7-7-2014

Assessment and Evaluation Methods for Access Services

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Abstract

This paper serves as a primer to assessment and evaluation design by describing the range of methods commonly employed in library settings. Quantitative methods, such as counting and benchmarking measures, are useful for investigating the internal operations of an Access Services department in order to identify workflow inefficiencies or comparator data to judge performance against peer institutions. Qualitative methods, such as focus groups and observation studies, are useful for exploring patron behavior and perceptions, especially in regards to space planning and customer service. The strengths and limitations of these methods are also briefly addressed.

Introduction

Assessment and evaluation activities provide Access Services (AS) managers with reliable and clear information regarding the efficiencies of departmental operations, progress towards specific goals and intended outcomes, and the quality of services and interactions with patrons. By using assessment and evaluation activities effectively, AS managers are able to make well founded decisions to guide changes and improvements in staffing, services, and work practices. However, data-driven decisions are only as good as the data on which they are based; information might not be clear or even actionable if AS managers employ the wrong method for collecting or analyzing data. The purpose of this paper is to identify assessment and evaluation methods that are commonly employed in library settings and to describe the methods' strengths and limitations.

Access services departments comprise complex sets of functions at most academic libraries. In a survey of Association of Research Libraries, Wilson (2013) identified core sets of services that comprise AS departments: circulation, reserves, interlibrary lending, and stacks maintenance. These services combine elements of technical operations that emphasize efficiencies such as time intervals; accuracy or error rates; and costs associated with goods or tasks, with elements of public services that emphasize patrons' perceptions and satisfaction with service. Consequently, AS librarians and staff should be familiar with a broad range of assessment and evaluation methods, including quantitative and qualitative approaches.

Assessment and evaluation methods are almost as numerous as there are research questions to explore. However, selecting the most appropriate method for an assessment or evaluation activity begins with answering the questions “What is it you wish to know?,” and “What evidence will answer this question compellingly?” The key to selecting the right method for an assessment or evaluation activity is fully understanding the research problem or question. If AS managers want to develop a better understanding of technical operations to ensure that processes or activities are efficient, cost-effective, or favorably comparable to peers, quantitative assessment and evaluation methods are typically more appropriate for investigating internal operations. If AS managers are exploring patrons’ attitudes and beliefs regarding customer service and satisfaction or gauging patrons’ knowledge, skills, and abilities, then qualitative assessment and evaluation methods are more appropriate choices.

Assessment and Evaluation Methods

A literature search on the phrases “library assessment” or “library evaluation” and “research design,” “methods,” and “methodology” in Library, Information Science and Technology Abstracts (LISTA) and Education Resources Information Center (ERIC) yielded a number of studies regarding assessment and evaluation activities in libraries. The methods described in this paper are included because they were the most frequently employed methods in library assessment studies published since 2008. Seminal monographs on library assessment and evaluation published since 2006 are also referenced in this paper.

Quantitative Approaches

Approaches to assessment and evaluation involve research designs that are generally either quantitative or qualitative in nature. In quantitative research designs, researchers tend to know in advance what they are investigating and are seeking to prove or disprove whether a problem exists or if a causal or correlational relationship exists between phenomena. Assessment and evaluation activities that employ a quantitative research design are generally focused on objective investigations; numbers and statistics may be emphasized over human elements, and participants tend to be unknown or anonymous to the researchers. Quantitative research is helpful for understanding whether a problem exists and how certain conditions or factors might affect a situation. Consequently, AS managers might find quantitative research designs useful for examining internal processes, particularly the effectiveness or efficiency of departmental operations. Researchers consider the following assessment and evaluation activities to employ quantitative research designs because the activities are objective, data-driven, rely on the anonymity of participants, or are conducted in highly controlled environments.

Benchmarking

Benchmarking is the comparison of an organization's data or processes against comparable or peer organizations in order to develop standards for quality performance (Brophy, 2006). Benchmaking is helpful for AS managers to identify best practices and to support decision-making regarding internal processes. For instance, an AS manager may track interlibrary loan (ILL) turn-around times to determine how long the department takes to fulfill ILL requests successfully. The turn-around time serves as a data point or benchmark which may then be compared against other libraries' data points. If the comparison suggests the turn-around time is significantly longer than comparators, the AS manager might consider developing a plan to reduce ILL turn-around time.

