

PERFORMANCE MEASUREMENT IN ACADEMIC LIBRARIES IN GHANA

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Abstract

The study is a survey of 97 members of Ghana's five public university libraries on measurement of performance of their organizations. A questionnaire and interviews were both used to gather data for the study. Findings show a shift from a situation of the University libraries in Ghana not measuring performance of their libraries in 1998 to one of having performance measurement policies as a means of diagnosing and justifying their existence. Three of the libraries were found to measure the performance of their libraries whilst two of the libraries did not measure performance of their libraries. It is concluded that an excellent use of performance indicators is key to effective, efficient and economical performance measurement.

KEYWORDS: PERFORMANCE EVALUATION, LIBRARY STANDARDS, PERFORMANCE INDICATORS, ORGANIZATIONAL CONTROL PROCESS

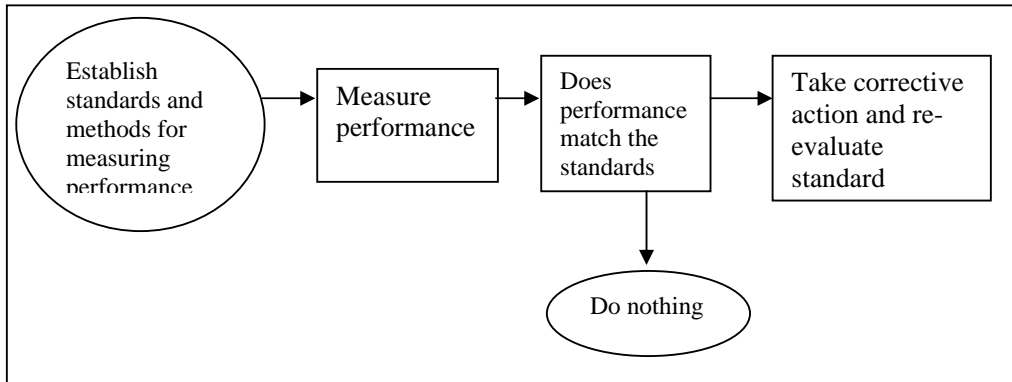
Introduction

Performance measurement according to Bateman and Snell (2002) is one of the steps in the organizational control process. They state that "management control systems are designed to measure progress toward planned performance and if, necessary, to apply corrective measures to ensure that performance is in line with managers' objectives.

Control systems detect and correct significant variations or discrepancies in the results obtained from planned activities".

They state further that a typical control system has four major steps as shown in the following figure:

Figure 1: Basic steps in control process



Source: Bateman and Snell, 2002

The steps involved are the following:

- Establish standards and methods for measuring performance;
- Measure performance;
- Determine whether performance matches the standard; and
- Take corrective action

Measuring performance therefore is an essential component of the management control process ensuring that the actual activities of an organization conform to planned activities. Similarly, libraries and university libraries in particular have realized over the years the importance and benefits of measuring performance.

Ford (1989) outlines below three reasons for measuring performance in academic libraries

- Political – the need to account for previous expenditure and to justify the budget for a future period;
- Managerial – the need to determine how resources are being used to achieve targets so that appropriate allocations can be made between competing activities; and
- Economic – resource allocation in order to maximize the benefits derived from the activities of the organizations (Ford, 1989).

The University Library Review (1989) also states that performance measurement is necessary to determine the extent to which a library has been successful in fulfilling its mission and to determine its priorities. Lancaster (1977), states that evaluation of library services provides feedback on whether the system is working or how well the system is working. He states further that when concrete and meaningful objectives are adopted and implemented, evaluation of the resulting services and products becomes critical and if it results that the objectives are not being met one desirable step is to examine the objectives to see if they are realistic in terms of the library's resources and total situation and any causal attempt at evaluation should quickly reveal the inadequacies of traditional, superficial and essentially meaningless objectives. For objectives to be useful, they require evaluation, and the evaluation process needs objectives as its criteria.

Line (1990) also asserts that one aspect of university library management that has become increasingly important as libraries have had to justify the existence of their services more vigorously in arguing for resources is the measurement of performance. Contributing to the dialogue on performance measurement, Johnson (1994) advocated the review of organizational strategies by the use of performance measures to ensure that strategies are working.

The need to justify the importance of academic library services particularly to the parent institution of these libraries and to the Ghanaian government that is responsible for funding them, is critical to the survival of academic libraries.

