University of Nebraska - Lincoln
DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal) | Libraries at University of Nebraska-Lincoln

2-1-2011

Size and Quality of Information Sources and the Use of Library Services in a University Library

Akobundu Dike Ugah
Michael Okpara University of Agriculture, ugahad@yahoo.ca

Follow this and additional works at: http://digitalcommons.unl.edu/libphilprac

Part of the Library and Information Science Commons

Ugah, Akobundu Dike, "Size and Quality of Information Sources and the Use of Library Services in a University Library" (2011). *Library Philosophy and Practice (e-journal)*. Paper 636.
http://digitalcommons.unl.edu/libphilprac/636

StatCounter.com RSS Add to Google

Library Philosophy and Practice 2011

ISSN 1522-0222

Size and Quality of Information Sources and the Use of Library Services in a University Library

Akobundu Dike Ugah, PhD
University Library
Michael Okpara University of Agriculture,
Umudike, Pmb 7267 Umuahia, Abia State, Nigera

Introduction

Michael Okpara University of Agriculture Umudike (Established 1994) was established to impart education in agriculture and related fields, and for advancement of learning and original research. It has 9 Colleges, two Schools- a School of General Studies and a School of Postgraduate Studies, and academic departments all located within Umudike, Abia State, Nigeria. It has established an excellent tradition of teaching, research and community service in agriculture, science and technology, veterinary medicine, agro business and financial management. By virtue of its mandate, age, experience, achievements and philosophy, Michael Okpara University is a university of national and international character and stature, in so far as it has drawn both its lecturers and students from all over the country and beyond. Aided by the university library, laboratories, equipment, lecturers and students are engaged in research in several areas. They are also engaged in national and international collaboration in research.

Purpose and Objectives of the Study

The purpose of this study was to examine the information sources variables of size and quality and the use of Michael Okpara University of Agriculture, Umudike library services. The specific objectives are:

1. To determine the relationship between the size of information sources and the use of library services.

2. To ascertain the relationship between the qualities of information sources and the use of library services.

Research Questions

The following research questions guided the study:

1. What is the relationship between the size of information sources and the use of library services?

2. What is the relationship between the qualities of information sources and the use of library services?

Methodology

The main instrument for data collection for this study was a questionnaire. The instrument went through validation and reliability test process. The researcher progressively and personally distributed the copies of the questionnaire to the users of the library. The data collected were analyzed through the use of frequency tabulation and percentages to answer research questions.

Literature Review

The relationship between the size of information sources and the effective use of library services has been a recurrent concern in the field. It is felt that there is a definite relationship between size of a given information source and the ability of the library to respond to the needs of the users, (Burns, 1969). Naturally, the larger the information sources, the greater the number that will be circulated (Schofield, Cooper, and Waters, 1975). Gross size is a straight count of total volumes of information sources currently received in the library. It may be broken down according to class or may be reported per capita, (Bonn, 1974). It is generally agreed that size does mean ‘something' and that there is a positive correlation between the size of information sources in a library and, for example, the excellence of the academic institution to which the library belongs, measured by composite scores of academic rating, (Jordan, 1963), or by number and variety of graduate degrees granted, (Downs, 1969). The size of a library's information sources and its ability to respond to the needs of its users can be expressed in terms of probability, (Burn, 1969) and that the probability will be even greater if the information sources have been intelligently selected by competent professional librarians (Beasley, 1964).

Verner W. Clap and Robert T. Jordan in 1965, developed a formula for setting the optimal size of a library collection for any particular university, but were not studied empirically until 1972. It is based on acceptable core plus volumes, per faculty, per undergraduate field, per graduate field. Statistical regression analysis was used, and it was found that for university libraries, the Clapper-Jordan formula might be considered a conservative guide to maximum size for adequate collection. Another result of this study is the impression that for academic institutions, the library is just more than a resource for teaching and research but it is something of an end it self, and that some universities have been prepared to develop national or regional libraries while others have been contented with restricting their ambitions to the needs of teaching and research on their campuses.

