Peer-Reviewed Article

Tell Us What You Really Think: Implementing a Mixed-methods Approach to Library User Assessment

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ABSTRACT

This article presents an analysis of student feedback received via formal biennial survey and informal sticky notes assessment, and advocates for the use of informal assessment methods to supplement formal methodologies. A biennial satisfaction survey and an informal sticky notes assessment were employed to collect data from library users. This yielded comprehensive, timely, and actionable feedback from the students, faculty, and staff. Feedback received from the two assessment methods allowed the University Library of Columbus (ULC) to gain a greater understanding of user needs and preferences, which was used to improve library spaces, resources, and services to increase user satisfaction. While each method has advantages and disadvantages, combining varied assessment methods helped the ULC gain a holistic understanding of its users, and it provided a rich set of actionable data. The student feedback provided a valuable tool for library advocacy and outreach to both the university community at large and administrators.

KEYWORDS

Informal assessment, sticky notes assessment, user feedback

Introduction

The University Library of Columbus (ULC) is a joint-use library located in the Columbus Learning Center (CLC), established by the city of Columbus, Indiana, in 2005 and managed by the nonprofit Columbus Education Coalition. The library currently serves students, faculty, and staff from Indiana University-Purdue University Columbus (IUPUC) and Ivy Tech Community College Columbus, as well as public users. Because of the different entities involved, it can be challenging to assess patrons' use of, and satisfaction, with the library's spaces, programs, services, and resources. ULC utilizes many traditional methods of assessing usage such as door, seating, and log-in counts, as well as interlibrary loan and circulation data. When the library opened, the ULC staff began performing an annual usage and satisfaction survey, which was sent via email to all students, faculty, and staff of Ivy Tech, IUPUC, and the Purdue Polytechnic Institute. The library originally maintained formal relationships with Purdue Polytechnic, but Purdue Polytechnic separated itself from many campus partnerships in 2017; for this reason, the most recent surveys omit Purdue Polytechnic constituents. Paper copies of the survey were also distributed within the library. The survey collected demographic data, such as user affiliation (which college and department) and status (undergraduate, staff, etc.), as well as information about which services the patrons use in the library. It also asked patrons to share opinions about those services. Additionally, there were open-ended questions asking what changes would increase respondents' satisfaction with the library, and an additional comments box. In 2015, however, the library was asked by the Office of Institutional Research and Effectiveness, which oversees all official campus surveys, to only employ the survey every two to three years due to the overload of surveys across campus. Because of limitations on the frequency of formal surveys, and to enhance the quality and quantity of user feedback, the librarians decided to explore alternative methods of assessment and feedback gathering to supplement traditional satisfaction surveys and usage data collection.

In February 2017, the University Library of Columbus began an annual sticky notes assessment campaign. The initiative was fashioned after a similar campaign at Indiana University-Purdue University Indianapolis (IUPUI) University Library, with the permission and assistance from the IUPUI librarian who initiated and implemented the program. The original IUPUI campaign was titled "I ❤ UL" (UL stands for University Library) and consisted of setting up boards in the main library lobby during the month of February. The boards asked students to write sticky notes about what they like and dislike about the library (Fialkoff, 2016). Later, the data was analyzed and used to advocate for additional library funding and to implement the recommended changes (Fialkoff, 2016). Similarly, library staff at ULC set up a large board and sticky notes asking students, faculty, and staff members to write short notes about what they like, dislike, or would like to change at the library. The board was placed in the highly trafficked main hallway of the Columbus Learning Center for a period of two weeks during the Spring semester. The notes were collected, transcribed, and analyzed. The sticky notes project was

designed to supplement library surveys and to serve as a quick and easy way to collect and respond to student feedback.

In this paper, the authors present a summary of the sticky notes project at ULC, including project planning, implementation, data analysis, and changes enacted as the result of feedback received. Additionally, this research further demonstrates the utility and benefits of supplementing a traditional survey assessment with informal feedback gathering methodology such as sticky notes.