It is in the light of this that I interviewed in 1996 some major stakeholders of Ghana's five public and well established university libraries namely, University of Ghana, Legon; Kwame Nkrumah University of Science and Technology, Kumasi; University of Cape Coast; University of Education, Winneba; and University for Development Studies, Tamale. The rationale was to explore their views on performance measurement of their libraries in relation to strategy formation and implementation in their libraries. The subjects were requested to comment on performance evaluation of their libraries.

Within the library environments all the interviewees stated that they did not have any systematic policies regarding the measurement of performance. When they were asked if their libraries carried out performance evaluation, responses were mixed. For example, in one of the universities one third of the staff

interviewed said their libraries did not do any performance evaluation of services. A member of that library reported as follows:

Yes we evaluate the work of staff but if it is evaluating our services then it is no. Another member of the Planning Committee of the same library reported

Yes we do. For example, at the cataloguing department we do the statistics of books that we catalogue in say, a year.

In a second University Library, the majority view was that the library did not do performance measurement of their libraries.

However, the University Librarian and a couple of others pointed to the use of some measures of performance which were mostly population related attributes. The University Librarian stated the following:

Yes we do. We use the population of users at specific periods.

Two other University Librarians claimed they had thought of making policies on the evaluation of their services but had not implemented the idea. The assessment of these responses clearly indicated that the university libraries in Ghana in 1996 had not realized over the years the importance and benefits of measuring the performance of their institutions.

This study therefore attempts to determine quantitatively the views of the management and some staff of Ghana's five public university libraries on performance measurement of their organizations with the view to making recommendations, if necessary, to the practice of measuring the performances of their libraries.

Methodology

In 1996 a study conducted by this researcher (Badu, 1998) explored qualitatively performance evaluation of the five public university libraries in Ghana.

Some of the responses have been illustrated in the introduction of this study. It is based on these responses that a quantitative study was deemed necessary to confirm some of the findings from the qualitative study of 1996. This mode of research whereby interviews are used to explore a phenomenon and then the

interpretative results are used as a basis for a large scale positivist methodology is supported by Patton (1980) and Hirscheim (1985).

This study undertaken in November 2004 sought the views of the senior members i.e. Professional staff and senior staff i.e. Para-Professional staff of the country's five public and well established university libraries in a structured interview. Their views on the purposes and reasons for measuring performance of their libraries and the various means of doing so were sought.

Table 1 is the selection of the subjects for the research. For the sake of anonymity the libraries are randomly represented in this report as Univ. A, Univ. B, Univ. C, Univ. D and Univ. E respectively.

Table 1: The Selection of Subjects for the Survey

Libraries	Number of Staff			Numbers selected		
	Professionals	Para-professionals	Total	Professionals	Para-Professionals	Total
Univ. A	16	37	53	10	15	25
Univ. B	8	10	18	8	10	18
Univ. C	12	15	27	10	15	25
Univ. D	9	10	19	9	9	18
Univ. E	6	9	15	6	9	15
Total	51	81	143	43	54	97

Source: Field Survey, 2004

The subjects selected were made up of professionals and para-professionals. Stratification did not work with this population because of the unequal distribution of the populations at the different libraries. Some stratified samples would have been too small, but statistically, a sample has to be large enough to allow generalizations within measurable limits of accuracy to the subject group from which it was selected.

A stratified random sample of the total library staff therefore was statistically insignificant. It was decided to select the subjects according to the numbers as indicated in Table 1. In this case, statistical inference about the population of the library staff in the public university libraries in Ghana was not possible. What was possible was to compare individuals and category of staff across

cases for the purpose of drawing the necessary inference by the use of non-parametric techniques and then to consider each result across cases.

The Chi – square value was therefore included in tables where significant relationships were established. Significance values (P) that fell below .05 level were therefore recorded in tables where statistical significance resulted. Table 2 is also the survey response rates

Table 2: Survey Response Rates

<i>Library</i>	Number Distributed		Number Received		Percentage	
	Professionals	Para-professionals	Professionals	Para-professionals	Total	% Res.
Univ. A	10	15	9	8	17	68
Univ. B	8	10	8	8	16	88
Univ. C	10	15	6	15	21	84
Univ. D	9	9	7	2	9	50
Univ. E	6	9	2	5	7	47
Total	43	54	32	35	70	100

Source: Field Survey, 2004

The response rates for the different case institutions are shown in Table 2. The overall response rate was 69%. Non response was the result of refusal of some subjects to return completed copies of the questionnaire.

