



LibQUAL⁺
2019 Survey

University of Northern Colorado

Association of Research Libraries / Texas A&M University

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1 Introduction

1.1 LibQUAL+: Defining and Promoting Library Service Quality

This notebook contains information from the 2019 administration of the LibQUAL+ protocol and provides background information in addition to suggestions for interpreting the data.

LibQUAL+ is a tool 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 protocol is a rigorously tested web-based survey 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

LibQUAL+ was initiated in 2000 as an experimental project for benchmarking perceptions of library service quality across 13 Association of Research Libraries member institutions under the leadership of Fred Heath and Colleen Cook, then both at Texas A&M University Libraries, and Martha Kyrillidou, former senior director of statistics and service quality programs at ARL. 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).

Since 2000, more than 1,300 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. Through 2018, there have been 3,161 institutional surveys implemented across 1,390 institutions in 35 countries, 19 language translations, and over 2.8 million respondents. About 37% of the users who respond to the survey provide rich comments about the ways they use their libraries. The growing LibQUAL+ community of participants and its extensive dataset are rich resources for improving library services.

1.2 Web Access to Data

Data summaries from the 2019 iteration of the LibQUAL+ survey will be available to project participants online in the Data Repository via the LibQUAL+ survey management site:

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

1.3 Interpreting Your Data

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 (SD) is a measure of the spread of data around their mean. The standard deviation 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.

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.

Radar Charts

Radar charts are commonly used throughout the following pages to display both aggregate results and results from individual institutions. 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.

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

Data Screening

In compiling the summary data reported here, several criteria were used to determine which responses to include in the analyses.

- 1. Complete Data.** 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 submit the questionnaire, 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 were retained in summary statistics.*
- 2. "N/A" Responses.** Because some institutions provide incentive prizes for completing the survey, some users might select "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. *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 are eliminated from the summary statistics.*
- 3. Inconsistent Responses.** One appealing feature of 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. *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+ Analytics

LibQUAL+ Analytics is a tool that permits participants to dynamically create institution-specific tables and charts for different subgroups and across years. Participants can refine the data by selecting specific years, user groups, and disciplines; view and save the selection in various tables and charts; and download their datasets for further manipulation in their preferred software. As a benefit of registration, libraries have access to their own data in LibQUAL+ Analytics, as well as to the data for other institutions participating in the same year. Expanded access to LibQUAL+ data, encompassing all libraries in all years from 2000 to the present, is available for an additional fee through a LibQUAL+ membership subscription.

LibQUAL+ Norms

LibQUAL+ norms are available in the appendix of the following conference paper:

http://arizona.openrepository.com/arizona/bitstream/10150/106442/1/08.Bruce_Thompson_pp52-60_.pdf

Selected Bibliography

- Begay, Wendy, Daniel R. Lee, Jim Martin, and Michael Ray. "Quantifying Qualitative Data: Using LibQUAL+(TM) Comments for Library-Wide Planning Activities at the University of Arizona." *Journal of Library Administration* 40, no. 3/4 (2004): 111-120.
- Berry, L.L. *On Great Service: A Framework For Action*. New York: The Free Press, 1995.
- Bradford, Dennis W. and Tim Bower. "Using Content Analysis Software to Analyze Survey Comments." *Portal: Libraries and the Academy* 8, no. 4 (2008): 423-437.
- Cabrerizo, Francisco J., Ignacio J. Pérez, Javier López-Gijón, Enrique Herrera-Viedma, An Extended LibQUAL+ Model Based on Fuzzy Linguistic Information. *Modeling Decisions for Artificial Intelligence Lecture Notes in Computer Science 2012*: 90-101.
- Calvert, Philip, J. *Assessing the Effectiveness and Quality of Libraries*. Ph.D. Thesis, Victoria University of Wellington, 2008.
- Cook, Colleen C., Fred Heath, and Bruce Thompson. LibQUAL+™ from the UK Perspective. 5th Northumbria International Conference Proceedings, Durham, UK, July, 2003.
- Cook, Colleen C. (Guest Ed.). "Library Decision-Makers Speak to Their Uses of Their LibQUAL+™ Data: Some LibQUAL+™ Case Studies." *Performance Measurement and Metrics*, 3 (2002b).
- Cook, Colleen C. "A Mixed-Methods Approach to the Identification and Measurement of Academic Library Service Quality Constructs: LibQUAL+™." (PhD diss., Texas A&M University, 2001) *Dissertation Abstracts International*, 62 (2002A): 2295A (University Microfilms No. AAT3020024).
- Cook, Colleen C., and Fred Heath. "Users' Perceptions of Library Service Quality: A 'LibQUAL+™' Qualitative Study." *Library Trends*, 49 (2001): 548-84.
- Cook, Colleen C., Fred Heath, and Bruce Thompson. "'Zones of tolerance' in Perceptions of Library Service Quality: A LibQUAL+™ Study." *portal: Libraries and the Academy*, 3 (2003): 113-123.
- Cook, Colleen C., Fred Heath and Bruce Thompson.. "Score Norms for Improving Library Service Quality: A LibQUAL+™ Study." *portal: Libraries and the Academy*, 2 (2002): 13-26.
- Cook, Colleen C., Fred Heath, and Russell L. Thompson. "A Meta-Analysis of Response Rates in Web- or Internet-based Surveys." *Educational and Psychological Measurement*, 60 (2000): 821-36.
- Cook, Colleen C., and Bruce Thompson. "Psychometric Properties of Scores from the Web-based LibQUAL+™ Study of Perceptions of Library Service Quality." *Library Trends*, 49 (2001): 585-604.
- Cook, C., Bruce Thompson, and Martha Kyriallidou. (2010, May). Does using item sampling methods in library service quality assessment affect score norms?: A LibQUAL+® Lite study. <http://libqual.org/documents/LibQual/publications/lq_gr_3.pdf>. Paper presented at the 2nd Qualitative and Quantitative Methods in Libraries (QQML 2010) International Conference, Chania (Crete), Greece, May 27, 2010.
- Cullen, Rowena. "Perspectives on User Satisfaction Surveys." *Library Trends*, 49 (2002): 662-86.
- Detlor, Brian and Kathy Ball. "Getting more value from the LibQUAL+ survey: The merits of qualitative analysis and importance-satisfaction matrices in assessing library patron comments." *College and Research Libraries*, 76 (2015): 796-810.
- Fagan, Jodi Condit. "The dimensions of library service quality: A confirmatory factor analysis of the LibQUAL+ model."

Library & Information Science Research 36, no. 1 (2014): 36-48.

Greenwood, Judy T., Alex P. Watson, and Melissa Dennis. "Ten Years of LibQual: A Study of Qualitative and Quantitative Survey Results at the University of Mississippi 2001-2010." *The Journal of Academic Librarianship* 37, no. 4 (2011): 312-318.

Guidry, Julie Anna. "LibQUAL+(TM) spring 2001 comments: a qualitative analysis using Atlas.ti ." *Performance Measurement and Metrics* 3, no. 2 (2002): 100-107.

Heath, F., Martha Kyrillidou. and Consuella A. Askew (Guest Eds.). "Libraries Report on Their LibQUAL+® Findings: From Data to Action." *Journal of Library Administration* 40 (3/4) (2004).

Heath, F., Colleen C. Cook, Martha Kyrillidou, and Bruce Thompson. "ARL Index and Other Validity Correlates of LibQUAL+™ Scores." *portal: Libraries and the Academy*, 2 (2002): 27-42.

Jones, Sherri and Kayongo, Jessica. "Identifying Student and Faculty Needs through LibQUAL+™: An Analysis of Qualitative Survey Comments." *College & Research Libraries* 69, no. 6 (2008): 493-509.

Kieftenbeld, Vincent and Prathiba Natesan. "Examining the measurement and structural invariance of LibQUAL+® across user groups." *Library & Information Science Research* 35, no. 2 (2013): 143-150.

Kyrillidou, M. *The Globalization of Library Assessment and the Role of LibQUAL+®. From Library Science to Information Science: Studies in Honor of G. Kakouri* (Athens, Greece: Tipothito-Giorgos Dardanos, 2005). [In Greek]

Kyrillidou, Martha. "Library Assessment As A Collaborative Enterprise." *Resource Sharing and Information Networks*, 18 ½ (2005-2006): 73-87.

Kyrillidou, Martha. (2006). "Measuring Library Service Quality: A Perceived Outcome for Libraries. This chapter appears in *Revisiting Outcomes Assessment in Higher Education*. Edited by Peter Herson, Robert E. Dugan, and Candy Schwartz (Westport, CT: Library Unlimited, 2006): 351-66.

Kyrillidou, Martha. (Guest Ed.). "LibQUAL+® and Beyond: Library assessment with a focus on library improvement." *Performance Measurement and Metrics*, 9 (3) (2008).

Kyrillidou, M. "Item Sampling in Service Quality Assessment Surveys to Improve Response Rates and Reduce Respondent Burden: The "LibQUAL+® Lite" Randomized Control Trial (RCT)" (PhD diss., University of Illinois at Urbana-Champaign, 2009).
<https://www.ideals.illinois.edu/bitstream/handle/2142/14570/Kyrillidou_Martha.pdf?sequence=3>

Kyrillidou, Martha and Colleen C. Cook. "The evolution of measurement and evaluation of libraries: a perspective from the Association of Research Libraries." *Library Trends* 56 (4) (Spring 2008): 888-909.

Kyrillidou, Martha and Colleen C. Cook and S. Shyam Sunder Rao. "Measuring the Quality of Library Service through LibQUAL+®." In *Academic Library Research: Perspectives and Current Trends*. Edited by Marie L. Radford and Pamela Snelson (Chicago, IL: ACRL/ALA, 2008): 253-301.

Kyrillidou, M., Terry Olshen, Fred Heath, Claude Bonnelly, and Jean-Pierre Côté. "Cross-Cultural Implementation of LibQUAL+™: the French Language Experience. *5th Northumbria International Conference Proceedings* (Durham, UK, 2003): 193-99.

Kyrillidou, M., Colleen Cook. and Bruce Thompson. (2010, May). Does using item sampling methods in library service quality assessment affect zone of tolerance boundaries?: A LibQUAL+® Lite study
<http://libqual.org/documents/LibQual/publications/lq_gr_2.pdf>. Paper presented at the 2nd Qualitative and Quantitative Methods in Libraries (QQL 2010) International Conference, Chania (Crete), Greece, May 27, 2010.

- Kyrillidou, M. and Mark Young. ARL Statistics 2003-04. Washington, DC: Association of Research Libraries, 2005.
- Lane, Forrest C., Baaska Anderson, Hector F. Ponce and Prathiba Natesan. "Factorial Invariance of LibQUAL+® as a Measure of Library Service Quality Over Time." *Library & Information Science Research* 34, no. 1 (2012): 22-30.
- Miller, Kathleen. *Service Quality in Academic Libraries: An Analysis of LibQUAL+™ Scores and Institutional Characteristics*. Ed.D. Dissertation, University of Central Florida, 2008.
- Nitecki, D.A. "Changing the Concept and Measure of Service Quality in Academic Libraries." *The Journal of Academic Librarianship*, 22 (1996): 181-90.
- Parasuraman, A., Leonard Berry, and Valerie Zeithaml. "Refinement and Reassessment of the SERVQUAL Scale *Journal of Retailing*, 67 (1991): 420-50.
- Thompson, B. "Representativeness Versus Response Rate: It Ain't the Response Rate!" Paper presented at the Association of Research Libraries (ARL) Measuring Service Quality Symposium on the New Culture of Assessment: Measuring Service Quality, Washington, DC, October 2002.
- Thompson, B., Colleen C. Cook, and Fred Heath. "The LibQUAL+™ Gap Measurement Model: The Bad, the Ugly, and the Good of Gap Measurement." *Performance Measurement and Metrics*, 1 (2002): 165-78.
- Thompson, B., Colleen C. Cook, and Fred Heath. "Structure of Perceptions of Service Quality in Libraries: A LibQUAL+™ Study." *Structural Equation Modeling*, 10 (2003): 456-464.
- Thompson, B., Colleen C. Cook, and Russell L. Thompson. Reliability and Structure of LibQUAL+™ Scores: Measuring Perceived Library Service Quality. *portal: Libraries and the Academy*, 2 (2002): 3-12.
- Thompson, B., Colleen C. Cook, and Martha Kyrillidou. (2005). Concurrent validity of LibQUAL+® scores: What do LibQUAL+® scores measure? *Journal of Academic Librarianship*, 31: 517-22.
- Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "Using Localized Survey Items to Augment Standardized Benchmarking Measures: A LibQUAL+® Study." *portal: Libraries and the Academy*, 6(2) (2006): 219-30.
- Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "Stability of Library Service Quality Benchmarking Norms Across Time and Cohorts: A LibQUAL+® Study." Paper presented at the Asia-Pacific Conference of Library and Information Education and Practice (A-LIEP), Singapore, April 3-4 2006.
- Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "How Can You Evaluate the Integrity of Your Library Assessment Data: Intercontinental LibQUAL+® Analysis Used as Concrete Heuristic Examples." Paper presented at the Library Assessment Conference: Building Effective, Sustainable, and Practical Assessment, Charlottesville, VA, August 4-6, 2006.
- Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "On-premises Library versus Google™-Like Information Gateway Usage Patterns: A LibQUAL+® Study." *portal: Libraries and the Academy* 7 (4) (Oct 2007a): 463-480.
- Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "User library service expectations in health science vs. other settings: a LibQUAL+® Study." *Health Information and Libraries Journal* 24 (8) Supplement 1, (Dec 2007b): 38-45.
- Thompson, B., Colleen C. Cook, and Martha Kyrillidou. "Library Users Service Desires: a LibQUAL+® Study." *Library Quarterly* 78 (1) (Jan 2008): 1-18.
- Thompson, B., Martha Kyrillidou, and Colleen Cook. "Item sampling in service quality assessment surveys to improve response rates and reduce respondent burden: The "LibQUAL+® Lite" example." *Performance Measurement & Metrics*, 10 (1) (2009): 6-16.

- Thompson, B., Martha Kyrillidou, and Colleen Cook. "Equating scores on Lite and long library user survey forms: The LibQUAL+® Lite randomized control trials." *Performance Measurement & Metrics*, 10 (3) (2009): 212-219.
- Thompson, B., Martha Kyrillidou, and Colleen Cook. (2010, May). "Does using item sampling methods in library service quality assessment compromise data integrity?: A LibQUAL+® Lite study. <http://libqual.org/documents/LibQual/publications/lq_gr_1.pdf>". Paper presented at the 2nd Qualitative and Quantitative Methods in Libraries (QQML 2010) International Conference, Chania (Crete), Greece, May 27, 2010.
- Thompson, B., Martha Kyrillidou, and Colleen Cook. "Does using item sampling methods in library service quality assessment compromise data integrity or zone of tolerance interpretation?: A LibQUAL+® Lite Study." 2010 Library Assessment Conference: Building Effective, Sustainable, Practical Assessment. Baltimore MD, October 25-27, 2010. (Washington DC: Association of Research Libraries, 2011).
- Town, S., and Martha Kyrillidou. "Developing a Values Scorecard" *Performance Measurement and Metrics* 14 (1) (2013): 1-16.
- Voorbij, H.. "The use of LibQUAL+ by European research libraries," *Performance Measurement and Metrics*, Vol. 13 Iss: 3 (2012): 154 - 168.
- Zeithaml, Valerie, A. Parasuraman, and Leonard L. Berry. *Delivering Quality Service: Balancing Customer Perceptions and Expectations*. New York: Free Press, 1990.

1.4 Library Statistics for University of Northern Colorado

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.

