Library and information science education in Nigeria: Curricula contents versus cultural realities

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Summary   Library and Information Science (LIS) education can only be meaningfully discussed within the context of education generally, and vis-à-vis the cultural milieu for which it is provided. The growing globalization is equally a necessary factor to consider in this discussion, given its seeping impact on culture, economy and education, especially in developing countries. LIS education programmes in Nigeria are offered at various tertiary level institutions—Colleges of Education, Polytechnics, and Universities. Such programmes award certificates, diplomas, BLS, BLIS, MLS, MLIS, Ph.D. and vary in nomenclature, content, and grading system, depending on the awarding institution. The discussion examines the types of LIS programmes these schools offer, the content of their curricula, and training facilities against the needs and the prevailing conditions of the socio-cultural environment which is the schools' raison d'etre. Each of these schools has its own peculiarities, but being federal institutions, they have many characteristics in common.

Introduction

Library and Information Science (LIS) education can only be meaningfully discussed within the context of education generally, and vis-à-vis the cultural milieu for which it is provided. The growing globalization is equally a necessary factor to consider in this discussion, given its seeping impact on culture, economy and education, especially in developing countries. LIS education programmes in Nigeria are offered at various tertiary level institutions—Colleges of Education, Polytechnics, and Universities. Such programmes award certificates, diplomas, BLS, BLIS, MLS, MLIS, Ph.D. and vary in nomenclature, content, and grading system, depending on the awarding institution.

The history of university-based LIS education began with the establishment of the Nigeria's premier university, the University of Ibadan (UI) Library School in 1960. The subsequent establishment of federal, state and private universities has now brought the numbers of such library schools to

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more than a dozen. The number continues to grow with the growth of private and state universities.

This paper focuses on the programmes of four university-based LIS schools in Nigeria. They include the Department of Library and Information Science, Ahmadu Bello University (ABU), Zaria, Department of Library and Information Sciences, Bayero University, Kano (BUK), both of them located in North-western Nigeria. Others are the Department of Library, Archival and Information Studies, UI, located in south-western Nigeria, and the Department of Library Science, University of Nigeria, Nsukka (UNN) in the South-eastern Nigeria. BUK is the only Second Generation University having attained the status of a full-fledged university in 1976. The others are first generation, with UI as the oldest, established (as a university) in 1960, ABU in 1962, and UNN in 1963.

The discussion examines the types of LIS programmes these schools offer, the content of their curricula, and training facilities against the needs and the prevailing conditions of the socio-cultural environment which is the schools' raison d'etre. Each of these schools has its own peculiarities, but being federal institutions, they have many characteristics in common.

Education in Nigeria

Part of the current crisis in Nigeria's education system has arguably been a result of inconsistent educational policies, characterized by frequent changes and poor implementation, and in many respects non-implementation. The current National Policy on Education (NPE), which has been in operation for over one and a half decades, prescribes an education system based on 6-3-3-4, that is, 6 years in primary (elementary) school, 3 years in junior secondary, and 3 years in senior secondary, schools and 4 years in university. There is already a new policy tagged 9-3-4 now, that is, 9 years in primary and junior secondary schools merged into a single tier, 3 years in senior secondary schools (NPE, 2004, p. 13), and 4 years (minimum) in the university.

The National Universities Commission (NUC) is the regulating body for university education in Nigeria. It serves as a quality-control unit by conducting periodic accreditation (normally on a 5-year basis) of degree and other programmes in all Nigerian universities. Decree No. 16 of 1985 by the Federal Military Government of Nigeria established Minimum Academic Standards (MAS) for all disciplines being taught in Nigerian universities. This decree was incorporated in the NUC Amendment

Decree No. 49 of 1988, the purpose of which was to lay down minimum standards for all universities in the Federation and to accredit their degrees and other academic awards.

In pursuance of this action, the NUC appointed panels to produce draft proposals on MAS for all the undergraduate academic programmes in all the Nigerian universities. The work of the panels resulted in the ultimate approval of MAS for all Nigerian universities in such areas as the arts and humanities, education and social sciences, science and technology, agriculture, human and veterinary medicine.

NUC's evaluation criteria during accreditation include academic content (with nine indices assessed), staffing (with seven indices), staff/ student ratio (SSR) (based on faculty), staff mix (SM), staff qualification (SQ), competence of teaching staff, system of administration (based on quality of Dean/HOD, non-teaching staff, staff development, physical facilities (laboratories, workshops, studios, clinics, etc.), funding, library, and employers' rating of graduates. Each index has a maximum (and minimum) score to be obtained (Abdulrashid, 2005, pp. 8–13).

Three of these criteria—SSR, SM, and SQ—need to be further explained given their relatively high relevance to this discussion. For the SSR, the NUC has its own pre-determined ratio with which carrying capacities of universities are assessed. They are faculty-based as follows: Faculty of Education, Social and Management Sciences, Law, and Arts and Islamic Studies share the same SSR of 1:30. It is important to note here that all university-based LIS departments in Nigeria are under the Faculty of Education. The SSR for the faculty of sciences is 1:20; for Faculties of Agriculture and Technology, it is 1:15; and for Medicine, it is 1:10 (Manual, 10: 2005). SSR attracts 10 as total maximum points to be scored.

