



Multiple constituencies model in the identification of library effectiveness

Identification of
library
effectiveness

645

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Abstract

Purpose – Public libraries can benefit from understanding the perspectives of various stakeholders leading to the development of measures for decision making and competing for funding as well as demonstrating accountability. The purpose of this paper is to examine library effectiveness from the perspective of multiple stakeholders from a list of indicators pertinent to today and to determine which are most important to a constituency of a single library and any differences among the various constituencies.

Design/methodology/approach – A survey that listed indicators of effectiveness for a public library was given to four stakeholder groups of a city library: employees, library board, library foundation members, and the public.

Findings – Of the 51 indicators, 39 comprised eight dimensions of effectiveness under the labels of: user experience, facility, digital collection, social media and board, community use, employees, administration, and collection management. The number of statistically significant differences was greatest between the library board and the public as well as the employees and the public.

Originality/value – Indicators of public library effectiveness have not been updated for the twenty-first century.

Keywords Indicators of public library effectiveness, Library effectiveness, Measuring effectiveness, Multiple constituencies, Public libraries

Paper type Research paper

Until 1980, three models defining an organization's effectiveness have prevailed:

- (1) The goal model, also known as the rational system model, measures effectiveness by goals achieved and "[...] the degree to which an organization is attaining its internally determined objectives" (Molnar and Rogers, 1976, p. 401).
- (2) The system resource model states that there cannot be consensus about the nature of goals because organizational leaders, and not the organization itself, create the goals (Yuchtman and Seashore, 1967). The system resource model, which takes into account the organization's interdependence with the environment, measures effectiveness "[...] in terms of its bargaining position, as reflected in the ability of the organization to exploit its environment in the acquisition of scarce and valued resources" (Yuchtman and Seashore, 1967, p. 898).
- (3) The process model views an organization as meeting goals and maintaining itself as a social unit. Effectiveness is measured by internal processes and organizational health as well as meeting goals (Van House and Childers, 1993, p. 2).



These models assume that it is possible for members of an organization to agree on the criteria that constitute effectiveness and create a single statement that supports the organization's definition of effectiveness and that a strategic plan exists around which goals can be framed. This raises the question of how major decision makers handle disagreements among themselves during the process (Connolly *et al.*, 1980, p. 212).

Organizational effectiveness might also be approached from the perspective of multiple stakeholders (Jobson and Schneck, 1982) or, as commonly called, a multiple constituency perspective. Cameron (1978) and others point out that organizations have different constituencies and that the constituencies have their own self-interests. He proposed "[...] that since the concept of organizational effectiveness differs with different constituencies, different levels of analysis, different aspects of organization, and different research of evaluation purposes, effectiveness not only encompasses multiple dimensions, but it is not a unitary concept" (p. 625).

Public libraries have varied stakeholders and multiple constituents such as library users, library staff members and administration, library boards of trustees, Friends of the library, local library foundations, city government, community leaders, state libraries, and elected representatives to state government. Understanding the perspectives of various stakeholders can lead to the development of measures, whether objective or perceptual, that libraries can use when making decisions and competing for funding as well as demonstrating accountability (Van House and Childers, 1993).

Problem statement

Public libraries are accountable to multiple constituents. Because each constituent can influence decisions about the library, either directly or indirectly, an effective library must understand varying perceptions of priorities. When library directors know how constituents conceptualize effectiveness, they can use the information to assist in the decision-making process about which services to offer as well as to educate stakeholders that make decisions about the allocation of funds (Van House and Childers, 1993). Previous research has concentrated on using the multiple constituency approach at a national level to measure public library effectiveness (Calvert and Cullen, 1992, 1994; Childers and Van House, 1989). However, public libraries have experienced transformational changes in the intervening years, and no published research has updated the list of effectiveness indicators critical to the multiple constituency approach. Those indicators may be qualitative or quantitative in nature. The purpose of this study is to examine the approach from a list of indicators pertinent to today and to determine which are most important to a constituency of a single library and any differences among the various constituencies.

Information from this research will be helpful for libraries in the strategic planning process as a way of identifying the needs of library users and establishing priorities for the future. Public library directors and boards of trustees will also find this information valuable as they work to narrow gaps in perceptions through educating and raising the awareness of constituents. Likewise, professional associations and others involved in continuing education will find this information beneficial for creating content in continuing education programs that seek to raise awareness of what various constituencies feel is most important for the library. Lastly, graduate students in library and information science programs who are interested in management and administration of libraries will be able to use this information in understanding the influence that multiple constituencies have on the planning process.

Literature review

Cameron and Whetten (1981) maintain that criteria for measuring effectiveness will change as an organization and the constituencies change. They found the goal model, which focusses on outputs, the system resource model, which focusses on inputs, and the process model, which focusses on internal transformation processes, applicable at different points in time (p. 268). The nature of these criteria, however, is static and there are few examples of studies over time (Cameron, 1978). The definition of effectiveness is also likely to differ depending on who is being asked; thus, it always represents a personal value (Cameron, 1978).

Since criteria did not exist for evaluating organizational effectiveness in colleges and universities, Cameron (1978) generated them, ultimately identifying nine dimensions of effectiveness. He used a constituency model that included “[...] major subunits or interest groups within the college or university, who influence the direction and function of the organization” (p. 611). That model is evaluated in terms of the degree of satisfaction that primary stakeholders have needs and expectations met (Cullen and Calvert, 1995). Cameron recommended an approach to evaluating public institutions’ organizational effectiveness in which attributes are the focus rather than goals, which may be difficult to quantify.

