Using Assessment Data to Improve Library Services

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Overview

• What is LibQUAL+™?
• Why LibQUAL+™?
• Implementation
• Results
  – original perceptions, 2004
  – actions/reactions
  – improved perceptions, 2006
• Impact on library
What is LibQUAL+™?

- Quantitative
- Uses user perceptions to measure the quality of library services
- Based on service gap metrics
- Developed from SERVQUAL instrument
- Joint project of Texas A&M University and the Association of Research Libraries (ARL)
- More than 500 libraries have participated
**Survey Instrument**

<table>
<thead>
<tr>
<th>When it comes to...</th>
<th>My Minimum Service Level</th>
<th>My Desired Service Level</th>
<th>Perceived Service Performance Is</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Employees who instill confidence in users</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>2) Making electronic resources accessible from my home or office</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>3) Library space that inspires study and learning</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>4) Giving users individual attention</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>5) A library Web site enabling me to locate information on my own</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>When it comes to...</td>
<td>My Minimum Service Level</td>
<td>My Desired Service Level</td>
<td>Perceived Service Performance Is</td>
</tr>
<tr>
<td>6) Providing website information when and where I need it</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>7) Employees who are consistently courteous</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>8) The printed materials I need for my work</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>9) Quiet space for individual activities</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>10) Readiness to respond to users' questions</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>When it comes to...</td>
<td>My Minimum Service Level</td>
<td>My Desired Service Level</td>
<td>Perceived Service Performance Is</td>
</tr>
<tr>
<td>11) The electronic information resources I need</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>12) Employees teaching me how to access or manage information</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>13) Employees who have the knowledge to answer user questions</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>14) An environment that facilitates group study and problem-solving</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>15) A comfortable and inviting location</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>When it comes to...</td>
<td>My Minimum Service Level</td>
<td>My Desired Service Level</td>
<td>Perceived Service Performance Is</td>
</tr>
<tr>
<td>16) Employees who deal with users in a caring fashion</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>17) Modern equipment that lets me easily access needed information</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>18) Access to information resources that support patient care</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>19) Employees who understand the needs of their users</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>20) Easy-to-use access tools that allow me to find things on my own</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

**Library Usage Patterns:**

<table>
<thead>
<tr>
<th>Please indicate your library usage patterns:</th>
</tr>
</thead>
<tbody>
<tr>
<td>36) How often do you use resources on library premises?</td>
</tr>
<tr>
<td>37) How often do you access library resources through a library Web page?</td>
</tr>
<tr>
<td>38) How often do you use Yahoo(TM), Google(TM), or non-library gateways for information?</td>
</tr>
</tbody>
</table>

**Please indicate the degree to which you agree with the following statements:**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Degree of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>26) The librarian helps me stay ahead of developments in my field(s) of interest.</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
<tr>
<td>27) The librarian helps me distinguish between trustworthy and untrustworthy information.</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
<tr>
<td>28) The librarian provides me with the information skills I need in my work or study.</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
<tr>
<td>29) In general, I am satisfied with the way in which I am treated by the librarian.</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
<tr>
<td>30) In general, I am satisfied with library support for my learning, research, and/or teaching needs.</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
<tr>
<td>31) How would you rate the overall quality of service provided by the library?</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
</tbody>
</table>

**Please answer a few questions about yourself:**

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>39) The library that you use most often:</td>
<td>Undergraduate, Graduate, Faculty, Library Staff, Staff</td>
</tr>
</tbody>
</table>

| 40) Age: |  |
| 41) Sex: |  |
| 42) Position (Select the one option that best describes you): | Undergraduate, Graduate, Faculty, Library Staff, Staff |

**Confirm the response:**

If you have any questions, e-mail the Survey Help Desk.
Perceptions/Dimensions

• Affect of service (AS)
  – library services
  – library staff

• Library as place (LP)
  – facilities
  – furniture
  – technology

• Information control (IC)
  – library collections
  – access to information
LibQUAL+™: why use it?

- Inform strategic planning
- Determine “just how bad” user perception was in key areas, particularly library space and library collections
- Make more informed case for resource allocation from university
- Prepare for NCA accreditation (2006)
LibQUAL+™: IIT implementation

- Two cycles, in 2004 and 2006
- Subsequent assessments on a three year cycle (next assessment in 2009)
- Sampled entire student body
  - to ensure adequate, statistically valid sample size
  - to achieve the best representativeness
Overview of results

- Sample size
- Representativeness
- Perceptions/Dimensions
- Quantification
Representativeness

- By user group
- By year
- By ARL standard disciplines
- By local disciplines
  - Schools/colleges
  - Departments/majors
Overview of results: representativeness of population and respondents by user subgroup, 2004 and 2006
Overview of results:
representativeness of population and respondents
by ARL standard discipline, 2004 and 2006
Overview of results:
representativeness of population and respondents by local discipline, 2004 and 2006
Quantification