The SM refers to the "structure for academic staff", which has similarly been pre-determined by the NUC in the 20:35:45 ratio for professors/ readers:senior lecturers:lecturers 1 and below, respectively. SM is allotted six as total maximum points to be scored.

The requirement for SQ is that at least 70% of the staff in a department should possess a terminal degree (Ph.D.) or equivalent. The less the percentage of staff with Ph.D.s, the fewer the points scored. The maximum points allocated to SQ are three.

These are general and broad criteria universally applied in the accreditation assessment to all academic programmes in Nigerian universities. Each programme has, in addition, specifically

defined criteria based on the general criteria. Such specific prescriptions apply to academic content, physical facilities, and funding criteria. In each of the indices contained in these criteria (e.g. admission requirements, laboratory space and equipment, or quantum of funding required) there may be variations from one department to another.

Njoku (2006, p. 23) lists the three main objectives of the accreditation exercise. The first is to ensure that the provisions of the MAS documents are attained, maintained and enhanced. The second is to assure employers and other members of the community that Nigerian graduates of all academic programmes have attained an acceptable level of competence in their areas of specialization. The last is to certify to the international community that the academic programmes offered in Nigerian Universities are of high standards and their graduates are properly trained for employment and further studies.

However, the achievement of these objectives depends strategically upon the viability of the universities' resource base, that is, the adequacy and sustainability of funding. In the last two decades funding of Nigerian universities has been a critical issue, leading to a series of crises—deterioration of physical facilities and learning environment, staff demoralization, brain drain, trade disputes and unions' strikes, students' unrests, and general decline in standards. The Academic Staff Union of Universities (ASUU), a forefront agitator for adequate funding for Nigerian universities, described the situation as follows:

> The crisis in Nigeria's university system is serious. Everyone who knows our universities and their history admits this. Although our students are back in the universities all over the country, the sorry state of the entire system has not changed for the better. No public university in our country has received any Capital Grant in the last two years; there is a poverty of scientific equipment and laboratories, most campuses do not have steady flow of electricity and water, and none has adequate living conditions. There does not exist an intellectual culture, which died in the early 1980s … . Given present policies on the funding of public universities, it is uncertain how many of them (Nigerian students) will survive the next five years (ASUU, 2001).

Sambo (2006, p. 13) remarked in his paper on the History of Nigerian Education System that: "The under funding trend has continued to the present day." This situation has had a significantly negative impact on all intellectual activities—teaching, learning, research, publication and conference attendance.

Ukeje (2002, p. 31) was more specific citing Longe Commission report on the "Review of Higher Education in Nigeria", he reported that ABU, Zaria (the largest university in Nigeria) "was well funded up to the academic year 1975–1976, after which, for the first time, the amount received was 20% lower than the amount requested … . Since then, the funding of the universities has been on the decline, and the decay in the university had started."

Similarly, Obikoya (2002, p. 40) reported Fadare's observation that "Federal Government has starved the Federal Universities of funds, providing 51% less than the UNESCO recommendation (26% of total national budget to education)—even when the universities' requests were based on the NUC parameters, the difference between requests and grants ranged between 25% and 54% in five years." He further illustrated statistically that "… allocation to education as a percentage of total budget has been consistently low between 1994 and 1999, ranging between 7.83% and 11.12%. It became worse in 2000 when it dropped to 8.36%." It dropped further to roughly 7% in 2001, the lowest since the Second Republic, and less than the averaged 11% in 1994 at the height of military dictatorship in Nigeria.

The underfunding situation cuts across the entire education subsystems, from primary to tertiary levels, since the funding policy is general for the education sector as a whole. Therefore, the problems resulting from the situation affect all these levels with the university as the terminal institution, the worst affected. While the university system battles with all the crises arising from underfunding, the declining student quality from the lower level institutions (primary and secondary, or polytechnics and colleges of education) as a result of the same crises increasingly places additional pressure on the system. The trend has now been that each year the universities select "the best" students; however, they only turn out to be, at best, last year's average.

A further point to note is the state of the larger Nigerian society that is riddled with other socio-cultural, economic, and political crises that inevitably affect education. Sawyer (2002, p. 25) summed up the main features of African higher education (with which Nigeria shares in common) in relation to these general crises, as follows:

- low literacy;
- low tertiary education expenditure per person; but very high relative to GNP;
- poor infrastructure;

- weak links to the global knowledge system;
- pervasive poverty;
- ageing faculty;
- low average household incomes;
- small number of universities per country, with notable exceptions; and
- an enrolment explosion in the last 30 years, but low enrolment ratios at all levels.

Obanya (2002, p. 46) provided statistics from UNICEF to illustrate the literacy/illiteracy situation in Nigeria. The major highlights are that:

- overall literacy rate declined from 57% in 1990 to 49% in 2001;
- literacy rate among women declined from 44% to 41% in the same period;
- urban areas had 67%, and rural areas 42% literacy rates respectively; and
- there were striking regional or geo-political differences both in overall literacy rates and in women's literacy rates.