The theory of multiple constituency does not assume that only one set of criteria can determine an organization’s effectiveness (Connolly *et al.*, 1980). When introducing this model Connolly *et al.* (1980) contended that stakeholders of the organization (such as management, employee unions, suppliers, regulators, and customers) can create various statements about the organizational effectiveness. Because the question of how well an organization is performing is subjective, stakeholders consider more than one answer correct (Connolly *et al.*, 1980). Effectiveness then becomes not a single statement but instead many statements that have the ability to influence the organization (Connolly *et al.*, 1980).

Divergence is to be an expected result of the multiple constituency model of effectiveness. Molnar and Rogers (1976) were the first to use this model when they evaluated 110 public agencies’ effectiveness ratings to determine whether the goal and systems resource models converged. The results “[...] fell far short” (p. 412) of converging, which Connolly *et al.* (1980) contend is “[...] perfectly consistent with multiple constituency theory” (p. 214).

Determining effectiveness for libraries and other non-profit organizations may be difficult to ascertain. Libraries do not produce goods that can be easily captured, described, counted, and weighed with their accompanying monetary value, but they instead specialize in information, which is subjective and can shift (Murphy, 1989). With no bottom-line of profit to determine whether the organization is meeting its goals, measuring effectiveness, which is a multi-dimensional construct, becomes complex (Cullen and Calvert, 1995).

Van House and Childers (1993) used the multiple constituency model to select indicators of effectiveness in public libraries. They identified 257 items from literature and interviews, condensing these to 61. They presented the 61 indicators of effectiveness in a survey to seven constituencies that best represented the stakeholders of the libraries and had them rank the indicators. Specifically, these groups of constituents were people who were expected to influence decisions about their local public library either directly or indirectly (Van House and Childers, 1993, pp. 9-10).

Cullen and Calvert (1995) found that New Zealand academic libraries frequently relied on the system resource model to count inputs in an effort to measure

effectiveness, but they believed measuring inputs only describes the effectiveness of the library in gaining resources (p. 439). They further posited that while goal attainment is also popular, it fails to consider the various stakeholders who may not agree with each other on established goals (p. 439). They conclude that all four models (goal, system resource, process, and multiple constituency) have a place in measuring library effectiveness and should be considered in the creation of measures (p. 440).

Cullen and Calvert (1993) duplicated the 1990 Van House and Childers study on New Zealand public libraries in order to develop performance-based standards. They chose to replicate the Van House and Childers study because they agreed with the underlying assumptions that there was a need to redefine the differences among measurement, performance, and effectiveness. They also found that the multiple constituency model matched their concept of the library as a social construct (p. 144). Cullen and Calvert contend that libraries:

[...] are creations of a particular time and place that happen to suit, to some extent, the needs of society for information, collection, organization and dissemination. They exist because society wants them to exist [...] and therefore must take their view of effectiveness from a much wider range of opinions than just those of the library profession (p. 144).

Cullen and Calvert (1996) found that the multiple constituency model used by Van House and Childers provides a sound empirical base for the development of broad-based practical performance measures. They completed the study in two stages; the first stage of the study of New Zealand's libraries at seven state-funded universities was primarily based on the multiple constituency model. The second stage had a purpose of examining actual performance against the 99 indicators identified for the first stage. The measurement in the second stage was achieved by having library staff rate their library's performance against the indicators (Cullen and Calvert, 1996).

Cullen and Calvert (1996) found the four models – goal, system resource, process, and multiple constituency – were represented in library effectiveness. They further concluded that the similarities between the public library and university library effectiveness studies suggest “a certain robustness in the methodology” (p. 115), noting that core dimensions of effectiveness can be used as a basis for judging effectiveness as well as performance measures for both types of libraries.

Hypothesis and research questions

The study specifically focussed on two research questions:

RQ1. What are the indicators of public library effectiveness? and

RQ2. What dimensions emerge from the groupings?

And one hypothesis:

H1. There are no statistically significant differences ($p = 0.05$) among constituent groups and the mean scores of the indicators of the library's effectiveness.

Procedures

A library effectiveness study using the multiple constituency model was conducted at a single public library facility located in the Midwestern area of the USA. This library serves a population of approximately 60,000 people through its physical collection of

about 225,000 items and a digital collection nearing 10,000 titles. Nearly 300,000 people visit the library each year and check out about 775,000 print and non-print items. Its \$3.7 million budget enjoys stable funding and the library employs 33.9 full-time equivalents (FTE). The constituencies are:

- The board of trustees: the library board of trustees is an independent policy-making library board that is appointed by the mayor of the city with the concurrence of the city council. Board members serve four-year terms. The seven-member library board is responsible for hiring and evaluating the library director, strategic planning, the library budget, establishing policy, and advocacy. The researcher asked the seven library board of trustees members to complete the survey at the conclusion of a scheduled meeting, after which she stepped out of the room. A container was left at the table to collect the responses.
- The library staff: the 33.9 FTE employed by the library represents 18 full-time employees and 31 part-time employees. Of the 49 employees, 11 are professional librarians with masters' degrees in library and information science. The library is non-union. Library employees' salaries are commensurate with the salaries of other city employees who perform similar duties and the turnover of staff at the library is low. The researcher sent an e-mail to the 49 staff members to explain the survey and request their opinions when the survey was distributed. Each employee received a survey attached to his or her paycheck. The researcher asked staff members to return the survey when they submitted their next timesheet, but will also provided other collection points for convenience such as through interlibrary mail, a box in the staff lounge, or inviting employees to send a scanned survey via e-mail. After two weeks, the researcher sent a reminder via e-mail to all staff members telling them that their opinions were important and requested that the surveys be completed.
- The public library foundation: the library foundation, a 501-C 3 non-profit organization, was founded in 1987 and raises funds for the library. Funds granted to the library are intended to supplement, not supplant local funding and to provide for services and programs outside of the library's general operating budget. The library foundation has nine members. The researcher asked the nine library foundation members to complete the survey at the conclusion of a regularly scheduled meeting at which time she then stepped out of the room. A container was left at the table to collect the responses.
- The residents in the city: the population of the city is approximately 60,000 and 73 percent of the population has a library card. The library is located near the Mississippi River. Top employers are found in the education, health care, insurance and technology industries, along with three major manufacturers. The unemployment rate is about 4.6 percent. The questionnaire was mailed to all 22,800 households in the community that subscribe to city utilities, as part of the monthly utility bills.

