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First published 2006

A Publication of
the University Organized Lectures Committee
Vice Chancellor's Office,
Ahmadu Bello University, Zaria, Nigeria

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Printed in by
Ahmadu Bello University Press Limited,
P. M. B. 1094, Zaria, Kaduna State.
Telephone: 069-550054
E-mail: abupresslimited@yahoo.com

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Mr. Vice Chancellor, Sir,
Deputy Vice-Chancellors, Administration and
Academic,
Other Principal Officers here present,
Chairman of Council,
Other members of Council here present,
Deans of Faculties, .
Heads of Departments,
My fellow women academics,
My colleagues and students in the Department
of Library and Information Science,
My colleagues in the University Library system,
Invited guests,
Distinguished ladies and gentlemen,

INTRODUCTION

Today's inaugural lecture is the 23rd in the current series of such lectures in Ahmadu Bello University. It is the second in the Faculty of Education, and the first in the Department of Library and Information Science. An inaugural lecture has been described as the first public testament of, or an initiation ceremony for, a newly appointed professor (Omolewa. 1987) However,

since this lecture is coming so many years after my promotion to professorship, it will have to serve both as an inaugural and a valedictory lecture.

As the first inaugural lecturer from the Department of Library and Information Science, I feel an obligation not only to highlight those aspects of my work that will be of interest to a general gathering such as this, but also to explain the nature of my discipline. Though familiar with the physical manifestation of our work, many of you are largely uncomprehending of, and somewhat skeptical about, what the librarian actually does. After all, a non-librarian colleague routinely addresses me as "professor of books!" Given our setting, I should normally view such a designation as a supreme accolade, except that the tone of his voice, the glint in his eyes, and the smirk on his face suggests otherwise.

Early in the history of our Department, at a cocktail party hosted by Professor Ishaya Audu, our first indigenous Vice-Chancellor, a senior academic pulled me aside and asked, in all earnestness, what a Department such as ours could possibly teach in all of three years. "Is it just how to arrange books on the library's shelves?" he queried. I did not dare to tell him that, even beyond the then-three-year Bachelor's degree, librarians undertook further years of study, leading to Master's and Doctoral degrees in the discipline.

I recall also a public lecture on the nature of Science at this very venue by a former Dean of Science who later became Vice-Chancellor and a distinguished Senator of the Federal Republic of Nigeria. In an effort to set a pleasant mood for the occasion, he started his lecture by announcing that many disciplines claim to be sciences. He then proceeded to name several such disciplines and ended, after an anticipatory pause, with "Library Science." At that point the audience exploded in mirthful laughter while the lecturer continued happily ever after.

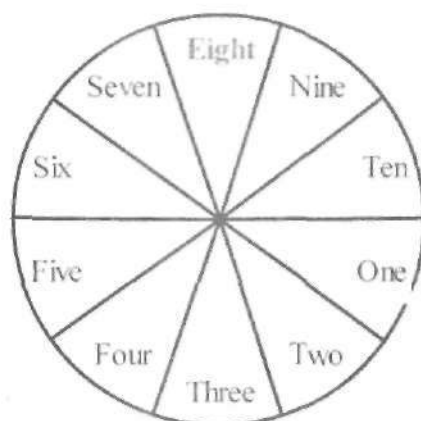
Library Science as an Academic Discipline

In order to appreciate the place of Library and Information Science within the academe, let us resort to the model described by Mortimer Adler as the guiding principle, which the editors used for the design of the 15th edition of the *Encyclopædia Britannica* (Adler, 1973). Starting from the premise that an encyclopædia should aim to encompass the entire universe of human knowledge, the editors classified human knowledge into the following ten categories (Table 1):

Table 1: The Ten Parts of Human Knowledge

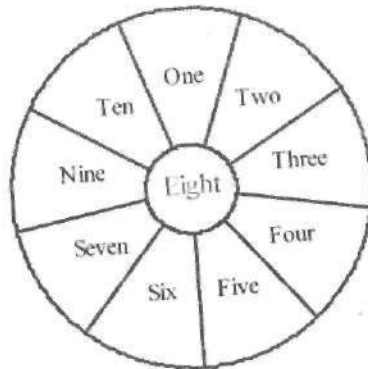
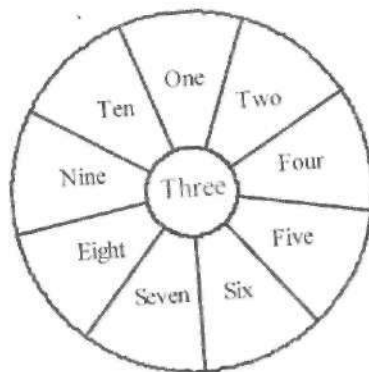
<i>Part one</i>	Matter and energy	<i>Part six</i>	Art
<i>Part two</i>	The Earth	<i>Part seven</i>	Technology
<i>Part three</i>	Life on Earth	<i>Part eight</i>	Religion
<i>Part four</i>	Human Life	<i>Part nine</i>	The History of Mankind
<i>Part five</i>	Human Society	<i>Part ten</i>	The Branches of knowledge

Based on the argument that there is no first or last category, and, considering the connotation of the word *encyclopaedia*, the editors decided that these categories would best be represented within ten sectors of a circle rather than in tabular form, as follows:



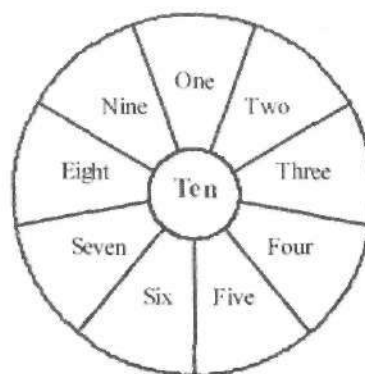
The circle has the advantage of allowing any sector to be rotated to occupy the top position. It also implies the connection of any sector with any other sector through the center.

Further examination of this diagram suggested to the editors that, from the point of view of the user, an even better representation would be one in which the category that is of interest to the user is placed within an inner concentric circle, with the other categories distributed within the nine surrounding truncated sectors, as follows:



This has the advantage of showing that each category is linked to the other categories over a broader interface than is suggested by the single central point in the earlier diagrams. As in the previous set of diagrams, any one of the categories can be placed within the inner circle to signify a new area of interest.

But, in spite of the apparent symmetry, there is one particular arrangement that is unique; namely, the one in which category ten is at the inner circle.



Whereas the other categories encompass knowledge and facts within individual disciplines, category ten is concerned, not with such facts, but with the structure and nature of the disciplines within itself and the other nine categories. Most of you here can examine the list of categories and see where your discipline fits. Although the editors of the Britannica

placed only logic, philosophy and mathematics into category ten, it is my contention that the intellectual undergirding to the practice of Library and Information Science is what is covered in the substance and spirit of category ten. In organizing library materials for optimal use, librarians must know the nature and structure of all the other disciplines. In addition, they must know the library's users, their approach to seeking information, and how they use the information that they get.

The librarian's preoccupation is with providing nourishment (information) for the human mind, the way the doctor is concerned with providing health for his body. And, just as the doctor must know about the structure and functioning of the body, and the drugs that he uses to cure the body's illnesses, the librarian must understand both the way the human intellect seeks and uses information, as well as the sources of the information.

The Librarian and the Exponential Growth of Knowledge

To get a better understanding of the nature and importance of the librarian's job, it is necessary to go back to what essentially makes *Homo sapiens* what he is, the Wise Man. In his book, *The Ascent of Man*, Jacob Bronowski (1976) calls our attention to the fact that not

only does man have one of the longest gestation periods among animals, he literally has the longest childhood during which the wisdom of the group is passed on from an older to a younger generation. Man, like other related animals, has evolved a variety of sounds, combinations of which convey meaning to his fellow man. Although other animals have also developed a system of sounds for transmitting information among themselves, only Man has invented a panoply of concrete, graphic and abstract symbols ranging from cuneiform through pictograms to alphabets and, more recently, bits and bytes, that represent his ideas. (Feather. 1998)

Stored in a variety of media ranging from stone, clay tablets, papyrus and paper to today's silicon chips and magnetic and optical disks, these records have made it possible to transcend the limitations of time and space in the transmission of information from one human to another. This is what has made it possible today for us to learn what Socrates wrote more than two thousand years ago, or to decipher what ancient Egyptians preserved in hieroglyphics more than five thousand years ago.

