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Transforming the university library one step at a time: a ten year LibQUAL+ review

Ciara McCaffrey

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Contact
Ciara McCaffrey@ul.ie

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Abstract

University libraries are going through a period of enormous transformation, and have been for some time. This study considers ten years of both incremental and transformational change at the University of Limerick (UL) Library in Ireland. In the last decade library services, staffing, collections and spaces underwent great changes, in line with international trends. Retrospective analysis of LibQUAL+ survey data from 2007 to 2016 was conducted to explore how users responded to these changes and to their gradually transforming library. This study outlines the many changes that occurred in the library over the course of ten years and found that satisfaction levels steadily increased in tandem through a systematic step-by-step approach to driving continuous improvement and managing change. The data tells a compelling story of a library where staffing, services, collections and spaces transformed and where readers’ perceptions of the quality of library services significantly improved.

Introduction

University libraries are going through a period of enormous transformation, and have been for some time. In the last decade changes in services, staffing, collections and spaces have been significant. Changing service models have moved towards self-service, online and independent access to information. Collections have continued the march from print to electronic and from ownership to access, while library spaces have broadened from the traditional to the varied and diverse. This transformation has been driven by technology, economics, society and by changing user needs and expectations. During the same period libraries have strengthened their focus on ensuring quality and continuous improvement, with an increased emphasis on enhancing the experience of the library user. The question must then be asked, in the context of the ongoing transformation, are academic libraries improving, and if so, how can this improvement be measured?
At the University of Limerick (UL) in Ireland, where this study is based, a change programme began in 2006 with a new library director and changing management team. There was a clear change agenda that was driven by innovation, automation, university strategy, international trends and underpinned by quality-based commitment to improving services for library users. This study considers ten years of both incremental and transformational change and explores user survey data from 2007 to 2016 to identify how users responded to these incremental changes and gradually transforming university library.

**Literature Review**

This study is set broadly within the literature on quality frameworks in libraries and specifically within the international body of literature on LibQUAL+ as a quality measurement tool. Stephen Town summarises that “Quality management frameworks place customer focus at the centre of attention, and this may comprise a requirement for customer identification, the achievement of customer satisfaction, and the acquisition of a deeper understanding of customers that allows services such as academic and research libraries to refine existing and develop new offerings” (2016). An overview of the main quality management systems and approaches adopted by academic libraries is provided by Harer (2012). Atkinson and Walton (2017) consider the role of external frameworks in establish quality in university libraries by comparing and contrasting LibQUAL+ and Customer Service Excellence (CSE). At the university where this study is based, the library’s quality processes are aligned with the university’s Quality Management System for Support Divisions. This is a customized framework adapted from recognised management system frameworks such as the Baldridge and European quality awards and the ISO 9000 quality assurance standards. Further descriptions and comparisons of these frameworks can be found in Rao Tummala and Tang (1996). The quality activities at UL Library are particularly aligned with the principles outlined by Deming, which include a strong focus on the customer, a commitment to continuous improvement and a willingness amongst library leadership to take action to accomplish...
transformation. An outline of Deming’s 14-point action plan and how it applies to libraries was provided by Mackey and Mackey in *Library Journal*, 1992.

LibQUAL+ is a key quality assessment tool that fits within the broader area of quality management systems adopted by academic libraries. There is a sizeable body of literature relating to LibQUAL+ since its inception in North America at the turn of the century and the creation and development of the tool are well published by prominent authors, including Cook and Heath (2001), Heath et al (2002), Thompson, Cook and Thompson (2002) and Thompson, Kyrillidou and Cook (2008). The bibliographies in the standard LibQUAL+ notebooks and on the LibQUAL+ website (2017) provide a comprehensive collection of studies which tend to divide into those focusing on the instrument itself, its reliability and validity, and those emanating from institutions that have acted on their LibQUAL+ results. This study is part of the latter group of practice-based applications of the tool and its impact. Early reviews and critiques of LibQUAL+ as a quality assessment tool include those of Tom B. Wall in his exploration of LibQUAL+ as a transformative experience (2002), William B. Edgar on “Questioning LibQUAL+” (2006) and E. Stuart Saunders (2007) in his paper “The LibQUAL+ Phenomenon: Who Judges Quality”. A more recent overview of LibQUAL+ as a quality survey case study, its origins, development, criticisms and strengths is provided by Stephen Town (2016).