The study took place during the months of February and March, 2013 using a survey, which listed indicators of effectiveness surrounding the public library's four infrastructure components: staff, collection, technology, and facility and a fifth category to encompass satisfaction. The researcher updated the list of indicators of effectiveness developed by Van House and Childers (1993), using metrics identified by Dugan *et al.* (2009), Matthews (2004), and Calvert and Cullen (1994). Those indicators

comprise inputs, which are the resources available to the library such as budget, number of employees, or number of items in the collection, and they are easily represented by numbers, and output measures, which quantify the volume of a product or service; for example, the total number of circulations per capita, visits per capita, and reference transactions completed.

Qualitative data are not easily reduced to discrete and measurable variables but offer respondents the opportunity to interpret and voice a personal opinion, which in turn can provide insight and depth to a study. Experts caution against relying exclusively on input and output measurements when defining a library's effectiveness because in and of themselves the measures have little value without thoughtful interpretation. Qualitative criteria of success should accompany the input and output measurements and such information was included in this survey as well (Lyons, 2007).

The researcher tried to raise awareness of the survey by reminding people to complete the questionnaire, which was included in their monthly city utility bill. The library's web site featured a reminder to complete the survey, and the local cable channel and radio station reminded citizens through a public service announcement. Additionally, the researcher wrote a press release that was sent to the local newspaper, television, and radio stations to remind city residents to complete the survey. Respondents could include the survey with their check for the utility bill, drop off the questionnaire at city hall or the library, or scan the survey and e-mail it to the researcher.

Method of analysis

Factor analysis was used to identify dimensions of library effectiveness based on the assumption that indicators that consistently rated as similar measure the same underlying dimension. In order to determine if factor analysis was an appropriate method for reducing this particular data into dimensions, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was used. The KMO was 0.910, which is well above the base satisfactory level of 0.50. Only eigenvalues greater than or equal to 1.00 were retained, as per Kaiser criterion. The researcher followed Stevens' (1992) recommendation of only using factor loadings of 0.40 and higher when placing indicators in a dimension. The researcher sorted the questionnaires into constituent groups and then arrayed the indicators by mean scores. A one-way ANOVA was conducted to identify significant differences in particular indicators of effectiveness between all stakeholders. An independent two-tailed *t*-test was used to identify statistically significant discrepancies of opinions between two entities.

Data quality

As a pre-test, the completed list of indicators in the survey was sent to the directors of the six largest libraries across the state and ten other library leaders. The researcher asked them to comment on the clarity of the questions as well as to provide input on the indicators, and the survey was modified based on their feedback. As a result of their comments the researcher condensed the survey to two pages, made minor adjustments in wording, introduced coloring in every other line for ease in reading, and asked the pre-testers to provide input for this version, which they subsequently approved.

Findings

In total, 39 indicators of effectiveness comprised eight dimensions of effectiveness under the labels of user experience, facility, digital collection, social media and library board, community use, employees, administration, and collection management.

In total, 12 indicators had correlations below five and were not included in the dimensions. Table I shows the dimensions of library effectiveness from those with highest correlations to lowest[1].

Statistically significant differences between all stakeholders exist for the following indicators: Number of meetings and special events attended by board members ($F(3, 302) = 5.201, p = 0.0002$), total expenditure for all employees ($F(3,308) = 2.663, p = 0.048$), number of library users compared to total population ($F(3,308) = 3.136, p = 0.026$), the number of people who come into the library ($F(3,304) = 4.185, p = 0.006$), having up-to-date written policies, procedures, and standard reflecting current needs ($F(3, 307) = 6.208, p = 0$), and the number of library materials borrowed by users ($F(3, 305) = 3.314, p = 0.02$).

The library board of trustees and staff believed in the importance of having up-to-date policies (board $n = 7, M = 4.57, SD = 0.535$; staff $n = 39, M = 4.33, SD = 0.806$); however, a statistically significant difference separated the library board of trustees and foundation from agreement ($F(7.241) = 2.648, p = 0.03$).

The library board also believed in the importance of conducting a user survey or community analysis every three years. The public did not agree with the board, though, which was a statistically significant difference ($F(2.59, 7.46) = 4.186, p = 0.002$). The library staff also did not agree with the board to a statistically significant extent ($F(43, 9.508) = 3.301, p = 0.002$).

The survey included space for open-ended comments so that respondents could write in ideas that were not listed but that they felt were important considerations for evaluating a library's effectiveness. Comments numbered 58. In all, 15 of the comments were compliments on the library and its staff, fourteen reiterated the importance of an indicator already listed, nine covered a clarification of a respondent's point of view or opinion, four were complaints about the facility or service, two were political, and two were suggestions to add a service. The seven remaining comments each suggested one of the following as an indicator of library effectiveness:

- volunteers – number and hours donated;
- per capita cost per household;
- marketing;
- total fines collected;
- clean facility and collection;
- extent to which the library supports those within its tax base vs outside the tax base; and
- books by local authors.

Discussion

Preferences by constituency

When comparing across the constituencies, the number of statistically significant differences were greatest between the library board and the public as well as the library staff members and the public. Besides the indicators conducting user studies or community analyses and having up-to-date policies, the board also differed from the public in their ratings by giving higher importance to the number of meetings they attend, the overall expenditure for materials and digital content, and the number of computer workstations and lap top computers available to the public as presented in Table II.

