

Thinking in Cycles: Assessment, Improvement and Validation

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We assess to find out how well we are doing, whether we are doing the right things, and how we can improve. After we analyze the assessment data, we make changes as appropriate. Then we need to know whether the improvements are effective. These are the major steps in the cycle:

Assess: Conduct LibQUAL+ survey in October 2006.

Analyze: Quantitative data from survey, qualitative data from LibQUAL+ comments and focus groups.

Change: Planned and implemented according to results of data analysis over a period of time.

Validate: As indicated by data analysis of 2009 LibQUAL+ survey, including comparisons of 2006 and 2009 perceived means using two-tailed *t*-tests. Also drew on 2009 comments and other anecdotal accounts.

2006 Quantitative Data

For the entire user group, all of the perceived means are between the minimal and the desired levels.

On a 1-to-9 scale, only four are below 7. These are:

1. Employees who instill confidence in users (6.66)
2. Giving users individual attention (6.80)
3. Library space that inspires study and learning (6.99)
4. Community space for group learning and group study (6.88)

For undergraduate students, the first two items noted above received low perceived mean.

For graduate students, in addition to the two areas identified for undergraduate students, having adequate electronic resources received a perceived mean lower than the minimal acceptable level.

For faculty, the perceived mean for service areas were uniformly high. The mean for group study areas is actually higher than the desired level. In 6 of the 8 questions concerning information control or resources, the perceived means are lower than the expected minimal level. These cover navigational, availability and access issues.

2006 Written Comments

Interrelationship among the issues

For example, difficulty in accessing electronic information may be due to:

- Inappropriate technology,
- Navigation among the Web pages,
- Lack of databases in certain topical areas, or
- Need better interfaces, newer and faster equipment, or additional databases.

Concerns about Interlibrary Loan services may be:

- Turn-around time, which is externally controlled

- Inability to check on status of request, a technological issue

Space and environmental issues

- Availability of space is time-dependent
- The more crowded the library, the higher the level of noise
- Call for a coffee bar or lounge area, especially among the students
- More open hours, both for the library and for service
- Library as inviting place or dated and gloomy
- Physical accessibility and ADA compliance

Resources

- Abundance or lack of resources depends on the specific disciplines
- Availability of resources also related to getting help from the library staff
- Lack of resources may refer to access and navigational concerns

2007 Focus Group Data

The remarks are generally very positive on the quality of service.

- Faculty and graduate students want expanded service hours, especially between sessions.
- Service needs focused on accessing and using resources.
- Need for recent books in disciplines because they synthesize strands of knowledge for undergraduate students who do not yet have the knowledge base to do that on their own.
- Need for better instructional and directional help for physical facilities, services, and online.
- There seems to be a “disconnect” between choices provided on Web pages or search engines and those needed by different disciplines.
- Make the library a “lively” place by updating the furniture, adding color, providing better signage, and perhaps a different physical layout of the stacks.
- There was also an expressed need for individual study areas, perhaps shared with a few other individuals.
- The library needs to market and promote its resources and services

2009 Quantitative Data

In the 2009 LibQUAL+ survey, the mean for 21 of the 22 core questions are above the minimum acceptable level but below the desired level. The only item where the perceived mean is below the minimum level is having “print and/or electronic journal collections I require for my work.” The perceived mean is 7.10 and the minimum is 7.14, a different of .04 on a 9-point scale, not a significant amount. The only item where the perceived mean is below 7 is “employees who instill confidence in users,” rated at 6.97.

55% of the respondents are physically in the library on a daily or weekly basis.

65% access library resources through the Library Web page.

4% of respondents never come to the library.

4% of respondents never use the Library Web page.

2009 Written Comments

For 2009, the written comments are divided into four areas as described below.

Access to Library Resources

- Access issues primarily concern electronic access. Comments range from easy to use Web page, confusing directions, to inconvenience for the user.
- Suggested more targeted instruction on appropriate use of library resources.
- Availability of resources highly dependent on discipline.
- Access issues also deal with interfaces.
- Confusing directions and interfaces for online resources in different databases with different vocabularies.
- Another wishes for a “save” button so when interrupted, he does not have to start over when the session times out.
- Friendliness of library Web site highly dependent on user needs.

