Research Library Issues

Special Issue on Value in Libraries: Assessing Organizational Performance

Guest edited by Martha Kyrillidou, Senior Director,
Statistics and Service Quality Programs, ARL

Special Issue on Value in Libraries: Assessing Organizational Performance

Table of Contents

Library Value May Be Proven, If Not Self-Evident

**Guest Editor, Martha Kyrillidou, Senior Director,
Statistics and Service Quality Programs, ARL**

We hold these truths to be self-evident: libraries are valuable to humankind; libraries preserve knowledge; libraries enable access to information; libraries serve the information needs of their users. To the believer the truth is evident. But libraries are not natural phenomena like the sun rising and setting every day. Libraries are institutions created and supported by those individuals who hold that these statements are true even if not self-evident to everyone.

The caretakers of libraries have gathered data on library performance for decades and have used this information to understand how to improve services and programs they provide to their users. The ability to measure the quality of library services is extremely important as libraries are faced with the need to make informed decisions about the best way to meet the needs of the users of those services. This ability has become even more important as libraries make transformative changes during times of fiscal constraint and increased competition.

ARL has built a program of assessment over the past 20 years and continuously looks for ways to strengthen this capacity for member libraries. This issue of *RLI* highlights ways in which assessment tools have helped libraries improve their services and programs. These improvements are the result of library leadership and their staff using data to make decisions that would have the most impact. This issue also captures some of the newer initiatives focused on demonstrating the value of library services.

LibQUAL+® has now been used for a decade by upwards of 1,200 libraries around the world in 20 language versions. The results have helped libraries understand users' perceptions of library service quality. Colleen Cook and Michael Maciel provide a brief historical look at the evolution of LibQUAL+® and highlight how the administration of this tool enabled the Texas A&M University Libraries to make significant service improvements based on sound data. The

University of Glasgow Library used the results from their LibQUAL+® surveys to build a strong case for enhancing the physical spaces in the library. Jacqui Dowd's article brings attention to how user perceptions of the library's environment can build support for increased funding. The introduction of LibQUAL+® Lite with fewer questions improves survey response rates and provides solid results. Both the University of Glasgow and Cranfield University in the United Kingdom implemented LibQUAL+® Lite. Selena Killick captures the experience at Cranfield, where they were particularly concerned with the impact of the recent economic downturn on library services and the possible consequential impact on their LibQUAL+® scores.

When ARL directors began to discuss what the research library of the 21st century would look like, it became clear that the traditional ARL statistics, and even many of the new measures tools, were not enough to draw the full picture. ARL initiated a process to address this shortcoming, calling on each ARL library to develop a narrative profile that describes their organization. Bill Potter, Colleen Cook, and Martha Kyrillidou provide an overview of this project and discuss how the profiles are being mined to describe the key elements of the 21st-century research library in addition to providing insights into possible new measures.

The "new measures" movement has definitely helped many libraries enhance and strengthen their assessment capacity, but the need to link assessment effectively with organizational priorities remains a challenge. The Balanced Scorecard has been used in the commercial and non-profit sectors for nearly two decades as a strategic management tool. ARL's new initiative to build a collaborative model for implementing a scorecard in research libraries is also highlighted in this issue. Johns Hopkins, McMaster, University of Virginia, and the University of Washington are among the key players in this pilot effort. In attempting to link strategy and metrics, we have realized that our library assessment toolkit can use a more convincing and richer arsenal in describing value delivered to library users. Lib-Value is an effort funded by the Institute of Museum and Library Services that supports collaborative work among the University of Tennessee, University of Illinois at Urbana-Champaign, and ARL exploring how we can capture the value of library collections and services in the research, teaching, and learning process. Regina Mays, Carol Tenopir, and Paula Kaufman provide an overview of this three-year project.

Last, Catherine Davidson and Martha Kyrillidou discuss the use of MINES for Libraries® by the Ontario Council of University Libraries, a 21-member library consortium. The consortium is using this brief point-of-use survey protocol to collect data on the value and impact of the rich electronic resources provided to students and faculty. Deeper understanding of user behavior in the virtual environment is a key element in articulating the value of networked electronic services and MINES for Libraries® is a proven useful method. Furthermore, the influence and importance of this protocol in future years is likely to increase.

This *RLI* issue on assessing library performance is timely for readers who will be participating in two upcoming events: the ARL-CNI Forum on Achieving Strategic Change in Research Libraries (October 14–15, Washington DC) and the Library Assessment Conference (October 25–27, Baltimore MD). Proceedings from both conferences will be made available on the ARL website after the events, enriching our understanding of these issues in multiple new ways. We invite the community to actively engage in the debate about the strategic aspects of library value and capturing the evidence, because few truths are self-evident.

To cite this article: Martha Kyrillidou. "Library Value May Be Proven, If Not Self-Evident." *Research Library Issues: A Bimonthly Report from ARL, CNI, and SPARC*, no. 271 (August 2010): 1–3.
http://www.arl.org/resources/pubs/rli/archive/rli271.shtml.

A Decade of Assessment at a Research-Extensive University Library Using LibQUAL+®

Colleen Cook, Dean, Texas A&M University Libraries

Michael Maciel, Data Analyst, Texas A&M University Libraries

Introduction[1]

Since 1999, the Texas A&M University Libraries have used the LibQUAL+® survey to assess programs, collections, and services. As the major partner with ARL in the development of the protocol, the LibQUAL+® theory of service quality is used as the framework from which to assess the success of the libraries from three dimensions: affect of service, information control, and library as place. In an age of accountability for higher education worldwide, there is a growing need for effective means of longitudinal assessment useful in local contexts as well as cross-institutional comparisons for institutions of higher learning and their libraries. Stakeholders, including students, parents, taxpayers and the public at large all have an interest in society's libraries that become more expensive to operate each year, particularly in contrast to information readily and freely available.

LibQUAL+® History

In 1999 as a part of ARL's New Measures Initiative, researchers at Texas A&M University and ARL embarked on a pilot study to reground SERVQUAL, the premier total market survey for assessing service quality in the commercial sector, for the research library environment. With funding from a US Department of Education Fund for the Improvement of Post-Secondary Education (FIPSE) grant, the LibQUAL+® survey instrument was developed and a program at ARL was inaugurated to run the web-based survey on an annual basis. From a modest beginning with 13 ARL libraries in 2001, the survey has

now been taken by 1.2 million respondents from 1,200 libraries in 20 language versions throughout the world.

A number of goals have emerged as the foundation of the LibQUAL+® program:

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

In its final version LibQUAL+® consists of 22 questions and a free-text comment box. This box secures open-ended comments from users regarding their concerns and suggestions about library services. A set of demographic questions, a set of satisfaction questions, and five outcomes questions are also included. The survey measures three dimensions of library service quality: affect of service, the emotive aspects of service provision; information control, the scope of content and means of access to content; and library as place, the physical characteristics of library spaces. Respondents answer each of the 22 questions on a nine-point scale from three perspectives: the minimum level of service; the perceived, current level of service; and the desired level of service. Perceived scores most often fall somewhere on a continuum anchored by a minimum level of service at the low end and a desired level of service at the high end. The spectrum of opinion is called the "Zone of Tolerance," a term borrowed from LibQUAL+®'s progenitor, SERVQUAL.[2]

LibQUAL+® at Texas A&M University Libraries

Texas A&M University has implemented LibQUAL+® each year since 2000. The survey has provided direction for local management decisions and for monitoring progress on those directions longitudinally across time. The survey has also been used to benchmark against peers, particularly other ARL libraries using LibQUAL+®. With nearly a decade of LibQUAL+® data, trends are emerging that are particularly useful. A few highlights of this trend data are discussed below by dimension and within dimension by user group using Texas

A&M as an example. The top priorities, areas of excellence, and areas of concern from the Spring 2010 LibQUAL+® survey results for undergraduate and graduate students as well as faculty are illustrated in Table 1.

Table 1. Top Five Priorities, Areas of Excellence, and Areas of Concern by Texas A&M User Group, Spring 2010

Undergraduates

Top Five Priorities

AS-3	Employees who are consistently courteous
AS-5	Employees who have the knowledge to answer user questions
IC-5	Modern equipment that lets me easily access needed information
LP-3	A comfortable and inviting location
LP-4	A getaway for study, learning, or research

Top Five Areas of Excellence

AS-3	Employees who are consistently courteous
AS-5	Employees who have the knowledge to answer user questions
AS-6	Employees who deal with users in a caring fashion
AS-8	Willingness to help users
IC-5	Modern equipment that lets me easily access needed information

Top Five Areas of Concern

LP-3	A comfortable and inviting location
Other LibQUAL+® responses ranked 50% or better within each Zone of Tolerance	

Graduate Students

Top Five Priorities

IC-1	Making electronic resources accessible from my home or office
IC-2	A library website enabling me to locate information on my own
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-8	Print and/or electronic journal collections I require for my work

Top Five Areas of Excellence

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-8	Willingness to help users

Top Five Areas of Concern

IC-1	Making electronic resources accessible from my home or office
IC-2	A library website enabling me to locate information on my own
IC-4	The electronic information resources I need
IC-6	Easy-to-use access tools that allow me to find things on my own
IC-8	Print and/or electronic journal collections I require for my work

Faculty

Top Five Priorities

IC-1	Making electronic resources accessible from my home or office
IC-2	A library website enabling me to locate information on my own
IC-4	The electronic information resources I need
IC-6	Easy-to-use access tools that allow me to find things on my own
IC-8	Print and/or electronic journal collections I require for my work

Top Five Areas of Excellence

|	
AS-3	Employees who are consistently courteous
AS-4	Readiness to respond to users' questions
AS-6	Employees who deal with users in a caring fashion
AS-8	Willingness to help users
IC-4	The electronic information resources I need (tied with IC-8)
IC-8	Print and/or electronic journal collections I require for my work (tied with IC-4)

Top Five Areas of Concern

IC-1	Making electronic resources accessible from my home or office
IC-2	A library website enabling me to locate information on my own
IC-4	The electronic information resources I need
IC-6	Easy-to-use access tools that allow me to find things on my own
IC-8	Print and/or electronic journal collections I require for my work

Key: "AS" = Affect of Service "IC" = Information Control "LP" = Library as Place

Affect of Service

The Affect of Service dimension asks respondents to rate their interactions with library staff, in particular, about their general helpfulness and competence. One statement, "Employees who deal with users in a caring fashion," is an issue of high salience for graduate students as indicated by high scores in both desired and minimum expectations (see Figure 1). Relatively speaking the Zone of