Literature Review

To study student satisfaction and perception, libraries frequently rely on survey instruments, such as LibQUAL+. LibQUAL+ is an online survey developed and administered by the Association of Research Libraries (ARL) and is designed to help libraries enhance library services, improve organizational culture, and to promote and market the library (LibQUAL, n.d). LibQUAL+ is a web-based survey offered on an annual or biennial basis by over 1000 libraries globally (Farnum et al., 2011; LibQUAL, n.d). Academic libraries that do not rely on LibQUAL+ often develop and use in-house surveys to gain feedback about improving library resources and services. High rates of survey saturation and survey fatigue, however, coupled with increasing demand for student feedback among numerous campus entities (Asiu et al., 1998; Porter et al., 2004), also create a need for academic libraries to expand the number and types of mechanisms used to gather student feedback. This is demonstrated in Asiu et al. (1998), which conducted a study of student attitudes towards surveys and survey saturation at the United States Air Force Academy and found that 97% of students indicated that they were somewhat or definitely over-surveyed.

Suggestion boxes, comment cards, feedback forms, whiteboards, and similar methods have been used in academic libraries for decades. Farnum et al. (2011) described the suggestion box as the most long-standing method of gathering patron feedback to assess how well the library is serving user needs Farnum et al. (2011) note that physical and virtual suggestion boxes support four important aspects of service improvement, specifically: accountability; anonymity; decision-making; and trustworthiness of unsolicited data. Due to the evolving assessment landscape and an increasing focus on the user's perspective, suggestion box feedback should be integrated into formal assessment activities in academic libraries. and they can be used as an additional data source to supplement or verify the findings of existing and ongoing assessment projects. These data gathering efforts can also offer additional insights into user preferences (Farnum et al., 2011).

In addition to suggestion boxes, other informal assessment methodologies including whiteboards, sticky notes, flip charts, offer the four aspects of service improvement mentioned by Farnum et al. (2011), and they have been utilized to improve library resources and services. Whiteboard commentary, for example, has been used to evaluate and improve reference

services, individual research consultations, accessibility, space assessments, and event planning. (Archambault & Justice, 2017; Becker et al., 2017; Camacho et al., 2019; Ferria et al., 2017; Fournier & Sikora, 2017; Halling & Carrigan, 2012; Ippoliti et al., 2017; Mamtora, 2013; Montgomery, 2014; Robison & Muszkiewicz, 2018; Spencer & Watstein, 2017). At Northern Colorado Libraries, librarians utilized whiteboards and flip charts to study how students use library space, which subsequently informed institutional space improvement and redesign priorities (Trembach et al., 2019). One of the most notable contributions to the project included whiteboard commentary on student needs and preferences, which may not normally be identified using traditional surveys as they target users who specifically visit the library and require less time than a traditional survey (Trembach et al., 2019). Examples of such feedback included requests for better Wi-Fi, a cleaner building, and better lighting (Trembach et al., 2019). Camacho et al. (2020) devised an informal 10-week assessment plan of reference services in which reference desk assistants wrote questions on a whiteboard and provided sticky notes to patrons, who then wrote the answers. In addition to supplying valued information about student use, expectations, and satisfaction with reference services, the authors found this whiteboard assessment initiative also led to almost immediate improvements and changes in library services, many of which were easy to implement (Camacho et al., 2020). The morale of the desk staff and supervisors increased due to this ability to immediately improve services and respond to users' input (Camacho et al., 2020). In another example, librarians at Valparaiso University used whiteboards to gather student ideas for finals de-stress week, allowing them to prioritize the ideas and plan the activities (Robison & Muszkiewicz, 2018). Holder and Lange (2014) supplemented the use of surveys with a comment board that allowed them to triangulate data and confirm findings from surveys and observations. In addition to supporting the findings of other assessment tools, the comment board helped librarians identify students' desires for more movable whiteboards and low-slung reading chairs, a student need that did not appear in survey responses (Holder & Lange, 2014).

