Abstract

Academic libraries need to be agile - to redefine services and restructure investments in response to changing academic programs, technology, resources and user needs. Librarians are skilled at monitoring their institutional and professional environments and conducting surveys to measure satisfaction with current services. But, in the case of informing decisions on new services, we need methods for obtaining systematic data from users to validate fundamental shifts in priorities and resource investments.

Carefully structured focus groups have been used successfully by Arizona State University West Library to reveal user behaviors and to design services that are congruent with their behaviors. Interview questions were derived from an examination of external forces and trends and are designed to elicit quantitative, qualitative, impressionistic and behavioral data. Focus group participants discussed how they obtain and use information and how technology has changed the way they communicate and collaborate with others. The interviews are about them and not about the library or how the library is performing.

The result is a collection of powerful stories that were energizing to staff in the consideration of possible new service models. Analysis of the stories entailed indexing responses to generate quantitative data regarding information-gathering strategies and use of library resources and facilities. The qualitative and quantitative data were clustered into categories of users for which tailored services could be designed. The strengths and weaknesses of this data-rich but resource-intensive methodology are outlined. In addition, the use of this data for program planning is explored.

Introduction

Library users are never static. Their numbers change. They become more diverse. Their needs, wants and aspirations evolve. Some want and need our services, but not in the way we make them available. There are also those we should stop serving because their need has been met, they are better served elsewhere, or because we’re not producing results.

Librarians are skilled at monitoring their institutional and professional environments and at conducting surveys to measure satisfaction with current services. But in the case of accommodating changing needs and informing decisions on new services, we need methods for obtaining systematic and valid data from users to substantiate fundamental shifts in priorities and resource investments.

Arizona State University West Library hosted focus groups to gather this data. Focus group methodology was chosen because focus groups allow the issues to be framed from the user’s perspectives. They are less structured and leave room for unanticipated information. Finally, one hears users’ stories in their own words, with their passion. This experience confirmed the power and necessity of stories in measurement and planning for libraries – especially stories from library users.

The story of this library is a relatively short one. Arizona State University West was created by the Legislature of the State of Arizona in 1984. The Library was the first of five buildings constructed on the campus and the Library staff made up a large part of the welcoming committee for the faculty, students and staff that followed. Besides being an integral part of the community’s first impression of a new public university campus, librarians were focused on anticipating and planning for the future. Over the approximately 15 years of its existence as a campus, the Library staff has worked to successfully anticipate accreditation standards, curricular development at the undergraduate and Master’s levels, and the needs of newly hired faculty.

Roughly two years ago, growing evidence began to suggest that student and faculty needs had caught up with us. Everyone was happy with the Library, which is very service-oriented and has been incorporating new collections and services in response to new technologies. The problem was that new services had been incrementally added without discontinuing any. Staff were experiencing overload and efforts were becoming scattered, more reactive and less future oriented. It was time to take a giant leap – to step out again in anticipation of institutional direction and users’ needs, and redefine – or “reframe” – services in a fundamental way.

The planning process began by examining external forces and trends in the information industry, scholarly communication, technology, public higher education, student demographics, enrollment trends, resource projections and library use data. This analysis was used to shape interview questions for focus groups of faculty
and students that would elicit data about campus community behavior – how faculty and students obtain and use information.

The most compelling data in the planning process came from these focus group interviews. Actually listening to people talk about how the external forces and trends shape their work lives was an energizing part of our planning process. It was important that as many staff members as possible were involved in the actual interviews – the stories they heard provided the drive and motivation to get through the hard work of data analysis and decision making to come. These interviews were the “hook” staff needed to overcome the usual skepticism about a planning exercise. Based on what was revealed in the focus groups, there was no longer any question that we needed to take action to alleviate difficulties our faculty and students were experiencing.

Focus Group Methodology

The interview questions made it clear that this was not a how-is-the-library-doing exercise. Nor was it strictly a poll about new services the Library should offer. The goal was qualitative, impressionistic, behavioral data, not quantitative facts.

First, we spent a lot of time begging people to talk to us. As enticements, all sessions were fortified with food and drink, and students were given $10 coupons redeemable at the campus bookstore. It helped that there is a tradition of close collaboration between faculty and the librarians at ASU West. Faculty were more readily convinced to participate and, therefore, lent their weight to soliciting student involvement.