**Figure 1. Graduate student responses to item AS-6, "Employees who deal with users in a caring fashion"**
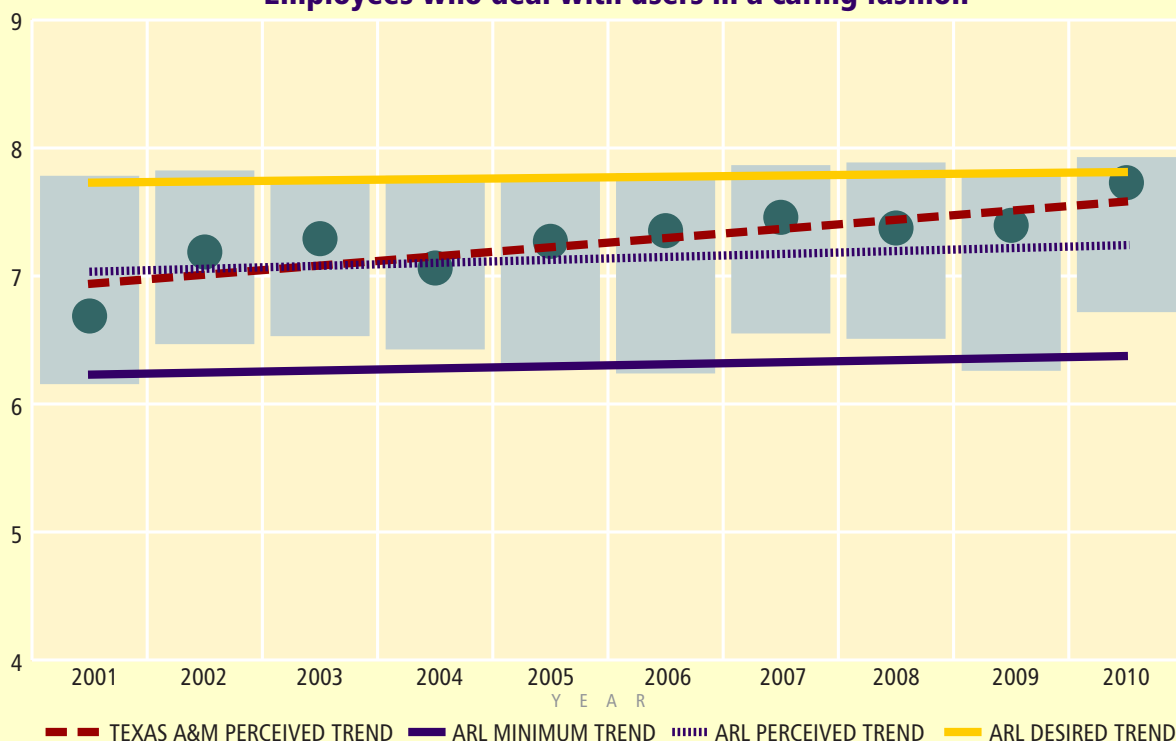
Tolerance bar ranging from 6.7 to 7.9 is high on the graph. Perceptions of caring service at Texas A&M are generally higher than those at other ARL institutions.

Steps Taken to Improve Affect of Service Scores

In order to improve LibQUAL+® scores in the Affect of Service dimension, focus groups were held to better understand what interventions users wanted. In particular, users desired increased hours of library services. As a result of suggestions from LibQUAL+® respondents, the West Campus Library, and shortly thereafter the Library Annex, was opened 24 hours/5 days a week. All libraries began opening earlier on weekends and hours were further expanded in the Cushing Library and the Medical Sciences Library. Texas A&M Libraries thus increased their ranking to third in their designated aspirational peer group in terms of open hours. Interlibrary Loan (ILS), Circulation, and Reference services were merged to a single service point. Library personnel were directed to staff expanded service hours for ILS and the popular "Get It For Me" service through which users can request articles online if e-versions are not readily available. If owned in print,

the journal articles are scanned and delivered through e-mail. If not owned by the library either in print or licensed in digital form, the article is requested through ILS and delivered electronically to the user. Liaison services to colleges were enhanced and in some instances office hours for librarians were established in departments. Virtual reference services were expanded and use of virtual services has increased substantially over time. A customer service program was crafted for the libraries that included on-site training provided by the Disney Institute.

Figure 2. Faculty responses to item IC-8, "Print and/or electronic journal collections I require for my work"

Legend: TEXAS A&M PERCEIVED TREND · ARL MINIMUM TREND · ARL PERCEIVED TREND · ARL DESIRED TREND
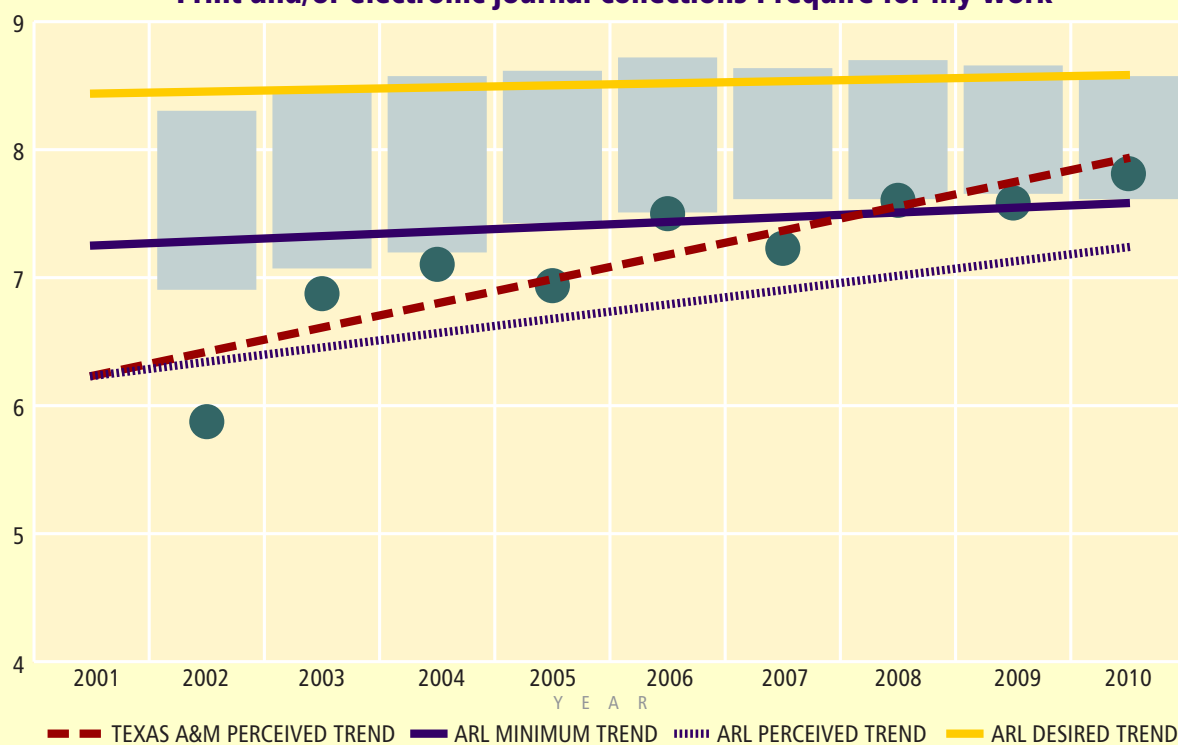
Information Control

The LibQUAL+® Information Control dimension includes questions that address content scope, and ease of access. Figure 2 shows the faculty response to the item, "Print and/or electronic journal collections I require for my work." As shown in Table 1, this question appeared on the Texas A&M faculty's list of top priorities, areas of excellence, and areas of concern. The trend for ARL generally is slowly upwards over time for desired and minimum scores while perceived scores are rising more rapidly. The comparative, even more aggressive, upward trend for the Texas A&M data in perception scores is noteworthy. Faculty users are recognizing the investments made in the journal collections over time.
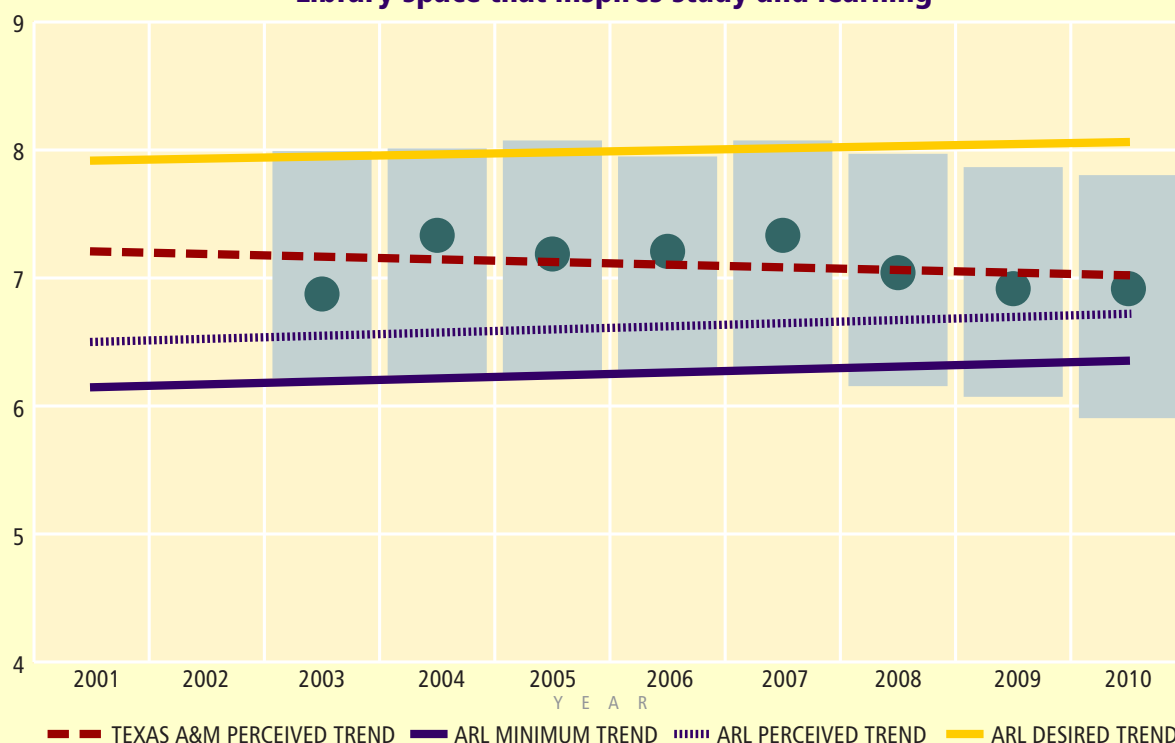
Steps Taken to Improve Information Control Scores

LibQUAL+® results have guided collection development decisions at Texas A&M University over the past decade. Digital format is preferred. Twice within the past 10 years, the libraries' websites have been redone. To test the usability of the websites, ongoing analyses are undertaken. The budget for print serials has dropped while that for electronic serials has risen substantially over the past decade. Texas A&M is ranked fifth among ARL libraries in serials expenditures.

Library as Place

The third LibQUAL+® dimension, Library as Place, addresses user desires for convenient and inviting physical surroundings while working. Generally speaking this dimension receives lower overall desired scores than the other two dimensions. Nonetheless, Library as Place is fundamental to library service quality from a user-centric perspective. Again, Texas A&M data can be used to show how LibQUAL+® scores have changed over the past decade and how this information has been used to drive management decisions. Undergraduate response to "Library space that inspires study and learning" shows that, even

Figure 3. Undergraduate responses to item LP-1, "Library space that inspires study and learning"

LEGEND: ■■■ TEXAS A&M PERCEIVED TREND ■■■ ARL MINIMUM TREND ■■■ ARL PERCEIVED TREND ■■■ ARL DESIRED TREND

though Texas A&M ratings are higher than the average ARL scores, they are experiencing a slight downward trend (see Figure 3).

Steps Taken to Improve Library as Place Scores

Many steps have been taken in listening to users to improve their perceptions of the Texas A&M Libraries in terms of physical spaces and access. Opening hours have been changed significantly in that several libraries are now open 24 hours/5 days a week. Libraries are now open Sunday mornings as requested by students. Accommodations for different learning spaces are being made. "Ninja" quiet spaces are being created in some areas of the library. Quiet reading rooms, enclosed group-study spaces, and quiet open group-study facilities are now also available. One trend seen in LibQUAL+® comments has been the request for additional electrical outlets to facilitate use of personal laptops and other electronic equipment. An Information Commons with flexible furniture, state of the art technology, soft seating, and many well-placed outlets has also been introduced.[3] The libraries have collaborated with the university's Information Technology Department to increase the number of computers and printers in the libraries. In addition, over 150 laptop and netbooks are available for checkout. Another collaboration, this time with the University of Texas System, to provide off-site storage of library materials has enabled additional space to be opened for studying and teaching spaces.