The program most similar to the ULC's sticky notes initiative and IUPUI's "I ❤ UL" campaign is a library-wide research project conducted by Oklahoma State University librarians, in which the open-ended question *"What if the libraries…"* was posed on a sticky note wall. The purpose of this program was to create an opportunity for students, faculty, and staff to provide feedback and respond to questions (Ippoliti et al., 2017). Analysis of the responses showed distinct categories of desired changes that included improvements to study areas, food and snack availability, general services, additional power outlets, and other miscellaneous requests. A course of action was subsequently planned by the committee, and the improvements that could be made immediately with relatively low expense were implemented (Ippoliti et al., 2017). The authors found it beneficial to ask open-ended simple questions of patrons and they recommend the use of this method as an effective way to understand "needs which may go unnoticed through traditional assessment means" (Ippoliti et al., 2017).

Examined as a whole, the field of literature demonstrates that brief and anonymous data-gathering methods such as comment cards, whiteboards, flip charts, sticky note walls, etc. supplement the findings of traditional assessment methods by encouraging greater participation, requiring less time to set-up and conduct, and in helping librarians learn about user needs that are likely to go otherwise unnoticed and undiscovered (Ippoliti et al., 2017; Holder & Lange, 2014; Trembach, 2019). Similar initiatives of informal assessment can help academic libraries unearth user needs that are undiscovered via traditional assessment methods. Such informal assessment efforts can verify the finding of other assessment methods, encourage feedback from students who would not otherwise provide such feedback, and encourage necessary changes based on students' feedback.

In the subsequent sections, the authors describe how their sticky notes project at University Library of Columbus was structured, how feedback was analyzed, and which changes were made based on the feedback received. Additionally, survey feedback gathered through other assessment projects will be reviewed and compared with the sticky note feedback as a control group.

Methods

Data was collected through four separate assessment projects, two of which were traditional surveys (2017 and 2021) and two sticky note projects (2018 and 2019). This study examines and compares the data collected and assesses the strengths and weaknesses of each approach. Note that the 2021 survey was originally scheduled for 2020,but was postponed due to the Covid-19 Pandemic. Similarly, sticky note assessments had been planned for 2020 and 2021, however, these were canceled for similar reasons.

Survey Description

The University Library of Columbus (ULC) began conducting an annual satisfaction and usage survey in 2006. Starting in 2018, the survey became scheduled biennially to cut down on student survey overload. The surveys analyzed in this paper were distributed via email to Ivy Tech's and IUPUC's respective student, staff, and faculty listservs in March of 2017 and 2021. Paper copies were also available to patrons who visited the library in person. After the initial email invitations, follow-up email reminders were sent one and two weeks later. The survey, which was developed by library staff, asked respondents to identify services and resources they used most often, and which services were most important to them. It also asked them to rate their satisfaction with various aspects of the library using a five-point Likert scale (Very Dissatisfied – Very Satisfied). The survey contained three demographic questions, two open-ended questions asking what changes would increase their satisfaction, and a space for any additional comments (see **Appendix A**).

Sticky Notes Description

   The design and implementation of the sticky notes' initiative were based on IUPUI University Library's "I ❤ UL" campaign. At ULC, the 2018 sticky notes project took place over the course of two weeks in March 2018. ULC staff installed a table and a 6' x 8' bulletin board in the main hallway of the Columbus Learning Center outside of the library's entrance with the prompt (Appendix B) written at the top: "Write us a note about what you like and don't like about the library". For four hours during the middle of each day, Monday through Thursday, the table was staffed with a librarian and/or library staff member. The ULC personnel encouraged those walking by to write something on the sticky notes to say what they liked about the library or what they would like to see changed. Giveaways for those who participated included t-shirts, candy, and fidget cubes. After the two-week data collection period concluded, a student worker transcribed the comments into an Excel spreadsheet. A library staff member and a librarian then reviewed the comments to identify broad categories, which were created by same staff members. When the note's content fell into more than one category, the primary focus of the note determined its categorization. To limit the subjective aspect of this categorization process, the length and substance of the response was a key factor when assigning each note to a specific category.