Benchmarking is a very helpful method for assessing or evaluating internal processes because it suggests clearly where improvement is possible or necessary. It can be used to develop performance standards, such as a 1-day turn-around time among the peer libraries for processing patrons' ILL requests into lending requests for other libraries to fulfill. The AS manager might then consult with the peer libraries to learn more about specific workflows, staffing levels, or procedures that could be implemented to close the gap between the data point and the performance standard. Generally the workflows and procedures of those libraries performing at the performance standards are setting the "best practices" that other libraries emulate (Hernon et al., 2011). Conversely, benchmarking can also confirm that workflows and targets meet or surpass other libraries and provide evidence that AS operations are efficient.

However, benchmarking can be difficult to undertake and is a fair assessment method only when comparators are very similar to each other. For instance, many libraries compare themselves against libraries that are geographically close or similar in mission, staffing, and size of collection; others compare against libraries at higher education institutions that are considered peers or aspirational peers (Matthews, 2007). However, AS managers should consider carefully the context of each comparator. For instance, a geographically convenient library may not be the best comparator if its ILL services are handled by reference librarians with many other responsibilities rather than a dedicated ILL staff. A peer institution's library may employ different automated technologies for transmitting ILL requests or may receive fewer ILL requests from their patrons because of the local collection's strengths. Therefore it is essential that AS managers select their comparators very thoughtfully in order to have authentically comparative data. Additionally, relatively few libraries make detailed benchmarks related to access services publicly available. Consequently, benchmarking may require visiting comparators and interviewing or observing activities at their libraries to identify relevant benchmarks for comparison.

Counting

Counts of various activities and processes might seem simplistic as an assessment or evaluation method, but Hernon, Dugan, and Matthews (2011) describe counting as one of the most basic, valuable, and common activities that library staff undertake. However, counting is often underrated or overlooked as an assessment and evaluation method because sometimes library staff perceive it as busy work or because the numbers collected are rarely used (Matthews, 2007). Matthews (2007) claims library administrators understand numbers poorly or do not use numbers effectively to make decisions, thereby limiting the usefulness of the wide range of counts available.

Yet counting provides AS managers with tremendous information with which to develop standards, improve performance, make decisions regarding appropriate levels of staffing, and demonstrate value to stakeholders. Counting helps AS managers answer the “how many?” questions, such as numbers of telephone inquiries received; the number of overdue returns; the number of books shelved; the number of patrons assisted at the circulation desk; or the number of fines and fees adjudicated. The numbers could suggest to AS managers that staffing levels should be changed at certain days of the week or times of day; whether courtesy notices or longer loan periods will reduce overdues; or whether fines and fees policies should be restructured.

At Illinois State University, this author employed counting as a means of assessing missed check-in's at the circulation desk. By checking-in materials an additional time after circulation staff conducted an initial check-in, AS staff found that nearly 3% of returned materials were not successfully removed from patrons' accounts due to staff inattention or scanner errors. With more than 110,000 annual circulation transactions, a 3% error rate meant approximately 3,300 items mistakenly remained on patrons' accounts. AS staff implemented new work practices that required shelving staff to discharge all returned materials before items were shelved, reducing the error rate to less than 1% and resulting in fewer patron complaints and requests for shelf-check's. As Matthews (2007) noted, counting is often an underrated method but can suggest powerful changes for service improvements.

Usability Testing

Usability testing is an assessment method that evaluates the accessibility, simplicity, navigability, and intuitiveness of physical and virtual spaces, equipment, and services (Brophy, 2006). Participants are given specific questions or tasks, and library staff observe the steps and measure the time participants take to answer the questions or complete the tasks. Participants may also be asked to think aloud so observers can record participants' reasoning and note what satisfied, confuses, or frustrates the participants.

Wilcox (2012) conducted usability testing of webpages managed by the access services department at Cornell University. The usability testing revealed that patrons were confused by the different delivery options available and that patrons found accessing course reserves to be consistently difficult. Additionally, library jargon was more pervasive than library staff had initially realized and vital information on renewals, fines, and library accounts were too deep into the library's website for patrons to find easily. Wilcox (2012) noted some sources of patron frustration were easily fixed by using clearer language and embedding links to vital information on the library's landing page for easier navigation. Wilcox (2012) recommends "lending policies and fines need to be both findable and understandable…hours, equipment, and laptop availability needs to be immediately located…and fix the misunderstandings between the language we use and the language patrons misunderstand."