Library Resources and Budget

- Faculty comments that books are still an essential part of humanities education, and particularly for undergraduates. But reduced funding for new purchases has left areas “completely behind in offering students the most rudimentary acquaintance with their field of study.”
- More convenient to find a relevant book at WIU instead of googling for the information or waiting for another library.
- What WIU does have should be publicized more widely.
- Archives Department is great, but the library lacks journals on Mormon history.
- Re-organization in Periodicals to separate scholarly materials from the popular.
- One student also wants more graphics novels.
- One faculty member wants more and better computers, especially on the upper floors.
- Another commented on the need for new computers since the rest of campus received new computers.
- The perception, according to one faculty member, is that the library has tended to promote "style" over "substance." Technology is embraced “with what appears to be little concern for the quality of information accessed by that technology.”

Physical Facilities and Environment

- Social space: coffee bar, faculty lounge, “inviting” place
- Academic space: no eating or drinking, faculty carrels, get rid of coffee bar, game nites and programming.

Library Operations and Personnel

- Faculty members are particularly impressed by the quality of service.
- Those who mentioned the lack of resources say that the librarians are always ready to help.
- Library has finally moved into the 21st century.
- Circulation staff not being knowledgeable. Dislike of circulation policy.
- Another would like self-serve checkout.
- One comment is that it seems you are “bothering” them when approaching librarians and another said librarians need to smile more.
- More hours at branches. At main library, calls for more hours, as last time, are from the traditional 18-22 age cohort group.

Data Analysis (2009)

Affect of Service: Significant increases for all items.

Information Control: Remote electronic access, equipment, and available information resources stand out.

Library as Place: Only library as a “comfortable and inviting location” increased significantly.

Overall, the rating went from 7.16 in 2006 to 7.44 in 2009, a very significant increase ($p < .01$).

By Groups

Undergraduate students: They saw improvement in several service areas such as getting the attention and help they need in a caring fashion. Also rated high is the willingness to listen and understand their problems. Whether that help resulted in their ability to find print materials is a question that needs to be answered. Unlike 2006 when they complained about computer equipment, in 2009 rated high having new equipment and print resources. Also significant is having more group study space. The fact that both minimum level and desired level for “giving users individual attention” have shifted significantly may mark a shift in the characteristics of that cohort age group.

Graduate students: The major areas of concern are access and availability of resources. While the ILS interface is still an issue, complaints about Interlibrary Loan were not voiced in 2009 by graduate students. In fact, there was a compliment in the written comments. The lack of complaints perhaps can be taken as tacit approval of ILLiad to manage interlibrary loan services implemented in 2006. Significant improvements include: 1) having more available electronic resources; 2) improved services and guides to access those resources; and 3) being able to get to those resources from remote locations.

Faculty: Views have not changed as much as the students. Significant improvements for them include collaborative spaces and the library environment. But as the comments indicate, the arguments have moved up a level of abstraction to whether the library should function as a social space or only as an academic space. But also marked as significant improvements are the willingness of library staff to pay individual attention and help solve their problems. One issue that came out of a comment

regards whether moves to the electronic is more “style” over “substance.” This is an area that must be addressed, perhaps just by re-framing communication emanating from the library.

Shifting Minimum and Desired Levels

In looking at minimum levels and desired levels, it became evident that *user expectations have shifted over the years*. For the item mentioned above concerning electronic journals (IC-8), the 2009 perceived mean is 7.10, a little less than the minimum level of 7.14. The minimum level for this item has increased from a value of 6.85 for 2006. This is significant at the .05 level. Thus, even though the current perceived mean has increased slightly by 0.08 over the 2006 mean, the shift in expectation by 0.29 has outpaced our improvement. The other two areas where the minimum levels have increased concern access from remote locations and the amount of individual attention from library staff members. The desired levels have also increased in most areas of library service and in regard to access to electronic resources. In all areas of service, even though the perceived means have increased significantly, the desired levels have also increased. In one case, “giving users individual attention,” the 2009 perceived mean (7.39) is actually more than the 2006 desired value (7.3). Thus, changes in library services must always be judged according to moving expectations, not to historical patterns.

No Improvement or Mixed Responses

Areas that have not improved or have received mixed ratings and comments include making information easily accessible for independent use, and having sufficient electronic collections. These may be related to mixed comments on the usability of Web interfaces, including the library site, the OPAC, and database vendor sites. Both positive and negative comments were received. Since most access to resources is through the library pages, users do not or cannot always make a distinction concerning the provenance of a given problem. As indicated with the questions about information literacy, two areas where the ratings have not improved to a significant extent include the teaching of information skills and the ability to distinguish between trustworthy and untrustworthy information.