Among the many quality frameworks and tools applied in university libraries, LibQUAL presents a rare and unique opportunity to compare quantitative data over time and track a library’s improvement, as measured by user perceptions. Given that LibQUAL+ has been in existence since 2001, there are surprisingly few studies that take a longitudinal approach to the analysis of the survey data. Two other studies look at trends across a ten year period, as this University of Limerick study does. Colleen Cook and Michael Maciel highlighted trend data from Texas A&M as it compared with ARL (Association of Research Libraries) trends from 2001 to 2010. They outlined steps taken to improve user perceptions over the period and found significant changes in users’
desired, perceived and minimum expectations in the decade (2010). An alternative experience was shared by the University of Mississippi in Oxford when they reviewed ten years of quantitative and qualitative LibQUAL+ data from 2001-2010 and found no direct relationship between changes in library policy and changes in adequacy gap scores (Greenwood, Watson and Dennis, 2011). A follow up study which added LibQUAL+ data for a further year again found that user feedback seemed not to reflect sizeable changes in library services (Dennis, Greenwood and Watson, 2013). The Cook and Maciel study and the Mississippi study reported conflicting experiences when exploring links between service improvements and user satisfaction over a decade. This UL study builds on the approaches taken in these two studies and uses similar methodologies to measure the impact of the change programme on user satisfaction at the University of Limerick.

In addition to studies spanning ten year periods, there are a small number of studies that look at changing LibQUAL+ scores across a number of iterations of the survey to identify links between changes and user satisfaction. Killick and Town (2012) compared UK and Irish data from 2004 with 2011 and noted a steady increase in perceptions for Affect of Service and Information Control, with a more erratic increase in Library as Place scores, with perceptions decreasing and increasing in alternate years. At Buffalo State College statistical tests were conducted to investigate the effect of changes, particularly a new information commons model of service, on users’ perceptions between 2003 to 2009. The authors found significantly more positive perceptions across three iterations of the survey and particularly with undergraduates after the development of the Information Commons (Harvey and Lindstrom, 2013).

A small number of studies look at changes at an individual question level across a number of years. These include investigations into faculty perceptions of IC-8 print and/or electronic journals I require for my work (Rutner and Self, 2013) and of IC-2 a library website enabling me to locate information on my own (Nicol and English, 2012). Scores for LP-2 quiet space for individual work were analysed
by the University of Limerick to measure the impact on library users of noise management interventions implemented from 2007 to 2014 and found that reader perceptions of the provision of quiet space greatly improved in the period and that continuous effort focused on the specific issue of noise management had a measurable impact on user perceptions as measured by LibQUAL+ (McCaffrey and Breen, 2016).

Methodology

The University of Limerick LibQUAL+ survey data form the basis of this study. The survey was run for the first time in 2007 and provided a baseline for comparison against subsequent surveys, which took place in 2009, 2012, 2014 and 2016. A total of 9,388 surveys form the sample in this study.

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2009</th>
<th>2012</th>
<th>2014</th>
<th>2016</th>
<th>Total</th>
<th>% of Total</th>
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</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>715</td>
<td>1,221</td>
<td>1,687</td>
<td>1,780</td>
<td>1,904</td>
<td>7,307</td>
<td>78%</td>
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<tr>
<td>Postgraduate</td>
<td>217</td>
<td>247</td>
<td>308</td>
<td>420</td>
<td>387</td>
<td>1,579</td>
<td>17%</td>
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<tr>
<td>Faculty</td>
<td>103</td>
<td>91</td>
<td>105</td>
<td>112</td>
<td>91</td>
<td>502</td>
<td>5%</td>
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<tr>
<td>Overall</td>
<td>1,035</td>
<td>1,559</td>
<td>2,100</td>
<td>2,312</td>
<td>2,382</td>
<td>9,388</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Total surveys completed 2007 to 2016

Table 1 shows the survey population breakdown by year and user group. The response rate to the survey grew each time the survey was run and response rates were deemed to be representative of each user population for all surveys. A high percentage of total responses were from the undergraduate population, which is reflective of the student population at UL, which in 2016 comprised of 14,000 undergraduates and 2,000 postgraduates.