LIS Education

The preceding section aptly describes the context within which LIS education in Nigeria is situated. How LIS Education responds to this situation, in terms of its ability to provide relevant human resource development training that prepares the well-equipped manpower required to make a positive impact, depends on many factors. These factors include the curricular content, adequacy (in terms of quality and quantity) of training facilities and equipment, teaching staff, and sustained funding both for recurrent and capital expenditure.

The NUC, as the accrediting body, sets MAS for the LIS Education in all these areas in its document (NUC, 1999, October, p. 14), which elaborates the specific components for compliance by all Nigerian universities. The components include philosophy and objectives, academic contents, existing degree programme and courses, core/compulsory courses, title and course description, evaluation, personnel, library, and computer laboratory.

Under philosophy and objectives, the document states the traditional roles of the universities as teaching, research, dissemination of existing and new information, and the pursuit of service to the community. Consequently, LIS education is expected to:

(a) Produce library and information professionals for all types of libraries and information and documentation centers.

(b) Equip the graduates of the programme with relevant theoretical knowledge, practical skills and techniques to develop and enhance their job performance.
(c) Encourage the spirit of enquiry and creativity among the Library and Information professionals so that they are capable of understanding the emerging concepts of the role of information in a complex, multi-cultural, multi-ethnic, and largely non-literate society like Nigeria.
(d) Provide prospective Library and Information professionals with the intellectual and professional background adequate for their assignments and make them adaptable to any changing situation.
(e) Provide an understanding of the role of the new communications technology (e.g. Internet) in the handling of information (NUC, 1999, p. 2).

The minimum admission requirements and modes of admission for the Bachelor's degree programmes are the same as the general admission requirements and modes for most degree courses.

The variety of degree courses approved and run by the LIS Departments include:

(a) Bachelor of Library and Information Science (B.LIS), in which LIS is taken along with some other academic subjects in the Humanities, Social Sciences, or the Sciences.
(b) Bachelor of Arts (Library and Information Science) (B.A. LIS), Bachelor of Science (Library and Information Science) (B.Sc. LIS) in which LIS is taken along with other academic subjects in the Humanities, Social Sciences or the Sciences (NUC, 1999, p. 4).

Under the course requirements in each of these, courses are categorized into:

(a) Core/Compulsory courses, which are central to the degree programme in view and normally offered by the Department offering the degree. They are allocated a total of 46 credits spread across all levels (1–4). The list is as follows (credit values in parenthesis) Libraries and Society (3), Introduction to Libraries and Information Resources (3), Introduction to Bibliography (2), Organization of Knowledge I (3), History of Libraries and Information Centres (2), Organization of Knowledge II (3), Collection Development (2), Reference and Information Source (2), Technical Services in Libraries (2), Introduction to Information Science (2), Management of Libraries and Information Centres

(2), Indexing and Abstracting (2), Automation in Libraries and Information Centres (3), Libraries and Information Services to Rural Communities (2), Research and Statistical Methods (3), Research Project (4), and Field Experience (Students' Industrial Work Experience Scheme—SIWES) (6).

(b) Cognate Courses, which are prescribed course units from related fields required for an understanding and appreciation of the students' major field. Cognate courses are also spread across all levels and across academic disciplines (i.e. Arts, Social Sciences, Sciences, etc.), with varying number of credits to be taken at each level and semester. Six to nine credits at the 100 level each semester, and six credits at each of the subsequent levels (two to four) each semester.

(c) Restricted Electives, i.e. optional courses taken from defined areas from which students are to choose specific courses. The departments within the same Faculty normally offer them. Restricted electives at all levels carry two credits each. They are spread as follows: Level 100 only one course unit: Library and Information Centres visit; Level 200: Literature and Library Services to Children and Adolescents, Serial Management, the Information User, Media Resources, Oral Tradition and Cultural Literature, and Computers and Data Processing, out of which students are to take at least two courses; level 300: National and Public Libraries and Information Centres, School Libraries and Media Resource Centres, Academic and Special Libraries and Information Centres, Information Technologies, and Preservation and Conservation of Library Materials. Students are to take at least two courses. At level 400, the students are to take at least any five courses, and any two of the subject Bibliographies and Literatures, from the following courses: Government Publications, Archives Administration and Records, Publishing and Book Trade, Bibliography and Literature of the Social Sciences, Bibliography and Literature of Humanities, Bibliography and Literature of Science and Technology, Book Production and Publishing, and African Bibliography.

(d) Unrestricted Electives are courses opted for by the students in accordance with their interests and normally offered from outside the Faculty. The Faculty determines their status. These courses are available only at 100 level, where students are allowed to take two credits from an academic programme in the University, preferably in any one of the following language Departments: French/German/Arabic/Hausa/Ibo/Yoruba.

(e) Pre-requisite Courses are courses, which must be passed as the understanding and offering of the subsequent courses to which they are pre-requisite depend on understanding them.

(f) Each programme defines its own restricted and unrestricted electives.

(g) Course Credit Unit is equivalent of one lecture/tutorial hour per week per semester (NUC, 1999, pp. 3–9).