One shortcoming of the Clapp-Jordan formula has been that it does not reckon with the difference in book needs between, say mathematics and history: rather, it assumes a universe of subjects will be covered by the academic community and thus the differences among subjects even out as do the differences in use of library by individuals. Another writer feels that since all the information sources do not have identical utility and information, the probability of finding a useful source is dependent on the nature of the request and the nature of information source, rather than on the size, (Krikelas, 1966). An example might be the usual special library information sources, which is very small in size, but is exhaustive in its specific subject coverage and is deliberately kept up-to-date by rigorous weeding. A collection of 5,000 books in

such a library could be more useful than 10,000 books on the same subject in some other kind of library (Jackson, 1968). This claim was collaborated by Trueswell (1968 and 1969) when he stated that ‘a fraction of the information sources meets the majority of users needs. Therefore, as the size of information sources grows, the corresponding per student circulation does not increase at the same rate. This does suggest that professional development, maintenance and exploitation information sources, taken together, are more important than size.

Aguolu and Aguolu (2002), listed the major determinants of size and the characters of the university information sources to be: The size of the students; the size of research interests and the needs of the faculty; the nature and scope of the curriculum; pedagogical methods; proximity to other libraries with information resources; and co-operative arrangements with other libraries. Ifidon's (1997) empirical study on collection development provides evidence that books and journal per capita in Nigerian academic libraries are below average, resulting in inadequate information sources. Nnadozie (2006) diagnosed inadequate information sources as unavailability of desired sources, insufficient number of needed information sources, preponderance of publications that are at variance with the curricula needs of library users and provision of out-dated publications. These in the collection impact negatively on the use of library services.

Studies have confirmed that size of information sources affect the use of library services. For instance, Unomah (1987), revealed that majority of students do not use the library because ‘library did not have enough materials.'Over the years, government funding of universities and their libraries did not take into consideration the inflationary trends, (Salisu 2000). This situation has drastically affected the growth of information sources in Nigerian University Libraries in terms of size (Agboola, 1998). The natural consequence of this is the inadequacy of information sources, which has in turn adversely affected the use of library services. Scarcity of resources for the acquisition of information sources began in the late 1980s and is still continuing. This came as a result of a serious downturn in the Nigerian economy and general mismanagement of the economy (Salisu, 2000).

As a result of this development, the literature on information sources inadequacy in size in Nigerian university libraries in the 1980s and 1990s is replete with lamentations of librarians. Examples of such lamentations include Ifidon (1998), Ekoja (1995), Akobo (1992), Ifidon (1985), Balarabe (1992 and 1995), Olorunsola (1995), Oyediran (1998), Dipolu (1998), Akhidime (1998), Ajibero (1998), Ekpenyong (1993).

Both for contrast and comparison, Ifidon (1999), with the aid of tables, illustrated some characteristics of university libraries. He selected ten from Nigeria, ten from Africa and ten from Britain and made startling revelations on number of books per reader. In terms of books, universities in Britain provide 307 volumes per reader, University of Dar-es-Salaam, in Tanzania provides 3.9 periodical title per reader, while in Nigeria, only Bayero University Kano can boast of two books per student, while Edo State University, Ekpoma, and Rivers State University of Science and Technology, Port-Harcourt, all in Nigeria have 0.07 periodical titles per reader.

It was however argued by Ifidon that sometimes the number of information sources per capita are small not because of the gross size but because the growth rate of the universities is too high and consequently the student population is too large. This was corroborated by a study commissioned by the World Bank, which states “Enrolment are often increasing faster than the capacity to plan for, and finance growth”

To stem this unfortunate situation, World Bank loan of USD 120m was injected into Nigerian federal university libraries in three installments. The

facility was for among others, the supply of library books and journals. Unfortunately, only the first installment was drawn before the Nigerian political problem in 1993 led to its premature winding down. At the end of the exercise, the 20 participating universities acquired some 178,978 volumes of books valued at USD 7.23m (Tamuno, 1998). For journals acquisition, the sum of USD 12m was budgeted for the 20 federal universities participating in the project (Balarabe, 1995). Almost all the universities under utilized their allocations up to the end of July 1993 due to some technical problems associated with journal selection, subscription, and procurement. A similar project funded by European Union for state-owned universities was also aborted.