Total library expenditures (in U.S. \$):	\$6,546,000
Personnel - professional staff, FTE:	26
Personnel - support staff, FTE:	22
Total library materials expenditures (in U.S. \$):	3,255,000
Total salaries and wages for professional staff (in U.S. \$):	1,704,000

1.5 Contact Information for University of Northern Colorado

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

Name:	Annie Epperson
Title:	Instruction Librarian
Address:	James A. Michener Library University of Northern Colorado Campus Box 48 501 20th Street Greeley, COLORADO 80639 United States of America
Phone:	(970) 351-1535
Email:	annie.epperson@unco.edu

1.6 Survey Protocol and Language for University of Northern Colorado

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

		Lite	Total <i>(by Language)</i>
English (American)	Count	470	470
	<i>% of Protocol</i>	100.00%	100.00%
	<i>% of Language</i>	100.00%	100.00%
	<i>% of Total Cases</i>	100.00	100.00
Total <i>(by Survey Protocol)</i>	Count	470	470
	<i>% of Protocol</i>	100.00%	100.00%
	<i>% of Language</i>	100.00%	100.00%
	<i>% of Total Cases</i>	100.00	100.00

2 Demographic Summary for University of Northern Colorado

2.1 Respondents by User Group

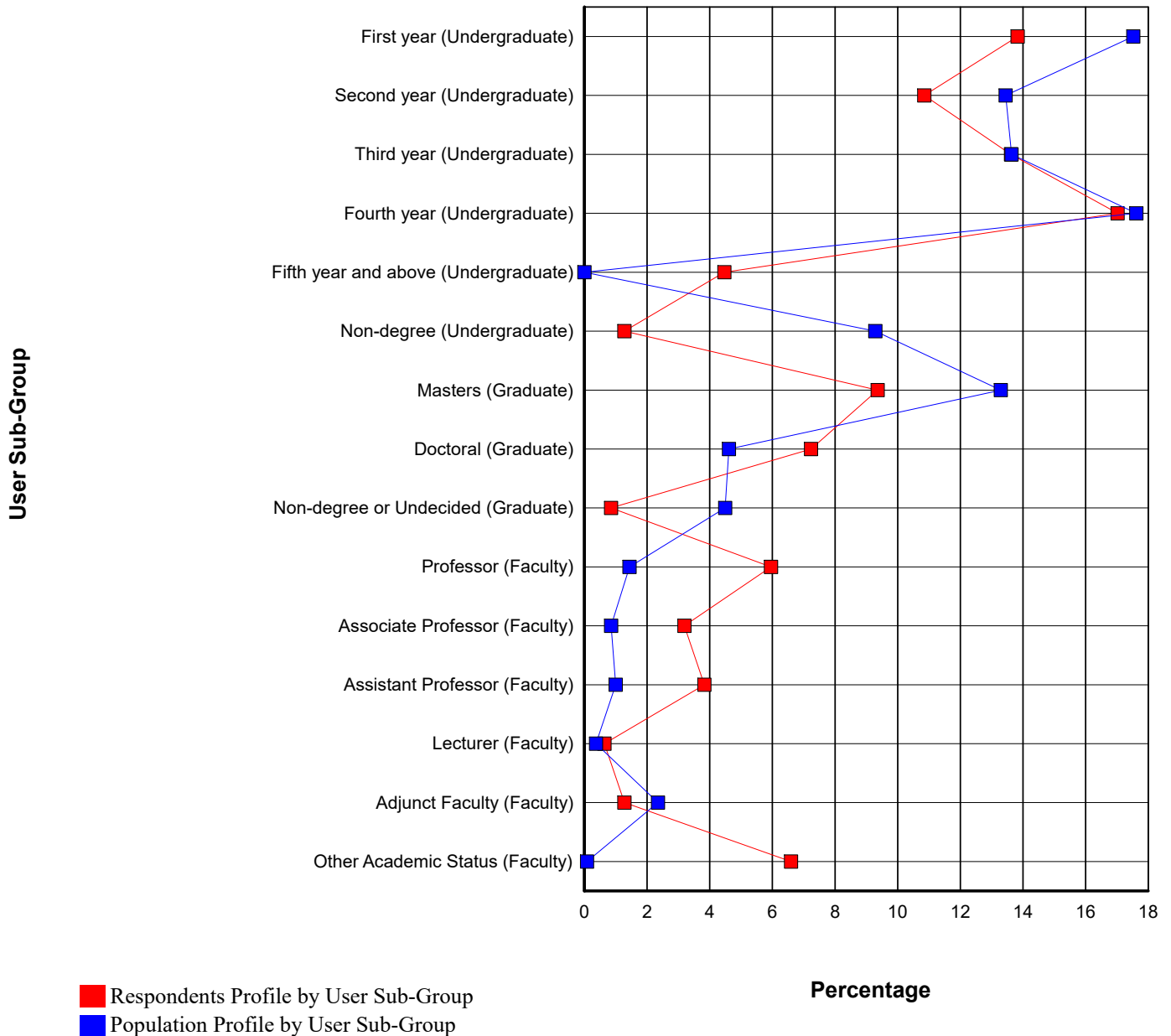
User Group	Respondent n	Respondent %
Undergraduate		
First year	65	13.83%
Second year	51	10.85%
Third year	64	13.62%
Fourth year	80	17.02%
Fifth year and above	21	4.47%
Non-degree	6	1.28%
Sub Total:	287	61.06%
Graduate		
Masters	44	9.36%
Doctoral	34	7.23%
Non-degree or Undecided	4	0.85%
Sub Total:	82	17.45%
Faculty		
Professor	28	5.96%
Associate Professor	15	3.19%
Assistant Professor	18	3.83%
Lecturer	3	0.64%
Adjunct Faculty	6	1.28%
Other Academic Status	31	6.60%
Sub Total:	101	21.49%
Total:	470	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.*



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

User Sub-Group	Population N	Population %	Respondents n	Respondents %	%N - %n
First year (Undergraduate)	2,507	17.52	65	13.83	3.69
Second year (Undergraduate)	1,924	13.45	51	10.85	2.60
Third year (Undergraduate)	1,951	13.63	64	13.62	0.02
Fourth year (Undergraduate)	2,521	17.62	80	17.02	0.60
Fifth year and above (Undergraduate)	0	0.00	21	4.47	-4.47
Non-degree (Undergraduate)	1,329	9.29	6	1.28	8.01
Masters (Graduate)	1,902	13.29	44	9.36	3.93
Doctoral (Graduate)	660	4.61	34	7.23	-2.62
Non-degree or Undecided (Graduate)	643	4.49	4	0.85	3.64
Professor (Faculty)	206	1.44	28	5.96	-4.52
Associate Professor (Faculty)	122	0.85	15	3.19	-2.34
Assistant Professor (Faculty)	143	1.00	18	3.83	-2.83
Lecturer (Faculty)	53	0.37	3	0.64	-0.27
Adjunct Faculty (Faculty)	336	2.35	6	1.28	1.07
Other Academic Status (Faculty)	12	0.08	31	6.60	-6.51
Total:	14,309	100.00	470	100.00	0.00

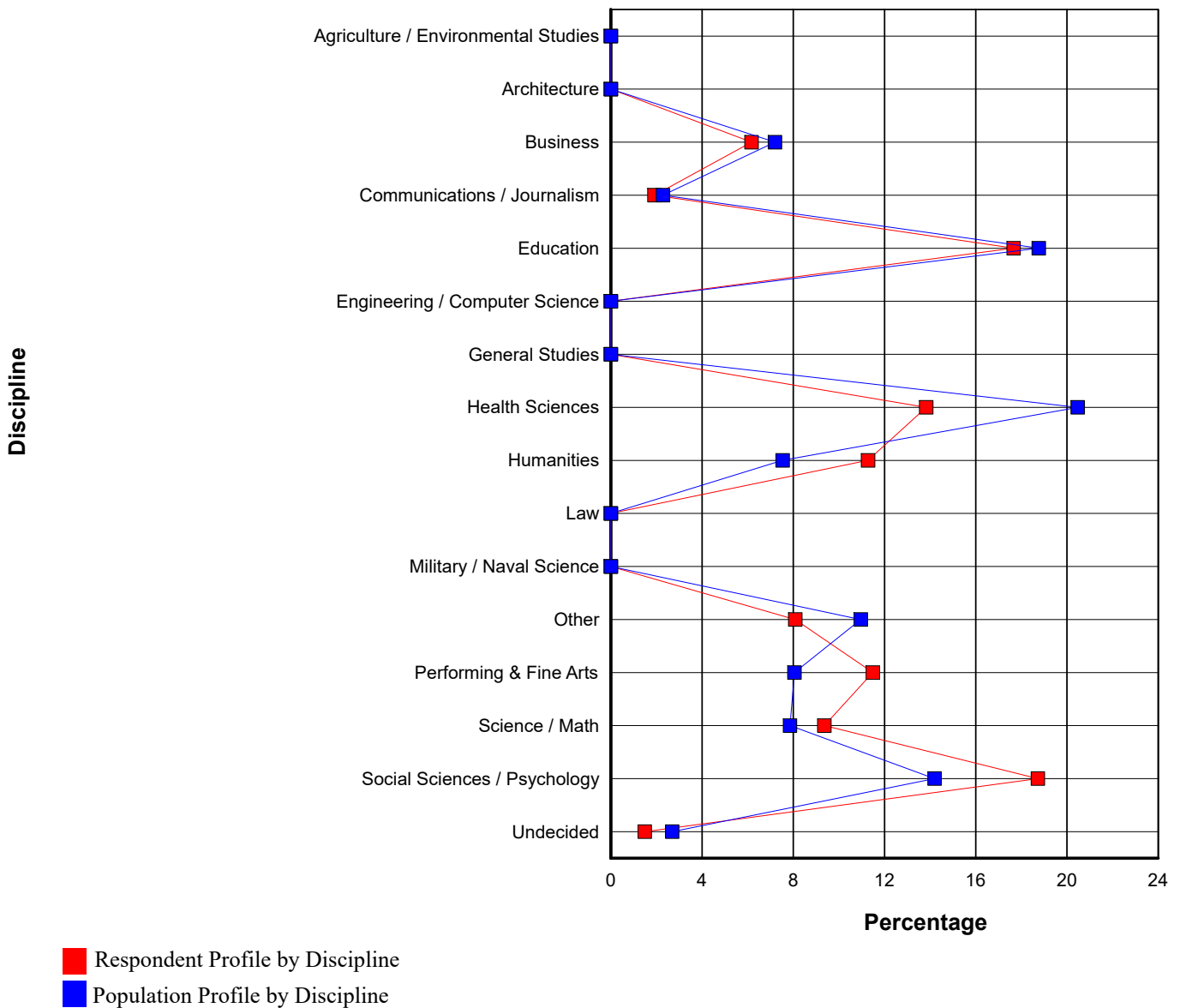
Language: English (American)
Institution Type: College or University
Consortium: None
User Group: All (Excluding Library Staff, Staff)

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.*



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

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	1,030	7.20	29	6.17	1.03
Communications / Journalism	327	2.29	9	1.91	0.37
Education	2,685	18.76	83	17.66	1.10
Engineering / Computer Science	0	0.00	0	0.00	0.00
General Studies	0	0.00	0	0.00	0.00
Health Sciences	2,929	20.47	65	13.83	6.64
Humanities	1,078	7.53	53	11.28	-3.74
Law	0	0.00	0	0.00	0.00
Military / Naval Science	0	0.00	0	0.00	0.00
Other	1,568	10.96	38	8.09	2.87
Performing & Fine Arts	1,152	8.05	54	11.49	-3.44
Science / Math	1,124	7.86	44	9.36	-1.51
Social Sciences / Psychology	2,031	14.19	88	18.72	-4.53
Undecided	385	2.69	7	1.49	1.20
Total:	14,309	100.00	470	100.00	0.00

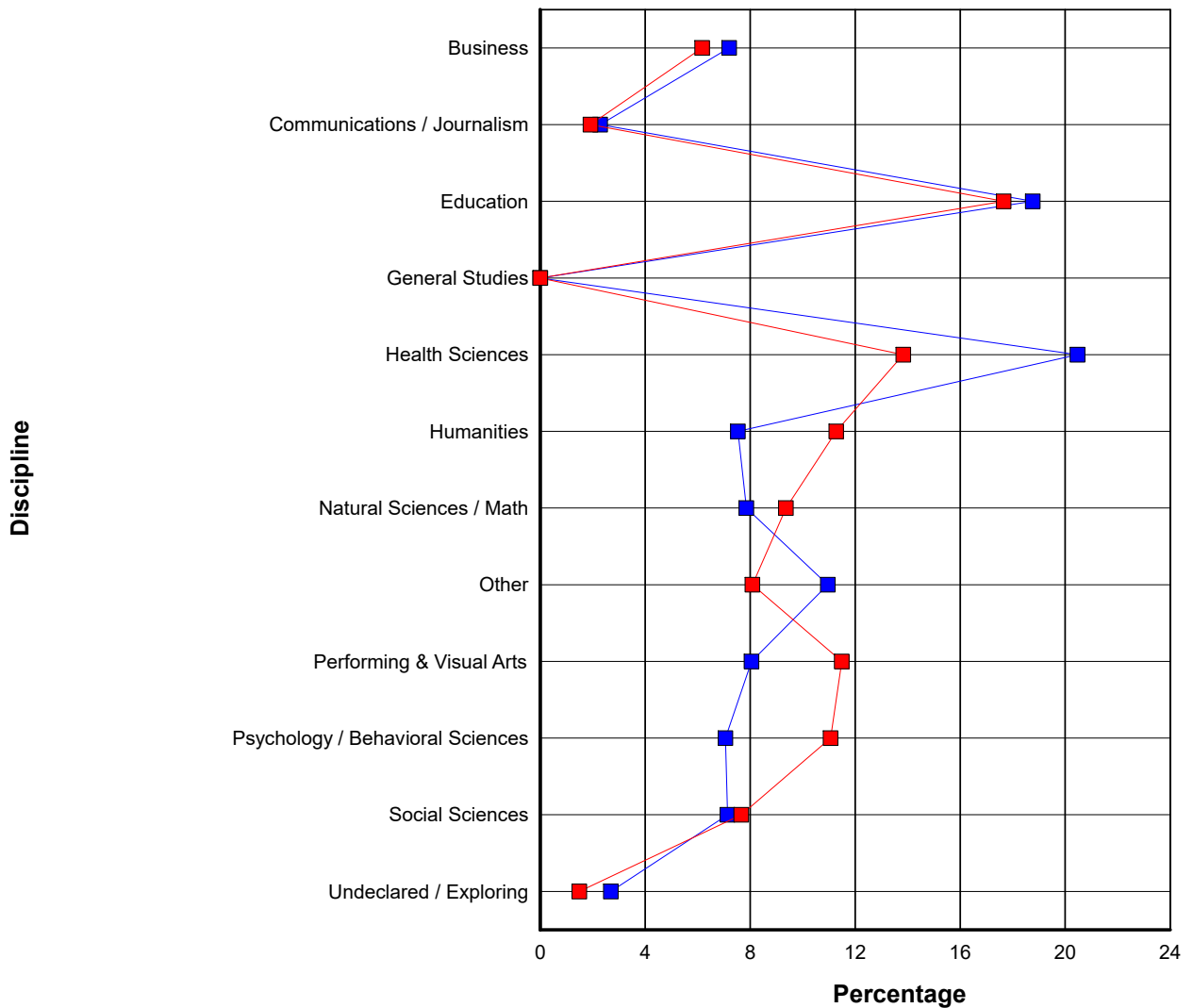
Language: English (American)
Institution Type: College or University
Consortium: None
User Group: All (Excluding Library Staff, Staff)

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

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

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Business	1,030	7.20	29	6.17	1.03
Communications / Journalism	327	2.29	9	1.91	0.37
Education	2,685	18.76	83	17.66	1.10
General Studies	0	0.00	0	0.00	0.00
Health Sciences	2,929	20.47	65	13.83	6.64
Humanities	1,078	7.53	53	11.28	-3.74
Natural Sciences / Math	1,124	7.86	44	9.36	-1.51
Other	1,568	10.96	38	8.09	2.87
Performing & Visual Arts	1,152	8.05	54	11.49	-3.44
Psychology / Behavioral Sciences	1,010	7.06	52	11.06	-4.01
Social Sciences	1,021	7.14	36	7.66	-0.52
Undeclared / Exploring	385	2.69	7	1.49	1.20
Total:	14,309	100.00	470	100.00	0.00

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

2.5 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 %
18 - 22	242	51.49
23 - 30	80	17.02
31 - 45	81	17.23
46 - 65	63	13.40
Over 65	4	0.85
Under 18	0	0.00
Total:	470	100.00

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

The library that you use most often:	Respondents n	Respondents %
Distance patron using online resources only	20	4.28
Howard M. Skinner Music Library	52	11.13
James A. Michener Library	358	76.66
Local patron using online resources only	28	6.00
None of these	9	1.93
Total:	467	100.00

2.7 Respondent Profile by Full or part-time student?

Full or part-time student?	Population N	Population %	Respondents n	Respondents %
Does not apply / NA		0.00	105	22.53
Full-time	9,617	67.21	330	70.82
Part-time	4,692	32.79	31	6.65
Total:	14,309	100.00	466	100.00

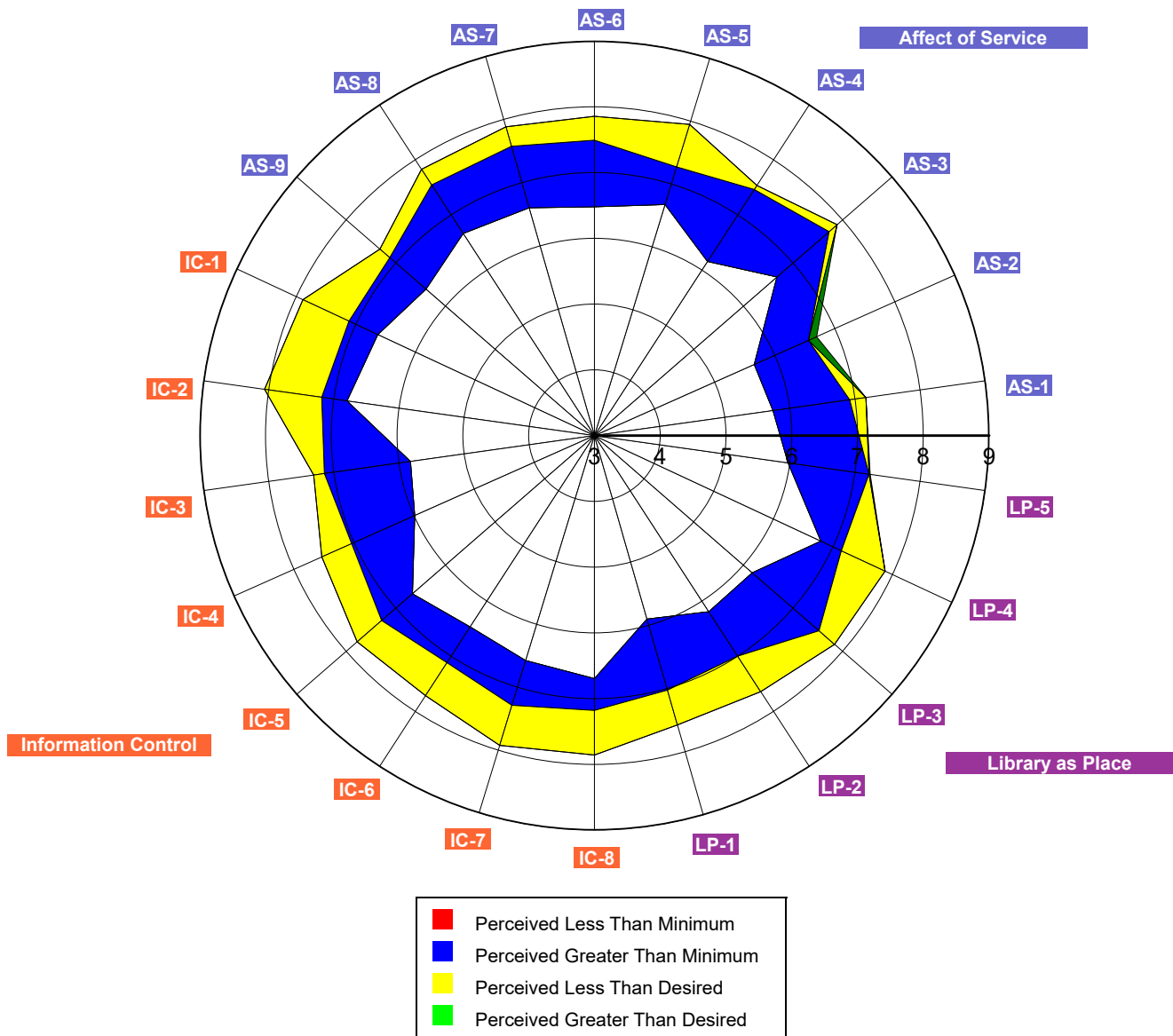
3. Survey Item Summary for University of Northern Colorado

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.)



