

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

### Introduction

Texas A&M University is a research extensive university in Texas, one of two major, public flagship institutions. A comprehensive university today, its historical strengths are in engineering, science and health. In the fall of 2008, there were over 48,000 students enrolled and the faculty numbered over 2400.

The Libraries is a member of the Association of Research Libraries (ARL) and ranked 26<sup>th</sup> from a cohort of 123 in 2007. With an annual budget of \$34,000,000, the Libraries house four million volumes. The strongest collections are in engineering, science, and veterinary medicine. The institution is 2<sup>nd</sup> in the United States in terms of electronic serial and journal holdings. The Cushing Library is home to many valuable rare and special collections including the Mexican Colonial Era Collection, Southwestern Printing Arts, the Enlightenment French Collection, Entomology and specific authors, e.g., Cervantes and John Donne.

Since 1999, the Libraries at Texas A&M have used the LibQUAL+® survey to assess programs, collections and services. As the major partner with ARL in the development of the protocol, we use the LibQUAL+® theory of service quality as the framework from which to assess the success of the Libraries from three dimensions: affect of service, information control and library as place.

In an age of accountability for higher education worldwide, there is a growing need for effective means of longitudinal assessment useful in local contexts as well as cross-institutional comparisons for institutions of higher learning and their libraries. Stakeholders, including students, parents, taxpayers and the public at large all have an interest in society's libraries that become more expensive to operate each year, particularly in the face of purportedly free access to information through the internet.

### LibQUAL+®

In 1999 as a part of the ARL New Measures Initiative, researchers at Texas A&M University and the Association of Research Libraries embarked on a pilot study to reground SERVQUAL, the premier total market survey for assessing service quality in the commercial sector, for the research library environment. With funding from national agencies in the United States, the LibQUAL+® survey instrument was developed and a program at ARL inaugurated to run the web-based survey on an annual basis. From a modest beginning with 13 ARL libraries in 2001, the survey has now been taken by 1.2 million respondents from 1200 libraries in 19 language versions throughout the world.

In its final version LibQUAL+® consists of 22 questions and a free text comment box. A set of demographic questions, a set of satisfaction questions, and five outcomes questions are also included. The survey measures three dimensions of library service quality: affect of service, the emotive aspects of service provision, information control, the scope of content and means of access to content, and library as place, the physical characteristics of library spaces. Respondents answer each of the 22 questions on a nine point scale from three perspectives: the minimum level of service, the perceived, current level of service, and the desired level of service. Perceived scores most often fall somewhere in a continuum anchored by a minimum level of

service at the low end and a desired level of service at the high end. The spectrum of opinion is called the “Zone of Tolerance,” a term borrowed from LibQUAL+<sup>®</sup>’s progenitor, SERVQUAL.

### LibQUAL+<sup>®</sup> at Texas A&M University Libraries

LibQUAL+<sup>®</sup> has been run each year since 2000 at Texas A&M University. The survey has provided direction for local management decisions and for monitoring progress on those directions longitudinally across time. We have also used the survey to benchmark against peers, particularly the ARL cohort. With nearly a decade of LibQUAL+<sup>®</sup> data, trends are emerging that are particularly useful. A few highlights of this trend data will be discussed below by dimension and within dimension by user group.

#### Affect of Service

Figure 1 shows trends for graduate student responses to the Affect of Service question, “Employees who instill confidence in users.” In terms of minimum expectations, A&M’s trend line is declining, while ARL’s is rising. The A&M trend line for desired expectations is fairly high, 7.6 on a 9.0 scale in 2008 and follows the ARL trend line nearly exactly. While Texas A&M is exceeding ARL perception scores generally, the ARL cohort is improving more rapidly than A&M.

Figure 2 indicates that undergraduates consistently scored the Affect of Service question, “Giving users individual attention,” consistently low in terms of desired and minimum expectations, effectively shifting the Zone of Tolerance down the graph. While the ARL cohort trend lines for desired, perceived and minimum expectations are rising, A&M’s are declining. Undergraduate responses are notably lower for this question than for faculty and graduate students for both ARL generally and Texas A&M. We speculate that undergraduates at ARL institutions, and particularly at Texas A&M with historical strengths in technology and science and large enrollments in engineering, want to be self-sufficient navigators of the information universe and do not particularly need nor want help in doing so.