Nigerian university libraries are still grappling with the problems of inadequacy of information sources. This has a serious implication for the use of library services. This fact was confirmed by Oyesiku and Oduwole (2004) on their investigations on the use of Olabisi Onabanjo University Libraries. In their findings, 192 (29%) respondents rated the collection in their field as inadequate in size and had to visit other libraries to obtain more information. For the same reason of inadequate size, students of University of Ado-Ekiti had to use other libraries, Olayinka (2005).

The standard ISO 11620 defines quality of libraries as “totality of features and characteristics of a product or service that bear on the library's ability to satisfy stated or implied needs”(ISO 11620). Over the years one can observe an increasing interest and different approaches to quality in libraries and information services, especially in a management area (Brophy 2004). A common factor of several concepts and approaches to quality is to focus on user expectation and needs. In TQM context “the quality of service is defined by the customer's perception of both the quality of the product and the service providing it” (Bernard 1994). Academic libraries should fulfill their own strategic plans and also goals of the higher education system (Pritchard 1996). They “like other service institutions have to show that they are using given resources for right purpose and in the best way, that they are providing high quality services (Poll and Boekhorst 1996). In other words, they are “being asked to demonstrate their worth, to justify their expenditure, and to adopt new practices that involve substantially improved and extended services to user” (Ward et.al 1995)

The quality of academic libraries is connected with product and services among others (Pindlowa 2002). Because libraries are service organizations, the quality in the content of a library is often treated as the quality of service. Hernon and Nitechi (1999) point out that service quality includes three areas: resources (information sources/contents), organization (service environment and resource delivery), and service delivered by staff. Each of them is related to five elements of (dimensions) of service quality defined by Parasuraman, Zeithanl and Berry (2005) namely: reliability, assurance, tangibility, empathy, and responsiveness. Brophy (2004) identified ten quality attributes applicable to library and information services: performance (a library service meets its most basic purpose), features (aspect of the service appealed to users), reliability (including availability of the service), conformance (the service meets the agreed standard, including standards and protocols), durability (sustainability over a period of time), currency of information, serviceability (the level of help available to users), aesthetics and image(physical and web-based services), perceived quality(users' view of the service), usability(particularly relevant to the electronic services)(Brophy,2004. Cartter ‘library resource index' was used in 1966 to correlate quality in graduate education and library resources. The institutions that are strong in all areas invariably have a major national resource libraries and all the universities with overall faculty quality ratings scored relatively high on the library resource index, (Bonn, 1974)

Beasley (1964), however argued that ‘quality becomes of serious concern only in small libraries' where consequently, competent professional

librarians would seem to be most needed but where, unfortunately, they seem to be most lacking. Ajibero (1998) however insisted that quality of library services depends to a large extent on the quality of information sources. Traditionally, Nigerian university libraries build information sources to meet the information needs of their patrons. It is therefore argued that quality of information sources have influence on the use of library services (Ologbonsaiye 1994). This argument was reinforced when he stated that the quality of a library's information sources has been identified as one of the yardsticks for measuring the library users' satisfaction of library services.

Maigari (1985) had earlier described poor library services as a national problem, which he attributed to lack of quality information sources. Maigari's view was reinforced by Kolo (1995) who revealed that library services in Nigeria have been of poor quality, which he attributed to acute shortage of quality information sources for any effective academic and other educational activities in the country.

Oyediran (1998) and others raised an alarm on the deterioration of information sources, facilities and services in the Nigerian university library system, due to economic downturn. Ogunrombi (2003) appraised the status of library information sources in Nigerian University Libraries based on the assessment of the National Universities Commission (NUC) and revealed that most universities missed the accreditation because of poor quality information sources. The argument being that the quality of education and research depends on the quality of library services, which in turn depends on the quality of information sources.

Ogunrombi (2004) further argued that there is correlation between quality of intellectual materials available and the quality of research and scholarship; that no educational system is greater than the quality of its teachers; and that teachers that are starved of current information sources will be ill prepared to produce quality graduates, a pre-requisite to national development. He recommended that the Committee of University Librarians of Nigerian Universities (CULNU), with a view to advising the proprietors of the universities to revitalize their libraries to shore up quality, should study the document by the NUC emanating from the 1999/2000-accreditation exercise.

Bonn (1974) stressed that quality and user needs rather than quantity on basic list alone should be decisive factors in building information sources and that the quality for a particular information source depends on user needs which may change as the user need change. This study wishes to investigate the size and quality of information sources in relation to use of library services at the Michael Okpara University of Agriculture.