The LibQUAL+ survey has been used by thousands of libraries worldwide and is provided by the Association of Research Libraries (ARL) in the United States. The online tool consists of 22 core
questions which measure user perceptions in three areas – Affect of Service (AS) which relates to staffing and customer service, Information Control (IC) which relates to library collections and how they are accessed, and Library as Place (LP) which relates to space and the library building. There are additional questions relating to information literacy, library use and general satisfaction, plus a free text box where respondents comment on where they feel the library can improve. For each of the core questions, users indicate their minimum service level, desired service level and perceived service performance, each on a scale of 1 to 9. When the results are produced an adequacy mean score is generated. Sometimes referred to as the service adequacy gap score, this measure is calculated by subtracting the minimum service score from the perceived service score and is a reflection of how well the library is meeting its users’ minimum requirements. A negative adequacy mean is an indication that users’ minimum requirements are not being met and suggests user dissatisfaction. For the purposes of this study and many studies mentioned herein, *improvement* is determined by increases in the adequacy mean scores. Perceived scores and the general satisfaction questions are also indicators of improvement in user perceptions and are presented in this study to support the conclusions and to manage the potential for bias in interpretation.

Retrospective analysis of survey data from five surveys over a ten-year period was conducted to explore how changes and improvements in library services over the decade impacted on user perceptions. This approach is similar to those taken by the other two studies that looked at trends across a ten year period (Cook & Maciel, 2010; Greenwood, Watson & Dennis, 2011). In this UL study, means were compared between surveys and across the five surveys, to explore whether user perceptions changed as improvements to services and policies were implemented. The institution’s raw data from five surveys was downloaded from the LibQUAL+ data repository site and analysed in SPSS, with descriptive statistics extracted to identify trends and patterns in user satisfaction across the five surveys. Libraries wishing to investigate if their customer satisfaction has improved over
multiple surveys can do this in a less complex way by downloading their summary survey data from the analytics section of the LibQUAL+ website.

In this study scores in the three dimensions of Affect of Service, Information Control and Library as Place were analysed to identify trends and patterns in user perceptions, as they compared with changes made in staffing, services, collections and space over the decade. Trends in overall scores were identified, as were trends for undergraduates, postgraduates and faculty. To provide greater context to the UL data, the overall scores were extracted from the SCONUL (Society of College, National and University Libraries) annual consortium notebooks for the same survey years and compared with those of UL, to benchmark UL’s user perceptions with trends in the UK and Ireland.
Results

Figure 1. Trends in overall adequacy mean and overall perceived mean.

A linear upward trend in user satisfaction scores over the decade is visible in figure 1, as measured by the overall adequacy and perceived means across the period, presented in table 2.

<table>
<thead>
<tr>
<th>Year</th>
<th>n</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<tbody>
<tr>
<td>2007</td>
<td>1035</td>
<td>0.04</td>
<td>1.62</td>
</tr>
<tr>
<td>2009</td>
<td>1559</td>
<td>0.20</td>
<td>1.45</td>
</tr>
<tr>
<td>2012</td>
<td>2100</td>
<td>0.30</td>
<td>1.46</td>
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<tr>
<td>2014</td>
<td>2312</td>
<td>0.39</td>
<td>1.45</td>
</tr>
<tr>
<td>2016</td>
<td>2382</td>
<td>0.52</td>
<td>1.41</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>n</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
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<tr>
<td>2007</td>
<td>1035</td>
<td>6.49</td>
<td>1.21</td>
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<tr>
<td>2009</td>
<td>1559</td>
<td>6.63</td>
<td>1.14</td>
</tr>
<tr>
<td>2012</td>
<td>2100</td>
<td>6.70</td>
<td>1.21</td>
</tr>
<tr>
<td>2014</td>
<td>2312</td>
<td>6.72</td>
<td>1.22</td>
</tr>
<tr>
<td>2016</td>
<td>2382</td>
<td>6.86</td>
<td>1.20</td>
</tr>
</tbody>
</table>