The Affect of Service question, “Employees who are consistently courteous,” is an issue of high salience for graduate students as indicated by high scores in both desired and minimum expectations on Figure 3. Relatively speaking the Zone of Tolerance bar ranging from 6.5 to 8.0 is high on the graph. Perceptions of courteous service at Texas A&M are generally higher than those at other ARL institutions.

The trend lines for Undergraduate responses to the questions, “Readiness to respond to users’ questions” and “Employees who understand the needs of their users” are shown on Figures 4 and 5 respectively. Desired expectations for both are declining somewhat over time among the ARL cohort. While the Texas A&M perception averages were lower in 2001 than the ARL cohort generally, trend lines indicate upward slopes that have surpassed ARL averages over time.

#### Steps taken to Improve Affect of Service Scores

In order to improve LibQUAL+<sup>®</sup> scores in the Affect of Service dimension focus groups were held to understand better what interventions users wanted in order to improve their ratings of library services. In particular, users desired increased hours of library services. As a result of suggestions from LibQUAL+<sup>®</sup>, the West Campus Library was opened 24 x 5 days a week, and

later these service hours were also implemented in the Library Annex. Hours were also expanded in the Cushing Library and the Medical Sciences Library. As a result the A&M Libraries currently rank 3<sup>rd</sup> in their designated aspirational peer group in terms of hours of operation. Liaison services to colleges were enhanced and in some instances office hours for librarians were established in departments. Virtual reference services were expanded and use of virtual services has increased substantially over time. Additional staff was added to the popular DeliverEdocs service through which users can request articles online if e-versions are not readily available. If owned in print, the journal articles are scanned and delivered through email. If not owned by the library either in print or licensed in digital form, the article is requested through Interlibrary Loan (ILS) and delivered electronically to the user.

### Information Control

Figure 6 for the faculty response to the question, “Making electronic resources accessible from my home or office,” indicates that while A&M’s perception scores were once below minimum expectations, they are now moving into the Zone of Tolerance, unlike the ARL cohort generally in which perceptions still fall below minimum expectations. Faculty responses for the question, “The printed materials I need for my work,” are indicated in Figure 7. There is a notable distinction between responses for Liberal Arts/Social Sciences faculty (2005, 2007) and Science/Engineering faculty (2006, 2008). While Science/Engineering perceptions scores are within the Zone of Tolerance, those for Liberal Arts/Social Sciences are still below minimum expectations. The fact that Liberal Arts/Social Sciences faculty has considerably higher desired scores for print resources is noteworthy and could be an indication that print resources remain more important for humanists and social scientists than for scientists and engineers. The trend for ARL generally is downward over time for perceived scores although minimum expectations are rising.

Faculty response to the Information Control question, “Making information easily accessible for independent use,” in Figure 8 indicates that the question has high salience for the user group. Self-sufficiency is recognized as highly desirable as indicated by the desired ratings over time of over 8.3 for ARL and A&M groups since 2001. At Texas A&M there is an upward trend in perceptions scores over time and across discipline categories, while the ARL is relatively stable over time. Results in Figure 9, also an Information Control question, “Print and/or electronic journal collections I require for my work,” show that both Science and Engineering and Liberal Arts and Social Sciences faculty perceptions are not within the Zone of Tolerance. The Liberal Arts faculty score this question lower than their Science and Engineering colleagues, not surprising given the historical strengths of the institution. The upward trend in perception scores is noteworthy. Faculty users are recognizing the investments made in the journal collections over time.

### Steps Taken to Improve Information Control Scores

The LibQUAL+<sup>®</sup> Information Control dimension includes questions that address both content scope and ease of access. LibQUAL+<sup>®</sup> results guided collection development decisions at Texas A&M University over the past decade. Digital format is preferred over any other. Efforts have been made to enlarge serial holdings, and to make access to them convenient

through state of the art websites. The overall size of the collection has grown by 33% in five years, from 3 to 4 million volumes of which 25% are electronic titles. Twice within the past ten years, the Libraries' websites have been redone. To test the usability of the websites, ongoing analyses are undertaken. Because the reputation of individual research libraries today is evermore dependent upon the *differences* in collections as manifested in rare and special collections, rather than similarities in current imprint and journal holdings, a concerted effort has been made in special collections acquisitions. Collections of distinction have been added in Entomology, Colonial Mexico, a French Enlightenment collection and many others. Figure 10 shows how the budget for print serials has dropped while that for electronic serials has risen substantially over the past decade. The monographic budget has continued to grow at an increased pace as well.

