LibQUAL+®

2010 Survey

Concordia University Libraries

Association of Research Libraries / Texas A&M University

www.libqual.org

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1   Introduction

1.1   Acknowledgements

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

The LibQUAL+® project requires the skills of a dedicated group. We would like to thank several members of the LibQUAL+® team for their key roles in the development of this service. From Texas A&M University, the qualitative leadership of Yvonna Lincoln has been key to the project's integrity. The behind-the-scenes roles of Bill Chollet and others from the library Systems and Training units were also formative in the early years. From the Association of Research Libraries, we are appreciative of the past contributions of Consuella Askew, MaShana Davis, Richard Groves, Kaylyn Groves, Amy Hoseth, Kristina Justh, Mary Jackson, Jonathan Sousa, and Benny Yu.

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

We would like to acknowledge the role of the Fund for the Improvement of Post-secondary Education (FIPSE), U.S. Department of Education, which provided grant funds of $498,368 over a three-year period (2001-03). We would also like to acknowledge the support of the National Science Foundation (NSF) for its grant of $245,737 over a three-year period (2002-04) to adapt the LibQUAL+® instrument for use in the science, math, engineering, and technology education digital library community, a project known as DigiQUAL. We would like to express our thanks for the financial support that has enabled the researchers engaged in this project to exceed all of our expectations in stated goals and objectives and deliver a remarkable assessment tool to the library community.

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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 2009, we have had 1,298 surveys implemented in over 20 countries, 20 language translations, and well over 1 million surveys. About 40% of the users who respond to the survey provide rich comments about the ways they use their libraries.

There have been numerous advancements over the years. In 2005, libraries were able to conduct LibQUAL+® over a two session period (Session I: January to May and Session II: July to December). The LibQUAL+® servers were moved from Texas A&M University to an external hosting facility under the ARL brand known as StatsQUAL®. Through the StatsQUAL® gateway we will continue to provide innovative tools for libraries to assess and manage their environments in the coming years. In 2006, we added an experimental version of the LibQUAL+® Analytics (for more information, see Section 1.6). Between 2007 and 2010 we incorporated additional languages including non-roman languages like Chinese, Greek, Hebrew, and Japanese. In 2008, we started experimenting with a new technology platform that incorporates many desired enhancements and tested a shorter version of the LibQUAL+® survey known as LibQUAL+® Lite. In 2010, we launched the new platform in our operational environment after researching extensively the LibQUAL+® Lite behavior [see: Kyrillidou, M. (2009). *Item Sampling in Service Quality Assessment Surveys to Improve Rates and Reduce Respondent Burden: The 'LibQUAL+® Lite' Randomized Control Trial (RCT)* (Doctoral dissertation). Retrieved from <https://www.ideals.illinois.edu/bitstream/handle/2142/14570/Kyrillidou_Martha.pdf?sequence=3>].

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

LibQUAL+® 2009 Survey Highlights
<**http://libqual.org/documents/admin/LibQUALHighlights2009_Full.pdf**>
<**http://libqual.org/documents/admin/LibQUALHighlights2009_Full_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.*

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

In an example of collaboration, LibQUAL+® participants are sharing their results within the LibQUAL+® community with an openness that nevertheless respects the confidentiality of each institution and its users. LibQUAL+® participants are actively shaping our Share Fair gatherings, our in-person events, and our understanding of how the collected data can be used. LibQUAL+® offers a rich resource that can be viewed using many lenses, should be interpreted in multiple ways, and is a powerful tool libraries can use to understand their environment.

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

With warm regards,

Martha Kyrillidou
Senior Director, ARL Statistics and Service Quality Programs

1.3   LibQUAL+®: Defining and Promoting Library Service Quality

What is LibQUAL+®?

LibQUAL+® is a suite of services that libraries use to solicit, track, understand, and act upon users' opinions of service quality. These services are offered to the library community by the Association of Research Libraries (ARL). The program's centerpiece is a rigorously tested Web-based survey paired with training that helps libraries assess and improve library services, change organizational culture, and market the library. The survey instrument measures library users' minimum, perceived, and desired service levels of service quality across three dimensions: Affect of Service, Information Control, and Library as Place. The goals of LibQUAL+® are to:

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

Since 2000, more than 1,000 libraries have participated in LibQUAL+®, including college and university libraries, community college libraries, health sciences libraries, academic law libraries, and public libraries---some through various consortia, others as independent participants. LibQUAL+® has expanded internationally, with participating institutions in Africa, Asia, Australia and Europe. It has been translated into a number of languages, including Afrikaans, Chinese (Traditional), Danish, Dutch, Finnish, French, German, Greek, Hebrew, Japanese, Norwegian, Spanish, Swedish, and Welsh. The growing LibQUAL+® community of participants and its extensive dataset are rich resources for improving library services.

How will LibQUAL+® benefit your library?

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

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

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

How is the LibQUAL+® survey conducted?

Conducting the LibQUAL+® survey requires little technical expertise on your part. Use our online Management Center to set up and track the progress of your survey. You invite your users to take the survey by distributing the URL for your library's Web form via e-mail or posting a link to your survey on the library's Web site. Respondents complete the survey form and their answers are sent to the LibQUAL+® database. The data are analyzed and presented to you in reports describing your users' desired, perceived, and minimum expectations of service.

What are the origins of the LibQUAL+® survey?

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

1.4   Web Access to Data

Data summaries from the 2010 iteration of the LibQUAL+® survey will be available to project participants online in the Data Repository via the LibQUAL+® survey management site:

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

1.5   Explanation of Charts and Tables

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

< http://libqual.org/about/about_survey/tools>

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

Radar Charts

Radar charts are commonly used throughout the following pages to display both aggregate results and results from individual institutions. Basic information about radar charts is outlined below, and additional descriptive information is included throughout this notebook.

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

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

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

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

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

Means

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

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

Standard Deviation

Standard deviation is a measure of the spread of data around their mean. The standard deviation (SD) depends on calculating the average distance of each score from the mean. If all users rated an item identically, the SD would be zero. Larger SDs indicate more disparate opinions of the users about library service quality.

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

Service Adequacy

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

Service Superiority

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

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

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

1.6   A Few Words about LibQUAL+® 2010

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

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

Today, "A measure of library quality based solely on collections has become obsolete" (Nitecki, 1996, p. 181). These considerations have prompted the Association of Research Libraries (ARL) to sponsor a number of "New Measures" initiatives. The New Measures efforts represent a collective determination on the part of the ARL membership to augment the collection-count and fiscal input measures that comprise the ARL Index and ARL Statistics, to date the most consistently collected statistics for research libraries, with outcome measures such as assessments of service quality and satisfaction. One New Measures Initiative is the LibQUAL+® service (Cook, Heath & B. Thompson, 2002, 2003; Heath, Cook, Kyrillidou & Thompson, 2002; Kyrillidou & Cook, 2008; Kyrillidou, Cook, & Rao, 2008; Thompson, Cook & Heath, 2003; Thompson, Cook & Thompson, 2002; Thompson, Kyrillidou & Cook, 2007a, 2007b, 2008).

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

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

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

LibQUAL+® is one of 11 ways of listening to users, called a *total market survey*. As Berry (1995) explained,

> When well designed and executed, total market surveys provide a range of information unmatched by any other method... A critical facet of total market surveys (and the reason for using the word 'total') is the measurement of competitors' service quality. This [also] requires

using non-customers in the sample to rate the service of their suppliers. (p. 37)

Although (a) measuring perceptions of both users and non-users, and (b) collecting perceptions data with regard to peer institutions can provide important insights Berry recommended using multiple listening methods and emphasized that "Ongoing data collection... is a necessity. Transactional surveys, total market surveys, and employee research should always be included" (Berry, 1995, p. 54).

LibQUAL+® Lite

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

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

Score Scaling

"Perceived" scores on the 22 LibQUAL+® core items, the three subscales, and the total score, are all scaled 1 to 9, with 9 being the most favorable. Both the gap scores ("Adequacy" = "Perceived" - "Minimum"; "Superiority" = "Perceived" - "Desired") are scaled such that higher scores are more favorable. Thus, an *adequacy* gap score of +1.2 on an item, subscale, or total score is better than an adequacy gap score of +1.0. A *superiority* gap score of -0.5 on an item, subscale, or total score is better than a superiority gap score of -1.0.

Using LibQUAL+® Data

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

For example, once an interpretation is formulated, library staff might review recent submissions of users to suggestion boxes to evaluate whether LibQUAL+® data are consistent with interpretations, and the suggestion box data perhaps also provide user suggestions for remedies. User focus groups also provide a powerful way to explore problems and potential solutions. A university-wide retreat with a small-group facilitated discussion to solicit suggestions for improvement is another follow-up mechanism that has been implemented in several LibQUAL+® participating libraries.

Indeed, the open-ended comments gathered as part of LibQUAL+® are themselves useful in fleshing out insights into perceived library service quality. Respondents often use the comments box on the survey to make constructive suggestions on specific ways to address their concerns. Qualitative analysis of these comments can be very fruitful. In short, LibQUAL+® is not 22 items. LibQUAL+® is 22 items plus a comments box!

Cook (2002b) provided case study reports of how staff at various libraries have employed data from prior renditions of LibQUAL+®. Heath, Kyrillidou, and Askew edited a special issue of the Journal of Library Administration (Vol. 40, No. 3/4) reporting additional case studies on the use of LibQUAL+® data to aid the improvement of library service quality. This special issue has also been published by Hayworth Press as a monograph. Kyrillidou (2008) edited a compilation of articles that complements and provides an updated perspective on these earlier special issues. These publications can be ordered by sending an email to libqual@arl.org. Numerous other articles have been published in the literature and a good number of references can be located on the LibQUAL+® publication page search engine under 'Related articles.'

2010 Data Screening

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

However, as happens in any survey, in 2010 some users provided incomplete data, inconsistent data, or both. In compiling the summary data reported here, several criteria were used to determine which respondents to omit from these analyses.

1. Complete Data. The Web software that presents the core items monitors whether a given user has completed all items. On each of these items, in order to submit the survey successfully, users must provide a rating of (a) minimally-acceptable service, (b) desired service, and (c) perceived service or rate the item "not applicable" ("N/A"). If these conditions are not met, when the user attempts to leave the Web page presenting the core items, the software shows the user where missing data are located, and requests complete data. The user may of course abandon the survey without completing all the items. *Only records with complete data on the presented core items and where respondents chose a "user group," if applicable, were retained in summary statistics.*

2. Excessive "N/A" Responses. Because some institutions provided access to a lottery drawing for an incentive (e.g., an iPod) for completing the survey, some users might have selected "N/A" choices for all or most of the items rather than reporting their actual perceptions. Or, some users may have views on such a narrow range of quality issues that their data are not very informative. *It was decided that records of the long version of the survey containing more than 11 "N/A" responses and records of the Lite version containing more than 4 "N/A" responses should be eliminated from the summary statistics.*

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

One appealing feature of such a "gap measurement model" is that the rating format provides a check for inconsistencies (i.e., score inversions) in the response data (Thompson, Cook & Heath, 2000). Logically, on a given item the "minimum" rating should not be higher than the "desired" rating on the same item. For each user a count of such inconsistencies was made. *Records of the long version of the survey containing more than 9 logical inconsistencies and records of the Lite version containing more than 3 logical inconsistencies were eliminated from the summary statistics.*

LibQUAL+® Norms

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

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

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

A total market survey administered to more than 100,000 users, as was LibQUAL+® in 2004 and 2005, affords the opportunity to ask normative questions such as, "How does a mean 'perceived' score of 6.5 stack up among all individual users who completed the survey?", or "How does a mean service-adequacy gap score of -0.5 stack up among the gap scores of all institutions participating in the survey?"

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

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

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

Common Misconception Regarding Norms. An unfortunate and incorrect misconception is that norms make value statements. Norms do not make value statements! Norms make fact statements. If you are a forest ranger, and you make $25,000 a year, a norms table might inform you of the fact that you make less money than 85 percent of the adults in the United States.

But if you love the outdoors, you do not care very much about money, and you are very service-oriented, this fact

statement might not be relevant to you. Or, in the context of your values, you might interpret this fact as being quite satisfactory.

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

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

Response Rates

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

Instructions. Please tell us what time to close the library every day. In the future **we will close at whatever time receives the most votes**.

Should we close the library at?

(A) 10 p.m.   (B) 11 p.m.   (C) midnight   (D) 2 p.m.

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

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

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

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

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

Representativeness is actually a matter of degree. And several institutions each with 25 percent response rates may

have data with different degrees of representativeness.

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

Alpha University

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

Omega University

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

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

However, one caution is in order regarding percentages. When total $\underline{n}$ is small for an institution, or within a particular subgroup, huge changes in percentages can result from very small shifts in numbers.

LibQUAL+® Analytics

The LibQUAL+® Analytics is a new tool that permits participants to dynamically create institution-specific tables and charts for different subgroups and across years. The current interface grants access to 2004-2010 statistical data and has two sections:

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

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

These two functionalities are only the beginning of our effort to provide more customized analysis. More features are in development based on feedback we receive from our participants. For a subscription to LibQUAL+® Analytics, email libqual@arl.org.

Survey Data

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

ARL Service Quality Evaluation Academy

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

Such a culture must be informed by more than one tool, and by more than only one of the 11 ways of listening to users. To facilitate a culture of service quality assessment, and to facilitate more informed usage of LibQUAL+® data, the Association of Research Libraries has created the ARL Service Quality Evaluation Academy. For more information about the Academy, see the LibQUAL+® events page at

<http://libqual.org/events>

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

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

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

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1.7   Library Statistics for Concordia University Libraries

The statistical data below were provided by the participating institution in the online Representativeness* section. Definitions for these items can be found in the *ARL Statistics*: <http://www.arl.org/stats/>.

Note: Participating institutions were not required to complete the Representativeness section. When statistical data is missing or incomplete, it is because this data was not provided.

Volumes held:	**3,050,519**
Volumes added during year - Gross:	**23,157**
Total number of serial titles currently received,:	**57,840**
Total library expenditures (in U.S. $):	**$14,231,481**
Personnel - professional staff, FTE:	**41**
Personnel - support staff, FTE:	**101**

1.8   Contact Information for Concordia University Libraries

The person below served as the institution's primary LibQUAL+® liaison during this survey implementation.

Name:	**Alex Guindon**
Title:	**Reference and Subject Librarian**
Address:	**1400 de Maisonneuve West** **Webster Library, LB 285-7** **Montreal, QC H3G 1M8** **Canada**
Phone:	**514-848-2424 ex 7754**
Email:	**alex.guindon@concordia.ca**

1.9   Survey Protocol and Language for Concordia University Libraries

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

		Lite
English (American)	Count *% of Total Cases*	1,042 *94.81*
French (Canada)	Count *% of Total Cases*	57 *5.19*
Total	Count *% of Total Cases*	**1,099** *100.00*

2   Demographic Summary for Concordia University Libraries

2.1   Respondents by User Group

User Group	Respondent n	Respondent %
Undergraduate		
First year	195	17.74%
Second year	192	17.47%
Third year	161	14.65%
Fourth year	98	8.92%
Fifth year and above	28	2.55%
Non-degree	18	1.64%
Sub Total:	692	62.97%
Graduate		
Masters	158	14.38%
Doctoral	70	6.37%
Non-degree or Undecided	16	1.46%
Sub Total:	244	22.20%
Faculty		
Professor	38	3.46%
Associate Professor	26	2.37%
Assistant Professor	37	3.37%
Lecturer	39	3.55%
Adjunct Faculty	11	1.00%
Other Academic Status	6	0.55%
Sub Total:	157	14.29%
Library Staff		
Administrator	0	0.00%
Manager, Head of Unit	0	0.00%
Public Services	0	0.00%
Systems	0	0.00%
Technical Services	0	0.00%
Other	0	0.00%
Sub Total:	0	0.00%
Staff		
Research Staff	3	0.27%
Other Staff Positions	3	0.27%
Sub Total:	6	0.55%
Total:	**1,099**	**100.00%**

2.2   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.