Table 2. Descriptive statistics – overall adequacy and perceived adequacy means 2007 to 2016
In 2007, the first time it ran LibQUAL+, the library was marginally meeting its users’ minimum requirements with an adequacy mean of .04. Scores increased with each survey and the adequacy mean had reached a respectable .52 by 2016. User perceptions of library services steadily improved and the library was meeting the needs of its users far better in 2016 than it was in 2007. The degree of improvement in the adequacy mean between 2007 and 2016 was 0.49 and perceived scores went from 6.50 to 6.86 in the period.

Table 3 details the degree of improvement across a range of LibQUAL+ scores in the period, including overall adequacy mean, overall perceived mean, adequacy means of the three dimensions, adequacy means by user groups and the satisfaction questions scores. The degree of improvement was identified by calculating the mean difference between the first survey in 2007 and the last survey in 2016. In all cases, the mean difference was positive and adequacy means were higher in 2016 than they were in 2007.

Looking beyond overall data and into the category breakdowns, the same incremental increase in scores is apparent. Of the three dimensions, scores for Information Control improved the most in the decade. In 2007 the library was not meeting postgraduates’ minimum requirements and they were the least satisfied user group. Perceptions amongst postgraduates improved the most in the period, with an adequacy mean improvement of .71 as compared with the overall average improvement of .49. Of the satisfaction questions, the most improved was In general, I am satisfied with library support for my learning, research, and/or teaching needs, with a .70 increase. All 22 questions increased both adequacy and perceived scores from 2007 to 2016. The five most improved questions are displayed in table 3. The degree of improvement for these questions far exceeds the overall average of .49 and for all, the adequacy mean went from negative to positive in the period.
OVERALL SUMMARY

<table>
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<tr>
<td>Overall adequacy mean</td>
<td>0.04</td>
<td>0.2</td>
<td>0.3</td>
<td>0.39</td>
<td>0.52</td>
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<td>Overall perceived mean</td>
<td>6.49</td>
<td>6.63</td>
<td>6.7</td>
<td>6.72</td>
<td>6.86</td>
<td>9388</td>
<td>0.37</td>
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DIMENSIONS

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<tr>
<td>Affect of service adequacy mean</td>
<td>0.41</td>
<td>0.49</td>
<td>0.63</td>
<td>0.71</td>
<td>0.87</td>
<td>9309</td>
<td>0.46</td>
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<td>Information control adequacy mean</td>
<td>-0.12</td>
<td>0.13</td>
<td>0.24</td>
<td>0.44</td>
<td>0.51</td>
<td>9382</td>
<td>0.63</td>
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<tr>
<td>Library as place adequacy mean</td>
<td>-0.39</td>
<td>-0.19</td>
<td>-0.08</td>
<td>-0.14</td>
<td>0.08</td>
<td>9290</td>
<td>0.47</td>
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USER GROUPS

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<tr>
<td>Undergraduate adequacy mean</td>
<td>0.08</td>
<td>0.24</td>
<td>0.33</td>
<td>0.4</td>
<td>0.55</td>
<td>7307</td>
<td>0.47</td>
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<tr>
<td>Postgraduate adequacy mean</td>
<td>-0.31</td>
<td>-0.01</td>
<td>0.05</td>
<td>0.38</td>
<td>0.4</td>
<td>1579</td>
<td>0.71</td>
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<tr>
<td>Faculty adequacy mean</td>
<td>0.45</td>
<td>0.34</td>
<td>0.67</td>
<td>0.2</td>
<td>0.49</td>
<td>502</td>
<td>0.04</td>
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SATISFACTION QUESTIONS