### Library as Place

The third LibQUAL+<sup>®</sup> dimension, Library as Place, addresses the user desires for convenient and inviting physical surroundings while working. Generally speaking this dimension receives lower overall desired scores than the other two dimensions. Nonetheless, Library as Place is fundamental to library service quality from a user-centric perspective. Again, Texas A&M data can be used to show how LibQUAL+<sup>®</sup> scores have changed over the past decade and how this information has been used to drive management decisions. Figure 11 shows Faculty response to the Library as Place question, "Quiet space for individual activities." Science and Engineering faculty perceptions scores are higher than desired scores, while Liberal Arts and Humanities scores are lower, but still well above the mid line of the Zone of Tolerance. A&M perceptions scores for the question are higher than those for the ARL cohort.

Results for a second Library as Place question, "A getaway for study, learning or research," are higher for graduate students at Texas A&M than ARL as a whole as shown in Figure 12. Figure 13 shows that A&M graduate students' perceptions scores for the question, "Community space for group learning and group study," are substantially higher than ARL. In fact some recent results indicate that perceptions scores are higher than desired scores for these questions, indicating that graduate students at Texas A&M feel that that provisions for group study exceed their desired expectations.

### Steps Taken to Improve Library as Space Scores

Many steps have been taken in listening to users to improve their perceptions of the Texas A&M Libraries in terms of physical spaces and access. Opening hours have been changed significantly in that several libraries are now open 24x5. Libraries now open Sunday mornings as requested by students. Accommodations for different learning spaces are being made. "Ninja" quiet spaces are being created in some areas of the library as well as enclosed group study spaces and quiet open group study facilities. Quiet reading room environments are being created. A Information Commons called U<sub>se</sub>R (pronounced your) Space with flexible furniture, state of the art technology and soft seating is also planned for the coming year.

### Conclusion

LibQUAL+® provides important management information for decision making, especially when considered over time. Trend data from the Texas A&M University Libraries indicate significant changes in user desired, perceived and minimum expectations over the past decade. LibQUAL+® data allows administrators to trace the results of interventions based upon earlier data. Equally as important desired and minimum data provide leadership with information on evolving user expectations for library service.