Although usability testing is most commonly associated with the evaluation of websites, databases and information systems, AS managers might also find it an appropriate method for evaluating equipment and products with which patrons must interact. Are the user interfaces of self-check kiosks easy to understand and use? Is library signage visible and understandable? Kupersmith (2012) reviewed the lessons learned by academic libraries in 51 usability tests and recounts an anecdote of a library that installed signs to promote their self-service hold shelves, reading "Patron Holds Pickup," only to discover in usability testing that patrons understood neither "patron" nor "holds;" the signage was consequently changed to "Pick Up Requested Materials Here."

Usability testing has many clear strengths, including direct feedback to AS managers and the opportunity to identify and resolve potential problems before a website, product, or service is launched. Usability testing decreases the likelihood that websites, products, and services will fail to meet their goals and intended outcomes, and it increases the likelihood that patrons will become repeat users. Brophy (2006) claims there are few drawbacks to usability testing but participants performing tasks assigned by library staff might not be representative of how patrons would realistically use or approach the task on their own. Usability testing is generally conducted in a controlled environment under the observation of library staff, which may cause participants to behave differently than they might alone. Finally, usability testing is time and labor-intensive for both library staff and participants, so most usability tests involve fewer than 12 participants (Kupersmith, 2012). Consequently, the small sample size of most usability tests may not adequately reflect the perceptions and attitudes of the larger patron population.

User Surveys

User surveys are arguably the most common method library staff employ to collect feedback from patrons (Hernon & Matthews, 2011). Library staff employ user surveys to assess patrons' satisfaction with specific transactions or services or to identify the importance of services, hours of operations, and equipment to patrons. User surveys are typically considered quantitative research because they are designed with scaled responses and convey to library staff only numeric data that is broken out by ratings (Stake, 2010). Many user surveys do include some qualitative features if patrons are able to contribute their own thoughts and experiences through open-ended questions, but generally user surveys include only one or two open-ended questions as the final survey items.

One of the strengths of user surveys is their flexibility. They can be customized to target certain groups, such as international students or newly hired faculty. They can be written broadly to gauge customer service or narrowly tailored toward a certain service or product. Yang, Hahn, and Thornton (2012) conducted a user survey to measure patrons' satisfaction with document delivery and interlibrary loan services at Texas A&M University; the survey's responses confirmed that patrons were largely satisfied and found the library's "Get it for me" service popular, but the authors still received feedback that allowed the AS department to refine their services. Feldmann, Wess, and Moothart (2013) created a user survey targeted to patrons who borrowed the laptops managed by Colorado State University's Morgan Library; they noted that patrons rarely provided verbal feedback regarding their laptop lending program and desired feedback to confirm success or suggest areas for improvement. The authors asked patrons to gauge their frequency of borrowing laptops, their reasons why, and to rate their level of satisfaction with the laptops. Despite the popularity of the laptop lending program and the AS department's efficiency at circulating laptops, their findings in the open-ended section of the surveys revealed that respondents rated the laptops poorly, with dropped wireless connections and difficulty with logons the greatest sources of frustration (Feldmann, Wess, & Moothart, 2013).

User surveys can be valuable methods for assessment, particularly when AS managers desire feedback on customer service. There are disadvantages to user surveys. Hernon, Dugan, and Matthews (2014) warn library staff of survey fatigue, in which patrons are bombarded by surveys on a constant basis from all areas of higher education, ranging from satisfaction with dining options, to the helpfulness of academic advisors, to preferences for social programming in the residence halls. Consequently, patrons ignore surveys increasingly, making the typical response rate as low as 3% on average (Hernon, Dugan, & Matthews). Stake (2010) recommends coordinating the timing of surveys with other areas of higher education institutions so patrons feel less inundated. In addition to low response rates, the construction of effective surveys can be difficult. Survey writers must think carefully about how to phrase questions in ways that do not lead respondents toward desired answers, but to also write questions that truly capture what the researchers really to know! Stake (2010) describes question construction as an "art form" (p. 95). Surveys are also a serious time commitment, as researchers should pilot the survey to ensure the questions are unambiguous and understandable to patrons. The timing of the survey should be considered, as surveys released near critical times of the semester might not receive as many responses as at other times. Additionally, data analysis can be time-consuming without data analysis software to assist. Fortunately, most survey creation software, such as SurveySelect, will analyze results for researchers (Hernon, Dugan, and Matthews, 2014).