• Service adequacy
  – difference between the patron’s minimal acceptable level of service and perceived level of service

• Service superiority
  – difference between the patron’s desired level of service & perceived level of service
Quantification

- Adequacy mean
  - average of service adequacy measured for any subset of patrons for a particular dimension

- Superiority mean
  - average of service superiority measured for any subset of patrons for a particular dimension
Original perceptions (2004)

• Overall, the greatest dissatisfaction was with the library’s collections (IC) with an adequacy mean of -0.51

• Undergraduates expressed greatest dissatisfaction with the library’s facilities (LP) with an adequacy mean of -0.42

• Graduate students & faculty expressed greatest dissatisfaction with the library’s collections (IC) with adequacy means of -0.44 and -0.82 respectively
Overview of results:
comparison of IIT’s results with average for all participants for all user groups, 2004
Actions/reactions – impact on the library

• Library as Place
  – enhanced access
  – improvements in the facility

• Affect of Service
  – expanded instruction program
  – enhanced reference services and access to librarians

• Information Control
  – top-to-bottom review of collection
  – enhanced monograph acquisitions
Impact on library space:
actions taken – access to library

• Expanded in-semester hours
  – increased open hours from 80 to 90 hours per week

• 24 hour access for finals week

• New security and access policy
Impact on library space:
actions taken - facilities

- “Fatboys” and other soft seating
- Expanded access for study rooms
- Expanded wireless network and available power outlets
- Added PCs and peripherals to common area
- Improved lighting on lower level
- Leveraged data to improve maintenance and improvements to HVAC and windows
Impact on library space:
percent change in affect of service adequacy means, 2004-2006, by user group

- Library space that inspires study and learning
- Quiet space for individual activities
- A comfortable and inviting location
- A getaway for study, learning, or research
- Community space for group learning and group study

Impact on library space:
percent change in affect of service adequacy means, 2004-2006, by user group

- Faculty
- Grad Students
- Undergraduates
- All users
Impact on library services:
actions taken – public services

- Expanded instruction program
- Re-thought removing librarians from reference desk
- Implemented several elements of Library 2.0
- Updated websites
- Performed quality review on circulation services
Impact on library services:
actions taken – library outreach

- Improved marketing and revamped library publications
- Opened permanent gallery space
- Expanded cultural events
- Reviewed and recast subject liaison to academic departments
- Implemented one-student/one librarian program
- Greatly increased library involvement in campus recruiting, orientation, and retention efforts
Impact on library services: percent change in affect of service adequacy means, 2004-2006, by user group

- Employees who instill confidence in users
- Giving users individual attention
- Employees who are consistently courteous
- Readiness to respond to users' questions
- Employees who have the knowledge to answer user questions
- Employees who deal with users in a caring fashion
- Employees who understand the needs of their users
- Willingness to help users
- Dependability in handling users' service problems

Chart showing percent change in affect of service adequacy means, 2004-2006, by user group (Faculty, Grad Students, Undergraduates, All users).

- Overall, undergraduates were least dissatisfied with the library’s collections (adequacy mean of -0.37)
- Undergraduates expressed greatest dissatisfaction with book collection (adequacy mean of -1.45)
  - preference for printed books over online e-books
  - expectation that library has class textbooks
- Graduate students expressed greatest dissatisfaction with journal collection (adequacy means of -1.51)
  - overwhelming preference for online journals over printed & bound journals
Impact on collection development:
original perceptions (2004) – faculty

• Overall, faculty were least satisfied of all user groups with the library’s collections (adequacy mean of -0.82)
• Greatest dissatisfaction with journal collection (adequacy means of -2.10)
  – overwhelming preference for online journals over printed & bound journals
Impact on collection development: perceived service levels by user group, 2004
Impact on collection development: adequacy means by user group, 2004

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

Chart showing the adequacy of collection development by user group with bars for Faculty, Grad Students, Undergraduates, and All users.
Impact on collection development: actions taken, monographs

- Evaluation of monograph collection in comparison with peer institutions with respect to age and scope
- Increased book budget
- Re-allocated funds to emphasize undergraduate curriculum
- Increased spending on non-technical subject areas to support liberal education core curriculum
- Increasing number of textbooks on reserve
- Added popular fiction/non-fiction leisure reading collection
- Sought out donations-in-kind more aggressively
Impact on collection development: actions taken, evaluation of monograph collection
Impact on collection development:
actions taken, increased monograph acquisitions