   In 2019, the sticky assessment project was deployed using the same methodology, however the collection period of responses was limited to one week. This was because the 2018 experience showed that the majority of the notes were collected during the first week of the initiative. Additionally, the prompt (Appendix B) was amended to "Tell us what you think about us…we can take it." Library staff felt that the original I ❤ULC prompt may have biased respondents toward more positive feedback, rather than constructive criticism. Therefore, the prompt was revised to potentially elicit more open responses. One hundred and forty-one responses were collected, and the data contained a higher number of constructive suggestions and criticism, but they were still predominantly positive. The library staff then analyzed the data using the previously identified categories from the first 2018 project implementation. The library staff were aware that new categories might be needed to analyze the 2019 data, however the categories established in 2018 proved equally applicable when examining the new data.

Figure 1

Promotional Materials for I ❤ULC Assessment Campaign

Figure 2

Sticky Notes Collected 2018

Results

Survey Results

The 2017 survey received responses from 142 IUPUC constituents, 58 Ivy Tech constituents, and five reported as "Other." Most of the responses came from undergraduate students (62.75%), but responses from staff (13.73%) and faculty (19.12%) also accounted for a large percentage of the responses. In 2021, there were 93 responses received, with 80 from IUPUC constituents and 13 from Ivy Tech. Of these responses, undergraduate students accounted for 31.18%, staff for 21.51%, and faculty 39.79%. It was necessary to ask these demographic questions because part of the library's interest was to determine whether differences existed between usage and satisfaction of the two primary educational entities on campus.

When examining the most important library services, there were several differences between the two primary educational entities. In 2017, the importance of computers was very close, while other items such as printers were quite different. In 2021, both Ivy Tech and IUPUC rated the library's website as the most important service or resource, however Ivy Tech identified books as second most important, while IUPUC instead identified online research help as their second-most-valued service. The 2021 survey was during the Covid-19 Pandemic when remote and hybrid learning were a norm for over a year, so it is not surprising that the library website and online research assistance became the most important library resources for patrons. The high ranking of books, however, was a initially surprising until the heavy use of eBook collections was also considered.