Qualitative Approaches

While quantitative approaches to assessment and evaluation are appropriate for investigating internal operations, they rarely provide insight into why a phenomenon exists or what patrons expect from Access Services. Consequently, qualitative approaches to assessment and evaluation are conducive to soliciting feedback from others or exploring research questions that are rooted in “why does this phenomenon exist?” or “what do others think about X?” (Stake, 2010). Mystery shopping, observation studies, and focus groups are some of the most common qualitative methods employed in library literature to collect information regarding patrons’ behavior, attitudes, and perceptions.

Focus Groups

Focus groups are a group interview or discussion designed to plumb the perceptions, attitudes, needs, and behaviors of a subset of a specific population. Generally, focus groups are comprised of seven to 10 volunteers who share similar characteristics or demographics, such as professors of history; first-year graduate students; or transfer undergraduate students (Hernon & Matthews, 2011). A facilitator guides a semi-structured interview or discussion, providing discussion prompts by asking questions regarding the participants’ perceptions of specific services or programs (Mizrachi, 2010).

Focus groups can collect direct or indirect measures of evidence, depending on the nature of the topic discussed. Participants’ personal and collective feedback can be direct evidence if the purpose of the focus group is to assess participants’ awareness or satisfaction with services, staff, technology, hours of operation, etc. However, their feedback is indirect evidence if the purpose is to assess their knowledge, skills, or abilities to use library services such as interlibrary loan or finding materials in book stacks. Participants tend to overstate their own comprehension and overestimate their skills and abilities, so self-reporting is not generally considered a reliable measure of evidence (Suskie, 2009). Murphy, Long, and MacDonald (2013) investigated undergraduate students' perceptions of call numbers and ability to locate known items in book stacks; nearly all the participants in the study self-reported finding their desired books "almost always" and judged their familiarity with call numbers good or very good. Yet only two of the participants were able to successfully interpret call numbers and locate books when their knowledge and skills were tested.

Focus groups can be difficult to conduct because participants must be able to share their perspectives forthrightly; a particularly vocal speaker may dominate discussions or unintentionally silence persons with dissenting or different opinions (Acocella, 2012). Consequently, facilitators must be attentive to nonverbal behavior and group dynamics. Additionally, facilitators could unintentionally bias responses themselves by asking leading questions. Acocella (2012) recommends that focus groups be conducted by trained facilitators rather than by library staff. The strengths of focus groups are the rich, often powerful stories that participants share. High quality information can be gathered in relatively little time and with relatively little investment on the part of AS managers and staff. In fact, one of the unintended outcomes of holding focus group is the positive notice that library staff are ready and willing to engage patrons directly in discussions about their needs (Acocella, 2012).

Mystery Shopping

Originally developed as a method for evaluating service providers in the retail sector, mystery shopping is only recently beginning to be adopted by libraries as a means for evaluating the quality of customer service provided at service points (Hernon, Dugan, & Nitecki, 2011; Wedinger, Benjes-Small, Ackermann, & Kinman, 2010). In a mystery shopping exercise, unidentified persons pose as ordinary patrons and conduct predetermined tasks, such as registering for library cards; borrowing library materials; and asking specific questions that are regularly answered by library staff. Shoppers are typically students or other unobtrusive patrons who are trained and given criteria for rating what the library considers to be its standards of customer service, such as circulation staff making eye contact with and greeting patrons or receiving assistance within five minutes.

For AS staff, mystery shopping might be an effective alternative to customer service surveys for collecting information regarding the quality of patrons' interactions with service points. Wedinger et al. (2010) claimed that customer service surveys "often draw responses from patrons who have had disproportionately good or bad experiences" (p. 29). Additionally, patrons may report on experiences that occurred in the distant past and may no longer be applicable to current service levels or expectations. Mystery shoppers, on the other hand, report immediately on the service provided during a particular encounter. Although mystery shopping could include quantitative elements such as measuring the length of time the shopper spends waiting for service, Bradshaw and Crowe (2012) found mystery shopping's strengths to be qualitative in nature because they evaluated the efficacy of their customer service training program by exploring staff and student assistants' greetings, courtesy, demeanor, avoidance of library jargon, and helpfulness in making referrals or instructing patrons on the use of library equipment.