Conclusion

LibQUAL+® provides important management information for decision making, especially when considered over time. Trend data from the Texas A&M University Libraries indicate significant changes in users' desired, perceived, and minimum expectations over the past decade. LibQUAL+® data allows administrators to trace the results of interventions based upon earlier data. Equally as important desired and minimum data provide leadership with information on evolving user expectations for library service. The LibQUAL+® tool is making key contributions not only for ARL member libraries but also for libraries across the globe.

There are several articles describing other libraries' experiences using LibQUAL+® and LibQUAL+® Lite in this issue of *RLI*.

1   This paper is an updated and modified version of a paper originally presented as: Colleen Cook, "Practical Lessons Drawn from 10 Years of Library Service Quality in a Research Library" (presented at the 17th Greek Academic Libraries Conference, Ioannina, Greece, September 24, 2008).

2   Colleen Cook, "A Mixed-Methods Approach to the Identification and Measurement of Academic Library Service Quality Constructs: LibQUAL+™" (PhD diss., Texas A&M University, 2001); Colleen Cook and Fred M. Heath, "Users' Perceptions of Library Service Quality: A LibQUAL+™ Qualitative Study," *Library Trends* 49 (2001): 548–584; Colleen Cook 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; Martha Kyrillidou, "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; Bruce Thompson, Martha Kyrillidou, and Colleen Cook, "Does Using Item Sampling Methods in Library Service Quality Assessment Compromise Data Integrity?: A LibQUAL+® Lite Study" (Paper presented at the Second Qualitative and Quantitative Methods in Libraries (QQML 2010) International Conference, Chania, Crete, Greece, May 25–28, 2010), http://libqual.org/documents/LibQual/publications/lq_gr_1.pdf.

3   For a PowerPoint presentation demonstrating many of the space improvements with pictures and additional evidence, see: Colleen Cook, "Practical Lessons Drawn from 10 Years of Library Service Quality in a Research Library" (presented at American Library Association Midwinter Meeting, Boston, January 18, 2010), http://www.libqual.org/documents/admin/ColleenCook2010jan.ppt; and "Strategic Elements of LibQUAL+® at Texas A&M University" (presented at "LibQUAL+® and Beyond: Using Results Effectively" workshop, Glasgow, Scotland, May 24, 2010), http://www.libqual.org/documents/LibQual/publications/Cook_StrategicElements.pptx.

© 2010 Colleen Cook and Michael Maciel

To cite this article: Colleen Cook and Michael Maciel. "A Decade of Assessment at a Research-Extensive University Library Using LibQUAL+®." *Research Library Issues: A Bimonthly Report from ARL, CNI, and SPARC*, no. 271 (August 2010): 4–12. http://www.arl.org/resources/pubs/rli/archive/rli271.shtml.

LibQUAL+® and the "Library as Place" at the University of Glasgow

**Jacqui Dowd, Management Information Officer,
University of Glasgow Library**

n 2001 Chris Bailey, then Acting Director of Library Services at the University of Glasgow wrote:

This year the University has been celebrating the five hundred and fiftieth anniversary of its foundation in 1451. The foundation coincided with the invention of printing by moveable type—a major contribution to the subsequent transformation of European culture and society. We now find ourselves, at the beginning of the twenty-first century and the coming of the digital information era, with a revolution in information provision and access no less significant.[1]

In the midst of this digital revolution it was obvious that traditional statistical data collection, which focused on inputs, circulation, expenditures, etc., are no longer sufficient to define the library's evolving role in the 21st Century. As these measures alone no longer describe the library's function or measure service quality, we began to investigate other performance assessment tools beyond the biennial user satisfaction survey, focus groups, targeted surveys and observational studies previously used to assess library services and identify user needs.

Self-administered internal surveys, though valuable, from design through to analysis are expensive.[2] We had moved to a web-based survey by 1996, thus reducing the costs of printing and distribution, but were continuing to input data, which is a very time-consuming task. In addition, these surveys offered no facility to compare our performance with peer institutions.

With the increasing demand, internally and externally, to demonstrate that the library was delivering services that were responsive, efficient, progressive, accountable and in line with the university's strategic priorities, the capacity to

benchmark services and facilities that were not quantifiable was becoming essential. This article describes the library's journey in using LibQUAL+® and LibQUAL+ Lite® as instruments to strengthen the use of data in strategic decision making for services and programs.

The LibQUAL+® Journey

In 2003 Glasgow University Library became a participant in LibQUAL+® as part of the Society of College, National, and University Libraries (SCONUL) consortium and since then we have participated annually, with the exception of 2007. The results have been published on the library website, presented as papers to the University's Library Committee, and used by Customer Services staff for service assessment and planning each year.

The 2003 LibQUAL+® results revealed that users perceived the provision of information resources, and access to these resources, to be far from adequate. This was especially true of postgraduates and staff members who recorded five and three (respectively) negative Service Adequacy Gap scores (SAGS)[3] in the Information Control dimension (then Access to Information & Personal Control). Surprisingly, only postgraduates recorded negative SAGS in the Library as Place dimension. However, the low perception scores indicated that the environment was not a "quiet haven for study." The environment was uninspiring, uncomfortable, uninviting, and lacked sufficient group study facilities. The comments from the "comments box" mirrored the scores from other core questions: inadequate e-journal provision, difficulty accessing e-resources, and difficulty navigating the website. Comments on staff covered both negative and positive aspects with the comments about the physical environment and facilities ranging from bad to abysmal. Although the results confirmed what we already suspected, benchmarking with the consortium and peers revealed that we were not alone. There were other libraries in the same position.
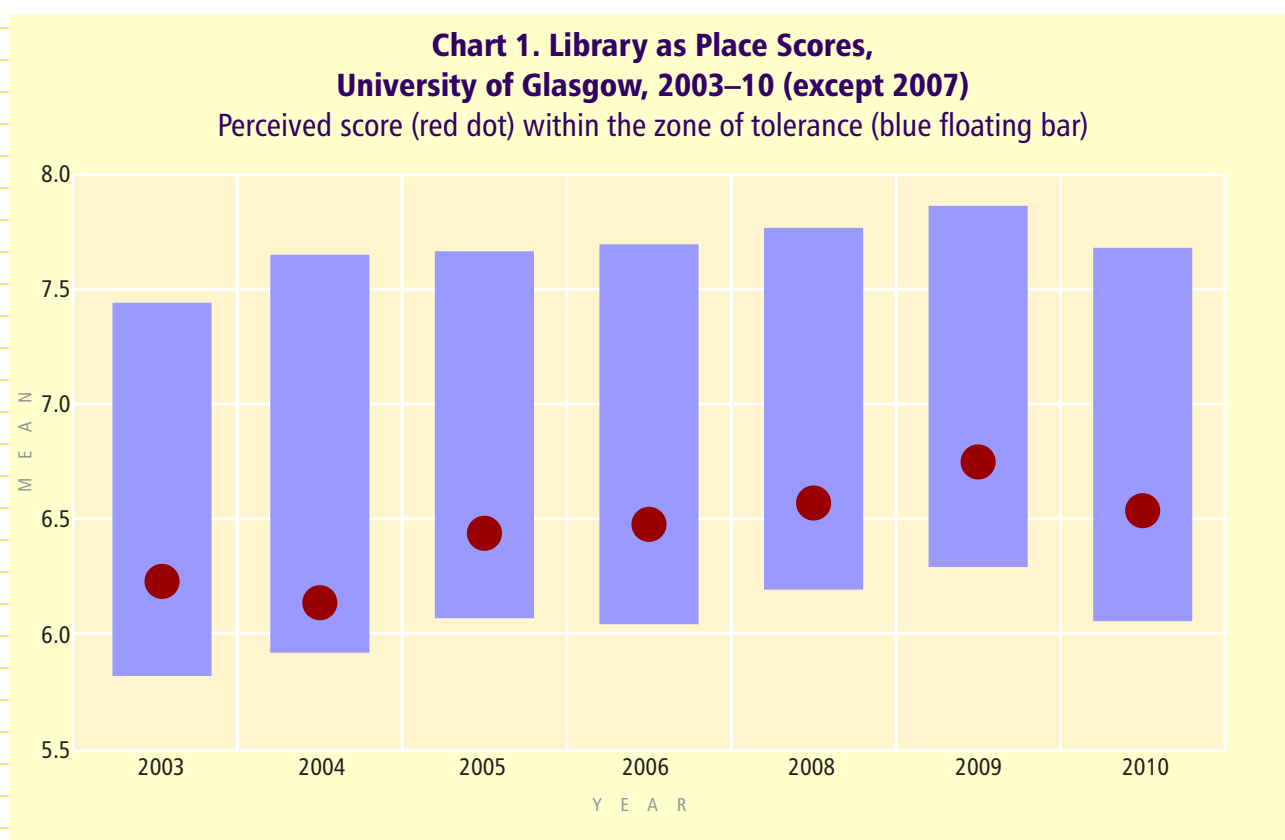
Library as Place

The University Library decided to focus on improving the Library as Place and began implementing a number of changes to the physical space of the library. In 2004, the refurbishment program, which had come to a standstill in 2002, was reinstated beginning with Levels 6 and 7 of the original 1968 building. The improvement process that the library developed was incremental because of the limited capital resources available each year. There was initially a concern about

how incremental changes would affect the ratings by faculty and students, if they would only see small steps of improvement. We were encouraged by the experiences of others. In particular, Eric Ackermann, commented:

> First, as published literature demonstrates, dramatic changes to a library's physical spaces such as extensive remodeling yield dramatic, immediate increases in user satisfaction. By extension we anticipate that the incremental changes that we can afford to implement will yield modest gains in user satisfaction over time.[4]

The experience of annual capital investments in the library building and facilities over the last six years verifies this statement (see Chart 1).[5]

**Chart 1. Library as Place Scores,
University of Glasgow, 2003–10 (except 2007)**
Perceived score (red dot) within the zone of tolerance (blue floating bar)

In spring 2004 the perceived service level scores on the Library as Place dropped, while the zone of tolerance moved up the scale, i.e., both minimum and desired service level scores increased and the comments on the building reached new depths. However, there was a positive outcome. The LibQUAL+® results played a significant role in highlighting the need for capital investment in the library's physical environment and facilities. Users repeatedly described the

building as horrid, depressing, cold, and gray. Action had to be taken if the university was to maintain its reputation and continue to attract and retain students and staff of the highest caliber.

In the summer of 2004, the refurbishment program was reinstated beginning with Levels 6 and 7 of the original 1968 building and was quite comprehensive. Changes included new air-conditioning, energy-efficient lighting, wireless technology, audio-visual alarm systems, and new carpets and furniture. Banquette seating for group activities was installed and toilet facilities for the disabled were created on each level. Reaction to the refurbishment was instantly positive and was reflected in the qualitative and quantitative LibQUAL+® results in 2005. This comment from a postgraduate from the Faculty of Arts is one example:

> *The refurbished levels are fantastic. A comfortable environment conducive to study is very important, and it's great… Couches on Level 9 would be a great idea for us literature students and our novels.*

Encouraged and enabled by the positive reactions, the library was able to secure continued annual capital investment from the university for similar projects until all 11 levels of the original 1968 building had been refurbished by 2006. This included the requested couches and the creation of Research Rooms for postgraduates, staff, and visiting academics. In 2006, Glasgow University Library was a winner of the British Building Improvement Project awarded by the Institute of Maintenance and Building Management.

