Developing Service Quality Measurement Skills Through an Online Course for Librarians

Danuta A. Nitecki
Associate University Librarian, Yale University Library, USA

Toni Olshen
Associate University Librarian, York University, Canada

Abstract

Service quality is becoming an important performance measurement in libraries. Managing service quality improvement is dependent upon routine assessment and requires the preparation of staff to understand the concepts and the techniques that foster the generation and application of customer-based data to decision-making. What are expectations for staff development to prepare librarians to embrace such a management approach to delivering services? What is the perceived readiness of library organizations to support a culture of assessment? How effective are web-based teaching and learning technologies in developing the requisite skills among library staff to manage service quality?

The study reported here begins to explore these questions based on the authors' experiences in designing and facilitating a 6-week online course on Measuring Service Quality in Libraries, offered three times since November 2000 through the Association of Research Libraries' Online Lyceum program[1]. A total of 85 library staff have registered for these sessions. Through analysis of their course activities, including responses to three questionnaires, their opinions sought during the course chats and bulletin discussions, and a post-course e-mail survey, the authors have gained insights into the need and expectations for staff development to foster a culture of assessment in libraries and the implications of utilizing web-based teaching technologies toward meeting such needs.

The Online Course

The Association of Research Libraries [ARL] membership identified performance measurement as a high priority for its staff development agenda. In fall 1999, ARL asked Danuta A. Nitecki to develop a course on the topic for its Online Lyceum offerings. Agreeing to undertake this project, she negotiated that the course content be focused on measuring service quality. Toni Olshen joined her in the development and facilitation of the course. Measuring Library Service Quality became the sixth offering of the Lyceum and the first created solely for the distance education format. After a year's gestation period, working with staff and consultants from ARL and a technical team from the Library Affairs Instructional Support Services, Southern Illinois University in Carbondale, the course was launched in November 2000[2]. We believe this was the first course on the topic offered through the Internet, and perhaps about service quality assessment directed to librarians in any format.

The authors and ARL projected that several trends in the profession would build a demand for such a course. Demands for assessment and accountability from stakeholders external to libraries – university administrators, government bodies, and accreditation agencies in particular – are powerful driving forces for the increasing interest in measuring library service quality and the impact of libraries on institutional missions. As we move into the realm of quality vs. quantity-based measurement, a considerable amount of learning and culture change must take place both about the organizational environment to survive and specific survival skills. As librarians are expected to "do more with less" to address increased demands for information and related services, and for utilizing information technologies, the principles of a culture of assessment are becoming more appealing. Lakos, Wilson, and Phipps offer a definition of a "culture of assessment" that illustrates the setting sought for many libraries to become productive and responsive service organizations:

> A Culture of Assessment is an organizational environment in which decisions are based on facts, research and analysis, and where services are planned and delivered in ways that maximize positive outcomes and impacts for customers and stakeholders. A Culture of Assessment exists in organizations where staff care to know what results they produce and how those results relate to customers' expectations. Organizational mission, values, structures, and systems support behavior that is performance and learning focused.[3]

Furthermore, demands for staff development opportunities continue to reflect difficulties for information professionals to develop and maintain the rapidly changing set of critical skills demanded by information technology and by the changing needs of information users. As librarians have more difficulty taking time away from work to attend conferences and workshops, and as travel budgets decrease, the idea of taking a course via the Web, without the barriers created by set

schedules, geography and added travel expenses found in most workshop settings, has become more appealing. Information about the Online Lyceum on the ARL web site points out that distance learning provides new opportunities for library staff to develop critical skills while working in a flexible, affordable, and convenient learning environment. Addressing both needs – content about quality assessment and at-home learning – were key reasons behind the ARL wish to have this course among its Lyceum offerings.

From the beginning, the course developers were determined to create a course that took advantage of the online environment and teaching technologies. We acknowledged concerns to overcome student obstacles to effective learning via this medium. Research indicates that in distance education courses, students' frustration originated from three main sources:

1. technological problems;

2. minimal and not timely feedback from the instructor; and,

3. ambiguous instructions on the Web site as well as via e-mail. (Hara & Kling 1999)

We included features that would minimize if not eliminate these barriers to students' success in completing and benefiting from an online professional development course. We dealt with some of the same issues that other developers of professional development online courses needed to manage: student expectations, content, content presentation, teaching components, interaction between students and instructors, course delivery and evaluation (Garrison, Schardt & Kochi 2000).