Evaluation comprises all techniques used in assessing students' progress. It consists of a combination of a variety of methods including written and oral examinations, individual and group projects, seminar/paper presentation, field experience, laboratory practical, and open-book examination. Generally, the final grading comprises 40% Continuous Assessment (CA) and 60% Examination for each semester. A final sessional grading (CGPA) is obtained by a computation of the two semesters' overall performance. To earn a B.LIS, or B.Sc. LIS degree, a student is required to pass at least 120 credit units in a four-year programme, or at lest 90 in a three-year programme. Both Internal and External examination systems (i.e. external examiners from other universities) are used in the determination of all these.

The table below shows the scoring and grading system.

1	2	3	4	5	6	7
Credit units	Percentage scores	Letter grades	Grade points (GP)	Grade point average (GPA)	Cumulative grade point average (CGPA)	Class of degree
Vary according to contact hours assigned to each course/week/ semester and according to work load carried by student	70–100	A	5	Derived by multiplying 1 and 4 and dividing by a total credit units	4.50–5.00	First class
	60–69	B	4		3.50–4.49	Second class upper
	50–59	C	3		2.40–3.49	Second class lower
	45–49	D	2		1.50–2.39	Third class
	40–44	E	1		1.00–1.49	Pass
	0–39	F	0		<0.99	Fail

NUC (1999, pp. 16–18)

On facilities, the NUC MAS stipulate that: "Every Library School should have a separate library of its own that can be used as a workshop for training the students. These Libraries should be under the direct control of the Department of Library and Information Science". The space requirements for the Library should be at least $50\,m^2$, with key documents and journals in LIS comprising a minimum of 1000 volumes, managed by professional Librarian and supported by Library Officer, technician and the messenger.

There should also be a Computer Laboratory with the same space dimension ($50\,m^2$) and at least five computers with accompanying accessories and relevant software. "No LIS department should … have full accreditation without these facilities" (NUC, 1999, pp. 19–20).

Considering the global trend of LIS education and the LIS profession, the NUC MAS itself appears outdated in many respects, especially in terms of course content, scoring and grading system and facilities. However, there is a need to present the actual situation in the LIS departments in Nigeria in order to see the complete picture. For instance, how does the actual conform to, or deviate from, the ideal as set by the NUC? What explains either of the scenarios? What are the implications of either situation for LIS education and for society generally?

The current state of the LIS schools ABU, Zaria

The Department of Library and Information Science, Ahmadu Bello University, Zaria, was established in 1968. It started with Bachelor's Degree in Library Science (BLS). A diploma programme followed, the Master's (MLS) and Ph.D. were introduced later. It used to be one of the largest and most reputed library schools in Nigeria in the 1960s, 1970s, and 1980s.

Currently, the Department offers a Bachelor's degree in Library and Information Science (BA.LIS), Post-Graduate Diploma in Information Management, Master's in Library Science (MLS), Master's in Information Management (MIM), and Ph.D. in LIS. Each of these programmes is governed by the general regulations regarding admission requirements, evaluation, and duration for similar programmes in Nigerian universities. For the bachelor degree programme the duration is either four years for candidates coming from secondary schools through University Matriculation Examinations (UME), or three years for candidates with "A" level or diploma certificate. The admission requirement for Post-Graduate Diploma is a Bachelor's degree or Higher National Diploma (HND) and the duration is one academic year.

The admission requirement for the Master's degree is a first degree with a minimum CGPA of 2.75. The duration for full-time students is a

maximum of three years, and five years for part-time students, combining course work and thesis writing in both cases, the Ph.D. is offered with a minimum CGPA of 4.0, with a maximum duration of five years for full-time, and seven years for part-time students.

The available courses spread across programmes and levels include the following: Introduction to Library and Information Science, Information Organization, Information Service, Sociology of Information Centres, Introduction to Information Science, Specialized Information Service, Research Methods, Quantitative Method, Indexing and Abstracting, Computers in Library, Publishing and Book Trade, Communication Studies, Information Management, Reference, and Information Service, Oral Literature, System Analysis, Practical, Comparative Librarianship, Administration of different types of Library, Collection Development and Bibliography.

Each of these courses is assigned credit value according to its perceived importance, or its inherent demand, such as possessing practical components, or according to its status as to whether it is an optional or compulsory course. Many of these courses are, as usual, taught at different levels with different depths of treatment.

The ABU LIS School has a total of eight (8) lecturers (from Graduate Assistant to Professor positions) and a total student enrollment of 507. This gives the teacher/student ratio of 1:63, a little over twice the NUC approved ratio. This does not include some of the lecturers' participation in other programmes, such as General Studies (a university-based programme), Diploma and Certificate programmes run by the Institute of Education. The lecturers also combine administrative responsibilities, such as level coordination (processing-collection and collation of results), registration, etc.; and their primary academic workload.

In terms of facilities, the School has a Computer Laboratory, which is equipped with 31 computers and Internet connectivity. This gives a student/PC ratio of 16:1, slightly over one and a half times the NUC approved ratio of 10:1. However, considering other computing facilities available in the university, such as the Central Computer Unit, the University Library's computing facilities, etc.; the ratio may be lower, perhaps within acceptable limits (in terms of accreditability). But it should be equally noted that, with the possible exception of the University Library's facility, none of the others might have the relevant software specifically for LIS training. In fact, the NUC ratio is a general PC accessibility ratio; no standard (in terms of student/PC ratio) has been set specifically for LIS training purposes. Contrasting all these with the

NUC recommendation of five computers for LIS Laboratory, brings to the fore the glaring contradiction and obsolescence of some aspects of the MAS.

