Using Continuous Quality Improvement Methods to Evaluate Library Service Points

Merrill Stein, Teresa Edge, John M. Kelley, Dane Hewlett, and James F. Trainer

Merrill Stein is Team Leader for Assessment and Teresa Edge is Co-Team Leader of Access and User Assistance at Falvey Memorial Library of Villanova (Pa.) University. John M. Kelley is Executive Director of the Office of Planning, Training, and Institutional Research at Villanova University. Dane Hewlett is Villanova's Director of Training and Organizational Development and James F. Trainer is Director of Planning and Assessment. Submitted for review May 22, 2007; accepted for publication July 7, 2007.

This article describes a multiple-methods approach to examining and enhancing the quality of walk-in service points at a major university library. Selected methods included focus groups, benchmarking, surveys, transaction analysis, activity mapping, and secret shoppers. The results of the study generated many recommended enhancements, including the consolidation of service desks

At Villanova University, two forces converged to initiate this continuous quality improvement project at Falvey Memorial Library. The first of these factors was an ongoing interest on the part of the library staff in maximizing services to patrons, both through technology and personal points of contact. The second was Villanova's continuous quality improvement program, a well-established initiative introduced in 1993 and long spearheaded by the Office of Planning, Training, and Institutional Research (OPTIR). In recent years, several studies have been completed by and for the library dealing with the physical footprint of the library as well as the responsiveness of staff to the needs of their various patrons—students, faculty, staff, alumni, members of the surrounding community, and outside scholars. The present study located precisely the various points of patron service and delved deeper into their functions.

VILLANOVA UNIVERSITY AND FALVEY MEMORIAL LIBRARY

Villanova University, a Roman Catholic institution based on the teachings of St. Augustine, is located in a pleasant suburban setting just twelve miles outside of Philadelphia. It is home to more than ten thousand students and more than five hundred faculty members. The university consists of four main colleges (College of Liberal Arts and Sciences, Villanova School of Business, College of Engineering, and College of Nursing) and a School of Law. Falvey Library has a staff of about sixty-five, including twenty librarians. The library offers patrons a place for social networking and studious collaboration with wireless network access, a twenty-four hour study lounge and coffee shop, group study rooms, laptop loans, and a rich complement of electronic and digital library resources in a medium-sized academic library environment.

A unique aspect of the Villanova Quality Improvement (VQI) model is its emphasis not only on the application of time-tested work process improvement tools, but on the integration of its efforts with the mission of the university. At Villanova, there are currently more than twenty-five VQI teams involving more than two hundred colleagues

from practically all of the offices of the university. Some have a special university-wide goal such as the Incentives and Recognition Team or the Environmental Team, but the vast majority of teams are located within departments with the tri-fold charge of work process improvement, building community, and offering community service. VQI is coordinated by OPTIR. OPTIR staff are experienced in qualitative and quantitative research methodologies, and three have been certified in Lean Six Sigma, a popular system for indentifying and reducing waste and increasing the effectiveness of work functions.

In an effort to seek its own answer to "library as place" or, as Davenport advocates, "in a networked world . . . place as library," Falvey seeks to steer a path beyond access versus ownership issues to provide a comfortable and collaborative base from which patrons can share ideas, conduct research, and receive assistance and instruction from within the library, within the colleges, and at a distance.[1] Reference and instruction services are becoming academic integration services with liaison information literacy teams; programming of library events has a programming coordinator; technical services is now resource(s) management; "access" means access to a host of services besides checking out and reserving books; and there is a growing need for even more skilled budget management and data-driven assessment coordination past standard monthly statistics.

LITERATURE REVIEW

Even several years ago, Ludwig and Starr wrote that library leaders were predicting "expanded roles for libraries as places where all members of the community can come together, as purposed and expanded learning centers, and as places for intellectual pursuits."[2] Between now and 2025, "Libraries will continue to include areas designed for both group work and privacy. . . . Libraries will create a multi-functional desk that combines circulation and reference."[3] Church reminds us that locating services together is not merely a merging of services but an interweaving of cultures and that "what is most important is fluidity of ideas."[4] In their study, Harer and Cole concluded that a focus on students, faculty, and stakeholders is the most important aspect of ensuring quality in programs and services.[5] Dempsey suggests that "the question we need to address is not the integration of library resources with each other; it is the integration of library services with the learning and research behaviors of users."[6] It is within this context that an improvement study was undertaken.

