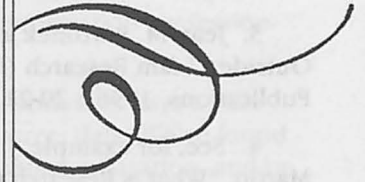


## THE QUESTIONS OF ACADEMIC LIBRARY ASSESMENT

*by Gwen Lee-Thomas and John Robson*



The economic forces that affect colleges and universities – declining public tax support, increasing demand for market sensitivity, budget freezes, and a host of other factors – have shaped a need to know. Board members, administrators, and faculty need to know if all available resources are being used effectively to support the academic mission. Alumni and citizens ask, “Are the resources being used effectively, actually making a difference in improving the skills of students and assisting them in grasping the intellectual complexity of the environment in which they live and work?”

Academic libraries are also called upon to examine how resources are deployed in support of the academic mission. Traditional activities, for example the preservation of older paper texts, have to be evaluated in light of the mission and strained budget. New activities, for instance the digitization and redistribution of research data, also must bear the same critical examination. What will be the return on the investment in advancing the institutional mission?

Librarians in decades past often used quantitative data. How many users came through the door? How many substantive reference questions were fielded? How many journals were held? These quantified measures of information support – while still useful, often as benchmarks against schools with similar characteristics and mission – are now chiefly important when used as a part of meaningful qualitative assessment.

The strategies for qualitative assessment, however, often bewilder librarians, faculty, and administrators alike. Creating and deploying survey instruments and then analyzing the data are specialized tasks. Will the data and analysis have value across time and will they have value when used to benchmark against other colleges? The investment is so considerable that librarians, particularly those at smaller institutions, struggle to understand the questions and planning underpinning assessment.

Programs like LibQUAL+™ sponsored by the Statistics and Measurement Committee of the Associa-

tion of Research Libraries, only date back to the fall of 1999. The commitment by libraries, again particularly the smaller ones, to participate in LibQUAL is often hard to secure, both for financial and administrative reasons. Still, the need for good assessment is, if anything, greater for the small college library to ensure careful deployment of resources.

### ROSE-HULMAN EXPERIENCE

The Rose-Hulman library is a small operation. The library has a staff of four and two FTE student workers supporting a population of 1800 FTE students. The collection of 70,000 volumes has made a major expansion electronically, primarily in engineering and science journals and documents. With limited resources – staff and materials – the library staff strongly felt the need to understand the patterns of information use – print and electronic – and to measure the gaps in services, collections, and facilities.

A survey was made of library literature and of the Web to understand better the requirements of useful assessment and to examine the survey experience and instruments of other similar colleges. Some major works, to name a few, were prepared by Peter Hernon and Roswitha Poll. There are many more guides to evaluating collection quality.

In the end, we felt that we knew better what we wanted to know but were challenged by the scope of quality assessment for a small staff. Thus, we sought the advice of the Director of Assessment at Rose-Hulman, Gwen Lee-Thomas. Our perception was that her office—within Institutional Research, Planning and Assessment—had a reputation of being chiefly focused on academic departments and helping them prepare for the accreditation process. She was very open in assisting the library staff in tackling meaningful library assessment as a part of overall campus evaluation. The foundation process that she led us through – the five questions that had to be answered upfront – was both challenging and rewarding.

### THE ASSESSMENT

Whenever anyone is interested in knowing whether or not something is working, it is important to begin

with basic information on the current status of the program, project, services, or situation. Although basic information can inform, a set of strategically designed and specifically focused questions can provide “answers” that give insight into whether or not there should be changes or improvements. Since there are numerous ways to gather information, it becomes vitally important that there is an understanding on how to frame the question(s)—hence, the help of and partnership with an assessment office.