Methodology

Case study method was used for this study. The main instrument for data collection for this study was through the administration of questionnaires. The instrument was subjected to validation and reliability test process. The researcher distributed copies of the questionnaire to the sample library users as they entered to use the library. The data collected were analyzed through the use of frequency tabulation and percentages to answer research questions.

Findings

Of the 200 copies of questionnaires distributed, 168 were returned and all found useful for analysis.

Responses by Colleges

Table.1. Distribution of Responses by Colleges

College	Frequency	Percent
College of Animal Science and Health (CASAH)	8	4.8
College of Food Processing Storage and Technology (CFPST)	34	20.2
College of Agric Econs Rural Sociology & Extension (CAERSE)	14	8.3
College of Engineering & Engineering Technology (CEET)	8	4.8
College of Biological &Physical Sciences (CBPS)	62	36.9
College of Agric Business & Financial Mgt (CABFM)	16	9.5
College of Natural Resources & Environmental Mgt (CNREM)	4	2.4
College of Crop & Soil Sciences (CCSS)	16	9.5
College of Veterinary Medicine (CVM)	6	3.8
Total	168	100

Table 1 shows the distribution of respondents by Colleges. Most responses came from CBPS with 62 (36.9%), followed by CFPST with 34 (20.2%). The least response came from CNREM with 4 (2.4%).

Table2. Distributions of Respondents by Status

Employment	Frequency	Percent
Staff	8	4.8
Student	160	95.2
Total	168	100

Table 2 shows the distribution of respondents by their status. Majority of the respondents were students with 160 (95.2%).

Gender of the Respondents

Table 3. Distribution of the Respondents by Gender

Gender	Frequency	Percent
Male	90	53.6
Female	78	46.4
Total	168	100.0

Table 3 shows the distribution of respondents by gender. The male respondents were 863(57.23%) while the female respondents were 645(42.77%). This shows a fair representation of the respondents in terms of gender

Age Range of Respondents

Table 4 Distributions of Respondents by Age

Age Range	Number	Percentage
20-29	146	86.9
30-39	14	8.3
40-49	8	4.8
Total	168	100

In terms of age, as shown in table 4, most respondents fall within the age range 20-29 (86.9%), followed by those in the age bracket 30-39 with 14(8.3%).

Highest Qualification of Respondents

Table 5. Distributions of Respondents by Highest Qualification

Highest Qualification	Number	Percentage
SSCE	114	67.9
Diploma	8	4.8
Bachelor Degree	32	19.0
Master degree	14	8.3
Total	168	100

As shown in table 5, majority of the respondents had Senior Secondary Certificate (SSCE), followed by first-degree holders 32(19.0) and those with Masters Degree 14(8.3%). The least number of respondents were diploma holder and none had doctorate degree.

Frequency of the respondents' use of library services

Table 6. Users Responses on the frequency of use of library services

Frequency of use	No of Respondents	%
Daily	38	22.6
4-5 times a week	47	28.0
1-3 times a week	48	28.6
1-3 times a month	22	13.1
Less than once a month	13	7.7
Total	168	100

From table 6 above, 38(22.6%) of the respondents use the library on daily basis, 47(28.0%) used the library 4-5 times a week, 48(28.6%), used the library 1-3 times a week. While 22(13.1%) used the library 1-3 times a month, only 13(7.7%) used the library once a month. From the analysis of table 6, the respondents made used of the library.

The size of information sources and the use of library services

Table 7. Users Responses on the Size of Information Sources and the use of Library Services in the University

Size of Information Sources			Agreement score and Percentage		Disagreements score and percentage	
			F	%	F	%
a	Inadequate	168	150	89.3	18	10.7
b	Inadequate in my discipline	168	144	85.7	24	14.3
c	My use of library depend on size	168	128	76.2	40	23.8
d	The size does not satisfy my use of library	168	120	71.4	48	28.6
e	The size does not influence my use of library	168	42	25.0	126	75.0

As shown in table 7, 150 (89.3%) agreed that the size of information

sources in the library was inadequate with disagreement total of 18 (10.7%). This result reveals that the size of information sources, as agreed by the majority 150 (89.3%), in the university library was rated inadequate.