We attempted to manage student expectations in three ways. Publicity for the course distributed both in print and through a website repeatedly listed the objectives of the course. They are:

• Develop an understanding of the concept of service quality in terms of customer perspectives and expectations for excellence and perceptions of delivered services.

• Explore ways to gather data for meeting/exceeding customer expectations and ensuring satisfaction.

• Gain the ability to conceive how different measurements can be used for different purposes in assessing service quality in libraries.

• Gain insights into how service quality can be utilized to improve library value to users.

ARL staff also posed on the website a series of questions to help prospective registrants determine if an online lyceum course is suitable for their learning style and if identified limitations of distance learning and the minimal specified technological requirements will hinder their development. In addition, we posted clarifying comments about what the course would cover in response to statements solicited from registrants about their course expectations that were received prior to the start of the course.

The course content was crafted over several months with the intention to be a balanced, challenging, up-to-date, informative learning experience for participants that would be enhanced by the multimedia features developed in conjunction with SIUC technical experts. In advance of the course each registrant received a package of written materials, and was offered the opportunity to review hot linked online resources interspersed throughout the course.

A great deal of attention was given to content presentation, wedding the course content with its online structure, resulting in a three-module format focusing on the three major topics developed in the course:

• definition of service quality,

• the tools to assess it, and

• the impact that measurement of service quality has on the library.

A metaphor was used throughout the course to graphically illustrate [Figure 1] and organize its content and represented the facets of measuring service quality as a multi-piece puzzle, each piece with jagged edges, but coming into focus when viewed as a whole. We very consciously strived to develop a learning environment through use of online chats and bulletin boards for exchanges between and among students and course facilitators. The course content was available any time, every day through the duration of the course and for an additional two weeks after its conclusion, to allow participants time to read materials at their own pace.
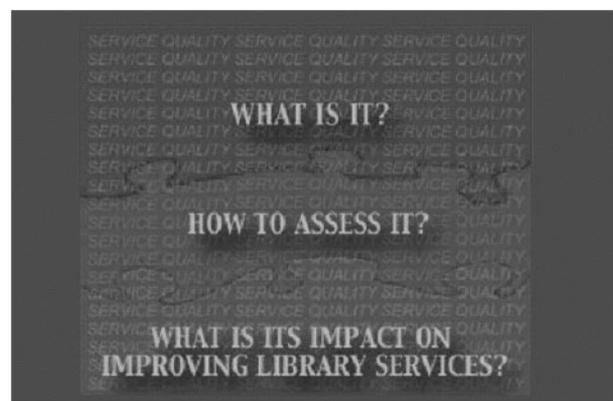

Figure 1. The puzzle metaphor used to organize the course modules.

The critical difference between in-person and distance learning settings is the ability for students and instructors to meet each other and engage in dialog in person. To foster interaction between and among stu-

dents and instructors, SIUC staff used Web Board software to incorporate both asynchronous bulletin board discussions and real-time chat opportunities into the course design, repeating the real-time availability of at least one instructor both mid-day and in the evening once a week The chats were the least successful mechanism used in this course. Typical comments were:

> I found it very difficult to participate in the chats because they occurred during my busiest times of the day. I also didn't find them very productive. The nature of the communication device is limited for any conversation of substance…. I don't know if this can be improved; it may just be a significant limitation of the online environment.

> I found the format of the chats frustrating. The chat comments scrolled by very fast…there seemed to be disconnects between discussion threads.

In recognition of the limitations of the chat software and the confusion that the format caused some students, we instituted more focused sessions with a specific topic, for example, data gathering tools or fostering the culture of assessment. Also we increased the use of the bulletin board feature as a more appropriate place for lengthy and content-rich discussions.

In addition, instructors responded within 48 hours to comments posted online for shared discussion, and to assignments submitted individually by each participant. It is common for students in many online courses to work alone, often at home in evenings or weekends or during lunch hours on the job, finding time wedged in between busy work days and full family lives. Distance education requires that students be self-regulated. It is hard for some to work under these conditions. One student commented,

> The problems I encountered were really based on changes in my schedule, unexpected snow days, and staff shortages which prevented me from spending as much time as I would have liked to on the course. I was unable to participate in the chat sessions, but did enjoy reading the discussion boards and the chat transcriptions as a way to "catch up."