Other significant efforts have continued since 2006 resulting in the recognition of the importance of the library in the student learning experience based on several campus and international surveys.[6] In 2007, other space needs were addressed by presenting a business case linking investment in e-journal backfiles with the release of space within the building. The goal was to create additional work places and technology access. By removing shelving and volumes of print stock, the library added more seating in an open access area, group study rooms, and IT training suites. In addition, a relaxation and refreshment area named the "Rest and Be Thoughtful" was opened. The furniture in the open access area was chosen for its flexibility and mobility.[7]

The most dramatic, innovative, and responsive refurbishment to date was the transformation of the Level 3 annex into a relaxed, informal learning café. The facilities include study booths for groups working on projects, round

meeting pods providing sheltered space for discussions, three accessible study rooms for disabled users, and a café with comfortable sofa-style seating. A spiral staircase leads up to more sofas and the "Rest and Be Thoughtful." The reaction to this refurbishment has been overwhelmingly positive. It is described by staff and students with superlatives such as "absolutely brilliant," "fabulous," "fantastic," and "a stroke of genius!"

LibQUAL+® Lite Experience

The effects of running the shorter LibQUAL+® Lite protocol on response rates and item scoring are well documented by Martha Kyrillidou, Colleen Cook, and Bruce Thompson[8] among others, which inspired the library to implement LibQUAL+® Lite at 100% in 2010. The goal was to reduce the burden on all respondents and increase the response rate. The results were positive in several ways:

- By choosing LibQUAL+® Lite, the median completion time for each survey dropped from 8 minutes 43 seconds to 5 minutes 23 seconds— saving 3 minutes 20 seconds and requiring fewer responses by every participant.

- Based on Kyrillidou's research, "Typically about half of the people who view the survey tend to submit a complete version of the survey."[9] Opting for 100% LibQUAL+® Lite increased the number of completed valid surveys at Glasgow from 10% to 46%. By the end of the first day 1,020 valid surveys had been submitted.

LibQUAL+® Lite

LibQUAL+® Lite is a short form of the LibQUAL+® survey launched in 2010. It uses item-sampling methods to:
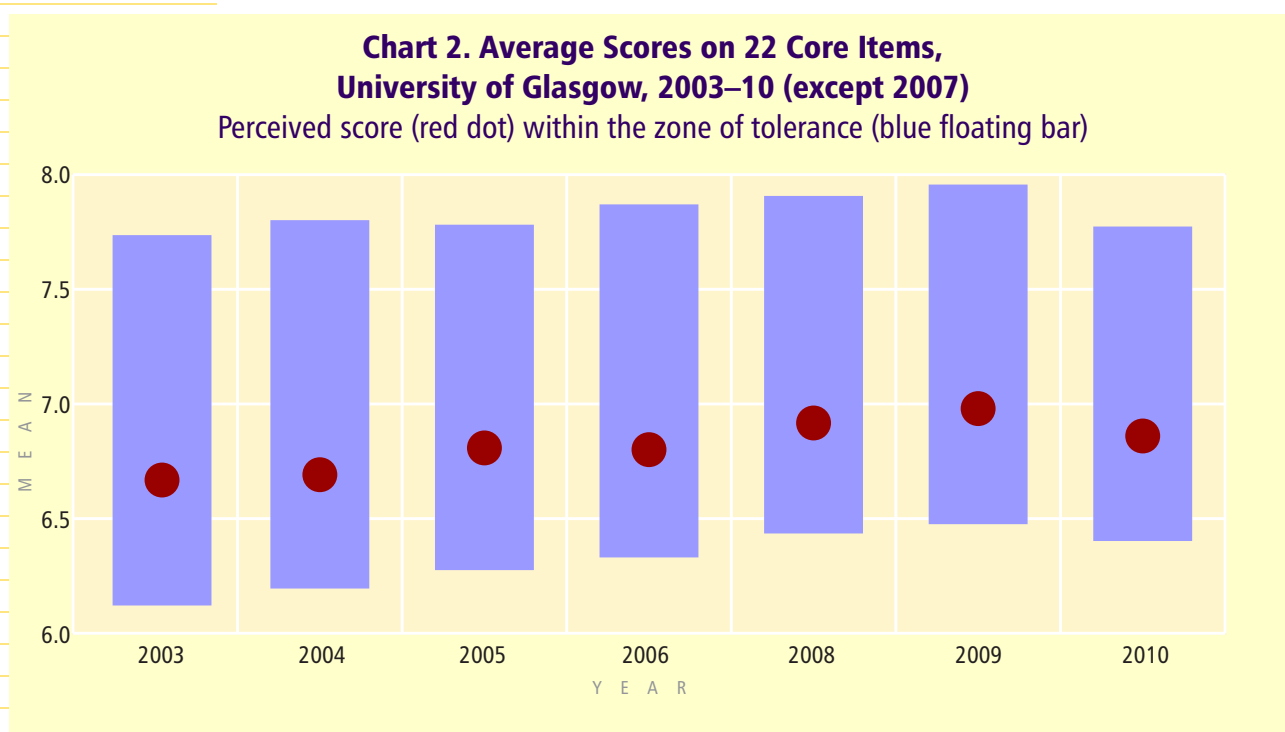
- gather data on all 22 LibQUAL+® core items; while

- each individual participant responds to only a subset of items.

As a consequence, survey response times are roughly cut in half, while the library still receives data on every survey question.

For more information about LibQUAL+® Lite, see http://libqual.org/about/about_lq/LQ_lite/.

When the University of Glasgow LibQUAL+® Lite survey closed, 2,508 valid surveys had been received with a higher response rate (9.8%) than previous iterations, and equally important, a representative sample was achieved.

The potential drawback to using LibQUAL+® Lite is that the scores may not be directly comparable to traditional LibQUAL+® scores. As expected, the 22 core average scores were lower than those achieved using the full protocol (see Chart 2). This pattern was repeated for the Library as Place and Information Control dimensions. Although this is not statistically relevant, the perception is that despite major investment in the physical environment, facilities, and the provision of information resources, users' perception of the quality of these services has fallen. There was little effect on Affect of Service average scores; the desired service level was identical to 2009, while the minimum acceptable and the perceived scores increased, meaning both the Service Adequacy and the Service Superior Gaps narrowed.

Chart 2. Average Scores on 22 Core Items, University of Glasgow, 2003–10 (except 2007)
Perceived score (red dot) within the zone of tolerance (blue floating bar)

The most noticeable effect of using 100% LibQUAL+® Lite was highlighting the benchmarking with the SCONUL consortium. When the 2010 average scores were benchmarked with the SCONUL consortium and five other Russell Group libraries, it became apparent that the playing field was not level, or as Bruce Thompson would say, we were not "comparing apples to apples." Glasgow University was the only library in the group that implemented 100% LibQUAL+® Lite in 2010.

In addition, the library has begun to incorporate the LibQUAL+® Lite ratings with the Balanced Scorecard and has created metrics and targets for future administrations of the Balanced Scorecard. The library's 2009–10 Balanced Scorecard has identified a number performance indicators based on LibQUAL+® scores. These indicators will be used as benchmarks within the library as well as against the SCONUL consortium scores.

LibQUAL+® Lite Qualitative Data

The volume of qualitative data harvested from users' comments was unaffected by using the LibQUAL+® Lite protocol in 2010. As in previous years, 43% of respondents (1,070) made in excess of 1,600 distinct comments. This is very good news as the qualitative data is often more persuasive in decision making as it provides information that is easier to understand than numerical score ratings. It identifies problems and provides the context to understand issues.

Conclusion

In the current economic climate, the ability of libraries to demonstrate that the services they provide are accessible, effective, efficient, progressive, and responsive is unavoidable and absolutely necessary. Over the last seven years, LibQUAL+®, together with other national and international survey instruments and local assessment tools, has been a major factor in this library's success in increasing and improving access to information resources within a physical environment that is comfortable, inspiring, inviting, and a secure place of work for the students and staff of the university. For the future, there is confidence that LibQUAL+® Lite will be a necessary tool for the library's continued development of services that are designed to meet users' needs and expectations.

[1] Chris Bailey, *University of Glasgow Annual Report 2001* (Glasgow: University of Glasgow, 2002).

[2] Steve Hiller, "Another Tool in the Assessment Toolbox: Integrating LibQUAL+® into the University of Washington Libraries Assessment Program," in *Libraries Act on Their LibQUAL+® Findings: From Data to Action*, eds. Fred M. Heath, Martha Kyrillidou, and Consuella Askew (New York: Haworth Press, 2004): 127.

[3] A Service Adequacy Gap score is calculated by subtracting the minimum score from the perceived score on any given question for each user. In general, a Service Adequacy Gap score is an indicator of the extent to which the library is meeting the minimum expectations of users. A negative Service Adequacy Gap score indicates that the users' perceived level of service quality is below their minimum level of service quality. For a fuller understanding of the LibQUAL+® scales and graphs, see the online tutorial on "LibQUAL+® Tools," http://libqual.org/about/about_survey/tools/.

[4] Eric Ackermann, "LibQUAL+® and the Evolution of 'Library as Place' at Radford University, 2002–2008," in *Building Effective, Sustainable, Practical Assessment: Proceedings of the 2008 Library Assessment Conference, Seattle, Washington, August 4–7, 2008*, eds. Steve Hiller, Kristina Justh, Martha Kyrillidou, and Jim Self (Washington DC: ARL, 2009): 43–49, http://libraryassessment.org/bm~doc/proceedings-lac-2008.pdf.

[5] Charts 1 and 2 show floating bar charts where the blue box defines the "zone of tolerance"—the

distance between minimum and desired expectations—and the red dot represents the library's performance on the service quality rating scale. For a detailed explanation of how to read LibQUAL+® charts and graphs, see the online tutorial on "LibQUAL+® Tools," http://libqual.org/about/about_survey/tools/.

6 The surveys reporting positive results about the library cane from a variety of sources: the University of Glasgow's First-year Student Experience Questionnaire, LibQUAL+®, the National Student Survey, the Times Higher Education (THE) Student Experience poll, and the International Student Barometer.

7 All of the necessary technology was installed, allowing the open access area to be used for conferences, seminars, etc. and in May 2010 it hosted the LibQUAL+® European Workshop, "LibQUAL+® and Beyond."

8 Martha Kyrillidou, "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; Bruce Thompson, 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 and Metrics* 10, no. 1 (2009): 6–16.

9 Kyrillidou, 2009.

To cite this article: Jacqui Dowd. "LibQUAL+® and the 'Library as Place' at the University of Glasgow." *Research Library Issues: A Bimonthly Report from ARL, CNI, and SPARC*, no. 271 (August 2010): 13–20. http://www.arl.org/resources/pubs/rli/archive/rli271.shtml.

Service Quality Assessment with LibQUAL+® in Challenging Times: LibQUAL+® at Cranfield University

**Selena Killick (née Lock), Research & Development Officer
for the Barrington Library, Cranfield University**

Cranfield University is the UK's only wholly postgraduate university focused on science, technology, engineering, and management. The University Library first implemented the LibQUAL+® survey methodology in 2003 as a member of the Society of College, National, and University Libraries (SCONUL) consortium.[1] The successful pilot study was the first time the LibQUAL+® protocol was used outside North America. Since 2005 the survey has been used at Cranfield's School of Defence and Security annually. Specializing in the teaching of defense science, technology, and management, the student population consists of 1,200 military and civilian students, 85% of whom study part-time away from the university campus.