Dissatisfaction with the size of information sources in respondents' disciplines was 144 (85.7%) Meanwhile, disagreement on dissatisfaction was scored 24 (14.3%). This result reveals that majority of the respondents were not satisfied with the size of information sources in their disciplines, an indication that the size of information sources in various disciplines in the University library was inadequate. Use of library services depending on size of information resources construct was scored128 (76.2%) agreement total. In other words 128 (76.2%) agreed that their use of library services did depend on the size of information sources. However, disagreement score was 40(23.8%) In other words, 128 (76.2%) agreed that their use of library services depended on the size of information sources. This result reveals that the use of library services depends on the size of information sources. The bigger the size, of information sources, the more likely the library services would be used.

Dissatisfaction derivable from using the library services based on size of information sources was scored 120(71.4%) agreement total; meaning majority did not derive satisfaction from using the library services based on size of information sources. On the other hand, 48(28.6%) disagreed. This result reveals that satisfaction derivable from using the library services based on the size of information sources is low. In other words, the bigger the size of information sources, the more satisfaction users derive from using the library services.

The size of information sources not influencing the use of library services was scored 42 (25.0%) agreement. On the other hand, 126 (75.0%) disagreed that the size of information resources did not influence their use of library services. This result reveals that the size of information sources influenced the use of library services. In other words, the bigger the size of information sources, the more likely users would be influenced to use the library.

The final analysis of the five indices of size of information sources shows that there is a relationship between the size of information sources and the use of library services, because majority of the users 120 (71.4%) agreed that their satisfaction from the use of library services depends on size of information sources and 126 (75.0%) agreed that the size of information sources influences their use of library services. These responses established a relationship between size of information sources and use of library services based on dependency on size, satisfaction based on size and influences based on size.

The quality of information sources and the use of library services

Table 8. Users Responses on the quality of Information Sources and the use of library services in the University

Responses						
Quality of Information Sources constructs		Number of Respondents	Agreements Total score and Percentage			Disagreements Total score and Percentage
			F	%	F	%
a	Low quality	168	102	60.7	66	39.3
b	Unsatisfactory In my discipline	168	122	72.6	46	27.4

c	My use of the library does not depend on the quality of Information Sources	168	32	19.1	136	81.0
d	Does not satisfy my use of library services	168	120	71.4	48	28.6
e	Does not Influence my use of library services	168	32	19.1	136	81.0

As shown in table 8, Agreement total on low quality of information sources was 102 (60.7%). Meanwhile disagreement total was 66 (39.3%). This result reveals that the quality of information sources, as agreed by the majority 102 (60.7%), in the university library was rated low.

Dissatisfaction with the quality of information sources in respondents' disciplines was 122 (72.6%) agreement. Meanwhile, disagreement on dissatisfaction was scored 46 (27.4%). This result reveals that majority of the respondents were not satisfied with the quality of information sources in their disciplines, an indication that the quality of information sources in various disciplines in the University library was low.

Use of library services not depending on quality of information resources construct 32 (19.1%) agreement total. In other words 32 (19.1%) agreed that their use of library services did not depend on the quality of information sources. However, disagreement score was 136 (81.0%). In other words, 136 (81.0%) agreed that their use of library services depended on the quality of information sources. This result reveals that the use of library services depends on the quality of information sources. The better the qualities, of information sources, the more likely the library services would be used.

Dissatisfaction derivable from using the library services based on quality of information sources was 120 (71.4%) agreement total, meaning majority did not derive satisfaction from using the library services based on quality of information sources. On the other hand, disagreement was 48 (28.6%). This result reveals that satisfaction derivable from using the library services is low. In other words, the better the quality of information sources, the more satisfaction users derive from using the library services.

Influence of quality of information sources on the use of library services was scored 32 (19.1%) of agreement. Meaning that the quality of information resources did not influence the use of library services by 32 (19.1%) of the respondents. 136 (81.0%) disagreed that the quality of information resources did not influence their use of library services. This result reveals that the quality of information sources influences the use of library services. In other words, the better the quality of information sources, the more likely users would be influenced to use the library.