The Online Lyceum course environment as developed by SIUC consists of a wide range of presentation features, including tools used to engage in learning with facilitators, colleagues, and resources. These include:

- Flip Charts highlight key points or provide additional information.

- Slide Shows [Figure 2] integrate audio with PowerPoint slide demonstrations to increase interaction with course content.

- Audio Clips [Figure 3], recorded by guest speakers and presented in a question/answer format, highlight the views of experts in the field[4].
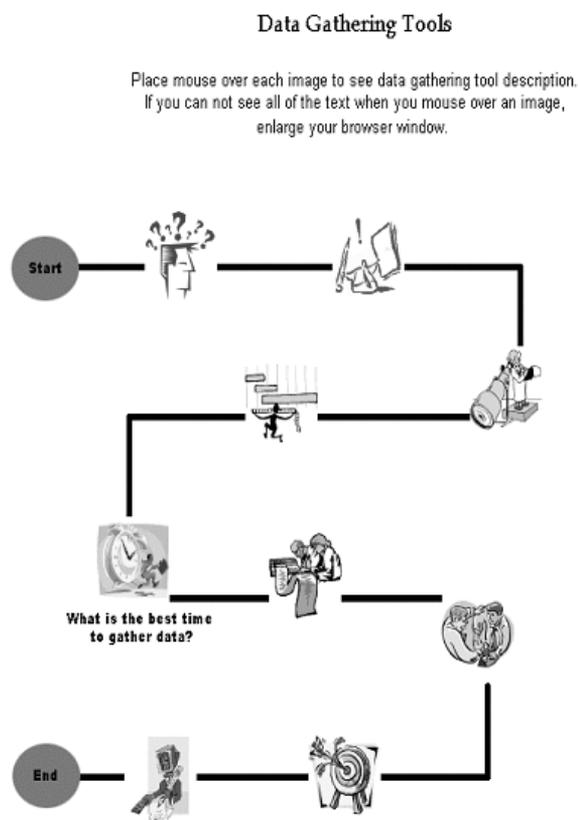

Figure 2. The graphic used to guide students through 9 steps for selecting data gathering tools developed for the course.

Figure 3. A sample slide accompanying one of the interviews of an expert on the topic of assessment research.

Various interactive learning opportunities were designed to allow students to reflect on past learning experiences and incorporate new skills and techniques into future work. Three assignments provide opportunities for skills practice and to receive feedback from course facilitators on course work. As course activities and assignments are completed, they are automatically entered into the participant's electronic personal learning journal.

It is likely that not all participants in distance education courses are familiar with course-support technology and may have different levels of comfort with the multi-media environment of a Lyceum course. One student commented, "Had some computer problems. Do not know if they were caused by my system or by flukes in the class design." Basic information about the minimum required technical set-up is provided with the names and email addresses of support people available for ongoing questions. Each animated version of a slide show and audio interview requiring Real Player also has an html version. Therefore the course is equally content-rich for those with more sophisticated technical set-ups as for those with simpler ones. Inadvertently, we also handled a disability issue: one participant was hard of hearing and appreciated the written format for the audio interviews. Feedback about the presentation features included such statements as:

"I liked the video and flipcharts. The Q & As, the slide shows, and the increased interactivity were all good."

"Despite the lack of face-to-face or voice-to-voice interaction I found alternating between readings, audio, flip charts, activities and chat sessions a richer experience than any library school courses I have taken (not online)."

For a 6-week course, such as Measuring Library Service Quality, it is expected that a registrant needs to dedicate between 30 and 42 hours to complete it. This time allows participants to read through course content, review the course readings in the print course pack, participate in online asynchronous discussions, attend weekly chat sessions, and complete course activities and assignments. Among student comments noted after the conclusion of the course,

"With this much to read, the course could have been a couple of weeks longer. When you are a full-time employee, it is difficult to put so much into a short period of time and do justice to your work, too."

"I think an online course can be a very effective learning experience depending on its structure. The ARL course was very effective in that it had a good mix of activities and it included components to fit most learning styles."