Assessment is the gathering of meaningful or purposeful data that will provide information that informs, improves or confirms. Although many practitioners use assessment and evaluation interchangeably, the assessment office at Rose-Hulman Institute of Technology has elected to keep these two fluid terms separate. Evaluation, at Rose, is the assigning of merit, value or worth to the findings. Therefore, our office specializes in helping others think through what they really want to know and, therefore, help them gather “useful” data (assessment) so that they can then decide the value of the information for decision-making (evaluation). For instance, survey results might reveal that 60% of a group of students indicated that they were satisfied with the services at the reference desk of the library (assessment). What the librarians would have to decide is whether or not this 60% satisfaction rate is acceptable or unacceptable. If unacceptable, then what else might be done to improve the 60% to, say 90% (evaluation)?

Before moving into the design of assessments, it is important to recognize any underlying concern with conducting assessment. If there are apprehensions among those who will need to use the information, these apprehensions must be eased before a useful assessment process can commence. If there are apprehensions, potential respondents may verbally advocate against the assessment project to others, withhold pertinent information that might be very helpful to the type of data gathered or the process itself, or provide biased information because of a basic distrust of the assessment process or distrust of how the information will be used. These apprehensions can be rooted in fear that the results will be used punitively, concern that those conducting the assessments will not be as knowledgeable of how the services are provided, or even concern that the results will not be interpreted in a way that will be useful. Another attitude that is more positive but equally unhealthy for the project, is a strong bias toward proving things are great. This is referred to by Posavac and Carey (2003) as the “slam bang effect.” With this attitude toward assessment, the information sought is not so much to find out what is happening or needs to happen, but finding information that proves what is believed to already exist. Any of these concerns, as well as others, should be clearly

addressed before proceeding with any assessment to ensure that there is a clear understanding that assessment is designed to inform, improve or confirm, not punish those involved in the project or service that is being assessed.

To design assessments that yield useful information, there are five basic assessment questions that should be clearly answered before any attempt is made to gather data. These questions are:

- (1) What do you want to know?
- (2) Why do you want to know it?
- (3) From whom will you gather the information?
- (4) How will you gather the information?
- (5) How will you use the information?

Although these questions seem innocent enough and relatively easy to answer, as you begin to focus on answering these basic assessment questions in ways that will lead to the design of clear measurable results, the task becomes a little more complex, highly involved, and iterative—yet focused and strategic.

To understand better how to think through these questions, here are some “things to consider” when answering the five basic assessment questions.

#### WHAT DO YOU WANT TO KNOW?

This is the most important question of the five because the answer sets the “agenda” for most of what will happen in the data gathering, interpreting and reporting stages of the assessment process. Once you decide what you want to know, carefully consider if this question could have multiple meanings to others. Always be open to feedback from others, especially those who may not be knowledgeable about the language, jargon, or definitions that are common among those in your field.

Oftentimes in assessing library services we want to know if “we are being responsive to the needs of our community.” Although this is a good starting point, this alone does not help you focus your approach. Think about what “responsive” really means. Are you interested in whether or not your services are effective or efficient? Even these terms can be too broad and ambiguous to design assessments. Why? These terms are often defined in the “mind of the beholder.” Ways to further define “effective” could include level of satisfaction, frequency and ease of use, or expectations. Responding to a *level of satisfaction* is less ambiguous than responding to an *effective service*. Also, to further define “efficient” could include timeliness, availability, level of difficulty in locating a publication, etc. The thing to remember is that, as long as you can further define a particular term or concept, another iteration of answering this first question is suggested.

Another very important consideration in answering this question is to make sure that the question is (a) Communicable—*Is the question easy to communicate to others in a way that the listener can understand it clearly?* (b) Concise—*Can the question guide the data gathering strategies so that the efforts remain focused on a specific targeted area?* and (c) Cogent—*Does the question encourage data gathering strategies that are interrelated?*

### WHY DO YOU WANT TO KNOW?

The answer to this question is difficult for most because it carries an illusion of “easy to answer.” When asked this question, most will say “because we need to decide if we need to make changes to our services.” Good, but why would you want to know if you need to make changes? Ah-hah! This is where most begin to struggle. Regardless of the answer, the important thing to remember is that “why?” is very broad, but there must be a specific reason or set of reasons information is needed. One response may be “we want to make sure our community is satisfied with our services.” The word *satisfied* narrows the focus. Another response might be “we need to know if we have the appropriate databases for our constituencies” or even “we want to know if our community prefers our library over other libraries in the area.” Another answer may include “we want to know if our constituents want a broader selection of materials than what we offer currently?”