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

ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Employees who instill confidence in users	5.74	7.17	6.92	1.18	-0.25	89
AS-2	Giving users individual attention	5.66	6.56	6.70	1.04	0.14	103
AS-3	Employees who are consistently courteous	6.68	7.89	7.73	1.05	-0.16	118
AS-4	Readiness to respond to users' questions	6.16	7.54	7.46	1.31	-0.07	95
AS-5	Employees who have the knowledge to answer user questions	6.68	7.95	7.28	0.60	-0.68	120
AS-6	Employees who deal with users in a caring fashion	6.48	7.86	7.49	1.01	-0.36	446
AS-7	Employees who understand the needs of their users	6.61	7.88	7.58	0.97	-0.31	104
AS-8	Willingness to help users	6.66	7.83	7.55	0.88	-0.28	128
AS-9	Dependability in handling users' service problems	6.40	7.32	7.13	0.73	-0.20	96
Information Control							
IC-1	Making electronic resources accessible from my home or office	6.63	7.89	7.12	0.49	-0.77	101
IC-2	A library Web site enabling me to locate information on my own	6.80	8.06	7.19	0.39	-0.88	139
IC-3	The printed library materials I need for my work	5.83	7.31	7.15	1.32	-0.17	103
IC-4	The electronic information resources I need	5.99	7.54	7.04	1.05	-0.50	458
IC-5	Modern equipment that lets me easily access needed information	6.67	7.78	7.29	0.62	-0.49	150
IC-6	Easy-to-use access tools that allow me to find things on my own	6.47	7.72	7.12	0.65	-0.60	162
IC-7	Making information easily accessible for independent use	6.58	7.93	7.29	0.71	-0.64	121
IC-8	Print and/or electronic journal collections I require for my work	6.70	7.86	7.18	0.48	-0.68	112
Library as Place							
LP-1	Library space that inspires study and learning	5.90	7.58	7.03	1.12	-0.55	437
LP-2	Quiet space for individual activities	6.19	7.64	7.00	0.81	-0.64	109
LP-3	A comfortable and inviting location	6.18	7.84	7.53	1.34	-0.31	99
LP-4	A getaway for study, learning, or research	6.80	7.88	7.14	0.34	-0.73	105
LP-5	Community space for group learning and group study	5.97	7.22	7.23	1.26	0.02	115
Overall:		6.31	7.67	7.22	0.91	-0.45	470

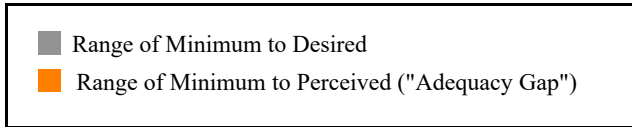
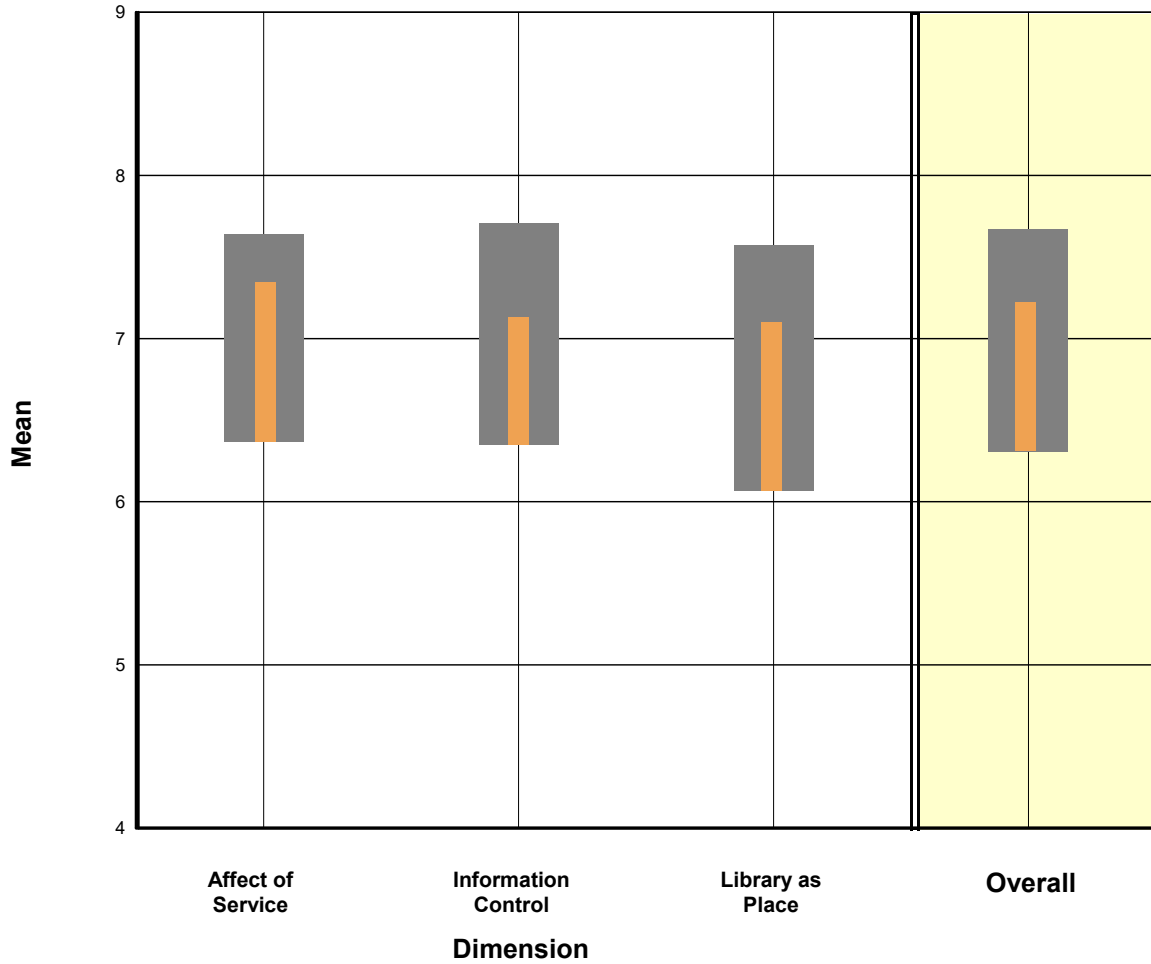
Language: English (American)
Institution Type: College or University
Consortium: None
User Group: All (Excluding Library Staff)

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service							
AS-1	Employees who instill confidence in users	2.29	1.96	1.72	2.00	1.99	89
AS-2	Giving users individual attention	2.38	2.05	1.90	2.22	1.88	103
AS-3	Employees who are consistently courteous	1.96	1.42	1.52	2.09	1.76	118
AS-4	Readiness to respond to users' questions	2.04	1.70	1.64	2.13	1.63	95
AS-5	Employees who have the knowledge to answer user questions	1.98	1.36	1.67	1.98	1.66	120
AS-6	Employees who deal with users in a caring fashion	1.99	1.49	1.58	2.02	1.69	446
AS-7	Employees who understand the needs of their users	1.93	1.46	1.63	1.99	1.71	104
AS-8	Willingness to help users	2.10	1.57	1.70	2.17	1.47	128
AS-9	Dependability in handling users' service problems	2.14	1.82	1.72	1.66	1.66	96
Information Control							
IC-1	Making electronic resources accessible from my home or office	2.12	1.49	1.78	2.22	1.85	101
IC-2	A library Web site enabling me to locate information on my own	1.96	1.51	1.82	1.93	1.79	139
IC-3	The printed library materials I need for my work	2.18	2.09	1.65	2.52	2.36	103
IC-4	The electronic information resources I need	2.02	1.75	1.71	2.02	1.88	458
IC-5	Modern equipment that lets me easily access needed information	1.84	1.55	1.49	1.88	1.58	150
IC-6	Easy-to-use access tools that allow me to find things on my own	1.92	1.57	1.73	2.10	1.83	162
IC-7	Making information easily accessible for independent use	1.70	1.46	1.50	1.79	1.71	121
IC-8	Print and/or electronic journal collections I require for my work	2.26	1.75	1.64	2.01	1.76	112
Library as Place							
LP-1	Library space that inspires study and learning	2.16	1.74	1.77	2.36	2.18	437
LP-2	Quiet space for individual activities	2.23	1.83	1.52	2.39	2.24	109
LP-3	A comfortable and inviting location	2.04	1.56	1.61	1.92	1.63	99
LP-4	A getaway for study, learning, or research	2.00	1.59	1.77	2.00	1.89	105
LP-5	Community space for group learning and group study	2.26	1.83	1.68	2.27	2.08	115
Overall:		1.63	1.18	1.25	1.62	1.32	470

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

3.2 Core Question Dimensions Summary

On the chart below, scores for each dimension of library service quality have been plotted graphically. The 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	6.37	7.64	7.35	0.98	-0.29	465
Information Control	6.35	7.71	7.13	0.78	-0.58	469
Library as Place	6.07	7.57	7.10	1.03	-0.47	443
Overall	6.31	7.67	7.22	0.91	-0.45	470

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	1.90	1.45	1.49	1.79	1.46	465
Information Control	1.70	1.34	1.43	1.71	1.49	469
Library as Place	2.01	1.59	1.57	2.10	1.90	443
Overall	1.63	1.18	1.25	1.62	1.32	470

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
Access to equipment that is not readily available in my department, for example: scanners, microphones, 3D printers, cameras, etc.	5.49	6.87	6.30	0.80	-0.58	71
Awareness of the University Archives and Special Collections (unique and rare library materials)	5.71	6.73	6.25	0.54	-0.48	83
Feeling like I belong in the library	6.44	7.97	7.77	1.33	-0.21	78
Keeping me informed about all library services, news, and events	5.22	6.46	6.35	1.13	-0.11	83
Services I receive from the library when I need help with my research	6.47	7.73	7.50	1.03	-0.23	66

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
Access to equipment that is not readily available in my department, for example: scanners, microphones, 3D printers, cameras, etc.	2.52	2.27	2.08	2.71	2.59	71
Awareness of the University Archives and Special Collections (unique and rare library materials)	2.58	2.44	2.24	2.41	2.29	83
Feeling like I belong in the library	2.20	1.69	1.74	2.53	2.41	78
Keeping me informed about all library services, news, and events	2.29	1.98	2.03	2.32	2.35	83
Services I receive from the library when I need help with my research	1.99	1.53	1.33	1.90	1.58	66

Language: English (American)

Institution Type: College or University

Consortium: None

User Group: All (Excluding Library Staff)

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.	7.98	1.28	230
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.44	1.62	240
How would you rate the overall quality of the service provided by the library?	7.71	1.30	470

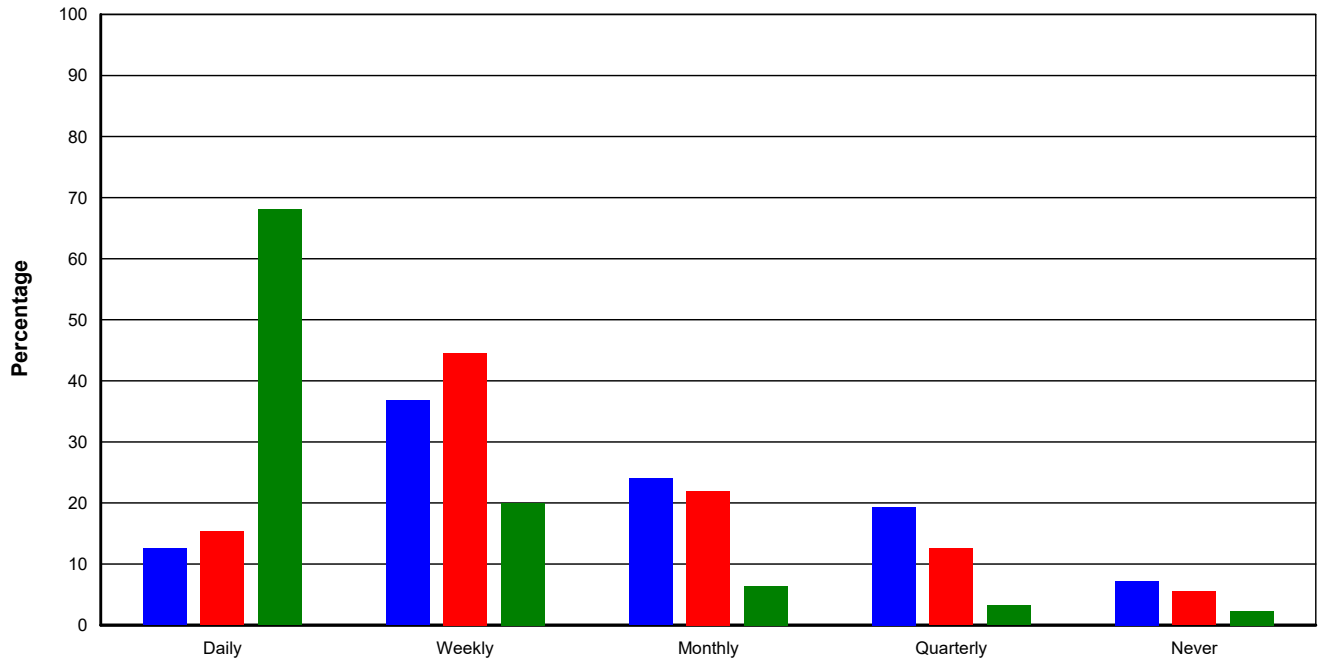
3.5 Information Literacy Outcomes Questions Summary

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.	6.52	2.07	150
The library aids my advancement in my academic discipline or work.	7.17	1.69	218
The library enables me to be more efficient in my academic pursuits or work.	7.45	1.57	204
The library helps me distinguish between trustworthy and untrustworthy information.	6.68	1.78	216
The library provides me with the information skills I need in my work or study.	7.28	1.67	152

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.



Frequency

- How often do you use resources on library premises?
- How often do you access library resources through a library Web page?
- How often do you use Yahoo™, Google™, or non-library gateways for information?

