INTRODUCTION
As part of its ongoing efforts to improve its resources and services, USM Libraries, along with the University of Maine System Libraries and 210 other institutions, participated in LibQUAL+ (www.libqual.org) during Spring 2007. LibQUAL+ is an assessment survey developed by the Association of Research Libraries (ARL) which has been used by nearly 1,000 colleges and universities. This web-based survey asked students, faculty and staff to rate their perceptions and expectations of library services, resources, and facilities. The survey consisted of 22 core questions, five “local” questions, and several questions about overall satisfaction, information literacy and library use, as well as a box for open-ended comments. The core questions cover three dimensions:

- Affect of Service (responsiveness, empathy, reliability)
- Access to Information (adequacy of journal collections, print/online materials, etc)
- Library as Place (space for learning, study and research)

Users were asked to rate each question for minimum, desired, and perceived levels of service. For example for the question “Employees who understand the needs of their users,” the respondent could rank the minimally acceptable level as 5, the perceived level as 6 and the desired level of performance as 8. Such a response would indicate that the user believes library employees are performing above the minimally acceptable level, but not up to what the user perceives as the desired level.

The LibQUAL+ survey also requested some demographic data (age, sex, major, status, discipline) which remained anonymous.

It is hoped that the results of this survey would help USM Libraries, and the system, to evaluate library programs and services, identify library strengths and weaknesses, assist in the strategic planning process, and provide for user feedback in all areas.

ADMINISTRATION (METHOD)
The USM survey was conducted from March 5, 2007 through March 24, 2007. The survey was web-based and could be completed online via a URL. The URL could also be found on the library home page. Printed copies of the survey were available for those who did not wish to take the survey online. Survey responses were collected and tabulated by LibQUAL services, but could be monitored online by USM Library LibQUAL liaisons. The survey had the endorsement and support of the Provost, as well as IRB approval.

The Library used several methods to solicit participation in the survey, but the most important method was sending several emails to all USM constituents. The schedule for such emails was:
1. Email of a LibQUAL survey invitation with embedded survey URL to all USM students, staff and faculty (full and part-time), delivered on March 5.
2. Email of a 1st Reminder about the survey to all USM students, staff and faculty (full and part-time), delivered on March 12.
3. Email of a 2nd Reminder about the survey to all USM students, delivered on March 20.

The survey was also promoted through the following methods:
- A link to the survey on the Library Home Page
- Banners and posters distributed to liaisons and placed
around the libraries and campuses
- Bookmarks available at the circulation desks
- "Postcards" available at library public services desks, ITMS and in classes
- Print copies of the survey available at the Circulation desks and Glickman Café
- Pop-ups promoting the survey appeared on student public PC's in the library and computer labs
- Announcements on many USM listservs and on Blackboard
- Announcements at faculty, classified and student senate meetings
- Promotion by librarians in classes and in one-on-one meetings
- Offering of incentives through a random drawing at the close of the survey

A local LibQUAL+ committee composed of Susie Bock, Casandra Fitzherbert, Maureen Perry and Lanny Lumbert worked diligently on organizing, promoting and evaluating results of this survey. Assistance was gratefully received from Michelle Dustin, Jenifer Hughes and all the staff of the USM Libraries and ITMS.

RESULTS
Emails were sent to approximately 11,138 individuals. 1,735 responses were received, however of those only 1,652 (14.8%) were considered complete and valid responses. A 15% return rate is about average and considered acceptable.

Respondents by user group: 1,652 total

<table>
<thead>
<tr>
<th>GROUP</th>
<th>TOTAL RESPONSES</th>
<th>RESPONSE RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>980</td>
<td>59.32%</td>
</tr>
<tr>
<td>Graduate</td>
<td>358</td>
<td>21.67%</td>
</tr>
<tr>
<td>Faculty</td>
<td>155</td>
<td>9.38%</td>
</tr>
<tr>
<td>Staff</td>
<td>128</td>
<td>7.75%</td>
</tr>
<tr>
<td>Library Staff</td>
<td>31</td>
<td>1.88%</td>
</tr>
</tbody>
</table>