Through an experience similar to the one at the University of Arizona Library in the early 1990s, Falvey Memorial Library underwent a reorganization of staff and functions with a commitment to focus on the customer and to making more data-based decisions. To that end we chose to employ continuous quality improvement methodology, which, as described by Larson, "provides a system for gathering all of the data related to a process, analyzing it, and developing solutions based on customers' requirements."[7] We decided to employ a wide variety of methods to gather the data we needed to begin the quality improvement process. The literature provides a few similar examples of a multi-pronged approach to collecting service-oriented data. Winkworth describes the Standard Conference of National and University Libraries (SCONUL) Benchmarking Pilot Project in the United Kingdom, which focused on "advice desks" and "counter services" and utilized site visits, mystery shoppers, staff questionnaires, and customer surveys.[8] The Arapahoe Library District in Englewood, Colorado, employed secret shoppers, focus groups, and the quality walk in their year-long service evaluation.[9] However, the Falvey study was particularly ambitious because it was composed of nine different data collection techniques completed in a six-month timeframe, some of which required collection over an extended period of time. This is where the VQI initiative became invaluably linked to our efforts.

THE PRESENT STUDY

In August 2005, OPTIR issued a special invitation to all departmental VQI teams reminding them that, through the VQI program, OPTIR staff would assist departments in defining and enhancing work processes. Interested departments were requested to contact OPTIR if they wished to pursue this opportunity. The leader of the VQI team shared this invitation with the library team and subsequently with the director of the library. All concurred that it would be helpful to invite OPTIR staff members to work with the library staff in studying and improving the physical layout of the library and the service points of contact.

A special study team was convened in January 2006. The team was composed of eight members of the library staff from key areas: Media Technologies, Library Access, Budget and Administrative Services, the information desk, Reference and Consulting, the periodicals/media desk, Assessment/Special Projects, and Central Library Administration.

Library personnel engaged in the process included librarians, technical staff, and paraprofessional support staff. Three members of the OPTIR team rounded out the study team, which was facilitated by OPTIR's director of training and organizational development. On average, the team met every other week from January through June 2006; special homework assignments were often given to sub-teams and completed between meetings.

The objectives of the study were twofold: (1) to examine public service delivery areas to ensure that the services provided effectively met the needs of library patrons in ways that are suitable and accessible to patrons; and (2) to explore whether the physical layout of the public service delivery areas is conducive to providing, in effective and efficient ways, the services that patrons need and desire.

METHODOLOGY

Multimethod approaches are a well-established application in program assessment. Implementing several different re-

search techniques simultaneously has numerous advantages. First, one gets to view a program or process from a variety of perspectives that can yield richer insights. Second, the data from different methods can be compared in order to determine consistency (convergent, concurrent, and discriminate validity). Third, findings from the qualitative methods (e.g., focus groups and personal interviews) can also be used to illuminate the quantitative findings from the surveys, database analyses, run charts, and other numeric methods. Conversely, quantitative results can suggest topics and issues for deeper qualitative study. As Johnson and Onwuegbuzie note, "qualitative and quantitative research used together produce more complete knowledge necessary to inform theory and practice."[10]

In this study, nine data collection methods were utilized:

1. *Quality Walk*: The study team began thirty yards outside the library main entrance and walked into and through the library visiting each service point. Each team member took the perspective of a patron and jotted down possible improvements.

2. *Suggestions from Staff*: Suggestions were gathered from staff throughout the process both in person and through e-mail.

3. *Focus Groups*: Three focus groups were conducted by the team facilitator not only discussing work process improvement but also exploring areas of vision, mission, values, goals, leadership, and strategic direction. All library staff, full time and part time, were invited to attend a focus group, and 74 percent (n = 65) did so.