Validation

Changes implemented since 2006 are listed below. Validation, directly or indirectly shown, is indicated:

1. Created Media & Digital Commons to provide additional technology and support.
Increased rating for equipment and remote access; absence of complaints about computer needs.
2. Installed a coffee bar in a lounge area with new furniture.
Absence of comments and improved rating of library as an "inviting place."
3. Installed ILLiad, an interlibrary loan management software to allow better control and the ability to track requests.
Absence of comments regarding interlibrary loan services.
4. Re-allocated space use to allow more group and individual study areas.
Significant improvement according to undergraduate students and faculty.
5. Installed a Faculty Lounge area with improved technology for use as a collaborative space.
Significant improvement in "Community space for group learning and group study"
6. Began a Liaison program to improve communication with academic departments.
Not measured by LibQUAL+.
7. Started installing more informative signage.
Absence of direct comments.
8. Made changes in personnel and job assignments to better address instruction, work with faculty, and initiate marketing and outreach activities.
Not measured by LibQUAL+.

All WIU Respondents	2006	2009	2009	
	Percvd Mean	Percvd Mean	Percvd SD	<i>t</i>
Affect of Service	7.23	7.57	1.4	3.443**
AS-1 Employees who instill confidence in users	6.66	6.97	1.93	2.220*
AS-2 Giving users individual attention	6.8	7.39	1.75	4.623**
AS-3 Employees who are consistently courteous	7.52	7.84	1.56	2.879**
AS-4 Readiness to respond to users' questions	7.36	7.74	1.53	3.477**
AS-5 Employees who have the knowledge to answer user questions	7.37	7.67	1.5	2.800**
AS-6 Employees who deal with users in a caring fashion	7.38	7.71	1.54	2.954**
AS-7 Employees who understand the needs of their users	7.29	7.55	1.71	2.118*
AS-8 Willingness to help users	7.47	7.83	1.47	3.358**
AS-9 Dependability in handling users' service problems	7.21	7.67	1.35	4.469**
Information Control	7.11	7.37	1.27	2.902**
IC-1 Making electronic resources accessible from my home or office	7.08	7.48	1.66	3.373**
IC-2 A library Web site enabling me to locate information on my own	7.09	7.3	1.72	1.714
IC-3 The printed library materials I need for my work	7.04	7.27	1.62	1.941
IC-4 The electronic information resources I need	7.12	7.38	1.59	2.278*
IC-5 Modern equipment that lets me easily access needed information	7.13	7.52	1.47	3.743**
IC-6 Easy-to-use access tools that allow me to find things on my own	7.12	7.37	1.56	2.255*
IC-7 Making information easily accessible for independent use	7.28	7.49	1.49	1.968
IC-8 Print and/or electronic journal collections I require for my work	7.02	7.1	1.81	0.611
Library as Place	7.1	7.3	1.46	1.928
LP-1 Library space that inspires study and learning	6.99	7.05	1.9	0.434
LP-2 Quiet space for individual activities	7.18	7.33	1.87	1.094
LP-3 A comfortable and inviting location	7.3	7.64	1.55	3.055**
LP-4 A getaway for study, learning, or research	7.14	7.31	1.67	1.396
LP-5 Community space for group learning and group study	6.88	7.08	1.8	1.444
Overall:	7.16	7.44	1.19	3.336**

Undergraduate Students	2006	2009	2009	
	Percvd Mean	Percvd Mean	Percvd SD	<i>t</i>
Affect of Service	7.15	7.55	1.32	2.659**
AS-2 Giving users individual attention	6.58	7.3	1.73	3.482**
AS-3 Employees who are consistently courteous	7.46	7.86	1.34	2.602*
AS-4 Readiness to respond to users' questions	7.26	7.69	1.49	2.483*
AS-6 Employees who deal with users in a caring fashion	7.33	7.7	1.55	2.040*
AS-9 Dependability in handling users' service problems	7.19	7.75	1.33	3.368**
Information Control	7.17	7.42	1.37	1.601
IC-3 The printed library materials I need for my work	7.18	7.72	1.43	3.182**
IC-5 Modern equipment that lets me easily access needed information	7.17	7.58	1.49	2.399*
Library as Place	7.2	7.39	1.56	1.069
LP-5 Community space for group learning and group study	7.04	7.43	1.63	2.030*
Overall:	7.17	7.47	1.22	2.158*
Graduate Students	2006	2009	2009	
	Percvd Mean	Percvd Mean	Percvd SD	<i>t</i>
Affect of Service	7.1	7.33	1.47	1.002
AS-9 Dependability in handling users' service problems	7.1	7.73	1.35	2.839**
Information Control	7.03	7.52	1.15	2.728**
IC-1 Making electronic resources accessible from my home or office	7.09	7.78	1.42	3.111**
IC-2 A library Web site enabling me to locate information on my own	7.07	7.63	1.37	2.617*
IC-4 The electronic information resources I need	7.03	7.61	1.43	2.597*
IC-6 Easy-to-use access tools that allow me to find things on my own	7.01	7.58	1.32	2.731*
IC-7 Making information easily accessible for independent use	7.17	7.7	1.32	2.539*
Overall:	7.02	7.36	1.17	1.861