Respondents by discipline: 1,493 total

<table>
<thead>
<tr>
<th>DISCIPLINE</th>
<th>TOTAL RESPONSES</th>
<th>RESPONSE RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>American and New England Studies</td>
<td>19</td>
<td>1.27%</td>
</tr>
<tr>
<td>Applied Sciences, Engineering and Technology</td>
<td>88</td>
<td>5.89%</td>
</tr>
<tr>
<td>Business</td>
<td>129</td>
<td>8.64%</td>
</tr>
<tr>
<td>Education and Human Development</td>
<td>134</td>
<td>8.98%</td>
</tr>
<tr>
<td>Humanities</td>
<td>177</td>
<td>11.86%</td>
</tr>
<tr>
<td>Nursing and Health Professions</td>
<td>109</td>
<td>7.30%</td>
</tr>
<tr>
<td>Other, LAC programs, Women's Studies</td>
<td>233</td>
<td>15.61%</td>
</tr>
<tr>
<td>Performing and Fine Arts</td>
<td>93</td>
<td>6.23%</td>
</tr>
<tr>
<td>Public Policy</td>
<td>52</td>
<td>3.48%</td>
</tr>
<tr>
<td>Sciences and Mathematics</td>
<td>118</td>
<td>7.90%</td>
</tr>
<tr>
<td>Social Sciences and Psychology</td>
<td>279</td>
<td>18.69%</td>
</tr>
<tr>
<td>Undecided</td>
<td>62</td>
<td>4.19%</td>
</tr>
</tbody>
</table>

RESPONDENT COMMENTS
In addition to collecting quantitative data, the LibQUAL+ survey allowed for respondents to submit open-ended comments about their experience with the library. Of the 1,652 completed surveys, 696 comments were received. Analyzing the comments proved to be an interesting exercise, but the information gleaned from these comments provides for some of the most specific and valuable data gathered from the survey.
<table>
<thead>
<tr>
<th>COMMENTS</th>
<th>GLICKMAN</th>
<th>GORHAM</th>
<th>LAC</th>
<th>ITMS</th>
<th>NONE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACULTY</td>
<td>54</td>
<td>22</td>
<td>10</td>
<td>2</td>
<td>1</td>
<td>89</td>
</tr>
<tr>
<td>GRAD</td>
<td>106</td>
<td>21</td>
<td>21</td>
<td>2</td>
<td>10</td>
<td>160</td>
</tr>
<tr>
<td>UGRAD</td>
<td>231</td>
<td>93</td>
<td>46</td>
<td>2</td>
<td>5</td>
<td>377</td>
</tr>
<tr>
<td>STAFF</td>
<td>41</td>
<td>14</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>57</td>
</tr>
<tr>
<td>LIB STAFF</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>TOTAL</td>
<td>439</td>
<td>154</td>
<td>81</td>
<td>6</td>
<td>16</td>
<td>696</td>
</tr>
</tbody>
</table>

In general the comments centered on the following suggestions:
- Extend the Library hours
- Create more individual and group study spaces
- Provide more electronic resources and easy access to such resources
- Enhance facilities, particularly the Gorham Library
- There were also many positive comments about library and ITMS staff and services.

**MEASURES**

**22 CORE QUESTIONS**
As previously noted; the LibQUAL survey measures three service dimensions: Affect of Service, Information Control and Library as Place. The library users’ views of these services are rated on a scale of 1-9, from minimum to desired, along with a rating of the users’ perception of current service. A way to conceptualize the responses is to look at “zones of tolerance” – the range that falls between minimally acceptable and desired levels of service. While the library should strive to meet the desired level, most responses fall into this level of tolerance. It is when the library falls below the minimally acceptable level of service that notice should be taken.

The following chart shows that for these three categories, and considering all USM user groups, the ratings are within this zone of tolerance. The Library more than met our users’ minimum expectations, although there is room for improvement in all areas to meet the desired level of service.

The top three desired services (top priorities), the top three areas in which respondents perceived that the library was best meeting their needs (strengths), and the top three areas with the largest gap between desired and perceived levels of service (weakness) for all user groups are highlighted in the charts below.
Affect of Service

Affect of Service measured qualities library users expected from staff. Overall, the Library scored well in this dimension. The perceived level of service was well above the minimum acceptable level and the closest to the desired level of all service dimensions. With few exceptions, all user groups, spanning all disciplines, rated this area as one of the Libraries strengths. Undergraduates were the most satisfied with the level of service received. They were followed by Graduate students, Staff and finally Faculty. Because of the strength of the library in this dimension, no user groups (with the exception of library staff) included this area in their top priorities. We may assume that the library is already providing competent service. It should be noted that of these four groups Faculty had the highest expectations of service. Library staff, interestingly, while rating this dimension as a library strength, also rated it as a top priority. This means that library staff are focusing on an area as priority, that other user groups do not identify as such a high priority and feel they are already being served well in this area.

The two highest scores for all user groups (excluding library staff) were for “Employees who instill confidence in users” and “Giving users individual attention”. The two lowest scores for the same user groups were “Employees who have the knowledge to answer user questions” and “Dependability in handling users’ service problems”.