Figure 3

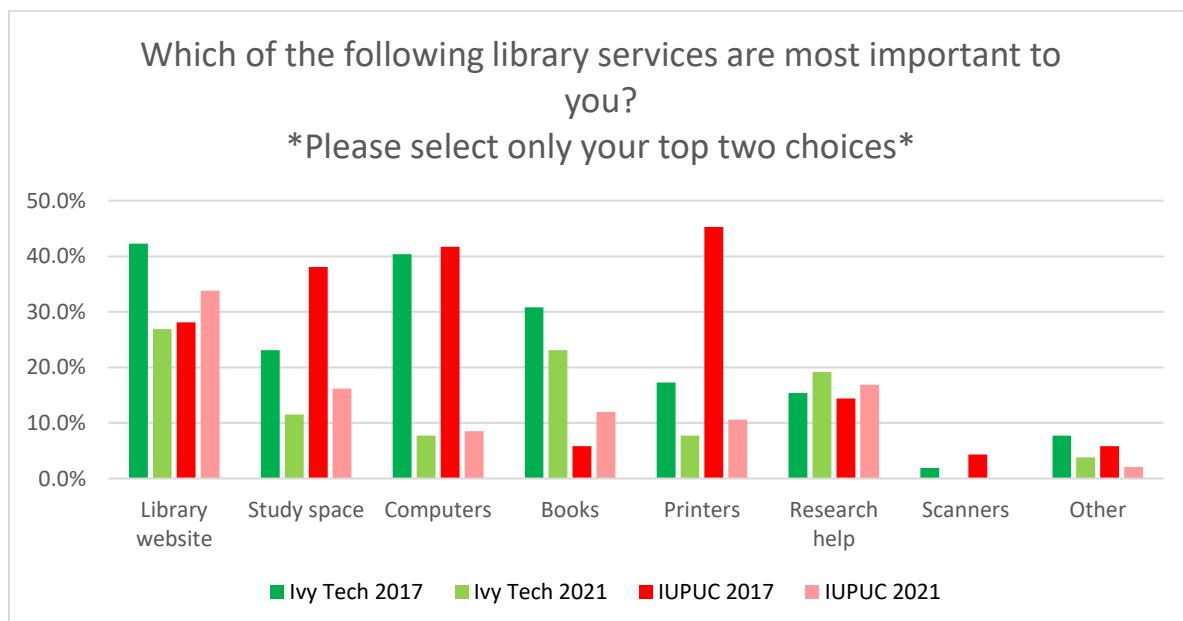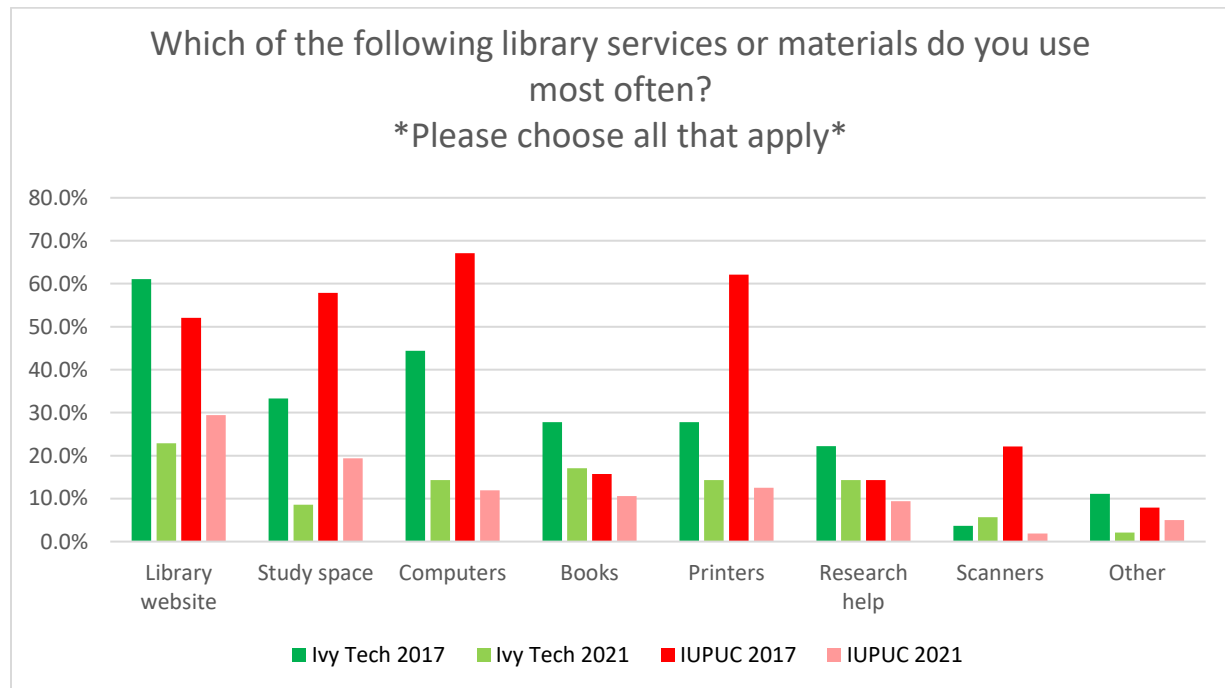*Survey Findings: Most Important Library Services*

Figure 4

*Survey Findings: Most Frequently Used Library Services*

When analyzing services and materials used most often in 2017, resources found on the library's website saw similar usage, while usage of printers and study space varied. In 2021, both Ivy Tech and IUPUC users identified the library's website as the service or resource used most often, with books being second for Ivy Tech and study space being second for IUPUC.

The final question on the surveys was an open-ended question: "What changes would increase your satisfaction with the University Library of Columbus?" Responses to this question were grouped into these categories: space, services, suggestions, staff, and events.

I ❤ ULC Sticky Notes Results

The two years of the "I ❤ ULC" sticky notes assessment resulted in 396 comments total (251 in 2018 and 145 in 2019), some praising the library and library staff, with others containing suggestions for improvements. The notes were transcribed by a student worker into an Excel spreadsheet and subsequently divided by library staff into five broad categories: space, services, suggestions, events, staff.