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</tr>
</thead>
<tbody>
<tr>
<td>In general, I am satisfied with the way in which I am treated at the library</td>
<td>7.04</td>
<td>7.11</td>
<td>7.39</td>
<td>7.38</td>
<td>7.64</td>
<td>6018</td>
<td>0.61</td>
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<tr>
<td>In general, I am satisfied with library support for my learning, research, and/or teaching needs</td>
<td>6.42</td>
<td>6.68</td>
<td>6.78</td>
<td>6.91</td>
<td>7.11</td>
<td>5962</td>
<td>0.7</td>
</tr>
<tr>
<td>How would you rate the overall quality of the service provided by the library</td>
<td>6.77</td>
<td>6.9</td>
<td>7.01</td>
<td>7.05</td>
<td>7.27</td>
<td>9386</td>
<td>0.5</td>
</tr>
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</table>

TOP FIVE MOST IMPROVED QUESTIONS

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</thead>
<tbody>
<tr>
<td>Quiet space for individual work</td>
<td>-1.1</td>
<td>-0.79</td>
<td>0.4</td>
<td>-0.12</td>
<td>0.03</td>
<td>4227</td>
<td>1.13</td>
</tr>
<tr>
<td>The printed library materials I need for my work</td>
<td>-0.4</td>
<td>-0.16</td>
<td>0.22</td>
<td>0.48</td>
<td>0.43</td>
<td>4306</td>
<td>0.83</td>
</tr>
<tr>
<td>The electronic information resources I need</td>
<td>-0.06</td>
<td>0.2</td>
<td>0.35</td>
<td>0.53</td>
<td>0.65</td>
<td>9191</td>
<td>0.72</td>
</tr>
<tr>
<td>Making electronic resources accessible from my home or office</td>
<td>-0.26</td>
<td>0.08</td>
<td>0.01</td>
<td>0.24</td>
<td>0.46</td>
<td>4276</td>
<td>0.71</td>
</tr>
<tr>
<td>Library space that inspires study and learning</td>
<td>-0.75</td>
<td>-0.46</td>
<td>-0.12</td>
<td>-0.32</td>
<td>-0.04</td>
<td>9220</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Table 3. Improvements in user perceptions across a range of scores 2007 to 2016.

To provide context for UL’s increasing scores and to explore how the degree of improvement compared when benchmarked with UK and Irish averages, the local data was compared with the equivalent adequacy mean measure in the SCONUL consortium notebooks for the same period,
illustrated in figure 2. In 2007 UL’s overall scores were far below average as compared with the UK and Ireland. This gap closed at each survey point and in 2016 UL scores were much closer to the international average adequacy mean score. It is worth noting that the SCONUL average adequacy mean is also exhibiting an overall upward trend – UK and Irish libraries are improving as far as their users are concerned. From UL’s perspective, the degree of improvement of 0.49 is greater than the SCONUL degree of improvement of 0.21 for the period from 2007 to 2016. While UL’s user perceptions remain slightly below the international average, UL’s rate of improvement in its users’ perceptions is sizeably above the average in the UK and Ireland.

![Chart showing UL's rate of improvement compared to SCONUL consortium LibQUAL scores.](chart.png)

**Figure 2.** UL’s rate of improvement as compared with the SCONUL consortium LibQUAL scores

**Discussion**

*Transforming library services through continuous improvement*

A great many changes occurred at the University of Limerick Library over the period from 2007-2017, some were direct outcomes of user feedback from LibQUAL+ which was then integrated into the quality improvement initiatives, while others arose from the change agenda set by wider strategy. These changes were in line with international trends and many librarians will recognise...
similar patterns of transformation in their own institutions.