The Participants

Registration for each session was limited to 30 participants. Demand for the first session exceeded this limit and encouraged scheduling additional sessions soon afterwards. Characteristics of the participants in the course, and thus the "population" for the exploratory study reported here are summarized in Table 1.

Table 1: Characteristics of Course Participants

	Session1	Session 2	Session 3	Combined
Total registered:	30	25	30	85 [100%]
Total active:	23	12	21	56 [66%]
Females				60 [71%]
Males				25 [29%]
Administrators				30 [35%]
Managers				17 [20%]
Frontline staff				38 [45%]
Affiliated with:				
ARL library	13	13	18	44 [52%]
Non-ARL	19	10	12	41 [48%]
LibQual+ participants				31 [36%]
LibQual+ non-participants				54 [64%]

Participants in the course were all library staff from the US and Canada. They held a wide variety of positions from library director to staff newly appointed to quality

assessment committees or assignments, from ARL research institutions to small colleges, and with backgrounds in the humanities, social sciences, science, law and health studies, including two public and two special business libraries. Most participants were novices in measurement, recently given some responsibility for assessment at their institutions. Four had titles that signified responsibility for assessment, one person from the first session and three from the last, perhaps indicating an increase over time in a measurement agenda at some institutions. Only 19 [22%] participants had indicated that they ever had taken an online course before. From the 85 people registered for the course, 56 completed all three assignments to receive a certificate from ARL, while more completed the content and participated in activities throughout the 6-week sessions.

The commitment to engage in the course varied among registrants. At the start of the course, two questions were posed for the students to project how much effort they expected to devote to this course. At the conclusion of the course, a similar set of questions was posed. Table 2 summarizes the shift between how much effort at the start of the course was expected to be given to complete it, and how much was perceived afterwards to have been devoted to it.

Table 2: Student Expectations and Perceptions of Course Engagement

a. Time per week devoted to course

Expected # hours [pre-course question]

	<1	1-5	6-10	11-15	16-20
Fall 00	2	8	19	0	0
Spr 01	0	9	10	0	0
Sum 01	0	6	18	1	0
Total:	2	23	47	1	0
n=73	3%	32%	64%	1%	0%

Perceived # hours[course end question]

	<1	1-5	6-10	11-15	16-20
Fall 00	1	8	12	1	1
Spr 01	1	6	6	0	0
Sum 01	0	7	14	0	0
Total:	2	21	32	1	1
n=57	3%	37%	56%	2%	2%

b. Times logged on during course

Expected times [pre-course question]

	1-5	6-10	11-15	16-20	>20
Fall 00	3	3	5	6	12
Spr 01	2	5	6	0	6
Sum 01	2	4	6	6	7
Total	7	12	17	12	25
n=73	10%	16%	23%	16%	34%

Perceived times [course end question]

	1-5	6-10	11-15	16-20	>20
Fall 00	2	4	6	4	7
Spr 01	2	2	4	1	4
Sum 01	4	0	1	4	12
Total	8	6	11	9	23
n=57	14%	11%	19%	16%	40%

Both in terms of the number of hours devoted per week to the course and the number of times logged in over the duration of the course, students perceived a greater effort was given to complete the course than expected at its beginning.

Expectations for Staff Development

Understanding the registrants' expectations for the course was important to us in two ways. Primarily it was essential for evaluation and improving the course. Expectations were the basis by which we could gauge the perceived service quality this group of Lyceum "customers" held for this one ARL service. Since the course focused on measuring service quality we illustrated the gap analysis between the participant's expectations for an excellent course at the start of the session and their perceptions of the course delivered at the end. Our second interest in registrants' expectations is to further an understanding of what kinds of training librarians seek to develop their skills to measure service quality. Although we are pleased with the overall high ratings the course received, here we will present only the data relating to the expectations for this area of staff development.

One of the first activities the participants were asked to complete was a questionnaire, presented online, to rank the importance each of 10 factors has to the success of the course. The factors were selected as a combination of four factors cited as objectives for the course and six that surfaced repeatedly among the statements of expectations that the participants submitted prior to the course. Course participants were asked to rank importance on a 7-point Likert scale, grounded by 1 = extremely unimportant and 7 = extremely important. Table 3 summarizes the average rankings for each factor by session. The combined scores reflect the average across sessions.