■ Respondents Profile by User Sub-Group
■ Population Profile by User Sub-Group
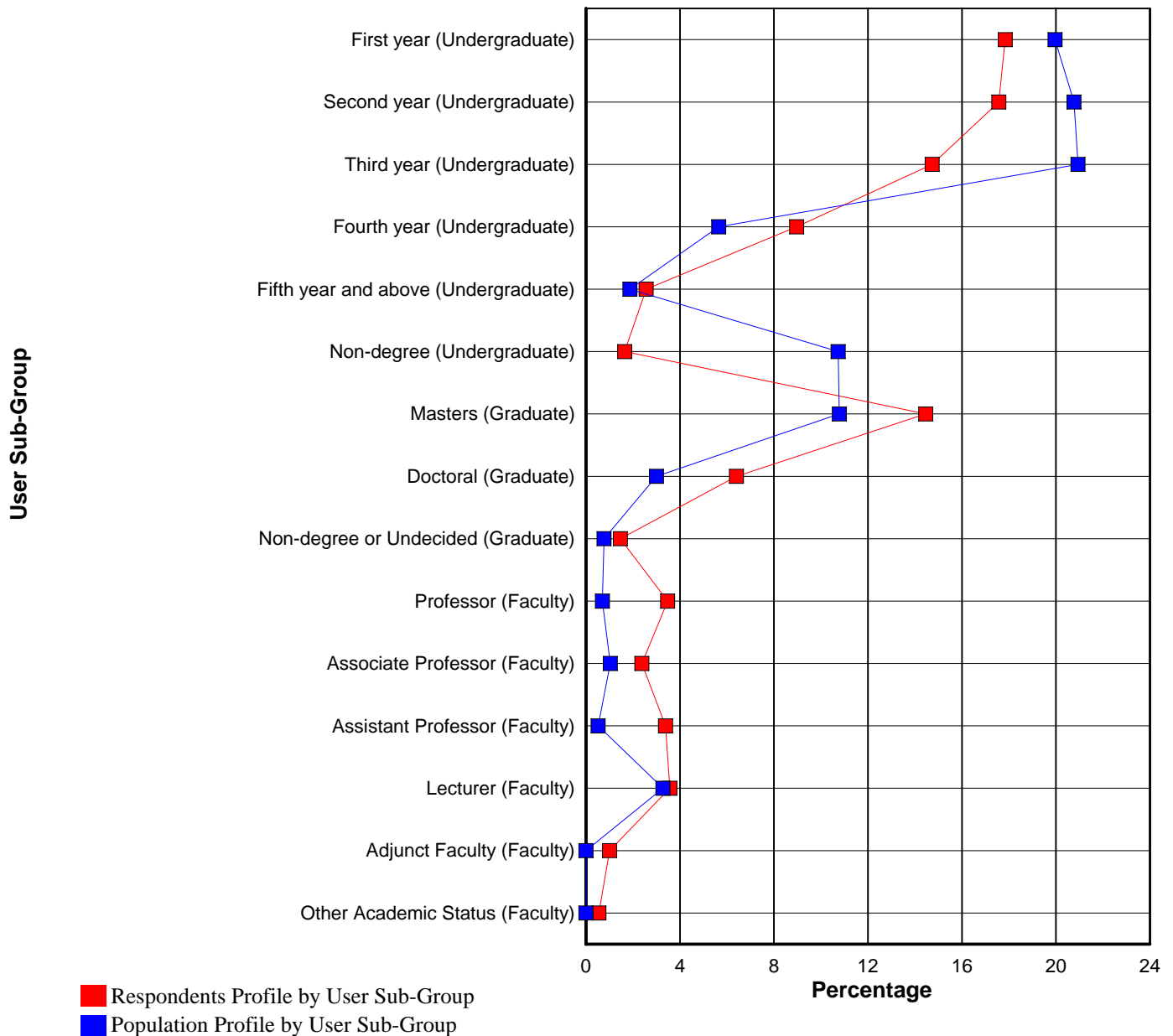
Language: English (American), French (Canada)
Institution Type: College or University
Consortium: LibQUAL Canada
User Group: All (Excluding Library Staff, Staff)

User Sub-Group	Population N	Population %	Respondents n	Respondents %	%N - %n
First year (Undergraduate)	7,184	19.96	195	17.84	2.12
Second year (Undergraduate)	7,474	20.77	192	17.57	3.20
Third year (Undergraduate)	7,536	20.94	161	14.73	6.21
Fourth year (Undergraduate)	2,033	5.65	98	8.97	-3.32
Fifth year and above (Undergraduate)	673	1.87	28	2.56	-0.69
Non-degree (Undergraduate)	3,863	10.73	18	1.65	9.09
Masters (Graduate)	3,880	10.78	158	14.46	-3.68
Doctoral (Graduate)	1,080	3.00	70	6.40	-3.40
Non-degree or Undecided (Graduate)	277	0.77	16	1.46	-0.69
Professor (Faculty)	252	0.70	38	3.48	-2.78
Associate Professor (Faculty)	373	1.04	26	2.38	-1.34
Assistant Professor (Faculty)	187	0.52	37	3.39	-2.87
Lecturer (Faculty)	1,179	3.28	39	3.57	-0.29
Adjunct Faculty (Faculty)	0	0.00	11	1.01	-1.01
Other Academic Status (Faculty)	0	0.00	6	0.55	-0.55
Total:	**35,991**	**100.00**	**1,093**	**100.00**	**0.00**

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

2.3   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

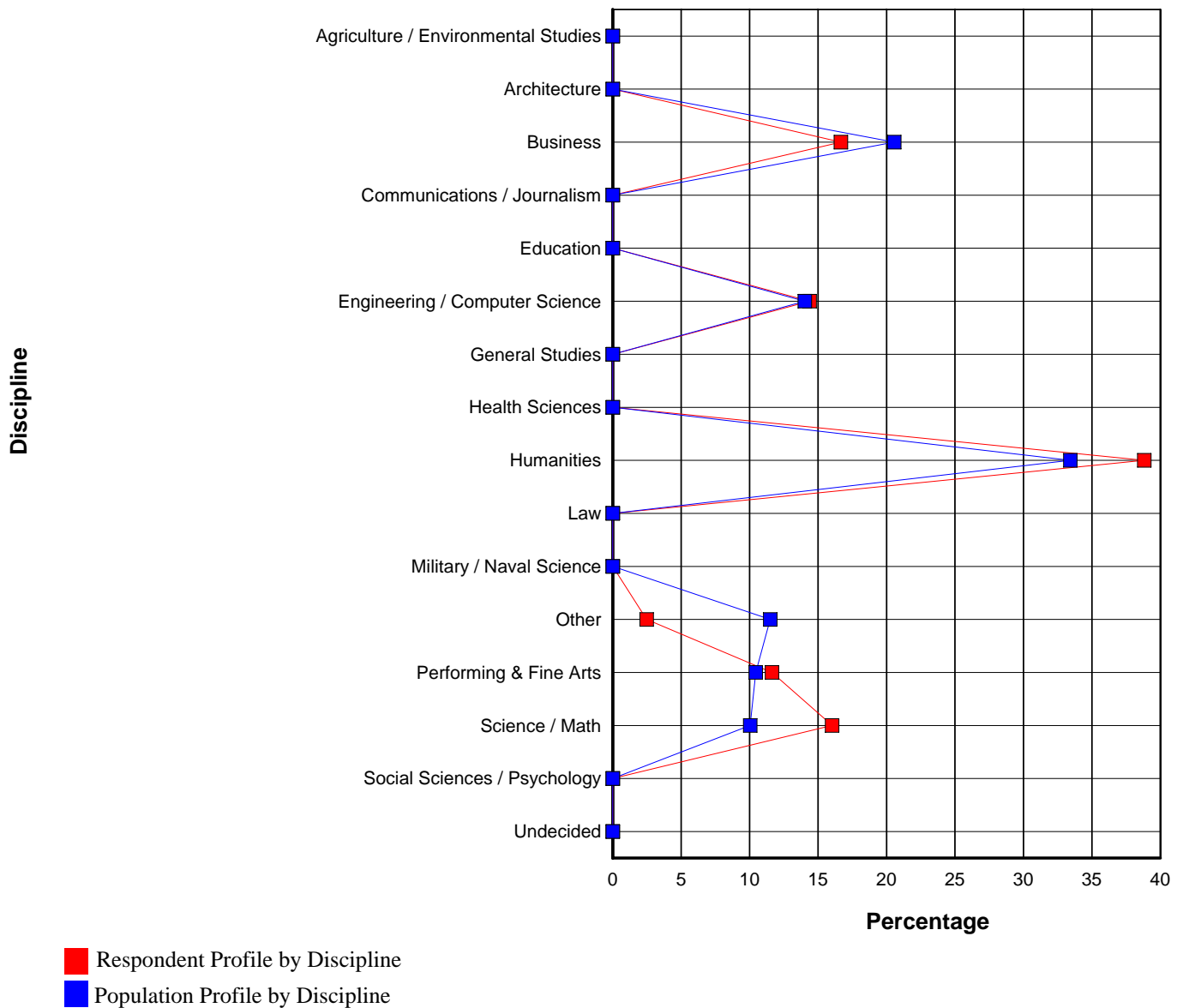| Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture / Environmental Studies	0	0.00	0	0.00	0.00
Architecture	0	0.00	0	0.00	0.00
Business	7,401	20.56	182	16.67	3.90
Communications / Journalism	0	0.00	0	0.00	0.00
Education	0	0.00	0	0.00	0.00
Engineering / Computer Science	5,048	14.03	157	14.38	-0.35
General Studies	0	0.00	0	0.00	0.00
Health Sciences	0	0.00	0	0.00	0.00
Humanities	12,029	33.42	424	38.83	-5.41
Law	0	0.00	0	0.00	0.00
Military / Naval Science	0	0.00	0	0.00	0.00
Other	4,140	11.50	27	2.47	9.03
Performing & Fine Arts	3,760	10.45	127	11.63	-1.18
Science / Math	3,613	10.04	175	16.03	-5.99
Social Sciences / Psychology	0	0.00	0	0.00	0.00
Undecided	0	0.00	0	0.00	0.00
Total:	**35,991**	**100.00**	**1,092**	**100.00**	**0.00**

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

2.4 Population and Respondents by Customized 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 customized discipline categories supplied by the participating library. 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.

■ Respondents Profile by User Sub-Group
■ Population Profile by User Sub-Group

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Faculty of Arts and Science - Science	3,613	10.04	175	16.03	-5.99
Faculty of Arts and Science - Social Sciences and Humanities	12,029	33.42	424	38.83	-5.41
Faculty of Engineering and Computer Science	5,048	14.03	157	14.38	-0.35
Faculty of Fine Arts	3,760	10.45	127	11.63	-1.18
John Molson School of Business	7,401	20.56	182	16.67	3.90
Non degree or Independent	4,140	11.50	27	2.47	9.03
Total:	**35,991**	**100.00**	**1,092**	**100.00**	**0.00**

2.5   Respondent Profile by Answer to the Question: The library that you use most often:

The library that you use most often:	Respondents n	Respondents %
Vanier Library (Loyola Campus)	191	17.46
Webster Library (Downtown Campus)	903	82.54
Total:	**1,094**	**100.00**

2.6   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	366	33.30
23 - 30	376	34.21
31 - 45	221	20.11
46 - 65	118	10.74
Over 65	18	1.64
Total:	**1,099**	**100.00**

2.7   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	17,888	49.70	648	59.02
Male	18,103	50.30	450	40.98
Total:	**35,991**	**100.00**	**1,098**	**100.00**

3. Survey Item Summary for Concordia University Libraries

3.1   Core Questions Summary

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.)

	Perceived Less Than Minimum
	Perceived Greater Than Minimum
	Perceived Less Than Desired
	Perceived Greater Than Desired

Language: English (American), French (Canada)
Institution Type: College or University
Consortium: LibQUAL Canada
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	6.39	7.42	6.89	0.50	-0.53	244
AS-2	Giving users individual attention	5.92	7.00	6.60	0.68	-0.40	253
AS-3	Employees who are consistently courteous	6.94	7.88	7.29	0.35	-0.59	248
AS-4	Readiness to respond to users' questions	6.81	7.82	7.10	0.29	-0.72	247
AS-5	Employees who have the knowledge to answer user questions	7.03	7.86	7.36	0.32	-0.50	290
AS-6	Employees who deal with users in a caring fashion	6.62	7.78	7.15	0.52	-0.63	1,054
AS-7	Employees who understand the needs of their users	6.81	7.90	7.32	0.51	-0.57	254
AS-8	Willingness to help users	6.85	7.81	7.13	0.28	-0.68	278
AS-9	Dependability in handling users' service problems	6.48	7.61	6.79	0.31	-0.82	201
Information Control							
IC-1	Making electronic resources accessible from my home or office	6.99	8.09	7.05	0.06	-1.04	313
IC-2	A library Web site enabling me to locate information on my own	6.99	7.98	7.02	0.03	-0.96	335
IC-3	The printed library materials I need for my work	6.35	7.60	6.47	0.12	-1.13	278
IC-4	The electronic information resources I need	6.44	7.75	6.67	0.23	-1.08	1,070
IC-5	Modern equipment that lets me easily access needed information	6.68	7.84	6.74	0.06	-1.10	304
IC-6	Easy-to-use access tools that allow me to find things on my own	6.79	8.00	6.90	0.11	-1.10	301
IC-7	Making information easily accessible for independent use	6.66	7.82	6.90	0.24	-0.92	289
IC-8	Print and/or electronic journal collections I require for my work	6.83	7.86	6.84	0.01	-1.01	267
Library as Place							
LP-1	Library space that inspires study and learning	6.20	7.61	5.97	-0.23	-1.63	1,038
LP-2	Quiet space for individual activities	6.44	7.70	6.22	-0.22	-1.48	248
LP-3	A comfortable and inviting location	6.34	7.76	6.28	-0.06	-1.48	280
LP-4	A getaway for study, learning, or research	6.48	7.66	6.61	0.13	-1.05	260
LP-5	Community space for group learning and group study	5.79	6.98	6.12	0.33	-0.86	213
Overall:		6.56	7.73	6.77	0.21	-0.96	1,099

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	1.84	1.61	1.60	1.70	1.58	244
AS-2	Giving users individual attention	2.11	1.92	1.83	1.77	1.73	253
AS-3	Employees who are consistently courteous	1.69	1.46	1.57	1.64	1.42	248
AS-4	Readiness to respond to users' questions	1.54	1.30	1.49	1.50	1.46	247
AS-5	Employees who have the knowledge to answer user questions	1.66	1.46	1.45	1.82	1.56	290
AS-6	Employees who deal with users in a caring fashion	1.74	1.45	1.63	1.78	1.65	1,054
AS-7	Employees who understand the needs of their users	1.67	1.40	1.36	1.58	1.58	254
AS-8	Willingness to help users	1.64	1.46	1.66	1.83	1.79	278
AS-9	Dependability in handling users' service problems	1.76	1.50	1.47	1.83	1.62	201
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.88	1.43	1.74	2.04	1.74	313
IC-2	A library Web site enabling me to locate information on my own	1.64	1.45	1.56	1.75	1.72	335
IC-3	The printed library materials I need for my work	1.76	1.56	1.66	2.15	2.02	278
IC-4	The electronic information resources I need	1.69	1.55	1.57	1.93	1.87	1,070
IC-5	Modern equipment that lets me easily access needed information	1.53	1.32	1.51	1.82	1.74	304
IC-6	Easy-to-use access tools that allow me to find things on my own	1.52	1.21	1.49	1.69	1.63	301
IC-7	Making information easily accessible for independent use	1.64	1.40	1.55	1.76	1.65	289
IC-8	Print and/or electronic journal collections I require for my work	1.71	1.52	1.44	1.86	1.73	267
Library as Place							
LP-1	Library space that inspires study and learning	1.97	1.83	1.99	2.38	2.42	1,038
LP-2	Quiet space for individual activities	2.02	1.65	2.06	2.42	2.43	248
LP-3	A comfortable and inviting location	1.72	1.40	1.80	2.21	1.98	280
LP-4	A getaway for study, learning, or research	1.91	1.68	1.85	2.20	2.04	260
LP-5	Community space for group learning and group study	2.18	2.25	1.82	2.31	2.36	213
Overall:		1.32	1.07	1.19	1.35	1.24	1,099

3.2   Core Question Dimensions Summary

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

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

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	6.64	7.70	7.10	0.45	-0.60	1,076
Information Control	6.65	7.84	6.78	0.13	-1.06	1,098
Library as Place	6.24	7.57	6.15	-0.09	-1.43	1,057
Overall	6.56	7.73	6.77	0.21	-0.96	1,099

