.21	1.89	1.72	2.31	2.19	83
Ease and timeliness in getting materials from other libraries	1.53	1.21	1.51	1.84	1.71	688
Helpful online guides and tutorials	1.93	1.66	1.60	1.84	1.68	394
An online catalog that is user-friendly for finding materials	1.56	0.91	1.44	1.94	1.66	133
Availability of assistance to improve my research skills	1.91	1.52	1.46	2.00	1.79	357
Availability of assistance in addressing issues of copyright and plagiarism	2.25	2.15	1.67	2.25	2.00	60
Reliable mix of technology to help me complete my work	1.45	1.21	1.25	1.60	1.39	183
The value of the library's resources and services to me for my academic success	1.63	1.04	1.13	1.62	1.16	289

Language: English (American), French (Canada)

Institution Type: College or University

Consortium: ARL

User Group: Graduate

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.	7.58	1.40	9,100
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.27	1.47	9,272
How would you rate the overall quality of the service provided by the library?	7.39	1.24	14,738

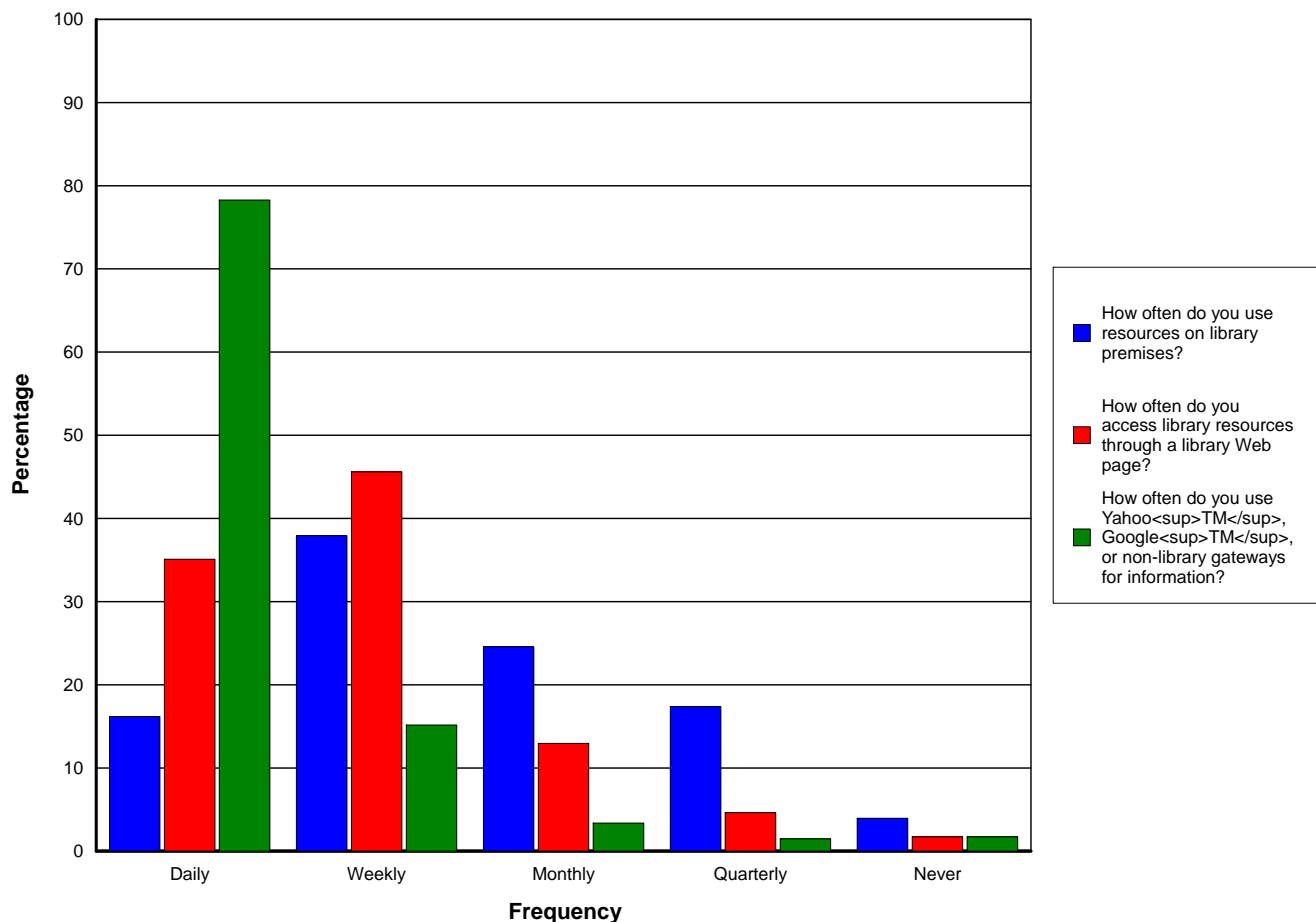
5.6 Information Literacy Outcomes Questions Summary for Graduate

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	1.86	7,501
The library aids my advancement in my academic discipline or work.	7.34	1.48	8,457
The library enables me to be more efficient in my academic pursuits or work.	7.29	1.52	8,486
The library helps me distinguish between trustworthy and untrustworthy information.	6.13	1.86	8,479
The library provides me with the information skills I need in my work or study.	6.76	1.66	7,454

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?	2,386 16.19%	5,590 37.92%	3,618 24.55%	2,563 17.39%	583 3.96%	14,740 100.00%
How often do you access library resources through a library Web page?	5,174 35.10%	6,722 45.60%	1,909 12.95%	681 4.62%	255 1.73%	14,741 100.00%
How often do you use YahooTM, GoogleTM, or non-library gateways for information?	11,538 78.27%	2,237 15.18%	497 3.37%	216 1.47%	253 1.72%	14,741 100.00%

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

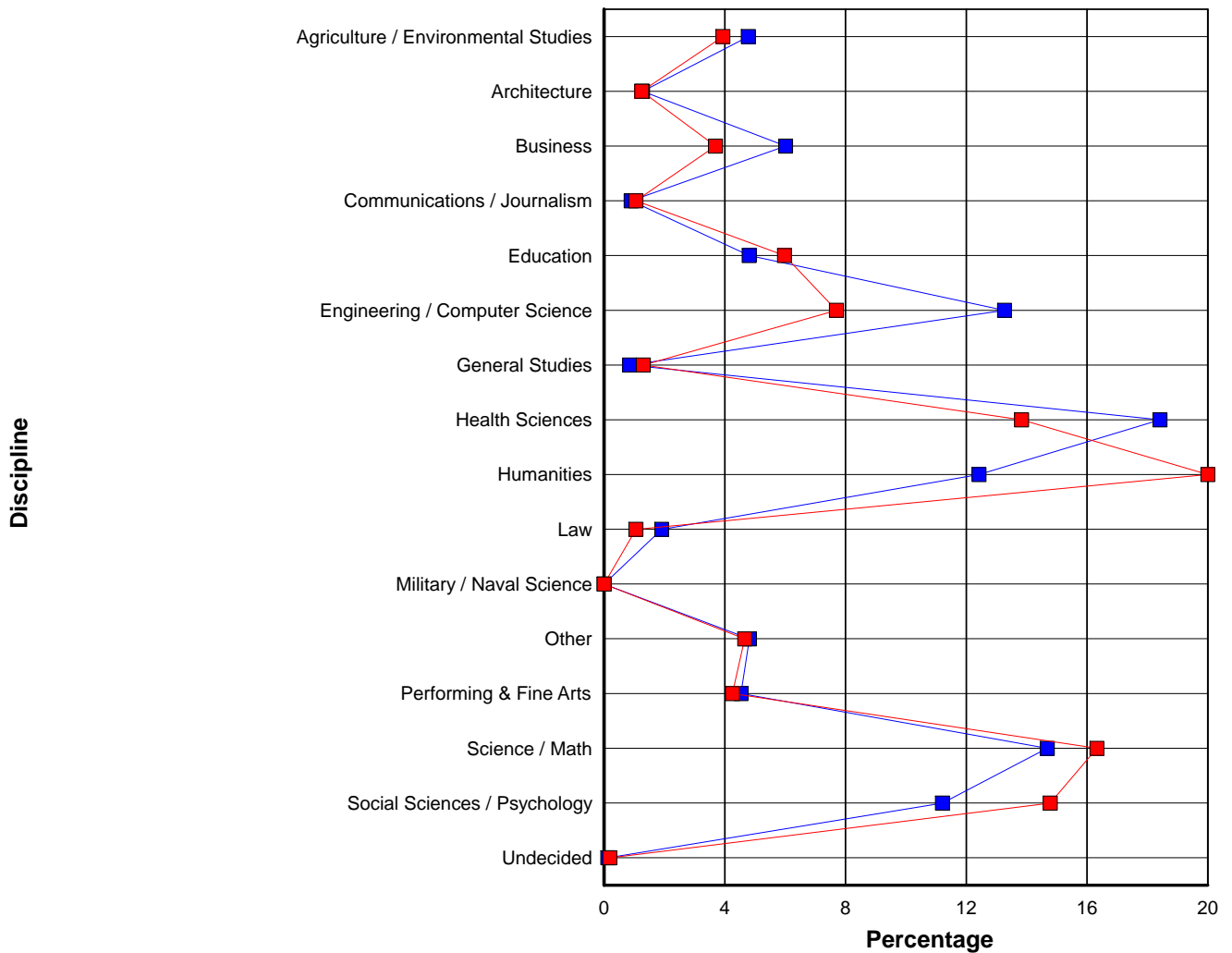
6 Summary for Faculty

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

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture / Environmental Studies	1,935	4.78	224	3.94	0.84
Architecture	517	1.28	71	1.25	0.03
Business	2,435	6.01	210	3.69	2.32
Communications / Journalism	363	0.90	60	1.05	-0.16
Education	1,946	4.81	340	5.98	-1.17
Engineering / Computer Science	5,371	13.27	438	7.70	5.57
General Studies	342	0.84	74	1.30	-0.46
Health Sciences	7,457	18.42	787	13.83	4.59
Humanities	5,030	12.42	1,138	20.00	-7.58
Law	773	1.91	60	1.05	0.85
Military / Naval Science	0	0.00	0	0.00	0.00
Other	1,950	4.82	265	4.66	0.16
Performing & Fine Arts	1,837	4.54	242	4.25	0.28
Science / Math	5,945	14.68	929	16.33	-1.64
Social Sciences / Psychology	4,539	11.21	841	14.78	-3.57
Undecided	50	0.12	11	0.19	-0.07
Total:	40,490	100.00	5,690	100.00	0.00

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.

Age:	Respondents n	Respondents %
Under 18	9	0.14
18 - 22	9	0.14
23 - 30	251	3.96
31 - 45	2,239	35.35
46 - 65	3,195	50.44
Over 65	631	9.96
Total:	6,334	100.00

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.