Table 3: Comparison of Expectations for the Course

Factors important to course success	Expectation scores				
Course Session:	11/2000	2/2001	6/2001	All	Rank
number of respondents	[n=29]	[n=19]	[n=25]	[n=73]	[n=73]
% of enrollment	97%	76%	83%	86%	86%
1. Understand when to use focus group interviews	4.27	5.05	5.2	4.79	9
2. Develop an understanding of the concept of quality	5.86	6.42	6.2	6.12	2
3. Learn how others have implemented service quality measures	5.55	6.00	5.84	5.77	6
4. Know how to summarize service quality measures to administration	5.27	5.89	6.36	5.80	4
5. Learn how to create an environment where high quality service is assessed & maintained	5.89	6.78	6.76	6.42	1
6. Explore ways to gather data for meeting/exceeding customer expectations & ensuring satisfaction	5.68	6.36	6.32	6.08	3
7. Begin to develop a service quality assessment plan for my library	5.34	6.00	5.76	5.66	7
8. Gain the ability to conceive how different measurements can be used for different purposes in assessing service quality in libraries	5.48	6.15	5.84	5.78	5
9 Discuss gained insights into how service quality can be utilized to improve library value to users	5.17	5.63	5.68	5.46	8
10. Benefit from participating in an online course experience	4.68	4.68	4.48	4.61	10

Each time the course was offered, students on average ranked as most important to the success of the course the expectation to "learn how to create an environment where high quality service is assessed and maintained." With the exception of the first group of students, most ranked as least important the expectation to "benefit from participating in an online course experience." With the small size response from each session, we have not attempted to find significant differences between the sessions. However, the data do not contradict impressions the authors were formulating from other feedback in the course sessions that the later group of students were more aware of service quality principles and more practical in seeking technical skills and applications of insights gained in the course. By comparison, the early students were less familiar with basic concepts.

Among the expectations noted in the pre-course comments, interest was expressed to learn about specific data gathering methods such as focus group interviews, as well as the LibQual+ project[5]. As more libraries have participated in this pilot to develop an instrument to measure service quality in libraries, more participants in the course sought information on how to interpret data obtained from the test instrument's application.

Participants were perhaps surprised by the complexity of the subject. One repeated theme expressed at the end of the course in response to our question on what was found to be most helpful in the course was that the materials were informative but required more time to digest. Typical comments included the following:

> "The readings were most stimulating. They were intellectually challenging, each complemented the others well, and the sequence was helpful. While I am sure as a librarian I could have located all these readings myself, it would have taken me an enormous amount of time and I would have probably spent time reading others that were less valuable. I also would not have had such valuable sequencing."

"The application of the readings and course content in the activities and assignments was very useful – and a little challenging at times."

Perceived Readiness of Libraries for Culture of Assessment

The second major question we posed in this study concerns the readiness of libraries as organizations to function within a culture of assessment. Earlier in this paper we described the concept of a "culture of assessment" as part of the managerial orientation of an operation. We adapted a questionnaire, developed by Wilson[6] into the online course content. A set of 15 statements asked participants to indicate if each statement was true or false for a library of their choosing. Table 4 summarizes the cumulative responses from the three sessions of the course. We offer this for possible insights about the readiness of libraries as reflected by this set of respondents.

Table 4: Perceptions of Libraries' Culture of Assessment

Indicative statement	Cumulative response			[n=64]
	True	False	no reply	% true
1. Assessment is evident in our library planning documents such as strategic plans	35	25	3	56%
2. Assessment is a campus priority	37	23	4	58%
3. Library administrators are committed to supporting assessment	49	12	3	77%
4. Staff accepts responsibility for assessment activities	20	38	6	31%
5. There is support and rewards for staff who engage in assessment	17	43	4	27%
6. Library policies & procedures are designed to meet user information needs	48	12	4	75%
7. Collaboration & cooperation exists among individuals & departments	49	12	3	77%
8. My library considers user needs in allocating resources	49	12	3	77%
9. My library actively cultivates a positive relationship with its users	45	16	3	70%
10. Assessment leads to results in my library	23	36	5	36%
11. My library routinely collects, uses & disseminates meaningful user data and feedback	17	44	3	27%
12. My library employs a Management Information System/Decision Support System	2	58	4	3%
13 My library evaluates is operations & programs for service quality	21	38	5	33%
14 Staff have expertise & skills in assessment	11	48	5	17%
15. On-going staff development in assessment is provided	18	42	4	28%