**Transforming staffing and services**

Changes in staffing in the ten year period were driven by changing service models and a shift towards self-service, as was the case amongst most libraries and other service industries including banking and retail. An economic recession in Ireland in 2008 accelerated this shift at the University of Limerick Library as staffing and budgets were reduced over a number of years. User-focused technologies such as self-service facilities and a book sorting machine made circulation of book stock easier and faster. Multiple service desks were merged and centralised to provide users with a highly visible single point for all queries and student peer advisors were provided in the library at the beginning of each academic year to assist new students in the transition to university. Later in the period new roles were created to meet emerging user needs, focusing on areas such as research support, bibliometrics, student success and retention, digital services, archival exhibition, communications and assessment. Information skills training was developed to include non-subject specific programmes such as referencing, Endnote, systematic searching and a popular *Realising Your Research Value* programme aimed at researchers. The upward trend in perceptions was also evident in the LibQUAL+ outcome questions, all of which improved, the most improved of which was *the library provides me with the information skills I need in my work or study* with a .99 degree of improvement as compared with the .49 overall increase.

In addition to the major shifts in the period, many smaller low-cost improvements were put in place in direct response to LibQUAL+ results. These included staff training programmes, staff badges, how-to guides and the development of new services such as the online query service QuestionPoint, recommend a book, find a missing item, e-payment of fines and text alerts on overdue material. The user feedback emanating from LibQUAL+ together with the library’s commitment to continuous
quality improvement had the effect over time of deepening the strong customer service ethos in the library team.

![Figure 3. Improvement in user perceptions of Affect of Service 2007 to 2016.](image)

The improvement in Affect of Service scores across the ten year period was steady, as illustrated in figure 3 and suggests that the many improvements made during the period were recognised and appreciated by library users. The large number of complimentary comments from each survey provides further evidence of this.

**Transforming library collections**

The shifts in collections during the ten year period followed the same trends as were happening internationally, largely focused on the move from print to electronic formats and from ownership to licensing models. National consortium purchasing arrangements led to a gradual increase in electronic journals from 30,000 in 2007 to 60,000 in 2016. Locally, sizeable investment was directed towards textbooks, recommended reading and e-book formats, to enhance access to relevant collections. Technical services processes were automated and made more efficient through shelf-ready options and electronic data interchange technologies. Like many other libraries, digitisation and digital services were established and a significant expansion of the library’s special collections
and archives occurred. More recent developments that took place in 2017 included migration to a library services platform, the introduction of reading list management software, the development of a digital library and a new library website, the impact of which will not be visible until the next survey scheduled for 2018.

Smaller scale improvements in collections included increasing borrower entitlements and loan periods, extending access to high demand collections, implementing discovery tools and streamlining procedures to login from off-campus.

![Figure 4. Improvement in user perceptions of print and electronic collections 2007 to 2016.](image)

In 2007 the library was not meeting its users’ minimum requirements in Information Control. This changed in 2009 and from there the upward trend continued. Information Control was the dimension that improved the most in the period. Of the 22 core questions, the printed library materials I need for my work (IC-3), the electronic information resources I need (IC-4) and making electronic resources available through my home or office (IC-1) were the second, third and fourth most improved questions in the period, with adequacy mean improvements of .83, .72 and .71 respectively, as compared with the overall improvement of .49 (see figure 4). This confirms that the
focus on developing collections was effective and that library users became much more satisfied with this area.

**Transforming library spaces**

The changes in library spaces for many years have been marked by widening diversity in the activities taking place in the library, from traditional solitary study, to collaborative work, learning commons, reducing footprints for print collections, technology-enhanced spaces and an increase in less formal social spaces such as library cafes and meeting spaces. The 2007 feedback at the University of Limerick indicated that the greatest challenge would be improving users’ perceptions of library as place. Feedback centred around traditional expectations and indicated that users felt the library was noisy, overcrowded, confusing to navigate and with insufficient connectivity, power or Wi-Fi. A planned library extension was postponed a number of times, therefore efforts were focused on improving existing space as much as possible, in both large and small ways. A medium-scale building refurbishment, involving glazing atriums and installing doors throughout reading rooms, dealt to some extent with environmental issues.

Technological innovations in the decade included the previously mentioned self-service machines and book sorting machine, as well as the installation of entry and exit gates, wired connections at all study desks and Wi-Fi throughout the building. Library space was reorganised to better deliver study areas that supported different learning styles and diverse activities, such as silent, quiet, group and collaborative work.