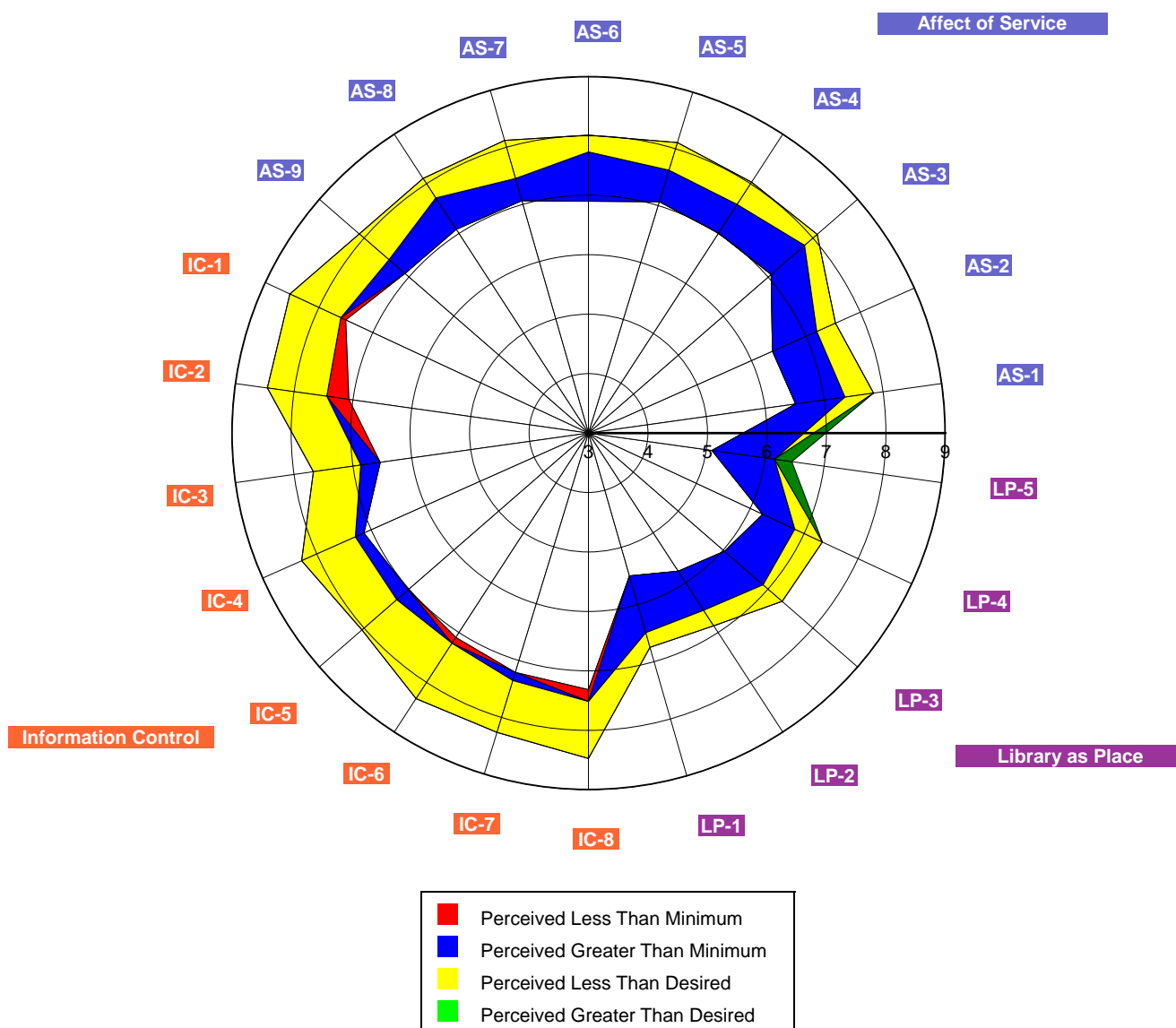
Sex:	Population N	Population %	Respondents n	Respondents %
Female	20,197	38.98	2,747	43.43
Male	31,623	61.02	3,578	56.57
Total:	51,820	100.00	6,325	100.00

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.)



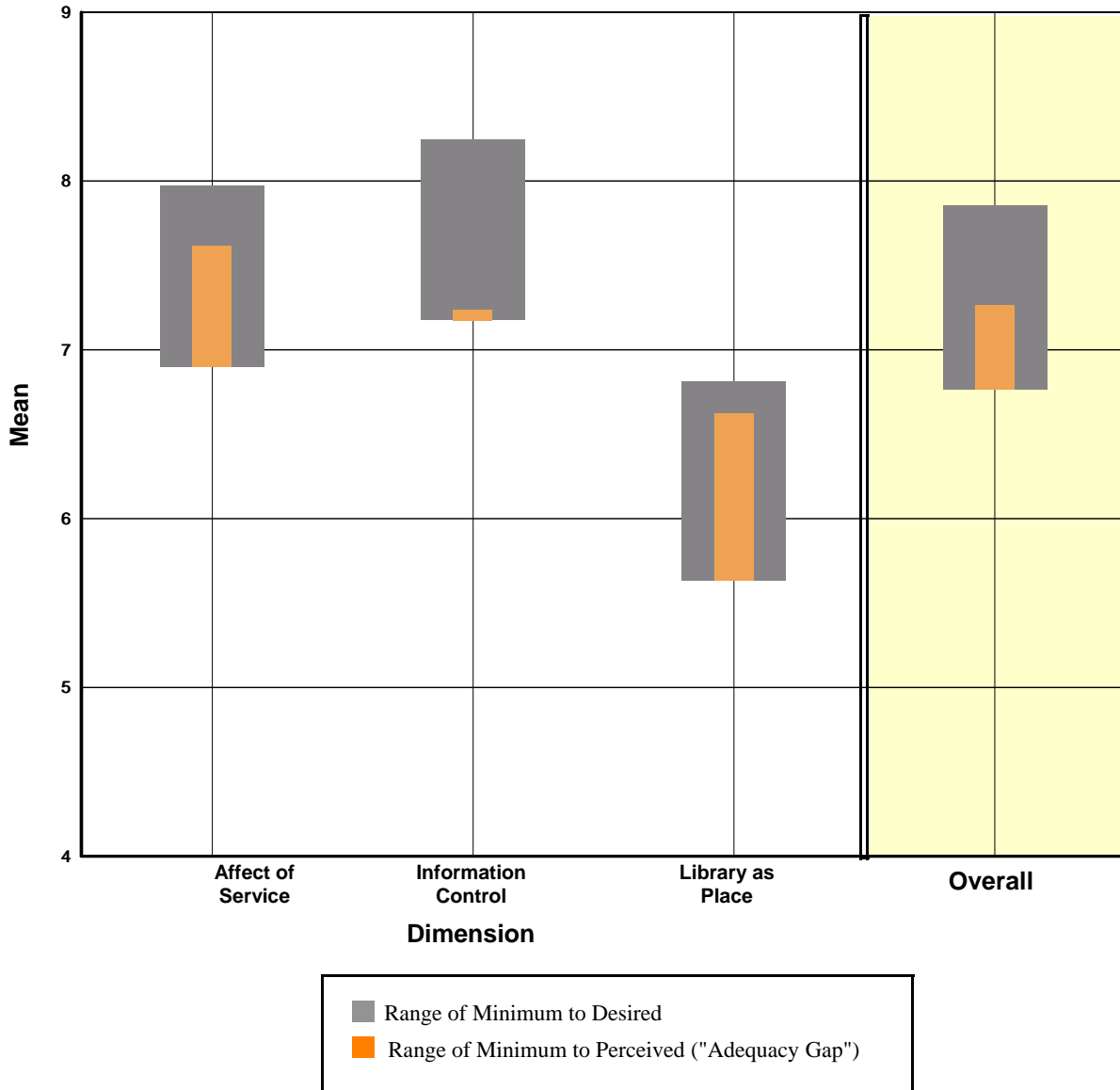
ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Employees who instill confidence in users	6.52	7.84	7.36	0.84	-0.48	2,153
AS-2	Giving users individual attention	6.39	7.55	7.20	0.82	-0.34	2,009
AS-3	Employees who are consistently courteous	7.07	8.09	7.81	0.75	-0.28	2,111
AS-4	Readiness to respond to users' questions	7.01	8.03	7.59	0.57	-0.45	2,175
AS-5	Employees who have the knowledge to answer user questions	7.07	8.11	7.63	0.56	-0.48	2,312
AS-6	Employees who deal with users in a caring fashion	6.90	8.01	7.73	0.83	-0.28	6,084
AS-7	Employees who understand the needs of their users	7.07	8.12	7.46	0.39	-0.66	2,084
AS-8	Willingness to help users	7.09	8.11	7.72	0.63	-0.39	2,164
AS-9	Dependability in handling users' service problems	7.09	8.11	7.45	0.36	-0.66	1,991
Information Control							
IC-1	Making electronic resources accessible from my home or office	7.60	8.54	7.51	-0.09	-1.03	2,648
IC-2	A library Web site enabling me to locate information on my own	7.45	8.45	7.07	-0.38	-1.38	2,534
IC-3	The printed library materials I need for my work	6.54	7.67	6.87	0.33	-0.80	2,054
IC-4	The electronic information resources I need	7.14	8.28	7.29	0.16	-0.99	6,271
IC-5	Modern equipment that lets me easily access needed information	7.02	8.05	7.27	0.25	-0.78	2,288
IC-6	Easy-to-use access tools that allow me to find things on my own	7.22	8.33	7.10	-0.12	-1.23	2,448
IC-7	Making information easily accessible for independent use	7.21	8.26	7.35	0.14	-0.91	2,269
IC-8	Print and/or electronic journal collections I require for my work	7.52	8.47	7.31	-0.20	-1.16	2,519
Library as Place							
LP-1	Library space that inspires study and learning	5.50	6.75	6.49	0.99	-0.26	5,126
LP-2	Quiet space for individual activities	5.77	6.87	6.56	0.79	-0.31	1,721
LP-3	A comfortable and inviting location	6.03	7.31	6.89	0.86	-0.42	2,040
LP-4	A getaway for study, learning, or research	6.23	7.34	6.83	0.59	-0.51	1,865
LP-5	Community space for group learning and group study	5.10	6.16	6.45	1.36	0.29	1,435
Overall:		6.76	7.85	7.26	0.50	-0.59	6,344