The Department maintains a Demonstration Library on the University's main campus in Samaru. The Library serves as a training Laboratory-Library for students and as a public library providing services for the Samaru community. The library has large collections for adults and children. It has full-time staff with a professional librarian heading it.

Kano

The Department of Library and Information Sciences, Bayero University, Kano was established in 1977. It started with a two-year diploma programme (Diploma in Library Science—DLS), until 1980, when Bachelor's Degree programmes [BA/B.Sc. (LS)] were introduced. The aim of the programmes was to produce subject librarians, those who have a strong base in Library Science, as well as in one other academic discipline from Arts, Social Sciences, Humanities, or Natural Science.

Currently, the Department runs seven programmes: Diploma in Library and Information Management (DLIM), Advanced Diploma in Information Management (ADIM), Bachelor of Arts (Library and Information Science) [BA (LIS)], Bachelor of Science (Library and Information Science) [B.Sc.LIS)], Post-Graduate Diploma in Information Management (PGDM) (to commence 2006/2007 session), Master's in Library Science (MLS), and Ph.D. in LIS.

The minimum admission requirements for DLIM are three O level credits (up to 2005/2006 admission, NUC has approved five from 2006/2007 admission) and the minimum duration is two years. For ADIM, the minimum admission requirement is a pass in DLIM or any qualification deemed by the Senate to be equivalent and the minimum duration is one year. The minimum admission requirements and duration for first degree and all postgraduate programmes are the same as ABU School.

The available LIS courses at BUK are spread across programmes and levels with many courses taught at different levels with different depths of treatment. These courses include: The Library and the Community, Reference and Information Work, Information Organization, Information Retrieval, Introduction to Information Management, Study and Communication Skills, Library and Information Resource Development, Typewriting (for DLIM only), Introduction to History of Literature

Preservation of Library Resources, Office Management, Public Relations in Information Work, Computers in Library and Information Services, Information Services for Young Children and Adolescents, Introduction to Information Work, Introduction to Information and Communications Technologies, Foundation of Behavioural Science, Philosophy and Theory of Information, African Library and Information Environment, The Library in the Nigerian Society, Indexing and Abstracting Procedure, Bibliography and Citation Techniques, Change Management, Electronic Information Resources, Community Analysis, Introduction to Epistemology, Information Science, Introduction to Printing, Publishing and Book Trade, Research Methods, Management of different types of Library and Information Centres, Industrial Attachment, Developing Information Infrastructure, Politics of Information, Serials Management, Introduction to Information Policy Analysis, Economics of Information, Resource Sharing and Information Networking in Library and Information Centres, Management of Archives, Computer Practical, Education for Library and Information Science, Advanced Cataloguing, Advanced, Classification.

Kano has a total of 14 lecturers from Graduate Assistant to Professor ranks and a total of 1000 students. The teacher/student ratio is thus 1:71, close to two and a half times over the NUC approved ratio. Lecturers also have additional academic and administrative responsibilities with which they combine their primary teaching and research responsibilities.

The available facilities include a departmental computer laboratory and a faculty audio–visual unit and e-library. The computer laboratory, equipped with 14 networked and 13 stand alone computers (distributed to lecturers), 1 microfiche and microfilm readers each, 3 overhead projectors, 3 slide projectors, and 1 multimedia Power point projector, is exclusively used by the department for training purposes. There are other computing facilities for training at the university library and the Centre for Information Technology (CIT) available on request for the lecturers and the students. Both the laboratory and other facilities have Internet connectivity via the University's VSAT.

It is clear that both teacher/student ratio and student/PC ratio are short of the NUC approved standard, but based on its approved minimum number of computers (5) for a laboratory, the standard is within acceptable (accreditable) limits. With the anticipated supplies of Teaching and Research Equipment (TRE) to face re-accreditation exercise at the end of the year or early next year

(2007), the situation of the department will significantly improve.

The re-accreditation exercise will also provide opportunity for the Department to have a separate library for training. Provision has already been made for a separate space within the library complex, with all the specified facilities for this purpose. The department has hitherto been using the University Library for students' training.

Ibadan and Nsukka

Curricula content and duration

The duration of the courses in both schools are the same, while the undergraduate programme runs for four years, the Master's programme runs for 18 months. Both schools run the Ph.D. programme for a minimum of three years which consists of seminars on chosen fields of study at the pre-field level and post-field level.

In both schools, the core subjects at the undergraduate level are: history of libraries, organization of knowledge, collection development, oral traditions/oral archives, reference sources and services, library administration, technical services in the library, bibliography, introduction to information science, practical librarianship, research methods, contemporary technology in libraries, project and literature of the various fields of life.

At the Master's level, there is a difference in the curriculum of both schools. While the UI has updated their curriculum at this level to reflect the changes in technology and the needs of the society, the courses at the UNN still needs to reflect the changes in the technology world.

The compulsory modules at the Masters level at the UNN invariably include: Theory of Knowledge and Classification, Research Methods, Practical, Advanced Cataloguing, Indexing and Abstracting and Project.