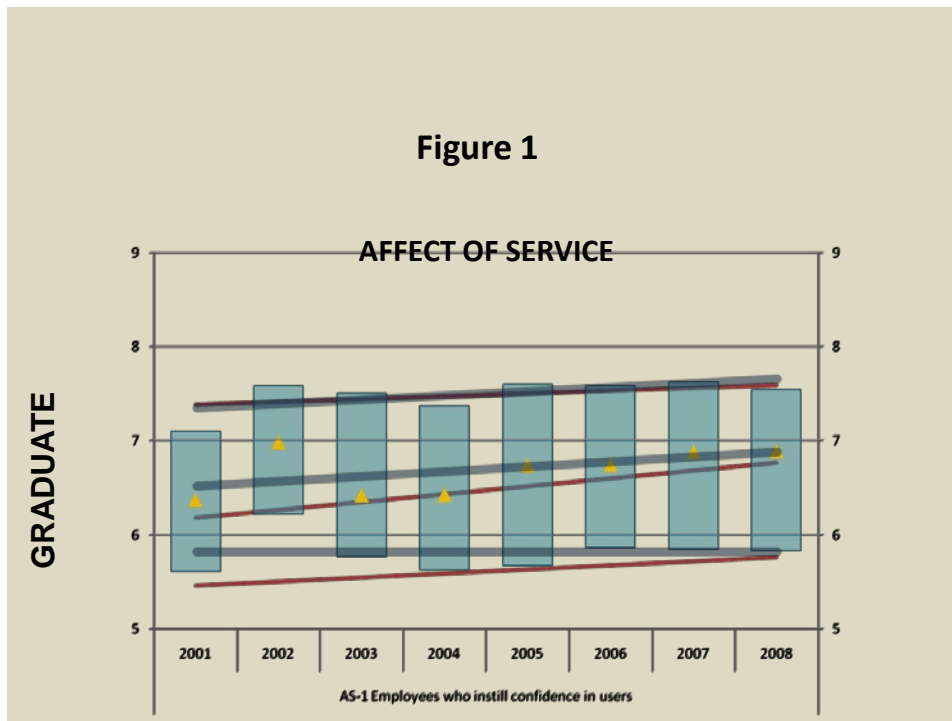


Figure 2

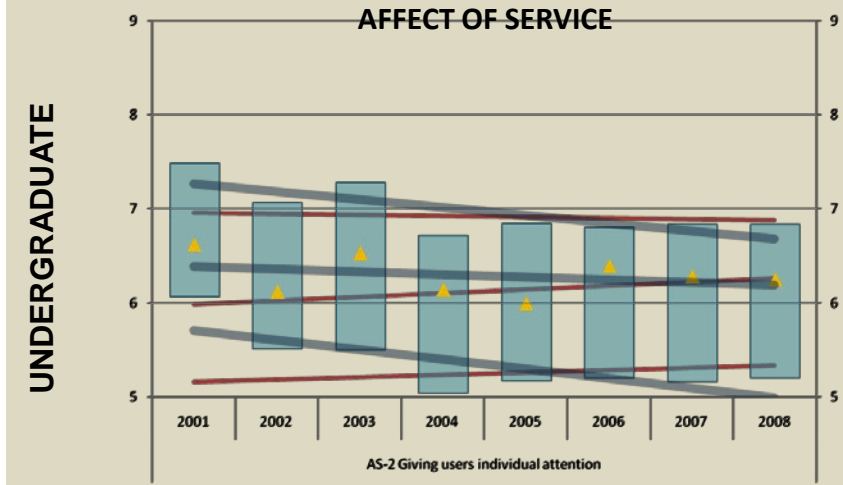


Figure 3

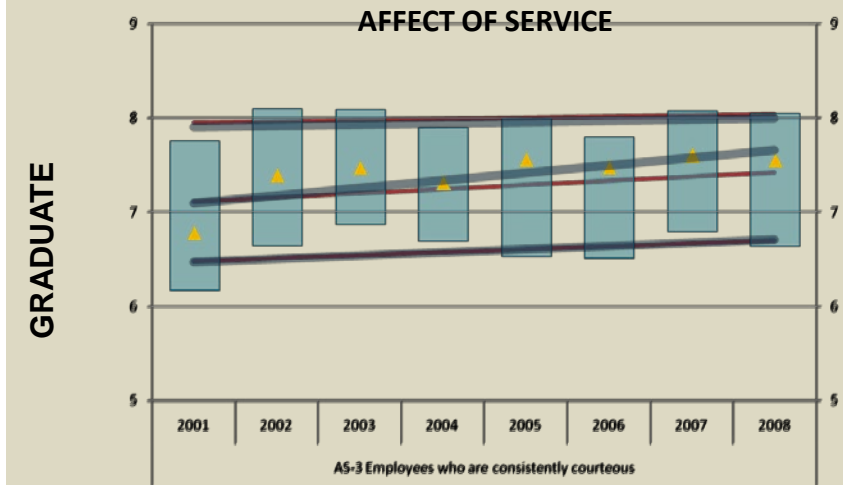


Figure 4