Figure 5

2018 Sticky Notes Findings by Category
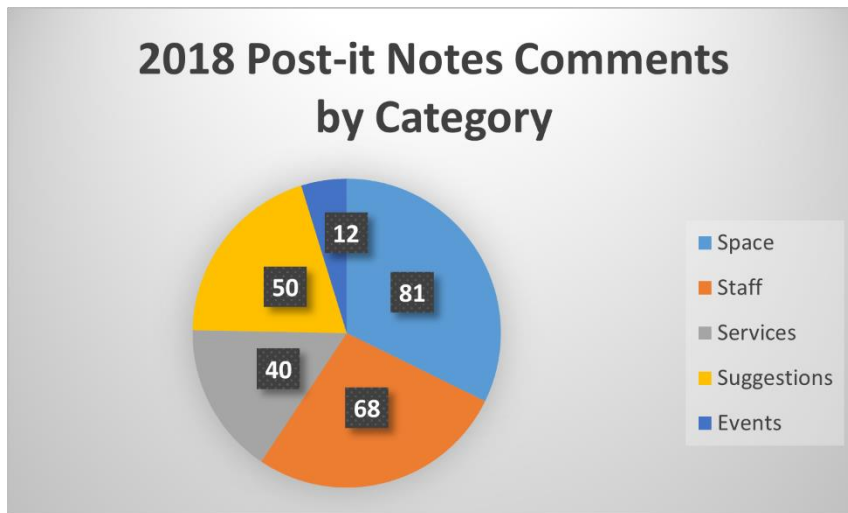
Figure 6

2019 Sticky Notes Findings by Category
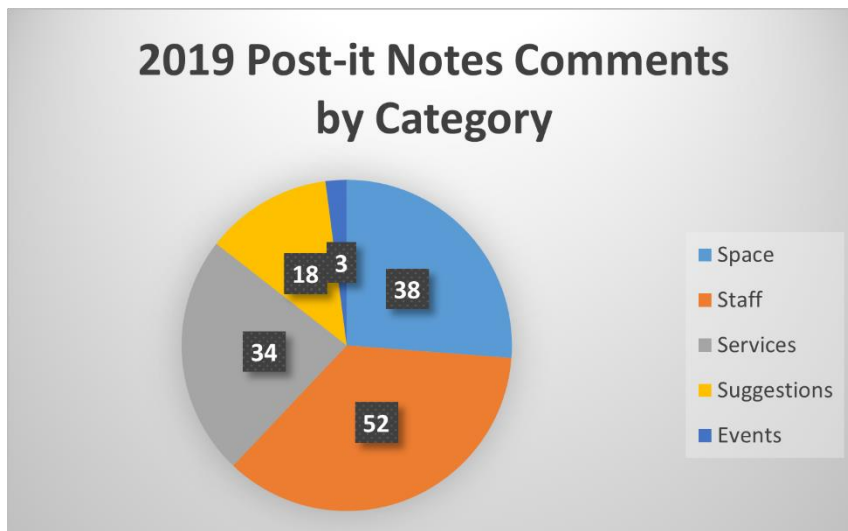
Comments regarding space were diverse and included many aspects of the library environment. One of the most prominent themes in this category, however, was the library's study rooms, which accounted for 32 of the 81 space comments in 2018, and 19 out of 40 in 2019. The comments ranged from praise for the spaces, to requests for additional rooms and included: "I really like the private study rooms, it's nice to have a quiet space"; "I love the learning environment and the study rooms", and multiple simple statements such as "I (We) Like/Love the study rooms." Patrons also expressed appreciation of the library's designated

quiet spaces, the talking/group study areas, and the positive, relaxing and welcoming atmosphere of the library. Students commented that the library was clean.

Many services comments from 2018 and 2019 showed general praise for library research services and available technology, while also commending specific services including interlibrary loan, free local newspapers, and umbrellas available for checkout. Many of the services comments in 2019 identified the computers and printing services as areas in need of improvement. Example notes included: "The printing systems are horrible. How are we having the same problem every year!" and "Faster log-in times on the computers would be great," which coincided with a recent software update that caused some campus-wide problems for patrons.