	Daily	Weekly	Monthly	Quarterly	Never	n/%
How often do you use resources on library premises?	59 12.55%	173 36.81%	113 24.04%	91 19.36%	34 7.23%	470 100.00%
How often do you access library resources through a library Web page?	72 15.35%	209 44.56%	103 21.96%	59 12.58%	26 5.54%	469 100.00%
How often do you use Yahoo™, Google™, or non-library gateways for information?	320 68.09%	94 20.00%	30 6.38%	15 3.19%	11 2.34%	470 100.00%

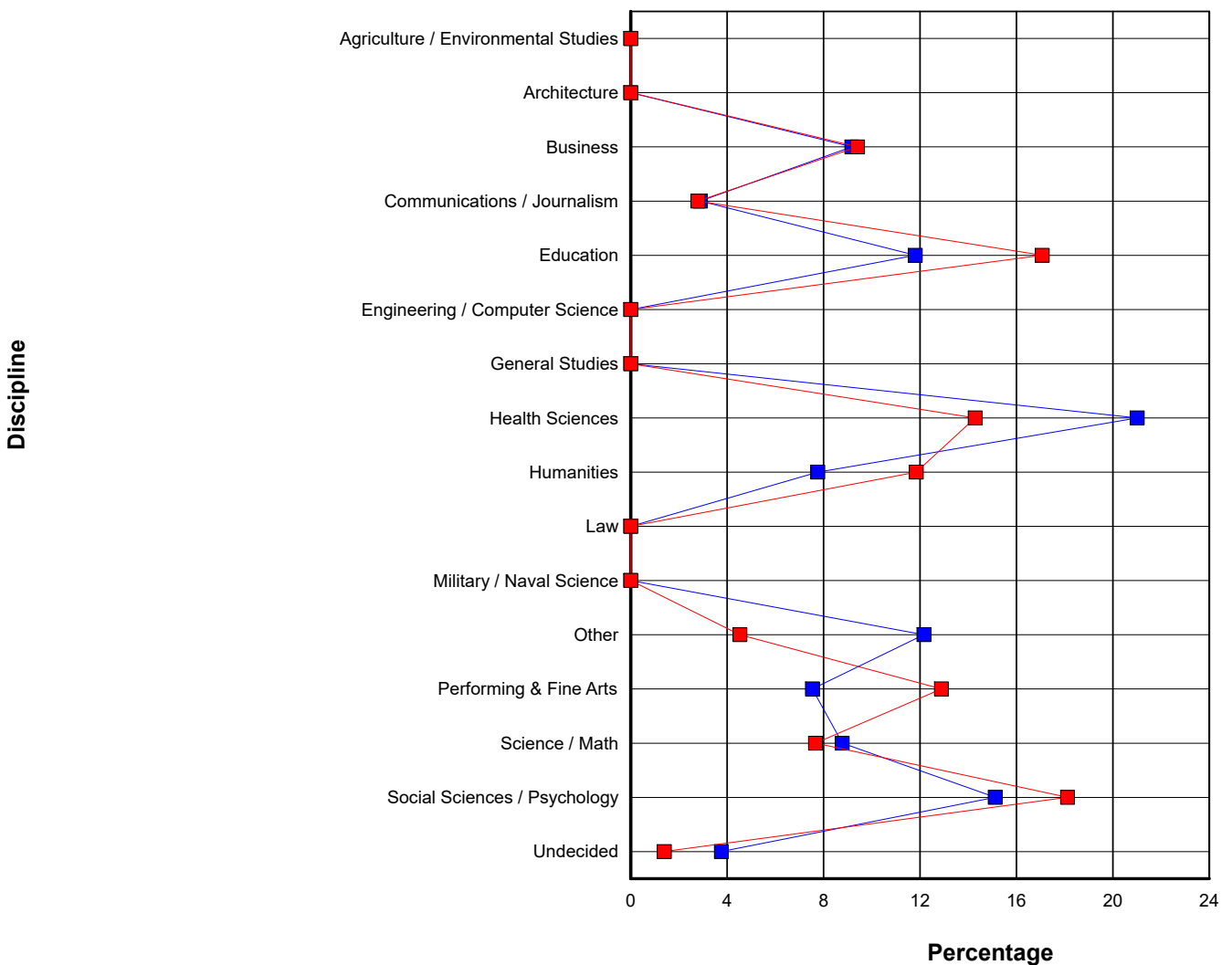
4 Undergraduate Summary for University of Northern Colorado

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)
 Institution Type: College or University
 Consortium: None
 User Group: Undergraduate

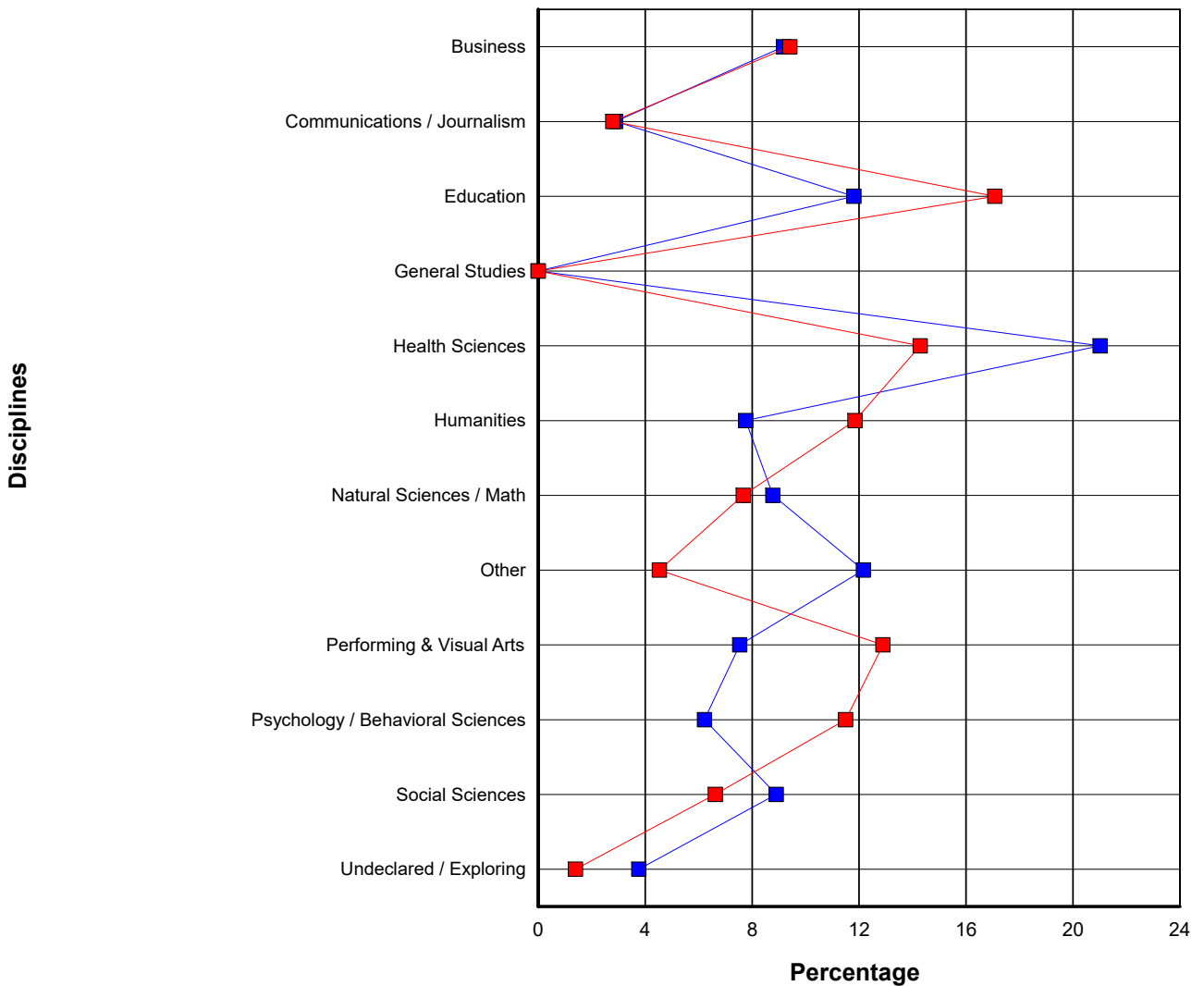
Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture / Environmental Studies	0	0.00	0	0.00	0.00
Architecture	0	0.00	0	0.00	0.00
Business	939	9.18	27	9.41	-0.23
Communications / Journalism	296	2.89	8	2.79	0.11
Education	1,208	11.81	49	17.07	-5.27
Engineering / Computer Science	0	0.00	0	0.00	0.00
General Studies	0	0.00	0	0.00	0.00
Health Sciences	2,150	21.01	41	14.29	6.73
Humanities	794	7.76	34	11.85	-4.09
Law	0	0.00	0	0.00	0.00
Military / Naval Science	0	0.00	0	0.00	0.00
Other	1,244	12.16	13	4.53	7.63
Performing & Fine Arts	771	7.54	37	12.89	-5.36
Science / Math	898	8.78	22	7.67	1.11
Social Sciences / Psychology	1,547	15.12	52	18.12	-3.00
Undecided	385	3.76	4	1.39	2.37
Total:	10,232	100.00	287	100.00	0.00

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

4.1.2 Population and Respondent Profiles for Undergraduate 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)
 Institution Type: College or University
 Consortium: None
 User Group: Undergraduate

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Business	939	9.18	27	9.41	-0.23
Communications / Journalism	296	2.89	8	2.79	0.11
Education	1,208	11.81	49	17.07	-5.27
General Studies	0	0.00	0	0.00	0.00
Health Sciences	2,150	21.01	41	14.29	6.73
Humanities	794	7.76	34	11.85	-4.09
Natural Sciences / Math	898	8.78	22	7.67	1.11
Other	1,244	12.16	13	4.53	7.63
Performing & Visual Arts	771	7.54	37	12.89	-5.36
Psychology / Behavioral Sciences	636	6.22	33	11.50	-5.28
Social Sciences	911	8.90	19	6.62	2.28
Undeclared / Exploring	385	3.76	4	1.39	2.37
Total:	10,232	100.00	287	100.00	0.00

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

4.1.3 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 %
18 - 22	238	82.93
23 - 30	35	12.20
31 - 45	10	3.48
46 - 65	4	1.39
Over 65	0	0.00
Under 18	0	0.00
Total:	287	100.00

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

The library that you use most often:	Respondents n	Respondents %
Distance patron using online resources only	3	1.05
Howard M. Skinner Music Library	33	11.58
James A. Michener Library	233	81.75
Local patron using online resources only	8	2.81
None of these	8	2.81
Total:	285	100.00

4.1.5 Respondent Profile by Full or part-time student?

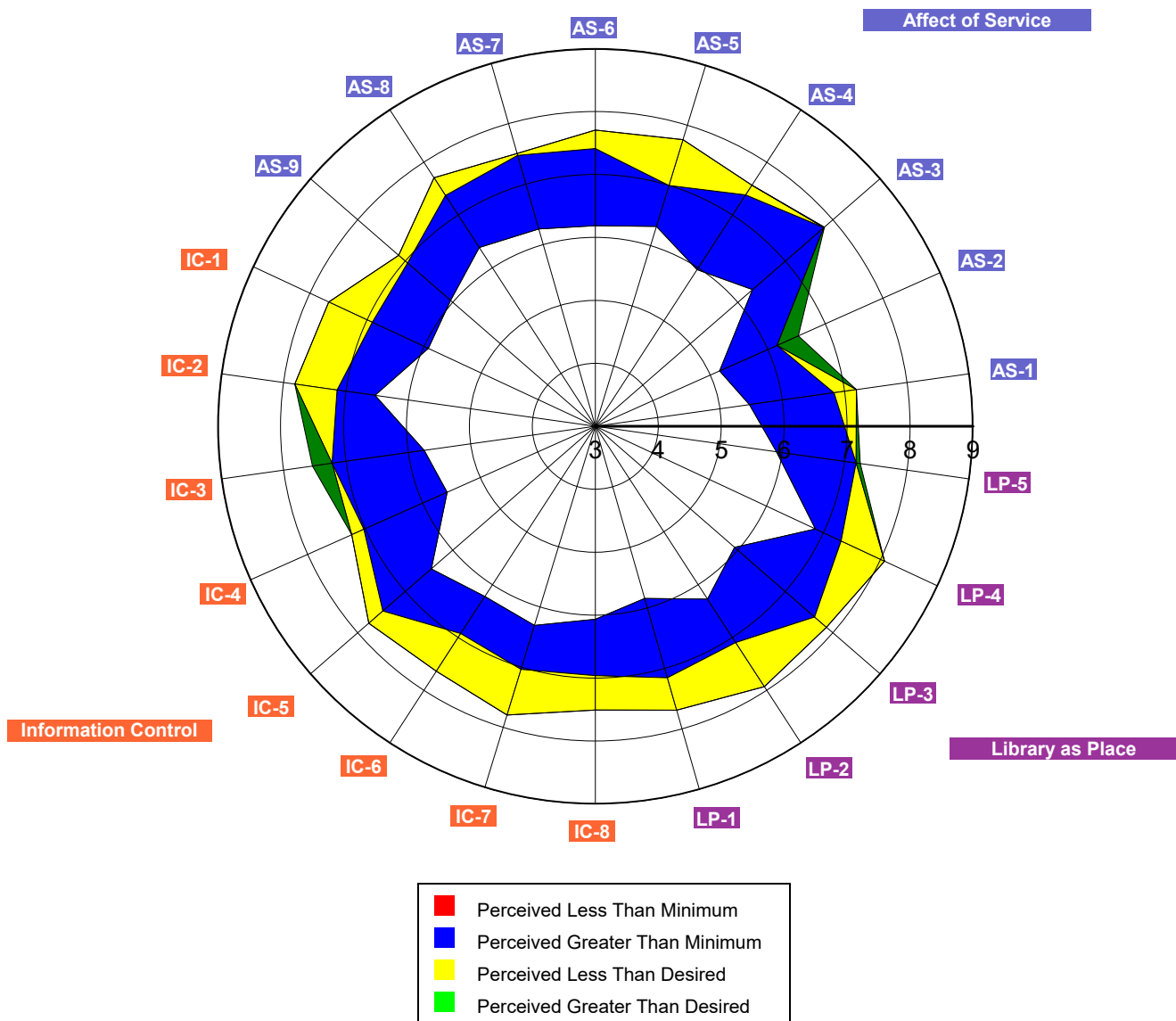
Full or part-time student?	Population N	Population %	Respondents n	Respondents %
Does not apply / NA		0.00	4	1.40
Full-time	8,064	78.81	275	96.49
Part-time	2,168	21.19	6	2.11
Total:	10,232	100.00	285	100.00

4.2 Core Questions Summary for Undergraduate

This radar chart shows the aggregate results for the core survey questions. Each axis represents one question. A code to identify each question is displayed at the outer point of each axis. While questions for each dimension of library service quality are scattered randomly throughout the survey, on this chart they are grouped into sections: Affect of Service, Information Control, and Library as Place.

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

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



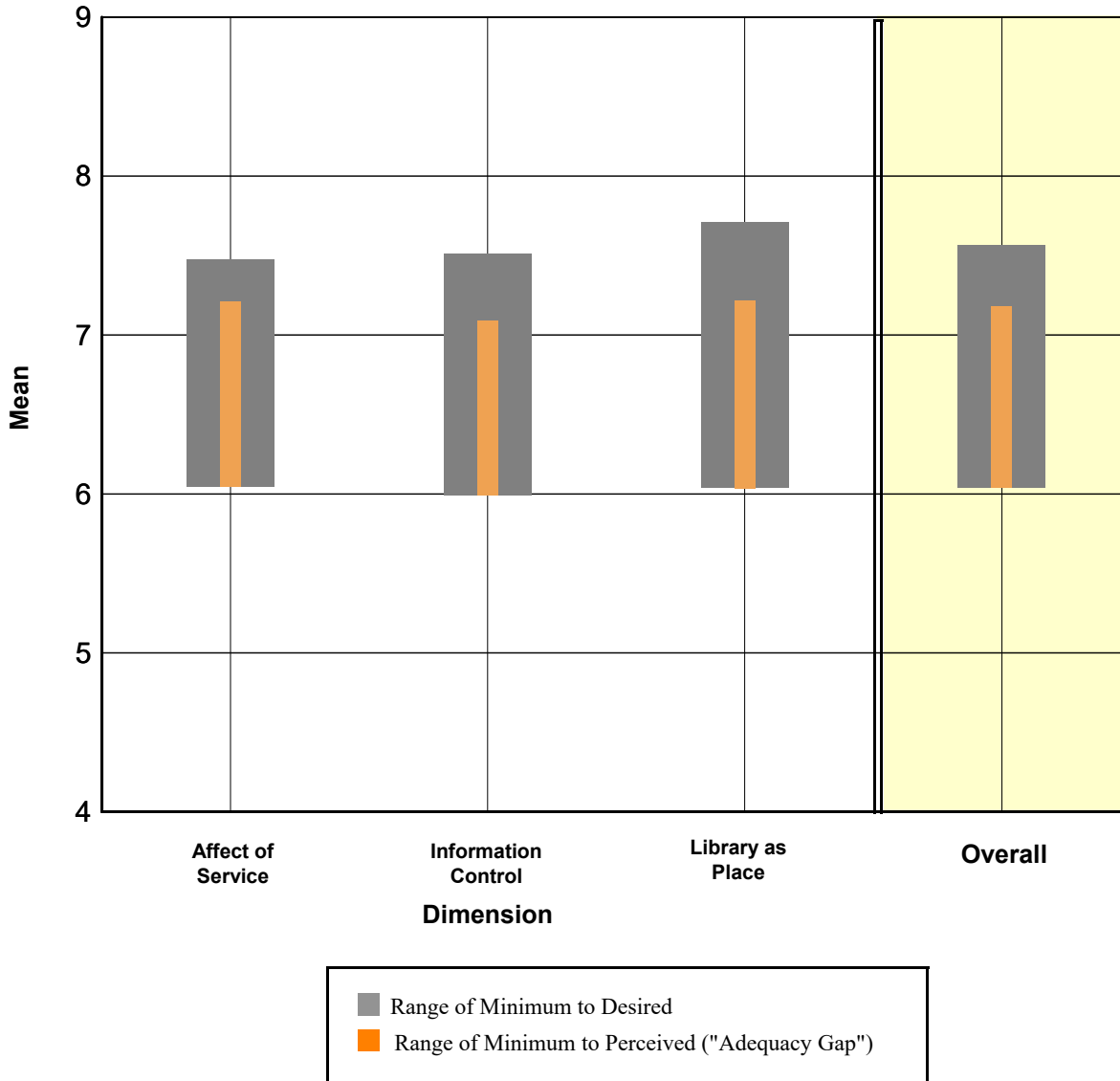
ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Employees who instill confidence in users	5.47	7.19	6.83	1.36	-0.36	53
AS-2	Giving users individual attention	5.16	6.16	6.53	1.37	0.37	62
AS-3	Employees who are consistently courteous	6.31	7.81	7.82	1.51	0.01	74
AS-4	Readiness to respond to users' questions	5.97	7.57	7.38	1.42	-0.18	60
AS-5	Employees who have the knowledge to answer user questions	6.32	7.76	7.00	0.68	-0.76	75
AS-6	Employees who deal with users in a caring fashion	6.19	7.71	7.41	1.22	-0.29	272
AS-7	Employees who understand the needs of their users	6.26	7.51	7.48	1.22	-0.03	65
AS-8	Willingness to help users	6.39	7.71	7.37	0.99	-0.33	75
AS-9	Dependability in handling users' service problems	6.05	7.14	6.95	0.91	-0.19	64
Information Control							
IC-1	Making electronic resources accessible from my home or office	5.93	7.67	6.91	0.98	-0.76	55
IC-2	A library Web site enabling me to locate information on my own	6.54	7.82	7.14	0.61	-0.68	84
IC-3	The printed library materials I need for my work	5.75	7.22	7.54	1.79	0.31	67
IC-4	The electronic information resources I need	5.58	7.24	7.03	1.45	-0.21	279
IC-5	Modern equipment that lets me easily access needed information	6.45	7.77	7.47	1.02	-0.29	95
IC-6	Easy-to-use access tools that allow me to find things on my own	6.22	7.64	6.93	0.70	-0.71	94
IC-7	Making information easily accessible for independent use	6.31	7.79	7.04	0.73	-0.76	78
IC-8	Print and/or electronic journal collections I require for my work	6.07	7.51	6.96	0.89	-0.55	75
Library as Place							
LP-1	Library space that inspires study and learning	5.85	7.69	7.15	1.31	-0.54	284
LP-2	Quiet space for individual activities	6.27	7.93	7.10	0.82	-0.84	73
LP-3	A comfortable and inviting location	5.93	7.87	7.62	1.68	-0.25	60
LP-4	A getaway for study, learning, or research	6.86	8.07	7.31	0.45	-0.76	71
LP-5	Community space for group learning and group study	5.91	7.18	7.25	1.34	0.07	76
Overall:		6.04	7.56	7.18	1.14	-0.39	287