Upon submission of responses within the course context, respondents receive the total of "true" responses marked as their "IQ score" and a suggested interpretation of it in their personal journals. The designers of this instrument suggest that this score provides a "relative ranking of where your library may be in developing a culture of assessment." The average total "IQ score" for all those responding to this assignment over the three sessions of the course was 6.9, interpreted as "experimenting", with suggestions to implement a pilot assessment project and examine "best practices" at institutions similar to your own.

Conclusions drawn from these responses cannot be generalized to the population of librarians, but it does reflect responses from 75% of the registrants in the course. Interest in the course certainly might be correlated with "readiness" to implement a pilot assessment project. A review of the factors shows some pattern of perceived readiness of libraries for the culture of assessment. The perception [greater than 70% responding "true"] is that libraries have supportive administrators, policies and procedures designed to meet user information needs, collaboration and cooperation among staff, resource allocations that consider user

needs, and active cultivation of positive relationships with users. The perceived weaknesses [less than 30% responding "true"] among this group, of libraries' preparedness are in lack of support and rewards for staff who engage in assessment; of routine collection, use and dissemination of meaningful user data and feedback; of on-going staff development in assessment; and of staff expertise and skills in assessment. The lack of libraries employing a "management information system and decision support system" is the single most clearly noted omission among this group of respondents with only 3% responding that their library does have such a system.

We noticed a marked difference in the background of participants between those in the first and third sessions, a span of only 8 months. Now we see more participants with experience conducting assessments, having job responsibilities to undertake assessments, and asking questions about more technical aspects of evaluations, measurement tools, and analytical techniques. This shift may be a reflection of who is registering for the course. However, we assume that since there was no major difference in the publicity for the course, that we had a similar representation of the population of librarians in the three sessions. Our speculation that there is a growing awareness of assessment techniques and concepts of service quality may be an interesting topic for further research and observation of the library profession.

Impact of Web-based Learning

Throughout the sessions, we formulated opinions about the value of web-based learning. As we noted earlier, we questioned the benefit of chats as open-ended times for contact with instructors or interactions among students. To our surprise, each session had a core of about 12 students that would always actively engage in chat discussions, eagerly following stimulants the facilitator would introduce to direct the online conversation along the topic covered that week in the course assignments and recommended readings. In each session there were students who asked for a continuation of the learning experience after the course concluded. We obliged by extending online access to the materials posted online for two weeks, but did not commit to a formal channel of communication afterwards.

Wondering how pervasive the interest in continued learning was among participants, we conducted an e-mail survey in July, 2001 of all registrants in the first two sessions to seek their opinions on the impact of the course and web-based learning to meet their development needs. A set of 6 open-ended questions was emailed to 53 people who had registered for the course 5 or 8 months earlier, and within four weeks and with one reminder to non-respondents, replies from 23 [43%] were received and were analyzed for this report[7]. The responses to the questions reflected a high and generally productive impact on those taking

the course. Only one participant expressed disappointment that the course did not meet expectations and that nothing was learned, due to difficulties in scheduling time to join discussions and technical difficulties of connecting while traveling abroad. Specific findings by select questions follows.

1. "How have you applied what you learned in the course to your local setting?"

Roughly two-thirds [15] of the respondents indicated ways in which they used what they learned, three expressed the hope or expectation to use the information, and two noted that they did not have an opportunity to apply the course. Among specific applications cited were execution of surveys of customer expectations, establishment of staff development workshops, changing existing presentations about data collection, holding staff discussions, changing employee performance evaluations, conducting a "doable pilot" assessment, and initiating collaborations with non-library assessment staff to participate in broader campus surveys. Though most indicated a focus on customers external to the library, one response outlined applications of the course learnings to work within the cataloging department, illustrating the application to internal customers.

2. To what extent have you shared what you learned with colleagues? Would you recommend that anyone else in your institution should take this course?