Suggestions comments encompassed a wide range of specific requests that did not fit neatly into another established category. Purchase requests and suggestions to expand areas of the library's materials collection were frequently mentioned. Such comments included: "Would like to see more books on mythology and death around the world," "Larger history section," and "Book: Anathema by Colleen Coble." Other comments in this category included suggestions for a library pet, such as "Need a library cat/dog," "a library tortoise would be amazing," along with requests for more therapy dog days, reflected in comments such as "Have more doggie playtime;" "do more dog therapy days."

Comments related to events included significant praise, such as "Your TED Talks series is AMAZING! I love it!," "I love Comicon!," and "I like the fun activities y'all provide." Free food events, in particular the free popcorn during finals week, were also mentioned several times.

The sticky notes related to staff were overwhelmingly positive and included statements such as "I feel super welcome to ask any questions I have about anything in the library," and "Friendly, helpful, knowledgeable people." There were also a few suggestions for improvement such as "More assistance with EndNote on campus," "Availability of librarian to staff research desk," and "More staff members available during the day." Several people recommended hiring more librarians.

Changes Made Based on Survey and Sticky Notes Feedback

While the structure of the two assessment methods resulted in slightly different questions, the results showed many overlapping themes. Overall satisfaction with the library's facilities, staff, programming, and services was generally high, and areas identified for improvement were consistent. Students consistently commented on their appreciation of the study rooms, while sometimes expressing dissatisfaction with the limited number of available rooms. Noise was also a common area of dissatisfaction in both assessment methods; paradoxically, some students expressing a desire for more talking areas in the library, while others felt the library needed to enforce the quiet areas thoroughly.

After evaluating data from each survey and sticky note project, the library identified possible areas of improvement, to either accomplish on its own or in partnership with building management and campus leadership. Some of the suggestions were directly actionable by library staff, such as redesigning the library website to be more user-friendly and highlighting resources and services most frequently mentioned in the sticky notes. The library could also immediately purchase more materials in collection areas identified as underdeveloped by the commenters. A large section of the library's seating area was also rearranged to reflect requests for more seating in the "talking" areas of the library. Finally, the library increased the frequency of some finals week activities, such as freshly popped popcorn and therapy dogs, based on a number of complimentary notes relating to these services.

Implementation of many other no- or low-cost suggestions involved working with campus partners. One example of a simple change was to ask building management to add more plants to make the library space more inviting. The library also worked with building management to convert three vacant offices into new study rooms. Based on requests for additional study rooms for collaborative work, the library coordinated with campus information technology to add casting screens in two of the study rooms. The addition of the collaborative screens allowed small groups to project from their device to all members of the group. Additional feedback relating to computer applications on library workstations, and printing frustrations, were also shared with information technology staff.

Pros and Cons of Surveys and Sticky Notes

One of the advantages of traditional survey assessment, which involves the repeated use of the same questions over time, is the ability to compare results annually for longitudinal study. This has allowed ULC to track changes in users' satisfaction with services and facilities since the survey's inception in 2006. Being able to point to years' worth of consistent feedback is especially helpful when advocating to building management and campus administration for changes to ULC space. A benefit of the survey being deployed mostly online is that it also captures feedback from people who do not visit the physical library, or who do not use library services at all, or those who use only online library services and resources. The traditional survey also collects demographic information which can allow a more targeted analysis of results based on role (i.e. student, faculty, staff) or campus affiliation (e.g. is an Ivy Tech student or an IUPUC student dissatisfied with the library website?).

A drawback of the traditional survey assessment is the limitation of only being allowed to deploy it biennially. This makes timely assessment of new services or changes to the facilities difficult. Another limitation is that the university is increasingly resorting to measures other than email to communicate with students, therefore it is unclear how many students are missing our call for participation.

A benefit of the sticky notes campaign is that it can be run without the approval or assistance of the Office of Institutional Research and Effectiveness and can be conducted at any time. The library administration is still mindful, however, of the burden of constant feedback solicitation on students, so the I ❤ ULC campaign is not conducted more than once a year. Another benefit of the sticky note method was the spontaneous nature of the comments. Many of the improvement suggestions were surprising to library staff, and yet easy to implement (e.g. adding more plants). These comments also captured feedback that was tied to a user's most recent visit and therefore provided more concrete, timely suggestions than a survey disconnected from library usage would.