Table I.
Dimensions of
library effectiveness

Indicators of effectiveness	1	2	3	4	5	6	7	8
<i>User experience</i>								
Extent of public involvement in library decision making	0.780							
Speed of service to user	0.770							
Staff is approachable	0.679							
User satisfaction	0.654							
Extent to which the library is free of charge	0.498							
Ability to receive a referral for what to read, listen, or view next	0.481							
<i>Facility</i>								
Convenience of library's location		-0.745						
Users feeling safe		-0.671						
Number of parking spaces around the library		-0.605						
Amount of comfortable seating areas		-0.591						
Hours open		-0.563						
How "green" the library building is		-0.521						
Number of programs offered for adults		-0.449						
<i>Digital collection</i>								
Number of digital audio books in the collection			-0.822					
Number of digital music titles in the collection			-0.786					
Number of e-books in the collection			-0.762					
Number of e-readers available for check-out			-0.686					
Number of electronic resources available through library web site			-0.558					
Total expenditures for digital collection			-0.493					
<i>Social media and library board</i>								
Number of followers on Facebook page				0.761				
Number of followers of the library's blog				0.731				
Number of clicks on web site to find what you need				-0.656				
Number of meetings and special events attended by board members				0.541				
<i>Community use</i>								
Number of people who come to the library					-0.850			
Number of library users compared to total population					-0.747			
Number of library materials borrowed by users					-0.685			

(continued)

Indicators of effectiveness	1	2	3	4	5	6	7	8
Number of materials used inside the library					-0.653			
Number of reference questions asked by users					-0.601			
<i>Employees</i>								
Number of library employees						0.699		
Total expenditure for library employees						0.675		
Number of training programs staff attends						0.526		
<i>Administration</i>								
Having up-to-date policies, procedures, and standards reflecting current needs							0.860	
The extent to which the library achieves its mission and goals							0.702	
Library's support of freedom of access to information (intellectual freedom)							0.609	
Number of partnerships the library has with other community organizations							0.407	
<i>Collection management</i>								
Number of items provided to other libraries								-0.831
Number of items borrowed from other libraries								-0.797
Total expenditures for library collection								-0.404
Number of items owned by the library								-0.615
Eigenvalues	18.202	3.731	2.762	1.916	1.712	1.624	1.555	1.437
Percentage of total variance	35.689	7.316	5.415	3.757	3.357	3.184	3.049	2.817
Number of test measures	4	6	5	3	5	3	3	3

Notes: Extraction method: principal component. Analysis rotation method: Oblimin with Kaiser normalization. Rotation converged in 26 iterations.
*Loadings = >0.50

Table I.

Table II.
Independent samples test:
statistically significant
differences between the
library board of trustees and
public

	Levene's test for equality of variances			<i>t</i> -test for equality of means			95% confidence interval of the difference	
	<i>F</i>	Sig.	<i>t</i>	Sig. (2-tailed)	Mean difference	SE difference	Lower	Upper
Number of meetings and special events attend by board members	1.15	0.285	3.608	0	1.602	0.444	0.728	2.477
			4.607	0.003	1.602	0.348	0.769	2.436
Total expenditures for library collection	1.535	0.216	2.055	0.041	0.814	0.396	0.034	1.593
			3.833	0.006	0.814	0.212	0.316	1.311
Total expenditures for digital collection	1.086	0.298	2.042	0.042	0.965	0.472	0.034	1.895
			2.254	0.062	0.965	0.428	0.066	1.995
Number of computer workstations available for public use	15.101	0	1.081	0.281	0.461	0.427	-0.379	1.301
			6.577	0	0.461	0.07	0.323	0.599
Number of lap top computers available for public use	10.149	0.002	1.011	0.313	0.446	0.441	-0.423	1.316
			0.279	0.02	0.446	0.16	0.087	0.0806

Besides the indicator having up-to-date policies, the library staff differed from the public in seven additional statistically significant indicators: total expenditures for all employees, number of reference questions asked by users, the number of library users compared to total population, number of people who come into the library, number of library materials borrowed by users, the library's support of freedom of access to information (intellectual freedom), and the ability to receive a referral for what to read, listen to, or view next as indicated in Table III. Five of the indicators are in the dimension labeled "community use."

The dimension "community use" can be defined as outputs such as the number of people who come into the library, number of items checked out, number of reference questions asked by users, number of library users compared to the total population, and the number of items used while inside the library. The public did not mention any of the indicators comprising "community use" in the top five indicators of effectiveness; rather, the top indicators came from the dimensions of "user experience" and "facility." Indicators in the dimension of "community use" and "administration" reflected the library board of trustees' top five indicators. Library staff member respondents and the public both identified two indicators in the "user experience" category as the highest ranked: "staff is approachable" and "user satisfaction."

The public placed the indicator "speed of service to user" in the ninth position of the top ten indicators of effectiveness. Although not statistically significant, this indicator was not included in the top ten with the other constituents. Speed of service to user was in the 14th position for library staff members, 15th position for library board of trustees' members, and the 20th position for library foundation respondents. Also, responses from the public found "convenience of the library's location" to be an important indicator, which appeared in tenth place, but this indicator was not mentioned in the top ten among the other constituents.

All constituents found Facebook and the library blog to be the least important in determining a library's effectiveness. The public, board of trustees, and library staff also agreed that the "number of clicks on the web site to find what you need" was unimportant, with this indicator placing in the lowest ten by mean average across all constituents. Board of trustees, library staff, and the foundation felt parking was not as important as the public. Of the 51 indicators, parking ranked 20 for the public, 24 with the foundation, 35 with staff, and 46 with the library board of trustees.