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	1.31	1.38	1.53	1.40	1,076
Information Control	1.42	1.23	1.29	1.54	1.44	1,098
Library as Place	1.75	1.60	1.77	2.09	2.10	1,057
Overall	1.32	1.07	1.19	1.35	1.24	1,099

3.3   Local Question Summary

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
Ability to navigate library Web pages easily	6.69	8.05	6.92	0.23	-1.13	228
Adequate hours of service	7.16	7.88	7.71	0.55	-0.18	211
Ease and timeliness in getting materials from other libraries	6.59	7.75	7.04	0.45	-0.70	157
Making me aware of library resources and services	6.23	7.28	6.36	0.13	-0.92	199
Teaching me how to access, evaluate, and use information	6.24	7.42	6.69	0.45	-0.73	190

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
Ability to navigate library Web pages easily	1.68	1.33	1.64	1.82	1.69	228
Adequate hours of service	1.80	1.53	1.48	1.95	1.78	211
Ease and timeliness in getting materials from other libraries	1.86	1.51	1.57	1.73	1.76	157
Making me aware of library resources and services	1.75	1.65	1.89	1.92	2.01	199
Teaching me how to access, evaluate, and use information	2.06	1.80	1.96	2.35	2.23	190

3.4 General Satisfaction Questions Summary

This table displays the mean score and standard deviation for each of the general satisfaction questions: Satisfaction with Treatment, Satisfaction with Support, and Satisfaction with Overall Quality of Service, where *n* is the number of respondents for each 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.	7.26	1.51	528
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	6.72	1.69	571
How would you rate the overall quality of the service provided by the library?	6.96	1.36	1,099

3.5 Information Literacy Outcomes Questions Summary

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

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	5.84	1.88	421
The library aids my advancement in my academic discipline or work.	6.90	1.65	445
The library enables me to be more efficient in my academic pursuits or work.	7.05	1.58	444
The library helps me distinguish between trustworthy and untrustworthy information.	6.08	1.76	443
The library provides me with the information skills I need in my work or study.	6.62	1.59	445

3.6   Library Use Summary

This chart shows a graphic representation of library use (both on the premises and electronically), as well as use of non-library information gateways such as Yahoo™ and Google™. Bars represent the frequency with which respondents report using these resources: Daily, Weekly, Monthly, Quarterly, or Never. The table below the chart displays the number and percentage of respondents who selected each option.
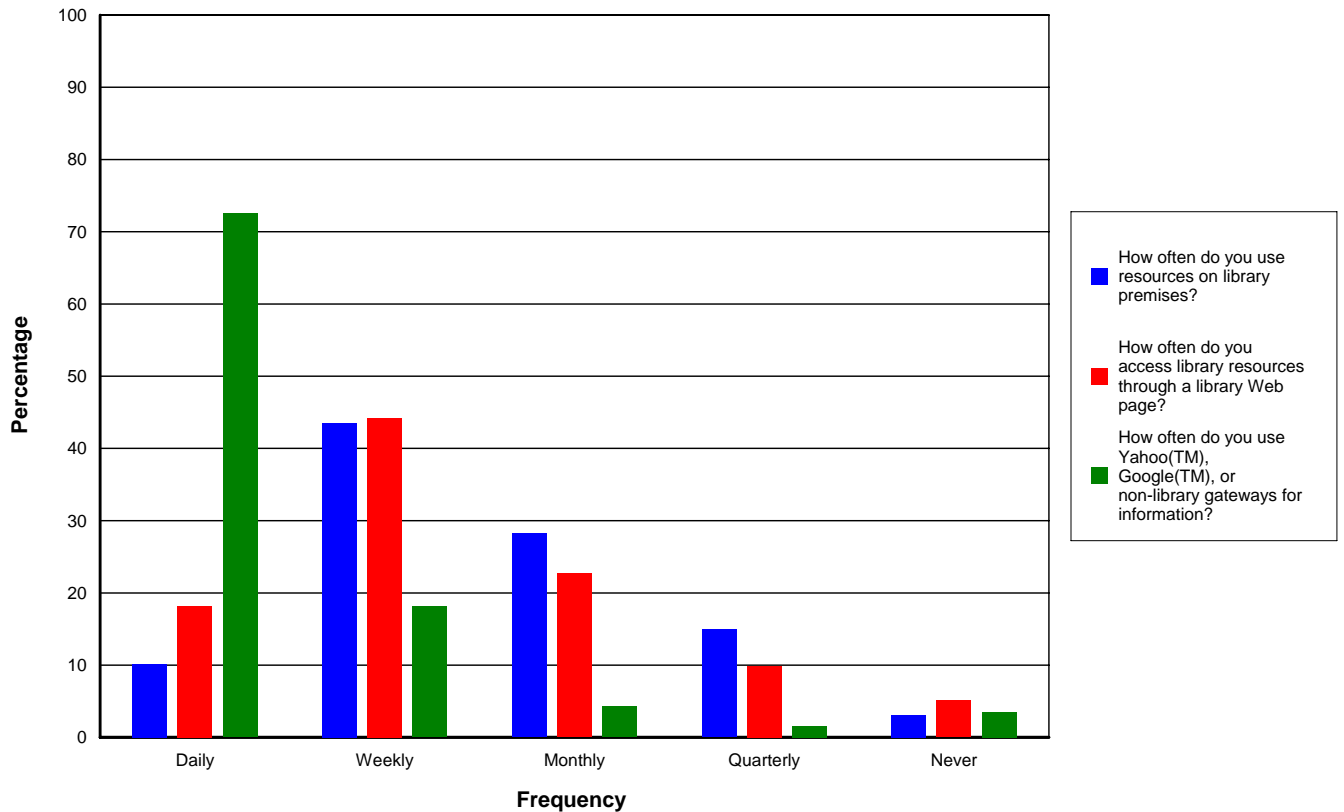
	Daily	Weekly	Monthly	Quarterly	Never	n/%
How often do you use resources on library premises?	112	478	310	164	34	1,098
	10.20%	43.53%	28.23%	14.94%	3.10%	100.00%
How often do you access library resources through a library Web page?	200	485	249	108	56	1,098
	18.21%	44.17%	22.68%	9.84%	5.10%	100.00%
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	797	199	47	17	39	1,099
	72.52%	18.11%	4.28%	1.55%	3.55%	100.00%

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

4   Undergraduate Summary for Concordia University Libraries

4.1   Demographic Summary for Undergraduate

4.1.1 Population and Respondent Profiles for Undergraduate 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: **LibQUAL Canada**
User Group: **Undergraduate**

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture / Environmental Studies	0	0.00	0	0.00	0.00
Architecture	0	0.00	0	0.00	0.00
Business	6,094	21.19	139	20.09	1.10
Communications / Journalism	0	0.00	0	0.00	0.00
Education	0	0.00	0	0.00	0.00
Engineering / Computer Science	3,032	10.54	73	10.55	-0.01
General Studies	0	0.00	0	0.00	0.00
Health Sciences	0	0.00	0	0.00	0.00
Humanities	9,892	34.39	267	38.58	-4.19
Law	0	0.00	0	0.00	0.00
Military / Naval Science	0	0.00	0	0.00	0.00
Other	3,863	13.43	24	3.47	9.96
Performing & Fine Arts	2,916	10.14	62	8.96	1.18
Science / Math	2,966	10.31	127	18.35	-8.04
Social Sciences / Psychology	0	0.00	0	0.00	0.00
Undecided	0	0.00	0	0.00	0.00
Total:	**28,763**	**100.00**	**692**	**100.00**	**0.00**

4.1.2 Population and Respondent Profiles for by Customized 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 customized discipline categories supplied by the participating library. 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: LibQUAL Canada
User Group: Undergraduate

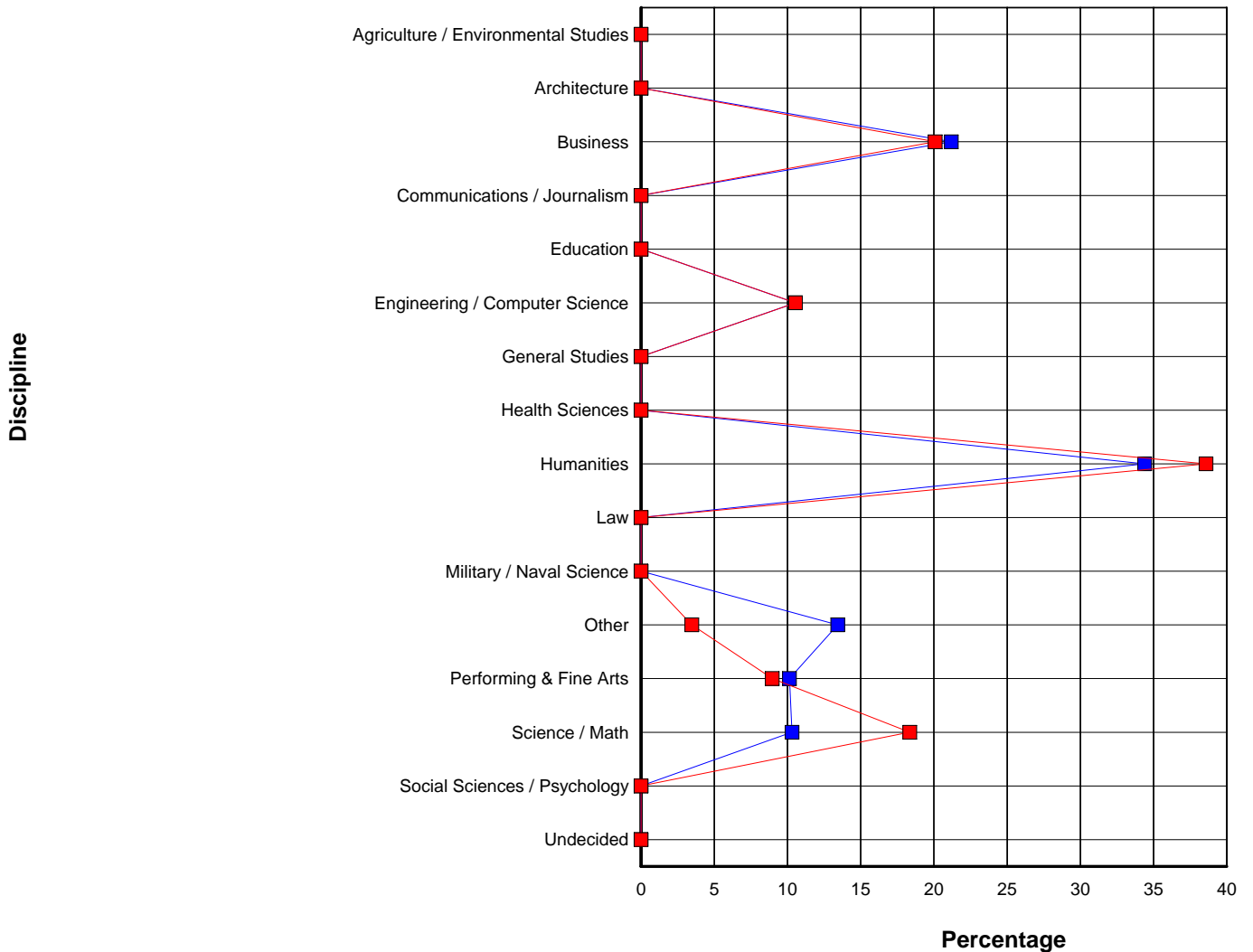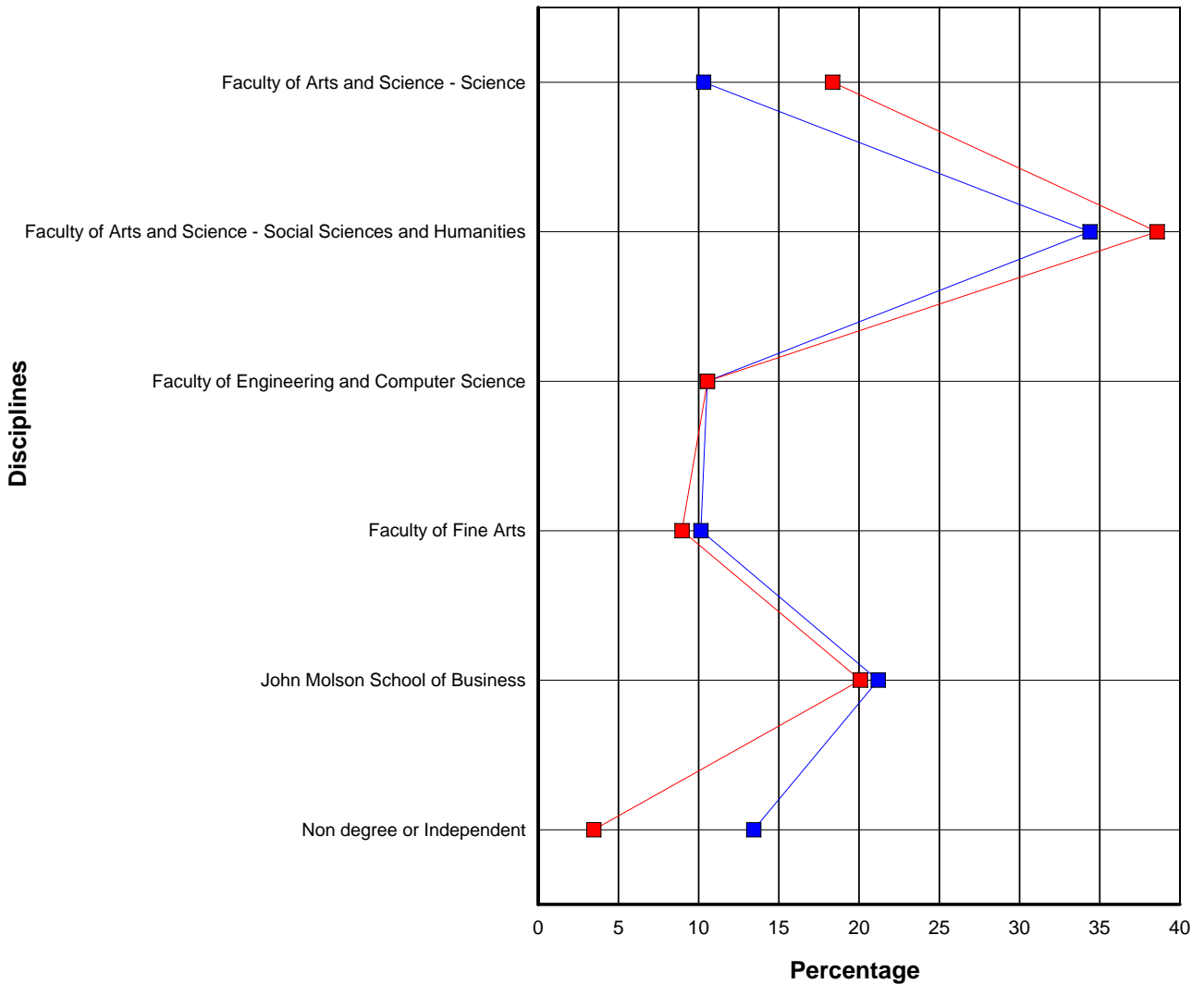| Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Faculty of Arts and Science - Science	2,966	10.31	127	18.35	-8.04
Faculty of Arts and Science - Social Sciences and Human	9,892	34.39	267	38.58	-4.19
Faculty of Engineering and Computer Science	3,032	10.54	73	10.55	-0.01
Faculty of Fine Arts	2,916	10.14	62	8.96	1.18
John Molson School of Business	6,094	21.19	139	20.09	1.10
Non degree or Independent	3,863	13.43	24	3.47	9.96
Total:	**28,763**	**100.00**	**692**	**100.00**	**0.00**

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

4.1.3 Respondent Profile by Answer to the Question: The library that you use most often:

The library that you use most of	Respondents n	Respondents %
Vanier Library (Loyola Campus)	126	18.31
Webster Library (Downtown Campus)	562	81.69
Total:	**688**	**100.00**

4.1.4 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	0	0.00
18 - 22	361	52.17
23 - 30	233	33.67
31 - 45	77	11.13
46 - 65	19	2.75
Over 65	2	0.29
Total:	**692**	**100.00**