We went through two stages of interviews (interviewing approximately 100 faculty members [50%] in one semester and 75 students [4%] in the following semester). Among the things we learned about focus groups were:

1. Develop broad, open-ended questions.
2. Ask factual and behavioral questions. Ask “What do you do?” NOT “What do you think the Library should do?”
3. Refine questions through trial and critique. Eliminate redundancy, re-word confusing questions, remove jargon, refine question order; get rid of anything that gets in the way of people telling their stories. For example, questions in the faculty survey about computing equipment, connectivity and resources used were incorporated into a short paper survey administered at the beginning of the student focus group sessions. In this way we got some factual information on each student participant, helped prompt students’ thinking in response to the discussion questions, and allowed the bulk of the time (guaranteed maximum of 90 minutes) to be focused on responses we could not get any other way.
4. Avoid responding to comments/questions of interviewees – no matter how incorrect the information they are sharing with each other. [This was particularly hard to do!]
5. Talk to your entire potential market. Include users and non-users of your services, people from different disciplines and departments, students/faculty/staff.
6. Use role-play to train interviewers and note-takers. In-house training on running focus groups was developed from the sources found in the Bibliography for this paper. Training sessions were approximately 5 hours in length. Interviewers learned to serve as prompters, not participants. The most important job of the interviewer was to listen, listen, listen.
7. Notes should be as verbatim as possible.
8. Transcribe notes immediately. Participants agreed to our both taping the proceedings and having a note-taker present. They were assured that no identifying data would be shared.

Focus Group Data

It is worth emphasizing that these interviews were not about us, not about how the library was doing. They were about our users and how they were coping – or not coping – with the new information environment. Two examples of the behavioral questions are:

- How do you obtain the information you need?
- How has technology changed how you communicate and collaborate with others?

Initially, we tried to focus our questions only on our interviewees’ behavior. But, we found that it was impossible to ignore the emotions and feelings expressed in the course of the interviews. (“When I do this, I feel this.”) What people do is intertwined with how they feel while they do it, and the emotions they expressed were almost as important to us in the end as the behaviors they described.

Here are examples of the compelling stories from students,

“He know periodical literature is more dependable than the Web, but it’s so hard to access. I have a job and two children. I do most of my work on the computer at 2 a.m. after the kids are in bed and I can concentrate. I use what I can to finish that paper that’s due in class tomorrow, and if that means I can use only the Web, then so be it.”

“...[when] I came here...[I] just cried all the time because I felt so overwhelmed, and my grades fell.”
“[There is] so much information that it is difficult to choose what is best. And then when you come back you don’t know what to do and can’t remember which way out of all the ways to get in, and it’s like starting all over again.”

“Advertising is key – If I don’t see it or read about it, I don’t know that it’s here, and then how can I take advantage of it? The Library needs to get information out to the students more.”

Faculty said:

“…we used to drain all the juices from each article. Now we are flooded. We are not trained to make the best selection. There is a sea of knowledge, [and] we will not have time or motivation or skills to use adequately what is in the sea.”

“The Library could simplify the process of obtaining information, force-feed me the right stuff, help with information overload. I spend too much time now browsing the Web for information.”

“I not only have to be a researcher and a teacher, I have to know how to operate the fax machine, how to install software, how to scan for viruses, how to locate information in print, in databases, on the Web. I must be a jack-of-all-trades and it’s too much. I’m overwhelmed.”

It was pretty powerful stuff, and library staff weren’t the only ones affected. The interviews aroused the interest of the people we interviewed as well. By and large, they enjoyed the experience of talking to us and to their colleagues and wanted to know what was going to happen with the information they gave us.

Some of the comments lent themselves to quick solutions. For instance, many of our users mentioned the inadequacy of our video loan period. The Library lent videos for three days, while faculty and students said they needed them for a week. Because lengthening the video loan period to seven days was a simple change to make, had no significant resource implication, and brought with it dividends in goodwill for our quick responsiveness, this was a “quick fix” we elected to make outside the planning process.

However, a word of warning – don’t get so caught up in quick fixes that the organization’s energy is dissipated before you get to the more difficult and more systematic analyses. Things to consider when coming up with a quick fix:

1. How much effort will it take to decide and to implement?
2. Does it add value for your users? – Will it make things easier, quicker, less expensive or more relevant to their lives?
3. Is it consistent and compatible with the environmental forces and the library’s plans for the future?

Data Analysis

Indexing the interviews and producing reports based on that indexing proved to be crucial. The experience of conducting an interview, hearing what those people have to say and picturing the little gestures that accompanied the words – the way, for instance, the man threw up his hands when he said “I’m overwhelmed!” – could skew staff perceptions in favor of a particularly powerful story. The indexing step mediated between compelling stories that grabbed attention and systematic analysis of all of the stories. It revealed the primary areas of concern.