Library staff members placed the importance of a "user study of community analysis" at 47 of the 51 indicators, which was lower than any constituent group. The public ranked the importance of a "user study or community analysis" at 45 of the 51 variables, while it was 21st in for the foundation, and 11 in the board of trustees list. Although the extent of public involvement in library decision making was important enough with the public for it to be in the 12th position, it appears that respondents do not feel that a user study provides this type of opportunity. Tables IV-VII provide the full rankings for the public, staff, library board, and foundation.

Implications for service

The board of trustees is charged with planning the future of the library, evaluating the overall effectiveness of the library, setting policies, hiring and evaluating the library director, and advocating for the library in the community; therefore, it is not surprising that they would identify the importance of the number of meetings and special events attended as an important indicator of the library's effectiveness. No other constituent

Table III.
Independent samples test:
statistically significant
differences between the
library staff and public

	Levene's test for equality of variances				t-test for equality of means			95% confidence interval of the difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean difference	SE difference	Lower	Upper
Total expenditure for all employees	0.8565	0.004	2.762	297	0.006	0.573	0.207	0.165	0.981
Number of reference questions asked by users	0.674	0.412	2.198	291	0.029	0.452	0.206	0.24	0.906
Number of library users compared to total population	4.683	0.031	2.871	297	0.004	0.452	0.191	0.047	0.856
Number of people who come to the library	3.186	0.075	3.111	294	0.002	0.567	0.157	0.068	0.835
Number of library materials borrowed by users	5.53	0.019	4.737	78.86	0	0.561	0.118	0.178	0.955
Library's support of freedom of access to information (intellectual freedom)	11.615	0.001	2.825	294	0.005	0.563	0.199	0.24	0.886
Ability to receive a referral for what to read, list, or view next	13.315	0	3.49	60.71	0.001	0.563	0.161	0.066	0.824
			3.508	82.39	0.001	0.445	0.193	0.193	0.697
			1.526	290	0.128	0.313	0.205	-0.091	0.717
			1.997	62.95	0.05	0.313	0.157	0	0.626

Indicators of effectiveness	<i>n</i>	<i>M</i>	SD	SEM
Staff is approachable	255	4.36	0.957	0.060
User satisfaction	252	4.36	0.842	0.053
Hours open	257	4.33	0.924	0.058
Extent to which the library is free of charge	256	4.22	0.995	0.062
Users feeling safe	253	4.10	1.075	0.068
Number of people who come to the library	258	3.86	1.086	0.068
Library's support of freedom of access to information (intellectual freedom)	258	3.84	1.176	0.073
The extent to which the library achieves its mission and goals	259	3.80	1.073	0.067
Speed of service to user	252	3.80	1.022	0.064
Convenience of library's location	249	3.80	1.066	0.068
Total expenditures for library collection	256	3.76	1.042	0.065
Extent of public involvement in library decision-making	257	3.75	1.093	0.068
Number of programs offered for children	256	3.74	1.173	0.073
Number of programs offered for adults	256	3.68	1.119	0.070
Having up-to-date written policies, procedures, and standards reflecting current needs	259	3.66	1.107	0.069
Number of library materials borrowed by users	257	3.64	1.194	0.074
Number of library users compared to total population	260	3.64	1.186	0.074
Efficiency of internal library operations	256	3.61	1.142	0.071
Likelihood that materials wanted will be immediately available	255	3.61	1.095	0.069
Number of parking spaces around library	258	3.56	1.299	0.081
Number of computers workstations available for public use	258	3.54	1.126	0.070
Number of materials used inside the library	254	3.52	1.182	0.074
Amount of use of equipment by the public (e.g. copiers, microfilm readers, computers, etc.)	255	3.51	1.16	0.073
Web site accessibility for the disabled	245	3.50	1.207	0.077
Number of electronic resources available through library web site	257	3.49	1.219	0.076
Number of items owned by the library	241	3.48	1.137	0.073
Ability to receive a referral for what to read, listen or view next	254	3.48	1.221	0.077
Services to special groups (e.g. minorities, aging)	257	3.47	1.222	0.076
Amount of comfortable seating areas	255	3.47	1.125	0.070
Total expenditure for all employees	260	3.46	1.256	0.078
Number of e-books in collection	258	3.41	1.236	0.077
Number of lap-top computers available for public use	258	3.41	1.164	0.072
Number of partnerships the library has with other community organizations	258	3.34	1.109	0.069
Total expenditures for digital collection	246	3.32	1.235	0.079
Number of items provided to other libraries	255	3.31	1.189	0.074
Number of items borrowed from other libraries for local users	258	3.29	1.16	0.072
Number of digital audio books in collection	257	3.26	1.189	0.074
Number of e-Readers available for check-out	251	3.22	1.229	0.078
How "green" the library building is	254	3.18	1.208	0.076
Amount of library use compared to use of other community services/event (e.g. sports events)	255	3.15	1.213	0.076
Percentage of total collection of library materials 5 years old or less	257	3.14	1.142	0.071
Total number of employees	260	3.12	1.245	0.077
Number of digital music titles in collection	256	3.11	1.183	0.074
Number of reference questions asked by users	254	3.09	1.209	0.076

Identification of library effectiveness

657

(continued)

Table IV.
The public's ranking of indicators

Table IV.