4. *Survey Data*: The library annually collects student satisfaction survey data, which are analyzed by OPTIR. Using a convenience sample, patrons are asked to complete the survey while in the library. For this study, findings from spring 2005 (n = 544) and spring 2006 (n = 646) were analyzed.

5. *Transactional Data*: The library continuously collects data in a number of areas. These include circulation and library usage statistics as well as a database of all questions asked of library staff at service delivery points. This latter database (LIBSTATS) includes the verbatim question asked by the patron and the staff member's response as well as information on when and where the question was asked, how long it took to answer the patron's question, and which staff member handled it. LIBSTATS also calls for classifying the type of question (e.g., directional, research query, policy) and how the question was transmitted (e.g., telephone, e-mail, in person).

6. *Secret Shopper*: Nine secret shoppers were given written assignments to complete specific tasks, such as locating reserve material, accessing a book through interlibrary loan, or finding and photocopying a journal article. Sixteen different tasks were composed by the study team, and each shopper was assigned four to five to complete within a two-hour time period. Two of the secret shoppers were students from other universities, and the remaining seven were university staff volunteers who were not extremely familiar with the library. Each secret shopper completed a standardized form immediately upon completion of each task. The form included items such as, "If you needed help, where did you find it? (What service point?)," "How helpful was the guidance you received?" "What if any problems did you experience?" and "What made your experience easier?"

7. *Activity Mapping*: This method is very similar to classical time and motion studies. Eight different service points were identified (e.g., information desk, copiers and other equipment, coffee lounge, public computer area). Trained observers used standardized forms to record the number of patrons that utilized these service points as well as to record the library staff at each point. These data were collected during multiday periods (e.g., Tuesday, Wednesday, Thursday, and Saturday) at three different times during the spring 2006 semester: a slow week, a typical week, and a peak week. In total, nine observers took part in the activity mapping; three were library staff, and six were OPTIR staff. The observation period typically ran an entire day, and on certain days began at 8:00 a.m. and ended at midnight. OPTIR analyzed the data and graphically displayed utilization patterns.

8. *Benchmarking/Site visits—Best Practices*: This was one of the most enjoyable tasks for the library staff on the study team because it entailed visiting six libraries, primarily in the East with one located in the Midwest. Teams of two Villanovans visited each library, observing operations and talking with colleagues. In addition, a call for best practices was disseminated on a librarian discussion list, and this resulted in several responses. A third function in identifying best practices was a literature review that combed professional journals for especially noteworthy models. As will be seen, the visitations were an especially exciting and rich source of ideas.

9. *Scenario Analysis*: The study team held an all-day session in May 2006 and another in June 2006. At these sessions, the data were analyzed and synthesized and recommendations were distilled. At the second and final full-day meeting, the team also created a set of three different scenarios for providing services. The strengths and limitations of each scenario were also weighted by the study team. Scenarios embodied best practices as well as evidence-based conclusions from the extensive data collected during the project. The scenarios included significant factors such as a print center, bolder signage, and a one-stop shopping service model.

This was a major effort that was staffed from several departments, primarily the library and OPTIR. More than thirty individuals were directly involved in the study as planners, data collectors, and analysts. The number of person hours devoted to the study was substantial, exceeding one thousand over a semester. In addition, the need for specialized quantitative support was imperative as the analysis demanded

statistical expertise as well as customized programming to graphically display the data. A final report was issued by the quality study team and presented to the entire library staff on June 30, 2006. Over the summer of 2006, and continuing into the fall semester, dozens of recommendations were put into place including a special makeover of the first floor service areas.

FINDINGS AND RECOMMENDATIONS

Like many self-evaluations of this nature, certain findings reinforced preexisting assumptions and beliefs, buttressing them with objective evidence. Other findings led to new and innovative recommendations. Findings and recommendations numbered over one thousand and were divided into two broad groupings: (1) incremental enhancements, which were relatively minor changes to the environment, staffing patterns, or work activities, and (2) major improvements, which were fairly major changes that enhanced the environment, staffing patterns, or significantly re-engineered work processes.