Thorough analysis conducted on the School of Defence and Security's LibQUAL+® results has led to a culture of continued performance improvement within the library. Results are used to develop and improve services, assess the impact of change, and demonstrate the value of the library to senior stakeholders of the school. Results are benchmarked externally with key competitors as well as longitudinally, and are closely monitored by key administrators.

When necessary, further performance assessment activities have been conducted to explore issues raised in the LibQUAL+® results. These activities include focus groups, local questionnaires, interviews, and observational studies. Service developments have been designed around customer feedback and the library has received improving results year-on-year since 2003.

The 2010 LibQUAL+® implementation raised two key challenges:

- Firstly, how can the library improve the response rate of the survey?

- Secondly, how will changes made to library services impact future LibQUAL+® results?

Improving Response Rate

Owing to the relatively small population at the School of Defence and Security with the majority of courses conducted during one academic year, the survey has always been sent to the whole population, no sampling has been applied. All students and staff members receive an invitation to complete the survey through a generic university-wide e-mail message. Since the introduction of part-time distant-learning courses in 2006, the response rate had been declining annually, from 26% in 2006 to 8% in 2009. Although the part-time students are issued with a university e-mail address, many do not use it, preferring to communicate via their work or personal e-mail addresses instead. Therefore, many have never read the general invitation to complete the LibQUAL+® survey. Supplementary to this, concerns regarding the complexity of the survey coupled with survey fatigue had been raised by both staff and students alike. The first strategic challenge to improve the response rate led to two changes for the 2010 implementation. Firstly, non-university e-mail addresses were obtained from the student records system for the part-time students. This data was coupled with the students' full name enabling a personalized mailing to be sent rather than a generic invitation. The message emphasized the importance of the customer feedback and how the results have been used in the past. The link in the e-mail directed the customer to the library website with a subsequent link to the LibQUAL+® survey to emphasize the anonymous nature of the questionnaire.

Secondly, the new shorter LibQUAL+® Lite[2] protocol was used for 50% of the surveys, in line with an agreed-upon approach with other SCONUL participants. The 50/50 approach was adopted by members of the SCONUL consortium who had previously used LibQUAL+® to collect baseline data for the comparability of the long and Lite versions of the LibQUAL+® survey. This enables further analysis of the implications of the Lite protocol on the scores received.

Impact of Changes in Service on LibQUAL+® Results

The second key challenge concerned how changes made to library services might result in a decline in LibQUAL+® scores. The current economic climate has impacted libraries the world over, with reduced budgets and increasing resource costs leading to a reduction in resources and services available within academic libraries. Cranfield University has not been immune to this and there was concern from the staff about how changes to library services would impact the LibQUAL+® results. At the "Introduction to LibQUAL+®" workshop held in London in February 2010, it became clear that the fear was shared across libraries. In some cases, participants were planning on implementing LibQUAL+® prior to cancelling resources to minimise the impact on the survey results. Cranfield did not have this option; opening hours had been reduced along with front-of-house staffing levels, and resources had been reduced. How would these changes impact our previously happy, healthy LibQUAL+® scores?

Results

The survey was launched on March 1, 2010, and ran for one month. Immediately it became obvious that the reduced survey length and personalized e-mails were improving the response rate. More responses were received in the first day of the 2010 survey than the total number of responses received in 2009. Overall the number of responses increased by 163%, with the response rate increasing from 8% in 2009 to 21% in 2010. The key change was the increase in responses from part-time students, which rose by over 500%.

Detailed analysis of the results and longitudinal benchmarking found that the LibQUAL+® results for 2010 remained at the same high standard set in pervious years with the overall superiority mean score showing no change between 2009 and 2010. For all core and local questions the library exceeded minimum expectations, and overall for the Affect of Service and Library as Place dimensions it exceeded desired expectations. There was a slight decline in customer perceptions for some specific questions. However, performance is still above their minimum expectations and within the "Zone of Tolerance." The changes implemented have been acceptable to the customers, recognized by the academic community as necessary in challenging times. LibQUAL+® has been vital in assessing the impact of these changes, enabling the library to ensure that resources and services are still aligned to customer needs.

The library will be using LibQUAL+® Lite for the 2011 implementation—
after assessing that there is no difference in the scores received for the two
different protocols in the Cranfield context—as the Lite protocol offers the
unique advantage of reducing response time and increasing response rates.
Further changes are planned to library services based on customer feedback
with the aim of improving the results once again.

[1] Selena Lock and Stephen Town, "LibQUAL+ in the UK and Ireland: Three Years' Findings and Experience," *SCONUL Focus*, no. 35 (2005): 41–45, http://www.sconul.ac.uk/publications/newsletter/35/.

[2] Martha Kyrillidou, "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.

To cite this article: Selena Killick. "Service Quality Assessment with LibQUAL+®
in Challenging Times: LibQUAL+® at Cranfield University." *Research Library
Issues: A Bimonthly Report from ARL, CNI, and SPARC*, no. 271 (August 2010):
21–24. http://www.arl.org/resources/pubs/rli/archive/rli271.shtml.

ARL Profiles: Qualitative Descriptions of Research Libraries in the Early 21st Century

William Gray Potter, University Librarian and Associate Provost, University of Georgia

Colleen Cook, Dean of University Libraries, Texas A&M University

Martha Kyrillidou, Senior Director of Statistics and Service Quality Programs, ARL

When ARL library directors were interviewed in 2005 and asked to describe a research library in the 21st century, there was general sentiment that the suite of ARL Statistics and the toolkit of services offered through the ARL Statistics and Assessment capability were insufficient in answering this question. There was a call for greater flexibility in describing today's research library in qualitative terms. Textual narrative descriptions of collections, services, collaborative relations, and other programs, as well as physical spaces will be necessary if the essence of a research library is to be described and evaluated.

This article describes some of the themes that emerged from narrative descriptions later submitted by ARL libraries. The Statistics and Assessment Committee discussed these themes and considered how to use them to shape the committee's future work and accelerate ARL's Statistics and Assessment work as indicated in the 2010–12 ARL Strategic Plan.

Background

During 2007 and 2008, members of the ARL Statistics and Assessment Committee in collaboration with other ARL member leaders developed narrative descriptions of their libraries called profiles. The end result was a small

collection of model profiles, which offered an alternative way of describing research libraries in addition to the ARL Statistics.

In the spring of 2009, ARL invited all member libraries to submit profiles. At that time, the following plan detailed how the profiles were to be used:

- The narratives would stand on their own as accompanying descriptions to the quantitative annual statistical data.

- The profiles would be analyzed to identify possible new descriptive variables for the annual statistics that represent today's research library.

- All materials from the analysis would be made available to the ARL membership.

The long-term goal was to explore testing and development of a multi-factor index measuring and assessing collections, services, and collaborative relations using new data elements identified in the profiling process. Such an index would be an alternative to the ARL Library Investment Index, which is a summary measure of relative size among the university library members of the Association and serves as one indicator of potential for ARL membership.[1]

RLLF Fellows Analyze Themes in ARL Library Profiles

Four participants in the 2009–10 ARL Research Library Leadership Fellows (RLLF) program—Bob Fox (Georgia Tech), Pat Reakes (Florida), Brian Skib (Michigan), and Ann Snowman (Pennsylvania State)—selected the ARL member library profiles as the subject of their RLLF group project. The group worked with Martha Kyrillidou, Senior Director of ARL Statistics and Service Quality Programs, to develop the scope of their project, which was to review the profiles and make recommendations that might inform future changes to the ARL Annual and Supplementary Statistics. The group drafted a list of themes from the profiles and gathered feedback from other RLLF fellows and colleagues in their libraries on the themes that warranted further study. The feedback included possible data-collection mechanisms and frequency. Some of the themes that emerged from this review of the profiles included: digital publishing, e-science/data curation and management, collaborations across all levels and on/off campus, assessment activities/space utilization, social networking tools/mobile applications, staffing changes, and collaborative collection building/development. The group's complete report and recommendations will be made available to the Task Force on Reviewing ARL Statistics, ARL Supplementary Statistics, and ARL Annual Salary Survey, which is slated to begin work in October 2010. This task force is charged to review the three flagship ARL statistical publications and recommend data elements that should be dropped or revised. The full report will be available by early October on the ARL website http://www.arl.org/stats/aboutstats/.

Eighty-six ARL members submitted the institutional profiles. ARL consultants and staff[2] used computer software, ATLAS.ti, to identify and analyze the ideas and themes contained in the narrative profiles. The software provided tools to isolate, code, and annotate the ideas and themes and to evaluate and rank them. The resulting set of reports not only broke each profile into a set of codes but also combined the codes into an overall view of the 86 responses, showing the frequency of themes and terms across all profiles as well as suggesting how libraries are similar and different.

It should be stressed that the profiles are not inventories or lists of every service or program that a library provides. Indeed, two libraries may host the same activity and one may discuss it at length in the profile while the other may not mention it at all. A profile reflects what a given library viewed as important at the time the profile was written. Therefore, when the frequency of an activity is mentioned below, bear in mind that it is the frequency of how many libraries mentioned that activity, not how many actually perform it.

Of the 86 libraries that provided profiles for analysis, 82 were academic libraries (7 Canadian, 22 US private, and 53 US public institutions). While all the profiles were valuable, this report focuses on the 82 academic libraries.

As an overview, six broad categories emerged from the analysis of the profiles. More detailed codes are grouped under each broad category and are too numerous to be discussed in detail in this brief report. Instead, major themes, similarities, and differences are discussed here along with suggestions for codes that merit further investigation and discussion as possible new measures. The six categories discussed here are:

- Management and Self-Assessment
- Collaboration and Support—External
- Collaboration and Support—Internal
- Library Services
- Branch Libraries
- Collections

Analysis of Six Categories

Management and Self-Assessment

Virtually all of the profiles mentioned the need for assessment as indicated in

their discussion of specific tools, methods, and management strategies. Almost all reported some quantitative data when discussing management issues, but only 20% provided any qualitative measures. Interestingly, 25% did not mention collection size and 60% did not address the size of the user population. Over half mentioned building projects in the context of assessment activities.

One divergence of note is that public university libraries were more likely to discuss the parent university than private university libraries (85% vs. 59%) and that libraries ranked highest in the ARL Library Investment Index were less likely to mention the parent university (56% in the highest quintile of the index vs. 100% in the lowest quintile).

Themes that were widely reported included construction projects (55%), usage data (55%), the future of libraries (44%), and LibQUAL+® (45%).

Some themes that were mentioned infrequently were building-use statistics (13%), website analytics (10%), and assessing relevance of collections (13%).

Recommendation

Three common themes emerged that merit further discussion to define new measures or methods: developing mission and strategy statements, addressing collection development priorities, and providing the best way to describe the parent institution.

Collaboration and Support—External

All respondents addressed their collaborative relationships with other libraries and almost all provided a list of their partners. The most frequent activities of these collaborations were scholarly communication (65%), interlibrary loan (59%), and bibliographic enterprises (55%). Presumably, all ARL libraries are involved in interlibrary loan consortia, but not all reported them in their profiles.