With about half of the faculty focus groups completed, indexing began. The questions were coded. Every response was assigned the code corresponding to the question that elicited it. All responses to a question on information-gathering strategies, for example, carried that code.

Table 1: Interview Questions

<table>
<thead>
<tr>
<th>Code</th>
<th>Question Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS</td>
<td>current library services used</td>
</tr>
<tr>
<td>NS</td>
<td>new library services desired</td>
</tr>
<tr>
<td>CT</td>
<td>current technology uses</td>
</tr>
<tr>
<td>PT</td>
<td>projected technology uses</td>
</tr>
<tr>
<td>IG</td>
<td>information-gathering strategies</td>
</tr>
<tr>
<td>R</td>
<td>resources and tools used</td>
</tr>
<tr>
<td>IM</td>
<td>information management techniques</td>
</tr>
<tr>
<td>SPACE</td>
<td>library space utilization</td>
</tr>
</tbody>
</table>

We built a database consisting of the transcribed tapes augmented by the notes taken at each focus group session. Each response to a question was assigned a number and a designator for the college with which each student responding was affiliated. Then each response was divided by topic. The more topics covered in any individual response, the more segments it represented in our database. A segment might be a word, phrase or several sentences.

Next, terms or concepts mentioned in the segments were noted. With some standardization of terms imposed, 79 index terms were derived and their frequency of mention counted. Added to the list were the terms “comfort” and “discomfort,” which were assigned to comments that were clearly positive or negative in their tone. In addition to the 79 “micro” terms, 19 “macro” terms or broad concepts were conceived, and the frequency with which they were assigned was counted. Both the micro and macro terms were elements that emerged in the context of our library, our institution and our culture.

An experienced indexer on the library staff performed this work, which was cross-checked for accuracy of interpretation by the interviewers. When indexing was complete, each discrete segment was assigned one macro term and 0-6 micro terms.
Table 2: Sample Database Entries

**Student Comment**

“We're so desperate as students we will pay for services to get information over here quickly.”

**College Affiliation:** [h]

**Micro Index terms:** ILL/DocDel; Fees

**Macro Index term:** Productivity

**Record No.:** 5563

**Question Code:** NS

**Faculty Comment**

“I don’t have words enough or time enough to answer that. Everything I do is electronic, from searching UnCover to submitting papers to collaborating with scholars around the world.”

**Micro Index terms:** Collaboration; Electronic submission; UnCover

**Macro Index term:** Computing

**Record No.:** 3223

**Question Code:** CT

Unlike surveys, interviews don’t give you a pre-constructed set of possible answers. Based on the indexing, we had an impressionistic quantification of comments. Some perceptions of our users were confirmed, but there were some surprises. For example, we did not expect to find the high number of similarities in information-seeking behaviors, concerns and values expressed by students and faculty.

Faculty and students (irrespective of college affiliation) gave roughly the same rank order of importance – in the sense of frequency of mention with which they alluded to 12 of the 19 broad subjects or issues. Both frequently mentioned electronic and print resources as core to their information seeking strategies or concerns. Staffed services such as circulation or reference were given medium-level priority by both groups. Equipment and digitization were least mentioned as strategies or issues by both groups.

Table 3: Same/Near Rank Order of Macro Terms

<table>
<thead>
<tr>
<th>Macro Term</th>
<th>Students</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic Resources</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Print Resources</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Electronic Print Resources</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Teaching/Learning</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Staffed Services</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Computing</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Productivity</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Space Use</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Policies</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Space Management</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Equipment</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Digitization</td>
<td>18</td>
<td>19</td>
</tr>
</tbody>
</table>

There were seven concepts that students and faculty gave significantly different priority. For example, access is a much greater issue for students than faculty. Faculty are much more reliant on networking with colleagues/peers than are students.

Table 4: Significant Difference in Rank Order of Macro Terms

<table>
<thead>
<tr>
<th>Macro Term</th>
<th>Students</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Information Literacy</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Climate</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Networking</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Collection Management</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>Scholarly Communication</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>Primary Resources</td>
<td>19</td>
<td>11</td>
</tr>
</tbody>
</table>

With a very few exceptions, the micro terms derived from the faculty database were also found in the student database. The macro terms worked for both data sets. There was significant agreement between the rank-ordered (in order of frequency of mention) lists of general/macro terms or concepts from the two groups.