All but three of the respondents [20] noted that they shared information gained with colleagues through venues ranging from casual coffee chats to formal presentations to advisory committees. Several commented on the existence of an assessment group in their library with whom information was shared. A few mentioned ordering the text or placing readings identified in the course in staff reading areas. Reasons for not sharing what was learned from the course included leaving the library for a job change and "political" reasons. No one was against recommending the course to others, though one doubted if the cost would allow for multiple participants from one institution. Discussions were initiated to arrange for a session devoted to one library as a result of these early sessions.

3. What could help you continue your learning about measuring library service quality?

Specifically, a suggestion was floated to establish a listserv for alumni of the course. All but one welcomed the idea of a listserv as a means to "keep up" with the literature and learn about experiences at other institutions; one was unenthusiastic to have more email and thus doubted he'd join a listserv. In addition, suggestions were made to send reminders of new articles, stimulate electronic discussion of readings, hold "reunions" or other in-person events at conferences,

and develop new modules on the topic perhaps at advanced levels to offer through the ARL Lyceum. A few of the respondents alluded to their library's participation in the LibQual+ pilot through which staff gained access to a community of colleagues with whom they could share ideas about assessment of service quality.

4. "What is your opinion on the effectiveness of an online learning experience over time?"

Several different observations were made in responses to this question. Three people were grateful for the online format because of their limitations to travel to professional development opportunities; one was homebound due to childcare, one due to an injury, and another to time restrictions. Most comments indicated little perceived difference from other learning formats, concluding that the benefit of a course, regardless of format, is dependent on the effort exerted to learn and that the readings are the most valuable component of the course offering.

5. "What pieces are missing from your knowledge of measuring library service quality?"

Overwhelmingly the common response to this question involved recognition of the difficulty of implementing change and the desire for more guidance on how to "make this successful." Alluding to the puzzle metaphor used to organize the course material, several respondents acknowledged that "all the pieces are there," but "it just isn't easy" to apply them to practice. A couple of respondents requested more advanced but non-technical explanation of ways to interpret and analyze data. One respondent specifically suggested a course on measuring cataloging or "indirect service quality," or applying the principles to small size service quality measurement, while another urged introduction of the concept of service quality measurement through library school curriculum.

An opportunity to add any other reflections or comments about the course methodology, the learning experience or the content was met with insightful responses. The authors are gratified by the numerous high compliments extended such as:

> this course stands out as one of the best (if not the best) professional development experience that I have had in my career….in the past 20 years….well beyond my expectations.

Feedback on the use of technology was mixed, several persons disliking the chat and bulletin experience, while others found it supportive and helpful, one even noting, "the bits of information that really stick with me are some of the comments made during the chats." Reactions to the multiple approaches to covering materials—through articles, textual "lectures," audio clips, interactive chats and bulletins, and assignments – confirm the assumption that different people learn in different ways.

The impressions from this set of responses cannot be generalized to the full population of participants in this course. However, they address our intention to explore the experiences gained from this online course. We share these findings as initial insights into the need for training and professional development on the topic of measuring service quality in libraries, as well as the impact of using web based technologies to deliver the course.

Conclusions

Measurement as an act of gathering data is not the difficulty. Rather the introduction of a new set of concepts and language about managing library services challenge most librarians who have taken the course. It is not easy to grasp quickly concepts of service quality, assessment, and fact-based customer-focused management orientation. Insights gained from our culture of assessment readiness exercise confirm at least among many of the librarians enrolled in this course that our library organizations are not ready for transforming libraries to well managed service quality operations. Thus, the need for staff development to prepare librarians to not only participate in, but lead, this transformation should become a high expectation within the profession.

This study has been exploratory. Observations and insights cannot be generalized beyond the group of librarians participating in this course. The study was not intended to be a scientific study of the profession's needs for staff development or of librarians' views of expectations for service quality. What it has attempted to provide are early insights on the status of preparing library staff for the challenges of making the necessary organizational and personal changes required to foster a culture of assessment among libraries of the future. It also has confirmed that web-based instruction offers benefits to professionals for self-learning, but also has limitations. Chat software, for example, introduces quick, brief, real-time interchanges that some find helpful in "being in touch" with the professional dialog on a topic. But others find that these same features of the technology set barriers to discussing, and evolving understanding of, complex ideas. As one of the students most recently noted, establishing true "learning communities" continues to pose a challenge to course designers. We found the chat technologies to be inadequate, and the bulletin boards to suffice for exchanging information. However, neither fosters development of relationships, a key contributor to learning in the classroom. To further explore use of information technologies, perhaps utilization of video clips and conferencing, teleconferencing and conference calls would contribute to shortening this gap.