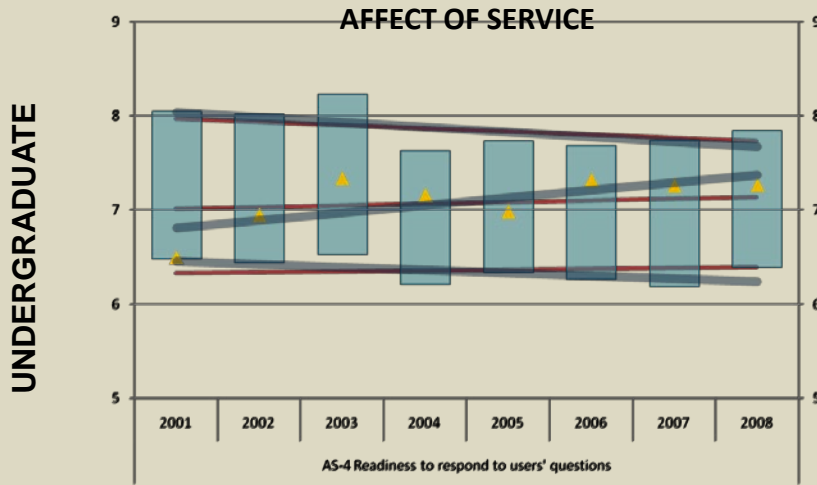


Figure 5

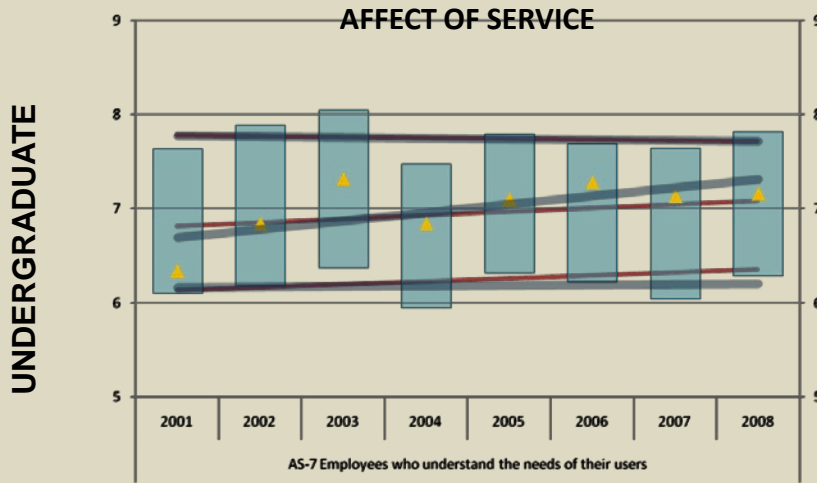


Figure 6

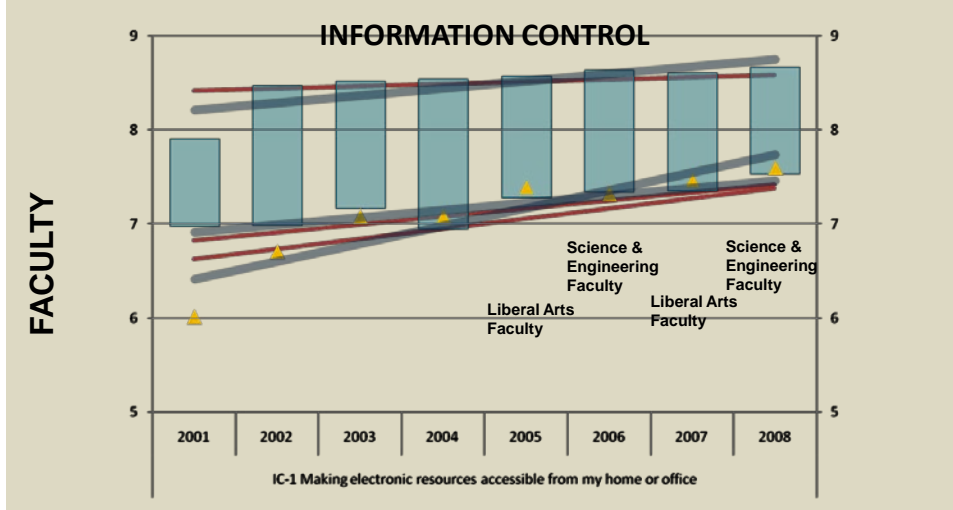


Figure 7