In addition to narrowing the *why*, it is important to keep in mind that a deeper defining process occurs with answering this question also. To narrow the answer to a response that includes “satisfaction” will also require thinking through “satisfaction with what?” Although this process can be very complex and time-consuming, it is absolutely essential to getting useful information.

### FROM WHOM WILL YOU GATHER THE INFORMATION?

Just like the previous two questions, this question seems easy enough to answer—our constituency groups, right? Right, but there are still other things that need to be considered. First, it is suggested that the groups are separated into two categories: primary and secondary. Those in the primary group are directly impacted by the service (i.e., students, faculty, administrators, etc.). Those in the secondary group are usually those who are indirectly impacted by the service (i.e., interlibrary loan, surrounding communities, alumni, businesses, etc.). It is up to the library to determine who falls into these categories.

When determining the primary and secondary groups, also consider the level of influence on the library and its services as well as any influence there

may be on the overall success of future growth and opportunities. The greater the influence on the library's future the more “primary” the group becomes. It is not presumptuous to separate out these two groups, it is very normal, healthy, and less time-consuming when deciding answers to the next question.

### HOW WILL YOU GATHER THE INFORMATION?

Once the above three questions are answered, clearly understanding how information will be gathered focuses the strategy of the assessment process. Knowing what, why, and from whom are all important, but determining “how” is more strategic.<sup>1</sup> Because there are so many ways to gather the information, answering “How will we gather the data?” can be answered by considering two issues: First, the answers to a few sub-questions at this stage can be very helpful:

- (1) How much time do you have to gather the information?
- (2) How can you use current processes to gather new information?
- (3) How can you keep the data gathering as non-intrusive as possible if there are no current processes in place?
- (4) How do you minimize the opportunities for biased information (i.e., campus tension during exams; homecoming weekend, etc.)?

When considering these additional questions, respondents must be encouraged to respond either through moral appeal or some other incentive unique or relevant to the group. Some have used a lottery process (i.e., draw the name of a respondent for a \$50 to \$200 gift) or merely appealed to the “we’re here to improve so that we may better serve you” concept, which works more often than not.

Part two of answering the “how will you gather the data?” question refers to types of data-gathering strategies. There are basically two types of data-gathering strategies with multiple instruments for each. One is referred to as *quantitative* assessment, which is the gathering of purposeful data that are measured in quantity and are represented by an assigned number or statistic. The other is referred to as *qualitative* assessment, which is the gathering of purposeful data that are measured by capturing the nature, capacity and attributes of a given environment, experience or process. Examples of quantitative assessment can include, survey responses, the number of visitors, the number of interlibrary loans, what books, periodicals, or databases are being selected, etc. Qualitative assessments can include focus groups, conversational interviews, testimonials and formal interviews. These two types of assessments both have advantages and disadvantages

and should be carefully weighted before a decision is made. See Table 1 for advantages and disadvantages of quantitative and qualitative assessment.

However, there is a cost-benefit effect that says “there is an inverse effect on the amount of time it takes to gather the data and the depth and quality of the data gathered.” Here again, is where the primary and secondary groups can be helpful when time is a critical factor.

### HOW WILL YOU USE THE INFORMATION?

This question requires careful consideration in two areas: First, what calculations will provide the desired information and second, who will use the information to make decisions. Calculations can be as simple as the percent of respondents to particular questions to more complex statistical procedures used with SPSS or SAS (statistical software packages). The choices are not so much as right or wrong as they are appropriate; however, the more complex the data that are gathered, or the decision on how to use the data, the more complex the analyses will be in the process. In most cases, the percent of respondents for a given survey item, or identifying the major theme that emerged throughout an interview or focus group can provide a wealth of information if the initial assessment question is clearly understood.