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
Affect of Service							
AS-1	Employees who instill confidence in users	1.93	1.55	1.57	1.86	1.65	2,153
AS-2	Giving users individual attention	1.88	1.64	1.61	1.87	1.73	2,009
AS-3	Employees who are consistently courteous	1.82	1.37	1.45	1.89	1.61	2,111
AS-4	Readiness to respond to users' questions	1.66	1.32	1.45	1.72	1.50	2,175
AS-5	Employees who have the knowledge to answer user questions	1.69	1.34	1.42	1.75	1.59	2,312
AS-6	Employees who deal with users in a caring fashion	1.78	1.41	1.40	1.78	1.54	6,084
AS-7	Employees who understand the needs of their users	1.66	1.24	1.50	1.76	1.58	2,084
AS-8	Willingness to help users	1.63	1.29	1.43	1.71	1.52	2,164
AS-9	Dependability in handling users' service problems	1.61	1.26	1.47	1.76	1.57	1,991
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.53	1.02	1.54	1.84	1.59	2,648
IC-2	A library Web site enabling me to locate information on my own	1.48	1.01	1.66	2.03	1.80	2,534
IC-3	The printed library materials I need for my work	2.02	1.84	1.74	2.19	2.07	2,054
IC-4	The electronic information resources I need	1.68	1.26	1.48	1.86	1.64	6,271
IC-5	Modern equipment that lets me easily access needed information	1.69	1.37	1.51	1.88	1.70	2,288
IC-6	Easy-to-use access tools that allow me to find things on my own	1.51	1.06	1.53	1.87	1.65	2,448
IC-7	Making information easily accessible for independent use	1.52	1.11	1.43	1.74	1.53	2,269
IC-8	Print and/or electronic journal collections I require for my work	1.55	1.16	1.53	1.95	1.71	2,519
Library as Place							
LP-1	Library space that inspires study and learning	2.32	2.36	1.96	2.64	2.74	5,126
LP-2	Quiet space for individual activities	2.34	2.31	1.93	2.59	2.64	1,721
LP-3	A comfortable and inviting location	2.01	1.88	1.79	2.30	2.21	2,040
LP-4	A getaway for study, learning, or research	2.21	2.09	1.84	2.29	2.29	1,865
LP-5	Community space for group learning and group study	2.34	2.45	1.81	2.44	2.57	1,435
Overall:		1.35	1.07	1.16	1.42	1.26	6,344

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.



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	6.90	7.98	7.62	0.71	-0.36	6,303
Information Control	7.18	8.24	7.24	0.06	-1.01	6,338
Library as Place	5.63	6.81	6.62	0.99	-0.19	5,530
Overall	6.76	7.85	7.26	0.50	-0.59	6,344

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	1.59	1.24	1.28	1.56	1.35	6,303
Information Control	1.37	1.01	1.28	1.58	1.37	6,338
Library as Place	2.12	2.11	1.74	2.31	2.37	5,530
Overall	1.35	1.07	1.16	1.42	1.26	6,344

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	5.92	7.36	6.85	0.92	-0.51	53
Informing me of useful library services	5.75	7.14	6.63	0.88	-0.51	100
An environment that facilitates group study and problem solving	5.00	6.40	7.00	2.00	0.60	5
Having comprehensive electronic resources	7.13	8.19	6.81	-0.31	-1.38	16
Providing help when and where I need it	6.78	7.98	7.28	0.49	-0.70	555
Teaching me how to access, evaluate, and use information	6.16	7.35	7.12	0.96	-0.23	444
Making me aware of library services	6.05	7.34	6.67	0.62	-0.67	437
The right mix of electronic content	7.25	7.95	6.80	-0.45	-1.15	20
Library orientations / instruction sessions	5.62	6.66	7.07	1.44	0.41	250
Online course support (readings, links, references)	6.21	7.31	6.87	0.67	-0.44	78
Access to rare and historical materials	5.54	6.87	6.79	1.25	-0.08	179
Contribution to the intellectual atmosphere of the campus	6.79	7.80	7.27	0.48	-0.52	143
Ready access to computers / Internet / software	6.60	7.40	6.97	0.37	-0.44	156
Library keeping me informed about all of its services	5.98	7.12	6.23	0.25	-0.89	57
The multimedia (CD / DVD / video / audio) collections I need	6.44	7.47	7.19	0.74	-0.28	162
An environment conducive to learning through classes, programs, activities, and meetings	4.67	6.67	7.50	2.83	0.83	6
Helpfulness in dealing with users' IT problems	6.74	7.76	7.26	0.52	-0.50	50
Availability of subject specialist assistance	6.38	7.53	7.01	0.63	-0.52	337
Library staff teaching me how to effectively use the electronically available databases, journals, and books	4.84	6.88	6.56	1.72	-0.32	25
A library environment that is hospitable and conducive to finding and using information	6.89	7.91	6.84	-0.05	-1.07	44
Making me aware of library resources and services	6.43	7.51	6.90	0.47	-0.61	750
Teaching me how to locate, evaluate, and use information	6.09	7.23	7.36	1.27	0.14	22
Convenient service hours	6.63	7.76	7.53	0.90	-0.23	185

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

Ability to navigate library Web pages easily	7.29	8.44	6.60	-0.69	-1.83	1,195
A secure and safe place	7.50	8.21	7.75	0.25	-0.46	270
Access to archives, special collections	6.34	7.56	7.12	0.78	-0.45	312
Enabling me to find information myself 24 hours a day	7.46	8.46	7.67	0.21	-0.79	24
Facilitating self-directed research	6.85	7.93	7.44	0.60	-0.48	97
Full-text delivered electronically to individual users	7.19	8.15	7.40	0.21	-0.75	48
Interdisciplinary library needs being addressed	6.51	7.56	6.32	-0.20	-1.24	41
Providing direction to self-navigate the library	6.46	7.53	7.12	0.66	-0.40	89
Providing search tools that permit me to work autonomously	7.56	8.33	7.93	0.37	-0.41	27
Space for group / individual study and research needs	5.75	6.80	6.81	1.06	0.01	89
Space that facilitates quiet study	5.65	7.08	6.04	0.39	-1.04	71
Visually appealing facilities	5.32	6.68	6.00	0.68	-0.68	31
Personalization features in the electronic library	5.11	6.11	4.78	-0.33	-1.33	9
Space for students to study and work in groups	5.25	6.21	6.36	1.11	0.14	56
Adequate hours of service	6.65	7.73	7.22	0.57	-0.51	276
Library staff providing help that assists in finding information needed now while improving my research skills	6.98	7.71	7.51	0.53	-0.20	106
The library provides access to archival materials (documents, manuscripts, and photographs)	5.61	7.11	6.61	1.00	-0.50	18
Ease and timeliness in getting materials from other libraries	6.96	8.00	7.34	0.38	-0.66	367
Helpful online guides and tutorials	6.45	7.61	6.50	0.05	-1.11	124
An online catalog that is user-friendly for finding materials	7.56	8.65	6.52	-1.04	-2.13	79
Availability of assistance to improve my research skills	6.35	7.49	7.15	0.80	-0.34	101
Availability of assistance in addressing issues of copyright and plagiarism	6.32	7.39	6.48	0.16	-0.90	31
Reliable mix of technology to help me complete my work	6.79	7.76	6.82	0.04	-0.93	165
The value of the library's resources and services to me for my academic success	7.63	8.38	7.68	0.05	-0.70	212

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	2.15	1.80	1.80	2.56	2.35	53
Informing me of useful library services	2.08	1.68	1.69	2.13	2.08	100
An environment that facilitates group study and problem solving	2.55	2.41	1.58	2.35	2.19	5
Having comprehensive electronic resources	1.45	1.52	1.38	1.82	1.50	16
Providing help when and where I need it	1.68	1.33	1.51	1.69	1.51	555
Teaching me how to access, evaluate, and use information	1.99	1.82	1.62	1.87	1.75	444
Making me aware of library services	2.04	1.68	1.75	2.27	2.03	437
The right mix of electronic content	1.25	1.19	1.44	1.93	1.93	20
Library orientations / instruction sessions	2.24	2.34	1.70	1.99	2.07	250
Online course support (readings, links, references)	2.41	2.20	1.88	2.32	2.28	78
Access to rare and historical materials	2.34	2.44	1.82	2.47	2.65	179
Contribution to the intellectual atmosphere of the campus	1.72	1.62	1.44	1.58	1.47	143
Ready access to computers / Internet / software	2.25	2.14	1.53	2.16	2.06	156
Library keeping me informed about all of its services	1.76	1.55	1.89	2.06	1.96	57
The multimedia (CD / DVD / video / audio) collections I need	2.13	2.05	1.75	2.25	2.15	162
An environment conducive to learning through classes, programs, activities, and meetings	2.42	1.37	1.52	2.71	2.04	6
Helpfulness in dealing with users' IT problems	1.87	1.27	1.41	1.73	1.49	50
Availability of subject specialist assistance	1.99	1.74	1.93	1.98	1.97	337
Library staff teaching me how to effectively use the electronically available databases, journals, and books	1.93	1.74	1.89	2.05	1.95	25
A library environment that is hospitable and conducive to finding and using information	1.65	1.29	1.75	1.90	1.92	44
Making me aware of library resources and services	1.79	1.55	1.61	1.99	1.86	750
Teaching me how to locate, evaluate, and use information	2.22	2.16	1.92	2.21	2.68	22
Convenient service hours	1.86	1.61	1.46	1.89	1.67	185
Ability to navigate library Web pages easily	1.52	1.00	1.80	2.22	1.98	1,195
A secure and safe place	1.76	1.57	1.48	1.95	1.62	270
Access to archives, special collections	2.08	1.76	1.67	2.21	1.99	312
Enabling me to find information myself 24 hours a day	1.35	0.88	1.20	1.59	1.47	24
Facilitating self-directed research	1.69	1.24	1.33	1.70	1.43	97
Full-text delivered electronically to individual users	1.72	1.40	1.69	1.91	1.74	48

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

Interdisciplinary library needs being addressed	1.78	1.78	1.71	2.03	2.03	41
Providing direction to self-navigate the library	1.78	1.69	1.62	1.64	1.56	89
Providing search tools that permit me to work autonomously	1.55	0.88	0.87	1.31	0.97	27
Space for group / individual study and research needs	2.23	2.20	1.62	1.96	2.07	89
Space that facilitates quiet study	2.41	2.36	2.08	2.88	2.75	71
Visually appealing facilities	2.34	2.55	2.02	2.02	2.64	31
Personalization features in the electronic library	2.42	3.10	1.92	1.94	2.35	9
Space for students to study and work in groups	2.62	2.69	1.66	2.35	2.45	56
Adequate hours of service	1.87	1.59	1.59	2.04	1.78	276
Library staff providing help that assists in finding information needed now while improving my research skills	1.76	1.72	1.58	1.62	1.61	106
The library provides access to archival materials (documents, manuscripts, and photographs)	2.03	2.22	1.75	1.64	2.04	18
Ease and timeliness in getting materials from other libraries	1.65	1.35	1.42	1.84	1.66	367
Helpful online guides and tutorials	1.82	1.57	1.84	1.97	2.05	124
An online catalog that is user-friendly for finding materials	1.59	0.75	1.77	2.10	1.90	79
Availability of assistance to improve my research skills	1.94	1.79	1.70	2.34	2.28	101
Availability of assistance in addressing issues of copyright and plagiarism	2.21	2.19	2.01	2.28	2.34	31
Reliable mix of technology to help me complete my work	1.64	1.57	1.58	1.96	1.85	165
The value of the library's resources and services to me for my academic success	1.51	1.26	1.55	1.95	1.59	212