Table 5: Rank Order of Top 10 Micro Terms

<table>
<thead>
<tr>
<th>Micro Term</th>
<th>Faculty Frequency of Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journals</td>
<td>491</td>
</tr>
<tr>
<td>Spec Resources/Pubn</td>
<td>355</td>
</tr>
<tr>
<td>Web</td>
<td>330</td>
</tr>
<tr>
<td>Databases</td>
<td>277</td>
</tr>
<tr>
<td>E-mail</td>
<td>231</td>
</tr>
<tr>
<td>Students</td>
<td>229</td>
</tr>
<tr>
<td>Media</td>
<td>207</td>
</tr>
<tr>
<td>Books</td>
<td>173</td>
</tr>
<tr>
<td>Files – Paper</td>
<td>170</td>
</tr>
<tr>
<td>Colleagues</td>
<td>153</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students Frequency of Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web</td>
</tr>
<tr>
<td>Databases</td>
</tr>
<tr>
<td>Library Info.</td>
</tr>
<tr>
<td>Computers</td>
</tr>
<tr>
<td>Journals</td>
</tr>
<tr>
<td>Distance Ed</td>
</tr>
<tr>
<td>Research Support</td>
</tr>
<tr>
<td>Discomfort</td>
</tr>
<tr>
<td>Comfort</td>
</tr>
<tr>
<td>Files – Paper</td>
</tr>
</tbody>
</table>
Findings
Among the students, we found more similarities than differences in how they obtain and interact with information. The major themes are outlined below:

WORK STYLE
• Difficulty juggling home and family, work and school
• Work in most convenient location – home, public and community college libraries, ASU West Library – frequently choosing a library based on proximity, familiarity or child care needs
• Use Library group study rooms for group work and large open tables for individual study; would like longer library hours

RESOURCES AND STRATEGIES USED
• Tend to limit themselves to familiar information resources and research strategies
• Use print resources when required by an assignment; prefer to use electronic information because it is quick, easy and convenient; want continuous access to databases from their homes
• Will select topics for research based on convenient availability of materials
• Recognize mixed quality of information on the Internet
• Convenient information is more important than optimum relevance or quality

SERVICES USED/NEEDED
• Some use document delivery service successfully; others avoid document delivery because they have procrastinated, the service is too slow for their needs, they must make an extra trip to pick up materials, or they don’t trust getting the material in time; they would like material delivered to them
• Need more assistance in finding and using print journals and micro formats
• Not aware of many library services; greater awareness and use of services among students who have had library instruction
• Hesitate to ask for reference assistance – feel dumb, don’t know what to ask; more readily seek advice from friends, classmates, faculty
• Those who use reference assistance have found it useful and user-friendly
• Overall satisfaction with the level and quality of library service

TECHNOLOGY
• Make paper copies of both electronic and print information for study and retention; emerging pattern of transporting, using and storing information electronically
• Increased percentage of computer ownership (92%) and Internet access from home (60%) or work (27%)
• Heavy use of e-mail to communicate with faculty and submit papers; lack of consensus whether technology enhances or detracts from communication
• Frustration among the computer “have nots” over the increasing emphasis on student computer use, for example, coming to campus only to e-mail an assignment; desire among the computer “haves” to do more of their work electronically
• Have experienced distance education and technology enhanced education; are certain about what works and doesn’t work

The interviews reflected much more variation among faculty than among students in ways of obtaining and working with information. The strongest patterns are:

WORK STYLE
• Work almost exclusively from their offices or homes
• Want continuous access to information from any location

RESOURCES AND STRATEGIES USED
• Extensively use (and want more) electronic resources, but physical formats are still necessary
• Extensively use Amazon.com and UnCover for awareness of newly published book and journal literature
• Need better access to primary and archival information
• Heavily use media for instruction
• Want more information sources

SERVICES USED/NEEDED
• Successfully use document delivery; want materials delivered to their offices and a return point in the faculty office building
• Frequently overwhelmed by the amount of information and the ever-changing array of formats
• Increasingly independent in conducting routine database searches
• Consult with librarians on non-routine searches and evaluation of Internet information
• Not aware of many services that are provided; want more tailored communication and training
• Satisfied with services; don’t want to lose services

TECHNOLOGY

• Experience techno-stress from constantly changing technologies and skills gap
• Expect the Library to stay in the forefront technologically
• Extensively use e-mail and attachments in communicating with colleagues and publishers; like speed, enhanced collaboration, continuous access, global contacts
• Communicate with students by e-mail; some accept papers by e-mail; no consensus whether technology enhances or detracts from student-teacher communication
• Have reservations about technology-delivered distance education
• Information management approaches vary by discipline; information is stored in all formats; want scanners available
• Some concern about management of datasets, interview records and other primary information

SCHOLARLY COMMUNICATION

• Confused and concerned about intellectual property rights, copyright and fair use in a digital environment; concerned about detecting student plagiarism from the Internet
• Concerned about quality and acceptance of electronically published work; some interest in publishing electronically, especially the ability to integrate formats

Nine user behavior clusters emerged and we gave them names for easier reference.