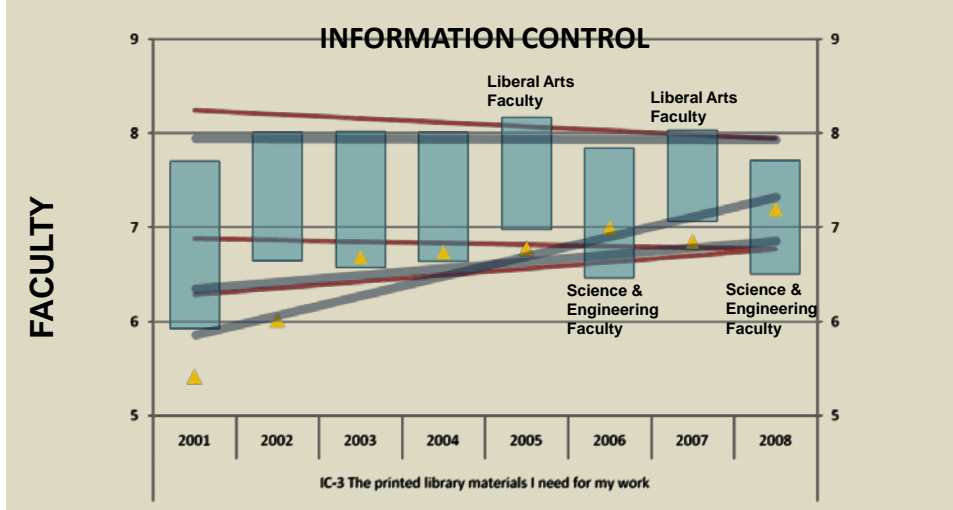




Figure 8

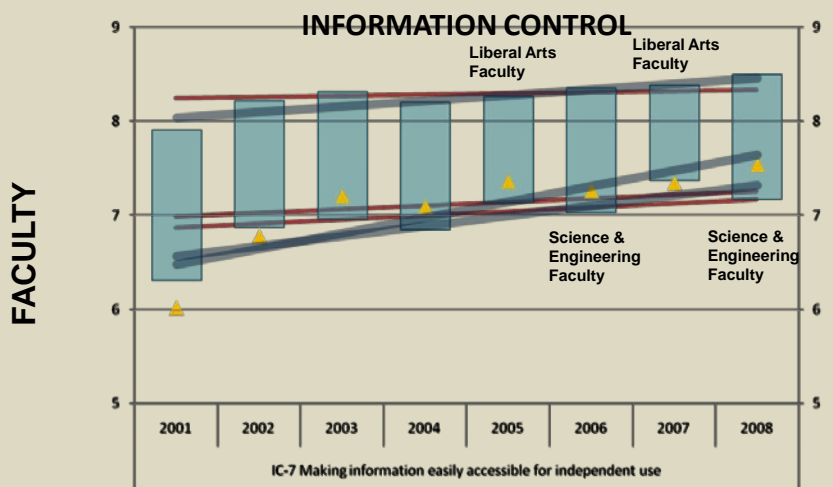


Figure 9

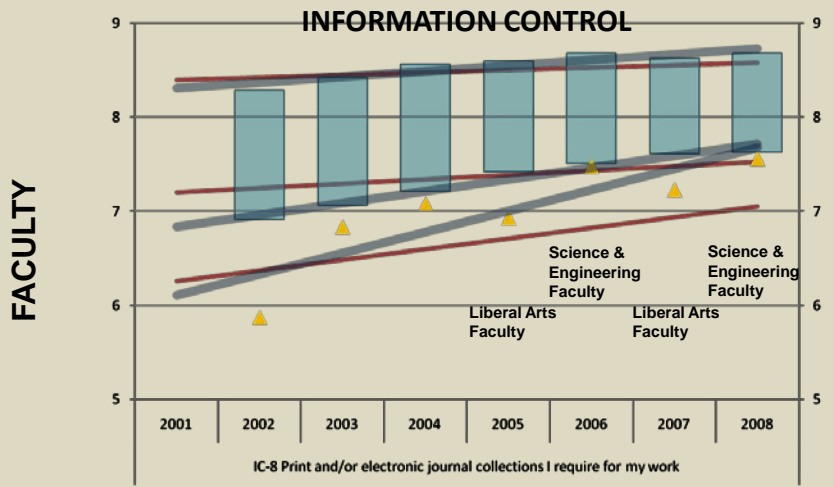


Figure 10