Indicators of effectiveness	<i>n</i>	<i>M</i>	SD	SEM
Whether the library has done a user study or community analysis in the past 3 years.	254	3.04	1.181	0.074
Number of clicks on web site to find what you need	258	3.01	1.298	0.081
Number of web site visits	255	2.94	1.234	0.077
Number of training programs staff attends	259	2.90	1.209	0.075
Number of meetings and special events attended by board members	255	2.25	1.164	0.073
Number of followers of the library's blog	256	2.16	1.163	0.073
Number of followers on Facebook page	248	2.12	1.103	0.070

group reported this indicator as important as the trustees did, a matter that resulted in a statistically significant difference between all constituents' rankings of this indicator and the board's ranking of this indicator. A respondent in the public constituency suggested a plausible explanation for this when she wrote, "I think some items are very important for [the] library to know but might not be important to me as an individual. I hope the board members are active but I don't need to know."

Like many libraries, this one provides traditional reference service with a professional librarian passively sitting behind a reference desk awaiting patrons to ask them a question by phone or by approaching the desk. Staff members believe this service contributes to library effectiveness, but the public disagrees to a statically significant extent. Are staffs clinging to an outdated style of service? When the Pew Internet and American Life Project studied how Americans searched for answers to questions pertaining to government or associated agencies in 2007, the library was the last choice for finding answers to questions. Americans first turned to the internet. If they could not find an answer via the web, they then consulted professional advisors, friends and family, newspapers, magazines and books, government agencies, even radio and television before their public library (Rainie *et al.*, 2007). Reference service is evolving to provide the service to users when and where the information is needed. Librarians who are not limited to a desk can become available in the public space in order to answer questions. This service, also known as roaming or roving reference can include using instant messages, chats, text messages, or social networks like Twitter to answer questions, and it can further develop to become a part of the library's outreach programs (O'Gorman and Trott, 2009). This public library can adopt these practices of providing answers to reference questions in an effort to close the gap between the public and the staffs' perception on the importance of this service.

All library boards and staffs should know that identifying community needs is a critical component in the development of a long-range plan. Libraries that do not match their programs and services to meet community needs risk becoming irrelevant. Staff respondents to the effectiveness survey did not believe a user study or community analysis was very important, nor did the public. However, the public did find that involvement in decision making was of higher importance. The library board and staff should provide opportunities to seek, receive, and respond to public input. The library will be in a stronger position to meet the needs of its community by listening to the public.

The area surrounding the public library has no property that can allow for growth in parking. The library board of trustees and library staff understand this, which may account for their closer rankings of unimportance for this indicator. As a quasi-public

Indicators of effectiveness	<i>n</i>	<i>M</i>	SD	SEM
User satisfaction	34	4.59	0.783	0.134
Staff is approachable	38	4.58	0.758	0.123
Number of people who come to the library	38	4.42	0.599	0.097
Having up-to-date written policies, procedures, and standards reflecting current needs	39	4.33	0.806	0.129
Library's support of freedom of access to information (intellectual freedom)	39	4.28	0.647	0.104
Users feeling safe	38	4.26	0.978	0.159
Hours open	38	4.24	0.852	0.138
Number of library materials borrowed by users	39	4.21	0.894	0.143
Number of library users compared to total population	39	4.21	0.864	0.138
Extent to which the library is free of charge	38	4.05	0.957	0.155
The extent to which the library achieves its mission and goals	39	3.97	0.707	0.113
Convenience of library's location	38	3.92	0.997	0.162
Number of programs offered for adults	38	3.92	0.850	0.138
Speed of service to user	38	3.89	1.008	0.163
Total expenditures for library collection	39	3.87	1.105	0.177
Efficiency of internal library operations	39	3.87	0.978	0.157
Number of materials used inside the library	39	3.82	0.885	0.142
Ability to receive a referral for what to read, listen or view next	38	3.79	0.843	0.137
Number of items owned by the library	39	3.77	1.063	0.170
Services to special groups (e.g. minorities, aging)	37	3.76	0.895	0.147
Number of computers workstations available for public use	39	3.74	1.069	0.171
Number of programs offered for children	38	3.74	0.891	0.145
Extent of public involvement in library decision-making	38	3.71	1.088	0.177
Number of e-books in collection	39	3.69	1.030	0.165
Number of library employees	39	3.69	0.922	0.148
Likelihood that materials wanted will be immediately available	39	3.67	0.982	0.157
Number of lap-top computers available for public use	39	3.62	1.091	0.175
Amount of use of equipment by the public (e.g. copiers, microfilm readers, computers, etc.)	38	3.61	1.054	0.171
Number of digital audio books in collection	37	3.57	0.987	0.162
Number of electronic resources available through library web site	39	3.54	0.942	0.151
Number of reference questions asked by users	39	3.54	1.097	0.176
Total expenditure for all employees	37	3.51	1.017	0.167
Total expenditures for digital collection	38	3.50	1.180	0.191
Web site accessibility for the disabled	37	3.49	1.216	0.200
Number of parking spaces around library	38	3.47	1.156	0.188
Number of items borrowed from other libraries for local users	39	3.38	1.184	0.190
Amount of comfortable seating areas	38	3.37	1.149	0.186
Number of e-Readers available for check-out	38	3.37	1.172	0.190
Number of digital music titles in collection	37	3.35	1.033	0.170
Number of partnerships the library has with other community organizations	39	3.28	1.025	0.164
Number of training programs staff attends	39	3.26	1.208	0.193
Number of clicks on web site to find what you need	39	3.21	1.196	0.192

Identification of library effectiveness

659

(continued)

Table V.
The library staff's ranking of indicators

Indicators of effectiveness	<i>n</i>	<i>M</i>	SD	SEM
Number of web site visits	39	3.21	1.174	0.188
Number of items provided to other libraries	39	3.21	1.128	0.181
How "green" the library building is	38	3.16	1.079	0.175
Whether the library has done a user study or community analysis in the past 3 years	39	3.15	1.065	0.170
Percentage of total collection of library materials 5 years old or less	39	3.13	1.080	0.173
Amount of library use compared to use of other community services/event (e.g. sports events)	38	3.05	1.184	0.192
Number of meetings and special events attended by board members	38	2.42	1.081	0.175
Number of followers on Facebook page	37	2.32	1.132	0.186
Number of followers of the library's blog	38	2.24	1.101	0.179

Table V.

group, the library foundation was closer to the public in its consideration in the importance of this indicator. Although additional or more convenient parking is not possible at the library, the library board can benefit from understanding the importance that the public places on this indicator as well as the importance that the public places on location (which was higher than other constituent groups) if library expansion is planned in the future.