But why should it matter whether or not we can read today what was written so many centuries ago? Because, that is what has made human progress possible. It is what has enabled Man to go, for instance,

from the rickety plane, built by the Wright brothers in a bicycle workshop a century ago, to today's jumbo jets, like the Airbus A800, built by thousands of workers in three different countries. More than anything else, the progressive increase in knowledge is what makes *Homo sapiens* the Wise Man, and distinguishes him from even his closest non-human relatives in the animal kingdom.

Over thousands of years, mankind has created a vast store of records that embody the collective wisdom of the ages. It has been estimated that these records have continued to increase at an exponential rate (Price, 1967). Most of us are not conscious of the awesome implications of exponential growth. The story, probably apocryphal, has been told of the inventor of the game of chess who went to demonstrate it to a king. So fascinated was the king that he offered to give the inventor any reward of his (the inventor's) choosing. The inventor requested that the king give him a single grain of rice for the first square, double that number for the next, and double that again for the next square, and so on, up to the sixty-fourth square. The request appeared so simple that the king granted it immediately. But when it came time for payment, the king soon discovered that all the rice in his realm would be insufficient to meet the requirement, and, in a fit of rage, had the inventor beheaded.

Man's ability to utilize these vast information resources requires that they be organized so that those who need the information can have access to it. That is what libraries and, indeed, librarians have done since 2500 BC when a temple in the Babylonian city of Nippur was filled with clay tablets, to create what Microsoft's *Encarta Encyclopedia* calls, the world's first library. From that beginning, librarians have served as intermediaries between Man and the records of human progress, systematically collecting, organizing, preserving and disseminating the wisdom that is represented in these records.

I do not mean to imply that Man cannot acquire knowledge without the intermediation of the librarian. It is just that the process is much more efficient and effective when mediated by well-trained and conscientious librarians or others who fill the role of the librarian. There is a strong positive correlation between the level of social development and economic well being of a society and the efficiency and effectiveness with which it organizes its knowledge management services to provide the appropriate information for those who need it. That is why, for instance, countries like the United States of America, which create and purvey information, have become the world's wealthiest, while others like Nigeria that have failed to harness this new source of wealth, are among

the world's poorest, in spite of their vast oil fields. That, indeed, is why I have chosen, as the topic for this lecture: "Enhancing Access to Information in Nigerian Universities."

Notions of Access

In respect of library materials, Aguolu and Aguolu (2002) define five types of access:

- | | |
|-----------------------------|--|
| <i>Conceptual access</i> | relates to the ability of the user to understand the ideas in a document because they are presented at a level that is within his understanding. |
| <i>Linguistic access</i> | refers to a user's ability to understand the language in which the material is presented. |
| <i>Critical access</i> | pertains to the user's ability to evaluate and determine whether the information is accurate and relevant. This is particularly significant for material that is obtained from the Internet. |
| <i>Bibliographic access</i> | applies to the user's ability to get to the required information by |

employing the library's cataloguing, classification, indexing and abstracting services.

Physical access involves the user's ability to lay hands on the material, or to gain electronic access to it.

For the purposes of this lecture, we are mainly concerned with bibliographic and physical access. I shall now proceed to discuss some aspects of my work that I believe will be of interest to this audience. I have selected work in the following areas, which have a direct or indirect impact on the issue of access to information in Nigerian universities:

1. Journal citation studies, which provide data about the information sources that scholars use for their research.
2. Cataloguing and classification studies that are directed towards the proper description and placement of library materials to make them more accessible to users, and
3. Library cooperation studies that can influence the quantity and quality of materials that are

available for teaching and research in the universities.

CITATION STUDIES

Mr. Vice Chancellor, Sir, distinguished ladies and gentlemen, as earlier noted, one of the librarian's primary tasks is to nourish the user's mind by providing information and, at the same time, observing the resources needed, requested and used. Perhaps no other type of study captures, in an unobtrusive manner, the resources used for teaching and research in universities than citation studies. Citations are references which researchers make because they consider that the cited papers have made some contribution to their thinking process in the course of writing a document. Accordingly, citations are "rewards" which individual writers accord to their colleagues whom they have personally assessed as having made some advancement to the store of information. Price (1967) has characterized the citation process as "a pile of bricks (added on by) each researcher...in perpetuity as an intellectual edifice built by skill and artifice, resting on primitive foundations and stretching to the upper limits of the growing research front." To be cited by a competent colleague, therefore, is an honour truly deserved. For libraries, citation studies point to what documents should be

acquired and also provide a peek into the way scholars seek information.

Fragmentation in Nigerian Scientific Research

One of my citation studies examined the state of the Nigerian national scientific enterprise – the coherence and cohesiveness of the Nigerian scientific community – in terms of one admittedly narrow criterion: the serial research literature of Nigeria's scientific community, using the *Nigerian Journal of Science* (NJS) as a source.

The NJS is the official organ of the Science Association of Nigeria, "the most representative and all-embracing scientific society in Nigeria" (Youdeowei, 1979a). During its first ten years, it catered to a wide range of scientific disciplines – agriculture, medicine, engineering, technology and the basic sciences. Although it invited contributions from all over the world, its main contributors were either Nigerian nationals or non-Nigerians whose work was closely associated with Nigeria. It had, indeed, been claimed that the NJS "reflects more the general trends in scientific activity in the country than any other journal." (Youdeowei, 1979b)

Table 2: List of Most Cited Journals in the Nigerian Journal of Science

Rank	Journal	Times cited	Rank	Journal	Times Cited
*1	J. Chem. Soc.	74	11	J. Biochem.	14
*2	J. Am. Chem. Soc.	45	*12	Lancet	14
*3	Nature	18	*13	Science	14
4	Soil Science	18	14	J. Neurosurgery	12
5	N. J. S.	17	15	J. Pharmacology	12
*6	Phys. Rev. Lett.	17	16	Poultry Sc.	11
*7	J. Biol. Chem.	16	17	Nuovo Cimento	10
8	J. West African Sc.	15	18	J. Nutrition	10
9	Heredity	15	19	British Med. J.	10
10	J. Helminthology	15	20	Geochim & Cosmochim	10

During its first decade, the NJS published 175 articles, which cited 1303 articles in 603 distinct journal titles. The twenty most cited journals during the period are shown in Table 2. For purposes of comparison, the world's twenty most cited science journals (Garfield, 1977b) are shown in Table 3.

The seven starred titles are the ones that are common to both lists, even though the relative ordering differs in the two lists. It can be argued that the fact of seven common titles shows that scientific research in

Nigeria parallels general world trends. On the other hand, 13 other titles that are not common to both lists could be used to argue the exact opposite proposition.

Table 3: List of the World's Most Cited Science Journals

Rank	Journal	Rank	Journal
* 1	<i>J. Am. Chem. Soc.</i>	* 11	<i>Lancet</i>
2	<i>Phys. Rev.</i>	* 12	<i>Phys. Rev. Lett.</i>
* 3	<i>J. Biol. Chem.</i>	13	<i>Comptes Rendus</i>
* 4	<i>Nature</i>	14	<i>Am. J. Physiol.</i>
* 5	<i>J. Chem. Soc.</i>	15	<i>J. Org. Chem.</i>
6	<i>J. Chem. Phys.</i>	16	<i>J. Appl. Phys.</i>
* 7	<i>Science</i>	17	<i>Proc. Soc. Exper. Biol. Med.</i>
8	<i>Biochim. Biophys. Acta</i>	18	<i>J. Mol. Biol.</i>
9	<i>Pro. Nat. Acad. Sc. USA</i>	19	<i>J. Physiol. (Lond.)</i>
10	<i>Biochem. J.</i>	20	<i>Proc. Royal Soc. (Lond.)</i>

This study also undertook an analysis of the impact of the *NJS*. Eugene Garfield of the Institute for Scientific Information (ISI), had defined "impact factor" as the ratio of the frequency of citation of a journal's articles to the total number of citable articles in the journal (Garfield, 1977). Operationally, to calculate the

impact factor for a journal in say, 1970, one counts the number of 1970 citations to the journal's issues of 1968 and 1969. Then one divides this number by the total number of citable articles published by the journal in 1968 and 1969

Science Citation Index provides a worldwide database of citations from which journal impact factors are calculated and published in the *Journal Citation Reports*. Unfortunately, because *NJS* was not a source journal for *Science Citation Index*, it was not possible to determine its world impact, or even to discern whether its articles were read outside the country's borders. I decided to undertake a less ambitious exercise, based on the following rationale:

1. The *NJS* was distributed to every member of the Science Association of Nigeria (SAN).
2. The overwhelming majority of its articles were contributed by SAN members who were resident in Nigeria; and
3. Although it was possible that not every member of SAN who received the journal read its articles, it was reasonable to assume that those who thought well enough of it to contribute articles would at least read it and have their work influenced by what they read in its pages.