The greatest divergence in this category was seen in the expression of a statewide mission, with 42% of public university libraries mentioning such a mission but only 5% of private university libraries noting one. Conversely, twice as many private university libraries mentioned holding a collection of national distinction as public university libraries, 64% vs. 30%. Interestingly, there was no similar distribution when members are broken down by the ARL Library Investment Index. In fact, libraries in the middle quintiles of the index tended to mention collections of national distinction more than libraries in the highest and lowest quintiles: 50% of the libraries in the second and third quintiles and 38% of

the libraries in the fourth quintile mentioned such collections, while only 31% of the libraries in the first and fifth quintiles noted such collections.

Participation in a government depository program was mentioned in 29% of the profiles. Activities that were less frequently mentioned included shared storage (21%), working with museums (18%), and working with businesses (2%).

Recommendation

ARL should consider tracking collaborative efforts that are valued by ARL libraries, such as collaboration with non-library entities and shared storage facilities.

Collaboration and Support—Internal

Collaboration with other units within the parent university, usually departments or schools, were mentioned in 92% of the profiles. This collaboration was most often described as support for faculty success and student learning and took the form of faculty outreach and information literacy instruction.

Information literacy was mentioned more often by public university libraries (77%) than private university libraries (55%). Conversely, providing support for curriculum development was mentioned more often by private university libraries (64%) than public university libraries (45%). Promoting open access was more common in the top two quintiles of libraries in the ARL Investment Index (25%) than in the lower three quintiles (13%).

Other activities mentioned by at least a quarter of the libraries include technology support (51%), course management support (29%), and grant proposal support (25%). Less frequently mentioned are promoting open access (18%), leadership in copyright policy (10%), hosting electronic journals (9%), and marketing faculty research (4%).

Recommendation

A promising area for ARL assessment is the extent that member libraries are promoting open access.

Library Services

When mentioning specific library services in the profiles, the most common theme was providing innovative access to the library, notably in seeking expanded roles for the library. These included proactive orientation (89%), faculty outreach (61%), and a greater virtual presence (50%).

With regard to library services, there is little divergence among libraries by type and very little by funding, with a few exceptions. For example, laptop lending and extended hours were mentioned more often by libraries at the lower end of the ARL Investment Index while a service orientation was mentioned more frequently by the better-funded libraries. It is not possible to draw conclusions about these differences, but they might merit some examination.

Other common library services that were mentioned in the profiles include outreach to the community (44%), outreach services to students (38%), and small group workspaces (27%). Less frequently mentioned were resources available to the public (5%), services to alumni (4%), and wikis (2%).

Recommendation

This is perhaps the area where qualitative assessment is most needed. Measuring the effectiveness of services is difficult. LibQUAL+® has certainly helped, but additional methods of measuring the true benefit of services beyond usage statistics are needed.

Branch Libraries

Virtually all of the profiles discussed branch libraries, with special collections receiving the greatest attention (93%). Other branches commonly mentioned were information commons (66%), science and engineering (42%), health sciences (38%), law (30%), and art and architecture (28%). Less frequently mentioned were music/dance (23%), business (11%), and maps (9%). There is little divergence among libraries by type or by funding in this category.

Recommendation

Possible areas for increased measurement include the relative return on investment of branch libraries or, more generally, the distinctiveness of their value.

Collections

It is notable that the most common reference to collections in the profiles involves creating digital collections. This was mentioned by 96% of the libraries. A close second was preservation, mentioned by 85%. Digitizing was mentioned as a means of improving access by 88% of the libraries while 82% mentioned it as a preservation technique. There appears to be a greater emphasis on stewardship of the existing collections, either through digitization or

preservation, rather than on building collections. Indeed, adding to collections was not overtly mentioned in any profile. Certainly, collection building is ongoing, but it was not prominent in the profiles.

Private university libraries were more likely to mention their nationally significant or distinctive collection than public university libraries (64% to 30%). Otherwise, there was little divergence by type or funding level.

Other themes mentioned by more than a quarter of the libraries included electronic theses and dissertations (37%), created digital objects (33%), government depository (29%), and microform collections (33%). Themes mentioned less frequently include map collections (9%), disaster recovery (4%), and weeding (4%). Electronic books were mentioned in 15% of the profiles.

Recommendation

The challenge of measuring the impact of the transition from print to digital has long been recognized within ARL. The profiles underline this challenge and should provide some guidance to the Statistics and Assessment Committee.

Conclusion

The ARL Statistics and Assessment Committee completed the analysis of the profiles this spring and has identified new directions as articulated in the above recommendations. When combined with other activities, notably the Lib-Value project[3] as well as local efforts to develop library scorecards, ARL hopes that the profiles can be used to refine existing programs as well as to identify new ones.

The profiles are a snapshot of the libraries at the time when these narratives were written. In many cases, the profiles are already obsolete. If libraries want to update profiles on a voluntary basis ARL will post updated versions on the website as received. The committee considers that a strategy of systematic updating of the profiles once every four or five years may be a good option for the future as a complement to the numbers collected through the ARL Statistics survey, given the reporting burden and the resource demands of this activity. The analysis of the profiles has been a formative exercise that can help ARL identify new metrics. Recognizing that these profiles and the analysis performed might be useful to others in the ARL community, the findings will be made available through the ARL Statistics and Assessment website http://www.arl.org/stats/. All are invited to visit the website and ARL staff and committee members are happy to answer any questions. Indeed, it is hoped that

this report whets your appetite for viewing the full reports and your observations are welcomed in the coming months.

1 ARL Index, http://www.arl.org/stats/index/.
2 A consultant, Nicholas Woolf, was retained to guide the use of ATLAS.ti and to prepare reports. Jennifer Rutner (Columbia University), Michael Maciel (Texas A&M University), David Green (ARL), and Martha Kyrillidou (ARL) coded the profiles in detail.
3 Regina Mays, Carol Tenopir, and Paula Kaufman, "Lib-Value: Measuring Value and Return on Investment of Academic Libraries," *Research Library Issues*, no. 271 (August 2010): 36–40, http://www.arl.org/resources/pubs/rli/archive/rli271.shtml.

© 2010 William Gray Potter, Colleen Cook, and Martha Kyrillidou

To cite this article: William Gray Potter, Colleen Cook, and Martha Kyrillidou. "ARL Profiles: Qualitative Descriptions of Research Libraries in the Early 21st Century." *Research Library Issues: A Bimonthly Report from ARL, CNI, and SPARC*, no. 271 (August 2010): 25–32. http://www.arl.org/resources/pubs/rli/archive/rli271.shtml.

The ARL Library Scorecard Pilot: Using the Balanced Scorecard in Research Libraries

Martha Kyrillidou, Senior Director, Statistics and Service Quality Programs, ARL

ARL has built a program of assessment over time and continues to seek opportunities to develop this capacity in research libraries. In 2009, the Association launched a new initiative to help libraries make a stronger case for the value they deliver through services and programs by developing metrics that are directly tied to strategic goals. ARL invited interested libraries to participate in a pilot effort to develop library scorecards along the lines of the Balanced Scorecard approach created by Harvard business professors Kaplan and Norton.[1] The ARL initiative began as a collaborative project with external consultant Ascendant Strategy Management Group and four participating libraries: Johns Hopkins University, McMaster University, University of Virginia, and University of Washington. At this early stage the project had two primary goals: to assist, train, and facilitate the use of the scorecard in a small number of ARL libraries; and to test the value of a collaborative model for learning about and implementing the new tool.

The Ascendant Strategy Management Group brought deep expertise in the application of the Balanced Scorecard to these four-mission driven organizations that are facing challenges to demonstrate their impact, increase leadership and management effectiveness, leverage networks of stakeholders, and ensure organizational capacity for growth. The consultants were also strongly advocating, "the cornerstone of an effective Balanced Scorecard, or any strategic measurement system, is to identify strategic priorities and clarify the cause-and-effect linkages among them."[2]

Many ARL member libraries have long shown an interest in the Balanced Scorecard, as they have closely watched the scorecard's application for almost a decade at the University of Virginia. Jim Self described the University of

Virginia's use of the scorecard in an article published by ARL in 2003[3] and he often discussed their efforts during site visits conducted through the Effective, Sustainable, and Practical Assessment consulting service between 2005 and 2009.[4]

The ARL Balanced Scorecard initiative was based on a series of initial assumptions articulated in the invitation letter. These elements were deemed critical for the success of the implementations:

- Leadership involvement is key for linking the library scorecard to strategy.

- Measures need to be focused on strategic objectives.

- Developing a framework/dashboard for implementing a strategy is useful.

- Implementing a scorecard will lead to its improvement and refinements.

- Applying a scorecard appropriate for each library—not a single scorecard for all libraries—is critical for success.

Other key assumptions underlying the initiative were articulated through the pilot process and confirmed by the experience of the participating libraries:

- The Balanced Scorecard is a change process, not a metrics process.

- Development of strategy and metrics is closely tied to library missions.

- Collaborative learning enhances the creation of new assessment tools.

The yearlong process involving Ascendant Strategy Management Group is now complete, and the four ARL member libraries and ARL staff have continued to refine the Balanced Scorecard effort. Early analysis suggests that the individual library environments have shaped how each library has implemented the Balanced Scorecard and accompanying metrics. Differences aside, a few key processes appear to be consistently important across all sites including:

- Setting objectives that are strategically aligned with the organization's mission

- Visualizing these objectives into a strategy map[5]

- Communicating the strategy map, the objectives, and the metrics consistently and effectively within and outside the organization

Two key metrics are also standing out as commonalities across all four Balanced Scorecards developed by the four organizations: budget and user perceived quality/satisfaction.

The four pilot institutions are engaged in documenting their efforts in a paper to be presented at the Library Assessment Conference in Baltimore this

October.[6] Their metrics-related work is expected to have a formative influence in ARL's effort to revise the annual ARL statistical surveys. As ARL moves this effort forward into 2011, the Association welcomes input and advice from the ARL membership on the interest in expanding the pilot activity to other ARL libraries. Please send feedback on your needs for strategic management systems such as the Balanced Scorecard to Martha Kyrillidou martha@arl.org. ARL looks forward to working with members in defining the next steps that will facilitate strategic thinking about the future of research libraries and describe that future with balanced and relevant metrics.

1   Robert S. Kaplan and David P. Norton, *The Balanced Scorecard: Translating Strategy into Action* (Boston: Harvard Business School, 1996).

2   Ascendant Strategy Management Group flier, 2009.

3   Jim Self, "Using Data to Make Choices: The Balanced Scorecard at the University of Virginia Library," *ARL: A Bimonthly Report*, no. 230/231 (October/December 2003): 28–29, http://www.arl.org/bm~doc/balscorecard.pdf.

4   Effective, Sustainable, and Practical Assessment service, http://www.arl.org/stats/initiatives/esp/.

5   A good portion of the pilot was spent on developing strategy maps and gaining a better understanding of how they relate to metrics and initiatives. The effective identification of strategic priorities and the clarification of the cause-and-effect linkages among them cannot be underestimated. For more information, see Robert S. Kaplan and David P. Norton, *Strategy Maps: Converting Intangible Assets into Tangible Outcomes* (Boston: Harvard Business School, 2004).

6   Vivian Lewis, Steve Hiller, Liz Mengel, and Donna Tolshon, "Building Scorecards in Academic Research Libraries: Organizational Issues and Measuring Performance," in *Building Effective, Sustainable, Practical Assessment: Library Assessment Conference Proceedings, Baltimore, Maryland, October 25–27, 2010* (Washington DC: ARL, forthcoming).

To cite this article: Martha Kyrillidou. "The ARL Library Scorecard Pilot: Using the Balanced Scorecard in Research Libraries." *Research Library Issues: A Bimonthly Report from ARL, CNI, and SPARC*, no. 271 (August 2010): 36–40. http://www.arl.org/resources/pubs/rli/archive/rli271.shtml.