1. Overloaded and Confused – straddling both print and electronic information worlds; overwhelmed by rate of change, information overload and the difficulty of identifying relevant and quality information; lacking control over information they collect; lack knowledge about existing library services

2. Teach Us – trying to stay current and wanting more training for themselves and/or their students (in the case of faculty); wanting training in information resources and research methods, computer skills, application of technology

3. Remote Users – routinely gather information electronically; work from their offices and homes; rarely use physical library; want more electronic resources and access for themselves and their students (in the case of faculty); want continuous access

4. Connoisseurs of Convenience and Quick Access – cannot invest a lot of time dealing with sources; want “selective dissemination of information” (SDI) for “just in time” access to all services and information; want easy and user-friendly interfaces

5. E-Scholars/Teachers – faculty that rely heavily on electronic communication with colleagues and, increasingly, with students; interest in electronic publishing, but leery of quality; confused by copyright provisions and limitations; concern for e-plagiarism

6. Media Savvy – infuse media in instruction; beginning to integrate text, image and sound in interactive modules to enrich scholarship, teaching and learning; engaged in re-formatting

7. Traditional Users – heavily paper dependent and into browsing as a mode of discovery; use reserve collections; seek long-term personal contact with a librarian

8. Users of Specialized Information – heavily use archival and primary resources; seek interdisciplinary and international information; looking for better access

9. Socializers – priority on sense of community and space to come together socially around intellectual work

The Library was now positioned to enter the decision-making phase of our planning. Briefly, what the Library could do to add value for these groups was identified. Having identified the what, we analyzed if we should take these actions. For those programs deemed viable, given our personnel and financial resources, implementation plans were developed.

Conclusion

One would be correct in concluding that there are some drawbacks to the use of focus groups as a data-gathering methodology. Focus groups are time-consuming to conduct, time-consuming to transcribe, and a logistical nightmare to organize on a campus-wide scale. The data they generate are a challenge to analyze. Even though members of the staff had previous focus group experience, intensive training was necessary for both facilitators and note-takers. Focus group facilitators used a welcoming script to ensure consistency of
experience across the groups. Each 90-minute focus
group session was followed by an hour of debriefing.
Additional time was necessary to convert the notes
and taped comments into text that could be entered
into a database followed by the indexing.

On the other hand there are clearly strengths in this
methodology. The question, “What do faculty and stu-
dents value?” – what satisfies their needs, wants and
aspirations – is so complicated that it can only be
answered by faculty and students themselves. Based on
the major themes from the interviews, campus feed-
back and the analyses of feasibility, the Library could
best add value for both faculty and student clientele
through services that:

a. provide fast and convenient delivery of informa-
tion to the user,
b. simplify the identification of relevant and quality
information, and
c. increase information and technology competen-
cies of students and faculty.

Reallocation of resources allowed new value-adding
services to emerge fostered by changes in organization-
al structure, reallocation of personnel and re-ordering
of priorities. For example, delivery of documents to
the desktop has been piloted and integrated into the pack-
age of services for faculty. The Library’s Website has
been redesigned and work is underway to convert part
of it to a database architecture in preparation for inte-
gration with the University’s customizable Web portal
service. Finally, the faculty and librarians are collaborat-
ing to integrate information competencies and infor-
mation literacy assessment into the curriculum, the
current focus being first-year learning communities.

These and other changes being implemented
emerged from interviews with clientele. Users con-
structed the framework within which new services
were designed – thus the “user-framed” label for our
methodology.1

ASU West Library
Student Focus Group Project

Source List

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Association. *The focus group research handbook.*

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1998.


5. *Involving Community Members in Focus Groups.*
Richard A. Krueger & Jean A. King. Thousand Oaks,

6. *Analyzing & Reporting Focus Group Results.*

Note

1. UFVA [User-Framed Value Added] Methodology
developed by Northern Lights Consulting, 1474
North Point Village Center, Suite 284, Reston, VA
20194-1190; Kgapen@aol.com; Voice: 703.352.1998
FAX: 703.362.9670