In other words, the local influence of the *NJS* could be assessed in terms of the effect of its articles on subsequent work published in the *NJS* itself.

Because of the long delays involved in the publication and distribution of Nigerian science journals, a wider time span was considered more appropriate for the calculation. Accordingly, Garfield's method was modified such that two sets of impact factors were calculated for single years rather than the two-year cumulations.

The data showed that, during the journal's first decade, out of 1303 journal citations in 175 articles, there were only 17 citations to *NJS* itself. And, even among these 17 citations, two were invalid (one was to a purported *NJS* article "in press" which was never subsequently published; the other was to an author self-citation to an *NJS* article that did not actually exist.) Of the 15 valid *NJS* citations, 12 were author self-citations and only three were citations to the work of others. The modified impact factors also showed that the *NJS* had minimal impact during its first four years, and almost no impact at all thereafter. By any measure, this suggests an unhealthy fragmentation and isolation within the Nigerian scientific community.

It is true that *NJS* was not the only journal devoted to the publication of the results of scientific research in Nigeria. Ideally therefore, a more accurate calculation

of impact factors should include other citations in other journals. More significantly, only a rather small proportion of the scientific output from Nigeria was actually published in the *NJS*.

In discussing these results, it might, of course, be argued that the total scientific community was so small that it allowed no room for duplication of effort. However, it would be expected that even for a small community, some consensus might be reached as to those problems that are most germane to the interest of the society, and which would therefore elicit concerted efforts on the part of scientists. After all, as J.D. Watson (1977), the co-discoverer of the structure of DNA, has so succinctly put it, "usually you discover that you are not the only person working with a given problem. Only when working with trivia can you be sure that you will be alone."

If the work of individual scientists in Nigeria seems to have such little impact on their competent colleagues, how could it then be expected to have any effect on the larger society? In other words, how can the publications, which are so effective in propelling individuals along their academic ladders, be made to inch the nation along its slow path to scientific and technological development?

The result of the study would seem to bear out the situation described some years ago by Charles Cooper (1973):

The lack of pressures on science from the local economy means that the main determinants of research orientations are the individual decisions of research workers; and these research workers take their lead from the international orientation of research. The scientific communities in the underdeveloped economies are outposts of advanced country science, with very limited links with the economic and social realities which surround them. There is no conspiracy or bad faith about this; it is simply the way the system works.

If this is an apt description of an extant situation, it is also an appropriate prescription for urgent concerted action at the governmental, commercial, institutional and individual levels. Any success of such concerted action will be measurable in terms of an increase in such simple indices as the impact factors of Nigerian scientific journals.

Quantity vs. Quality in Scholarship

Another study (Bozimo, 1988) sought to investigate whether authors who are productive (that is, publish a lot of papers) also publish quality works, as judged by the number of citations that their publications attract. It was inspired by an observation by Price (1963) that scientists who publish work of high quality usually have a high publication rate or productivity. Eugene Garfield (1977) extended the

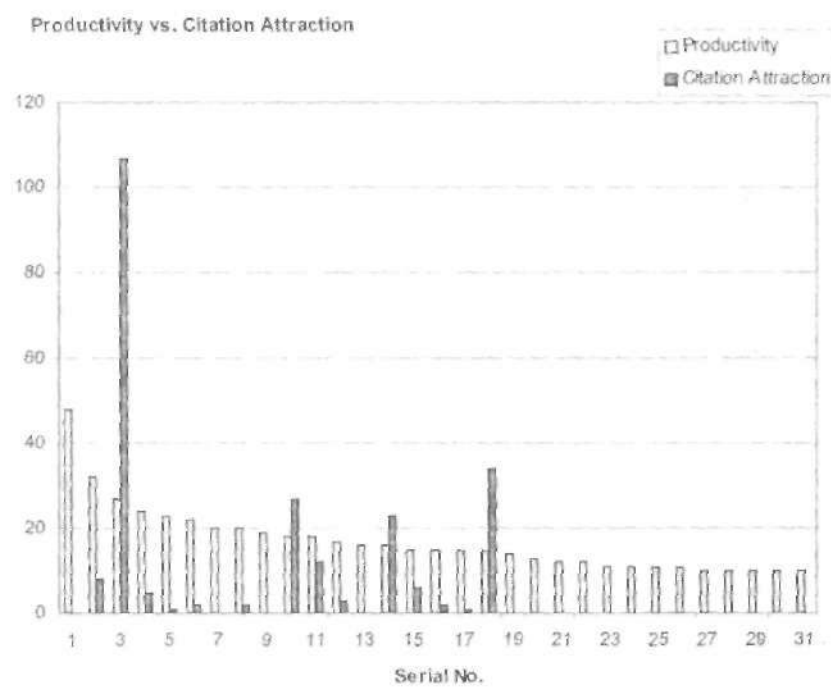
observation by noting that "Nobel prize winners generally publish frequently and their cited works are more numerous and cited more frequently than those of us (ordinary) mortal scientists" Numerous studies had been carried out in the field of citation analysis to discern any correlations between author productivity and quality of work, as measured by citation attraction. As a Humanities graduate, I was interested in what, if any, relationship existed in the field of "language" literature between productivity and citation attraction (quality). Using data from *Language and Language Behavior Abstracts*, and citation attraction data from the *Arts and Humanities Citation Index*, a list of the thirty most productive authors was compiled for analysis to give the data shown in the Table 4.

Table 4: Author Productivity Ranking vs. Citation Attraction Ranking

<i>S/No.</i>	<i>Author</i>	<i>Productivity</i>	<i>Citation Attraction</i>	<i>Productivity Rank</i>	<i>Citation Attraction Rank</i>
1	Aarts, F.	12	1	21	22
2	Bailey, C.	32	8	2	13
3	Betts, E.	22	2	6	19
4	Blake, K.	15	6	18	15
5	Boe, L.	12	1	22	23
6	Cutting, J.	23	1	5	24
7	Dorman, M.	11	0	25	27
8	Downing, J.	10	10	27	12
9	Dubuc, R.	15	2	15	20
10	Fellman, J.	11	7	26	14
11	Fishman, J.	27	107	3	4
12	Fujisaki, H.	16	0	13	28
13	Geyl, E.	20	0	7	29
14	Givon, T.	18	27	11	7
15	Greenberg, J.	14	126	19	3
16	Haggard, M.	20	2	8	21

Table 4: Author Productivity Ranking vs. Citation Attraction Ranking

17	Hall, R.	13	144	20	1
18	Harding, E.	11	5	23	16
19	Hirose, H.	24	5	4	17
20	Hyman, L.	10	40	28	5
21	Levin, J.	11	14	24	10
22	Loftus, E.	15	1	16	25
23	Lurquim, G.	48	0	1	30
24	Martinet, A.	10	136	29	2
25	Prucha, J.	10	1	30	26
26	Sampson, G.	10	16	31	9
27	Sauvageot, M.	18	12	10	11
28	Sawashima, M.	19	0	9	31
29	St. Clair, R.	17	3	12	18
30	Steinberg, D.	16	23	14	8
31	Zwicky, A.	15	34	17	6



From the table and the graphical representation and, indeed, calculation of the statistical Pearson product moment correlation coefficient, there was no relationship between productivity (i.e., number of papers published by an author) and the quality of work, as judged by the number of citations attracted. Appointments and Promotions Committees might take an interest in such findings.

Nigerian Medical Research: A Soft Science?

In a related study of the citation characteristics of medical literature, as represented by Nigeria's leading medical journal, the *Nigerian Medical Journal* (NMJ), over a five-year period (1973-78), the five leading countries whose journals were most cited were: USA, Britain, Nigeria, Canada and Sweden; and the five most cited medical journals were *Lancet*, *British Medical Journal*, *Nigerian Medical Journal*, *West African Medical Journal* and the *Journal of Obstetrics and Gynecology*. This study also determined the "hardness" of medical research, in accordance with Price's "hardness" index, which is the proportion of citations that are less than five years old. Price (1970) defines "hard" sciences as those for which the index is equal to or greater than 42 percent; "soft" sciences have indices lying between 21 and 42 percent; and non-sciences have indices less than 21 percent.