Faculty	2006 Percvd Mean	2009 Percvd Mean	2009 Percvd SD	<i>t</i>
Affect of Service	7.65	7.78	1.39	0.742
AS-2 Giving users individual attention	7.5	7.88	1.33	2.195*
AS-8 Willingness to help users	7.85	8.19	1.2	2.176*
Information Control	7.03	7.28	1.16	1.711
IC-5 Modern equipment that lets me easily access needed information	7.11	7.52	1.35	2.411*
Library as Place	6.99	7.3	1.34	1.822
LP-3 A comfortable and inviting location	7.32	7.83	1.45	2.724**
LP-5 Community space for group learning and group study	6.63	7.13	1.69	2.007*
Overall:	7.28	7.49	1.15	1.449

* < .05

** < .01

<u>Minimum Level</u>	2006	2009	2009	
	Percvd Mean	Percvd Mean	Percvd SD	<i>t</i>
Affect of Service	6.57	6.73	1.66	1.367
AS-2 Giving users individual attention	5.95	6.36	2.05	2.742**
Information Control	6.79	6.96	1.6	1.506
IC-1 Making electronic resources accessible from my home or office	6.6	6.9	1.99	2.111*
IC-8 Print and/or electronic journal collections I require for my work	6.85	7.14	1.76	2.277*
<u>Desired Level</u>	2006	2009	2009	
	Percvd Mean	Percvd Mean	Percvd SD	<i>t</i>
Affect of Service	7.81	8.06	1.04	3.408**
AS-2 Giving users individual attention	7.3	7.76	1.56	4.043**
AS-4 Readiness to respond to users' questions	7.88	8.14	1.18	3.085**
AS-5 Employees who have the knowledge to answer user questions	8.01	8.25	1.1	3.055**
AS-6 Employees who deal with users in a caring fashion	7.88	8.13	1.27	2.713**
AS-7 Employees who understand the needs of their users	7.87	8.08	1.3	2.250*
AS-8 Willingness to help users	7.95	8.18	1.2	2.628**
AS-9 Dependability in handling users' service problems	7.85	8.19	1.05	4.247**
Information Control	8.05	8.23	0.91	2.804**
IC-4 The electronic information resources I need	8	8.21	1.18	2.479*
IC-5 Modern equipment that lets me easily access needed information	8.07	8.28	1.05	2.821**
IC-6 Easy-to-use access tools that allow me to find things on my own	8.02	8.27	1.07	3.288**
IC-7 Making information easily accessible for independent use	8.06	8.23	1.08	2.198*
IC-8 Print and/or electronic journal collections I require for my work	8.07	8.33	1.03	3.489*
Library as Place	7.8	7.92	1.2	1.407
LP-1 Library space that inspires study and learning	7.89	8.11	1.34	2.257*

Overall: **7.9** **8.1** **0.89** **3.186****

Satisfaction Question	2006 Mean	2009 Mean	2009 SD	<i>t</i>
In general, I am satisfied with the way in which I am treated at the library	7.51	7.74	1.46	2.233*
In general, I am satisfied with library support for my learning, research, and/or teaching needs	7.04	7.31	1.67	2.292*
How would you rate the overall quality of the service provided by the library	7.28	7.54	1.45	2.542*

Information Literacy Outcomes Questions

The library helps me stay abreast of developments in my field(s) of interest	6.05	6.41	2.1	2.430*
The library aids my advancement in my academic discipline or work	6.58	7.03	1.78	3.584**
The library enables me to be more efficient in my academic pursuits or work	6.8	7.2	1.75	3.241**
The library helps me distinguish between trustworthy and untrustworthy information	6.18	6.26	2.16	0.525
The library provides me with the information skills I need in my work or study	6.5	6.68	2.06	1.239

* < .05

** < .01