4.1.5 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	14,816	51.51	435	62.86
Male	13,947	48.49	257	37.14
Total:	**28,763**	**100.00**	**692**	**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.)
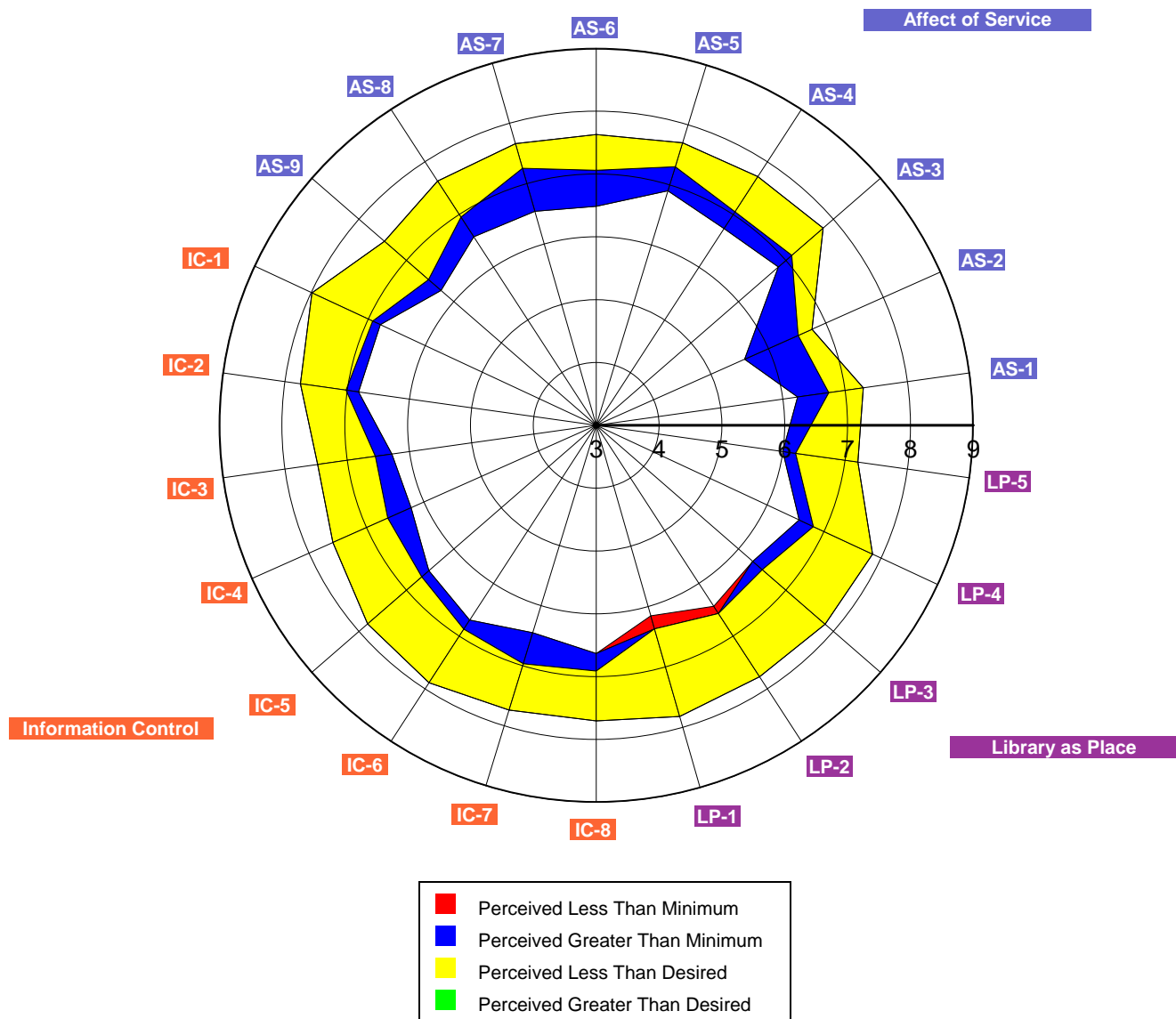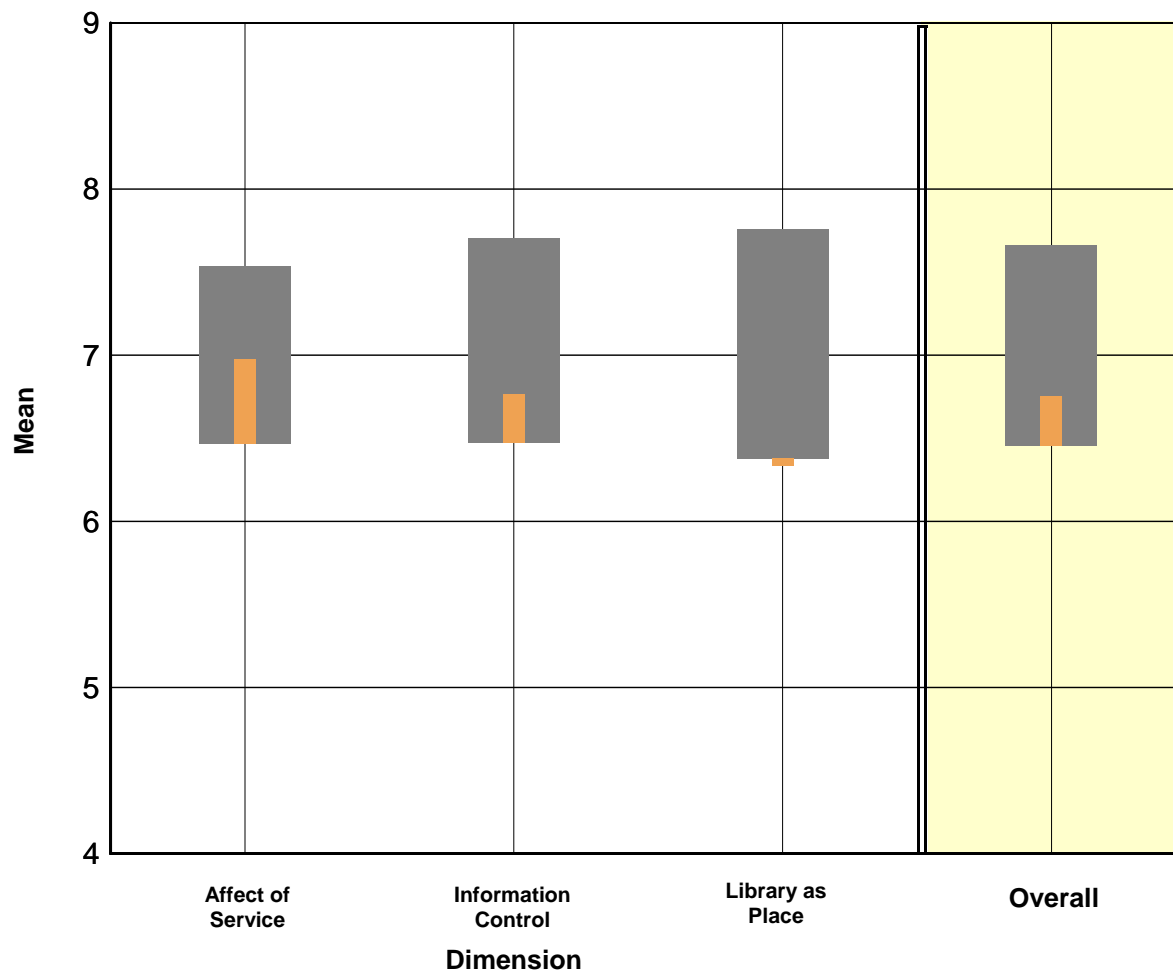

Language: English (American), French (Canada)
Institution Type: College or University
Consortium: LibQUAL Canada
User Group: Undergraduate

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	6.24	7.29	6.74	0.50	-0.55	164
AS-2	Giving users individual attention	5.59	6.76	6.52	0.93	-0.24	162
AS-3	Employees who are consistently courteous	6.84	7.78	7.12	0.28	-0.66	153
AS-4	Readiness to respond to users' questions	6.73	7.72	7.05	0.32	-0.67	150
AS-5	Employees who have the knowledge to answer user questions	6.90	7.70	7.30	0.40	-0.40	174
AS-6	Employees who deal with users in a caring fashion	6.49	7.63	7.06	0.57	-0.57	655
AS-7	Employees who understand the needs of their users	6.54	7.66	7.26	0.71	-0.41	160
AS-8	Willingness to help users	6.58	7.63	6.95	0.37	-0.69	178
AS-9	Dependability in handling users' service problems	6.27	7.46	6.54	0.26	-0.93	114
Information Control							
IC-1	Making electronic resources accessible from my home or office	6.79	7.99	6.93	0.14	-1.07	200
IC-2	A library Web site enabling me to locate information on my own	6.82	7.75	7.02	0.20	-0.73	203
IC-3	The printed library materials I need for my work	6.28	7.48	6.55	0.27	-0.93	166
IC-4	The electronic information resources I need	6.22	7.59	6.63	0.41	-0.96	669
IC-5	Modern equipment that lets me easily access needed information	6.53	7.82	6.68	0.15	-1.14	193
IC-6	Easy-to-use access tools that allow me to find things on my own	6.70	7.88	6.87	0.17	-1.02	191
IC-7	Making information easily accessible for independent use	6.45	7.74	6.97	0.52	-0.77	188
IC-8	Print and/or electronic journal collections I require for my work	6.63	7.70	6.91	0.28	-0.79	169
Library as Place							
LP-1	Library space that inspires study and learning	6.37	7.82	6.15	-0.22	-1.67	683
LP-2	Quiet space for individual activities	6.57	7.77	6.44	-0.14	-1.34	154
LP-3	A comfortable and inviting location	6.30	7.83	6.50	0.20	-1.32	195
LP-4	A getaway for study, learning, or research	6.56	7.85	6.82	0.25	-1.04	163
LP-5	Community space for group learning and group study	6.00	7.21	6.21	0.21	-1.00	151
Overall:		6.46	7.66	6.75	0.30	-0.91	692

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	1.60	1.52	1.86	1.66	164
AS-2	Giving users individual attention	2.08	1.96	1.90	1.75	1.80	162
AS-3	Employees who are consistently courteous	1.77	1.59	1.62	1.75	1.51	153
AS-4	Readiness to respond to users' questions	1.51	1.24	1.54	1.61	1.52	150
AS-5	Employees who have the knowledge to answer user questions	1.67	1.53	1.49	1.87	1.63	174
AS-6	Employees who deal with users in a caring fashion	1.79	1.53	1.67	1.81	1.70	655
AS-7	Employees who understand the needs of their users	1.69	1.53	1.35	1.51	1.63	160
AS-8	Willingness to help users	1.72	1.62	1.72	1.86	1.84	178
AS-9	Dependability in handling users' service problems	1.90	1.67	1.60	2.12	1.87	114
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.94	1.43	1.71	2.19	1.88	200
IC-2	A library Web site enabling me to locate information on my own	1.68	1.53	1.58	1.78	1.77	203
IC-3	The printed library materials I need for my work	1.78	1.64	1.62	2.05	1.94	166
IC-4	The electronic information resources I need	1.65	1.58	1.61	1.93	1.92	669
IC-5	Modern equipment that lets me easily access needed information	1.60	1.39	1.57	1.87	1.75	193
IC-6	Easy-to-use access tools that allow me to find things on my own	1.58	1.28	1.55	1.69	1.65	191
IC-7	Making information easily accessible for independent use	1.66	1.37	1.54	1.75	1.59	188
IC-8	Print and/or electronic journal collections I require for my work	1.69	1.56	1.42	1.79	1.77	169
Library as Place							
LP-1	Library space that inspires study and learning	1.87	1.67	1.93	2.27	2.25	683
LP-2	Quiet space for individual activities	1.86	1.51	1.93	2.13	2.22	154
LP-3	A comfortable and inviting location	1.70	1.38	1.65	1.90	1.72	195
LP-4	A getaway for study, learning, or research	1.87	1.39	1.79	2.20	1.90	163
LP-5	Community space for group learning and group study	2.07	2.09	1.89	2.34	2.37	151
Overall:		1.31	1.08	1.20	1.35	1.25	692

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.

■	Range of Minimum to Desired
■	Range of Minimum to Perceived ("Adequacy Gap")

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	7.54	6.98	0.51	-0.56	672
Information Control	6.47	7.71	6.77	0.29	-0.94	691
Library as Place	6.38	7.76	6.33	-0.04	-1.43	687
Overall	6.46	7.66	6.75	0.30	-0.91	692

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	1.60	1.38	1.41	1.58	1.47	672
Information Control	1.40	1.25	1.29	1.52	1.44	691
Library as Place	1.64	1.41	1.71	1.94	1.92	687
Overall	1.31	1.08	1.20	1.35	1.25	692

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
Ability to navigate library Web pages easily	6.72	8.04	6.83	0.11	-1.20	142
Adequate hours of service	7.33	7.90	7.85	0.52	-0.05	126
Ease and timeliness in getting materials from other libraries	6.17	7.48	6.88	0.71	-0.60	93
Making me aware of library resources and services	6.02	7.14	6.29	0.28	-0.84	129
Teaching me how to access, evaluate, and use information	6.09	7.31	6.71	0.62	-0.60	119

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
Ability to navigate library Web pages easily	1.66	1.29	1.59	1.89	1.70	142
Adequate hours of service	1.85	1.62	1.51	1.97	1.84	126
Ease and timeliness in getting materials from other libraries	1.95	1.59	1.61	1.90	2.01	93
Making me aware of library resources and services	1.77	1.78	1.97	1.90	2.14	129
Teaching me how to access, evaluate, and use information	2.14	1.91	2.02	2.58	2.40	119

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.	7.25	1.43	325
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	6.64	1.73	367
How would you rate the overall quality of the service provided by the library?	6.90	1.35	692

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.	5.70	1.88	265
The library aids my advancement in my academic discipline or work.	6.72	1.72	279
The library enables me to be more efficient in my academic pursuits or work.	7.04	1.49	273
The library helps me distinguish between trustworthy and untrustworthy information.	6.12	1.69	279
The library provides me with the information skills I need in my work or study.	6.64	1.68	288

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.
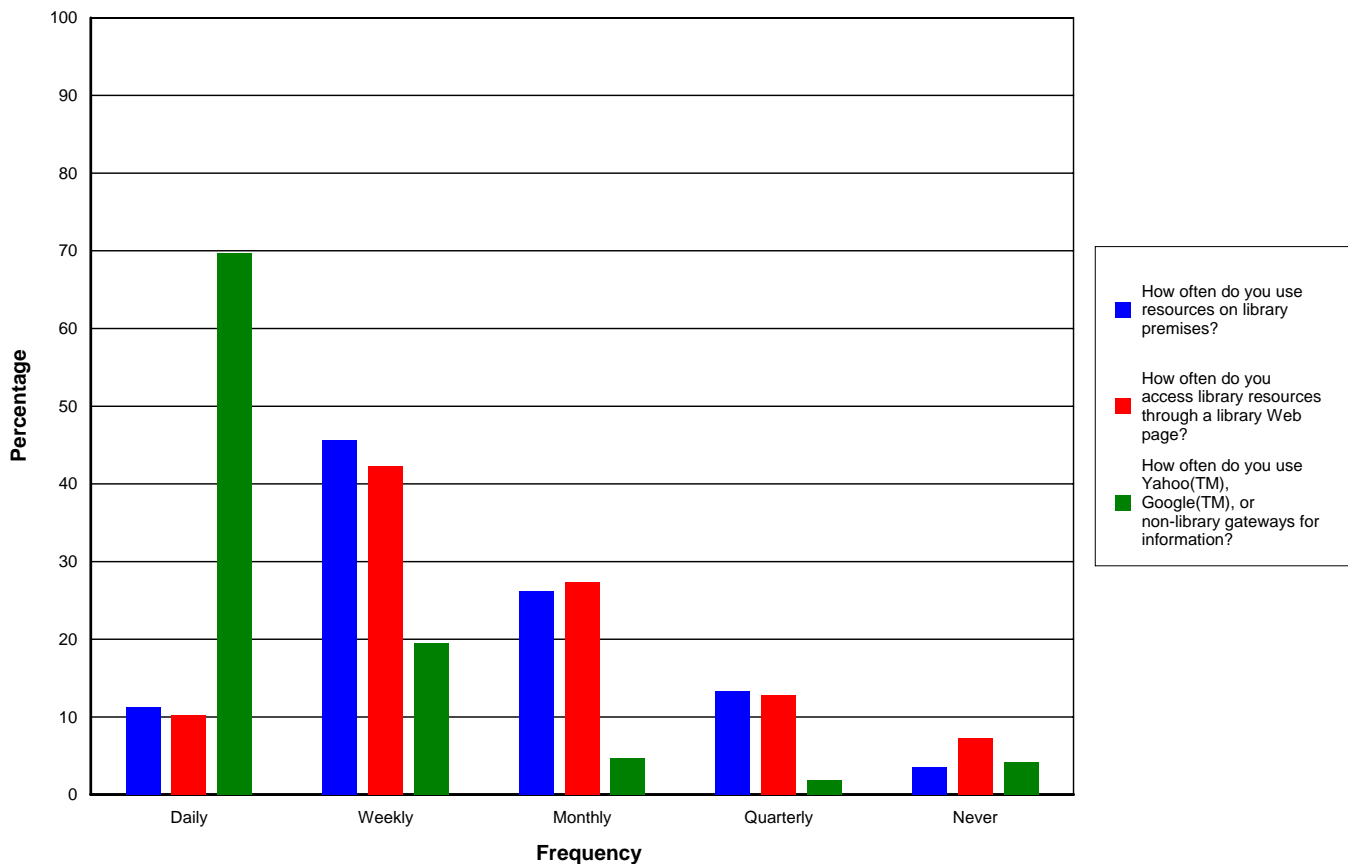
	Daily	Weekly	Monthly	Quarterly	Never	n/%
How often do you use resources on library premises?	78 11.29%	315 45.59%	181 26.19%	92 13.31%	25 3.62%	691 100.00%
How often do you access library resources through a library Web page?	71 10.27%	292 42.26%	189 27.35%	89 12.88%	50 7.24%	691 100.00%
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	482 69.65%	135 19.51%	33 4.77%	13 1.88%	29 4.19%	692 100.00%