1,083 of the 3,237 citations over the five-year period were to articles no older than five years, giving an index of 33 percent; and placing Nigerian medical research within the range of the "soft" sciences. However, when the calculation was based only on citations to Nigerian articles, the index rose to 59 percent. This raises the question whether the Price Index would be better defined if confined to national boundaries, at least in underdeveloped countries like Nigeria.

CATALOGUING AND CLASSIFICATION STUDIES

We have made reference earlier to the exponential growth of knowledge and the difficulty of keeping up with what is available. Libraries spend considerable amounts of intellectual and other resources in analyzing materials before making them available to users. The objective is to ensure that materials are described appropriately in the catalogue, and placed at locations where their most likely users will find them. As might be expected, the classification process is a very subjective one, and depends on the librarian's prior knowledge and his perception of how the user will approach the resources of the library. As Aboyade (1982) rightly observed,

The true pattern of knowledge is indeed multidimensional whereas library classification as reflected on the shelves and in the catalogue is lineal – presenting the subjects in a line or row. Thus books which deal with more than one subject cause problems of classification. Some people here will indeed recall instances when they expect to find a book among a certain subject grouping, only to discover it had been classed with an entirely different subject.

Computers and the Classification Process

Long before the days of search engines like Google and Yahoo, I had wondered whether computers might

solve such classification/indexing problems (Bozimo, 1980), and came to the conclusion that, because a computer's approach would be based on such factors as word frequency counts and pattern recognition algorithms, it could probably not duplicate the human process. But because it could go around the problem of limited access points, particularly in an on-line catalogue, it could prevent the situation described by Aboyade in which a user might miss relevant documents because they are classified under a different subject class, and therefore, from the user's perspective, placed in an unexpected location. It is personally gratifying to me that I correctly anticipated what the search engines now do.

Cataloguing of Nigerian Muslim Names

Over the years, librarians have worked out various rules to guide the description of library materials, based on librarians' perceptions of the manner in which a user seeks information. For instance, for a book by Wole Soyinka, we would create a main record in which the access point would be under "Soyinka" but not under "Wole". In general, the rule of thumb, as enunciated in the *Anglo American Cataloguing Rules*, (1967) is to reverse the name sequence and catalogue under the last name. That is all well and good except when we come to a situation such as, for example, Nigerian

Muslim names. In this case, the first name, the *given* name, is often a variant of the name of the prophet Mohammed, or close associates or companions of the prophet or his family. The last or added name gives the first name its distinctive nature but it comes in various forms. It could be the name of a forebear (e.g., Aliyu Akilu, Mohammed Idris), or a place name (Aminu Kano, Saidu Kontagora), or a name depicting circumstances of birth (Audu Bako or Mohammed Tanko) or a name depicting physical traits (Haruna Mai-karfi). It would seem logical to provide, as access point, the last name, if it a forebear; and to provide, as access point, the *given* name for those bearing place names, those depicting physical traits or those depicting circumstances of birth. That decision would, however, place on the user the burden of determining the meaning of a name before seeking the access points. My recommendation, after studying the various options, was that the last name should always be used as the access point. (Bozimo. 1982) Today, computers have solved this problem because any part of a name can be manipulated to form an access point.

STUDIES ON LIBRARY COOPERATION

The fundamental economic postulate - that resources are never sufficient for needs - applies to university libraries, as to most other human

institutions. As Britain's Universities Grant Committee
(1968) put it,

In estimating the efficiency of a university library one can make the broad assertion that it should be able to meet all the needs of undergraduates from its own stock, and as many as possible of the needs of its research workers. Where research is concerned, however, there is a margin of inability which is inevitable.

Wyn Evans (1975), who carried out a comprehensive survey of library resources worldwide, was even less sanguine about African libraries:

Africa has perhaps the poorest (library) facilities and the greatest problems...The situation is even worse than might appear at first because out of a total of 29 libraries of any size, 15 are in South Africa.

Whereas citation analyses and studies in cataloguing and classification generally provide indirect enhancement of access to information, effective cooperation among any group of libraries holds out the prospect of greatly enhanced access to information for the users of the libraries.

Having been privileged to work in, and use, some of the world's largest academic libraries, I was acutely aware of the relative poverty of library resources in Nigeria, and had long wondered how services could

institutions. As Britain's Universities Grant Committee (1968) put it,

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Wyn Evans (1975), who carried out a comprehensive survey of library resources worldwide, was even less sanguine about African libraries:

Africa has perhaps the poorest (library) facilities and the greatest problems...The situation is even worse than might appear at first because out of a total of 29 libraries of any size, 15 are in South Africa.

Whereas citation analyses and studies in cataloguing and classification generally provide indirect enhancement of access to information, effective cooperation among any group of libraries holds out the prospect of greatly enhanced access to information for the users of the libraries.

Having been privileged to work in, and use, some of the world's largest academic libraries, I was acutely aware of the relative poverty of library resources in Nigeria, and had long wondered how services could

be improved by concerted efforts to work cooperatively together. Indeed, my very first article as a young academic at ABU was concerned with the issue of cooperation among the six newly created Northern States in the provision of technical services, such as acquisition of materials, cataloguing and classification and other related library activities.

In pre-civil war Nigeria, the Northern Region had had the best public library system in that it had both the requisite legislation and a well-organized system headquartered in Kaduna, with branches in the provinces. But, in the flush of excitement, which characterized the birth of the states, there a rush to carve up this valuable resource into six dysfunctional units, one of which had only two qualified librarians to run an entire State library system. Based on my analysis of the situation, I had suggested that cooperation could perhaps be best organized around joint acquisitions and processing of library materials. (Bozimo. 1971)

Cooperation Among Nigerian University Libraries

At the time that I started my studies in librarianship, one of the prime exemplars of successful cooperation among libraries in the United States was OCLC, the Ohio College Library Center. Now renamed On-line College Library Center, it provided a framework for higher institutions in the state of Ohio

to create a joint catalogue of their holdings such that a user at any of the institutions could find out if what he needed was in any of the member libraries. The system also provided a mechanism for obtaining the item for the user through inter-library loan. I was so impressed by the leverage and enhanced access provided by such cooperation that I yearned for the day when such systems would be available in Nigeria.

But I recognized that neither OCLC nor any other successful cooperative scheme in the U.S. could simply be transplanted to Nigeria, as most previous studies had tended to suggest. Several years earlier, Harold Lancour (1958), then Dean of the School of Library Service at the University of Illinois, had carried out a Carnegie Foundation-sponsored study of libraries in British West Africa. Among other observations, he had noted that: "librarianship in this part of the world has now reached a stage where it is developing its own characteristics." In any case, Wolfgang Stolper (1966), an economist who had served as a consultant in the preparation of Nigeria's First National Development Plan, had admonished against such transplantation: "The application to country B of lessons learned in country A may be as much a source of error as of wisdom. There is no substitute for a direct study of the peculiarities of country B." In other words, although there was already a considerable body of literature on

library cooperation in Nigeria, there was still a need, during the mid-1970s, for studies that placed their primary emphasis on an examination of the "characteristics" and "peculiarities" of Nigerian university librarianship – the characteristics of past cooperative efforts, the holdings of Nigerian university libraries, the deficiencies in these holdings as seen by the libraries' primary users, and the views of relevant stakeholders of the Nigerian university library system about library cooperation. I undertook a study that was designed, in part, to fill that gap. (Bozimo, 1980). I shall now highlight a few of the findings from that study.

Institutions for Cooperation

Concerning the institutions or organizations that could be expected to play a positive role in fostering cooperation among the university libraries, the study examined the functions and activities of:

1. the National Universities Commission, which, though concerned with the larger issue of coordination of Nigerian higher education, indirectly precipitated the formation of the Committee of University Librarians by instructing the universities to devote five percent of their recurrent expenditures to their libraries;

2. the National Library, which was statutorily empowered to coordinate library development throughout the country, and had actually undertaken to produce a joint catalogue of the holdings of the country's major libraries;
3. the Nigerian Library Association, which, through its meetings and workshops, created an enabling environment for the exchange of views within the profession; and
4. the Committee of (Nigerian) University Librarians, which brought together the highest officials in the university libraries, and which actually attempted to implement some cooperative activities, such as a union list of the libraries' holdings of Africana materials, and initiated a short-lived courier service to carry inter-library loan materials.