Oftentimes a similar finding or recommendation derived from two or three different research methods. For example, overhauling the signage system was a prominent recommendation in the site visits, secret shopper visits, quality walk, and suggestions from staff. Nonetheless, particular methodologies did tend to yield distinctive levels of insight.

Quality Walk: For example, the quality walk is predominantly a visual experience and yielded palpable recommendations that may well have been overlooked by the other methods. During the quality walk, the team noticed that bushes were obscuring the library sign—an easy fix—and regular trimming was promptly scheduled. The unsightliness of the outdoor smoking area near the front entrance drew attention, and solutions are being explored. Signage deficiencies, overflowing recycling bins, and a host of other observations emerged from this experience, and numerous incremental enhancements resulted.

Activity Mapping: The quality walk is essentially a low-cost, fairly effortless undertaking. At the other end of the spectrum, activity mapping (recording patron and staff at various physical locations and times) proved to be extremely labor intensive. Creating the data collection forms was challenging and required extensive field testing to finalize the instruments. Figure 1 displays the extended observation period observation form.

Another difficulty was staffing the activity mapping exercise. To conduct this substudy, it was necessary to collect information for all hours the library was open during multi-day periods. Data collectors often began at 8:00 a.m. and finished at midnight. Data collectors received extensive training and included six OPTIR staff and three library staff. Each data collector worked alone for two hours, completing two rounds of observation at eight locations (the information desk, the circulation/reserve/ILL desk, copiers/printer/microform equipment, public computer area, coffee lounge, reference and periodical/media desks, reference and current periodicals

stacks, and the instructional media services desk). Organizing and displaying the data for discussion and analysis required several remakes before a suitable format was agreed upon.

The final database included comprehensive computations of activity that spanned multiple days during three distinct periods of the spring 2006 semester: a slow period, a typical period, and a peak period. In the end, the heavy investment of time and effort proved sound because the study team, in particular the library staff, was able to sift through the data and gain new, empirically based knowledge of workloads and patron levels. As a result, a number of major changes were recommended:

- Merge functions that had been previously separated (e.g., scheduling viewing rooms and reserving videos).
- Change the staffing loads at the service desks on the basis of observations of traffic patterns.
- Alter weekend coverage.
- Relocate certain functions and staff such as periodicals/media.

In addition to being an effective tool for assessing certain staffing needs, the activity mapping substudy also brought to light patterns in computing and technical equipment and corresponding concrete recommendations were made:

- Add eight additional desktop computers.
- Reduce media viewing stations by 50 percent (from eight to four) and reduce microreaders from four to two.

LIBSTATS and Patron Surveys: Data from the LIBSTATS system also proved valuable in analyzing staffing levels, not only in terms of volume but type of staff needed. As displayed in figure 2, the LIBSTATS system yields basic data about the location of the service desk where the questions occurred, the type of patron, if known (graduate, undergraduate, and so on), the detail level of the question (directional, in-depth, etc.), the format of the question (phone, e-mail, etc.), the library staff member conducting the question, and details given in the response. This was very instructive when exported into Microsoft Excel, Access, and SPSS. This system was modified from open-source software developed by the University of Wisconsin library system and put into place on February 1, 2006, shortly after the quality study commenced. Thus the data were limited to a single semester, and less than a full semester at that. Nevertheless, these details were collected for four full months, yielding data from more than five thousand patron questions. The patron surveys were predominantly satisfaction items and reinforced the high level of efficient, caring service on the part of library staff.

The Secret Shopper Visitations: One of the most interesting techniques was the secret shopper visitations. VQI is both an objective system for assessing and enhancing work processes and a philosophy that is rooted in the university's Augustinian tradition. Among other ideals central to the teachings of Augustine of Hippo is the *vita perfecta communis*—the perfect common life, a deep sense of community.