The results of mystery shopping may yield actionable results in refining customer service plans, identifying particular staff or student assistants who may need greater training, indicating areas where all or many staff or student assistants may require additional training, identifying key points that appear to be unclear or inconsistent for the overall staff, or pointing out blind spots that staff might not have previously considered such as patron confusion with library jargon. However mystery shopping as an assessment or evaluation method has significant disadvantages too. Wedinger et al. (2010) acknowledged the difficulty of defining "quality" customer service or interactions and of training mystery shoppers to subjectively report their perceptions. Additionally, Bradshaw and Crowe (2012), Hernon, Dugan, and Nitecki (2011), and Wediginer et al. (2010) emphasized the political delicacy of employing mystery shoppers. Although AS staff should be informed that mystery shopping will occur at unidentified times and by unidentified patrons, staff might perceive such activities as "going fishing" for reasons to discipline or correct individual staff. This could result in low staff morale. Nonetheless, mystery shopping is a relatively simple method for evaluating customer service, especially the efficacy of customer service plans and training programs.

Observation Studies

An observation study is an assessment method undertaken by library staff to develop a broad understanding of patrons' behavior and usage of a physical space. Sometimes called "environmental scans" or "sweeping studies," observation studies attempt to describe the kinds of activities taking place in a specific location, the complexity of people's behavior, and the interaction transpiring between people and their environment (Hernon, Dugan, & Nitecki, 2011). These are distinct from floor or head counts, which simply provide an understanding of how many patrons are present at a given time. Instead, observation studies require the observer to simultaneously note what activities are taking place, by whom, when, and where. The observer must also attempt to explain the why of behavior (Stake, 2010). As an assessment or evaluation method for libraries, observation studies are useful for internal explorations of how patrons behave in or use a physical space. These studies take many forms depending on what libraries want to assess or evaluate. A number of studies employed observations to explain how patrons seek information at service points, select resources, use resources, navigate stacks to locate known titles, or interpret library signage (Montgomery, 2011; Vanderschantz, Hinze, Cunningham, Trimpany, & McKay, 2011; Mandel, 2010).

For AS managers, observation studies of library floors or locations are helpful in evaluating the levels and types of staffing service points may require, especially on certain days of the week or at certain times of day. Hernon and Matthews (2011) suggest AS managers should consider the following questions in observational studies: What spaces are patrons using? Are they alone or interacting with others? In what interactions are they engaged? What personal belongings and library materials do they have with them? If patrons are engaged principally in studying and socializing rather than in activities that require significant contact with service points, AS managers could consider staffing service points with student assistants rather than with staff members. If patrons congregate in specific locations at certain times of the night, unused portions of the library could be closed to patron access in order to manage library security and minimize closing activities.

Observation studies are more reliable than surveys when AS managers must undertake decisions concerning library hours and services. Given and Leckie (2003) noted that observed behaviors often do not match patrons' self-reported behaviors or expectations, so observations can provide direct measures of evidence of how a space is actually used rather than how others believe a space is used. Observation studies are, however, time and labor-intensive. If the library is heavily populated with patrons or if only one or few observers participate in the assessment, an accurate and detailed account of all or even most patrons may not be possible. Although AS managers might wish to employ observations over a prolonged period of time for a comprehensive view of library usage, Stake (2011) cautions that observers may experience fatigue or boredom – particularly when employing student assistants for this purpose -- thereby threatening the reliability of the collected data. Additionally, observation studies do not readily answer why patrons are engaged in particular behaviors or in certain spaces. Although many well trained observers may make educated conclusions, Hernon and Matthews (2011) noted that although relatively few patrons may be studying in the library very late at night, observers do not ordinarily know the reasons why patrons are there: Three o'clock in the morning might be the only time a student with two part-time jobs is able to study! Consequently, observation studies are strengthened when they are used in conjunction with other assessment or evaluation methods, such as focus groups and circulation transaction data for a fuller, richer understanding of library usage.

Conclusion

Access Services combines elements of technical services functions, such as operational efficiencies associated with interlibrary loan and stacks maintenance, and public services functions, such as signage and interactions with patrons. Consequently, AS managers should be familiar with a range of assessment and evaluation tools that are designed to collect meaningful information and adequately answer the questions under investigation. While not intended to be exhaustive, the purpose of this paper is to introduce AS managers and staff to the most commonly employed assessment and evaluation methods explored in recent library literature.

Quantitative methods, such as benchmarking; counting; user surveys; and usability studies are designed to assess activities objectively. They are most helpful when evaluating internal workflows or processes. Qualitative methods, such as focus groups; mystery shopping; and observation studies, are designed to gauge the quality of customer service or discern patrons' behaviors, perceptions, and attitudes. AS managers can employ these methods to develop performance standards, improve efficiencies in operations, adjust staffing plans, and measure space usage and customer service.

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