The study found that these institutions had all served as centripetal forces in fostering cooperation among the university libraries. Through their publications, meetings and memoranda, they had identified problems plaguing cooperation, and provided prescriptions for action. To a greater or lesser degree, they were plagued by the voluntary nature of some of them; personality conflicts among major protagonists of library cooperation; problems of

vertical communications within the institutions; and the physical and environmental constraints within the larger Nigerian society.

The Libraries' Holdings

Cooperation among the libraries would be most easily justified, and accepted, if there was either a high degree of duplication (more correctly, multiplication) of materials, or a situation in which no single item was held by more than one of the libraries. Under the first scenario, coordination or cooperation in resource sharing would be directed towards better utilization of available funds, and overall cost reduction. For the librarian and the academic, the second scenario is a more acceptable basis for planning coordination and cooperation, since it would lead to expanded access to information, and therefore better service, to the libraries' clientele. It is unlikely, of course, that the holdings of any group of libraries would fall into either of these two extremes.

If the National Library had succeeded in producing the union catalogue of the libraries' holdings, it would have been possible to carry out an analysis based on the total holdings of the libraries. In the absence of such a comprehensive catalogue, a more limited one, compiled by S. M. Lawani (1974) of science and technology journals held in the eighteen largest Nigerian libraries, including five of the six university

libraries, was used. (Nsukka, which was then just struggling to recover from the depredation of the civil war, was not included in the catalogue.)

The data showed that the five university libraries had among them a total of 4859 distinct titles, distributed as shown in Table 5 below.

Table 5: Distribution of Periodical Titles Held by University Libraries as of 1973²

<i>University</i>	<i>Individual Titles held by institution</i>	<i>Individual titles as fraction (%) of 4859 titles*</i>	<i>Unique titles held by institution</i>	<i>Unique titles expressed as a percentage of 2980</i>
ABU	2324	47.8	980	32.9
Benin	492	10.1	93	3.1
Ibadan	2567	52.8	1250	41.9
Ife	1584	32.6	451	15.1
Lagos	1151	23.7	206	6.9

* Based on the IITA Union List of Periodicals in Major Nigerian libraries.

* The figure 4859 represents the total number of distinct titles possessed by one or more of the university libraries. This figure differs from the total of 8118 titles obtained by adding the numbers in column 2 because a title can be owned by more than one library.

The numbers broadly reflect the relative ages and academic coverage of the universities. The relative larger number of titles at ABU, compared to Lagos and Ife, could be expected on account of its isolation from the others. Between Lagos and Ife, the difference might be attributable to the fact that Lagos was initially intended to develop special strength in business and related disciplines. The Table also shows that more than

Table 6: Dispersion of 4859 titles held among five Nigerian university libraries*

<i>Number of university libraries owning same periodical titles</i>	<i>Proportion of 4859 titles held in common by one or more university libraries</i>	<i>Percentage of 4859 titles</i>
5 libraries	123	2.53
4 libraries	287	5.91
3 libraries	529	10.89
2 libraries	940	19.30
1 library	2890	61.31

* Based on the IITA Union List of Periodicals in Major Nigerian libraries.

60 percent of the individual titles were unique; that is, found in only one of the five libraries. The actual dispersion of the titles is shown in Table 6.

As stated earlier, two extreme scenarios in holdings would justify coordination and cooperation in resource sharing. An overall administrator interested in cost saving would look out for excessive duplication. On the other hand, users and librarians would be more convinced by a situation of very little duplication. Since there was no "administrator" with an overall say on purely internal matters within the universities, the likelihood that an external agency would demand such coordination was minimal. In any case, the dispersion figures were largely skewed towards the other extreme, and librarians, if they were so inclined, could easily have received the acquiescence and support of their users if they implemented coordination in anticipation of the considerably enhanced access that would result for all users.

Table 7 below shows the number of titles held in common by any two of the libraries; that is, duplicated between any two of the libraries. ABU could justify almost any level of duplication on account of its isolation from the others. But there was almost a similar level of duplication between, on the one hand, Ibadan and Ife and, on the other hand, Ibadan and Lagos.

Table 7: Number of Periodical Titles Held in Common by Any Two Libraries*

University	ABU	Benin	Ibadan	Ife	Lagos
ABU		292	888	753	664
Benin	292		263	239	210
Ibadan	888	263		811	649
Ife	753	239	811		534
Lagos	664	210	649	534	

* Based on the IITA Union List of Periodicals in Major Nigerian libraries

To recapitulate, the data on the libraries' holdings of science and technology journals showed that almost 40 percent of the 4859 titles were duplicated at least once. It is such duplication that would be of interest to an administrator who was interested in more effective use of limited funds. For the academic and the librarian, the fact that more than 60 percent of the titles are found only in one of the libraries would suggest that planned and coordinated joint use of resources would dramatically enhance access to information for all library users. It was remarkable that Ibadan, the oldest

library, had only 42 percent of the unique titles, and that even Benin, the youngest, had unique titles that it could contribute to a common pool.

The Users' Expressed Needs

Based on their responses to a questionnaire survey, more than 95 percent of Nigerian academics felt that their libraries were inadequate for research purposes and, to a lesser degree, even for teaching. Journals were the single most important type of material that was often found wanting. Academics perceived that most urgently needed items were obtained from foreign libraries and suppliers; and judged that slightly less than half of the requested items took more than one year to arrive. With poor postal and telecommunications services and, given the absence of a comprehensive union catalogue of the libraries' holdings, more than one-third of all respondents had made special trips to another Nigerian university library in search of urgently needed information (Bozimo. 1983).

Inter-Library Loans, the Major Cooperative Activity among the University Libraries

Compiled from detailed records kept by each library, Table 8 is a summary of inter-library loan transactions among the six libraries during the three academic sessions from 1972 to 1975.

Table 8: Summary of Inter-Library Loan Transactions Among University Libraries for the 3-year Period, 1972-1975

	<i>ABU</i>	<i>Benin</i>	<i>Ibadan</i>	<i>Ife</i>	<i>Lagos</i>	<i>Nsukka</i>	<i>Total</i>
Loan requests received by library	44	1	2179	81	59	22	2386
Loan requests filled by library	36	1	1875	64	43	16	2035
Proportion filled (%)	82%	100%	86%	79%	73%	73%	85%
Loan requests sent out by library	115	1496	32	324	227	192	2386
Loan requests filled	106	1248	22	271	210	178	2035
Proportion filled (%)	92%	83%	69%	84%	93%	93%	85%

Because inter-library loan (ILL) requests often result from expression of urgent need on the part of library users, they usually involve the active participation of both librarian and user, and provide a reasonable framework for testing library performance against user needs. By indicating the actual level of resource commitment to one aspect of inter-library cooperation, data on ILL discount much of the rhetoric that is usually associated with official pronouncements on cooperation.

The figures in Table are remarkable for the sheer smallness of the total number of loan requests among the libraries. A total of 2,386 requests over a period of three years works out to an average of about 133 requests per year from each library to the other five libraries, or an annual rate of about 27 requests by each library to each of the other five libraries. These figures did not reflect the actual level of need; just that the libraries tended almost automatically to look abroad for most urgently needed items.

Extensive analysis was done on various parameters of the ILL data, leading to conclusions, which can be summarized as follows:

- * The great majority of requests (78 percent) were for photocopies, 20 percent were for originals and only 2 percent were for microfilms.

- * Some 99 percent of requested documents were in the English language; the rest were for material in German and French and Arabic.
- * A majority of the loans (72 percent) were in the field of Science and Technology. Material in the Social Sciences constituted only some 15 percent, and the rest were in the Humanities.
- * Three-quarters (74 percent) of all requests were for journal articles; 23 percent were for books, and only two percent were for theses and dissertations.
- * Most (82 percent) of the requests were for material published later than 1960, Nigeria's year of political independence; 11 percent were for material published between 1950 and 1960; and only 7 percent were for material published earlier than 1950.

Attitudes to Cooperation

Based on questionnaire responses and detailed structured interviews, the study found that:

- Librarians, as a group, being more conscious of the practical difficulties, were generally

slightly less favourable to cooperation than the academics. Nevertheless, both groups were enthusiastic about coordinated plans that would ensure that needed research material was present in the country.