Figure 1. Extended Observation—Information and Circulation Desks

Observe the Information & Circulation/Interlibrary Loan/Course Reserve desks over a period of 10 minutes:

1. Note start time.
2. Map and indicate on sheet the total number of patrons who approached the desk.
3. Map and indicate on sheet the total number of staff present at the desks or who are called as backup.
4. Note end time.
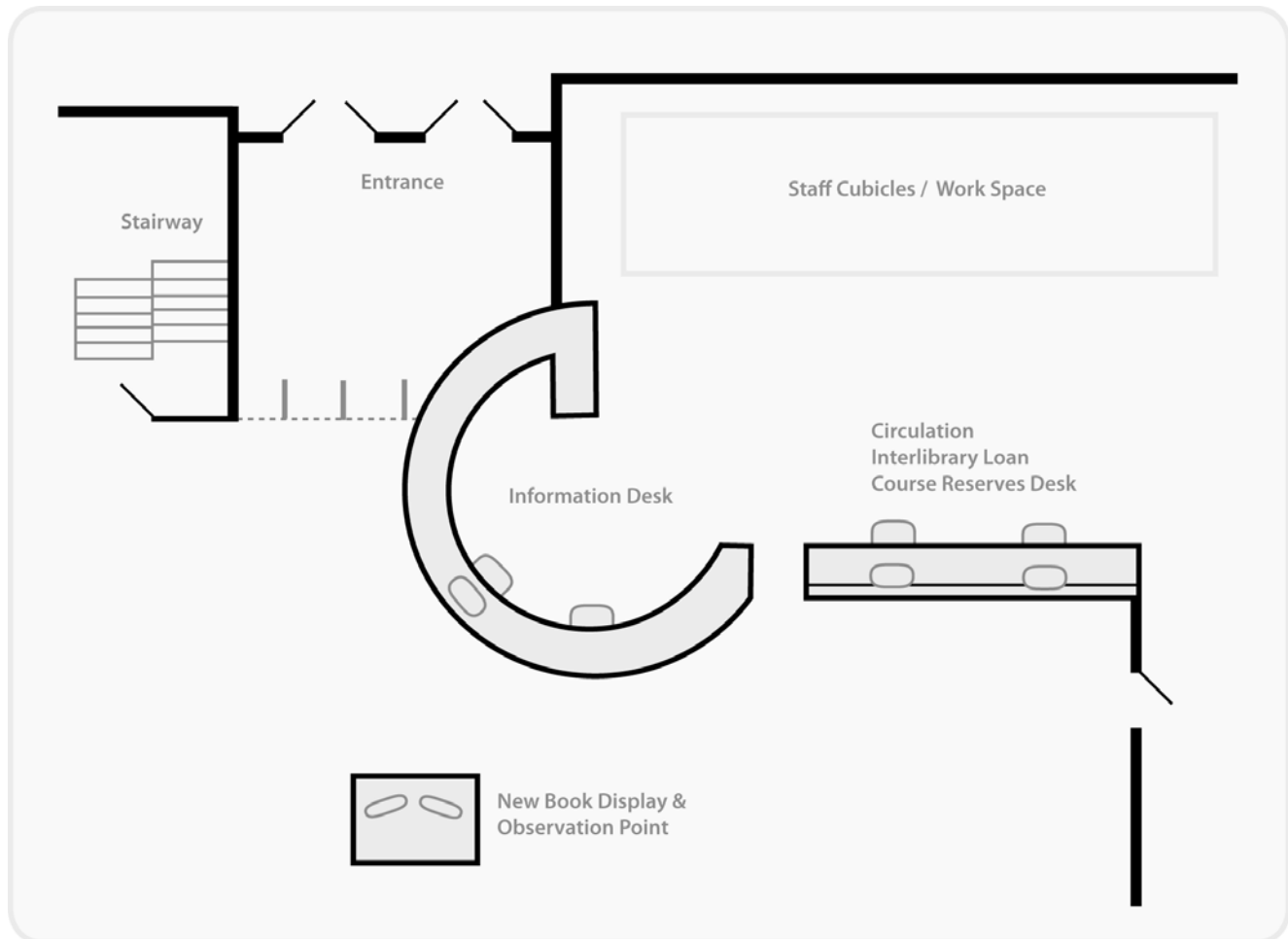
Observation Legend:
Each patron approaching/waiting at service desk = /
Each staff person immediately present at desk upon arrival = /
Each instance of staff called as backup to service desk = B