With optional modules from: Audiovisual Resources, Oral Information, Administration of Archives and Records, Library Services for Children and Youth, Administration of Academic Libraries, Book Production, Computer Technology in Libraries and User Studies and Education.

A compulsory module for the MLIS programme at the UI includes: Foundation of Information Studies, Reference Sources and Services, Collection Management, Theory and Organization of Knowledge, Cataloguing and Classification, Research Methods and Statistics, Management in Library, Archive and Information Centres, Records and Information

Management, Preservation and Conservation of Information Resources.

Required courses in the same university means that students are expected to take and pass a number of these courses while in school. These include: Audio–visual and Mass Media required Resources, Information Technologies, Indexing and Abstracting, Database Management Principles and Applications, Quantitative Methods in Information Systems, Software Packages for Information Systems, The Information User, Information Resources Management, Information Systems Analysis Design and Evaluation, Information Products and Services, Oral Archives and Indigenous Knowledge Systems, Computer Applications in Information Systems Research, Knowledge Management.

Other courses tagged as electives include: Bibliometrics, Information Sources in different fields of knowledge, The Internet for Libraries and Information Centres, Academic Libraries, Special Libraries, Public Libraries, Law Libraries, Medical Libraries, Grey Literature, Libraries for Target Groups.

At the undergraduate level the modern course structure is very much absent. Though the UI revealed that they are in the process of reviewing the existing curriculum at the undergraduate level to accommodate the modern technological needs in LIS, there is a need to do that quickly. The curriculum is influenced by a number of factors including the academic level of the programme and its length, requirements of the accrediting professional association, and the ethos of the parent educational institution.

Teaching and learning facilities

Available data reveal the following facilities in respect to each of the above schools. The University of Ibadan Library School, the first library school in the country, offers a two-year diploma programme to train paraprofessionals, the Bachelor of Library Science Degree (BLS) the MLS degree programme, the Master of Philosophy programme, and the Ph.D. programme, all in librarianship. This school has a library science department library, a computer laboratory, an audio–visual centre and the Abadina media centre to complement the teaching and learning process. The department also has a wealth of information materials in the university library, and a teaching laboratory for cataloguing and classification.

At the UNN, the library school offers a diploma in the Library Science programme, a bachelor's degree programme, Master's of Library and Infor-

mation Science degree, and a doctoral degree in LIS. There is a departmental library, a teaching laboratory for cataloguing and classification, a workshop centre at the children's centre library, a computer laboratory, and many classrooms. It is, however, noteworthy that a number of the parent universities of these library schools have central computer facilities that their respective schools can exploit for instruction and research purposes. The adequacy of these resources when compared with the ratio of students is grossly poor.

The application and utilization of basic modern technologies such as computers, audio–visual materials, and microforms is not only important but indispensable in instruction. One would suppose that the parent institutions where those library schools exist would have such formats available for teachers to use. But personal observations and experiences have shown that in many campuses such materials are non-existent. And even where some of these materials are available, there may be restricted access to them.

The importance of physical facilities such as library science libraries, laboratories, and demonstration rooms cannot be over-stressed in training librarians and information scientists. Nwakoby's observation that: ''Ideally, the department of Library Studies should be housed in its own building, equipped with classrooms, a large lecture theatre, a seminar room, offices, laboratories, a library and a minicomputer center'' (Nwakoby, 1990, p. 67), agrees with the statement but how realistic this is, is a big question.

In the developed countries, there is a tradition of establishing separate library science libraries, or distinct areas within the main university libraries, and to have independent library school laboratories (for cataloging, computer use, and perhaps reference books). This has not been the practice in Nigeria until recently. The operation of laboratories and demonstration rooms is a new phenomenon in library schools in Nigeria.

Studies of libraries and their staff have consistently reported inadequate levels of Information and Communications Technology (ICT) literacy as one of the major problems facing libraries in Nigeria as they move into the 21st century. ICT infrastructure development and poor funding have been identified as problems, followed by poor ICT skills among staff (Adedoyin, 2005, p. 15; Oduwole, 2005, p. 43). These are the same problems confronting libraries in most developing countries. Amekuedee (2005, p. 13) reported similarly for Ghana and Zhou (2005, p. 21) for China.

Librarians who are part of the nation's human capital need to keep abreast of the global changes.

Human capital may be defined as the total stock of knowledge, skills, competencies, and innovative abilities possessed by the population. Among the most important changes that characterize the 21st century are, "the increasing importance of knowledge as a driver of economic growth; the information and communication revolution; the advent of a worldwide labour market and global socio-political transformations" (World Bank, 2002, p. 28).

Human capital development has become a core element in the development efforts of developing countries, in the knowledge society of the 21st century. This is because "comparative advantage among nations who derive less from natural resources and cheap labour endowment and increasingly from technical innovations and the competitive use of knowledge" (World Bank, 2002, p. 8). In the new environment, the learning paradigm has changed. The new paradigm is life-long learning, in which there is less emphasis on remembering facts and basic data, and more emphasis on process, analytical knowledge, skills, and competences. The emphasis is "learning to learn; learning to transform information into new knowledge; and learning to translate new knowledge into applications" (World Bank, 2002, p. 29). In this new paradigm, cooperative education is central. Institution-based learning should produce the foundation of knowledge, and the acquisition of work-related skills, competences, and practices in relevant workplaces build on this foundation. The training of librarians for the 21st century must follow this paradigm.