- * For academics, teaching and research were equally important for lending library resources. Librarians were more favourably disposed to lending material for research than for teaching purposes.
- * Predictably, even though both groups supported a compulsory national borrowing/lending scheme, they nevertheless demanded local self-sufficiency for their university libraries.
- * Librarians were emphatically against a centralized acquisition and processing scheme, given the communication difficulties within the country.
- * As might be expected, academics and librarians at Ibadan were less favourably disposed to the various forms of cooperation. They recognized that they would contribute more than any other library to, and gain less from, a national cooperative scheme.

In 2002, more than twenty years after the completion of the study, I received a request from the London-based International Network for the Availability of Scientific Publications (INASP) for a report on the feasibility of forming a consortium of Nigerian university libraries. At its most basic level, a library consortium is simply a group of libraries that undertake mutually beneficial activities within an environment of formally defined rights and responsibilities. The Report (Bozimo, 2003) has been extensively discussed in library circles within and outside the country. However, because the activities of a successful consortium of university libraries would greatly enhance access to information within the universities, and affect every stakeholder in the Nigerian university system, it is worthwhile to highlight it in some detail here.

Nigerian University Libraries: *The Road to Resource Deficiency Crisis*

“...whatever else we do, I am determined that we
have at least a good library.”
— (Mellamby, 1958)

The above is an extract from the appointment letter sent by Kenneth Mellamby, the first Principal of University College, Ibadan, to John Harris, the first

librarian. It encapsulates what, in modern parlance, could be regarded as both the vision and the mission of the library of University College, Ibadan, Nigeria's first university library.

Given this degree of high-level support, and endowed with just the right combination of wide-ranging knowledge, consummate skill and apparently inexhaustible energy, Harris built an institution that earned widespread respect and admiration both within and outside the university (Bozimo, 1980). A British observer of the African university library scene provided the following assessment of the Ibadan library at quarter-century (Ratcliffe, 1975):

Emergent libraries in emergent universities in an emergent nation with problems of nationalism and tribalism, competing and needing instant success on the modern stage whilst living in so many ways in the past, could with profit study Ibadan university library. The quality which this library represents took some twenty-five years to achieve and it can compare with any institution of comparable age in Britain or elsewhere, despite huge initial difficulties. It has grown gradually in response to Ibadan's special needs and in many ways is a model library of its kind. Its achievement is set squarely in the context of Nigerian university life and academic requirement.

Subsequent Nigerian academic libraries followed the leadership provided by the Ibadan library and became,

up to the early 1980s, solid and reliable supports for the academic and scholarly missions of their universities. It has, indeed, been observed (Karani, 1977) that, "in terms of quality and quantity, the research output of tertiary institutions in Nigeria was about the best in sub-Saharan Africa up to the late 1980s." There can be little doubt that the university libraries could justifiably lay claim to a considerable share of this compliment.

But, long before the 1980s, the roots of the resource crisis currently facing Nigeria's university library system were already established. Shortly after the country's independence in 1960, a series of political crises led inexorably to the Nigeria-Biafra civil war of 1967-1970. This created an economic situation that required the imposition of controls designed to conserve the country's foreign currency reserves. In one form or another, these controls have remained in Nigeria's statute books to this day.

For the university libraries, which imported a preponderant fraction of their books, journals and other materials, these controls proved particularly devastating. Indeed, by the early 1970s, payment for imported material was already so severe a problem that the issue was an item on the agenda of the very first meeting in 1973 of Nigeria's six university librarians (CULNU, 1973).

The brief oil boom that resulted from the Arab oil boycott after the six-day Arab-Israeli war of 1973 may have provided a temporary respite. What it certainly did do was create, within Nigeria's political leadership, a euphoria of unlimited possibilities, which, in 1975, led, in one fell swoop, to the establishment of seven new "second-generation" federal universities to join the existing six.

By the late 1970s, it was already apparent that Nigeria's finances were not as buoyant as the leadership had imagined. Yet, because political considerations had now assumed pre-eminent status in considerations concerning the establishment of new universities, several more "third-generation" universities were established by the federal and state governments during the 1980s and 1990s (Hartnett, 2002). By 2002, when the INASP study was undertaken, there were already 47 universities in Nigeria: 25 federal, 15 state, and seven under private proprietorship.

As of 2006, there are at least 76 universities in Nigeria: 25 federal, 25 state, and 26 under private proprietorship. Even now, more private universities are still being established.

A succession of corrupt dictatorial regimes, unconcerned about legitimacy or accountability, so systematically under-funded the universities that it became impossible for the libraries to maintain journal

subscriptions or even buy basic textbooks. One librarian reported during the late 1980s that he had had to implement drastic cuts in the number of his library's journal subscriptions from 2000 to 300 (CULNU, 1988).

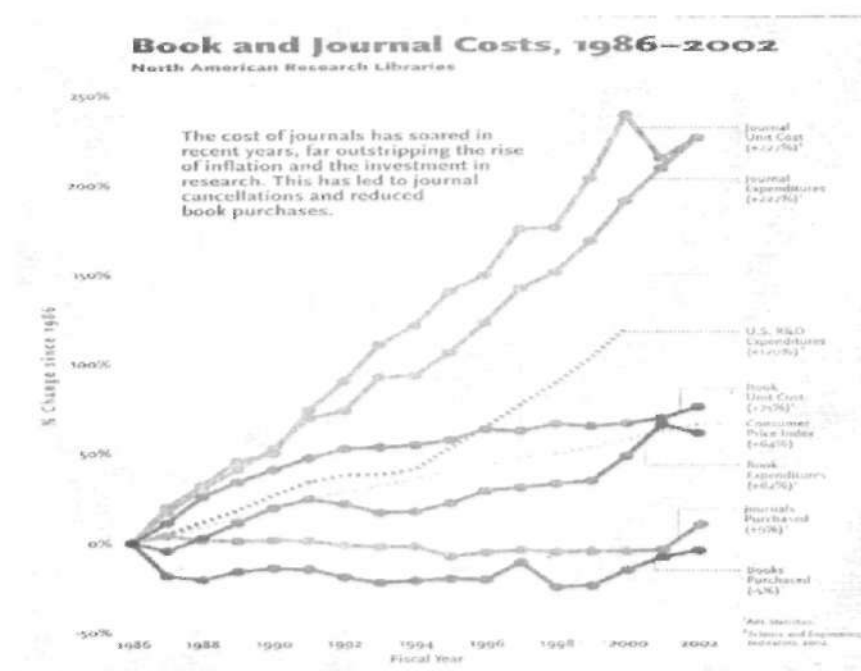


Figure 2. Monograph and Serial Costs in ARL Libraries, 1986-2002

The country's economy and its currency were in free fall and the universities and their libraries were in a raging crisis. In the words of one who had carried out a detailed study of university funding, in "1996 and 1997, the total recurrent grants to the (federal) universities were at half their 1980 levels... In per student terms, federal subventions have lagged far behind enrolment growth. By 1999 the total recurrent grants per student were at about one-third of their 1988 level." (Hartnett, 2002b)

Yet, during this period of declining funding, the costs of library materials were rising quite steeply. Figure 2 (ARL, 2002) shows monograph and serial pricing and acquisition trends charted by the Association of Research Libraries for 1986 to 2002. Unit costs for monographs and serials rose by 75 percent and 227 percent, respectively, during the 16-year period when recurrent grants to Nigerian universities were dropping by more than 50 percent.

As was to be expected, this situation led to a general decline in the quality of university education in Nigeria. In the words of an official government document,

Poor quality library resources have depressed the quality of teaching and research. Outdated library books and journals beget lecture notes with stale contents. Research is hampered by lack of awareness of the content of

knowledge in the field and the use of dated paradigms and methodologies. As reported by UNESCO (1999), the contributions of Nigerian academics to world research output as documented in international journals has been declining steadily since 1988 as a consequence of outdated library resources among other reasons. (Fed. Min. of Educ. 2001)

A recent World Bank study notes that:

Many employers observe that the quality of university graduates has worsened during the 1990s... (They) are quick to state that the quality of the graduates is simply a reflection of the quality of the academic staff, learning resources (libraries, laboratories, etc.) and funding limitations. (Dabalen, Oni and Adekola. 2002)

It is worthy of note that even more recent studies point to the fact that no Nigerian university is among the world's top 200 universities (NUC. 2005). And, although there are more than 70 universities in Nigeria today, measured on the basis of web characteristics or presence on the web, Nigerian universities have also fared very poorly (NUC. 2006). Indeed, among the world's best 1000 universities ranked using the webometric procedure, the six African universities that featured at all were from South Africa. Interestingly, when focus was directed at the 100 top African universities using the webometric ranking, only five Nigerian universities were listed. They are the

University of Ibadan, Obafemi Awolowo University, University of Benin, University of Lagos and the University of Jos.