Language: English (American), French (Canada)

Institution Type: College or University

Consortium: ARL

User Group: Faculty

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.	7.80	1.41	3,643
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.43	1.55	3,663
How would you rate the overall quality of the service provided by the library?	7.59	1.31	6,342

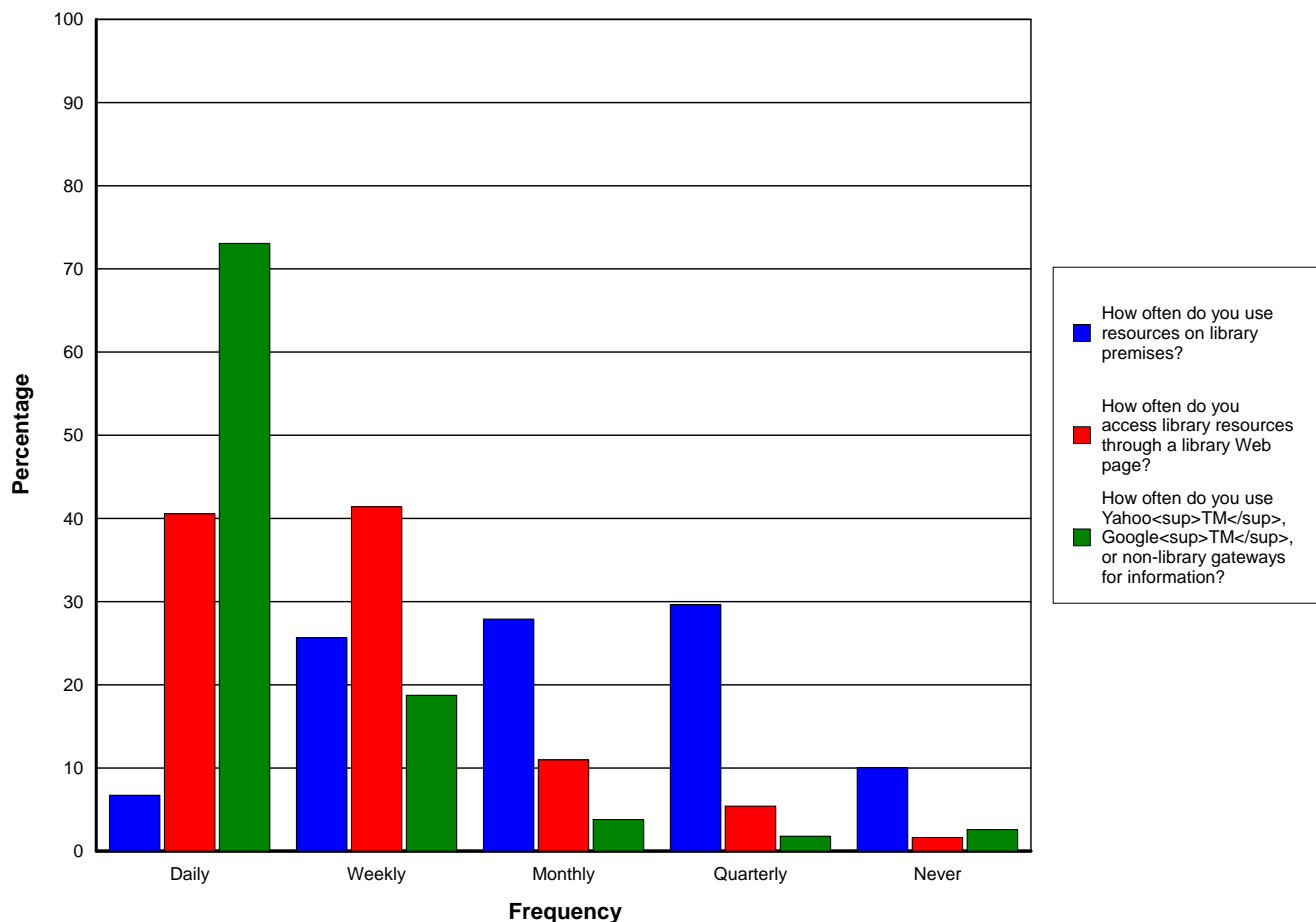
6.6 Information Literacy Outcomes Questions Summary for Faculty

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.	6.63	2.02	2,855
The library aids my advancement in my academic discipline or work.	7.53	1.58	3,215
The library enables me to be more efficient in my academic pursuits or work.	7.47	1.60	3,410
The library helps me distinguish between trustworthy and untrustworthy information.	5.93	2.04	3,272
The library provides me with the information skills I need in my work or study.	6.81	1.81	2,818

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?	427 6.73%	1,628 25.67%	1,770 27.90%	1,881 29.65%	637 10.04%	6,343 100.00%
How often do you access library resources through a library Web page?	2,572 40.56%	2,626 41.41%	696 10.97%	344 5.42%	104 1.64%	6,342 100.00%
How often do you use YahooTM, GoogleTM, or non-library gateways for information?	4,633 73.06%	1,189 18.75%	241 3.80%	114 1.80%	164 2.59%	6,341 100.00%

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	18	3.51
23 - 30	63	12.28
31 - 45	166	32.36
46 - 65	248	48.34
Over 65	18	3.51
Total:	513	100.00

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.

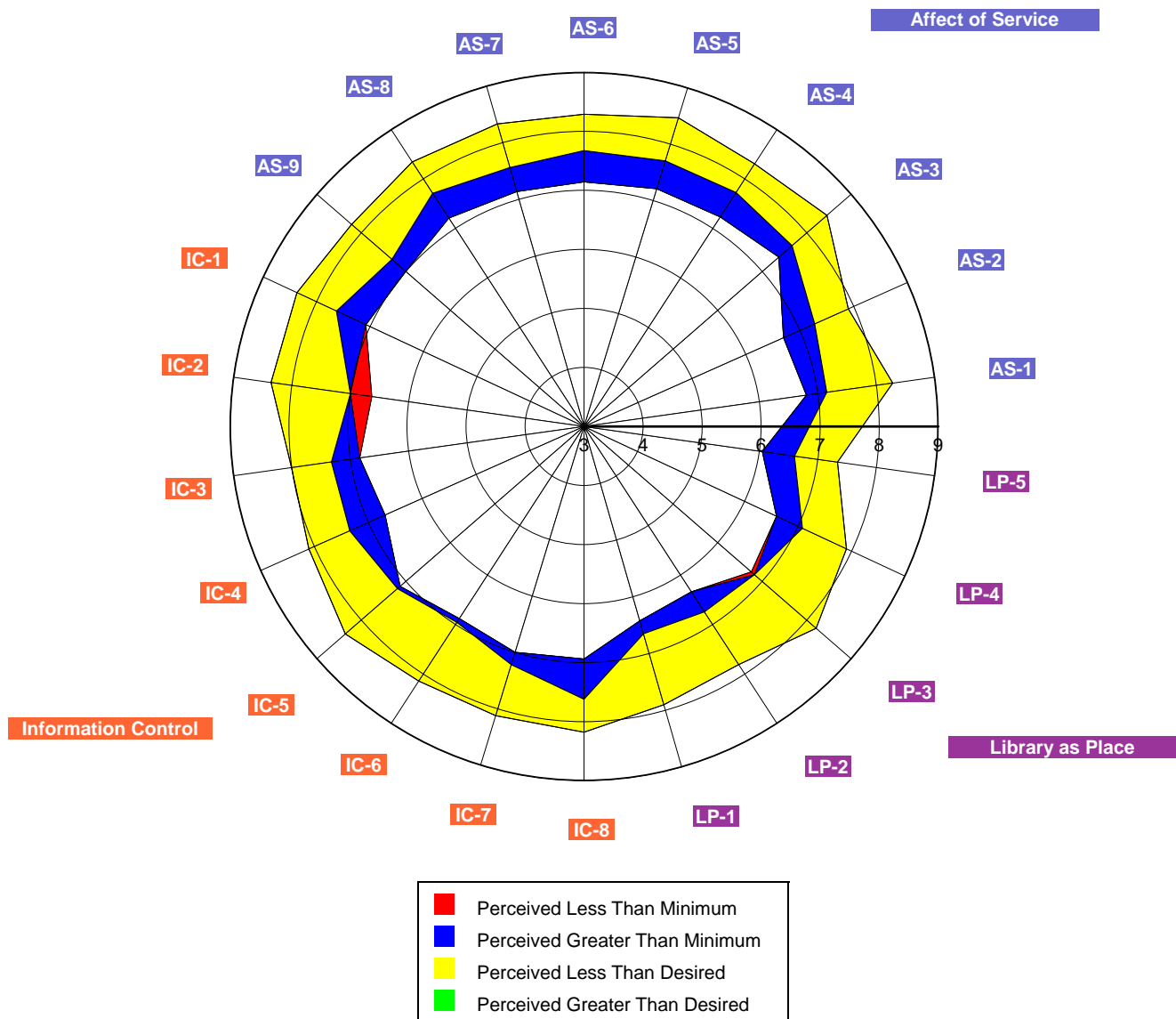
Sex:	Respondents n	Respondents %
Female	339	66.08
Male	174	33.92
Total:	513	100.00

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.)