The final analyses of the five indices on the quality of information sources indicate in answer to question two, that there is relationship between the quality of information sources and the use of library services. This is because 136 (81.0%)agreed that their use of library depends on the quality of information sources in the libraries, satisfaction derivable from using the library services depends on the quality of information sources and 136 (81.0%)agreed that the quality of information sources had influence on their use of library services.

The size of information sources and use of library services

There is significant relationship between the size of information sources and the use of library services. This result reveals that relationship. The relationship is positive as the use of library services has 76.2% dependence on

the size of information sources, and the size information sources have 75.0% influence on the use of library services.

Again, majority of the respondents agreed that the relationship between the size of information sources and use of library services is low, because of inadequacy in size in general and in users' disciplines in particular led to dissatisfaction in library services as indicated in table 7. Jordan (1963) and Burn (1969) agreeing with the above findings, had noted that there is a definite relationship and correlation between size of information sources and the use of library services and the ability to respond to users needs depends on the size of information sources which can be expressed in terms of probability. In other words, the greater the size of information sources, the greater the ability of the library system to respond to the needs of the users. Sheffield, cooper and Waters (1975) reinforced this observation when they asserted that the larger in the information sources, the greater the number that will be circulated to meet the needs of the users. Unomah (1987) also confirmed that the size of information sources affect; the use of library services.

Quality of information sources and the use of library services

By the finding, there is significant relationship between the quality of information sources and the use of library services. This relationship is positive as the use of library services has 81.0% dependence on the quality of information sources, and the quality of information sources has 81.0% influence on the use of library services.

Again, majority of the respondents agree that the relationship between the quality of information sources and the use of library services in the university library is low because of low quality of information sources both in general and in the specific subject disciplines leading to dissatisfaction in the use of library services as shown in table 8. Agreeing with the above, Cartter (1966) who used ‘library resource index' to correlate quality, found out that all the Universities with overall faculty quality rating scored relatively high on the library resource index and the use of the resource (sources). Cossette (2005) agreed that an indicator of quality is a sign that shows the quality of information sources and library services, which represent and indicates effectiveness (library course) since it shows how far the objectives of the library are being achieved. The findings of this study also agrees with those Ologbonsaiye (1994) and Ajibero who found out that quality library services and use, depends to a large extent on the quality of information sources and that the quality of a library's information sources has been identified as one of the yardsticks for measuring library users' satisfaction of library services. Maigari (1985) and Kolo (1995) have earlier reported similar findings in their various studies. Ogunrombi (2004) summarized these findings when he stated that there is correlation between qualities of intellectual materials (information sources) available (in university libraries) and the quality of research and scholarship.

Conclusion

From the findings of this study, it has been established that information sources in the university library were inadequate in size, and are not of high quality in terms of the needs of the users. The findings from the study also reveal significant relationships between the size and quality and the use of library services, and that these information sources variables to large extent influence the use of library services.

Since majority of the respondents were not satisfied with the size and quality information sources, and significant relationships exist between these

variables and the use of library services and that these variables, influence the respondents use of the library services, it is being concluded that that the library services in the university library are not fully being utilized because of the perceived shortcomings of the information sources in terms of size and quality.

Recommendations

From the results of this study, the following recommendations are put forward:

The university library should be properly funded to acquire adequate size of information sources in response to increased students enrolment, introduction of new courses, establishment of more academic departments, faculties and colleges, and the recruitment of more academic and administrative staff.

The library, when acquiring information sources should collaborate with the users or their representatives to get their views or recommendations on the content of the sources they want to acquire in terms of the intellectual quality. The librarians themselves should ensure that the physical quality of the information sources they want to acquire must be of high standard in terms of paper used, the typeface or fonts, the binding, the design, color, and illustration.

The university library should also be provided with more ICT and Internet facilities as to be able to explore other information sources in the electronic media and format such as the CD-ROMs, diskettes, and the Internet. The university libraries should explore other ways and means of increasing the size of information sources in addition to available funding.

References

AGBOOLA, A.T. (2000). Five decades of Nigerian UniversityLibraries: A review. *Libri*, 50, 280-289.

AGUOLU, C.C and Aguolu, I.E. (2002*). Libraries and Information management in Nigeria:* Maidugujri: Ed-Linform services.