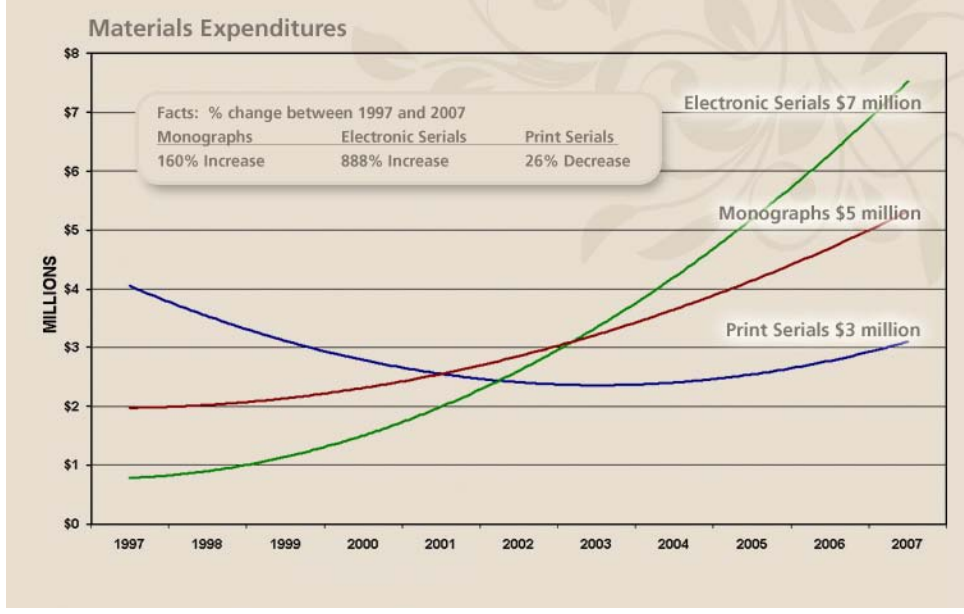


Figure 11

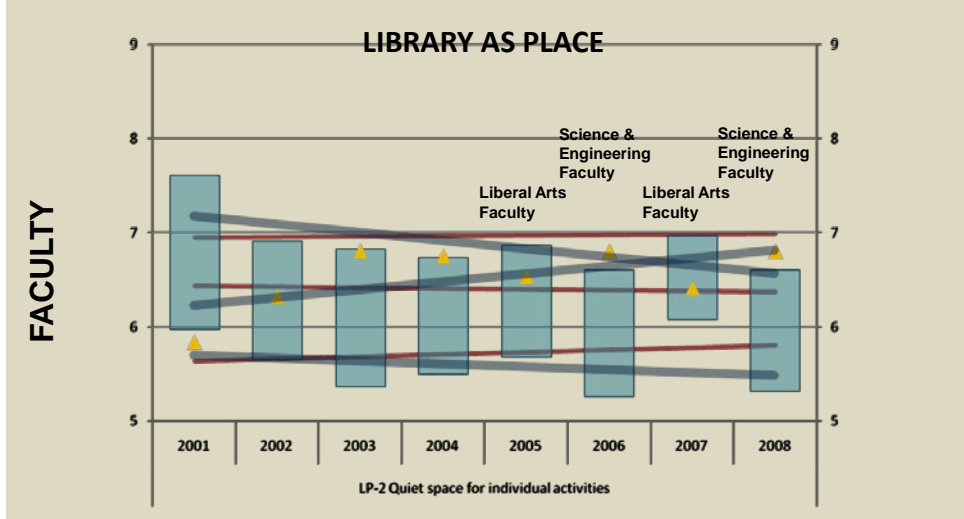


Figure 12

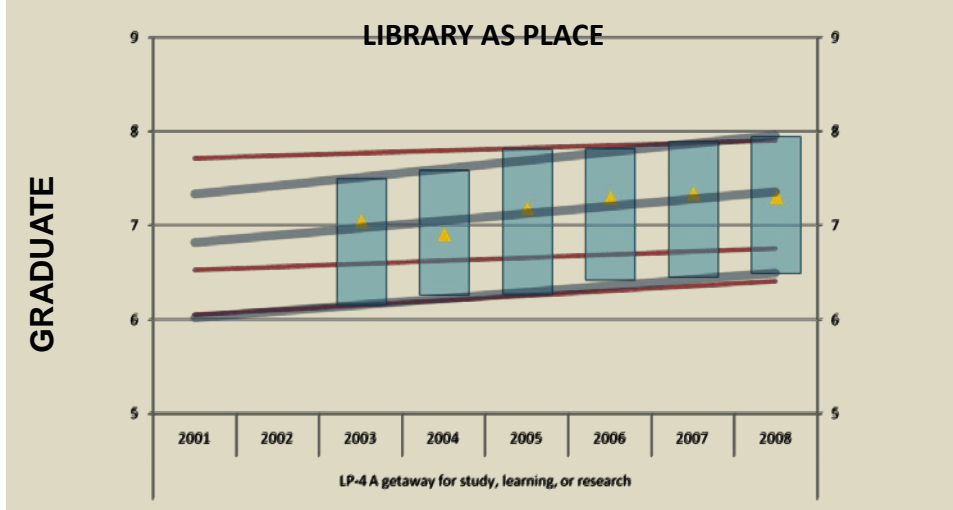


Figure 13