In a similar manner to the qualitative study of 1996 (Badu, 1998), the subjects were requested to state if their libraries did performance measurements of their organizations. Those who claimed that their libraries measured the performances of their libraries were subsequently asked to give reasons for doing so. They were further asked to show the type of indicators the libraries used.

Lastly, subjects were requested to state any problems associated with the measurement of the performance of their libraries. Results are presented under awareness of libraries measuring performance, reasons for measuring performance, performance indicators and the problems associated with performance measurement.

Results

Awareness of Libraries Measuring Performance

Subjects were requested to state if their libraries did measure performance. Table 3 shows the 'Yes' and 'No' responses by the subjects.

Table 3: Awareness of Performance Measurement by Library

Library	Yes		No		Total	
	No.	%	No.	%	No.	%
Univ. A	7	41.2	10	58.8	17	100
Univ. B	5	31.2	11	68.8	16	100
Univ. C	12	60.0	8	40.0	20	100
Univ. D	5	71.4	2	28.6	7	100
Univ. E	6	10.0	0	0	6	100
Total	35	53.0	31	47.0	66	100
Chi square 10.662	DF = 4		=		.031	

Source: Field Survey, 2004

Table 3 shows a significant relationship between the awareness of performance measurement by the libraries. Univ. C, Univ. D and Univ. E show a higher level of awareness than Univ. A and Univ. B. This could possibly be due to the fact that the new university libraries Univ. D and Univ. E have realized the benefits of adopting management tools such as performance measurement right from the inception of their libraries. The majority of respondents at Univ. A indicated that their libraries did not do performance measurement.

About 70% (68.8%) of the respondents at Univ. B also stated that their libraries did not measure performance. Univ. A and Univ. B are the oldest libraries among the five libraries. This shows that these libraries are probably wallowing in old library practices and are yet to adopt some of the modern management techniques of doing library business.

Univ. E showed the highest level of awareness with every respondent stating their library did measure performance. The new university libraries can therefore be said to show a higher level of awareness of performance measurement than the old libraries. The subjects who indicated their libraries measured performance were requested to indicate the reasons they believed accounted for their libraries' measurement of performance.

Reasons for Measuring Performance

Table 4 shows the responses when respondents who indicated their libraries measured performance were requested to state why they did so.

Table 4: Responses on the Reasons for Measuring Performance

Reasons for measuring performance	N = 35	
	No.	%
Falls within organizational mission and goals	30	85.7
External Pressure	21	60.0
Political	17	48.6
Managerial	22	62.9
Economic	25	71.4

Source: Field Survey, 2004

Table 4 clearly shows that over 80% (85.7%) of the respondents who stated their libraries measured performance believed that this was due to the fact that measuring performance falls within their organizational mission and goals. Economic reasons for measuring performance were also cited 25 times (71.4%) with external pressure and managerial reasons scoring about 60% each. A cross-tabulation of the reasons for measuring performance by library was not statistically significant.

Performance Indicators

The respondents who stated their libraries measured performance were asked to state the performance indicators used. Table 5 shows the indicators used by the libraries.

Table 5: Responses on Performance Indicators used by Libraries

Performance Indicators	N = 35	
	No.	%
Service Input measures	15	42.9
Service Output measures	21	60.0
Service Effectiveness	29	82.9
Population Attributes	29	82.9

Source: Field Survey, 2004

Table 5 indicates that the performance indicators used by the libraries of the respondents who stated their libraries measured performance are service output measures, effectiveness measures and population attributes. All the respondents were asked to respond to specific problems their libraries encountered in measuring performance.

Problems Encountered in Performance Measurement

The major stumbling blocks for measuring performance were expressed as indicated in Table 6.

Table 6 Responses to Problems Affecting the Conduct of Performance Measurement

Problems affecting Performance Measurement	No.	N = 70 %
Low level of awareness	34	48.6
Inadequate finances	47	67.1
Shortage of required staff	26	37.1
Lack of evaluation tools	40	57.1

Source: Field Survey, 2004

The major problems identified by the library staff are the inadequate finances (67.1%) and the lack of evaluation tools (57.1%). The major reason – inadequate finances is not surprising because normally, the cost of such exercises are usually part of the budget for research. In university libraries in Ghana however, no fund is specifically budgeted for research.