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

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service							
AS-1	Employees who instill confidence in users	2.35	1.96	1.73	2.09	2.18	53
AS-2	Giving users individual attention	2.55	2.19	1.99	2.40	1.95	62
AS-3	Employees who are consistently courteous	2.12	1.45	1.38	1.85	1.54	74
AS-4	Readiness to respond to users' questions	2.15	1.61	1.66	2.05	1.55	60
AS-5	Employees who have the knowledge to answer user questions	2.05	1.50	1.71	2.16	1.84	75
AS-6	Employees who deal with users in a caring fashion	2.06	1.54	1.52	1.98	1.64	272
AS-7	Employees who understand the needs of their users	2.04	1.61	1.52	1.87	1.64	65
AS-8	Willingness to help users	2.14	1.56	1.78	2.44	1.67	75
AS-9	Dependability in handling users' service problems	2.16	1.75	1.86	1.81	1.83	64
Information Control							
IC-1	Making electronic resources accessible from my home or office	2.19	1.68	1.95	2.42	2.05	55
IC-2	A library Web site enabling me to locate information on my own	2.05	1.73	1.96	2.02	1.86	84
IC-3	The printed library materials I need for my work	2.27	2.12	1.37	2.53	2.26	67
IC-4	The electronic information resources I need	2.05	1.83	1.69	1.95	1.84	279
IC-5	Modern equipment that lets me easily access needed information	1.85	1.43	1.43	1.73	1.46	95
IC-6	Easy-to-use access tools that allow me to find things on my own	2.06	1.54	1.82	2.28	1.98	94
IC-7	Making information easily accessible for independent use	1.58	1.50	1.62	1.73	1.85	78
IC-8	Print and/or electronic journal collections I require for my work	2.40	1.97	1.80	2.16	2.00	75
Library as Place							
LP-1	Library space that inspires study and learning	2.09	1.54	1.68	2.24	1.98	284
LP-2	Quiet space for individual activities	2.16	1.57	1.56	2.39	2.15	73
LP-3	A comfortable and inviting location	2.15	1.32	1.37	1.94	1.43	60
LP-4	A getaway for study, learning, or research	1.74	1.37	1.63	1.73	1.75	71
LP-5	Community space for group learning and group study	2.17	1.85	1.74	2.08	2.04	76
Overall:		1.65	1.15	1.24	1.60	1.30	287

4.3 Core Question Dimensions Summary for Undergraduate

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



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

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	6.05	7.47	7.21	1.16	-0.27	284
Information Control	5.99	7.51	7.09	1.10	-0.42	286
Library as Place	6.04	7.71	7.22	1.18	-0.49	285
Overall	6.04	7.56	7.18	1.14	-0.39	287

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	1.96	1.47	1.48	1.80	1.49	284
Information Control	1.72	1.34	1.42	1.71	1.50	286
Library as Place	1.91	1.40	1.50	1.96	1.72	285
Overall	1.65	1.15	1.24	1.60	1.30	287

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
Access to equipment that is not readily available in my department, for example: scanners, microphones, 3D printers, cameras, etc.	5.52	7.00	6.14	0.62	-0.86	50
Awareness of the University Archives and Special Collections (unique and rare library materials)	5.40	6.57	5.96	0.57	-0.60	53
Feeling like I belong in the library	6.70	8.18	7.84	1.14	-0.34	50
Keeping me informed about all library services, news, and events	5.22	6.64	6.18	0.96	-0.46	50
Services I receive from the library when I need help with my research	6.24	7.48	7.46	1.22	-0.02	46

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
Access to equipment that is not readily available in my department, for example: scanners, microphones, 3D printers, cameras, etc.	2.38	2.10	2.34	2.73	2.58	50
Awareness of the University Archives and Special Collections (unique and rare library materials)	2.63	2.48	2.15	2.54	2.31	53
Feeling like I belong in the library	2.21	1.41	1.67	2.19	2.00	50
Keeping me informed about all library services, news, and events	2.51	2.04	2.24	2.63	2.47	50
Services I receive from the library when I need help with my research	2.10	1.68	1.38	2.11	1.68	46

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.	7.97	1.36	140
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.57	1.39	147
How would you rate the overall quality of the service provided by the library?	7.76	1.20	287

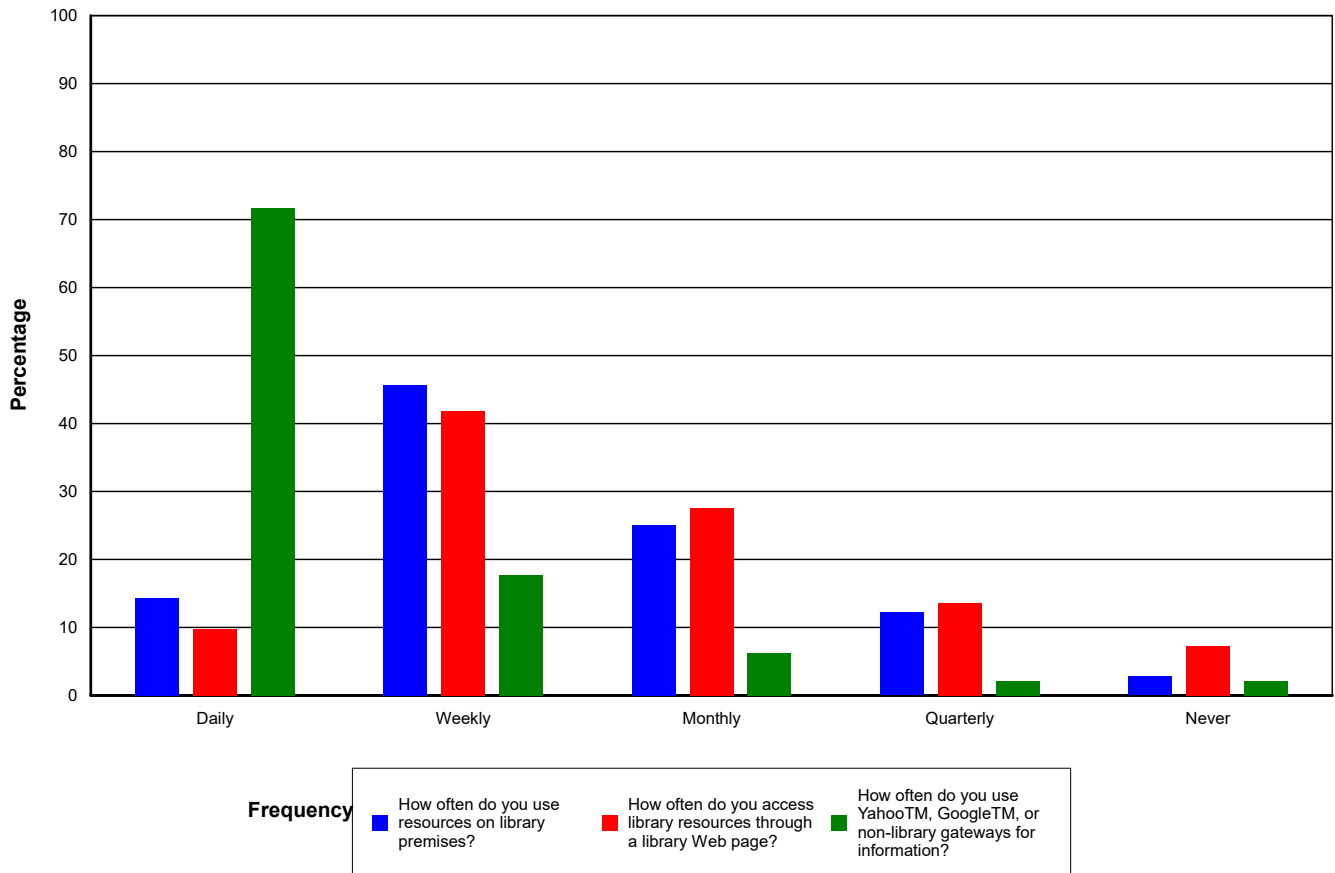
4.6 Information Literacy Outcomes Questions Summary for Undergraduate

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

Information Literacy Outcomes Questions	Mean	SD	n
The library helps me stay abreast of developments in my field(s) of interest.	6.64	2.00	95
The library aids my advancement in my academic discipline or work.	7.14	1.70	131
The library enables me to be more efficient in my academic pursuits or work.	7.44	1.61	131
The library helps me distinguish between trustworthy and untrustworthy information.	6.99	1.64	129
The library provides me with the information skills I need in my work or study.	7.39	1.52	88

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?	41 14.29%	131 45.64%	72 25.09%	35 12.20%	8 2.79%	287 100.00%
How often do you access library resources through a library Web page?	28 9.76%	120 41.81%	79 27.53%	39 13.59%	21 7.32%	287 100.00%
How often do you use Yahoo™, Google™, or non-library gateways for information?	206 71.78%	51 17.77%	18 6.27%	6 2.09%	6 2.09%	287 100.00%

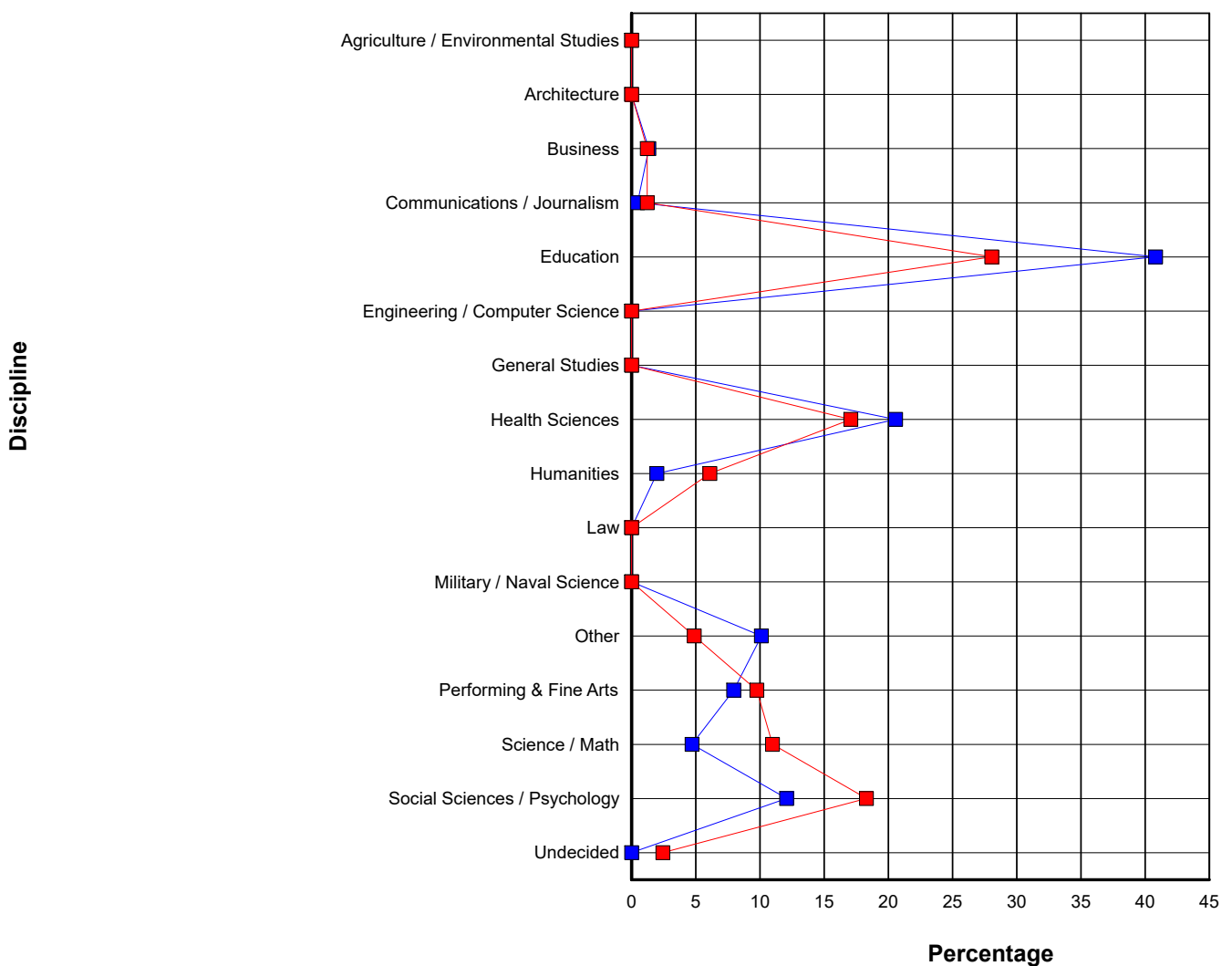
5 Graduate Summary for University of Northern Colorado

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)
 Institution Type: College or University
 Consortium: None
 User Group: Graduate

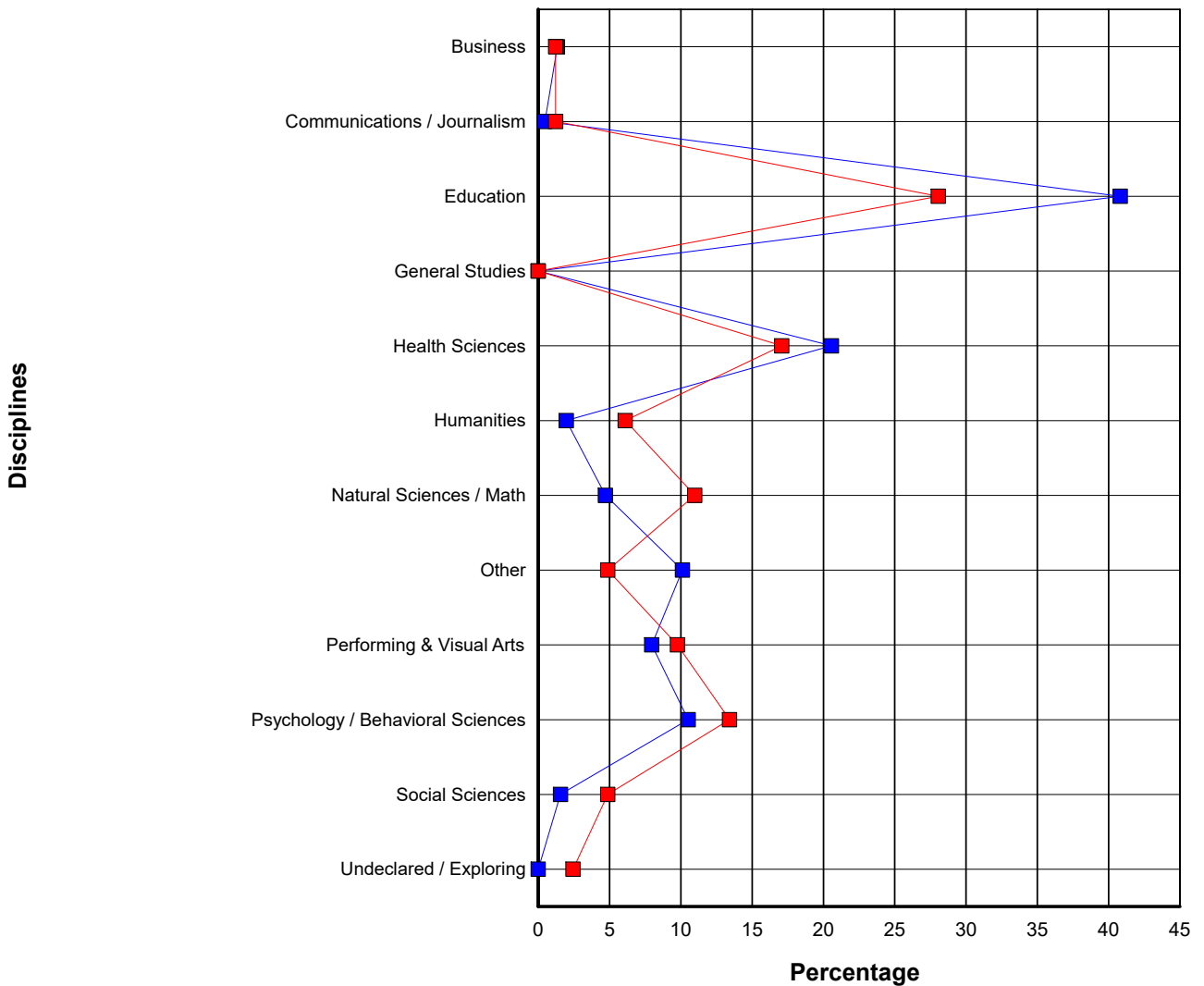
Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture / Environmental Studies	0	0.00	0	0.00	0.00
Architecture	0	0.00	0	0.00	0.00
Business	43	1.34	1	1.22	0.12
Communications / Journalism	15	0.47	1	1.22	-0.75
Education	1,308	40.81	23	28.05	12.76
Engineering / Computer Science	0	0.00	0	0.00	0.00
General Studies	0	0.00	0	0.00	0.00
Health Sciences	659	20.56	14	17.07	3.49
Humanities	63	1.97	5	6.10	-4.13
Law	0	0.00	0	0.00	0.00
Military / Naval Science	0	0.00	0	0.00	0.00
Other	324	10.11	4	4.88	5.23
Performing & Fine Arts	255	7.96	8	9.76	-1.80
Science / Math	151	4.71	9	10.98	-6.26
Social Sciences / Psychology	387	12.07	15	18.29	-6.22
Undecided	0	0.00	2	2.44	-2.44
Total:	3,205	100.00	82	100.00	0.00