Examining library effectiveness measures

Librarians are accustomed to tracking inputs and outputs, and they keep a myriad of statistics. Can these alone determine if a library is effective? One respondent wrote on the survey, "Too many other outside factors can influence the operations of a library." Another concluded, "It is all about perception and reputation of the library more than measurements." There is a need to include qualitative information with the more traditional output measures to capture the full meaning of what defines a public library's effectiveness. Given the complexity of attitudes' underpinnings, traditional library inputs and outputs generally cannot lead to a full understanding of the public's opinions and beliefs regarding library service. Rather, using a combination of statistics and qualitative measures can help capture a more well-rounded picture. Qualitative measures have the additional benefit of leading to greater engagement with the public (Dalton and McNicol, 2004). Without qualitative measures library boards and administrators become distanced from their constituents and will be unable to define how the library can meet the needs of its users.

No model of effectiveness has emerged as the best approach, but as publically funded organizations, public libraries will find the multiple constituency approach to measuring effectiveness useful because their constituents have power over the organization. Through this approach the library can gain information about the demands and expectations of its constituency and adapt to remain responsive to meet the identified demands and expectations (Cameron, 2005).

Another model in organizational effectiveness has emerged in the twenty-first century and is considered a new movement: positive organizational scholarship. This framework for describing effectiveness reflects a more recent focus on identifying best practices, managerial implications, and practical guidelines, which Cameron (2005) describes as a shift from ends to means. Experts describe this model as focussed

Indicators of effectiveness	<i>n</i>	<i>M</i>	SD	SEM
Total expenditures for library collection	7	4.57	0.535	0.202
Having up-to-date written policies, procedures, and standards reflecting current needs	7	4.57	0.535	0.202
Number of people who come to the library	7	4.57	0.535	0.202
Total expenditures for digital collection	7	4.29	1.113	0.421
Library's support of freedom of access to information (intellectual freedom)	7	4.29	0.488	0.184
The extent to which the library achieves its mission and goals	7	4.29	0.756	0.286
Staff is approachable	7	4.29	0.951	0.360
Users feeling safe	7	4.29	0.756	0.286
User satisfaction	7	4.14	0.690	0.261
Number of library users compared to total population	7	4.14	0.690	0.261
Number of computers workstations available for public use	7	4.00	0.000	0.000
Number of items owned by the library	7	4.00	0.577	0.218
Number of library employees	7	4.00	1.000	0.378
Whether the library has done a user study or community analysis in the past 3 years	7	4.00	0.577	0.218
Speed of service to user	7	3.86	0.378	0.143
Hours open	7	3.86	0.690	0.261
Web site accessibility for the disabled	7	3.86	0.690	0.261
Number of electronic resources available through library web site	7	3.86	0.690	0.261
Efficiency of internal library operations	7	3.86	1.069	0.404
Number of meetings and special events attended by board members	7	3.86	0.900	0.340
Extent to which the library is free of charge	7	3.86	0.690	0.261
Number of programs offered for children	7	3.86	0.378	0.143
Number of lap-top computers available for public use	7	3.86	0.378	0.143
Number of items borrowed from other libraries for local users	7	3.86	0.900	0.340
Number of library materials borrowed by users	7	3.86	0.900	0.340
Extent of public involvement in library decision-making	7	3.71	0.756	0.286
Number of e-books in collection	7	3.71	0.756	0.286
Number of materials used inside the library	7	3.71	0.756	0.286
Percentage of total collection of library materials 5 years old or less	7	3.71	0.756	0.286
Number of partnerships the library has with other community organizations	7	3.71	0.488	0.184
Number of reference questions asked by users	7	3.14	1.864	0.705
Number of programs offered for adults	7	3.57	0.535	0.202
Likelihood that materials wanted will be immediately available	7	3.57	0.535	0.202
Number of items provided to other libraries	7	3.57	1.134	0.429
Number of e-readers available for check-out	6	3.50	0.837	0.342
Convenience of library's location	7	3.43	0.787	0.297
Number of training programs staff attends	7	3.43	1.134	0.429
Total expenditure for all employees	7	3.43	1.134	0.429

Identification of library effectiveness

661

(continued)

Table VI.
The library board of trustees' ranking of indicators

Indicators of effectiveness	<i>n</i>	<i>M</i>	SD	SEM
Number of digital audio books in collection	7	3.29	1.113	0.421
Amount of use of equipment by the public (e.g. copiers, microfilm readers, computers, etc.)	7	3.29	0.951	0.360
Services to special groups (e.g. minorities, aging)	7	3.29	0.951	0.360
Number of web site visits	6	3.17	0.983	0.401
Amount of library use compared to use of other community services/event (e.g. sports events)	7	3.14	0.690	0.261
Ability to receive a referral for what to read, listen or view next	7	3.14	0.900	0.340
Amount of comfortable seating areas	7	3.14	0.900	0.340
Number of parking spaces around library	7	3.14	1.069	0.404
Number of clicks on web site to find what you need	7	3.14	0.900	0.340
How "green" the library building is	7	2.86	1.215	0.459
Number of digital music titles in collection	7	2.86	1.069	0.404
Number of followers on Facebook page	6	2.83	0.753	0.307
Number of followers of the library's blog	6	2.67	0.516	0.211

Table VI.

on positive outcomes, processes, and attributes of organizations (Cameron, 2005). In determining an organization's effectiveness attributes such as "[...] appreciation, collaboration, virtuousness, vitality, and meaningfulness" and creating human well-being are key indicators of success (Bernstein, 2003). Through a focus on "extraordinarily positive performance" Cameron (2005) says that organizations become "stronger and more resilient" (p. 18). How this measure of effectiveness can be incorporated into public libraries merits further research.