RESCUE MEASURES FOR ENHANCED ACCESS

a. Government and its agencies

Faced with the stark reality of a higher education system in crisis, various efforts were made at different levels to tackle the problem of the decreasing access to information in our university libraries. At the official level, diverse agencies of government undertook specific projects aimed at reversing the dire situation. Governments' grants to the universities progressively increased.

Also, the Petroleum (Special) Trust Fund financed the bulk purchase of textbooks, monographs and other materials for distribution to the universities. The Education Trust Fund initiated an ongoing programme of annual grants to university libraries.

The National Universities Commission

As the one government agency charged with the coordination of university development in Nigeria, the NUC's actions and decisions play a significant role in creating an atmosphere of mutually beneficial activities among the universities and their libraries. Accordingly,

some attention will be devoted here to a review of the activities of the NUC, which impacted on university libraries' willingness to cooperate with one another. These include:

(i) *Upward Review of Allocation to Libraries*

As noted earlier, in an effort to reverse the widespread under-funding that the university libraries had suffered during the 1980s and early 1990s, the NUC instituted a scheme in 1993 by which 10 percent of each federal university's recurrent funds would be paid into a separate Library Development Fund. The libraries owe a great debt of gratitude to Prof. Idris Abdulkadir, a former Professor of Veterinary Medicine of this university, who, as Executive Secretary of NUC, instituted this arrangement.

(ii) *World Bank Credit for Bulk Purchase of Books, Journals, Research Equipment and Other Materials for Distribution to the Universities*

The NUC was intimately involved with the formulation of a special scheme for resource and equipment acquisition for the universities under the World Bank Credit Scheme. Although the scheme did not entirely solve the decay in the resources of Nigerian libraries, it brought a measure of relief.

(iii) *NUNet E-mail Linkage for the Universities*

In order to ease communication for Nigerian universities, both among themselves and with the larger scholarly world, the NUC designed a scheme in 1996 to provide e-mail services through a central root server at Abuja linked by telephone dial-up to the various universities. This system could, for a modest fee, register the universities' departments, units and their staff and even students under their individual domain names. Some universities took up this facility and provided the infrastructure in their campuses so as to benefit from NUNet. However, plagued by the deficiencies of the public telephone system, NUNet is almost moribund in many campuses.

(iv) *TINLIB Library Automation Software*

Another initiative by NUC, that was favourable to enhanced access to information among federal university libraries, was the proposal for the joint adoption by the libraries of the TINLIB library automation software. It was reasoned that a common software would encourage the sharing of resources after the libraries automate their records.

NUC undertook the ambitious programme of equipping all the Federal Universities with the TINLIB software and providing a computer and printer. But there was unfortunately not enough thought given to

the state of preparedness of the libraries. Moreover, not enough training was given by the local vendors to the library staff, who were expected to operate the system. When it came time to renew the license, many of the libraries, which had not even started using the software, opted out.

(v) The Nigerian Virtual Library Project (NVL)

The Nigerian Virtual Library Project is a proactive response by NUC to deploy ICT techniques to tackle the problem of scarcity of up-to-date scholarly information for the Nigerian academic community. A multi-million dollar project, it is designed to enable Nigerian scholars to access free on-line resources, subscription based on-line resources and local digitized resources (see Figure 3 above) The prototype is already deployed and can be accessed through the Web at www.nigerianvirtuallibrary.com. Procurement and installation of needed hardware and other equipment at the eleven Phase I campuses (including ABU) never took off.

b. Foundations and Non-Governmental Organizations

As discussed earlier, the World Bank played a commendable role in reversing the deplorable trend in resource provision in university libraries in the early

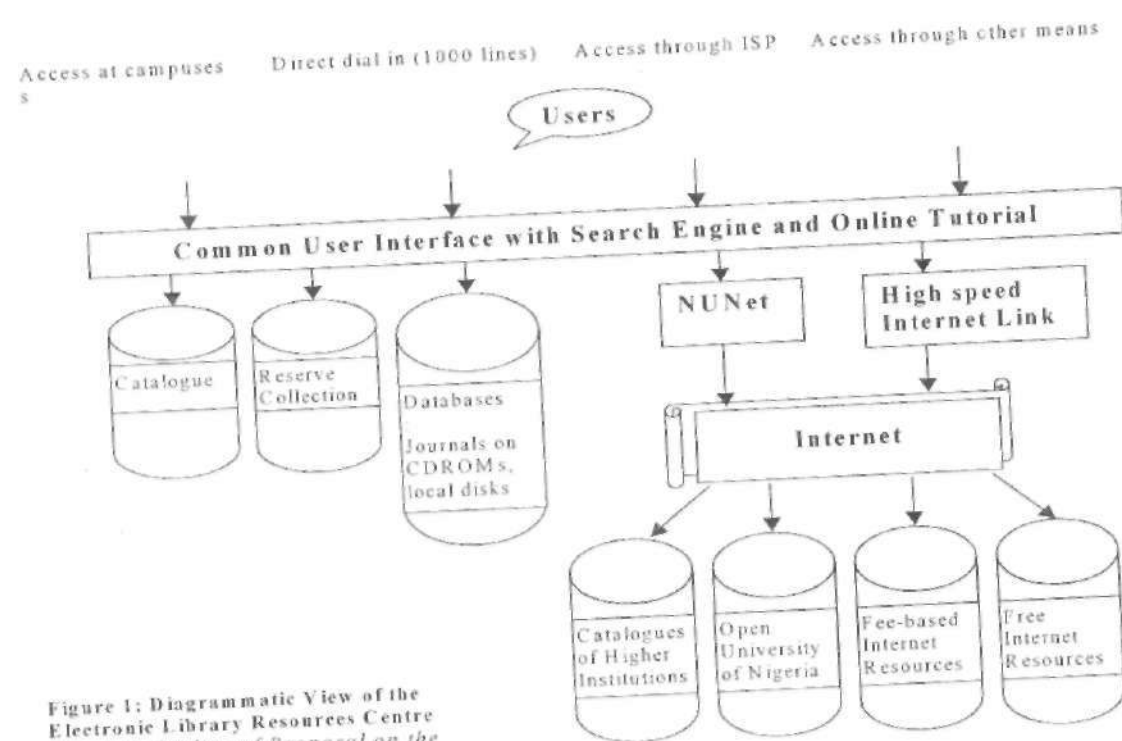


Figure 1: Diagrammatic View of the Electronic Library Resources Centre
(Source: Outline of Proposal on the Establishment of the Nigerian Virtual Library)

Fig. 3: Schematic View of the Nigerian Virtual Library

1990s by providing books, journals and equipment, and undertaking capacity building in federal universities in Nigeria.

In more recent times, particularly with the growth of electronic publishing and the Internet, new international initiatives have been organized that hold the prospect of dramatic improvements in enhancing access to information resources in Nigerian university libraries. Among the most important are the following:

OSIWA. Thanks to Mr. George Soros, OSIWA (Open Society Initiative for West Africa) and OSI (Open Society Initiative) midwived the eIFL.net consortium in Nigeria from 2002 to 2004. By means of a country-wide license of EBSCOHost databases, libraries in Nigeria had enhanced access to over 8,000 scholarly, mostly full-text articles in various disciplines. Many university scholars who have access to the Internet gained tremendously from this arrangement.

INASP. (The International Network for the Availability of Scientific Publications). Through PERI (Programme for the Enhancement of Information), INASP provided "world-wide access to, and dissemination of scientific information and knowledge" either free or at highly reduced prices. Also, INASP's AJOL (African Journals On Line) is a

determined effort to increase the African content of scientific publications on the Web.

HINARI. (Health InterNetwork Access to Research Initiative) A World Health Organization initiative, HINARI is currently providing abstracts and free full-text versions of articles in biomedical journals on-line to many universities and research institutes in Nigeria. This is part of its effort to bridge the digital divide in medicine and allied disciplines. The access period ends in 2006.

JDP (Journal Donation Project) Sponsored by the MacArthur Foundation, this initiative has brought a wide range of journals, in print and in electronic format to four and, later, six Nigerian university libraries: Ahmadu Bello University (ABU), University of Ibadan (UI), Bayero University, Kano and the University of Port-Harcourt, Rivers State. Later, the University of Nigeria, Nsukka and the University of Maiduguri, joined the programme. The project has gone a long way in meeting user needs for current information.