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

5.1.2 Population and Respondent Profiles for Graduate 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)
 Institution Type: College or University
 Consortium: None
 User Group: Graduate

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Business	43	1.34	1	1.22	0.12
Communications / Journalism	15	0.47	1	1.22	-0.75
Education	1,308	40.81	23	28.05	12.76
General Studies	0	0.00	0	0.00	0.00
Health Sciences	659	20.56	14	17.07	3.49
Humanities	63	1.97	5	6.10	-4.13
Natural Sciences / Math	151	4.71	9	10.98	-6.26
Other	324	10.11	4	4.88	5.23
Performing & Visual Arts	255	7.96	8	9.76	-1.80
Psychology / Behavioral Sciences	337	10.51	11	13.41	-2.90
Social Sciences	50	1.56	4	4.88	-3.32
Undeclared / Exploring	0	0.00	2	2.44	-2.44
Total:	3,205	100.00	82	100.00	0.00

5.1.3 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 %
18 - 22	3	3.66
23 - 30	40	48.78
31 - 45	27	32.93
46 - 65	12	14.63
Over 65	0	0.00
Under 18	0	0.00
Total:	82	100.00

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

The library that you use most often:	Respondents n	Respondents %
Distance patron using online resources only	15	18.52
Howard M. Skinner Music Library	12	14.81
James A. Michener Library	45	55.56
Local patron using online resources only	8	9.88
None of these	1	1.23
Total:	81	100.00

5.1.5 Respondent Profile by Full or part-time student?

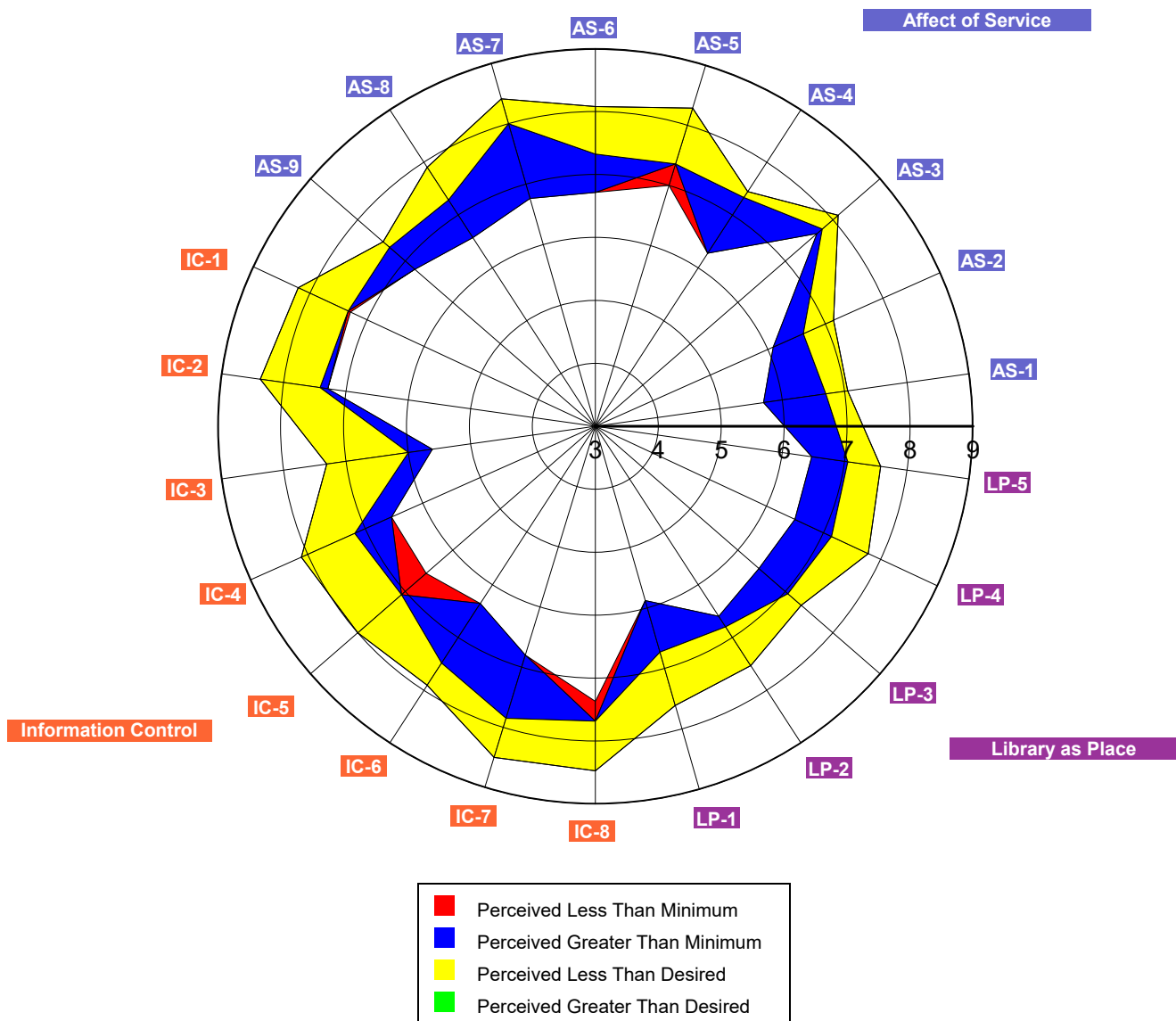
Full or part-time student?	Population N	Population %	Respondents n	Respondents %
Does not apply / NA		0.00	2	2.44
Full-time	1,039	32.42	55	67.07
Part-time	2,166	67.58	25	30.49
Total:	3,205	100.00	82	100.00

5.2 Core Questions Summary for Graduate

This radar chart shows the aggregate results for the core survey questions. Each axis represents one question. A code to identify each question is displayed at the outer point of each axis. While questions for each dimension of library service quality are scattered randomly throughout the survey, on this chart they are grouped into sections: Affect of Service, Information Control, and Library as Place.

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

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



ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Employees who instill confidence in users	5.70	7.05	6.70	1.00	-0.35	20
AS-2	Giving users individual attention	6.10	7.14	6.62	0.52	-0.52	21
AS-3	Employees who are consistently courteous	7.67	8.11	7.78	0.11	-0.33	18
AS-4	Readiness to respond to users' questions	6.28	7.44	7.33	1.06	-0.11	18
AS-5	Employees who have the knowledge to answer user questions	7.36	8.29	7.00	-0.36	-1.29	14
AS-6	Employees who deal with users in a caring fashion	6.71	8.08	7.32	0.61	-0.75	77
AS-7	Employees who understand the needs of their users	6.76	8.41	8.00	1.24	-0.41	17
AS-8	Willingness to help users	6.57	7.90	7.29	0.71	-0.62	21
AS-9	Dependability in handling users' service problems	6.80	7.47	7.33	0.53	-0.13	15
Information Control							
IC-1	Making electronic resources accessible from my home or office	7.33	8.21	7.29	-0.04	-0.92	24
IC-2	A library Web site enabling me to locate information on my own	7.29	8.38	7.42	0.13	-0.96	24
IC-3	The printed library materials I need for my work	5.62	7.31	6.00	0.38	-1.31	13
IC-4	The electronic information resources I need	6.54	8.11	7.19	0.64	-0.93	81
IC-5	Modern equipment that lets me easily access needed information	7.08	8.00	6.56	-0.52	-1.44	25
IC-6	Easy-to-use access tools that allow me to find things on my own	6.35	7.90	7.48	1.13	-0.42	31
IC-7	Making information easily accessible for independent use	6.80	8.50	7.85	1.05	-0.65	20
IC-8	Print and/or electronic journal collections I require for my work	7.68	8.47	7.37	-0.32	-1.11	19
Library as Place							
LP-1	Library space that inspires study and learning	5.88	7.61	6.73	0.85	-0.88	67
LP-2	Quiet space for individual activities	6.60	7.53	6.80	0.20	-0.73	15
LP-3	A comfortable and inviting location	6.44	7.33	7.06	0.61	-0.28	18
LP-4	A getaway for study, learning, or research	6.50	7.79	7.14	0.64	-0.64	14
LP-5	Community space for group learning and group study	6.47	7.58	7.05	0.58	-0.53	19
Overall:		6.61	7.93	7.20	0.59	-0.72	82

Language: English (American)

Institution Type: College or University

Consortium: None

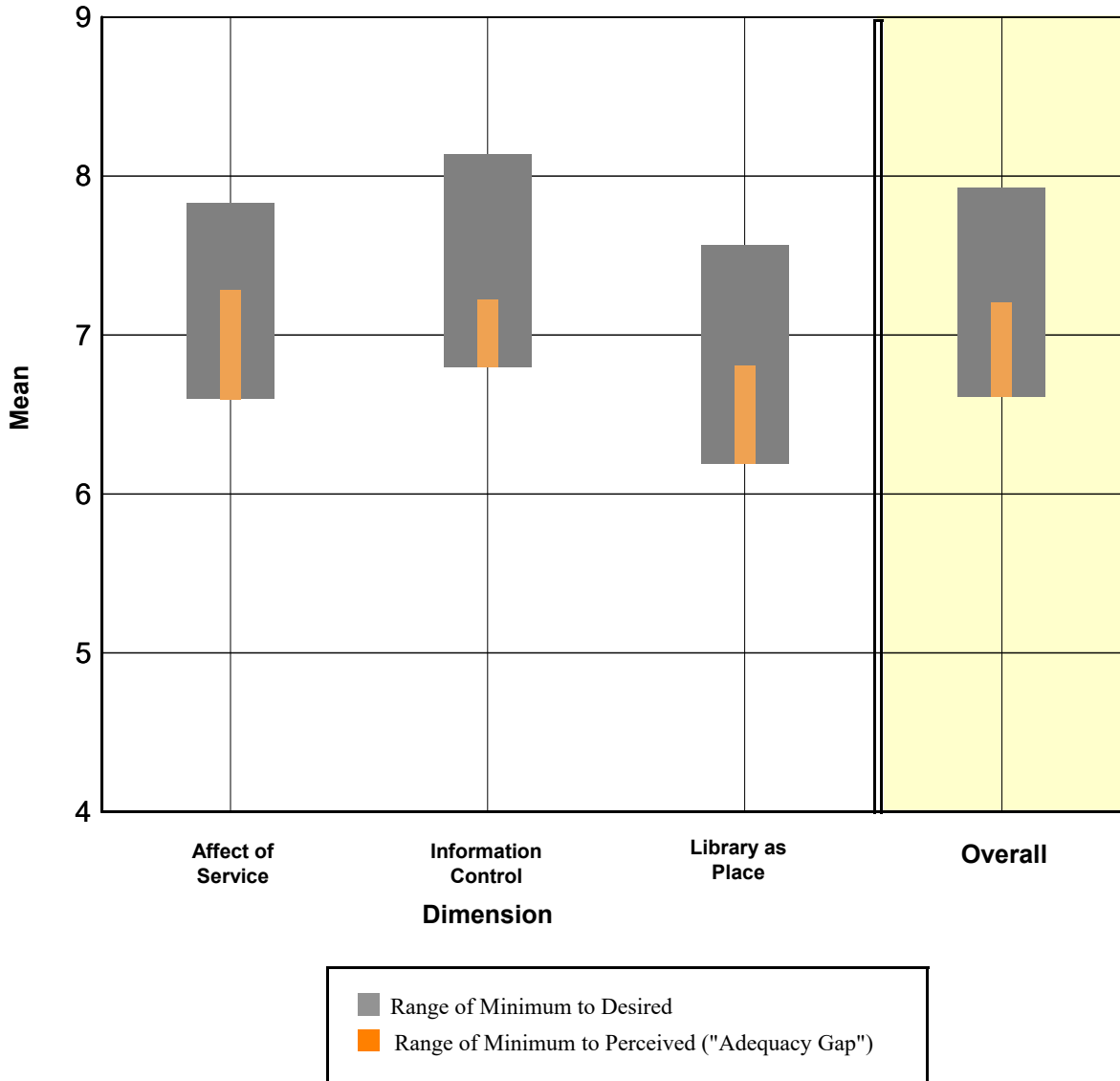
User Group: Graduate

ID	Question Text	Minimum SD	Desired SD	Perceived SD	Adequacy SD	Superiority SD	n
Affect of Service							
AS-1	Employees who instill confidence in users	2.64	2.44	1.84	2.05	1.79	20
AS-2	Giving users individual attention	1.55	1.53	1.66	2.09	2.11	21
AS-3	Employees who are consistently courteous	1.50	1.41	1.35	1.23	1.19	18
AS-4	Readiness to respond to users' questions	1.90	2.28	1.97	2.62	2.03	18
AS-5	Employees who have the knowledge to answer user questions	1.39	0.99	1.75	1.74	1.68	14
AS-6	Employees who deal with users in a caring fashion	1.98	1.42	1.79	2.07	1.73	77
AS-7	Employees who understand the needs of their users	1.79	1.00	1.27	1.86	1.33	17
AS-8	Willingness to help users	2.18	1.92	1.95	1.74	1.24	21
AS-9	Dependability in handling users' service problems	2.11	2.20	1.50	1.36	1.46	15
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.83	1.14	1.68	1.92	1.67	24
IC-2	A library Web site enabling me to locate information on my own	1.73	1.10	1.38	1.65	1.37	24
IC-3	The printed library materials I need for my work	1.50	2.39	1.91	2.47	1.75	13
IC-4	The electronic information resources I need	1.84	1.56	1.59	1.98	1.83	81
IC-5	Modern equipment that lets me easily access needed information	1.68	1.91	1.80	1.92	1.53	25
IC-6	Easy-to-use access tools that allow me to find things on my own	1.91	1.68	1.67	2.01	1.36	31
IC-7	Making information easily accessible for independent use	2.14	1.19	1.14	2.26	1.69	20
IC-8	Print and/or electronic journal collections I require for my work	1.38	0.96	1.21	1.60	1.29	19
Library as Place							
LP-1	Library space that inspires study and learning	2.45	1.97	2.07	2.45	2.36	67
LP-2	Quiet space for individual activities	1.96	1.64	1.57	1.74	1.98	15
LP-3	A comfortable and inviting location	2.31	2.43	2.60	1.91	2.02	18
LP-4	A getaway for study, learning, or research	2.28	1.58	1.56	2.95	2.34	14
LP-5	Community space for group learning and group study	2.44	1.84	1.84	2.83	2.52	19
Overall:		1.54	1.20	1.34	1.70	1.34	82

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

5.3 Core Question Dimensions Summary for Graduate

On the chart below, scores for each dimension of library service quality have been plotted graphically. The 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	6.60	7.83	7.28	0.69	-0.55	80
Information Control	6.80	8.14	7.22	0.42	-0.91	82
Library as Place	6.19	7.57	6.81	0.62	-0.76	68
Overall	6.61	7.93	7.20	0.59	-0.72	82

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	1.78	1.48	1.55	1.78	1.42	80
Information Control	1.56	1.29	1.46	1.78	1.36	82
Library as Place	2.18	1.71	1.87	2.30	2.15	68
Overall	1.54	1.20	1.34	1.70	1.34	82

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
Access to equipment that is not readily available in my department, for example: scanners, microphones, 3D printers, cameras, etc.	4.77	5.92	6.23	1.46	0.31	13
Awareness of the University Archives and Special Collections (unique and rare library materials)	6.42	7.42	6.83	0.42	-0.58	12
Feeling like I belong in the library	5.45	7.00	7.09	1.64	0.09	11
Keeping me informed about all library services, news, and events	5.38	6.50	6.44	1.06	-0.06	16
Services I receive from the library when I need help with my research	6.45	8.18	7.27	0.82	-0.91	11