AJIBERO, M.I (1998) User expectations in Nigerian University library services in the 21st Century. In Salisu, T.M. and Olanlokun S.O. ed. *CULNU proceedings of Ibadan and Ekpoma seminars, 1992 and1994. Nigeria*: CULNU pp 82-99.

AKHIDIME, J.A.F. (1992) the Nigerian university library environment:survival strategies in the 21st century. In Salisu, T.M.and Olanlokun, S.O (1998) eds. *CULNU proceedings of Ibadan &Ekpoma seminar, 1992 & 1994. Nigeria:* CULNU.

AKOBO, D.I. (1992). The effect of government policies on the acquisition of library resources in Nigeria*. Library Acquisitions: Practice and Theory 16*(3): 313-320.

BALARABE, A.A. (1992). The effects of austerity on collections development in Nigerian university libraries with particular reference to Usmanu Danfodiyo university library, Sokoto. *International Information and Library Review 24(2): 173-187.*

BALARABE, A.A (1995) Nigerian university libraries and the World Bank loan. *Third World Libraries* 5.2: 31-45.

BERNARD, S. B. (1994) *Total quality management: customer-centered models for libraries*. In: Total Quality Management in Libraries: a Sourcebook. Englewood: 1-4.

BEASLEY, K.E. (1964). *A statistical reporting system for local public libraries*(monograph.no.3) University Park, pa. Institute of Public Administration, Pennsylvania State University p.8.

BONN, G.S. (1974). Evaluation of the collection. *Library Trends (*January).

BROPHY, P. (2004). The quality of libraries. In: Hilgermann,K. and te Borkhorst (eds.) *Die Bibliothek*. Muchen:K.G Saur: 34-48

BURNS, R.W. (1968). Evaluation of the holdings in science and technology in the University of Idaho. *Library Publication* no.2 p.4 .

CLAPP, W. Verner and Jordan, Robert T. (1965). Quantitative criteria for adequacy of academic library collections. *College and Research Libraries* 26(5):371-80.

DIPEOLU, S.C. (1998). Survival strategies for university libraries in the twenty first century. In Salisu T.m and Olanlokun ,S.O (1998) eds.*CULN proceedings of Ibadan & Ekpoma seminars 1992 & 1994.Nigeria; CULNU*.

DOWNS, R.B. (1969). Doctoral Degrees and Library Resources *College and Research Libraries.* 30. 417-21.

EKOJA, I. I. (1994). An appraisal of user-satisfaction with the services of Sokoto State library services. *Lagos Librarian* vol.15: 15-64

EKOJA,I.I. (1995). Contemporary issues in collection development programmes in Nigerian University Libraries. *International Information and Library Review.* 2(27) (4) 333-343.

EKPEYONG, G.D. (1993) The effects of austerity on university Libraries in Nigeria: The case of Kenneth Dike Library. *New Library World* 94(1107) 19-23.

HERNON, P., Nitecki D., Altman E (1999) Service Quality and Customer Satisfaction: An Assessment and Future Direction. *Journal of Academic Librarianship,* Vol.25. Issue 4: 9 - 17

IFIDON, B. (1995). Recent developments in Nigerian academic libraries: the effects of accreditation on University Library Bookstocks. *Libri* 45(3/4) 186-196.

IFIDON, B.(1998). Books scarcity in Nigeria; causes and solutions. *African Journal of Library, Achives and Information science.* 4(1).55-62.

IFIDON, S.E. (1985). *Collection development in Nigerian University Libraries* In Aspects of African Librarianship: A collection of writings.London: Mansell pp31-49.

IFIDON, S.E. (1998). University library Finance in transition - the challenges in the 21st Century in: Salisu T.M and Olanlokun, S.O eds. CULNU proceedings of the Ibadan and Ekpoma seminars, 1992and 1994.Lagos: CULNU 167-192.

IFIDON, Sam E. (1999). *Essentials of African University Library Management* 2nd.ed Lagos: The national Library press Ltd.

IFIDON, S.E. (1997). Planning for Collection Development in the twenty-first century.*World Libraries,* 7 (2): 27 - 39.

ISO 11620 (1998). ISO 11620: 1998/ADI: 2003 Information and Documentation. Library Performance Indicators.