5   Graduate Summary for Concordia University Libraries

5.1   Demographic Summary for Graduate

5.1.1   Population and Respondent Profiles for Graduate 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: LibQUAL Canada
User Group: Graduate

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture / Environmental Studies	0	0.00	0	0.00	0.00
Architecture	0	0.00	0	0.00	0.00
Business	986	18.83	26	10.66	8.17
Communications / Journalism	0	0.00	0	0.00	0.00
Education	0	0.00	0	0.00	0.00
Engineering / Computer Science	1,798	34.33	70	28.69	5.64
General Studies	0	0.00	0	0.00	0.00
Health Sciences	0	0.00	0	0.00	0.00
Humanities	1,315	25.11	85	34.84	-9.73
Law	0	0.00	0	0.00	0.00
Military / Naval Science	0	0.00	0	0.00	0.00
Other	277	5.29	2	0.82	4.47
Performing & Fine Arts	464	8.86	38	15.57	-6.71
Science / Math	397	7.58	23	9.43	-1.85
Social Sciences / Psychology	0	0.00	0	0.00	0.00
Undecided	0	0.00	0	0.00	0.00
Total:	**5,237**	**100.00**	**244**	**100.00**	**0.00**

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

5.1.2 Population and Respondent Profiles for by Customized 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 customized discipline categories supplied by the participating library. 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
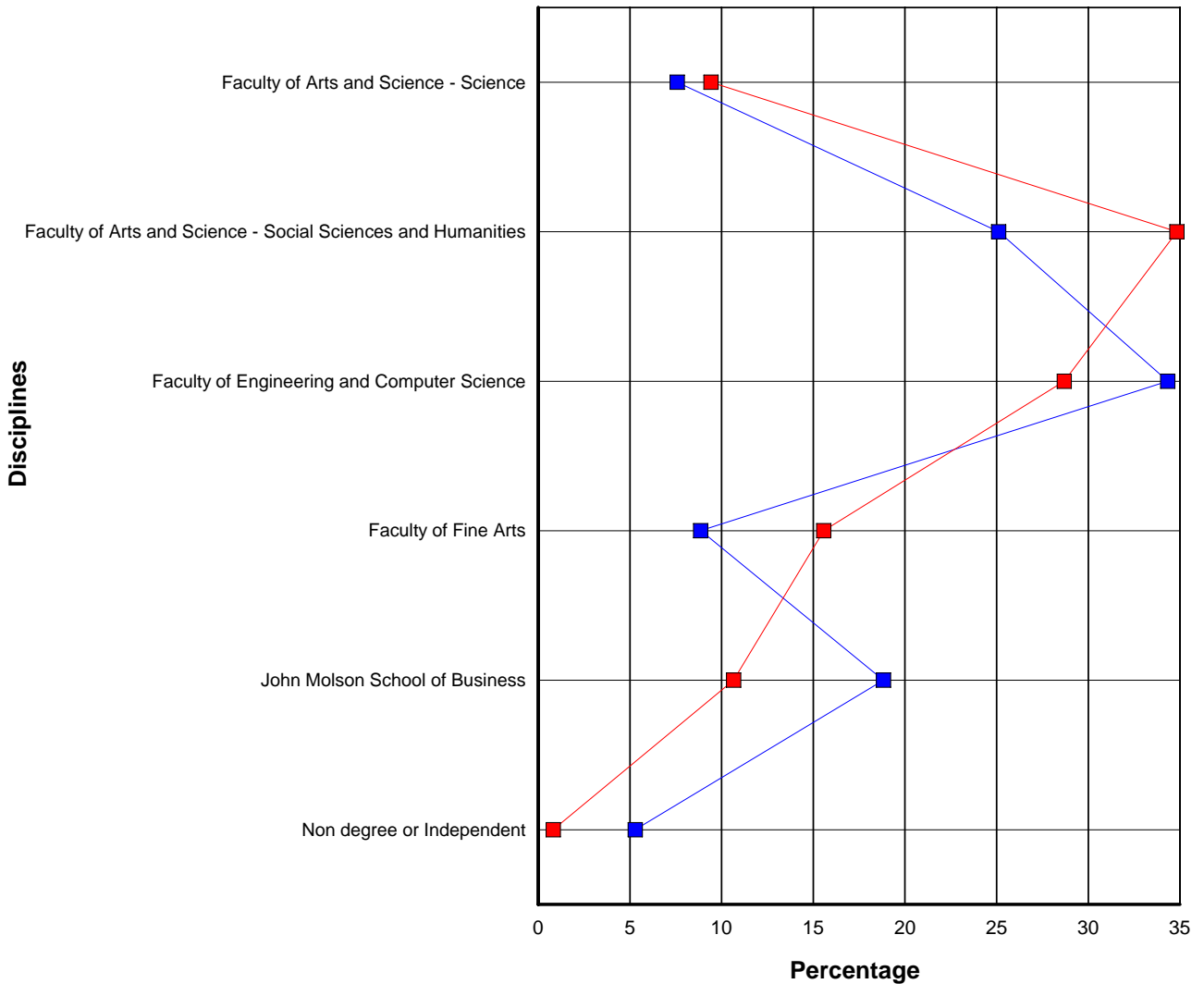Consortium: LibQUAL Canada
User Group: Graduate

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Faculty of Arts and Science - Science	397	7.58	23	9.43	-1.85
Faculty of Arts and Science - Social Sciences and Human	1,315	25.11	85	34.84	-9.73
Faculty of Engineering and Computer Science	1,798	34.33	70	28.69	5.64
Faculty of Fine Arts	464	8.86	38	15.57	-6.71
John Molson School of Business	986	18.83	26	10.66	8.17
Non degree or Independent	277	5.29	2	0.82	4.47
Total:	**5,237**	**100.00**	**244**	**100.00**	**0.00**

5.1.3   Respondent Profile by Answer to the Question: The library that you use most often:

The library that you use most of	Respondents n	Respondents %
Vanier Library (Loyola Campus)	30	12.30
Webster Library (Downtown Campus)	214	87.70
Total:	**244**	**100.00**

5.1.4   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	0	0.00
18 - 22	5	2.05
23 - 30	139	56.97
31 - 45	84	34.43
46 - 65	15	6.15
Over 65	1	0.41
Total:	**244**	**100.00**

5.1.5   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	2,302	43.96	138	56.56
Male	2,935	56.04	106	43.44
Total:	**5,237**	**100.00**	**244**	**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.)

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

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

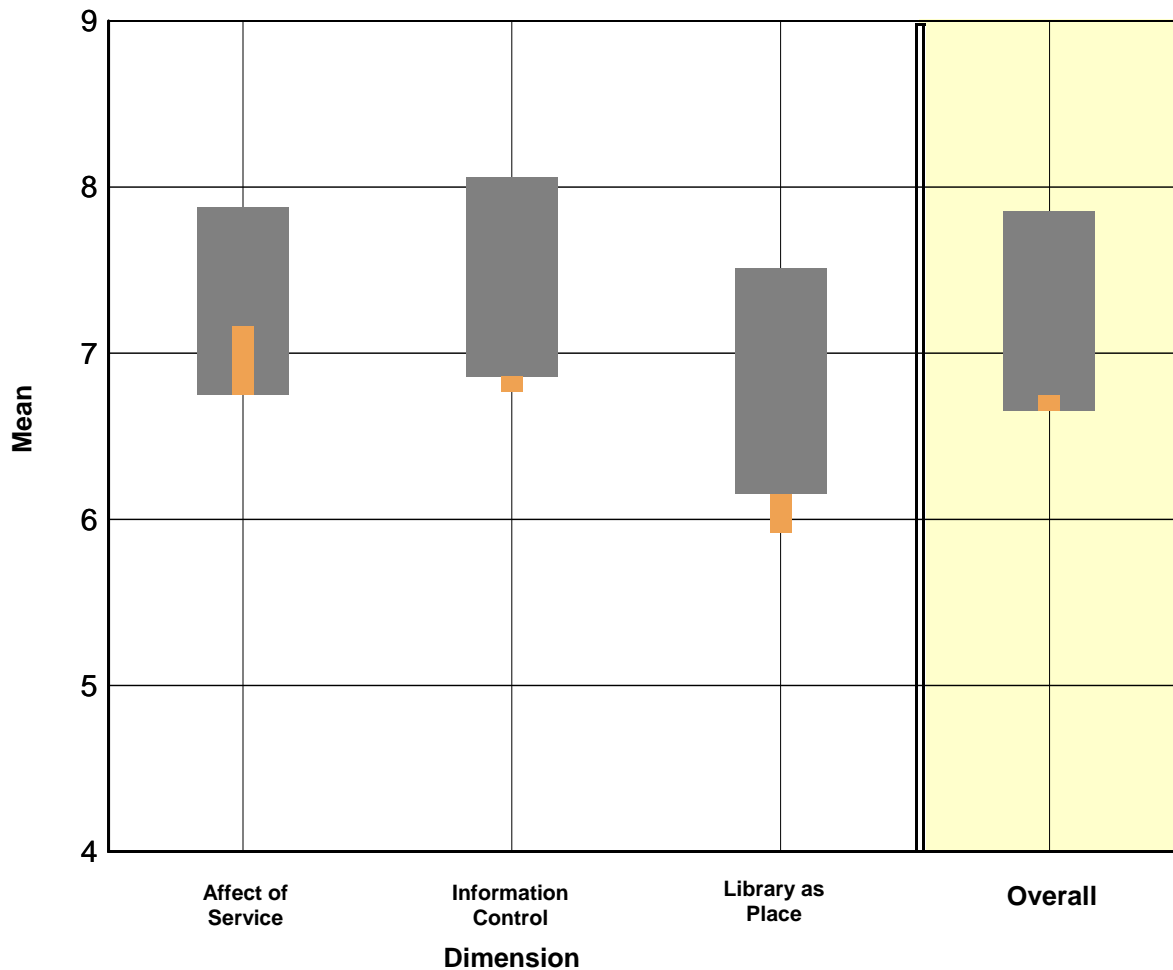| ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Employees who instill confidence in users	6.43	7.62	7.02	0.60	-0.60	47
AS-2	Giving users individual attention	6.38	7.31	6.64	0.25	-0.67	55
AS-3	Employees who are consistently courteous	6.90	7.88	7.43	0.53	-0.45	60
AS-4	Readiness to respond to users' questions	6.86	7.86	7.09	0.22	-0.78	58
AS-5	Employees who have the knowledge to answer user questions	7.09	8.06	7.42	0.32	-0.65	65
AS-6	Employees who deal with users in a caring fashion	6.66	7.95	7.16	0.50	-0.79	238
AS-7	Employees who understand the needs of their users	7.10	8.08	7.40	0.31	-0.67	52
AS-8	Willingness to help users	7.03	7.97	7.08	0.05	-0.88	59
AS-9	Dependability in handling users' service problems	6.60	7.68	7.00	0.40	-0.68	53
Information Control							
IC-1	Making electronic resources accessible from my home or office	7.03	8.29	7.08	0.05	-1.22	65
IC-2	A library Web site enabling me to locate information on my own	7.12	8.34	6.92	-0.21	-1.42	73
IC-3	The printed library materials I need for my work	6.50	7.82	6.50	0.00	-1.32	68
IC-4	The electronic information resources I need	6.71	8.02	6.68	-0.03	-1.35	243
IC-5	Modern equipment that lets me easily access needed information	6.91	7.84	6.94	0.03	-0.90	69
IC-6	Easy-to-use access tools that allow me to find things on my own	6.77	8.14	7.05	0.28	-1.09	65
IC-7	Making information easily accessible for independent use	7.07	7.96	6.63	-0.44	-1.32	68
IC-8	Print and/or electronic journal collections I require for my work	7.03	8.07	6.69	-0.34	-1.38	61
Library as Place							
LP-1	Library space that inspires study and learning	6.08	7.54	5.77	-0.31	-1.78	230
LP-2	Quiet space for individual activities	6.47	7.76	5.82	-0.65	-1.94	66
LP-3	A comfortable and inviting location	6.33	7.67	5.71	-0.63	-1.96	51
LP-4	A getaway for study, learning, or research	6.51	7.57	6.43	-0.08	-1.14	63
LP-5	Community space for group learning and group study	5.50	6.79	6.17	0.67	-0.62	42
Overall:		6.65	7.85	6.74	0.09	-1.11	244

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	1.58	1.55	1.74	1.47	1.68	47
AS-2	Giving users individual attention	2.22	1.96	1.83	1.94	1.67	55
AS-3	Employees who are consistently courteous	1.63	1.42	1.50	1.40	1.05	60
AS-4	Readiness to respond to users' questions	1.71	1.54	1.47	1.17	1.46	58
AS-5	Employees who have the knowledge to answer user questions	1.64	1.27	1.33	1.65	1.16	65
AS-6	Employees who deal with users in a caring fashion	1.67	1.28	1.59	1.66	1.56	238
AS-7	Employees who understand the needs of their users	1.47	1.19	1.40	1.49	1.44	52
AS-8	Willingness to help users	1.31	1.05	1.58	2.00	1.87	59
AS-9	Dependability in handling users' service problems	1.47	1.12	1.04	1.42	1.17	53
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.79	1.35	1.92	2.13	1.72	65
IC-2	A library Web site enabling me to locate information on my own	1.65	1.40	1.63	1.72	1.54	73
IC-3	The printed library materials I need for my work	1.68	1.32	1.48	1.92	1.78	68
IC-4	The electronic information resources I need	1.69	1.47	1.55	1.91	1.67	243
IC-5	Modern equipment that lets me easily access needed information	1.36	1.18	1.32	1.60	1.55	69
IC-6	Easy-to-use access tools that allow me to find things on my own	1.47	1.09	1.32	1.70	1.61	65
IC-7	Making information easily accessible for independent use	1.44	1.39	1.67	1.77	1.86	68
IC-8	Print and/or electronic journal collections I require for my work	1.68	1.26	1.48	1.92	1.45	61
Library as Place							
LP-1	Library space that inspires study and learning	1.94	1.75	2.00	2.40	2.56	230
LP-2	Quiet space for individual activities	2.07	1.70	2.27	2.57	2.54	66
LP-3	A comfortable and inviting location	1.69	1.49	1.87	2.70	2.52	51
LP-4	A getaway for study, learning, or research	1.68	1.71	1.78	2.10	2.22	63
LP-5	Community space for group learning and group study	2.33	2.33	1.59	2.43	2.28	42
Overall:		1.30	1.07	1.19	1.38	1.24	244