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
Access to equipment that is not readily available in my department, for example: scanners, microphones, 3D printers, cameras, etc.	3.24	3.04	1.17	3.26	3.17	13
Awareness of the University Archives and Special Collections (unique and rare library materials)	2.64	2.50	2.62	1.00	0.79	12
Feeling like I belong in the library	2.62	2.90	2.74	4.43	4.57	11
Keeping me informed about all library services, news, and events	2.22	2.19	1.71	2.17	2.43	16
Services I receive from the library when I need help with my research	1.75	0.87	1.27	1.33	1.38	11

Language: English (American)

Institution Type: College or University

Consortium: None

User Group: Graduate

5.5 General Satisfaction Questions Summary for Graduate

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

Satisfaction Question	Mean	SD	n
In general, I am satisfied with the way in which I am treated at the library.	7.75	1.26	40
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.10	2.16	42
How would you rate the overall quality of the service provided by the library?	7.46	1.56	82

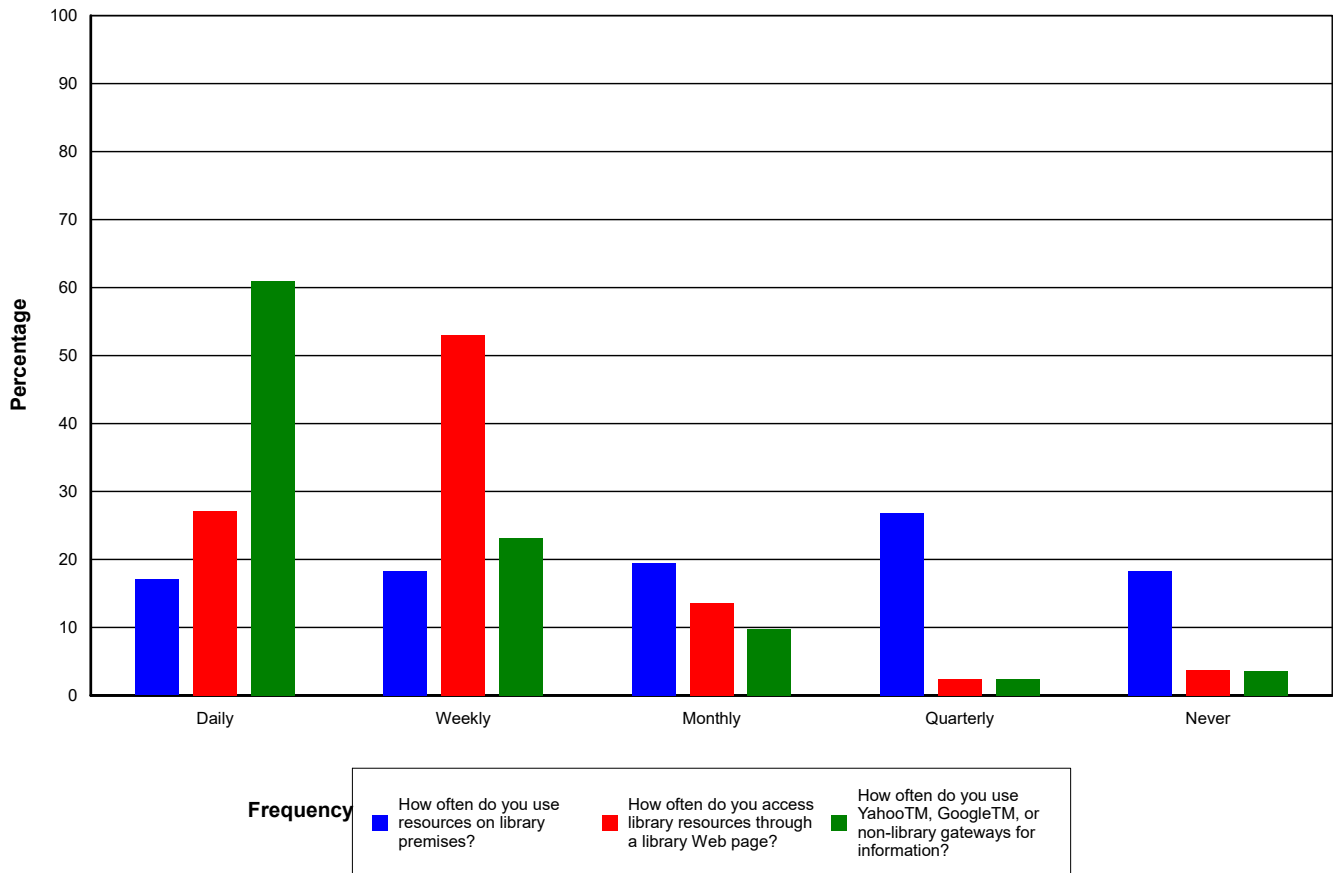
5.6 Information Literacy Outcomes Questions Summary for Graduate

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.	6.59	1.92	29
The library aids my advancement in my academic discipline or work.	7.28	1.58	40
The library enables me to be more efficient in my academic pursuits or work.	7.04	1.81	25
The library helps me distinguish between trustworthy and untrustworthy information.	6.18	2.05	40
The library provides me with the information skills I need in my work or study.	7.20	1.92	30

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?	14 17.07%	15 18.29%	16 19.51%	22 26.83%	15 18.29%	82 100.00%
How often do you access library resources through a library Web page?	22 27.16%	43 53.09%	11 13.58%	2 2.47%	3 3.70%	81 100.00%
How often do you use Yahoo™, Google™, or non-library gateways for information?	50 60.98%	19 23.17%	8 9.76%	2 2.44%	3 3.66%	82 100.00%

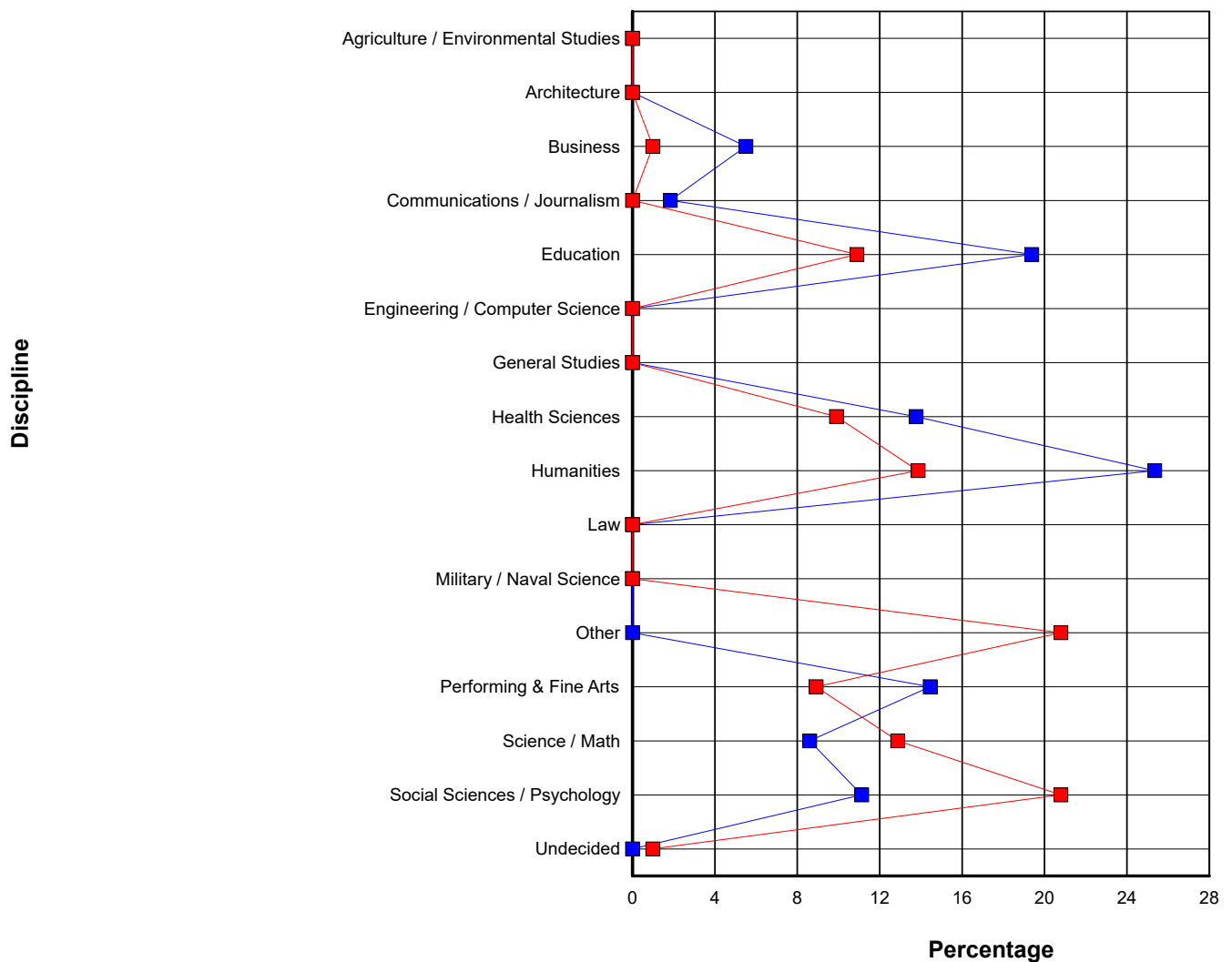
6 Faculty Summary for University of Northern Colorado

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

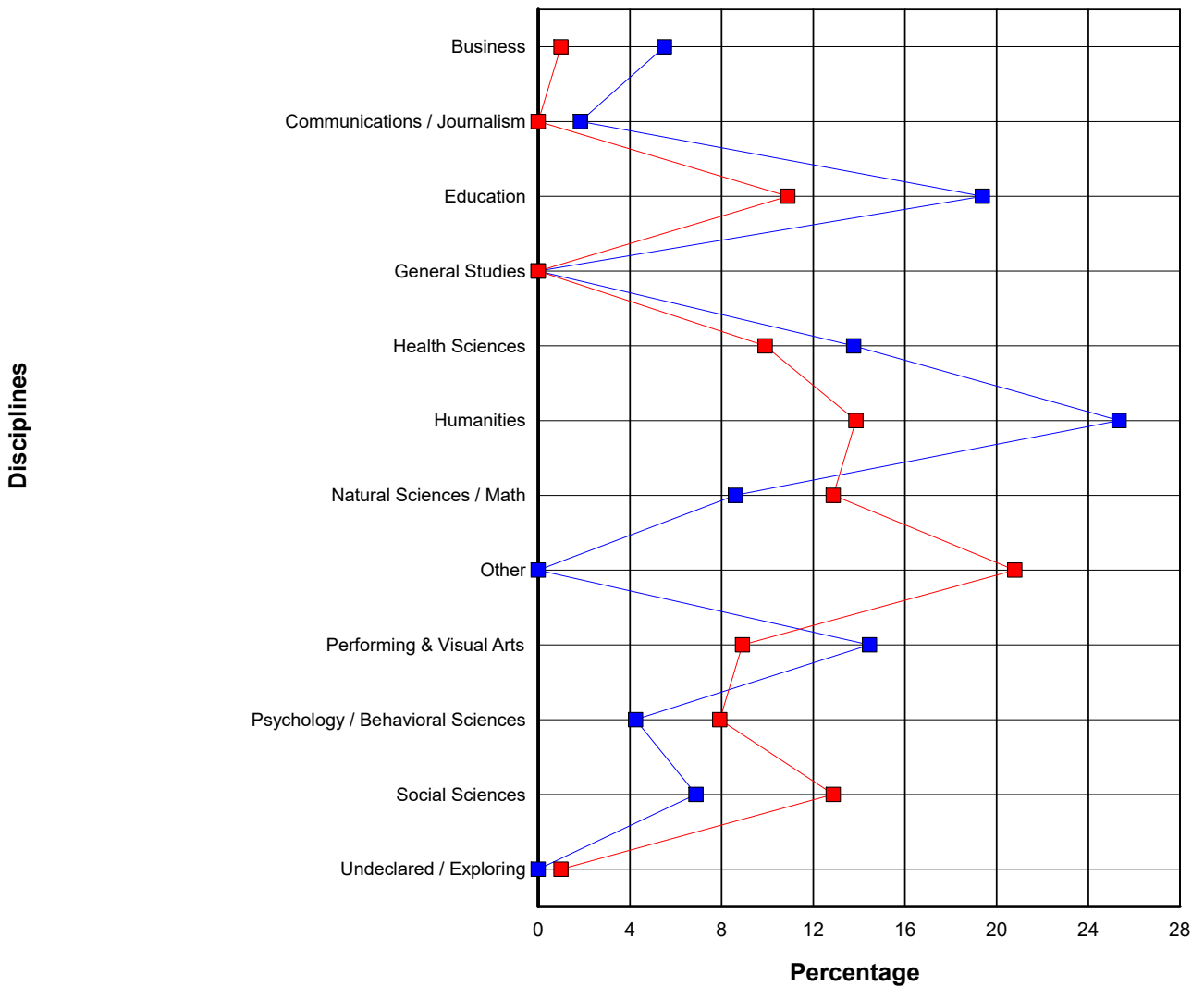
Language: English (American)
 Institution Type: College or University
 Consortium: None
 User Group: Faculty

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Agriculture / Environmental Studies	0	0.00	0	0.00	0.00
Architecture	0	0.00	0	0.00	0.00
Business	48	5.50	1	0.99	4.51
Communications / Journalism	16	1.83	0	0.00	1.83
Education	169	19.38	11	10.89	8.49
Engineering / Computer Science	0	0.00	0	0.00	0.00
General Studies	0	0.00	0	0.00	0.00
Health Sciences	120	13.76	10	9.90	3.86
Humanities	221	25.34	14	13.86	11.48
Law	0	0.00	0	0.00	0.00
Military / Naval Science	0	0.00	0	0.00	0.00
Other	0	0.00	21	20.79	-20.79
Performing & Fine Arts	126	14.45	9	8.91	5.54
Science / Math	75	8.60	13	12.87	-4.27
Social Sciences / Psychology	97	11.12	21	20.79	-9.67
Undecided	0	0.00	1	0.99	-0.99
Total:	872	100.00	101	100.00	0.00

6.1.2 Population and Respondent Profiles for Faculty 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)
 Institution Type: College or University
 Consortium: None
 User Group: Faculty

Discipline	Population N	Population %	Respondents n	Respondents %	%N - %n
Business	48	5.50	1	0.99	4.51
Communications / Journalism	16	1.83	0	0.00	1.83
Education	169	19.38	11	10.89	8.49
General Studies	0	0.00	0	0.00	0.00
Health Sciences	120	13.76	10	9.90	3.86
Humanities	221	25.34	14	13.86	11.48
Natural Sciences / Math	75	8.60	13	12.87	-4.27
Other	0	0.00	21	20.79	-20.79
Performing & Visual Arts	126	14.45	9	8.91	5.54
Psychology / Behavioral Sciences	37	4.24	8	7.92	-3.68
Social Sciences	60	6.88	13	12.87	-5.99
Undeclared / Exploring	0	0.00	1	0.99	-0.99
Total:	872	100.00	101	100.00	0.00

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

6.1.3 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 %
18 - 22	1	0.99
23 - 30	5	4.95
31 - 45	44	43.56
46 - 65	47	46.53
Over 65	4	3.96
Under 18	0	0.00
Total:	101	100.00

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

The library that you use most often:	Respondents n	Respondents %
Distance patron using online resources only	2	1.98
Howard M. Skinner Music Library	7	6.93
James A. Michener Library	80	79.21
Local patron using online resources only	12	11.88
None of these	0	0.00
Total:	101	100.00

6.1.5 Respondent Profile by Full or part-time student?

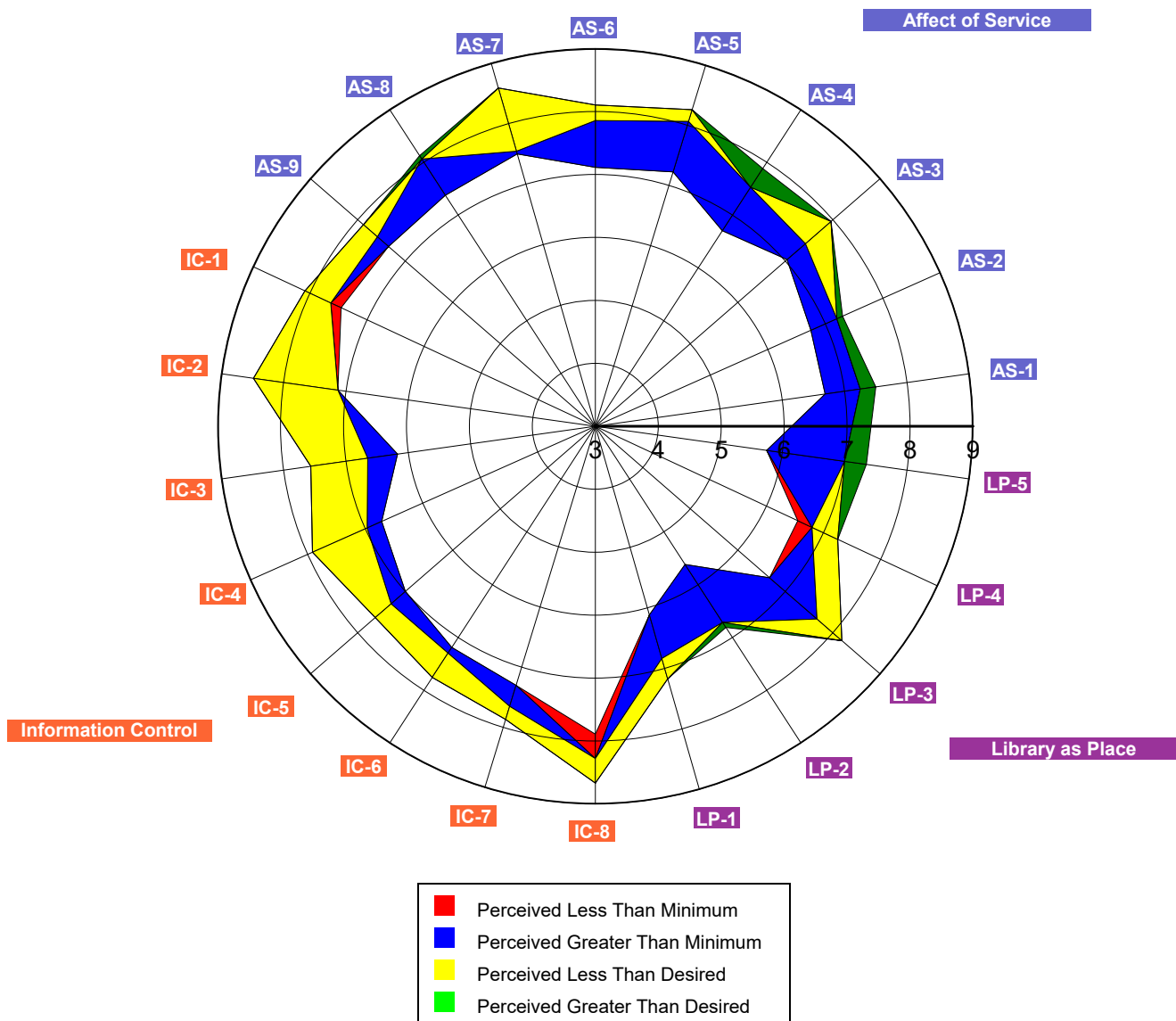
Full or part-time student?	Population N	Population %	Respondents n	Respondents %
Does not apply / NA		0.00	99	100.00
Full-time	514	58.94	0	0.00
Part-time	358	41.06	0	0.00
Total:	872	100.00	99	100.00

6.2 Core Questions Summary for Faculty

This radar chart shows the aggregate results for the core survey questions. Each axis represents one question. A code to identify each question is displayed at the outer point of each axis. While questions for each dimension of library service quality are scattered randomly throughout the survey, on this chart they are grouped into sections: Affect of Service, Information Control, and Library as Place.