In the local questions, “Teaching how to locate, evaluate and use information” was rated the top strength among all users (except library staff).

192 comments were related to library service and staff. The responses were overwhelmingly positive, reinforcing a high regard for library staff and service. Criticism was generally related to the lack of training and knowledge of student workers, or when staff were not present or inattentive to users.

**Library as Place**

Library as place, overall, closely followed Affect of Service in terms of library strength. All user groups rated the library as above minimum acceptable levels. Overall, “Community space for group learning and group study” and “A getaway for study, learning, or research” were rated highest in terms of strength. Lowest ratings were for “A comfortable and inviting location” and for “Library space that inspires study and learning”. However, with three physical libraries, there was a wider array of responses depending upon which library the respondent identified with most closely.

One local question “Adequate hours of service” is closely related to this dimension and was rated third out of the five local questions in terms of library strength.

150 comments were received about “Library as Place” and another 56 comments were received regarding library hours. Of the 150 comments, 56 were specifically about individual or group study spaces. In broad strokes, faculty like the Portland and LAC Libraries (except for the distance of Glickman Library in Portland from the rest of the campus) and feel that Gorham needs improvement. (It should be noted that this survey was conducted before implementation of the Commons @ Gorham Library.) Graduate students in general like Glickman and LAC Libraries, but were also more critical of the Gorham Library. They cited the need, particularly in Gorham, for more individual and group study spaces. Undergraduates were kinder in their comments about the Gorham library, but also cited a need for more study spaces. In general, undergraduates also liked the Glickman and LAC Libraries.

All three user groups commented on the need for expanded library hours, particularly on weekends and during academic breaks. Also related to this dimension were a fair amount of negative comments related to noise and the use of cell phones in the libraries.
Information Control

Information control did not fare as well with users. Of the three dimensions it had the highest ratings for desired level or priority, but lowest in the perceived level of service provided, and with two user groups, Faculty and Library staff, fell below the minimum level of acceptable service.

For all users (except library staff) the strongest areas in this dimension are “modern equipment that lets one easily access needed information” and “making information easily accessible for independent use”. The weakest areas are “print and/or electronic journal collections required for work” and “making electronic resources accessible from home or office”.

The difference in perceptions among the user groups is more dramatic in this dimension. For all Faculty, the library fell below the minimum acceptable level of service in this group for all but two areas. Overall, Faculty primary concerns included a lack of “print and/or electronic journal collections” and “printed library materials” needed for their work. The two exceptions where Faculty view the library as performing above minimal acceptable levels, (although just barely), are “a library website enabling me to locate information on my own” and “easy to use access tools that allow me to find things on my own”. When disciplines are evaluated Faculty in Public Policy, Education, Performing and Fine Arts and the Sciences and Mathematics strongly rated the area of information control as below minimum. Other disciplines were more charitable.

269 comments were received that related to Information Control. Most reflected dismay with the libraries online resources, particularly online journals. Interestingly, there were several comments wondering why the library did not have online packages such as Project Muse – which the library does subscribe to and has provided access well before this survey. While the majority of comments focused on obtaining more online materials or expanded access to such materials, a fair amount of comments also were about the library’s monograph collection. Most were negative here as well, commenting that collections were limited and outdated. Interlibrary Loan service received praise for timely and invaluable service in obtaining materials that USM does not own.

Additional comments were received regarding desire for better a library website and for easier, faster access to online materials from classrooms, offices, off-campus and home.
LIBRARY USE
One of the sections on the survey pertained to Library use, both on the premises and electronically, as well as use of non-library information gateways such as Yahoo™ and Google™. The three questions were:
- How often do use resources on library premises?
- How often do you access library resources through a library Web page?
- How often do you use Yahoo™, Google™, or non-library gateways for information

The following charts depict responses for all groups, except Library Staff.

It is readily apparent that access and use of the library has shifted from onsite to online, primarily via gateways. There is little difference among disciplines in how the library is used.

LOCAL QUESTIONS
Five additional “local” questions, specific to University of Maine System libraries, were asked in the survey. These were:
- Comprehensive collection of full-text articles online
- Teaching me how to locate, evaluate, and use information
- Timely document delivery / interlibrary loan
- Adequate hours of service
- URSUS, the online catalog, is user friendly for finding books

Of these questions, and for all user groups (except library staff), the top priority was for URSUS to be a user friendly online catalog, followed closely by the desire for a comprehensive collection of full-text articles online. USM users felt the library was strongest in teaching one how to locate, evaluate, and use information and weakest in the comprehensive collection of full-text online articles.
INFORMATION LITERACY AND GENERAL SATISFACTION QUESTIONS
Respondents were also asked to rate on a scale from 1-9 with 1 being “strongly disagree” and 9 being “strongly agree” on questions related to information literacy outcomes and general user satisfaction of library services. The mean ratings scores for the various user groups can be seen in the chart below.