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.

| Range of Minimum to Desired |
| Range of Minimum to Perceived ("Adequacy Gap") |

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

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

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	6.75	7.88	7.16	0.41	-0.71	241
Information Control	6.86	8.06	6.77	-0.09	-1.29	244
Library as Place	6.15	7.51	5.92	-0.23	-1.59	235
Overall	6.65	7.85	6.74	0.09	-1.11	244

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	1.17	1.32	1.42	1.27	241
Information Control	1.39	1.16	1.29	1.58	1.37	244
Library as Place	1.73	1.61	1.78	2.22	2.32	235
Overall	1.30	1.07	1.19	1.38	1.24	244

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
Ability to navigate library Web pages easily	6.61	8.14	7.09	0.48	-1.05	56
Adequate hours of service	7.00	8.04	7.86	0.86	-0.18	51
Ease and timeliness in getting materials from other libraries	7.18	8.03	7.12	-0.06	-0.91	33
Making me aware of library resources and services	6.44	7.44	6.22	-0.22	-1.22	45
Teaching me how to access, evaluate, and use information	6.31	7.50	6.33	0.02	-1.17	42

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
Ability to navigate library Web pages easily	1.68	1.07	1.52	1.83	1.49	56
Adequate hours of service	1.48	1.30	1.15	1.83	1.61	51
Ease and timeliness in getting materials from other libraries	1.86	1.57	1.69	1.27	1.21	33
Making me aware of library resources and services	1.84	1.53	1.72	2.10	1.73	45
Teaching me how to access, evaluate, and use information	1.97	1.71	1.96	1.92	2.17	42

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.	7.19	1.65	118
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	6.90	1.53	126
How would you rate the overall quality of the service provided by the library?	7.02	1.37	244

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.	6.01	2.01	88
The library aids my advancement in my academic discipline or work.	7.25	1.32	106
The library enables me to be more efficient in my academic pursuits or work.	7.17	1.48	105
The library helps me distinguish between trustworthy and untrustworthy information.	6.22	1.70	98
The library provides me with the information skills I need in my work or study.	6.59	1.38	91

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.
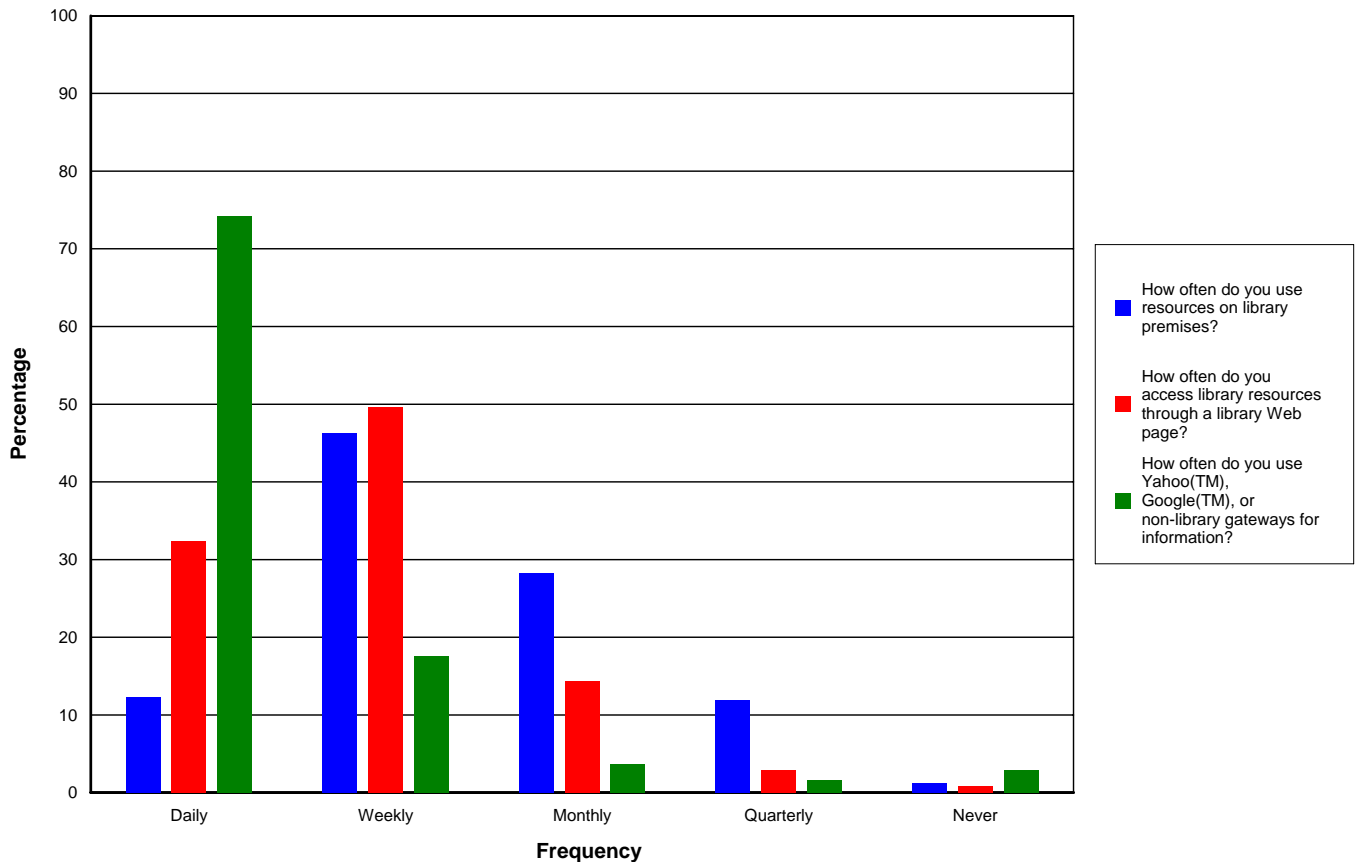
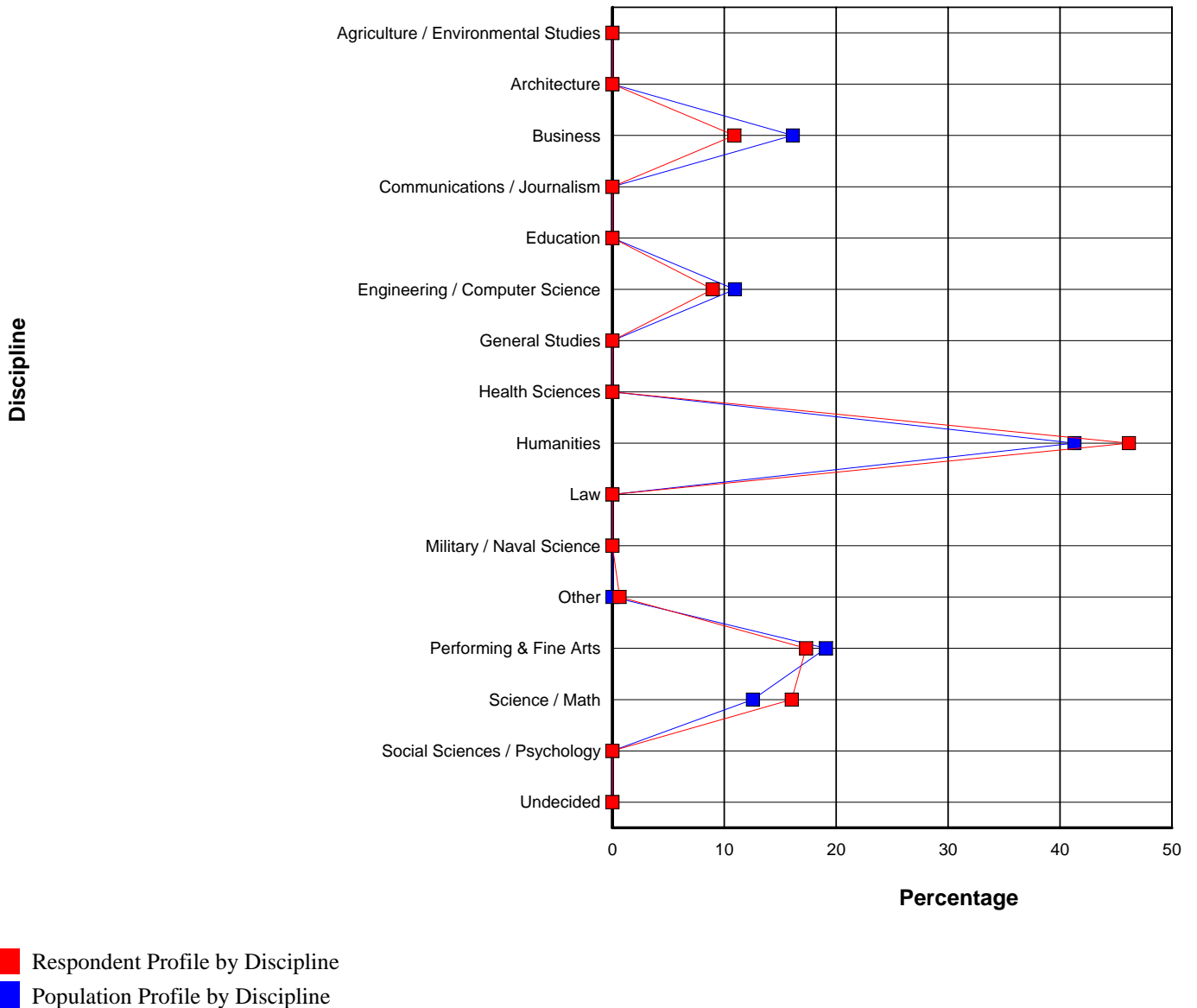|	Daily	Weekly	Monthly	Quarterly	Never	n/%
How often do you use resources on library premises?	30 12.30%	113 46.31%	69 28.28%	29 11.89%	3 1.23%	244 100.00%
How often do you access library resources through a library Web page?	79 32.38%	121 49.59%	35 14.34%	7 2.87%	2 0.82%	244 100.00%
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	181 74.18%	43 17.62%	9 3.69%	4 1.64%	7 2.87%	244 100.00%

6   Faculty Summary for Concordia University Libraries

6.1   Demographic Summary for Faculty

6.1.1   Population and Respondent Profiles for Faculty 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).
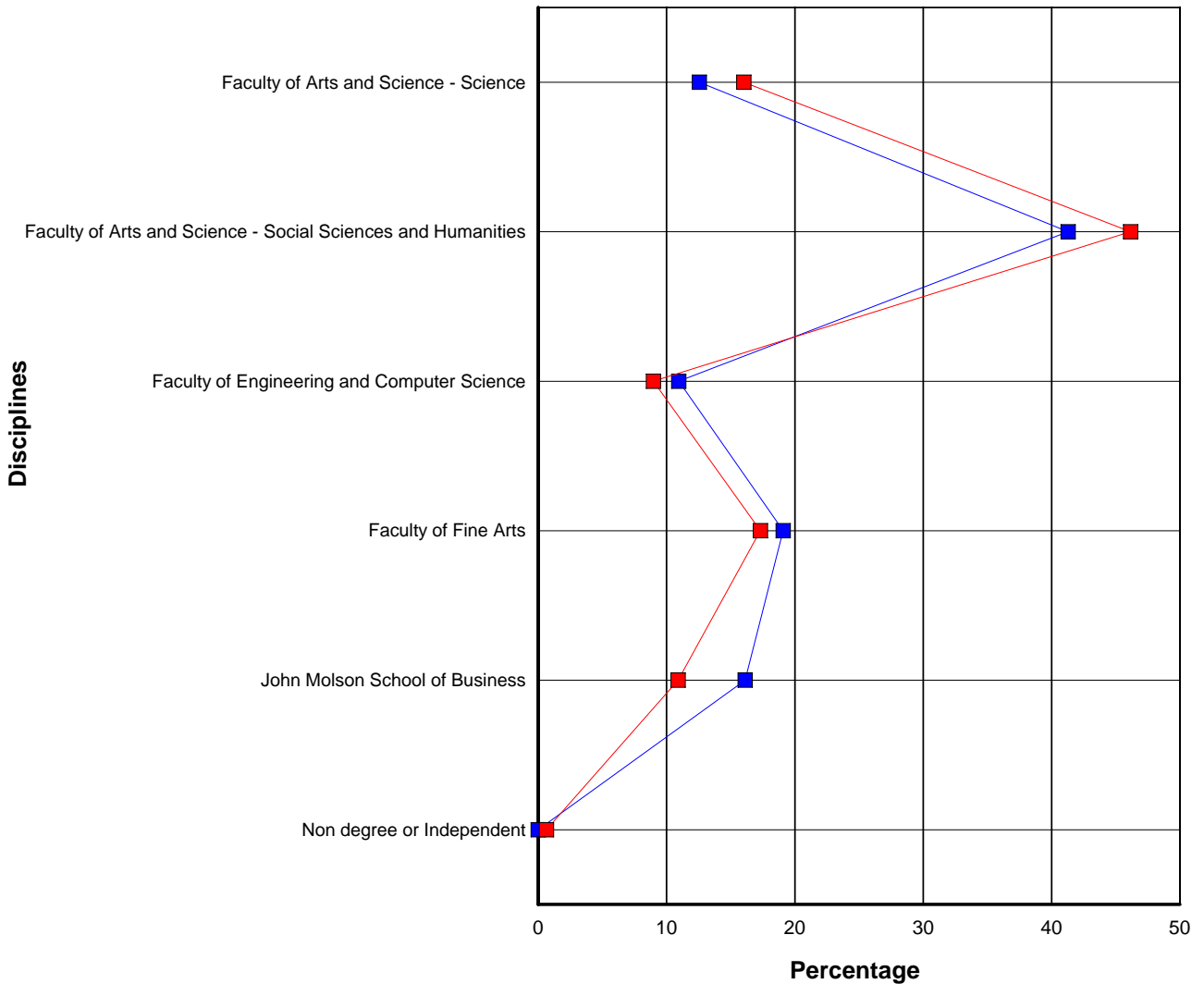

■ Respondent Profile by Discipline
■ Population Profile by Discipline

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

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture / Environmental Studies	0	0.00	0	0.00	0.00
Architecture	0	0.00	0	0.00	0.00
Business	321	16.12	17	10.90	5.23
Communications / Journalism	0	0.00	0	0.00	0.00
Education	0	0.00	0	0.00	0.00
Engineering / Computer Science	218	10.95	14	8.97	1.97
General Studies	0	0.00	0	0.00	0.00
Health Sciences	0	0.00	0	0.00	0.00
Humanities	822	41.29	72	46.15	-4.87
Law	0	0.00	0	0.00	0.00
Military / Naval Science	0	0.00	0	0.00	0.00
Other	0	0.00	1	0.64	-0.64
Performing & Fine Arts	380	19.09	27	17.31	1.78
Science / Math	250	12.56	25	16.03	-3.47
Social Sciences / Psychology	0	0.00	0	0.00	0.00
Undecided	0	0.00	0	0.00	0.00
Total:	**1,991**	**100.00**	**156**	**100.00**	**0.00**

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

6.1.2 Population and Respondent Profiles for by Customized 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 customized discipline categories supplied by the participating library. 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

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Faculty of Arts and Science - Science	250	12.56	25	16.03	-3.47
Faculty of Arts and Science - Social Sciences and Human	822	41.29	72	46.15	-4.87
Faculty of Engineering and Computer Science	218	10.95	14	8.97	1.97
Faculty of Fine Arts	380	19.09	27	17.31	1.78
John Molson School of Business	321	16.12	17	10.90	5.23
Non degree or Independent	0	0.00	1	0.64	-0.64
Total:	**1,991**	**100.00**	**156**	**100.00**	**0.00**

6.1.3 Respondent Profile by Answer to the Question: The library that you use most often:

The library that you use most of	Respondents n	Respondents %
Vanier Library (Loyola Campus)	33	21.15
Webster Library (Downtown Campus)	123	78.85
Total:	**156**	**100.00**

6.1.4 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	0	0.00
18 - 22	0	0.00
23 - 30	3	1.91
31 - 45	59	37.58
46 - 65	80	50.96
Over 65	15	9.55
Total:	**157**	**100.00**