VQI has perhaps accomplished as much in this area as in work process improvement and re-engineering. At any given time, well over two hundred Villanovans are actively involved in over twenty VQI teams. This feeling of unity made recruiting secret shoppers rather easy. The VQI coordinator simply telephoned several colleagues and asked them to volunteer as secret shoppers. To qualify, the person had to be largely unfamiliar with the library. Responsibilities entailed attending a lunch training session during which the instrument and procedures were reviewed. Subsequently, each secret shopper was given a protocol that consisted of tasks that would interface the secret shopper with various library services (e.g., EZ Borrow, course reserve, using media technology, finding periodicals and books). Thirteen tasks were written by the library staff on the study team, and each secret shopper was assigned up to seven. Tasks were to be completed in a single visit, and accomplishing all tasks took approximately two hours. Secret shoppers were scheduled so as not to overlap and to cover various days and times, including evenings and weekends. Immediately after completing the five tasks, the secret shopper was instructed to write up the experiences and send a copy to a designated member of the study team. The secret shopper write-ups were then analyzed by the study team and recommendations were formulated, such as install patron friendly signage, make transparency creation available during all library hours, simplify computer log-in

Figure 2. LIBSTATS Data Form

is a common technique in a continuous quality improvement approach and is defined by Henczel as "investigating how things are done elsewhere and where they are done differently or better, to see whether a group could adapt the processes of another organization to improve their own processes."[11] Several methods were utilized to garner state-of-art best practices.

Site visits, as noted, were a peak and a perk experience for the library staff on the study team. Travel costs being a factor, sites included five regional academic libraries, one Midwestern academic library, and one local public library. These locations were selected after reviewing ACRL's list of Excellence in Academic Libraries Award winners, in consultation with the library director. The site visits produced perhaps the most significant recommendations. Some examples include brighter and more open spaces with more opportunities for student collaboration, clearer signage, establishing a full-service print center, and the possibility of self checkout. Although the same recommendations were often reinforced by the literature review and a call for best practices on a librarian discussion list, seeing other libraries in action and talking to peers was energizing, reinforcing, and substantive.

Scenario Analyses: Drawing from the full body of data, but especially from the site visits, three scenarios were created by the study team. Each included the following factors that were felt to be essential for a top-tier library:

- Establish a print center (that will be managed by a source outside the library).
- Create a one-stop shopping service center.
- Make more space for both collaborative and private study.
- Provide access to more computers.
- Develop a more open look to the first floor.
- Provide more event space.
- Put in place a much more captivating and clear signage system.
- Provide twenty-four-hour access.

The three scenarios offered different combinations of factors and varied in complexity and cost. The scenarios themselves were built by the entire study team working together toward the end of the study period during two full-day planning retreats that were devoted to reviewing all the

procedures, provide access to more computers, and reduce service points. It is important to note that library staff members were informed that the secret shoppers would be visiting, but they were not told who the shoppers were or when they would visit. In gratitude, the study team prepared gift bags for the secret shoppers and also for the colleagues who did the time/motion activity mapping. Sample tasks for the secret shoppers included scanning a chart from a current issue of a magazine for a presentation and obtaining a book that the library does not own.

Focus Groups and *Individual Suggestions from Staff* were instituted to ensure that the entire library staff had the opportunity for direct input. An OPTIR staff member, skilled in focus group leadership, ran the sessions. In actuality, the focus groups were a prelude to the study, occurring in fall 2005. Among other things, the focus group study helped provide a general read of the climate and culture of the library, which was helpful in planning the point of service study. One clear finding from the focus groups was that the library staff valued an open and structured decision-making approach. Consequently, throughout the study, conscious effort was made to communicate clearly and continuously to the entire library staff study processes, research questions, and important findings. These sessions spanned a broad range of content that went well beyond work processes and included library mission, vision, leadership, and goals. Staff input was further ensured by encouraging all staff to make suggestions directly to study team members throughout the study period.

Benchmarking Study/Best Practices: Benchmarking

data and attempting to convert it into information, insight, and formal recommendations.