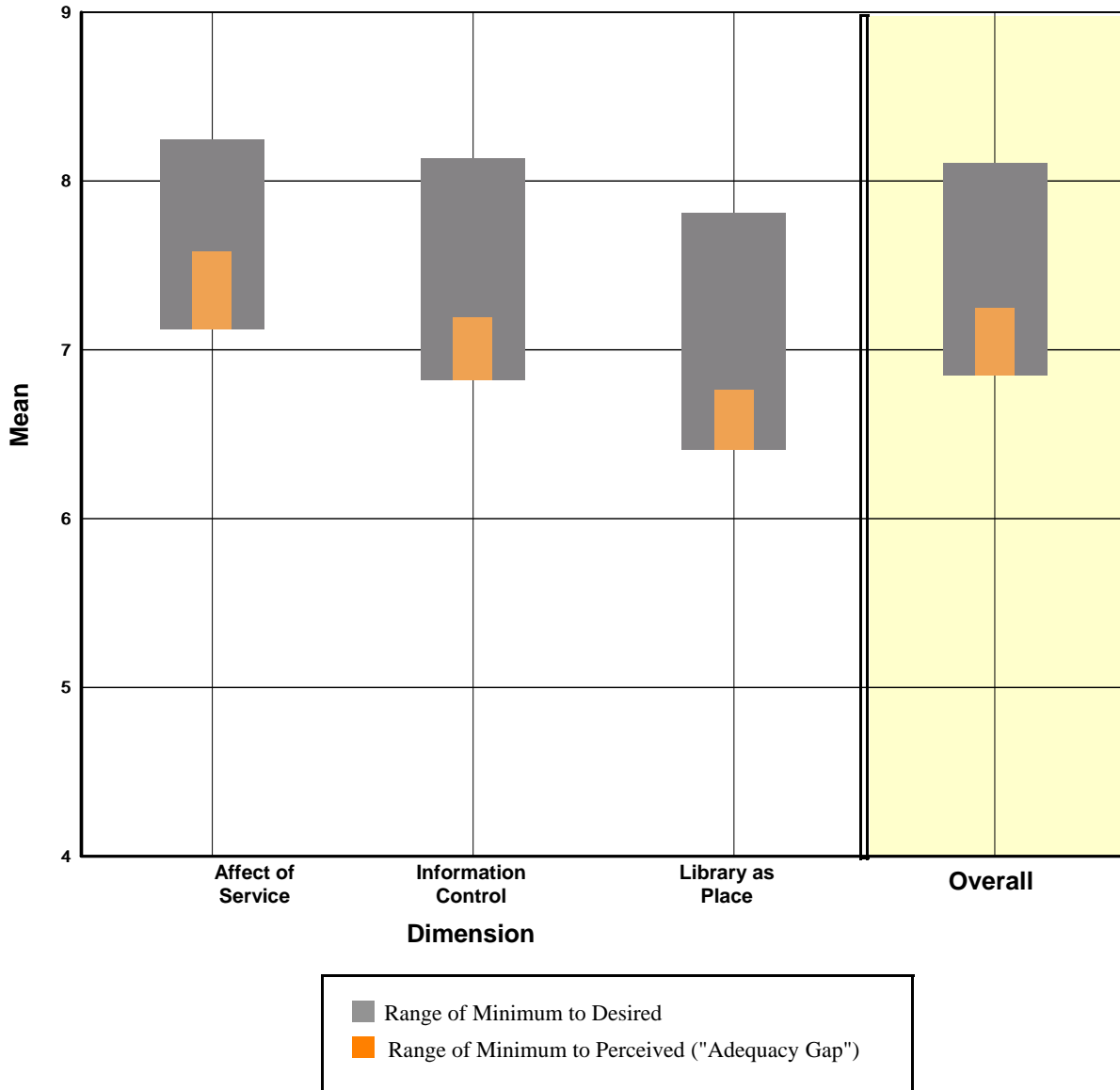
ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Employees who instill confidence in users	6.80	8.28	7.15	0.35	-1.13	210
AS-2	Giving users individual attention	6.70	7.90	7.28	0.58	-0.62	209
AS-3	Employees who are consistently courteous	7.37	8.45	7.67	0.30	-0.78	201
AS-4	Readiness to respond to users' questions	7.23	8.31	7.73	0.49	-0.58	213
AS-5	Employees who have the knowledge to answer user questions	7.21	8.47	7.71	0.49	-0.76	207
AS-6	Employees who deal with users in a caring fashion	7.14	8.29	7.68	0.53	-0.61	505
AS-7	Employees who understand the needs of their users	7.14	8.33	7.57	0.43	-0.77	223
AS-8	Willingness to help users	7.21	8.34	7.71	0.50	-0.63	215
AS-9	Dependability in handling users' service problems	7.00	8.22	7.31	0.31	-0.90	216
Information Control							
IC-1	Making electronic resources accessible from my home or office	7.08	8.37	7.63	0.55	-0.74	213
IC-2	A library Web site enabling me to locate information on my own	7.00	8.35	6.63	-0.37	-1.72	234
IC-3	The printed library materials I need for my work	6.84	8.01	7.32	0.48	-0.68	192
IC-4	The electronic information resources I need	6.69	8.10	7.35	0.65	-0.76	486
IC-5	Modern equipment that lets me easily access needed information	7.13	8.36	7.19	0.06	-1.17	232
IC-6	Easy-to-use access tools that allow me to find things on my own	6.88	8.14	6.96	0.08	-1.19	252
IC-7	Making information easily accessible for independent use	7.00	8.12	7.22	0.22	-0.90	213
IC-8	Print and/or electronic journal collections I require for my work	6.94	8.18	7.62	0.68	-0.56	214
Library as Place							
LP-1	Library space that inspires study and learning	6.42	7.90	6.65	0.23	-1.25	476
LP-2	Quiet space for individual activities	6.34	7.81	6.75	0.41	-1.07	200
LP-3	A comfortable and inviting location	6.83	8.21	6.76	-0.07	-1.46	213
LP-4	A getaway for study, learning, or research	6.60	7.91	7.08	0.49	-0.82	202
LP-5	Community space for group learning and group study	6.05	7.34	6.60	0.55	-0.74	178
Overall:		6.85	8.10	7.25	0.40	-0.85	513

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
Affect of Service							
AS-1	Employees who instill confidence in users	1.62	1.02	1.42	1.87	1.63	210
AS-2	Giving users individual attention	1.61	1.28	1.40	1.87	1.58	209
AS-3	Employees who are consistently courteous	1.31	0.82	1.19	1.62	1.38	201
AS-4	Readiness to respond to users' questions	1.34	0.95	1.13	1.43	1.23	213
AS-5	Employees who have the knowledge to answer user questions	1.34	0.86	1.25	1.48	1.40	207
AS-6	Employees who deal with users in a caring fashion	1.53	1.09	1.31	1.62	1.50	505
AS-7	Employees who understand the needs of their users	1.31	0.80	1.21	1.57	1.29	223
AS-8	Willingness to help users	1.52	1.03	1.16	1.54	1.38	215
AS-9	Dependability in handling users' service problems	1.50	1.08	1.23	1.61	1.38	216
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.61	1.04	1.32	1.68	1.50	213
IC-2	A library Web site enabling me to locate information on my own	1.60	1.01	1.79	2.07	1.90	234
IC-3	The printed library materials I need for my work	1.40	1.24	1.26	1.61	1.60	192
IC-4	The electronic information resources I need	1.63	1.24	1.32	1.79	1.62	486
IC-5	Modern equipment that lets me easily access needed information	1.26	0.92	1.44	1.69	1.60	232
IC-6	Easy-to-use access tools that allow me to find things on my own	1.51	1.12	1.49	1.95	1.68	252
IC-7	Making information easily accessible for independent use	1.39	1.13	1.35	1.66	1.72	213
IC-8	Print and/or electronic journal collections I require for my work	1.58	1.34	1.15	1.81	1.61	214
Library as Place							
LP-1	Library space that inspires study and learning	1.79	1.59	1.81	2.26	2.28	476
LP-2	Quiet space for individual activities	1.96	1.45	1.72	2.37	2.09	200
LP-3	A comfortable and inviting location	1.49	1.04	1.80	2.09	2.09	213
LP-4	A getaway for study, learning, or research	1.76	1.43	1.47	1.91	1.74	202
LP-5	Community space for group learning and group study	2.05	1.86	1.69	2.30	2.24	178
Overall:		1.26	0.91	1.10	1.39	1.28	513

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.



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	7.12	8.25	7.58	0.46	-0.67	509
Information Control	6.82	8.14	7.20	0.37	-0.94	511
Library as Place	6.41	7.81	6.76	0.35	-1.05	494
Overall	6.85	8.10	7.25	0.40	-0.85	513

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	1.34	0.95	1.18	1.44	1.32	509
Information Control	1.36	1.00	1.23	1.62	1.48	511
Library as Place	1.66	1.43	1.55	1.97	1.94	494
Overall	1.26	0.91	1.10	1.39	1.28	513

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	3.50	6.00	7.00	3.50	1.00	2
Informing me of useful library services	6.25	7.50	7.25	1.00	-0.25	16
An environment that facilitates group study and problem solving	5.00	9.00	8.00	3.00	-1.00	1
Providing help when and where I need it	6.67	7.90	6.96	0.29	-0.94	52
Teaching me how to access, evaluate, and use information	6.74	8.02	7.67	0.92	-0.35	66
Making me aware of library services	6.57	7.66	6.75	0.18	-0.91	56
Library orientations / instruction sessions	6.40	7.70	7.10	0.70	-0.60	10
Online course support (readings, links, references)	7.30	8.20	7.10	-0.20	-1.10	10
Access to rare and historical materials	6.11	7.47	7.60	1.49	0.13	53
Ready access to computers / Internet / software	7.30	8.37	7.37	0.07	-1.00	30
Library keeping me informed about all of its services	6.67	8.67	7.67	1.00	-1.00	3
The multimedia (CD / DVD / video / audio) collections I need	6.62	8.00	7.92	1.30	-0.08	50
Helpfulness in dealing with users' IT problems	7.25	8.75	7.00	-0.25	-1.75	4
Availability of subject specialist assistance	6.91	8.04	7.09	0.19	-0.94	54
Making me aware of library resources and services	6.70	7.92	7.22	0.52	-0.70	87
Teaching me how to locate, evaluate, and use information	7.00	7.00	6.50	-0.50	-0.50	2
Convenient service hours	6.62	7.85	7.77	1.15	-0.08	13
Ability to navigate library Web pages easily	7.37	8.41	6.25	-1.11	-2.16	87
A secure and safe place	7.59	8.45	7.51	-0.08	-0.93	76
Access to archives, special collections	6.86	8.14	7.56	0.70	-0.58	50
Facilitating self-directed research	7.60	8.40	7.60	0.00	-0.80	5
Full-text delivered electronically to individual users	5.67	7.67	8.00	2.33	0.33	3
Interdisciplinary library needs being addressed	4.00	4.00	4.00	0.00	0.00	1
Providing direction to self-navigate the library	6.57	8.00	6.00	-0.57	-2.00	7

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

Space for group / individual study and research needs	6.50	7.67	7.33	0.83	-0.33	6
Space that facilitates quiet study	5.00	7.00	5.00	0.00	-2.00	1
Adequate hours of service	7.12	8.24	7.82	0.71	-0.41	17
Library staff providing help that assists in finding information needed now while improving my research skills	6.50	7.67	7.33	0.83	-0.33	6
The library provides access to archival materials (documents, manuscripts, and photographs)	6.33	6.67	7.00	0.67	0.33	3
Ease and timeliness in getting materials from other libraries	6.89	7.95	7.62	0.73	-0.32	37
Helpful online guides and tutorials	7.22	7.44	6.78	-0.44	-0.67	9
An online catalog that is user-friendly for finding materials	7.33	8.44	5.89	-1.44	-2.56	9
Availability of assistance to improve my research skills	7.00	8.80	7.60	0.60	-1.20	5
Reliable mix of technology to help me complete my work	6.63	8.00	7.50	0.88	-0.50	8
The value of the library's resources and services to me for my academic success	6.38	7.13	7.25	0.88	0.13	8