The second problem expressed by the respondents as prohibiting performance measurement is the lack of evaluation tools. Although the library profession acknowledges that it lacks in widely and accepted applicable tools and methods for performance measurement (Pritchard, 1996), there is a continuing effort and marked achievement in developing and employing tools, methods and frameworks for evaluation of performance of libraries in the developed world. Goodall (1988), and Pritchard (1996) present different models and approaches for evaluation of the performance of libraries and these approaches are being used with a degree of success in developed countries as those were developed by the developed countries and as such fit their environments.

To determine the degree of variation between the responses on the problems by the subjects, a cross-tabulation of the responses by library yielded the results in Table 7.

Table 7: Responses on Problems Affecting Performance Measurement by Library

Problem	Univ. A		Univ. B		Univ. C		Univ. D		Univ. E		Total	Significance	
	No.	%	No.	%	No.	%	No.	%	No.	%			
Low level of awareness of importance of Performance measurement	10	29.4	6	17.6	11	32.3	4	11.8	3	8.8	34	100	.694
Lack of finances	6	26.1	4	17.4	5	21.7	7	30.4	1	4.3	23	100	.031
Shortage of required staff	7	24.1	6	20.7	11	37.9	4	13.8	1	3.4	29	100	.589
Lack of Evaluation tools	4	15.4	10	15.4	10	38.5	5	19.2	2	7.7	26	100	.064

Source: Field Survey, 2004

Table 7 shows that there were no significant differences between the libraries and the responses by staff on the problems for measuring performance with the exception of the lack of finances. Univ. D exhibits the highest response for the lack of finances with Univ. E indicating the least.

Discussion

The findings for this survey show a shift from a situation of the university libraries in Ghana not measuring performance of their libraries (Badu, 1998) to one of having performance measurement policies as a means of diagnosing and justifying their existence. The analysis of data, revealed that Univ. C, Univ. D and Univ. E measured the performances of their libraries whilst Univ. A and Univ. B did not measure performance of their libraries.

These two libraries (Univ. A and Univ. B) appear not to be cognizant of the benefits and necessities of having performance measurement data. Performance measurement has become a main stream exercise in all service providing

institutions like libraries in many countries of the world (Mckee, 1989; Baba and Broady, 1998).

A library that does not measure performance is certainly compromising with levels of quality and lacks formal standards of quality assurance. There is also the lack of accountability and probably the lack of explicit objectives and obviously no means for achieving performance targets.

On paper, the role of the university library within the context of the university's information policies and academic goals exist in most university documents. The mission of the university library as expressed in many of the university's documents is to provide information services in support of the teaching, research and public service mission of the university. The achievement of that mission requires the development of standards to address the ways in which goals should be developed and measured, needed resources estimated and success in goal achievement evaluated. A library that does not measure performance therefore cannot be said to be optimizing the performance of the library in terms of the mission of the university. Performance measurement of a library or its components can also be required for different reasons.

Reasons for Measuring Performance in University Libraries in Ghana

This survey has revealed two main reasons why some of the university libraries in Ghana do measure performance. These have been expressed as:

1. Because performance measurement falls within the university's mission and goals; and
2. Because of economic reasons.

These findings are not peculiar to Ghanaian university libraries. Bawden's (1990) view which supports these findings is that performance evaluation ought to be an institutional requirement and that performance measurement helps to assess how well the library meets its objectives or justifies the continuance of service.

Regarding the economic motives for measuring performance, the study corroborates Ford's (1989) argument in establishing performance standards in British academic libraries. Ford (1989) asserts that libraries are economic organizations and that for such organizations resources have to be allocated in order to maximize the benefits derived from the activities of the organization.

This study further supports Rodger (1987), and McKenzie's (1990) notion that among the purposes of measuring performance is the idea of using it as a tool to convince institutions that the library needs the same relative share of institutional budget, even if the budget itself may be shrinking. The cost justification of the existence of an academic library is also supported by Abbot (1994), Rodger (1987) and Van House (1995) respectively.

Performance Indicators

This study has revealed that the university libraries in Ghana that measured performance use service output on a large scale. Service effectiveness and population attributes performance indicators are also used.