Lib-Value: Measuring Value and Return on Investment of Academic Libraries

Regina Mays, Lib-Value Program Manager, Center for Information and Communication Studies, University of Tennessee, Knoxville

Carol Tenopir, Professor at the School of Information Sciences, Director of Research for the College of Communication and Information, and Director of the Center for Information and Communication Studies, University of Tennessee, Knoxville

Paula Kaufman, Dean of Libraries and University Librarian, University of Illinois at Urbana-Champaign

Library professionals are looking for new ways to measure and express the value of their libraries to their parent institutions and to measure how well they meet the rapidly changing needs and expectations of their users. They need both to find the best ways to meet patron needs and to communicate the value of their operations to administrators and funders. Developing a strategy to help libraries attain these goals is the focus of the Value, Outcomes, and Return on Investment of Academic Libraries project, "Lib-Value" for short.

Funded by a grant from the Institute of Museum and Library Services (IMLS), Lib-Value is a three-year study that began in December 2009. Carol Tenopir of the University of Tennessee (UT) leads the project as Principal Investigator (PI) with Paula Kaufman of the University of Illinois at Urbana-Champaign (UIUC) as Co-PI. In addition to the teams at UT and UIUC, Donald King of UT and Bryant University, Bruce Kingma of Syracuse University, and Martha Kyrillidou and her team at ARL round out the partnership. Lib-Value builds on and goes beyond two previous studies that looked at return-on-investment (ROI) of grants income.[1] Lib-Value expands the focus of the research to consider both ROI and value more broadly, including the value of library collections and services to research, teaching and learning, and social and professional areas.

The first step in the Lib-Value project was to develop a fact-based articulation of all areas of value and ROI in academic libraries. Rachel Fleming-May and Crystal Sherline of the University of Tennessee are in the final stages of compiling a comprehensive bibliography on value and ROI in libraries of all types. This extensive review of the literature informs the Lib-Value team, and serves as a base for the end-product that Lib-Value will deliver: a customizable set of models for determining value and ROI in academic libraries.

A map of areas included in the Lib-Value study is based on three major functional areas reflected in academic libraries: research, teaching/learning, and other social and

Figure 1. Map of Functional Areas
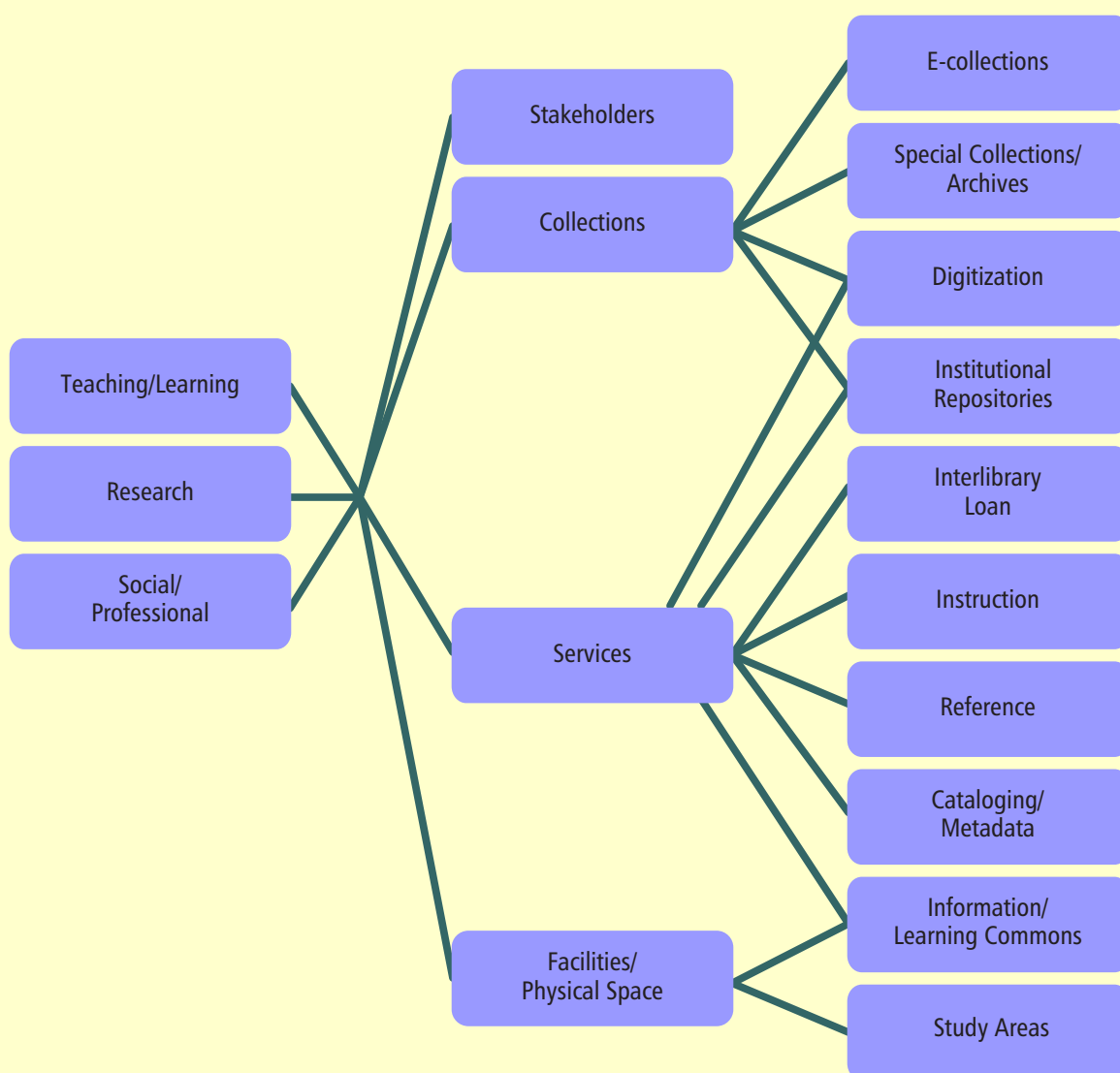
professional issues (see Figure 1). These are the broad, over-arching areas within which more specific items are being studied. Examples of questions that are being answered are: What is the value of library collections to research, to teaching and learning outcomes, and to social and professional outcomes? How does that value differ for different stakeholders, such as faculty, students, administration, alumni, and others? What is the importance of library services and facilities and physical spaces in these three functional areas? This cognitive map reflects the foundation and structure for all of the individual studies that Lib-Value is conducting.

Because it is not possible to conduct original research on every area of academic libraries in a three year study, the Lib-Value team has focused on being as innovative as possible. In some instances, this means looking at areas that have not yet been widely studied because they have only relatively recently become of significant concern, as is the case for e-books, learning/information commons areas, and environmental sustainability. Innovation in this context also means looking with fresh eyes at more traditional areas, such as journal collections, library instruction, and special collections, as well as at well-known tools such as LibQUAL+® and MINES for Libraries®.

Work is already underway in several areas:

- An e-books study, headed by Tina Chrzastowski, Wendy Shelburne, and Paula Kaufman of UIUC, is incorporating a portion of the Elsevier E-books Use and Value Study that is currently underway at UIUC and other institutions. This study looks at the value of e-books as presently used by faculty and graduate students; how that value differs between those two groups and by publisher and subject; and how e-books are used by UIUC users.

- Gayle Baker, Teresa Walker, and Ken Wise of UT are leading an examination of how the information commons' spaces and services contribute to student success on multiple levels, as well as how commons are utilized by instructors and how they affect teaching outcomes.

- Bruce Kingma of Syracuse University is examining the environmental value of the library. For instance, providing online resources may yield savings in transportation and paper as users access collections from home and on their screens. Kingma, an economist, will also lend his expertise to all areas of the project, searching for ways to apply economic principles to every aspect of research.

- To study the use of library collections, Carol Tenopir and Donald King of UT are updating a cost and readership study at the University of Pittsburgh, first done in 2002–2004. In addition to collecting longitudinal data that will give an invaluable snapshot of the rapid changes in the processes and functioning of the library as well as the impact of these changes on costs, this study will look at how library journal collections affect the success and productivity of faculty and students.

- Rachel Fleming-May and Crystal Sherline of UT are conducting an experimental-design study of the impact and outcomes of library instruction on learning. This study is examining how multiple types of library instruction impact various measures of student success, including learning outcomes, library anxiety, and information literacy. The study will also investigate how the library as place affects students' comfort with, enjoyment of, and perception of the larger university.

- Ken Wise and Gayle Baker of UT are examining the value of special collections, including the role that special collections play in donations from alumni and the community, in recruiting faculty and students, and in generating goodwill and prestige for the university.

- Finally, Martha Kyrillidou and the team at ARL will be involved in multiple aspects of the project, from promoting public awareness to developing web-based tools that implement the models the larger team develops. In addition, Kyrillidou is working with the team to integrate data that has already been collected through existing ARL tools. This integration supports an important goal of the project: to make value and ROI assessments as easy and seamless as possible for overworked and overloaded professionals, largely by utilizing pre-existing data-collection methods wherever possible.

These projects are the beginning, but by no means the end, of what Lib-Value hopes to accomplish. Information will be distributed via the project website[2] and through ARL as the study progresses. Project feedback, updates, and presentations have been featured at the ARL Library Assessment Forum held on Friday afternoons prior to American Library Association Annual Conferences and Midwinter Meetings. The Library Assessment Blog is an additional venue for disseminating related news and information.[3] An important factor in determining the research priorities for Lib-Value has been the feedback received

from library professionals around the world. The project continues to welcome feedback online at http://libvalue.cci.utk.edu/.

1   Judy Luther, *University Investment in the Library: What's the Return? A Case Study at the University of Illinois at Urbana-Champaign*, Elsevier Library Connect White Paper 1 (San Diego CA: Elsevier, 2008), http://libraryconnect.elsevier.com/whitepapers/0108/lcwp010801.html; Carol Tenopir, Amy Love, Joseph Park, Lei Wu, Andrea Baer, Regina Mays, Bruce Kingma, Donald W. King, *University Investment in the Library, Phase II: An International Study of the Library's Value to the Grants Process*, Elsevier Library Connect White Paper 2 (San Diego CA: Elsevier, 2010), http://www.elsevier.com/wps/find/librariansinfo.librarians/lc_home#White_Paper.

2   Lib-Value website, http://libvalue.cci.utk.edu/.

3   Library Assessment Blog, http://www.libraryassessment.info/.

To cite this article: Regina Mays, Carol Tenopir, and Paula Kaufman. "Lib-Value: Measuring Value and Return on Investment of Academic Libraries." *Research Library Issues: A Bimonthly Report from ARL, CNI, and SPARC*, no. 271 (August 2010): 36–40. http://www.arl.org/resources/pubs/rli/archive/rli271.shtml.

The Value of Electronic Resources: Measuring the Impact of Networked Electronic Services (MINES for Libraries®) at the Ontario Council of University Libraries

Catherine Davidson, Associate University Librarian, Collections, York University

Martha Kyrillidou, Senior Director, Statistics and Service Quality Programs, ARL

Measuring the Impact of Networked Electronic Services (MINES for Libraries®) is an online, transaction-based survey that collects data on library-user demographics (patron status and discipline affiliation), the purpose of use (funded or non-funded research, teaching, coursework, patient care and other), and the location of the user at point of use (on campus, in library or remote).[1] The survey attempts to capture the value and impact of digital content; determine how specific populations apply digital content to their work; identify where library use originates to tailor services accordingly; gather usage data on digital collections to justify funding and inform collection development decisions; and assess the impact of networked electronic resources and services on teaching, learning, and research. MINES for Libraries® can be implemented both at individual libraries and at the consortium level; the ability to compare data across libraries makes consortial implementations extremely useful as they inform decision making both within and across institutions. This article discusses such an implementation by the Ontario Council of University Libraries.