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	2.12	4.24	1.41	0.71	2.83	2
Informing me of useful library services	1.29	1.46	1.29	1.32	1.65	16
An environment that facilitates group study and problem solving						1
Providing help when and where I need it	1.63	1.22	1.43	1.67	1.30	52
Teaching me how to access, evaluate, and use information	1.62	1.10	1.11	1.30	1.17	66
Making me aware of library services	1.55	1.32	1.53	1.98	1.63	56
Library orientations / instruction sessions	2.12	1.16	1.60	2.87	2.22	10
Online course support (readings, links, references)	2.00	0.92	1.91	3.19	2.28	10
Access to rare and historical materials	1.95	1.54	1.32	1.96	1.61	53
Ready access to computers / Internet / software	1.76	1.43	1.27	2.12	1.76	30
Library keeping me informed about all of its services	0.58	0.58	1.53	1.73	1.73	3
The multimedia (CD / DVD / video / audio) collections I need	1.55	1.09	1.23	1.43	1.18	50
Helpfulness in dealing with users' IT problems	0.96	0.50	1.83	1.26	1.71	4
Availability of subject specialist assistance	1.48	1.18	1.63	1.90	1.73	54
Making me aware of library resources and services	1.80	1.30	1.71	1.58	1.59	87
Teaching me how to locate, evaluate, and use information	1.41	1.41	2.12	0.71	0.71	2
Convenient service hours	1.56	1.52	1.42	1.21	1.50	13
Ability to navigate library Web pages easily	1.29	0.92	1.73	2.18	2.01	87
A secure and safe place	1.33	1.00	1.32	1.34	1.40	76
Access to archives, special collections	1.28	1.03	1.21	1.57	1.43	50
Facilitating self-directed research	1.14	0.55	1.14	0.71	0.84	5
Full-text delivered electronically to individual users	1.15	2.31	1.00	2.08	2.52	3
Interdisciplinary library needs being addressed						1
Providing direction to self-navigate the library	1.27	1.15	2.58	3.64	3.21	7
Space for group / individual study and research needs	1.97	1.51	1.21	1.47	1.37	6
Space that facilitates quiet study						1
Adequate hours of service	1.22	0.66	1.13	1.65	1.33	17
Library staff providing help that assists in finding information needed now while improving my research skills	0.84	0.82	0.82	0.98	0.52	6
The library provides access to archival materials (documents, manuscripts, and photographs)	1.15	1.53	2.00	1.15	1.53	3

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

Ease and timeliness in getting materials from other libraries	1.07	0.85	0.95	1.19	0.91	37
Helpful online guides and tutorials	1.48	2.13	1.72	2.07	3.12	9
An online catalog that is user-friendly for finding materials	1.50	1.01	2.32	2.60	2.88	9
Availability of assistance to improve my research skills	1.22	0.45	0.55	1.52	0.45	5
Reliable mix of technology to help me complete my work	1.60	0.53	0.53	1.73	0.93	8
The value of the library's resources and services to me for my academic success	2.62	2.85	1.58	2.03	1.89	8

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.	7.70	1.33	313
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.55	1.35	321
How would you rate the overall quality of the service provided by the library?	7.60	1.23	513

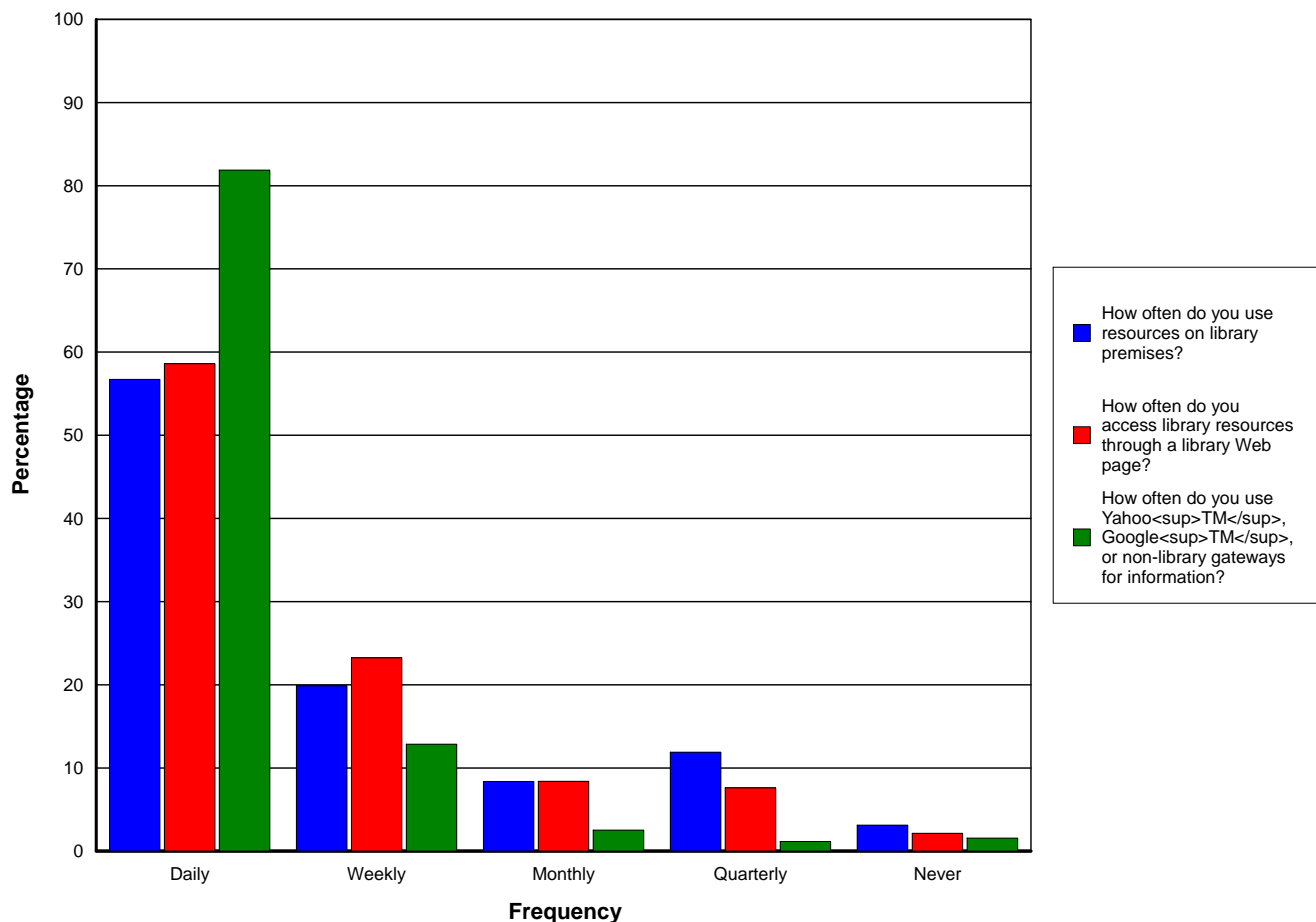
7.6 Information Literacy Outcomes Questions Summary for Library Staff

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.	6.82	1.80	270
The library aids my advancement in my academic discipline or work.	7.47	1.41	277
The library enables me to be more efficient in my academic pursuits or work.	7.51	1.30	282
The library helps me distinguish between trustworthy and untrustworthy information.	6.90	1.75	292
The library provides me with the information skills I need in my work or study.	7.16	1.50	268

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?	291 56.73%	102 19.88%	43 8.38%	61 11.89%	16 3.12%	513 100.00%
How often do you access library resources through a library Web page?	300 58.59%	119 23.24%	43 8.40%	39 7.62%	11 2.15%	512 100.00%
How often do you use YahooTM, GoogleTM, or non-library gateways for information?	420 81.87%	66 12.87%	13 2.53%	6 1.17%	8 1.56%	513 100.00%

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	3	0.14
18 - 22	27	1.24
23 - 30	406	18.62
31 - 45	846	38.81
46 - 65	851	39.04
Over 65	47	2.16
Total:	2,180	100.00

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.

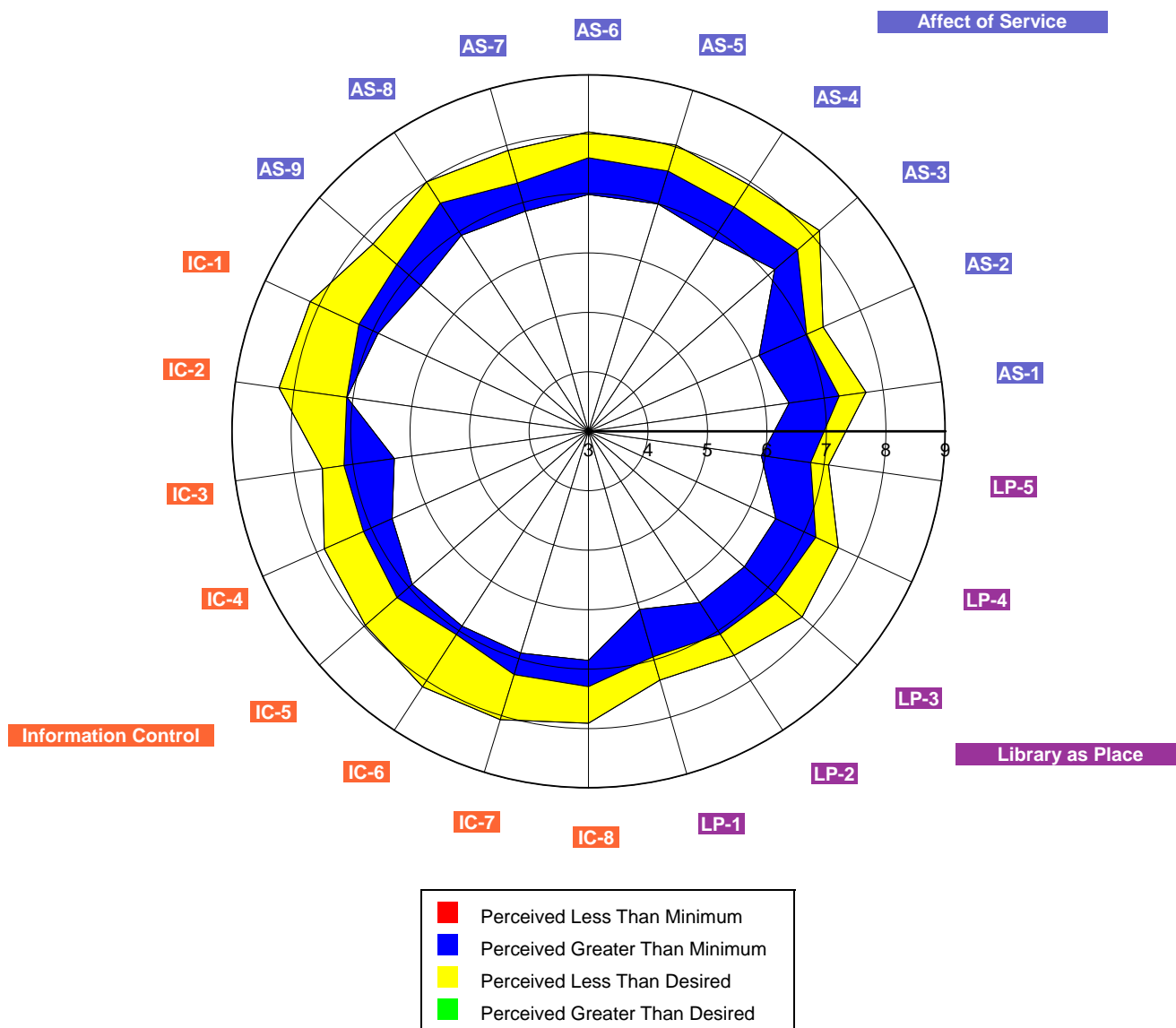
Sex:	Respondents n	Respondents %
Female	1,340	61.52
Male	838	38.48
Total:	2,178	100.00

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.)