6.1.5 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	770	38.67	70	44.87
Male	1,221	61.33	86	55.13
Total:	**1,991**	**100.00**	**156**	**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.)
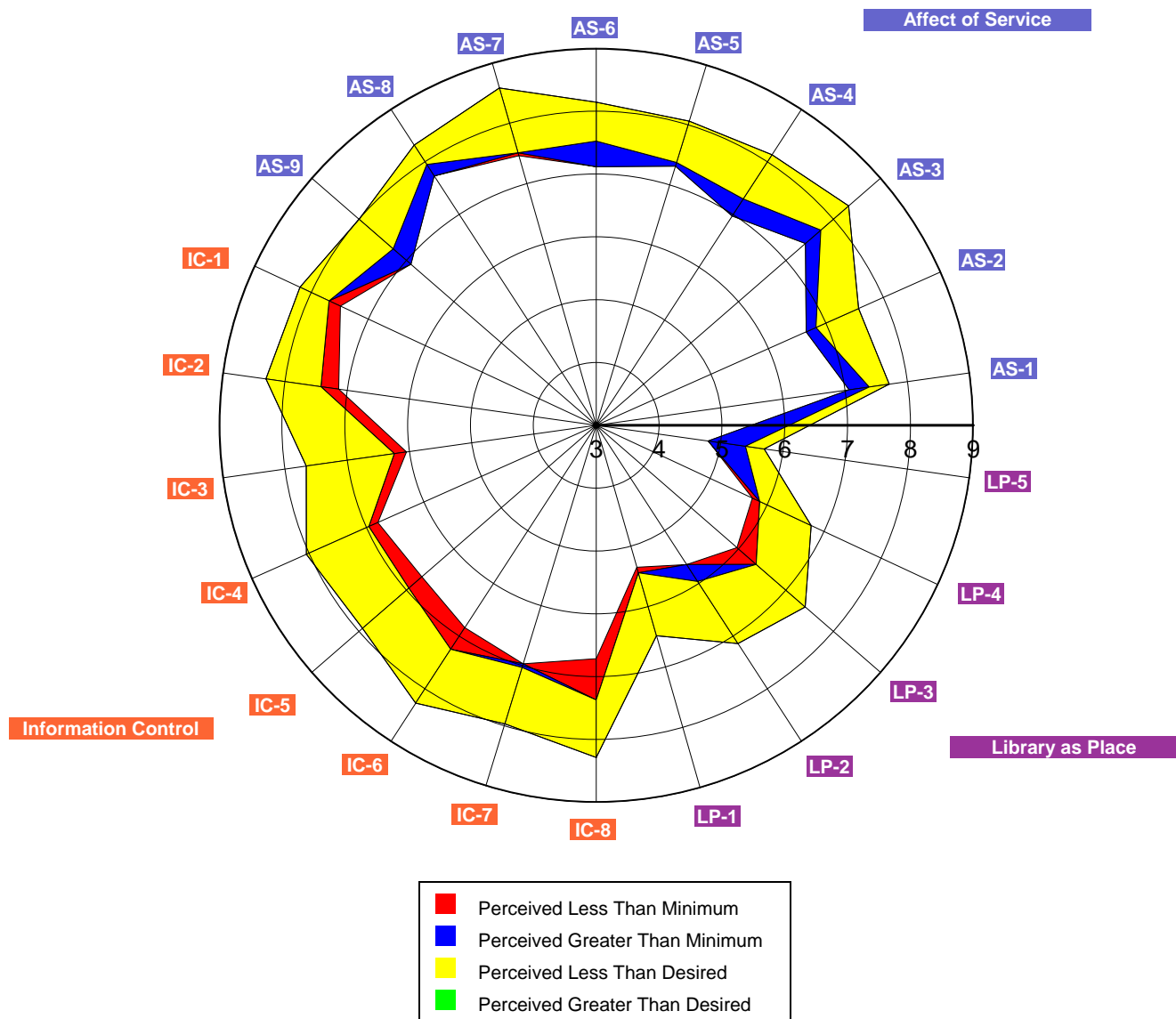

Language: English (American), French (Canada)
Institution Type: College or University
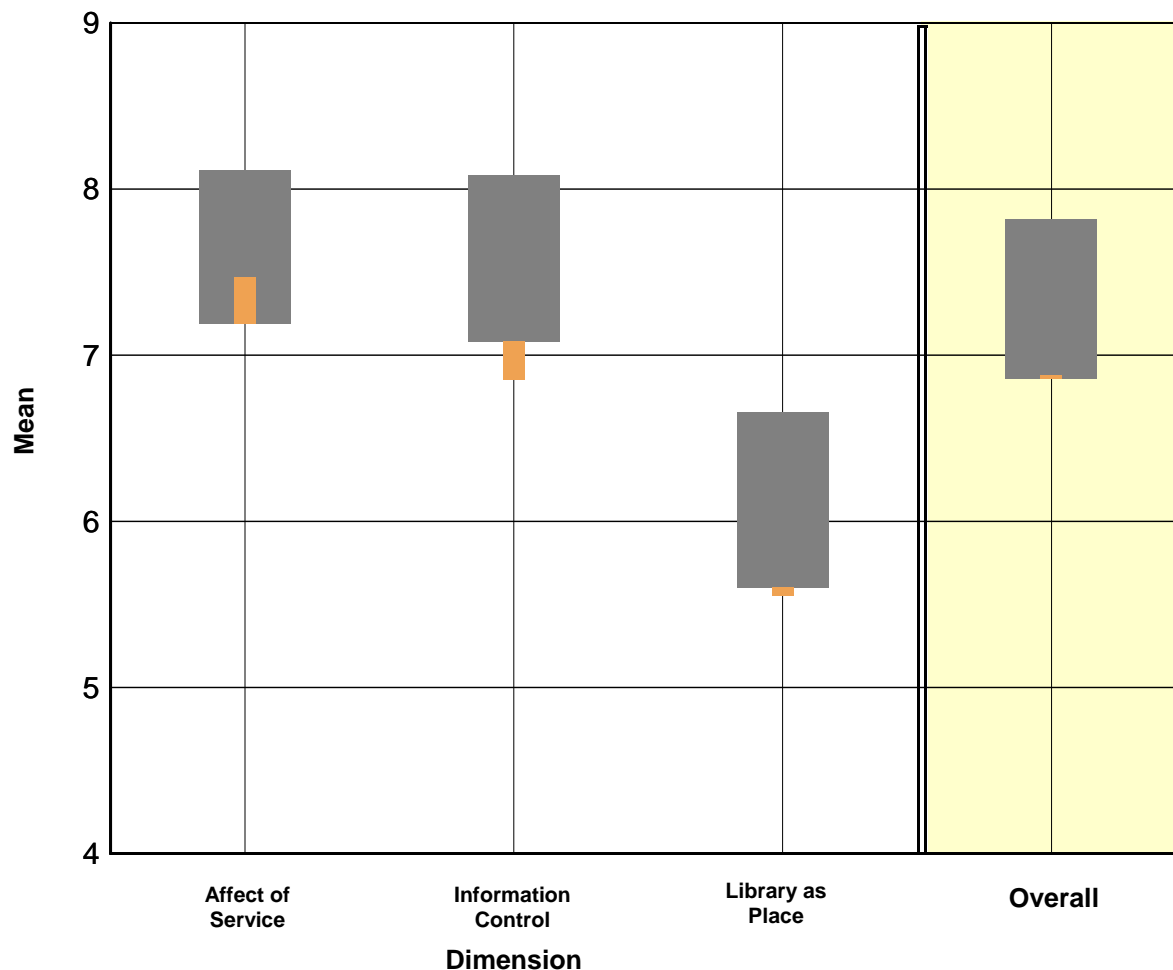Consortium: LibQUAL Canada
User Group: Faculty

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	7.06	7.71	7.39	0.32	-0.32	31
AS-2	Giving users individual attention	6.66	7.57	6.83	0.17	-0.74	35
AS-3	Employees who are consistently courteous	7.41	8.32	7.74	0.32	-0.59	34
AS-4	Readiness to respond to users' questions	6.97	8.14	7.30	0.32	-0.84	37
AS-5	Employees who have the knowledge to answer user questions	7.31	8.06	7.38	0.06	-0.69	48
AS-6	Employees who deal with users in a caring fashion	7.12	8.14	7.52	0.41	-0.62	155
AS-7	Employees who understand the needs of their users	7.51	8.59	7.46	-0.05	-1.12	41
AS-8	Willingness to help users	7.73	8.32	7.95	0.22	-0.37	41
AS-9	Dependability in handling users' service problems	6.91	8.00	7.28	0.38	-0.72	32
Information Control							
IC-1	Making electronic resources accessible from my home or office	7.69	8.20	7.49	-0.20	-0.71	45
IC-2	A library Web site enabling me to locate information on my own	7.42	8.31	7.14	-0.29	-1.17	59
IC-3	The printed library materials I need for my work	6.24	7.66	6.05	-0.20	-1.61	41
IC-4	The electronic information resources I need	6.96	8.05	6.80	-0.16	-1.24	152
IC-5	Modern equipment that lets me easily access needed information	6.95	7.93	6.68	-0.28	-1.25	40
IC-6	Easy-to-use access tools that allow me to find things on my own	7.25	8.27	6.84	-0.41	-1.43	44
IC-7	Making information easily accessible for independent use	6.97	7.97	7.03	0.06	-0.94	33
IC-8	Print and/or electronic journal collections I require for my work	7.37	8.29	6.71	-0.66	-1.57	35
Library as Place							
LP-1	Library space that inspires study and learning	5.44	6.48	5.35	-0.09	-1.13	120
LP-2	Quiet space for individual activities	5.64	7.14	5.96	0.32	-1.18	28
LP-3	A comfortable and inviting location	6.38	7.41	5.97	-0.41	-1.44	32
LP-4	A getaway for study, learning, or research	5.87	6.77	5.74	-0.13	-1.03	31
LP-5	Community space for group learning and group study	4.80	5.70	5.40	0.60	-0.30	20
Overall:		6.86	7.82	6.88	0.02	-0.94	157

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	1.82	1.75	1.71	1.11	0.94	31
AS-2	Giving users individual attention	1.73	1.42	1.52	1.40	1.46	35
AS-3	Employees who are consistently courteous	1.35	0.77	1.33	1.53	1.50	34
AS-4	Readiness to respond to users' questions	1.40	1.11	1.29	1.53	1.21	37
AS-5	Employees who have the knowledge to answer user questions	1.63	1.46	1.44	1.94	1.79	48
AS-6	Employees who deal with users in a caring fashion	1.58	1.25	1.48	1.81	1.50	155
AS-7	Employees who understand the needs of their users	1.60	0.74	1.34	1.86	1.49	41
AS-8	Willingness to help users	1.32	1.06	1.20	1.41	1.43	41
AS-9	Dependability in handling users' service problems	1.59	1.37	1.44	1.39	1.33	32
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.61	1.53	1.56	1.06	0.97	45
IC-2	A library Web site enabling me to locate information on my own	1.37	0.99	1.38	1.65	1.67	59
IC-3	The printed library materials I need for my work	1.81	1.59	2.04	2.89	2.61	41
IC-4	The electronic information resources I need	1.71	1.47	1.45	1.86	1.93	152
IC-5	Modern equipment that lets me easily access needed information	1.38	1.25	1.46	2.01	2.00	40
IC-6	Easy-to-use access tools that allow me to find things on my own	1.31	1.00	1.52	1.63	1.62	44
IC-7	Making information easily accessible for independent use	1.72	1.59	1.33	1.37	1.43	33
IC-8	Print and/or electronic journal collections I require for my work	1.77	1.62	1.49	1.81	1.72	35
Library as Place							
LP-1	Library space that inspires study and learning	2.38	2.40	2.14	2.86	2.95	120
LP-2	Quiet space for individual activities	2.54	2.19	2.13	3.38	3.14	28
LP-3	A comfortable and inviting location	1.83	1.32	2.29	2.59	2.29	32
LP-4	A getaway for study, learning, or research	2.46	2.62	2.03	2.45	2.46	31
LP-5	Community space for group learning and group study	2.44	2.83	1.60	1.82	2.36	20
Overall:		1.31	1.02	1.13	1.28	1.16	157

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.

	Range of Minimum to Desired
	Range of Minimum to Perceived ("Adequacy Gap")

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

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

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	7.19	8.11	7.46	0.28	-0.65	157
Information Control	7.08	8.08	6.85	-0.23	-1.23	157
Library as Place	5.60	6.66	5.55	-0.05	-1.11	130
Overall	6.86	7.82	6.88	0.02	-0.94	157

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	1.44	1.08	1.27	1.47	1.26	157
Information Control	1.42	1.17	1.28	1.52	1.49	157
Library as Place	2.21	2.14	1.94	2.56	2.50	130
Overall	1.31	1.02	1.13	1.28	1.16	157

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
Ability to navigate library Web pages easily	6.54	7.86	6.86	0.32	-1.00	28
Adequate hours of service	6.79	7.55	6.91	0.12	-0.64	33
Ease and timeliness in getting materials from other libraries	7.17	8.20	7.40	0.23	-0.80	30
Making me aware of library resources and services	6.83	7.65	6.78	-0.04	-0.87	23
Teaching me how to access, evaluate, and use information	6.72	7.76	7.10	0.38	-0.66	29

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
Ability to navigate library Web pages easily	1.75	1.96	2.09	1.47	2.04	28
Adequate hours of service	2.03	1.50	1.63	2.06	1.82	33
Ease and timeliness in getting materials from other libraries	1.09	1.00	1.25	1.50	1.49	30
Making me aware of library resources and services	1.19	0.98	1.65	1.72	1.77	23
Teaching me how to access, evaluate, and use information	1.79	1.41	1.68	1.86	1.42	29

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.

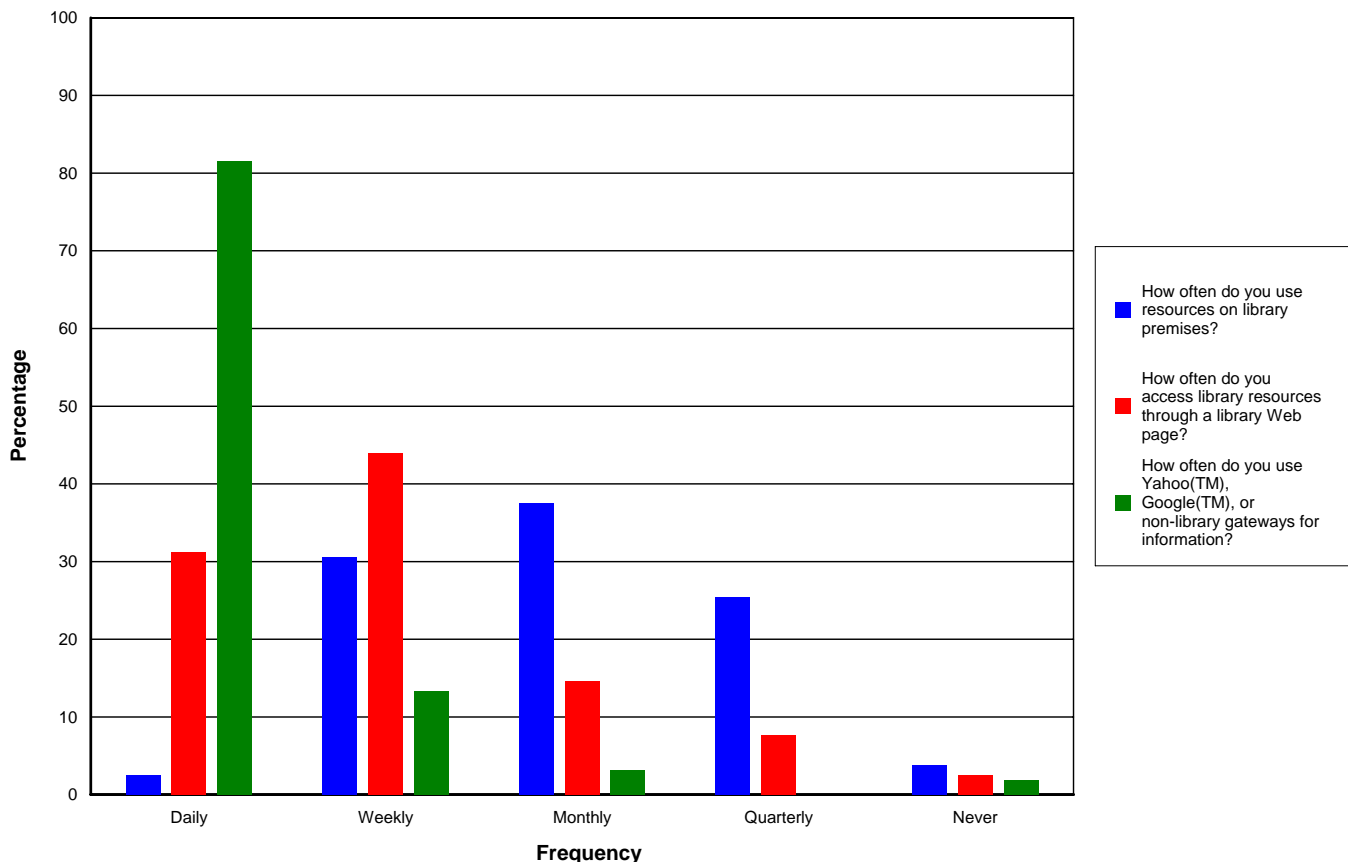| Satisfaction Question	Mean	SD	n
In general, I am satisfied with the way in which I am treated at the library.	7.37	1.60	81
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	6.80	1.75	76
How would you rate the overall quality of the service provided by the library?	7.08	1.37	157