DISCUSSION

Skills, Effort and Cost: This project consumed considerable resources. Hiring external consultants to perform the work would have been prohibitive because of costs. Villanova is fortunate to have a resource such as its continuous quality improvement program and the range of skills embodied by the staff of the Office of Planning, Training, and Institutional Research. A number of institutions have similar resources, but many do not. In the latter cases, rather than embarking on the full set of evaluative methods, it seems sensible to select those that best fit the institution's staff competencies and budget.

As indicated in figure 3, it would seem that the quality walk, suggestions from staff, scenario analysis, and possibly the patron survey are within the reach of most libraries. The site visits required dollars for travel and lodging, but several were conducted at colleges and universities within a few hours of the Villanova campus and could be completed in one day. The secret shopper exercise required special resources, but by far the most demanding method was the activity mapping technique, which called for expertise in instrument design, customized computer programming, statistical analy-sis, and extensive data collection time extending from early morning to late night hours and weekends.

Unitas: Villanova is a faith-based university led by members of the Augustinian Order of Catholic priests and brothers who trace their lineage to Augustine of Hippo. As noted, one of the core values of the university is nurturing a sense of community. In the late 1980s and early 1990s Villanova reemphasized its heritage, and the conscious commitment to community has been omnipresent since then. Not just faculty and students, but staff at all levels are seen as vital to enhancing community, and a deep spirit of collaboration has emerged. This made it very comfortable to recruit over a dozen colleagues through VQI to serve on this study as secret shoppers and activity mappers. The great majority of these colleagues were unpaid volunteers, but students were paid an hourly wage.

Transparency, Teamwork, and Trust: The headline of this article concerns empirical methodology and technique, but a study of this nature cannot succeed without a climate of respect and trust. Creating such a climate can be difficult and is dependent on many factors such as leadership and management styles, staff cohesion, and historical events. For example, simultaneous to this study, the library, through a separate committee, was reviewing the job duties of all staff with an eye toward reorganization. In fact, many colleagues, including the Human Resources office, at times did not distinguish between the two committees. Thus some believed that the point of service study team was identical to the committee working on staff reorganization. What confused things even more was the fact that a number of library staff sat on both committees and the reorganization committee hoped to use data from the point of service study team to assist it in redesigning staff roles and responsibilities. When reorganization is at hand anxiety tends to rise, and this was true here.

Another situation that elevated staff skepticism for the project was a feeling that "we've done this before and nothing happened." True, staff had in the not-too-distant past addressed many of the questions raised in the focus groups. These questions not only included ways to improve services, but also

Figure 3. Evaluative methods and relative effort

	Method	Effort	Degree of Expertise	Impact of Recommendation
1	Quality walk	1	1	1–2
2	Suggestions from staff	1	1–3	2
3	Focus groups	4	3	3
4	Patron survey data	3	3	2
5	Transactional data	4	3	3
6	Secret shopper	4	2	2
7	Activity mapping	4	3	3
8	Benchmarking/site visits/ best pactices	4	2	3
9	Scenario analyses	2	2	3

Effort	Degree of Expertise	Impact
1 = 1 to 4 hours (1/2 day)	1 = Novice	1 = Low
2 = 1 to 3 days	2 = Proficient	2 = Medium
3 = 1 week	3 = Expert	3 = High
4 = more than 1 week		

core topics such as vision, mission, values, goals, leadership, and strategic direction.

The values of VQI, which stress integrity and open communication, in tandem with this somewhat nervous and cautious environment, made it imperative that the team's work be as transparent as possible. At the very first team meeting, the team facilitator set the stage by devoting a substantial part of the agenda to gaining consensus that the team would be honest and open with each other and that the team would communicate steadily with the entire library staff. This was not to be a secret, closed-door committee. As a result, full staff meetings were held at the beginning of the study to describe its purpose and methods, midway through the study to provide a face-to-face update, and at the culmination of the study to present results. Open dialogue characterized these meetings and many staff offered their opinions, reactions, and suggestions. Minutes of the team meetings were regularly posted on the library staff's electronic bulletin board. At the same time, the team recognized the sensitivity of certain personnel issues that might arise and agreed that until the final recommendations were made, comments about individuals and their jobs would remain confidential.