This result provides grounds for debate. Usually service input performance indicators such as amount of resources applied to service are used by institutions that have freshly adopted performance measurement as a management tool. It is very surprising that the new university libraries in Ghana use output measures which according to Henty (1989) are complex and time consuming. It is relatively simple, such as to keep a record of the number of reference enquires received but it is methodologically far more complicated to evaluate the quality of the responses given. Similarly, it is simple to record statistics concerning bibliographic instruction courses held and the members attending, but difficult to evaluate the effectiveness of such courses. Population attributes are also relatively simple to collect for example, number of registered users per population.

The performance indicators used by university libraries in Ghana have been widely and extensively used in the academic libraries of most developing and developed countries. For example, Goodall (1988) and Powell (1988) provide a comprehensive coverage of the literature on performance indicators and have described several techniques on different aspects of measuring performance of library services.

These techniques cover the range of input measures to more complex measures such as quality and appropriateness. Lancaster (1988) discusses a range of performance indicators from simple quantitative measures to qualitative statistics. It is very encouraging to note that the university libraries in Ghana also recognize the need to go beyond simple quantitative performance measures as used for input service measures to a more qualitative approach such as effectiveness measures.

Cullen (1992) discourages the use of only input measures. In her discussion of performance measurement in reference services she discourages the use of reference enquiry numbers as a performance indicator and states that:

One thing is certain, no one's goal is to increase the number of enquires answered each year... Increased business in the reader services area may indicate ... increasing frustration (Cullen, 1992).

However, administrators seeing falling enquiry numbers may tend to see this as an indicator of falling demand and therefore falling performance. In fact it could mean that the user education service has been so successful that users no longer need to ask for so much help.

Brophy (1997) acknowledges that there can be many perspectives on performance indicators including those of stakeholders such as customers, institutional managers, funding councils, government, other library managers, student advisors, and heads of academic department.

Although some progress have been made by some of the university libraries in Ghana in developing performance indicators such as effectiveness measures and population attributes these have been focused on library managers' requirements only but if one of the reasons for measuring performance in the libraries as stated earlier is fulfilling a requirement enshrined in the universities' statutes then the perspective of the universities authority or government is essential.

Problems in Measuring Performance

Two main problems were identified by the staff namely, inadequate finances and the lack of evaluation tools.

These problems and many others have been noted by Town (1998) and Saracevic (1980) as hampering the evaluation of library performance by most developing countries. They state further that there is the general absence of reports on performance measurement from developing countries in International Library and Information Science Indexes and that not much have been investigated in that area of research as a result of some of the stated problems. Table 7 shows that Univ. E and Univ. A had the highest number of responses for inadequate finances. This is probably the reason why staff at Univ. A did not measure performance.

Although the problem of finance is common to all countries (Cronin, 1982; Goodall, 1988) it is more severe in developing countries and it is no wonder that the participants in this survey have rightly indicated this as a problem that mitigates against the performance measurement process.

Conclusion

Institutions ought to run both efficiently and effectively. To this end, all university libraries should be responsible for evaluating their own services by measuring performance. Performance measurement is an essential ingredient of good management practice.

Two university libraries from this survey do not measure performance of services and it is strongly suggested they do so for the reasons stated by Ford (1989), The University Library Review (1989) and Winkworth (1993).

As indicated by the respondents, cost is an inhibiting factor in performance measurement of their libraries in Ghana but inadequate finances should not be an excuse for not getting involved in the exercise as numerous evidence exist in academic library literature (Van House, 1995; Richard, 1996; Brophy, 1998) to show that it is one of the main weapons that departments have when it comes to making a strong case for organizational budgets or attracting funding at large.

On the issue of performance indicators, the libraries that measured performance use output measures and population attributes as chosen by the management of the libraries and derived from books written by authors from developed countries.

It must be stated that an excellent use of performance indicators is the key to effective, efficient and economical performance measurement. Indicators chosen must match the objectives of the libraries and this precludes the adoption of a totally standard detailed set for all academic libraries in Ghana.

Boekhorst (1995) and Van House (1995) have advised that it is necessary for every country to have its own performance indicators, as a standard for one country cannot be used for another, simply because setting standards is affected by the local circumstances of each country. The same is also true at the institutional level.

Lancaster (1977) clearly indicates that:

to be valuable, performance indicators must be directly related to the resources and objectives of a particular institution (Lancaster, 1977).

Performance indicators, either copied from books or by consensus of management or through benchmarking of other university libraries of advanced countries will not yield the desired results. Performance indicators ought to be unique to each country and institution as standards ought to be based on what is possible in each specific environment.

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