LIS Education and cultural realities

LIS Education is a service-oriented industry whose ultimate aim is to bring about positive transformation in societal value systems, attitude, and world outlook. To achieve this aim, education must close the gaps between theory and practice, i.e. between the intelligentsia and the larger society, between scholarship, abstract philosophy and concrete human reality. The question here is whether that bridge exists between LIS education and the larger society it is supposed to serve. The question touches the very core of LIS Education in Nigeria—the relevance of curriculum, availability and quality of teaching and learning facilities, and availability and quality of teaching staff, all of which depend on the quantum and judicious use of funding.

The preceding discussions describe the actual situation in the four Nigerian LIS schools. In the first instance LIS Education, despite its globalist out-look, has to address itself to specific cultural situations. Hence its content, philosophy, and orientation should be dictated by the socio-cultural environment in which the products of such education would operate. It is clear that most of the courses presented above place emphasis on print-orientation, print-media and post-industrial information and communication technologies (ICTs) (computers, automated systems, internet connectivity, online services, micro-media, etc.). Indeed, the history of the library in Nigeria, a largely non-literate society, has been the history of "The Book", of print media, which have had no place for Nigerian cultural store of ideas and collective wisdom preserved in oral traditions. Even where such non-print courses exist in the curricula, they only constitute a marginal component, with little or no practical cultural value. If effectively used, modern technologies (ICTs) can mobilize, sensitize, and transform a non-literate society. However, the failure of the LIS educators to develop the conceptual framework, courses and techniques to actualize that, demonstrates the conditions of their existence.

The fact that Nigerian universities suffer from chronic underfunding indicates the poor state of teaching, learning, and research environment. It equally explains the conditions of facilities and the nature of the products (students) of the system. This becomes a metaphorical situation of the two islands—the one of theory, where the teachers and the students live, and the other of practice, where the larger society dwells. At some point the students are expected to leave the first for the second, but with neither a compass to take their bearing, nor the instruments to face the hazards that may be encountered on the way. In this situation, they are unsure of themselves, unsure of what do and how to do it, and unsure of their professional possibilities. They get lost between the two islands.

Suggestions and recommendations

In order to carry along the larger segment of the Nigerian populace and to join the current movement for the internationalization of LIS education, Nigerian Library and Information Schools must reappraise their philosophical concept of the role of the library, and hence of library education in Nigerian Society. A compromise must be struck between globalization and localization and such a compromise must be favorable to and in the overall interest of the latter. Given the Nigerian situation at present, the people's psychology, their cultural

level, and the demographic patterns—localization, at least in the basic aspects of LIS education, must take precedence over internationalization. Basically, the following elements must be restructured and reoriented to actually relate to Nigeria's real situation.

Teaching staff

The quality of LIS educators is of primary importance, not just in terms of academic or professional qualification, but also in terms of their philosophical outlook, their vision for humanity, and their ability to damn the credo of "No Politics". They should be teachers who develop local perspectives into universal framework for action. Li Tachao, Mao Tse Tung, and Nadezdha Krupskaya/Vldamir Lenin serve as inspiring examples in these respects. Educators must sensitize the public to their conditions and the need for change by broadening their intellectual and political horizons.

Curriculum

The emphasis of LIS courses should shift from physical document to information; from library as a building to library as a system, as a culture preserving and transmitting organ; from technique-oriented approach to service-oriented methods; and from LIS as independent discipline to an interdisciplinary discipline. Such conceptual changes require the introduction of new courses or modifying the contents of the existing ones. To bring about these changes courses in the curricula should include philosophy (as a branch of knowledge), oral tradition, rural information service, the library in Nigerian society, history of ideas, behavioural science (with emphasis on rural psychology), translation courses, children's literature, adult education, and research methods (with emphasis on traditional information systems, community needs, interest, cultural attitudes, etc.). All these should have well-articulated content, relevant to Nigeria's current circumstances.

Teaching and learning facilities

Effective learning takes place only when facilities are available. For library and information schools, in addition to basic facilities like classroom, furniture, and departmental library; there should be at least a model rural library or information centre; a media resources centre with all the required audio–visual materials (audio and video cassettes, disc, slides, film strips, cine-films,

posters, pictures/photographs, etc. with all the hardware equipment for their operation), computers; and telecommunication facilities. Many of such modern facilities can be used effectively for the benefit of the local people (and that should be the main emphasis when applied to learning purposes). For instance, cassettes, slides and films can be used effectively to record oral tradition, lecture/speech/document translation into local languages, drama shows, etc. In so doing, students are exposed to modern information technologies and how they can be effectively applied in service delivery to traditional communities, who are equally, though indirectly, exposed to the advantages and possibilities of these technologies.