A hallmark of the first full meeting with staff was the library director and the team facilitator sharing with the staff the findings and recommendations of the focus groups. Many recommendations were upbeat and positive, but some were critical of certain library practices and others called for improving organizational factors such as enhancing communication. This honest, nondefensive opening seemed to set a positive tone, and staff continued to provide input to team members throughout the process.

A final trust-enhancing factor was the OPTIR staff members who had joined the study team. All three had worked closely with library staff over the years, one for more than twenty years. Close bonds of trust and respect already existed and formed a foundation for collaboration and credibility. Further, the OPTIR staff made it clear that they would not have agreed to the project if it were "just another study going nowhere." This did not erase staff's doubts of the project's efficacy, but it did seem to build belief that this study was for real and results would make a difference.

Implementation: The major purpose of the study was to make tangible improvements in patron service. Progress toward this goal has been remarkable. As noted above, many incremental changes were made *in cursu*; however, since the submission of the quality study report on June 30, 2006, three major physical enhancements have been set in motion with anticipated completion by the end of 2007:

1. Consolidation of all person-to-person service interactions at the single large desk at the front of the first floor. From this single point of contact, the following are delivered: transactional services (circulation, ILL, reserves), information assistance, reference consulting, media and bound periodical collection access, and basic

technology support.

2. In response to student demand and also at the recommendation of the study team, the library is partnering with the university's graphic services to install in the library a comprehensive print center.

3. A multipurpose instructional computer lab will be created on the first floor, providing access to two dozen more computers.

A further recommendation calls for a space assessment and three-year plan to include additional quiet and group study spaces and more event space. Ideas such as relocation of current collections and the use of compact shelving have been considered in order to provide the required space.

Summary: This article described an ambitious, multi-method, six-month assessment project of walk-in service points at a modern university library. Nine evaluative techniques were concomitantly applied yielding a rich vein of data that spanned major physical improvements and staffing adjustments to more modest, quick-fix quality improvements. The types of evaluative judgments and findings fostered by the different methodologies was discussed, as were the resources and specific skills required by the various methods. Finally, the importance of conducting such an assessment within a context of teamwork, trust, and transparency was underscored.

References

1. Nancy Davenport, "Place as Library?" *EDUCAUSE Review* 41 (2006): 12.
2. Logan Ludwig and Susan Starr, "Library as Place: Results of a Delphi Study," *Journal of the Medical Library Association* 93, no.3 (July 2005): 316.
3. Ibid., 322.
4. Jennifer Church, "The Evolving Information Commons," *Library Hi Tech* 23, no. 1 (2005): 80–81.
5. John B. Harer and Bryan R. Cole, "The Importance of the Stakeholder in Performance Measurement: Critical Processes and Performance Measures for Assessing and Improving Academic Library Services and Programs," *College & Research Libraries* 66, no. 2 (Mar. 2005): 149–70.
6. Lorcan Dempsey, "The Recombinant Library: Portals and People," *Journal of Library Administration* 39, no. 4 (2003): 109.
7. Catherine A. Larson. "Customers First: Using Process Improvement to Improve Service Quality and Efficiency," *RSR: Reference Services Review* 26, no. 1 (Spring 1998): 52.
8. Ian Winkworth, "Innovative United Kingdom Approaches to Measuring Service Quality," *Library Trends* 49, no. 4 (Spring 2001): 727.
9. Marlu Burkamp and Diane E. Virbick, "Through the Eyes of a Secret Shopper," *American Libraries* 33, no. 10 (Nov. 2002): 56–57.
10. R. Burke Johnson and Anthony J. Onwuegbuzie, "Mixed Methods Research: A Research Paradigm Whose Time Has Come," *Educational Researcher* 33, no. 7 (2004): 21.
11. Sue Henczel, "Benchmarking—Measuring and Comparing for Continuous Improvement," *Information Outlook* 6, no. 7 (July 2002): 13.