AGORA. (Access to Global On-Line Research in Agriculture). A Cornell University and Rockefeller Foundation initiative, this electronic database has proved very useful to staff and students in Agriculture.

JSTOR. This is another recent MacArthur Foundation initiative, whose goal is to provide full text articles, including a rich archival store of journal articles, in the Humanities and the Social Sciences.

TEEAL. (The Essential Electronic Agricultural Library) A Rockefeller Foundation initiative, it consists of hundreds of CDs with full-text articles in agricultural literature that are invaluable to many developing countries with unreliable Internet connectivity.

Formation of a Consortium for Enhanced Access

The various rescue efforts led to discernible improvement in service delivery in many Nigerian university libraries. Nonetheless, there was a need for coordinated planning if the libraries were to maintain and expand the progress that had been made. In any case, some of the aid programmes were time bound. The MacArthur Foundation's Journal Donation Project (JDP) was for the three-year period, January 2001 – December 2003. Even though it was renewed one more time, it is due to expire in June 2006. The eIFL-net initiative, which gave a country-wide access to EBSCOhost, ended in 2004 and if Nigerian university libraries still wanted to access the database, they now had to pay for it. Even the government-sponsored

virtual library project was intended to be self-financing within five years.

Meanwhile, the quantity and cost of the information that the universities need continued their exponential growth. The financial resource base of the country and its universities had not witnessed any similar increase. It was obvious, therefore, that the universities would soon return to the crisis days if urgent action was not taken to tackle the problem.

But, with increased availability of academic journals in electronic format world-wide, and with multiple simultaneous access enabled by modern ICT techniques, the libraries rightly embraced the idea of joint acquisition of information resources. University Librarians were now more than willing to consider "shared access to electronic databases and similar information services" and a vast majority of them supported joint purchase of such materials.

This was not altogether surprising. Worldwide trends showed that the cost of information resources can be dramatically reduced when purchasers bargain as groups, or consortia, rather than as individuals. The following figures supplied by the Coalition of South African Library Consortia (COSALC) illustrate the point (Segbert, 2001):

- The subscription cost to the individual library for the four most frequently used databases

were cut from \$61,500 to \$14,285 when acquired through a consortium of 35 academic libraries.

- Similarly, the cost for the average title in EBSCOhost's 4000 electronic journals in economics and business management dropped from \$380 to \$6.50.

Since budgets for university libraries had not dramatically increased, the Feasibility Report made a compelling case for a consortium of Nigerian university libraries. The Report was submitted to INASP in March 2003, and discussed at the April 2003 biennial meeting of the Standing Conference of University Librarians of West Africa (SCAULWA) in Ghana.

At its April 2004 meeting, the Committee of University Librarians of Nigerian Universities (CULNU) considered the Report, and resolved to form a consortium. Members were to be governed by Bylaws and a Memorandum of Understanding. They were to have defined rights and responsibilities. At that stage, its initial remit was to support and sustain the Nigerian Virtual Library (NVL), then under development by the National Universities Commission, for the acquisition of shared electronic information resources.

A Stirring to Life

The Committee of University librarians appointed a five-member Executive Committee, with my humble self as Chairman, to pilot the affairs of the Consortium (Bozimo. 2005). It was tentatively christened the Nigerian University Libraries Consortium (NULIC). Its membership included all university libraries, with no distinction as to proprietorship, whether federal, state or private.

Although the initial intention of the Consortium was to buy into the NUC-sponsored Nigerian Virtual Library, operational problems soon arose with that proposition. It would appear that, like the universities, the NUC itself was suffering serious funding difficulties. It had therefore been unable to get the virtual library project off the ground. Consequently, NULIC decided to make alternative arrangements for funding the joint acquisition of digital information resources.

A Quest for Funds

NULIC's initial efforts were devoted to preparing and submitting a proposal to the Education Trust Fund (ETF), a statutory body that receives 2% of the annual profits from each company in Nigeria. ETF is charged with the responsibility of devising and implementing intervention programmes for improvement at all levels

of the country's education system. During the past few years ETF has played a very important role in providing funds for the acquisition and upgrade of university library resources. It seemed perfectly sensible therefore for NULIC to look to this source for paying the country subscription fees to digital information providers. Unfortunately, although ETF appreciated the logic of CULNU's argument, they insisted that each library obtain the written acceptance by its university's Vice-Chancellor of the proposed funding arrangement.

Because we foresaw considerable delay in getting all university Vice-Chancellors to accept the ETF funding arrangement, and because the eIFL-net sponsored country subscription to the EBSCO database had expired at the end of 2004, NULIC obtained CULNU's approval for a scheme by which each university library would contribute an equal annual amount towards the country's subscriptions to EBSCOhost and other proposed digital information suppliers. No distinction was made as to the library's type, size, age or level of IT infrastructure development. In spite of the fact that the call for the annual subscriptions went out to the libraries in the middle of their annual budget operations, a good number paid up, and the Consortium had enough money to pay an initial one-year subscription to EBSCOhost. However,

because the ETF-funded arrangement promises to be tidier than chasing annual subscriptions from some seventy individual university libraries, we shall continue with our efforts to get them to pay our country subscription dues.

A Matter of Names

As a child of the Committee of University Librarians of Nigerian Universities (CULNU), the Consortium could have remained as an informal organization under the wings of its parent. However, saddled with the responsibility of organizing timely and orderly payment, in foreign currencies, for the libraries' acquisition of electronic resources, it was suggested that the Consortium acquire a legal personality and register formally with the Corporate Affairs Commission (CAC). The latter is responsible for registering all corporate and business enterprises in Nigeria. That exercise threw up totally unanticipated hurdles.

CAC rejected the NULIC acronym because another organization had already registered as NULIK, and the corporation wanted to avoid the confusion that might arise from the similar-sounding names. They also rejected "Nigerian University Libraries Consortium" because, they said, too many organizations with the "Nigerian" prefix in their names had given the country and its government a bad world

image through their dubious or unethical activities. Additionally, they would not accept any proposed name that had "Consortium" within it because it gave the impression of a conglomeration of companies. After a series of proposals and counter-proposals, our lawyers finally got them to accept NULIB CONSULTS NIG. LTD. as the registerable name for the consortium.

Successes

In a situation in which unexpected difficulties constantly turn up to trip up the best-laid plans, any little step taken in the direction of intended goals deserves to be celebrated. We count our payment of our annual eIFL-net dues as one such step.

The consortium we have formed for Nigerian university libraries has introduced a formal structure of communication and accountability among our university libraries. Our twice-yearly meetings have become a forum for analyzing issues of consortium management. There is, among our university librarians, a perceptible determination to work towards ensuring that the consortium grows from strength to strength. Progress has been admittedly slow because of the difficulty of trying to organize a working system for a large number of libraries, spread all over the country, in an environment of generally poor communications, in which even those with e-mail and mobile phones

do not necessarily feel the need to respond promptly to mail or text messages. Nevertheless, we believe that, slowly but surely, we are gradually mastering the problems.

I have outlined the various efforts that have been made to provide the information resources required in Nigerian universities. Obviously, actual access to these resources requires the existence of the necessary ICT infrastructure. As a report by an ICT consultant team to this university recently noted,

The key to great libraries is providing access to resources in a reliable, easy-to-use, and affordable manner... Access relies on several important factors including automating the catalogue and developing a library website, robust local area network, adequate facilities and sufficient and reliable infrastructure. (Mortenson Center, 2006)

In this regard, wide differences exist in the level of preparedness of the various Nigerian universities.

A Return to Home Base

Thanks largely to the MacArthur Foundation, computer networking has been done in Kashim Ibrahim and Arewa House libraries. The necessary cabling has been completed in all the seven other satellite libraries. Digitization of theses and dissertations has begun, conversion of library catalogue

records into electronic format is proceeding apace, and capacity building by way of staff training, both locally and abroad, is ongoing. We had also started training academic staff and postgraduate students from Faculties on the use of Internet-based electronic journals. Unfortunately, this last activity has been very severely disrupted by the lack of Internet connectivity over the past several months.

It has been a rare privilege to be in a position, towards the end of one's career, to attempt to implement ideas that one nursed at the very beginning of that career. I thank everyone who has been involved in providing me that opportunity, I thank those of you who, by words and deeds, have given me support and encouragement in my job as University Librarian; and, most especially, I thank you all for listening.

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