From our experiences, we recommend that additional professional development opportunities on library service quality be offered. There is interest in developing "communities of practice" in the area of

service quality assessment. Though not often active, membership in the ARL sponsored listserv includes participants in this Lyceum course on measuring service quality, representatives from libraries participating in the LibQual+ project, and others interested in the topic. We urge ARL and other library associations to form and stimulate discussion among those trying to implement changes toward a culture of assessment through listservs and conference gatherings.

The diffusion of service quality assessment as an innovative topic is increasingly interesting to observe. With each session of the course, we witnessed a more sophisticated set of questions and comments shared by participants, suggesting that some of the basic principles of continuous improvement and service quality assessment may be diffused through the profession. Soon the course content of this initial design will be remedial and of appeal only to "late adaptors" of the innovation, and may be coupled with demands for more detailed training opportunities in design of specific data gathering instruments and techniques [e.g. surveys, focus group interviews], and processes to foster organizational change. As new generations of librarians are being prepared, schools of library and information sciences are urged to also incorporate continuous improvement and the culture of assessment into the preparation of management perspectives, and to introduce students to the basic tools used to measure service quality and solicit, analyze and utilize customer feedback.

If we consider service quality assessment in libraries as an innovation of the past decade, then we are yet early in its diffusion. This course has addressed the needs of early adaptors. There will likely be a period yet of several years to coach those who are less progressive in leading change and adapting new ideas in this area, and simultaneously to address the challenging inquisitiveness and creative energies of the innovators in the profession. Web-based instruction should continue to be utilized to meet these needs and can do so effectively in modules to address the shifting populations of students requesting the instruction.

Nurturing the efforts of librarians who desire to undertake self-directed professional development is a challenge. Programs like the Online Lyceum are turning the concept of online professional development into reality. People taking responsibility for their own learning, and collaborations that embrace the innovations of networking and multimedia teaching techniques, enable us to exchange information and experiences that help build an informed professional community.

References

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Notes

1. The course was activated over the following periods: session 1: November 13-December 15, 2000; Session 2: February 12-March 23, 2001; Session 3: June 25-August 3, 2001.

2. Thanks are extended to those assisting in the creation and delivery of the course, including from SIUC: Heidi Greer, Distance Learning Coordinator; JP Dunn, Web Developer and Systems Administrator; Kevin Rundblad, Assistant Instructional Development Librarian. From ARL: Dawn Kight, Program Officer for Distance Learning, Trish Rosseel, former Program Officer for Distance Learning, Martha Kyrillidou, Director, Statistics and Measurements Program, Julia Blixrud, Director of Information Services, Office of Leadership and Management Services, and Kathryn Deiss, former Director, Office of Leadership and Management Services.

3. Originally developed by Amos Lakos, University of Waterloo, and Betsy Wilson, University of Washington, 1998. Revised and updated by Amos Lakos and Shelley Phipps, University of Arizona, Living the Future III Conference April, 2000 Tucson, Arizona.

4. Appreciation is extended to the interviewed experts Philip Calvert, Colleen Cook, Rowena Cullen, Peter Hernon, Steve Hiller, Amos Lakos, Charles Lowry, Charles McClure, Shelly Phipps, Roswitha Poll, Patience Simmonds and Joan Stein.

5. LibQual+ information can be found online at: http://www.arl.org/libqual/

6. Betsy Wilson, University of Washington Library, developed the instrument used with credit to Cerise Oberman, Plattsburgh State University of New York and Amos Lakos, University of Waterloo. Response to one statement, from the original 16 presented, is not included here because the course software inadvertently did not capture participants' response to it. The statement was, "My campus has local assessment resources & experts."

7. Three returned the message but without answers to the questions, one respondent admitted to not having participated in the course after it began due to unexpected circumstances, another to not finishing the readings, and one with promise to send responses later.