A targeted and systematic approach was taken to investigate and find solutions to the library’s noise problem, measured by LP-2 *quiet space for individual work* and the large number of comments on noise. A series of interventions were implemented over many years to deal with the issue. The quiet space question was the lowest scoring question for a number of surveys, yet was highly prioritised by library users. The most improved question in the ten-year period was *quiet space for individual work*, with a significant adequacy mean improvement of 1.13 as compared with the
overall improvement of .49 (see figure 5). Within this question, the creation of a postgraduate reading room in 2012 had a dramatic increase on postgraduate satisfaction with quiet space in 2014 with a 1.51 increase between two surveys - a resounding recognition of a single and relatively simple change. The many interventions implemented to deal with the issue of noise and evidence of their impact on user perceptions are outlined in detail in McCaffrey and Breen (2016).

![Figure 5. Improvement in user perceptions of quiet space 2007 to 2016.](image)

Other improvements relating to the physical library included extending opening hours, improving signage, reorganising group spaces and implementing an online system for booking group study rooms. In response to LibQUAL+ in 2014, where 40% of the 1,074 comments were about insufficient space and difficulty finding available study spaces, a desk clearing initiative called the Every Seat Counts campaign was introduced to deal with the issue of belongings left on seats for long periods and the subsequent space constraints caused by the practice. A description of this initiative together with its impact, effectiveness and user response can be found in a 2017 study by Breen, Dundon and McCaffrey.
With regard to library spaces generally, despite many changes in the period, by 2016 Library as Place remained the area where user perceptions were lowest by far. Over the period the student population increased from 11,000 in 2007 to 16,000 in 2016, placing further pressure on a building with insufficient space. That being the case, the upward trend in user perceptions and the degree of improvement in Library as Place of .47 is notable.

**Continuous improvement and change management**

The LibQUAL+ data tell a compelling story of how a focus on continuous quality improvement has been highly effective and impactful in enhancing the library user experience. Libraries embarking on LibQUAL+ or other user-based quality tools may be interested in how the results are turned into action at UL Library and a description of the process follows. The Quality Management System for Support Divisions in the university requires improvement to be based on sources such as user feedback, staff feedback, data and statistics, and process reviews. LibQUAL+ forms a large part of the user feedback input. Following each survey, the comments and a summary of the results are shared with all library staff. All departments and teams consider the results and make suggestions for improvement. These are agreed by library management and actions are added to the quality improvement plan. Ownership of actions is assigned to the relevant heads of department or the deputy librarian and a project management approach is often employed to implement changes. The actions are reviewed regularly as part of the library’s planning cycle and are moved from the quality improvement plan to the ‘You said, We did’ public facing website when completed. Communication with the student community and the students’ representative body forms an important component of the process.

It is important to note that this author is not suggesting that the transformational change occurring across the decade was due to LibQUAL+ alone. E. Stewart Saunders in his 2007 review of LibQUAL+ pointed out that in responding to results “what libraries do falls in to the category of very specific changes to very specific services...focusing on the sins of the past and not on the possibilities of the
future”. Continuous improvement and change at UL is managed through over-arching strategy, an annual plan and a quality improvement plan, each of which are inter-connected. From 2007 a new library leadership had a definite change agenda that focused on the possibilities of the future. The leadership approach was outward-facing and informed by developments internationally, with a strong appreciation of where the library needed to go. LibQUAL+ enabled this change agenda.

In consequence, librarians at UL have developed a great deal of experience in quality improvement and change management over the decade. Automating processes, implementing new technologies, introducing new services, transforming library spaces – these present challenges when it comes to staffing, resourcing and buy-in from stakeholders. The continuous quality improvement approach brought many benefits to the organisation, but possibly the greatest of these was to normalise change. The change cycle occurs with all the predictable pain points and challenges that are typically experienced in any organisation, but staff have developed sufficient experience to understand and navigate the process effectively. Above all, the process of continuous improvement is enabled by a shared understanding of the rationale for change – to improve services and enhance the student experience.