The Ontario Council of University Libraries (OCUL) is a consortium comprised of 21 member libraries that work cooperatively to enhance information services through resource sharing, document delivery, and other activities and services.[2] OCUL implemented the MINES for Libraries® methodology to demonstrate the value of the electronic resources that the

consortium made available in 2004–05 and again during 2010–11. Scholars Portal—created in 2001—serves as OCUL's information infrastructure for delivering digital content and services to support research, teaching, and learning endeavors within the province's 21 universities.[3] The consortium's user base is extensive, with over 400,000 FTE users, and Scholars Portal provides a wide array of content: e-resources alone now number over 17 million articles from over 8,000 e-journals as well as 240,000 e-books. The size of the consortium affords unique opportunities to demonstrate the value of electronic resources by collecting data on the use of e-resources licensed both by the consortium and by individual member libraries.

In 2004–05, OCUL implemented the MINES for Libraries® survey to measure use of over 7,000 e-journals locally loaded on their Scholars Portal platform. Key outcomes pursued at that time were:

- Capturing in-library and remote web usage of Scholars Portal in a sound representative sample

- Identifying the demographic differences between in-house library users as compared to remote users by status of user

- Identifying users' purposes for accessing Scholars Portal electronic services (funded research, non-funded research, instruction/education use, student research papers and course work)

- Developing an OCUL infrastructure to make studies of patron usage of OCUL networked electronic resources routine, robust, and integrated in decision making[4]

OCUL found MINES for Libraries® to be an effective means of providing data on the use of e-resources and member institutions were able to use the data locally to argue for resources and demonstrate the relationship of resources to outcomes. OCUL determined that the study should be repeated in 2010–11. In February 2010, OCUL launched MINES for Libraries® a second time. In addition to querying the *who, what, where* and *why* of e-resource usage to provide longitudinal comparability, key issues to be explored in 2010–11 include:

- Methodological best practices as to whether such a survey should be mandatory or optional

- Survey implementation issues introduced by using an open-URL resolver

- Potential characteristics of the non-respondents of web-based, intercept surveys

- Understanding the use of both consortially acquired products and locally licensed content

Point-of-Use Web Surveys

MINES for Libraries® is implemented as a point-of-use survey when a user attempts to access a particular resource. In 2004–05, the survey was implemented in the established mandatory fashion for all 16 participating libraries within a two-hour randomly selected monthly time slot for a period of 12 months.[5] The 2010–11 OCUL MINES for Libraries® methodologies vary significantly from those used in 2004–05. The current delivery mechanism by which the user encounters the survey is via the Ex Libris SFX open-URL resolver; consequently, the e-resources measured reflect *only* what is in the SFX knowledge base, in addition to the locally loaded e-journals that were measured in 2004–05. Also, the survey is presented randomly once in every 250 instances during the 12-month period, as opposed to being presented to every user within a given time period as it was in 2004–05.

Obtaining permission from institutional ethics review boards to run the mandatory version of the survey proved more challenging in 2010–11 than in 2004–05—only 5 of the 20 schools were approved for the mandatory version, while 15 were required to run it in optional mode. The 5 schools that obtained permission to run the survey in a mandatory fashion are implementing an experiment where half of their survey instances are mandatory and the other half are optional. The experimental data will allow informed decisions to be made about the differences in the sampled data regarding mandatory versus optional point-of-use web-survey data. Are students and faculty responding differently, for example, to mandatory and optional surveys? If yes, in what ways? Are users who primarily access the electronic resources for research purposes eager to respond to point-of-use web surveys whether they are mandatory or optional? This information is critical as libraries need well-established ways to secure reliable information about the users who no longer cross their physical doorstep but increasingly access their electronic resources remotely. The outcomes of this experiment will be one of the primary areas of focus upon the completion of the survey in February 2011.

E-Resources Being Measured

The scope of e-resources being surveyed is directly related to what is (and is not) included in the SFX knowledge base, which is an important consideration when comparing 2004–05 and 2010–11 data.

Preliminary observations of data captured from the survey between February and June 2010 illustrate the expansion in surveyed content:

2004–05

Consortial only:

- Locally loaded e-journals

2010–11

Both consortial and individually licensed content:

- E-journals
- E-books, (NetLibrary, ebrary, but not books locally loaded on Scholars Portal*)
- Abstracts and indexes
- Dissertations

- Library catalogs
- Reference materials
- Institutional repositories
- Other services (e.g., interlibrary loan, Ulrich's, Journal Citation Reports, RefWorks)

*Work is underway to create SFX targets for e-book collections loaded on Scholars Portal.

Survey Findings: Highlights from 2004–05 results

From May 2004 to April 2005, a total of **20,293** usable cases were collected from the MINES for Libraries, survey from 16 institutions. Analysis revealed that:

- The majority of the uses of the Scholars Portal resources are from the sciences and the medical health field
- Close to half of the use made of the Scholars Portal resources is by undergraduate students (**46%**)
- Almost half of the use made of the Scholars Portal resources is from off-campus locations **(45%)**
- The largest portion of the use of the Scholars Portal resources is for purposes of coursework (**42%**) with sponsored research representing an important second-highest category of use (**26%**)

OCUL institutions have used the results of the 2004–05 survey to justify budget allocations within and across institutions, for peer-group comparisons, and for understanding how MINES for Libraries® data relate to external

measures of institutional investment such as sponsored research revenue per faculty. The data can be interpreted in a way that allows understanding of resource allocation across different departments as well as across different publishers and platforms. Peer-group comparisons have proven useful not only within the consortium but by comparing institutions of similar academic purpose across different consortia as Scigliano compared similar OCUL and OhioLINK institutions.[6]

Ultimately a longitudinal interpretation of the data may be possible as the 2010 study is reaching completion, though technical considerations need to be taken into account as some elements have changed over time.

Preliminary Survey Findings: Highlights from June 2010 Data

In June 2010, a snapshot of data was collected, comprising **15,359 optional** responses and **1,750 mandatory** responses. Analysis revealed that:

Optional:

- Half of the use made of the Scholars Portal resources is by undergraduate students **(50%)**

- Over two-thirds of the use made of the Scholars Portal resources is from off-campus locations (**68%**)—up sharply from 2004–05

- The largest portion of the use of the Scholars Portal resources is for purposes of coursework **(55%)** with sponsored research representing an important second-highest category of use **(18%)**

Mandatory:

- Over half of the use made of the Scholars Portal resources is by undergraduate students **(53%)**

- Two-thirds of the use made of the Scholars Portal resources is from off-campus locations (**66%**)

- The largest portion of the use of the Scholars Portal resources is for purposes of coursework (**60%**) with sponsored research representing an important second-highest category of use **(18%)**

Conclusion

The MINES for Libraries® data provide a critical link between electronic resources and the value derived by users. The data have been used by library administrators to demonstrate the value of e-resources to the various departments within institutions so that, in tight financial times, the library can continue to support the particular resources that are highly valued by users. The data can be used to demonstrate that those users who gain the most value from e-resources are those users who are attracting grants and producing more research output. Making the link between use of e-resources and other desired outcomes (e.g., higher GPA, retention, graduation, job placement) is within our reach. The protocol has been implemented in an anonymous fashion and the demonstrated value has been articulated at the departmental level, yet more granular studies may be pursued that link e-resource use to individual performance.

The possibility of expanding the MINES for Libraries® protocol to extend the value and return-on-investment studies pursued through the Lib-Value project is a promising area of investigation in the coming years. A companion article by Mays, Tenopir, and Kaufman in this special issue of *RLI* articulates some of the Lib-Value activities. Studies that relate use of electronic resources to personal attainment and characteristics need to be implemented with great caution and attention to the highest ethical and professional guidelines to ensure that users' privacy is protected appropriately. Yet, if use of the content that libraries deliver is tracked electronically, libraries are probably a much-preferred, trusted, third party to secure ethical and professional use of such information compared to other entities that may have stronger commercial, marketing, and entrepreneurial interests.

[1] For details on the research foundations of MINES for Libraries®, see: Brinley Franklin, "Academic Research Library Support of Sponsored Research in the United States," in *Proceedings of the Fourth Northumbria International Conference on Performance Measurement in Libraries and Information Services* (Washington DC: ARL, 2001); Brinley Franklin and Terry Plum, "Networked Electronic Services Usage Patterns at Four Academic Health Sciences Libraries," *Performance Measurement and Metrics* 3, no. 3 (2002): 132–133.

[2] Ontario Council of University Libraries, http://www.ocul.on.ca/.

[3] Scholars Portal, http://www.scholarsportal.info/.

[4] Martha Kyrillidou, Toni Olshen, Brinley Franklin, and Terry Plum, "MINES for Libraries™: Measuring the Impact of Networked Electronic Services and the Ontario Council of University Libraries' Scholars Portal, Final Report" (Washington DC: ARL, 2005): 10, http://www.libqual.org/documents/admin/FINAL%20REPORT_Jan26mk.pdf.

[5] An excellent follow-up study extending the original report is available by Marisa Scigliano, "Measuring the Use of Networked Electronic Journals in an Academic Library Consortium: Moving beyond MINES for Libraries® in Ontario Scholars Portal," *Serials Review* 36, no. 2 (2010): 72–78.

[6] Ibid.

To cite this article: Catherine Davidson and Martha Kyrillidou. "The Value of Electronic Resources: Measuring the Impact of Networked Electronic Services (MINES for Libraries®) at the Ontario Council of University Libraries." *Research Library Issues: A Bimonthly Report from ARL, CNI, and SPARC*, no. 271 (August 2010): 41–47. http://www.arl.org/resources/pubs/rli/archive/rli271.shtml.

ARL Calendar 2010

http://www.arl.org/events/calendar/

October 12–14	**ARL Board & Membership Meetings** *Washington DC*
October 14–15	ARL-CNI Forum on Achieving Strategic Change in Research Libraries *Washington DC*
October 18–24	International Open Access Week
October 19	Broader Library Involvement in Building Programs: Librarian Training and Development *Webinar 4B in ARL-ACRL ISC Series*
October 25–27	Library Assessment Conference *Baltimore, Maryland*
November 8–9	SPARC Digital Repositories Meeting *Baltimore, Maryland*
November 10	ARL-SSP Seminar on Partnering to Publish: Innovative Roles for Societies, Institutions, Presses, and Libraries *Washington DC*
November 15	The Future Is Now! *Webinar 5 in ARL-ACRL ISC Series*
December 13–14	CNI Fall Membership Meeting *Arlington, Virginia*

ARL Assessment Events in 2011

January 7	Library Assessment Forum Survey Coordinators and SPEC Liaisons Meeting
January 10	LibQUAL+® Training
March 14–18	Service Quality Evaluation Academy Applications due December 15, 2010

Research Library Issues

A Bimonthly Report
from ARL, CNI, and SPARC

Current and back issues are freely available on the ARL Web site.
The Web site is also where you may sign up for alerts of new releases of
Research Library Issues and learn about submitting ideas for articles.
Visit http://www.arl.org/resources/pubs/rli/.