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Withdrawn Volumes</th>
<th>Donated Volumes</th>
<th>Purchased Volumes</th>
<th>Net Volumes Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY01-02</td>
<td>1,056</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY02-03</td>
<td>1,994</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY03-04</td>
<td>1,749</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY04-05</td>
<td></td>
<td>2,163</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY05-06</td>
<td></td>
<td></td>
<td>5,101</td>
<td></td>
</tr>
<tr>
<td>FY06-07</td>
<td></td>
<td></td>
<td></td>
<td>3,675</td>
</tr>
</tbody>
</table>
Impact on collection development: actions taken, serials

- Comprehensive review of library subscriptions
  - converted all Indexing and Abstracting (I&A) services to electronic counterparts
  - converted all scholarly journal subscriptions to on-line only format
- Increased unique title count
  - more publisher bundles
  - more aggregated full-text databases
  - consortial and joint-access offerings
Impact on collection development: actions taken, improved serials holdings

Number of Unique e-journal Titles, 2002-2006

Number of Electronic Databases by Type, 2002-2006

- **Index & Abstract**
- **Journal Collections**
- **I & A with full-text**

- No overall adequacy gap—overall adequacy mean of +0.25
- Undergraduates still least satisfied with the book collection
  - adequacy mean improved from -1.45 to -0.02
- Grads & faculty still least satisfied with the journal collection
  - graduate adequacy mean improved by the greatest amount – from -1.51 to +0.05
  - faculty adequacy mean improved only slightly from -2.10 to -2.00
Impact on collection development: perceived service levels by user group, 2006

Impact on collection development: perceived service levels by user group, 2006
Impact on collection development: adequacy means by user group, 2006

- Making electronic resources accessible from my home or office
- A library Web site enabling me to locate information on my own
- The printed library materials I need for my work
- The electronic information resources I need
- Modern equipment that lets me easily access needed information
- Easy-to-use access tools that allow me to find things on my own
- Making information easily accessible for independent use
- Print and/or electronic journal collections I require for my work
Improved perceptions & lowered expectations (2006)

• Marketing & outreach initiatives
  – lowered students’ expectations (minimum means)
  – raised perceived service levels

• Changes and improvements
  – raised perceived service level for most users across most dimensions
  – raised expectations of faculty
Impact on collection development:
percent change in information control minimum means, 2004-2006, by user group

Making electronic resources accessible from my home or office

A library Web site enabling me to locate information on my own

The printed library materials I need for my work

The electronic information resources I need

Modern equipment that lets me easily access needed information

Easy-to-use access tools that allow me to find things on my own

Making information easily accessible for independent use

Print and/or electronic journal collections I require for my work

Impact on collection development:
percent change in information control minimum means, 2004-2006, by user group
Impact on collection development:
percent change in information control perceived means, 2004-2006, by user group

- Making electronic resources accessible from my home or office
- A library Web site enabling me to locate information on my own
- The printed library materials I need for my work
- The electronic information resources I need
- Modern equipment that lets me easily access needed information
- Easy-to-use access tools that allow me to find things on my own
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[Bar chart showing percent change by user group]
Improved perceptions (2006)

- User group showing greatest improvement is undergraduates
  - most instruction targets undergrads
- Dimension showing greatest improvement is Library as Place (LP)
  - most visible improvements
Impact on collection development:
percent change in information control adequacy means, 2004-2006, by user group

- Making electronic resources accessible from my home or office
- A library Web site enabling me to locate information on my own
- The printed library materials I need for my work
- The electronic information resources I need
- Modern equipment that lets me easily access needed information
- Easy-to-use access tools that allow me to find things on my own
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Faculty
Grad Students
Undergraduates
All users
Lower expectations + improved perceptions = reduced adequacy gap

- No overall adequacy gap
- All user groups least satisfied with library collections (IC)
  - undergraduates adequacy mean of 0.44
  - graduate adequacy mean of 0.34
  - faculty adequacy mean of -0.93
NCA Accreditation

- New Criteria for accreditation (2000-2004) places emphasis and learning outcomes and assessment
- LibQUAL+™ is increasingly recognized by accreditation teams as the standard for library assessment
Important LibQUAL mapping areas for library in NCA Core Criteria

• Student Learning and Effective Teaching
  (NCA 3c; 3d/ LibQUAL+™ AS; LP)
  – The organization creates effective learning environments.
  – The organization’s learning resources support student learning and effective teaching.

• Acquisition, Discovery, and Application of Knowledge
  (NCA 4d/ LibQUAL+™ IC; AS )
  – The organization provides support to ensure that faculty, students, and staff acquire, discover, and apply knowledge responsibly.

• Engagement and Service (5a)
  – The organization learns from the constituencies it serves and analyzes its capacity to serve their needs and expectations
Overview of results:
comparison of IIT’s results, 2004 vs. 2006

2004

2006
Overview of results:

comparison of IIT’s results with average for all participants for all user groups, 2006
• Questions?