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.	6.12	1.68	67
The library aids my advancement in my academic discipline or work.	7.14	1.77	59
The library enables me to be more efficient in my academic pursuits or work.	6.94	2.05	63
The library helps me distinguish between trustworthy and untrustworthy information.	5.68	2.11	62
The library provides me with the information skills I need in my work or study.	6.57	1.46	63

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**	**n/%**
How often do you use resources on library premises?	4	48	59	40	6	157
	2.55%	30.57%	37.58%	25.48%	3.82%	100.00%
How often do you access library resources through a library Web page?	49	69	23	12	4	157
	31.21%	43.95%	14.65%	7.64%	2.55%	100.00%
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	128	21	5	0	3	157
	81.53%	13.38%	3.18%	0 %	1.91%	100.00%

7   Staff Summary for Concordia University Libraries

7.1   Demographic Summary for Staff

7.1.1   Respondent Profile by Answer to the Question: The library that you use most often:

The library that you use most of	Respondents n	Respondents %
Vanier Library (Loyola Campus)	2	33.33
Webster Library (Downtown Campus)	4	66.67
Total:	**6**	**100.00**

7.1.2 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	0	0.00
18 - 22	0	0.00
23 - 30	1	16.67
31 - 45	1	16.67
46 - 65	4	66.67
Over 65	0	0.00
Total:	**6**	**100.00**

7.1.3 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.
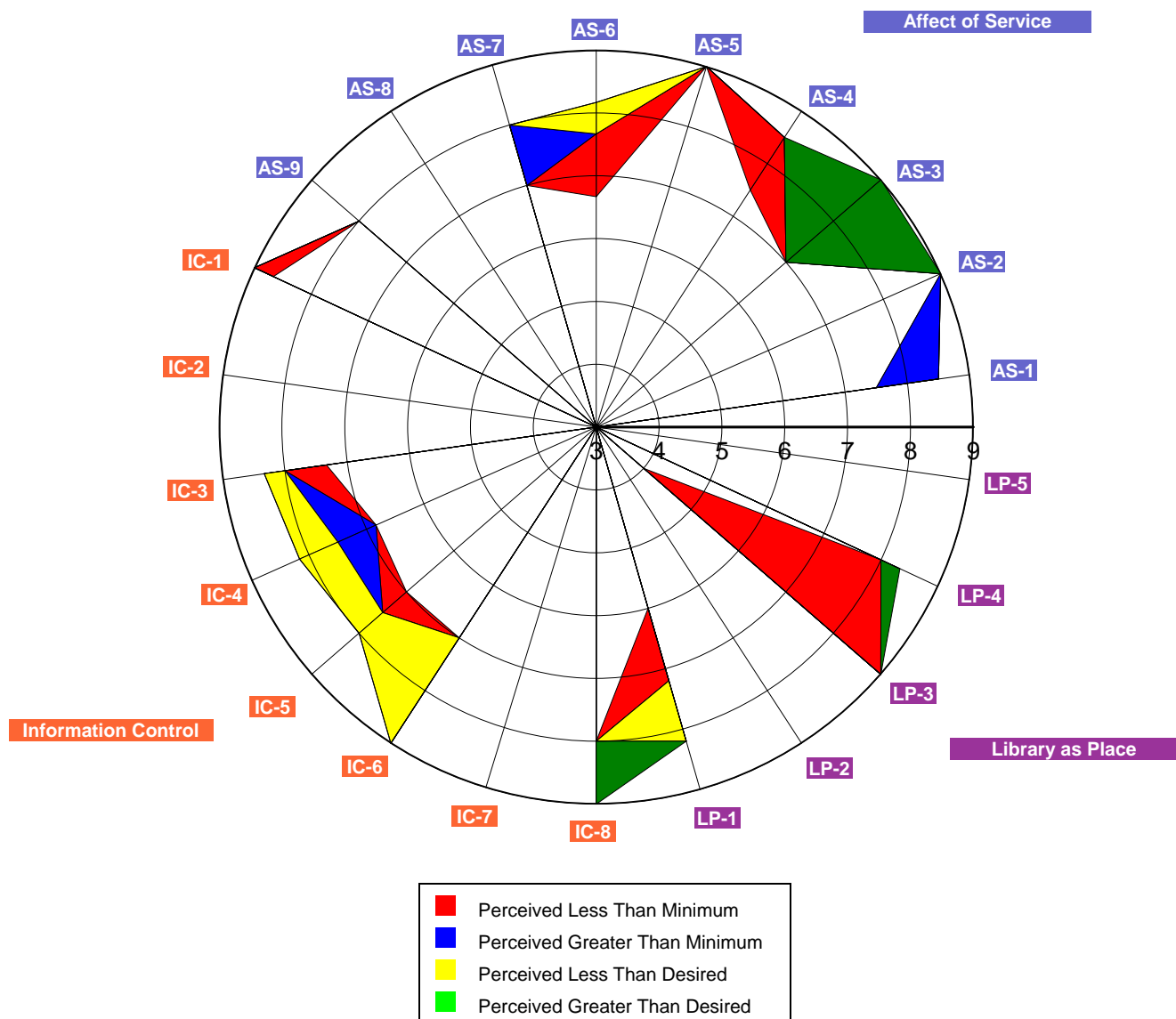
Sex:	Respondents n	Respondents %
Female	5	83.33
Male	1	16.67
Total:	**6**	**100.00**

7.2   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.)

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

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	7.50	8.50	8.50	1.00	0.00	2
AS-2	Giving users individual attention	9.00	9.00	9.00	0.00	0.00	1
AS-3	Employees who are consistently courteous	7.00	7.00	9.00	2.00	2.00	1
AS-4	Readiness to respond to users' questions	8.50	8.50	7.50	-1.00	-1.00	2
AS-5	Employees who have the knowledge to answer user questions	9.00	9.00	9.00	0.00	0.00	3
AS-6	Employees who deal with users in a caring fashion	7.67	8.17	6.67	-1.00	-1.50	6
AS-7	Employees who understand the needs of their users	7.00	8.00	8.00	1.00	0.00	1
AS-8	Willingness to help users						0
AS-9	Dependability in handling users' service problems	8.00	8.00	8.00	0.00	0.00	2
Information Control							
IC-1	Making electronic resources accessible from my home or office	9.00	9.00	8.67	-0.33	-0.33	3
IC-2	A library Web site enabling me to locate information on my own						0
IC-3	The printed library materials I need for my work	8.00	8.33	7.33	-0.67	-1.00	3
IC-4	The electronic information resources I need	6.83	8.17	7.50	0.67	-0.67	6
IC-5	Modern equipment that lets me easily access needed information	7.50	8.00	7.00	-0.50	-1.00	2
IC-6	Easy-to-use access tools that allow me to find things on my own	7.00	9.00	7.00	0.00	-2.00	1
IC-7	Making information easily accessible for independent use						0
IC-8	Print and/or electronic journal collections I require for my work	8.00	7.00	8.00	0.00	1.00	2
Library as Place							
LP-1	Library space that inspires study and learning	7.20	8.20	6.00	-1.20	-2.20	5
LP-2	Quiet space for individual activities						0
LP-3	A comfortable and inviting location	9.00	9.00	4.00	-5.00	-5.00	2
LP-4	A getaway for study, learning, or research	8.00	8.00	8.33	0.33	0.33	3
LP-5	Community space for group learning and group study						0
Overall:		7.93	8.36	7.60	-0.33	-0.76	6

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	2.12	0.71	0.71	1.41	0	2
AS-2	Giving users individual attention						1
AS-3	Employees who are consistently courteous						1
AS-4	Readiness to respond to users' questions	0.71	0.71	2.12	1.41	1.41	2
AS-5	Employees who have the knowledge to answer user questions	0	0	0	0	0	3
AS-6	Employees who deal with users in a caring fashion	1.21	1.33	2.25	2.37	2.81	6
AS-7	Employees who understand the needs of their users						1
AS-8	Willingness to help users						0
AS-9	Dependability in handling users' service problems	1.41	1.41	1.41	0	0	2
Information Control							
IC-1	Making electronic resources accessible from my home or office	0	0	0.58	0.58	0.58	3
IC-2	A library Web site enabling me to locate information on my own						0
IC-3	The printed library materials I need for my work	1.00	0.58	1.15	0.58	1.00	3
IC-4	The electronic information resources I need	1.72	1.60	1.52	1.37	2.34	6
IC-5	Modern equipment that lets me easily access needed information	2.12	1.41	2.83	0.71	1.41	2
IC-6	Easy-to-use access tools that allow me to find things on my own						1
IC-7	Making information easily accessible for independent use						0
IC-8	Print and/or electronic journal collections I require for my work	1.41	0	1.41	2.83	1.41	2
Library as Place							
LP-1	Library space that inspires study and learning	1.79	1.79	2.00	3.19	3.35	5
LP-2	Quiet space for individual activities						0
LP-3	A comfortable and inviting location	0	0	0	0	0	2
LP-4	A getaway for study, learning, or research	1.00	1.00	0.58	0.58	0.58	3
LP-5	Community space for group learning and group study						0
Overall:		0.79	0.66	0.72	1.13	1.27	6

7.3   Core Question Dimensions Summary for Staff

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

Legend:
- Range of Minimum to Desired
- Range of Minimum to Perceived ("Adequacy Gap")

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	8.00	8.33	7.83	-0.17	-0.50	6
Information Control	7.64	8.28	7.61	-0.03	-0.67	6
Library as Place	7.80	8.30	6.30	-1.50	-2.00	5
Overall	7.93	8.36	7.60	-0.33	-0.76	6

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	0.82	0.47	0.91	1.07	1.11	6
Information Control	1.14	0.95	1.02	0.86	1.40	6
Library as Place	1.15	1.10	1.79	2.92	2.72	5
Overall	0.79	0.66	0.72	1.13	1.27	6

7.4　　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
Ability to navigate library Web pages easily	9.00	9.00	9.00	0	0	2
Adequate hours of service	7.00	9.00	8.00	1.00	-1.00	1
Ease and timeliness in getting materials from other libraries	9.00	9.00	9.00	0	0	1
Making me aware of library resources and services	8.50	8.50	9.00	0.50	0.50	2
Teaching me how to access, evaluate, and use information						0

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
Ability to navigate library Web pages easily	0	0	0	0	0	2
Adequate hours of service						1
Ease and timeliness in getting materials from other libraries						1
Making me aware of library resources and services	0.71	0.71	0	0.71	0.71	2
Teaching me how to access, evaluate, and use information						0

7.5   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.	8.75	0.50	4
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	6.50	3.54	2
How would you rate the overall quality of the service provided by the library?	7.33	1.97	6

7.6   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.	7.00		1
The library aids my advancement in my academic discipline or work.	8.00		1
The library enables me to be more efficient in my academic pursuits or work.	6.00	1.73	3
The library helps me distinguish between trustworthy and untrustworthy information.	5.50	2.08	4
The library provides me with the information skills I need in my work or study.	6.67	2.08	3

7.7   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.
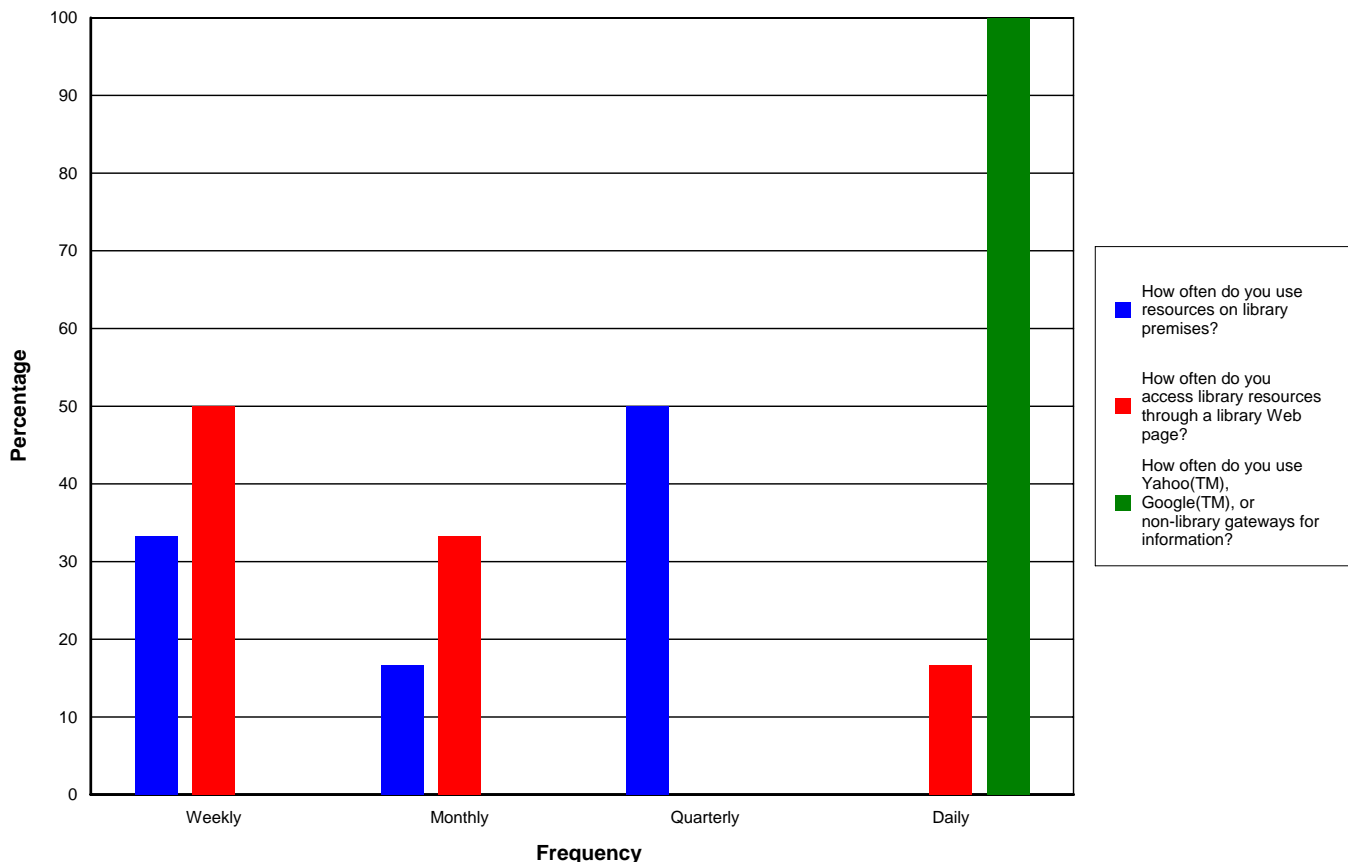
	Daily	Weekly	Monthly	Quarterly	n/%
How often do you use resources on library premises?	0 0 %	2 33.33%	1 16.67%	3 50.00%	6 100.00%
How often do you access library resources through a library Web page?	1 16.67%	3 50.00%	2 33.33%	0 0 %	6 100.00%
How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?	6 100.00%	0 0 %	0 0 %	0 0 %	6 100.00%

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 2009 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