The answering of these basic five assessment questions can take several days, weeks or even months, depending on how much thought and time (and number of people) can be devoted to identifying the answers. However, it is strongly encouraged to take the time to answer carefully all of these questions before embarking upon any data-gathering strategy. Answering these questions will determine the quality of the information obtained as a result of the assessments which will, in turn, directly influence what information will prove useful when deciding whether or not change is warranted.

As the answers to these questions are sought and hashed out you should expect to go through several iterations before everyone involved is clear about the assessments. Also, guard against jargon, and do not be afraid to get input from “outsiders” (those who are not privy to the language and definitions of your discipline.).

### CONCLUSION

In the end, the process took the library four to six weeks. Each iteration was predicated on more research and consultation – within the library, on campus, and with librarians at other schools. By the third iteration, the sample survey was tested for comprehensibility with a group of students. This helped to refine further

Table 1: Advantages and disadvantages of quantitative and qualitative assessments.

Assessment Method	Advantages	Disadvantages
Quantitative	Can obtain a broad range of information in a short amount of time.	Does not take into account human-variables.
	Through proper statistical methods, results can be generalized.	Does not take into account environmental or situational variables.
	Less time-consuming than qualitative.	Does not allow for in-depth insight of the “why?” when gathering data.
	Objective interpretation of results.	
	Provides in-depth information on the program, group, or environment.	Cannot be generalized across groups.
Qualitative	Provides the “why?” and the “how?” with regard to the program, group or environment.	Process is subjective and the importance of certain data is contingent on the assessment person’s value system and judgment.
	Allows for testimonials that may strengthen the interpretation, conclusions and recommendations.	Multiple uncontrollable variables can influence the information gathering process (i.e., participants in a focus group may have had a bad day and may not separate the anxiety from the discussion).

question intent and terminology amongst user groups. Was it important for the user groups segments (faculty, staff, undergraduates, and graduate students) to distinguish between a magazine and journal, between scholarly and peer-reviewed? The sample test takers also forced alterations in survey design and in limiting the number of questions. It became apparent that by the time all the "absolutely essential and clearly written questions" were answered many students would become disengaged from the process because of the time required. Each question was modified to allow a "comments" window. That proved very beneficial because responses could be correlated with satisfaction levels. Some of the most pointed criticism came from satisfied and highly satisfied students who made use of the library 2-3 times per week and faculty with five or more years of experience.

The Assessment Office would not facilitate a library assessment until there was a high level of confidence that the results would have meaning. The numerous iterations that were necessary in answering the five questions to the satisfaction of all made for an assessment that still guides the library nearly two years later. For example, the merits of "dumb" terminals for the Rose-Hulman environment were something of a surprise. We would not have explored such options as this without a better understanding of why students used the library and for how long on average. The dumb terminal deployment has increased overall student satisfaction. Since they all have relatively new laptops, library terminals needed to be purely research tools. The upgrade of the fifteen station library computer lab served to help those with laptop issues and graduate students. Another example of the survey forcing us to examine assumptions was in the area of seating. The importance of chair comfort was made apparent and is guiding the current evaluation of study rooms. The initial assessment led us to see different patterns of use between male and female and to resurvey small groups. Such issues as the ideal chair turned out to depend on gender and length of library study time.

In many respects, the work on the assessment whetted our interest in doing more user surveys. We learned to think about satisfaction and dissatisfaction in a different light. The lessons drawn were not used to punish but to prompt better thinking about solutions.

## NOTES

<sup>1</sup> Developing a strategy for assessment data gathering occurs in many ways; however, the strategy for gathering can be simultaneous collection, linear collection, or circular collection. Simultaneous collection occurs when you administer several assessment instruments (surveys, focus groups, interviews, archived data, etc.) without using the results from any one assessment to formulate another assessment instrument in the same project. Linear collection occurs when you administer one assessment instrument and then use the results to formulate the next assessment instrument (i.e., using the results from a survey to determine what questions should be asked in a focus group on the same project). Circular collection is when you use the results from one instrument to design other assessment instruments and then revisit at least one of the groups in the same project (i.e., use survey results to design focus group questions, and then use the results from the focus group to design interview questions for a few individuals who completed the survey.)

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