<table>
<thead>
<tr>
<th>Question</th>
<th>ALL (except lib staff)</th>
<th>FAC</th>
<th>GRAD</th>
<th>UGRAD</th>
<th>STAFF</th>
<th>LIB STAFF</th>
</tr>
</thead>
<tbody>
<tr>
<td>IL: The library helps me stay abreast of developments in my field(s) of interest</td>
<td>5.94</td>
<td>5.73</td>
<td>5.77</td>
<td>6.06</td>
<td>5.76</td>
<td>6.52</td>
</tr>
<tr>
<td>IL: The library aids my advancement in my academic discipline</td>
<td>6.62</td>
<td>6.15</td>
<td>6.74</td>
<td>6.71</td>
<td>6.02</td>
<td>7.23</td>
</tr>
<tr>
<td>IL: The library enables me to be more efficient in my academic pursuits</td>
<td>6.82</td>
<td>6.44</td>
<td>6.84</td>
<td>6.93</td>
<td>6.03</td>
<td>7.1</td>
</tr>
<tr>
<td>IL: The library helps me distinguish between trustworthy &amp; untrustworthy information</td>
<td>6.23</td>
<td>5.68</td>
<td>5.81</td>
<td>6.46</td>
<td>6.32</td>
<td>6.97</td>
</tr>
<tr>
<td>IL: The library provides me with the information skills I need in my work or study</td>
<td>6.43</td>
<td>5.91</td>
<td>6.21</td>
<td>6.61</td>
<td>6.32</td>
<td>7</td>
</tr>
<tr>
<td>S: Rate the overall quality of the service provided by the library (Scale 1-9)</td>
<td>7.31</td>
<td>7.32</td>
<td>7.18</td>
<td>7.37</td>
<td>7.27</td>
<td>7.55</td>
</tr>
</tbody>
</table>

COMPARISONS
A distinct advantage of the LibQUAL+ survey is the opportunity for all participants to compare data results across institutions or peer-groups. It is recommended that USM compare results with the other UMS campuses and with other peer institutions. Below are charts that compare USM responses to all the Colleges and Universities that participated in the 2007 spring survey.

From these charts it is apparent that USM does not stray far from the norm.

SUMMARY
Library Strengths:
- Employees who instill confidence in users
- Giving users individual attention
- Employees who deal with users in a caring fashion

Library Weaknesses:
- Print and/or electronic journal collections I require for my work
- Making electronic resources I need accessible from my home or office
- The electronic information resources I need

Top Priorities:
- Making electronic resources I need accessible from my home or office
- A library website enabling me to locate information on my own
- Modern equipment that lets me easily access needed information
LIBRARY RESPONSES
The Libraries have already taken steps to address some of the areas identified for improvement in both survey responses and comments.

- Evening and weekend library hours have been extended in Portland and Gorham and during finals at LAC
- The Commons@ Gorham Library has been implemented
- Creation of a Commons@ LAC Library is currently underway
- New group study rooms have been added in the Gorham Library
- Science Direct has been purchased, adding another 1,800 science journals to our holdings
- A Library Web committee is currently reviewing the Library website for changes and improvements
- Special Collections has added significant new content to their webpage
- Article Linker has been fine-tuned to clarify access to online resources
- A document delivery service to USM patrons for USM owned items is being established.

There is more that the Libraries can and should do as a result of this survey. Active marketing and promotion of the services and collections we do have would address many of the concerns revealed through this survey. The creation of focus groups as a means of clarifying and expanding user survey responses could provide the building blocks for improving user services. Peer comparisons of results of the UMS campuses and national institutions should be undertaken. The Library plans additional analysis of this survey information which will help in strategic planning, identifying issues needing further assessment, and highlighting areas for further improvement.

FINAL COMMENTS
LibQUAL+ is one tool of many that libraries can use for assessment. It is unique in that it provides the library with data based on user perceptions of library quality. While, we may have information regarding services and service decisions that our users may not be aware of, it is important that we continue to listen to our users and be transparent in our communications about our services and resources. Our challenge will be to have on-going assessments, and continue to acknowledge and address user perceptions and identifying ways to increase user satisfaction.