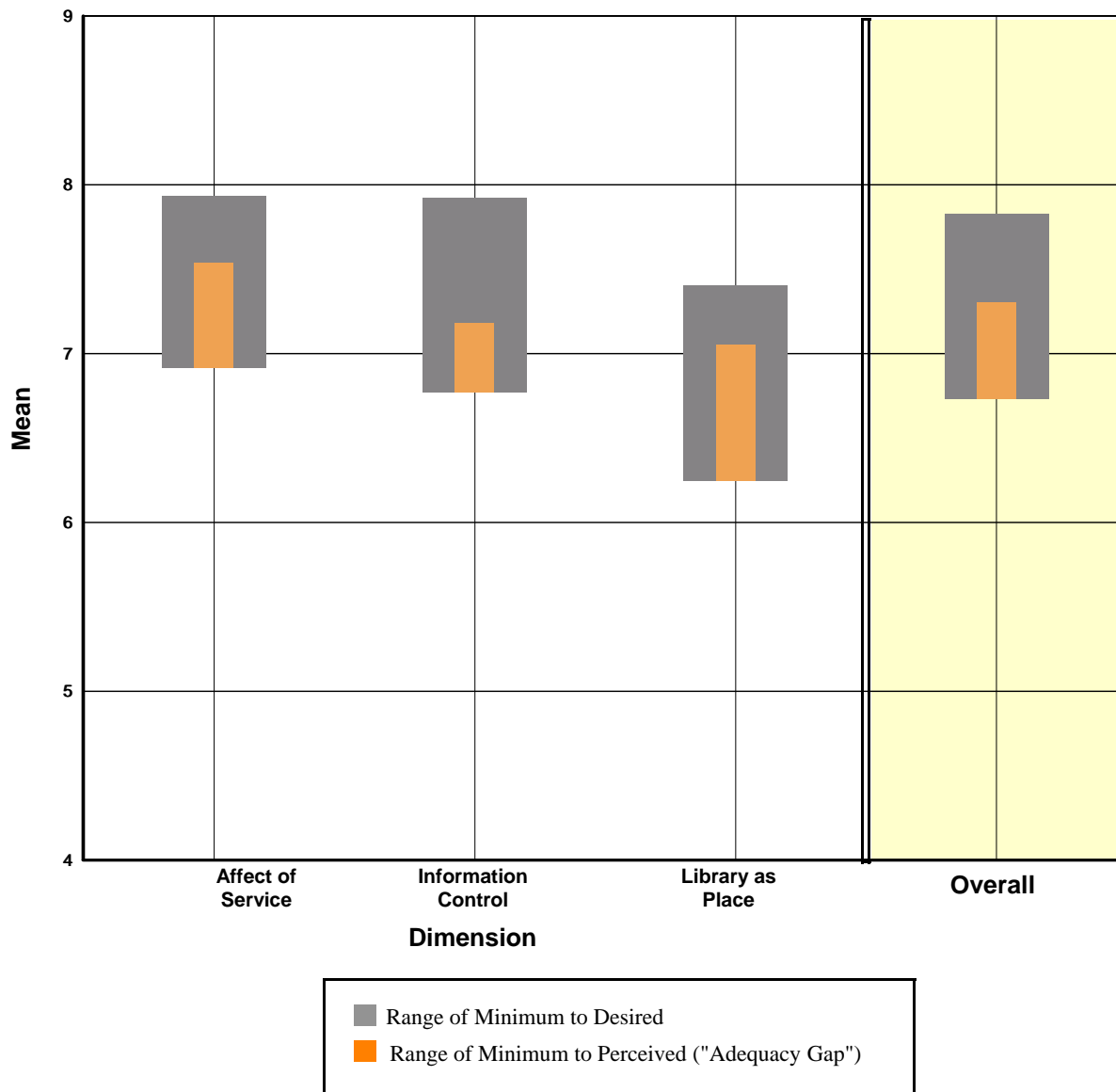
ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Employees who instill confidence in users	6.41	7.71	7.26	0.85	-0.45	811
AS-2	Giving users individual attention	6.14	7.32	7.02	0.87	-0.30	774
AS-3	Employees who are consistently courteous	7.15	8.15	7.66	0.51	-0.49	829
AS-4	Readiness to respond to users' questions	6.87	7.95	7.50	0.62	-0.45	796
AS-5	Employees who have the knowledge to answer user questions	7.00	8.03	7.58	0.58	-0.46	831
AS-6	Employees who deal with users in a caring fashion	6.98	8.04	7.60	0.62	-0.43	2,112
AS-7	Employees who understand the needs of their users	6.85	7.92	7.34	0.49	-0.57	795
AS-8	Willingness to help users	6.93	8.00	7.58	0.65	-0.42	820
AS-9	Dependability in handling users' service problems	6.74	7.80	7.27	0.54	-0.53	727
Information Control							
IC-1	Making electronic resources accessible from my home or office	6.91	8.16	7.26	0.35	-0.90	897
IC-2	A library Web site enabling me to locate information on my own	7.10	8.26	7.11	0.00	-1.15	925
IC-3	The printed library materials I need for my work	6.30	7.52	7.15	0.85	-0.36	694
IC-4	The electronic information resources I need	6.61	7.86	7.14	0.53	-0.72	2,062
IC-5	Modern equipment that lets me easily access needed information	6.93	7.97	7.27	0.34	-0.71	889
IC-6	Easy-to-use access tools that allow me to find things on my own	6.91	8.13	7.08	0.17	-1.05	879
IC-7	Making information easily accessible for independent use	6.90	8.07	7.28	0.38	-0.79	857
IC-8	Print and/or electronic journal collections I require for my work	6.85	7.91	7.30	0.44	-0.61	777
Library as Place							
LP-1	Library space that inspires study and learning	6.12	7.35	6.95	0.83	-0.41	1,813
LP-2	Quiet space for individual activities	6.44	7.50	7.07	0.63	-0.43	705
LP-3	A comfortable and inviting location	6.47	7.76	7.17	0.69	-0.59	794
LP-4	A getaway for study, learning, or research	6.48	7.63	7.22	0.74	-0.41	750
LP-5	Community space for group learning and group study	5.94	7.08	6.77	0.84	-0.30	567
Overall:		6.73	7.83	7.30	0.57	-0.52	2,180

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
Affect of Service							
AS-1	Employees who instill confidence in users	1.89	1.48	1.52	1.90	1.68	811
AS-2	Giving users individual attention	1.98	1.69	1.66	1.94	1.77	774
AS-3	Employees who are consistently courteous	1.62	1.19	1.45	1.71	1.46	829
AS-4	Readiness to respond to users' questions	1.59	1.24	1.45	1.64	1.44	796
AS-5	Employees who have the knowledge to answer user questions	1.60	1.25	1.37	1.70	1.53	831
AS-6	Employees who deal with users in a caring fashion	1.68	1.24	1.42	1.75	1.52	2,112
AS-7	Employees who understand the needs of their users	1.61	1.32	1.45	1.70	1.45	795
AS-8	Willingness to help users	1.64	1.27	1.39	1.67	1.44	820
AS-9	Dependability in handling users' service problems	1.73	1.46	1.53	1.79	1.67	727
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.74	1.31	1.59	1.96	1.70	897
IC-2	A library Web site enabling me to locate information on my own	1.51	1.12	1.61	1.95	1.72	925
IC-3	The printed library materials I need for my work	1.96	1.74	1.53	1.93	1.82	694
IC-4	The electronic information resources I need	1.77	1.49	1.56	1.90	1.78	2,062
IC-5	Modern equipment that lets me easily access needed information	1.51	1.26	1.40	1.70	1.56	889
IC-6	Easy-to-use access tools that allow me to find things on my own	1.59	1.15	1.52	1.88	1.60	879
IC-7	Making information easily accessible for independent use	1.56	1.21	1.44	1.75	1.51	857
IC-8	Print and/or electronic journal collections I require for my work	1.91	1.66	1.52	1.94	1.76	777
Library as Place							
LP-1	Library space that inspires study and learning	2.02	1.89	1.70	2.22	2.22	1,813
LP-2	Quiet space for individual activities	2.05	1.87	1.60	2.24	2.14	705
LP-3	A comfortable and inviting location	1.82	1.42	1.54	1.97	1.74	794
LP-4	A getaway for study, learning, or research	1.93	1.66	1.58	1.91	1.76	750
LP-5	Community space for group learning and group study	2.07	1.96	1.73	2.19	2.12	567
Overall:		1.37	1.06	1.14	1.41	1.23	2,180

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.