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

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



ID	Question Text	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service							
AS-1	Employees who instill confidence in users	6.69	7.25	7.50	0.81	0.25	16
AS-2	Giving users individual attention	6.75	7.20	7.30	0.55	0.10	20
AS-3	Employees who are consistently courteous	7.04	7.96	7.42	0.38	-0.54	26
AS-4	Readiness to respond to users' questions	6.71	7.53	7.88	1.18	0.35	17
AS-5	Employees who have the knowledge to answer user questions	7.23	8.26	8.06	0.84	-0.19	31
AS-6	Employees who deal with users in a caring fashion	7.11	8.10	7.86	0.74	-0.25	97
AS-7	Employees who understand the needs of their users	7.50	8.59	7.55	0.05	-1.05	22
AS-8	Willingness to help users	7.38	8.06	8.13	0.75	0.06	32
AS-9	Dependability in handling users' service problems	7.35	7.88	7.59	0.24	-0.29	17
Information Control							
IC-1	Making electronic resources accessible from my home or office	7.64	8.09	7.45	-0.18	-0.64	22
IC-2	A library Web site enabling me to locate information on my own	7.13	8.48	7.13	0.00	-1.35	31
IC-3	The printed library materials I need for my work	6.17	7.57	6.65	0.48	-0.91	23
IC-4	The electronic information resources I need	6.71	7.92	6.97	0.26	-0.95	98
IC-5	Modern equipment that lets me easily access needed information	7.00	7.63	7.30	0.30	-0.33	30
IC-6	Easy-to-use access tools that allow me to find things on my own	7.19	7.76	7.30	0.11	-0.46	37
IC-7	Making information easily accessible for independent use	7.30	7.87	7.65	0.35	-0.22	23
IC-8	Print and/or electronic journal collections I require for my work	8.28	8.67	7.89	-0.39	-0.78	18
Library as Place							
LP-1	Library space that inspires study and learning	6.12	7.17	6.84	0.72	-0.34	86
LP-2	Quiet space for individual activities	5.62	6.71	6.81	1.19	0.10	21
LP-3	A comfortable and inviting location	6.67	8.19	7.67	1.00	-0.52	21
LP-4	A getaway for study, learning, or research	6.80	7.25	6.55	-0.25	-0.70	20
LP-5	Community space for group learning and group study	5.75	7.00	7.35	1.60	0.35	20
Overall:		6.83	7.77	7.37	0.53	-0.40	101

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	1.25	1.29	1.51	1.68	1.53	16
AS-2	Giving users individual attention	2.17	1.85	1.81	1.54	1.21	20
AS-3	Employees who are consistently courteous	1.48	1.40	1.98	2.76	2.52	26
AS-4	Readiness to respond to users' questions	1.79	1.37	1.11	1.91	1.50	17
AS-5	Employees who have the knowledge to answer user questions	1.89	1.06	1.29	1.46	0.95	31
AS-6	Employees who deal with users in a caring fashion	1.63	1.36	1.55	2.03	1.77	97
AS-7	Employees who understand the needs of their users	1.41	0.80	2.13	2.21	1.99	22
AS-8	Willingness to help users	1.84	1.37	1.16	1.76	1.01	32
AS-9	Dependability in handling users' service problems	1.87	1.65	1.23	1.25	1.10	17
Information Control							
IC-1	Making electronic resources accessible from my home or office	1.56	1.27	1.44	1.68	1.56	22
IC-2	A library Web site enabling me to locate information on my own	1.80	0.93	1.77	1.84	1.85	31
IC-3	The printed library materials I need for my work	2.31	1.88	1.87	2.23	2.61	23
IC-4	The electronic information resources I need	1.78	1.48	1.86	1.96	1.91	98
IC-5	Modern equipment that lets me easily access needed information	1.89	1.65	1.21	1.93	1.75	30
IC-6	Easy-to-use access tools that allow me to find things on my own	1.37	1.57	1.49	1.58	1.77	37
IC-7	Making information easily accessible for independent use	1.49	1.46	1.11	1.50	1.13	23
IC-8	Print and/or electronic journal collections I require for my work	0.83	0.69	1.02	1.09	0.94	18
Library as Place							
LP-1	Library space that inspires study and learning	2.17	2.10	1.81	2.61	2.61	86
LP-2	Quiet space for individual activities	2.62	2.47	1.36	2.79	2.62	21
LP-3	A comfortable and inviting location	1.32	1.17	1.11	1.70	1.83	21
LP-4	A getaway for study, learning, or research	2.67	2.17	2.28	2.10	2.13	20
LP-5	Community space for group learning and group study	2.49	1.78	1.31	2.37	1.73	20
Overall:		1.47	1.21	1.22	1.53	1.34	101

Language: English (American)

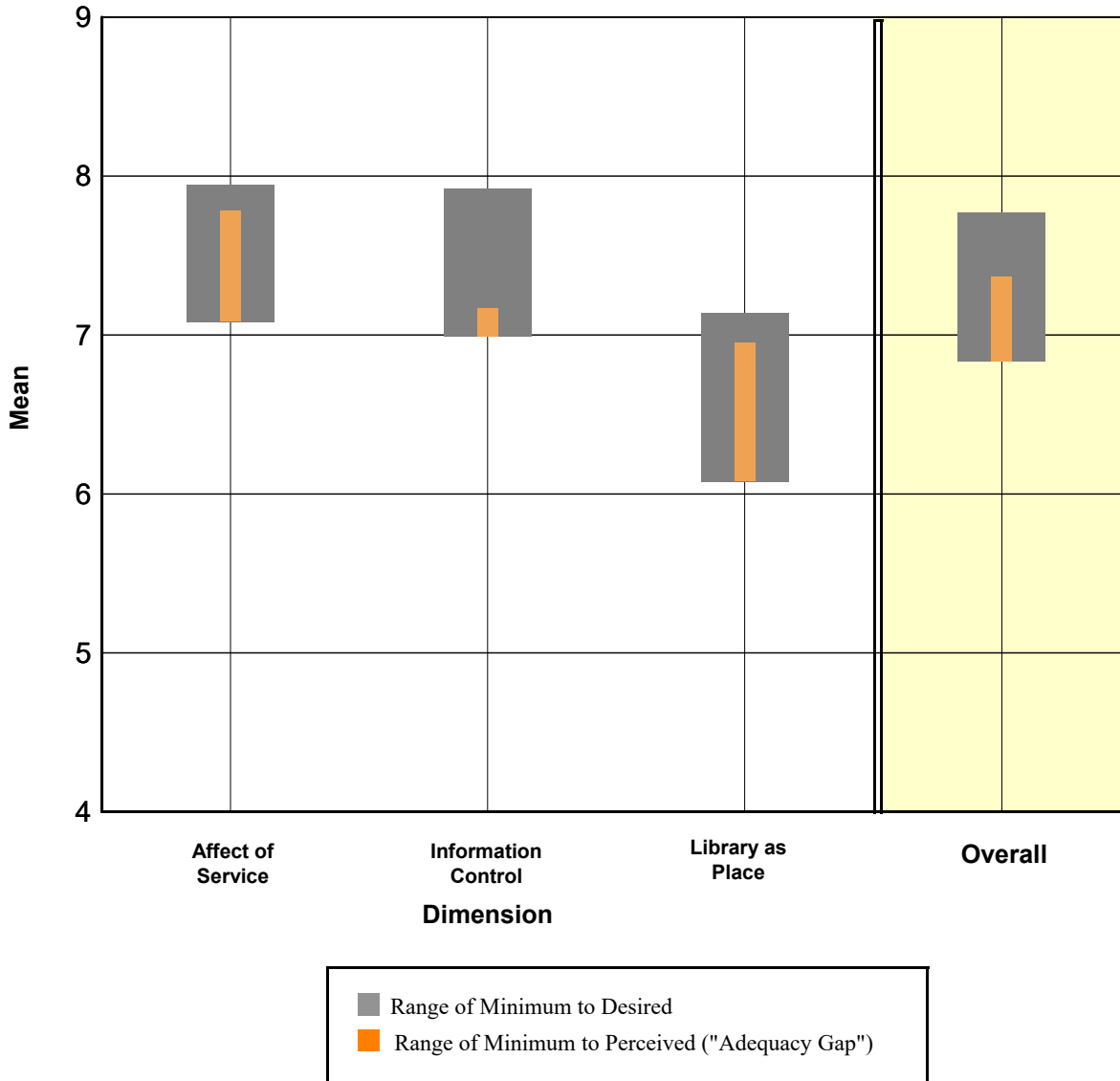
Institution Type: College or University

Consortium: None

User Group: Faculty

6.3 Core Question Dimensions Summary for Faculty

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



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

Dimension	Minimum Mean	Desired Mean	Perceived Mean	Adequacy Mean	Superiority Mean	n
Affect of Service	7.08	7.95	7.78	0.70	-0.17	101
Information Control	6.99	7.92	7.17	0.18	-0.75	101
Library as Place	6.08	7.14	6.95	0.87	-0.19	90
Overall	6.83	7.77	7.37	0.53	-0.40	101

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	1.61	1.31	1.40	1.71	1.40	101
Information Control	1.48	1.24	1.44	1.46	1.50	101
Library as Place	2.21	1.97	1.53	2.34	2.20	90
Overall	1.47	1.21	1.22	1.53	1.34	101

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
Access to equipment that is not readily available in my department, for example: scanners, microphones, 3D printers, cameras, etc.	6.50	7.63	7.38	0.88	-0.25	8
Awareness of the University Archives and Special Collections (unique and rare library materials)	6.17	6.78	6.72	0.56	-0.06	18
Feeling like I belong in the library	6.29	8.00	8.00	1.71	0	17
Keeping me informed about all library services, news, and events	5.06	5.88	6.76	1.71	0.88	17
Services I receive from the library when I need help with my research	7.67	8.44	8.00	0.33	-0.44	9

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
Access to equipment that is not readily available in my department, for example: scanners, microphones, 3D printers, cameras, etc.	2.00	1.51	1.06	1.46	1.16	8
Awareness of the University Archives and Special Collections (unique and rare library materials)	2.38	2.34	2.19	2.75	2.88	18
Feeling like I belong in the library	1.79	1.27	0.94	1.86	1.58	17
Keeping me informed about all library services, news, and events	1.71	1.58	1.64	1.21	1.62	17
Services I receive from the library when I need help with my research	1.22	1.01	1.12	1.12	1.01	9

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.	8.18	1.04	50
In general, I am satisfied with library support for my learning, research, and/or teaching needs.	7.33	1.70	51
How would you rate the overall quality of the service provided by the library?	7.78	1.35	101

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.	6.00	2.47	26
The library aids my advancement in my academic discipline or work.	7.17	1.77	47
The library enables me to be more efficient in my academic pursuits or work.	7.71	1.27	48
The library helps me distinguish between trustworthy and untrustworthy information.	6.23	1.75	47
The library provides me with the information skills I need in my work or study.	7.09	1.82	34

Language: English (American)

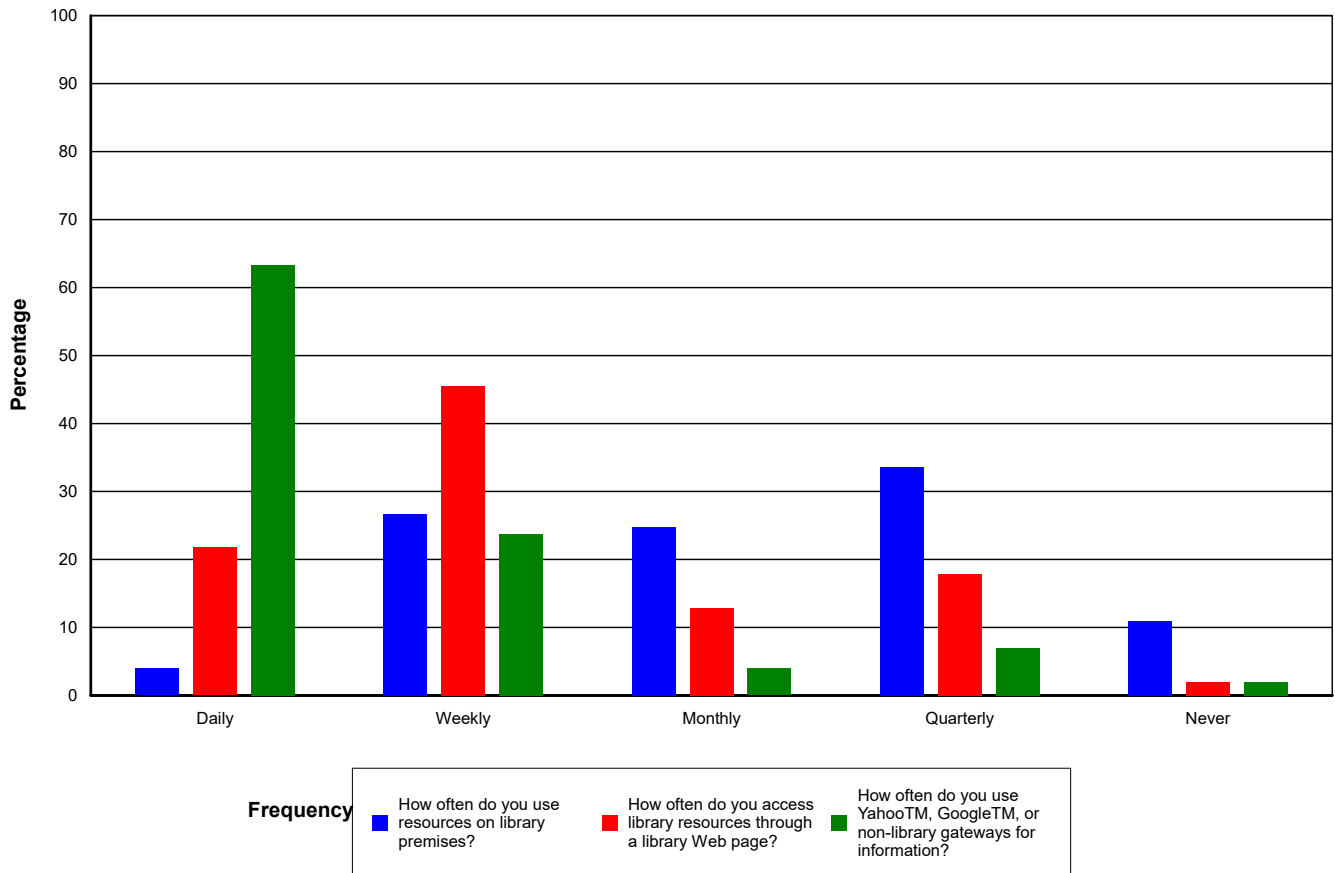
Institution Type: College or University

Consortium: None

User Group: Faculty

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 3.96%	27 26.73%	25 24.75%	34 33.66%	11 10.89%	101 100.00%
How often do you access library resources through a library Web page?	22 21.78%	46 45.54%	13 12.87%	18 17.82%	2 1.98%	101 100.00%
How often do you use Yahoo™, Google™, or non-library gateways for information?	64 63.37%	24 23.76%	4 3.96%	7 6.93%	2 1.98%	101 100.00%

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 2012 notebooks, along with the questions that relate to each dimension. *(Note: The questions below are those used in the College and University implementation of the survey, American English version.)*

Affect of Service

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

Information Control

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

Library as Place

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



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