A disadvantage of the sticky notes method is the exclusion of feedback from online students and non-library users. Inclusion of these groups might be achieved by providing a space for anonymous feedback in an online environment using online notes software such as Padlet, Lucidpark, or Stormboard.   Because of the free-form nature of the sticky note comments, their categorization was sometimes difficult and sometimes additional context was needed to understand fully what the user was describing.

Finally, benefits of both assessment methods extended beyond data collection and the implementation of new policies and services. By actively soliciting feedback from the campus community, the library earned increased goodwill, both from students and campus administration. These assessment efforts yielded numerous positive comments about library staff and services, which also helped to increase staff morale and further affirmed the view that the library existed on campus to support student success.

Dos and Don'ts

An important consideration when planning any assessment activity is timing. It is important to solicit feedback at a time in the semester that is not particularly busy or stressful for campus constituents. As an example, the biennial survey conducted in 2015 was launched just before finals week, and as a result the number of respondents was significantly lower than in previous years. It is also recommended that traditional surveys stay open for about two weeks, and that reminder emails be sent halfway through the survey period. This will students who do not check their campus email often will get the chance to respond. It is also helpful to staff the sticky note tables during the busier times of campus foot traffic, as this helps increase participation significantly.

In order to gain the trust of campus partners, it is important to demonstrate that the library takes their suggestions seriously. Therefore, publicizing the survey results widely and sharing improvements made based on comments is highly recommended. If students, staff, and faculty do not believe the library takes suggestions seriously, they will not respond to future requests for feedback. The changes ULC made based on these assessments were highlighted on the library's website, in the campus newsletter, and through promotional emails. It is also

important to specify the suggestions that were not implemented, and to provide a solid reasoning for why the libraries were not able to follow up on those suggestions.

Based on experiences with distance learning during COVID-19, a virtual version of the sticky note methods, or another online anonymous commentary method, might be advisable. These online methods would benefit both the students who are rarely on campus, or do not visit the physical university library, and those who are fully online students.

Conclusion

The two assessment methods, when used in conjunction with other library data gathering efforts, have allowed the University Library of Columbus to gain a greater understanding of user needs and preferences than any one method could provide on its own. Each method possesses advantages and disadvantages yet combining these varied assessment methods allowed the ULC to gain a more holistic understanding of user needs and preferences, which in turn yields a rich set of actionable data. The University Library of Columbus plans on continuing this mix of assessment methods while also exploring new ways to assess user preferences. By using informal assessment methods to supplement more formal data, these feedback collection methodologies jointly provide many unique, candid, and often actionable suggestions from library users.

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Appendix A

University Library of Columbus - User Satisfaction Survey

Your feedback is important, and we'd like to hear from you so that we may provide you with better service.

Which institution are you primarily affiliated with?

• 	IUPUC

• 	Ivy Tech

• 	Purdue Polytechnic

• 	Other: _____

What is your primary status?

• 	Undergraduate Student

• 	Graduate Student

• 	Full-time Faculty

• 	Adjunct Faculty

• 	Staff

• 	Other (please indicate: Indiana Resident, out of state, visiting, etc.):

    _____

If you are a student or faculty member, which division/program area/major are you primarily affiliated with? _____

Which of the following library services or materials do you use most often? *Please choose all that apply*

• 	Resources found on the library website

• 	Study Space

• 	Computers

• 	Books

• 	Printers

• 	Research Help

• 	Scanners

• 	Other: _____

Which of the following library services are most important to you? *Please select only your top two choices*

•   Resources found on the library website

•   Study space

•   Computers

•   Books

•   Printers

•   Research Help

•   Scanners

•   Other: _____

How do you rate the following aspects of the library?

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
Noise Level					
Library Online Resources					
Print Collection					
Staff Courtesy					
Study Spaces					
Technology					
Assistance with Research					

What changes would increase your satisfaction with the University Library of Columbus?

_____

Additional Comments

Appendix B

2018 Sticky Notes Prompt

2019 Sticky Notes Prompt