At UL, the consistently increasing satisfaction levels provide strong evidence to staff that the change programme was greatly appreciated by library users and was therefore worthwhile. Increasing scores have been particularly useful in demonstrating the library’s effectiveness to university management, as they illustrate a record of successful change and quality improvement focused on innovation, automation, university strategy, international trends and, above all, user needs.

**Findings**

This study found that users were much more satisfied with library services at the University of Limerick in 2016 than they were in 2007 and that the incremental increase in satisfaction was
strongly linked with the many service improvements implemented during the period. In the five iterations of the survey, satisfaction levels consistently rose, indicating that the library’s continuous change programme had impact and that readers’ perceptions of the quality of library services greatly improved. Between surveys some scores went up and down but across the decade the overall scores of all 22 core questions improved and there was a consistent upward trend in overall satisfaction levels, as measured by the adequacy and perceived scores and the satisfaction and outcome scores. The most improved dimension in the period was Information Control and of the user groups, postgraduate satisfaction increased the most in the decade. The impact of targeted efforts or long-term investment of resources directed at a specific issue or user group were visible in the data. Finally, UL’s user perceptions of library services increased to a greater degree than the UK and Irish average, indicating that UL’s rate of improvement was noteworthy when benchmarked internationally.

**Practical implications and limitations**

For staff who manage quality in their libraries, LibQUAL+ survey data provides a unique opportunity for retrospective analysis of user feedback as a way of identifying and measuring improvement. A major effort or long-term investment of resources directed at specific issues should be visible by taking a longitudinal approach to the data. However, as many LibQUAL+ administrators may find, detailed comparisons between two surveys can be problematic, particularly when analysed at a question, user group or dimension level, as scores can increase or decrease for reasons that may be unknown or difficult to explain. Based on the evidence in this study, taking a broad view of overall scores to identify trends and patterns across a number of surveys can provide a good indication of the impact of a long-term leadership approach.

“Assessment is based on the idea that we do it to improve, not prove. Yet, in some sense, the stakeholders in an academic institution are looking for proof of whether they are receiving value for the money they invest in every aspect of the campus” (Matthews, 2015, p.175). Longitudinal
analysis linking continuous quality improvement with increasing user satisfaction can be a powerful tool to demonstrate value and effectiveness to university management and library users. For libraries that have a number of years of survey data, this study may provide ideas on how that data can convey a long term commitment to continuous improvement that is effective in enhancing the student experience.

The findings in this study are similar to the Cook and Maciel study (2010) which identified increases in user perceptions over a ten year period and provide an alternative perspective to the University of Mississippi study (2011), which did not find improvements in user perceptions over time. These three studies suggest that different libraries may have different experiences when it comes to assessing the impact of continuous change through LibQUAL+ and further studies are required to test the impact of improvements against user perceptions.

Conclusion

Change is often described as either transformative or incremental, and yet at the University of Limerick, as illustrated by this study, it has been both. Over the course of ten years, library users’ satisfaction levels consistently rose through a systematic, step-by-step, quality-focused approach to driving continuous improvement based on user feedback. From one end of the decade to the other, the data tells a compelling story of a library where staffing, services, collections and spaces transformed and where readers’ perceptions of the quality of library services dramatically improved in parallel.

The story is not over however, continuous improvement has no end point. At the University of Limerick a significant building project due to open in 2018 will increase the library by two thirds. The transformed library will provide technology-rich, creative and inspirational spaces to meet a diverse array of current and future needs and includes an Automated Storage and Retrieval System (ASRS) to manage its print collection. As is the case with university libraries internationally, the transforming
library at UL faces many new challenges and opportunities which include radically changing models of scholarly communications, digital learning and research technologies, developing new roles and adapting existing ones, and creating diverse, technology-enhanced spaces. In the academic library landscape the only constant is change and the transformation, one step at a time, is set to continue.
C. McCaffrey, 2019, New Review of Academic Librarianship

References


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