JACKSON, E.B. (1968). *Measurement and evaluation in special libraries* In Goldhor ed Research Methods in librarianship: Measurement andevaluation (monograph, no.8) Urbana, ill. University of Illinois,Graduate School of LibraryScience p.5

JORDAN, R.T. (1963). Library characteristics of colleges ranking high in academic excellence *College & Research Libraries, 24 369-74*

KOLO, S.S. (1994). Library services to adult literacy in Nigeria. *Lagos Librarian* Vol.15 pp 34-43

KRIKELAS, J.(1966). Library statistics and the measurement of library services. *ALA Bulletin*, 60: 494-98

MAIGARI, J.A. (1985). Role of libraries in quantitative education. A paper presented at the official launching ceremony of Niger state chapter of the Nigerian Library Association p.14.

MAIZELL, R.E. (1971). *Abstracting scientific and technical literature*. New York: Wiley-Interscience. Pp 210-211

NNADOZIE, Chuma Opara (2006). Qualitative Library Services in developing countries: an assessment of the Nigerian situations.*Nigeria Library Link: A journal of Library and Information Science 3*(1 & 2): 62 - 70.

OGUNROMBI, S.A (2004). Quality assurance and book crisis in Nigerian university libraries. Gateway Library Journal 6(2):65-73

OLAYINKA, F (2003). Making use of other libraries: University of Ado- Ekiti students. Owena Journal of Library and Information Science 2(1):60-65

OLOBGONSAIYE,R.(1994). *Resource management for libraries*. Lagos:Concept publishers

OLORUSOLA, R(1995). Retrenched journals: further on the World Bank loan in Nigeria. Third World Libraries 6 (1): 29-30

OYEDIRAN, ABO (1998). Nigerian university libraries in the 21st century: the future begins with the present In:Salisu, T.M and Olanlokun,S.O CULNU proceedings of Ibadan and Ekpoma, 1992 and 1994 : Lagos:CULNU.

OYESIKU, F.A., & Oduwole, A.A. (2004). Use of academic library: A survey on the Olabisi Onabanjo University Libraries*. Lagos journal of Library and Information Science* 2(2)96-101

PINDLOWA, W. (2002), High-quality information services to users as the fundamental necessity for building a
modern information society in the European Union. In: *EBIB Electronic Information Bulletin for Librarians*, 2. Available at:
http://ebib.oss.wroc.pl/english/grant/pindlowa.php

PISAGIH, H.C. (2003) The use of quality information by rural women cooperative groups in Bauchi. *SCAULWA Newsletter 4* (2):22-26

POLL, R. and T. Bockhorst P. quantitative measures.(1996) Measuring quality: international guidelines for performance measurement in academic libraries. *IFLA publications 75*. Munchen.

PRITCHARD, S. M. (1996). Determining quality in academic Libraries *Library Trends 44*(3): 375-594.

SALISU, T.M (2000). Funding Nigerian university libraries in autonomy, *Gateway Library Journal* 2&3:11-16

SCHOFIELD, J.I.,Cooper,A and Waters, G. H.(1975). Evaluation of an academic Library's stock effectiveness. *Journal of Librarianship 7*:207-227

TAMUNO, O. G. (1998). The impact of the World Bank loan facility on the Nigerian University Library system. In Salisu TM and Olalokun S.O. (Eds*). CULNU proceedings of the Ibadan and Ekpoma Seminars,1992 and 1994.*

Lagos: CULNU. 193-217.

TRUESWELL, Richard (1968). *Analysis of library user circulation requirements*: *Final Report* NSF GNO 435

TRUESWELL, Richard (1969). User circulation satisfaction vs. size of holdings at three academic libraries. College and Research Libraries 30: 204-213

UNOMAH, J.I. (1987) Unavailability syndrome in academic libraries: a case study of Bendel State University*. Library and Information Science Review 5* (1&2) 38-46.

UNOMAH, J.I. (1988) Students utilization of Academic libraries in Nigeria: the examples of two universities. *Nigerian Library and Information Science Review 6*(2): 51-57.

WARD, S.Sumsion, J., Fuegi, D.,Bloor, I (1995). *Library performance Indicators and Library Measurement tools*. Luxamburg: Office for Official Publication of the European communication.