Research

Research is a necessary component of academic activities. There are wide areas in which research in LIS can be carried out in Nigeria. Rather than emphasizing document or book-oriented research, library schools should emphasize research on Nigeria's information environment; people's information needs as they relate to their cultural, economic, political, religious and social activities; peoples right and access to information; government restrictions to access of certain information; censorship as it affects public interest; information generated from people's cultural, economic, religious and social activities; people's communication structure. The knowledge of the people and of their conditions is the first step to providing effective library and information services and in raising their cultural level. Critical enquiry or research is one of the most effective methods of advancing knowledge and is needed in LIS education; the sole aim of which is to advance knowledge.

Professionals

In Nigeria, the world of "theory" and that of "practice" are two different worlds and the gap has apparently been widening despite the increasing numerical strength and activities of both. One major reason for this development is the nonchalant attitude developed by both sides perhaps as a result of that credo of neutrality. There has not been any initiative from either side to develop formal or even informal working cooperation. Neither the professionals nor the educators have a strong national association or union that can speak with authority on behalf of its members. The Nigerian Library Association (NLA) with its scattered and disoriented membership is hardly aware

of the existence of the Nigerian Association of Library and Information Science Educators (NALISE) whose members are still battling to pronounce its name after over two decades of existence. Whatever the case, this situation does not bode well for library education. Professional bodies all over the world play not mere advisory role in matters relating to professional education, but serve as accrediting authorities whose set standards must be met by any training institutions to be established. NLA must rise above pettiness to this occasion, fight and establish itself, and set standards for Nigerian library and information schools to make progress. The professionals' practical experience must be reflected in, and brought to bear upon, training. The NLA must also sensitize the public not only to what it stands for or what it provides for them, but also to their collective destiny as a people and to the enormous potential and possibilities they have at their disposal to transform this destiny. All this must be guided by intelligent planning and organization, informed by a thorough knowledge of its members' professional calling. Both NLA and NALISE, therefore, have to raise the level of this collective spirit to transcend their narrow professional interests, to promote and actively involve collective popular struggles by developing linkages and working cooperation with other institutions and groups in Nigeria, in Africa, and in other parts of the world that share common experiences with the Nigerian Society.

The state

The state is vested with all the vital instruments for development and under development, depending upon how these instruments are used. In Nigeria, information is one of such vital instruments that has been under the monopoly and strict control of the state. Its dissemination via electronic (mostly state owned) and print media is strictly monitored and often manipulated by state officials to serve their class interests, in most cases at the expense of popular interests. In most cases, state officials who use such media as instruments of propaganda—to sing their praise and self-glorification; exhibit their 'achievements'; bestow honour upon their supporters; and harass, intimidate and blackmail their perceived enemies form a segment of the population. In this situation, those who attempt to disseminate the truth, mostly intellectuals, scholars, journalists, artists, and writers run into collision with the state that does not hesitate to apply its coercive and repressive might.

This anti-intellectual posture of the state has in recent years become so pervasive that it translates into practical negation of learning and knowledge, especially at higher levels of education to which LIS education belongs. This has serious implications for all the aspects discussed above. While progressive and patriotic state officials on their own initiatives can change this negative trend, substantial pressure will have to be exerted from below. Library and information teachers and professionals have a leading role to play in changing Nigeria's information environment. Whatever methods they use to achieve this objective, they must realize that their success or failure depends to a great extent upon the state's attitude towards information and the role it plays in society. The state's change of attitude, it should be noted, is one of the primary aspects to which information workers must direct their attention.

The training of the Nigerian librarian for the 21st century

The library of the 21st century has been appropriately described as a digital library. The library in a 21st century Nigeria will combine digital and traditional library elements. Abandoning all the elements of a traditional library would be unsuitable for Nigeria, where illiteracy is still high and ICT literacy very low.

Training of the librarian for the 21st century must be mainly in the mode of a digital librarian. Zhou (2005), describes the responsibilities of a digital librarian as to: select, acquire, preserve, organize and manage digital collection; design the technical architecture of digital library; plan, implement, and support digital services such as information navigation, consultation and transmission of services; establish friendly user interface over network; set up relative standards and policies for the digital library; design, maintain and transmit value-added information products; protect digital intellectual property in network environment; and insure information security.

He also describes digital library service as analyzing and processing different kinds of information resources; activating and finding potential value hidden in any information; providing value-added information products and services at right time and right place; finding the right users for information and providing personalized and tailored services.

Conclusion

The training of librarians in Nigeria is inadequate, and needs radical restructuring to produce

librarians suited to deliver service in a digital or technological based library in a knowledge-based society.

This study tends to agree with Igun (2006) when she suggested that, for the training of librarians in Nigeria—increase training from four academic years (8 semesters) to five and one-half years (11 semesters); curriculum that combines library science and information management science; the 11-semester curriculum is broken down as follows: a four-year (8-semester) period of theoretical training, and a one and one-half year (three semester) practicum, with on-the-job training in varied work environments to acquire real skills and competences. The 18 months on the job training are to be spent as follows: three months each in an academic organization, a private sector organization, a telecommunications organization, a military organization, and a government organization. The last three months should be spent in the organization in which the student wants to specialize.

The inclusion of the teaching of the new technologies that should form the foundation of the knowledge acquired for the necessary job has just started in the UI at the Masters degree level and should be reflected in the other progammes run by the university that are relevant to the workforce promised by the department. Other library schools producing graduates should hopefully imbibe this review.

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