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	6.92	7.93	7.54	0.62	-0.39	2,165
Information Control	6.77	7.92	7.18	0.41	-0.74	2,164
Library as Place	6.25	7.40	7.05	0.80	-0.35	1,943
Overall	6.73	7.83	7.30	0.57	-0.52	2,180

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	1.50	1.14	1.28	1.53	1.33	2,165
Information Control	1.47	1.16	1.29	1.58	1.42	2,164
Library as Place	1.86	1.68	1.48	1.95	1.88	1,943
Overall	1.37	1.06	1.14	1.41	1.23	2,180

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	6.67	7.22	6.78	0.11	-0.44	9
Informing me of useful library services	5.48	7.00	5.86	0.38	-1.14	21
Providing help when and where I need it	6.49	7.72	7.18	0.69	-0.55	231
Teaching me how to access, evaluate, and use information	6.65	7.69	7.06	0.41	-0.63	224
Making me aware of library services	6.01	7.42	6.79	0.77	-0.63	149
Library orientations / instruction sessions	5.54	6.40	6.69	1.15	0.29	107
Online course support (readings, links, references)	6.29	7.52	7.19	0.90	-0.33	21
Access to rare and historical materials	5.49	6.79	6.50	1.01	-0.29	156
Contribution to the intellectual atmosphere of the campus	6.40	7.37	7.09	0.69	-0.28	65
Ready access to computers / Internet / software	6.52	7.44	7.13	0.60	-0.31	48
Library keeping me informed about all of its services	5.61	7.29	6.11	0.50	-1.18	28
The multimedia (CD / DVD / video / audio) collections I need	6.38	7.16	6.84	0.46	-0.33	80
Helpfulness in dealing with users' IT problems	6.95	8.10	7.30	0.35	-0.80	20
Availability of subject specialist assistance	5.92	7.29	6.67	0.76	-0.62	86
Making me aware of library resources and services	6.32	7.54	6.75	0.44	-0.79	439
Teaching me how to locate, evaluate, and use information	5.67	7.67	6.17	0.50	-1.50	6
Convenient service hours	7.33	7.96	7.83	0.50	-0.13	24
Ability to navigate library Web pages easily	7.01	8.22	7.05	0.04	-1.17	497
A secure and safe place	7.64	8.16	7.63	-0.01	-0.54	166
Access to archives, special collections	6.16	7.64	7.47	1.31	-0.17	122
Enabling me to find information myself 24 hours a day	7.00	8.00	7.00	0.00	-1.00	1
Facilitating self-directed research	6.75	7.25	7.00	0.25	-0.25	4
Full-text delivered electronically to individual users	6.65	7.65	6.39	-0.26	-1.26	23
Interdisciplinary library needs being addressed	2.00	2.00	7.00	5.00	5.00	1

Providing direction to self-navigate the library	7.03	8.03	7.03	0.00	-1.00	33
Space that facilitates quiet study	3.00	7.00	7.00	4.00	0.00	1
Visually appealing facilities	3.00	9.00	7.00	4.00	-2.00	1
Personalization features in the electronic library	6.25	7.75	6.00	-0.25	-1.75	4
Space for students to study and work in groups	4.00	7.00	7.50	3.50	0.50	2
Adequate hours of service	7.30	8.16	7.72	0.41	-0.44	141
The library provides access to archival materials (documents, manuscripts, and photographs)	5.89	7.05	7.47	1.58	0.42	19
Ease and timeliness in getting materials from other libraries	6.65	7.90	7.64	0.99	-0.25	115
Helpful online guides and tutorials	6.25	7.55	6.86	0.62	-0.69	125
An online catalog that is user-friendly for finding materials	6.91	8.30	6.30	-0.61	-2.00	23
Availability of assistance to improve my research skills	6.09	7.59	7.01	0.92	-0.58	97
Reliable mix of technology to help me complete my work	8.00	8.50	9.00	1.00	0.50	2
The value of the library's resources and services to me for my academic success	6.90	7.73	7.85	0.95	0.12	41

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	2.55	2.68	1.86	3.22	3.28	9
Informing me of useful library services	1.99	2.17	1.77	1.02	1.49	21
Providing help when and where I need it	1.76	1.52	1.49	1.95	1.91	231
Teaching me how to access, evaluate, and use information	1.65	1.38	1.55	1.78	1.68	224
Making me aware of library services	2.07	1.71	1.74	2.16	2.03	149
Library orientations / instruction sessions	2.32	2.37	1.59	2.40	2.48	107
Online course support (readings, links, references)	2.12	1.86	1.69	1.30	1.56	21
Access to rare and historical materials	2.19	2.13	1.84	2.16	2.10	156
Contribution to the intellectual atmosphere of the campus	1.69	1.56	1.35	1.59	1.39	65
Ready access to computers / Internet / software	2.18	1.58	1.48	2.20	1.70	48
Library keeping me informed about all of its services	2.17	1.67	2.25	3.33	2.99	28
The multimedia (CD / DVD / video / audio) collections I need	1.96	1.95	1.83	2.10	2.23	80
Helpfulness in dealing with users' IT problems	2.37	1.17	1.42	1.53	1.06	20
Availability of subject specialist assistance	1.97	1.94	1.88	1.99	2.03	86
Making me aware of library resources and services	1.83	1.39	1.72	1.93	1.66	439
Teaching me how to locate, evaluate, and use information	3.27	1.97	2.04	2.95	2.88	6
Convenient service hours	1.31	1.40	1.27	1.59	1.80	24
Ability to navigate library Web pages easily	1.47	1.09	1.53	1.85	1.64	497
A secure and safe place	1.77	1.48	1.57	2.13	1.89	166
Access to archives, special collections	2.15	1.69	1.36	2.03	1.60	122
Enabling me to find information myself 24 hours a day						1
Facilitating self-directed research	1.71	2.06	1.41	0.96	0.96	4
Full-text delivered electronically to individual users	2.29	2.10	2.41	2.09	2.40	23
Interdisciplinary library needs being addressed						1
Providing direction to self-navigate the library	1.79	1.13	1.72	2.55	2.05	33
Space that facilitates quiet study						1
Visually appealing facilities						1
Personalization features in the electronic library	2.50	1.50	0.82	2.50	2.06	4
Space for students to study and work in groups	1.41	0.00	0.71	0.71	0.71	2
Adequate hours of service	1.58	0.97	1.33	1.62	1.33	141

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

The library provides access to archival materials (documents, manuscripts, and photographs)	2.56	2.22	1.74	2.46	2.22	19
Ease and timeliness in getting materials from other libraries	1.61	1.32	1.21	1.67	1.34	115
Helpful online guides and tutorials	1.99	1.53	1.71	1.83	1.63	125
An online catalog that is user-friendly for finding materials	1.59	0.82	2.05	2.64	2.32	23
Availability of assistance to improve my research skills	1.86	1.58	1.37	1.85	1.61	97
Reliable mix of technology to help me complete my work	1.41	0.71	0.00	1.41	0.71	2
The value of the library's resources and services to me for my academic success	1.85	1.70	1.20	1.83	1.78	41

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.	7.73	1.35	1,272
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.32	1.48	1,329
How would you rate the overall quality of the service provided by the library?	7.54	1.22	2,177

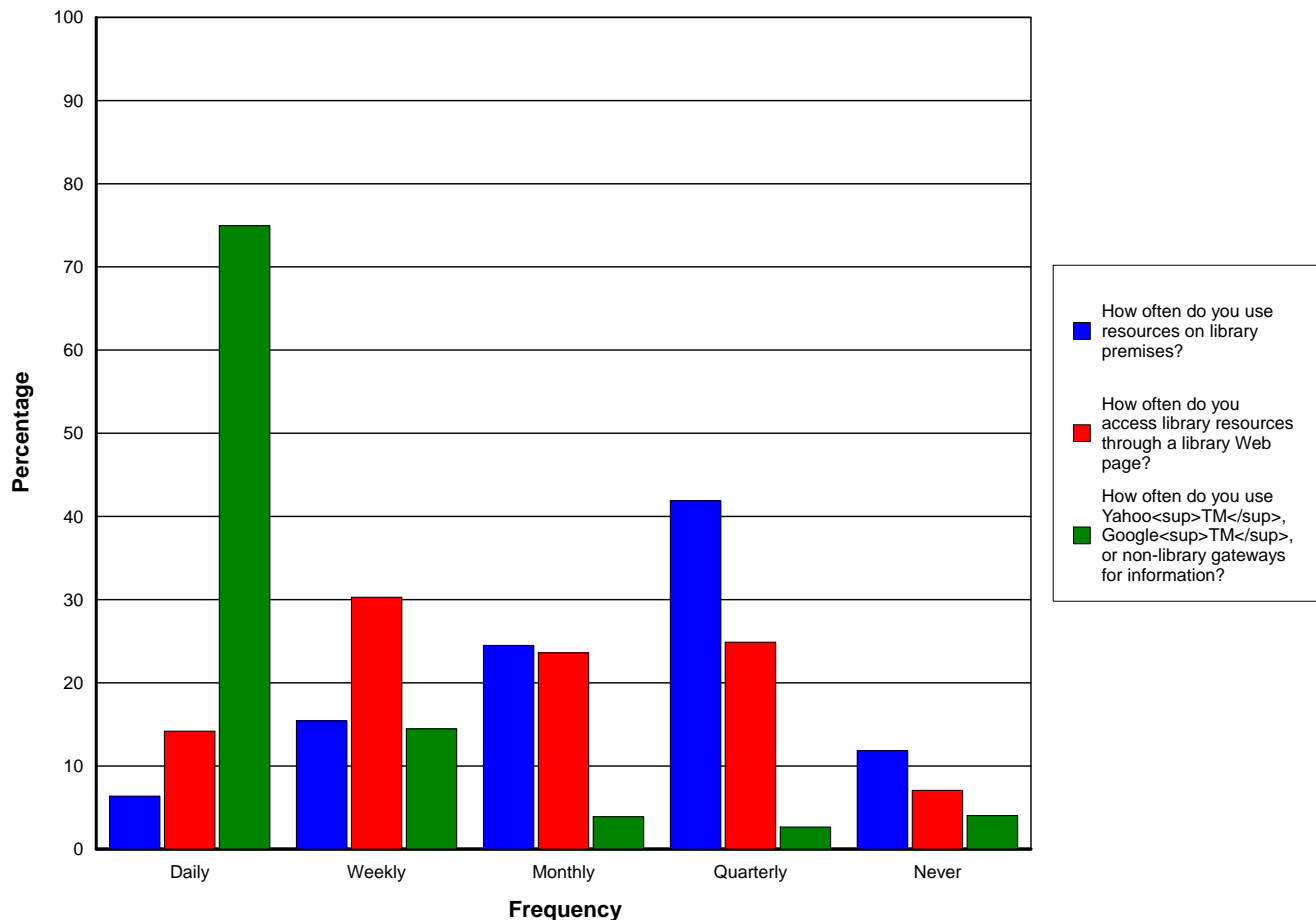
8.6 Information Literacy Outcomes Questions Summary for Staff

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.	6.54	1.89	1,070
The library aids my advancement in my academic discipline or work.	7.01	1.73	1,140
The library enables me to be more efficient in my academic pursuits or work.	7.15	1.63	1,178
The library helps me distinguish between trustworthy and untrustworthy information.	6.29	1.86	1,186
The library provides me with the information skills I need in my work or study.	6.76	1.67	1,041

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?	139 6.38%	336 15.41%	534 24.50%	913 41.88%	258 11.83%	2,180 100.00%
How often do you access library resources through a library Web page?	309 14.18%	660 30.29%	514 23.59%	542 24.87%	154 7.07%	2,179 100.00%
How often do you use YahooTM, GoogleTM, or non-library gateways for information?	1,634 74.95%	315 14.45%	85 3.90%	58 2.66%	88 4.04%	2,180 100.00%

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



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