Further research

A response rate of 1.1 percent indicates that including the survey with the city utility bill was not effective. Designers of a future study should have a stand-alone survey that is more likely to be noticed and read rather than potentially being discarded with the envelope in a utility bill. Future research will benefit from the opinions of an important stakeholder group – funding officials. This may be difficult as the number of decision makers approving funding for municipal libraries is small and funding officials, concerned about the potential lack of anonymity, are more likely to decline participation in the study. One option may be to instead survey funding officials in similarly sized communities with similarly sized budgets and libraries.

Conclusion

A survey of multiple constituencies is a valuable tool to understand the priorities and perceptions of the public and to align collections, programs, and services to best meet the community needs. The library board of trustees is charged with policy-making decisions, which are necessary to overall operations, but it must also have a clear understanding of what the public defines as effective. The library board of trustees members are also citizens who are appointed to represent all community members, and with the understanding of what their constituents want from the library they can guide the library in such a way as to match services to identified priorities. Similarly, library staff members must understand what their constituents define as indicators of effectiveness and commit to minimizing gaps in their respective perceptions. This will

Indicators of Effectiveness	<i>n</i>	<i>M</i>	SD	SEM
The extent to which the library achieves its mission and goals	6	4.50	0.548	0.224
User satisfaction	5	4.40	0.548	0.245
Total expenditures for library collection	6	4.33	0.516	0.211
Number of library materials borrowed by users	6	4.33	0.516	0.211
Extent to which the library is free of charge	6	4.00	1.095	0.447
Hours open	6	4.00	1.095	0.447
Number of e-Books in collection	6	4.00	0.632	0.258
Number of materials used inside the library	5	4.00	0.000	0.000
Number of people who come to the library	5	4.00	0.707	0.316
Staff is approachable	6	3.83	1.472	0.601
Number of electronic resources available through library web site	6	3.83	0.983	0.401
Number of items provided to other libraries	6	3.83	1.472	0.601
Number of items owned by the library	6	3.83	0.983	0.401
Users feeling safe	6	3.83	0.983	0.401
Amount of library use compared to use of other community services/event (e.g. sports events)	6	3.67	0.516	0.211
Number of lap-top computers available for public use	6	3.67	0.816	0.333
Number of computers workstations available for public use	6	3.67	0.816	0.333
Number of library users compared to total population	6	3.67	0.816	0.333
Total expenditures for digital collection	6	3.67	1.033	0.422
Speed of service to user	5	3.60	0.894	0.400
Services to special groups (e.g. minorities, aging)	6	3.50	1.225	0.500
Number of programs offered for adults	6	3.50	0.837	0.342
Number of programs offered for children	6	3.50	0.837	0.342
Number of parking spaces around library	6	3.50	0.837	0.342
Number of items borrowed from other libraries for local users	6	3.50	1.225	0.500
Library's support of freedom of access to information (intellectual freedom)	6	3.50	1.225	0.500
Whether the library has done a user study or community analysis in the past 3 years	6	3.50	1.225	0.500
Extent of public involvement in library decision-making	6	3.33	1.033	0.422
Convenience of library's location	6	3.33	1.033	0.422
How "green" the library building is	6	3.33	1.033	0.422
Number of e-readers available for check-out	6	3.33	1.033	0.422
Number of digital audio books in collection	6	3.33	1.506	0.615
Number of clicks on web site to find what you need	6	3.33	1.033	0.422
Having up-to-date written policies, procedures, and standards reflecting current needs	6	3.33	1.033	0.422
Number of partnerships the library has with other community organizations	6	3.17	1.169	0.477
Total expenditures for all employees	6	3.17	1.329	0.543
Number of employees	6	3.17	0.753	0.307
Ability to receive a referral for what to read, listen or view next	6	3.00	1.095	0.447
Amount of use of equipment by the public (e.g. copiers, microfilm readers, computers, etc.)	6	3.00	1.549	0.632
Number of digital music titles in collection	6	3.00	1.549	0.632

Identification of library effectiveness

663

(continued)

Table VII.
The library foundation's ranking of indicators

Indicators of Effectiveness	<i>n</i>	<i>M</i>	SD	SEM
Number of web site visits	5	3.00	1.414	0.632
Likelihood that materials wanted will be immediately available	6	3.00	1.549	0.632
Percentage of total collection of library materials 5 years old or less	6	3.00	1.265	0.516
Efficiency of internal library operations	6	3.00	1.265	0.516
Number of reference questions asked by users	5	3.00	1.225	0.548
Web site accessibility for the disabled	6	2.83	0.983	0.401
Amount of comfortable seating areas	6	2.33	1.033	0.422
Number of training programs staff attends	6	2.33	1.033	0.422
Number of followers of the library's blog	6	2.17	1.169	0.477
Number of followers on Facebook page	6	2.00	0.894	0.365
Number of meetings and special events attended by board members	6	1.67	0.816	0.333

Table VII.

require library staff members to be open and willing to change if the library is to remain relevant and to deliver positive performance.

Note

1. Factor analysis was used to identify dimensions of library service. Responses from the public, the largest group, ($n=260$), led this identification. Responses from library staff ($n=39$), the library board of trustees ($n=7$), and the library foundation ($n=6$) were not large enough to influence the identification of dimensions in factor analysis.

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