

AFRICAN JOURNAL OF LIBRARY, ARCHIVES AND INFORMATION SCIENCE

VOLUME 11, NUMBER 1, APRIL 2001

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Disaster Management in Academic Libraries in Ghana

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Abstract

The article presents the findings of a survey of the management of disasters in academic libraries in Ghana. In the 12 academic libraries surveyed, the findings revealed varying levels of unpreparedness of most academic libraries for disasters in Ghana. The absence of purpose of recovery after disasters, the lack of disaster plans, inadequate human and material capacity to recover after disasters and the lack of conservation units or workshops to restore damaged information materials characterised the academic libraries. Recommendations to rectify the situation are made.

Introduction

In 1996, the Government of Ghana enacted the National Disaster Management Organisation (NADMO) Act 517 (1996). The organisation has the following functions:

- Prepare national disaster plans for preventing and mitigating the consequences of disasters;
- Monitor, evaluate and update national disaster plans;
- Ensure the establishment of adequate facilities, technical training and the institution of educational programmes to provide public awareness, warning systems and general preparedness for its staff and the general public;
- Ensure that there are appropriate and adequate facilities for the provision of relief, rehabilitation and reconstruction after any disaster; and

- Co-ordinate local and international support for disaster or emergency control relief services and reconstruction.

NADMO is made up of professionals, experts, consultants, officers and employees of public institutions and non-governmental organisations and such volunteers as may be registered under the Act.

In mid-1999, the University of Ghana Library, also known as The Balme Library, invited NADMO to study a four-storey library annex which had been constructed by the Government of Ghana as an extension to the main University Library. The NADMO report stated that the library annex was built without taking cognisance of seismic or geological hazards which could impact on the library and its resources at the same time. This raised issues of disaster management in libraries in Ghana. Most library buildings in the country were not purposefully built with library architectural standards in mind. The public library system which blazed the library trail in Ghana is no exception. With the exception of the public library head office in Accra, whose structures were designed to serve as a library, all the other public library buildings in Ghana were not purposefully built to serve as library buildings.

Special libraries in Ghana are even in a worse situation because any four walls serve as a special library. Most of the academic libraries, with the exception of the newer university libraries which are in temporary accommodation, were purposefully built as library buildings and some standards required of library buildings were taken into account. It appears, however, that disaster management issues were not considered. This, therefore, implies that the information resources these buildings hold could be at risk in the event of a disaster.

The authors of this paper felt a strong need for a survey of academic libraries to determine the true state of affairs in relation to disaster preparedness. The need for the study became more compelling when it was realised that NADMO has always directed most of its disaster management attention at physical structures and human beings to the neglect of information resources. It was, therefore, decided to conduct a survey to determine how adequately prepared or ill-prepared academic libraries are to manage disasters which have consequences for information resources.

Morgan and Smith (1997) state that library resources are very valuable either for the information they contain or for their physical beauty. The materials are meant to be a source of knowledge, pleasure and assistance for generations to come. Libraries house and protect materials which by their very nature are very susceptible to disasters. Materials could be completely lost or, to put it more trenchantly, national assets in

information resources could be easily lost in a disaster and a nation stands to lose greatly if there are no arrangements to prevent or mitigate the consequences of disaster. The disaster problem is further emphasised by Matthews (1994) who asserts that surveys have shown that some sort of disaster in libraries is almost inevitable.

Ghana, a developing country, is grappling with economic recovery and its attendant problems. Meanwhile, higher education is becoming more expensive with increasing student numbers but dwindling resources. An attempt by government to introduce some amount of fee paying for academic facilities known as "academic facilities user fees" was fiercely resisted by university students in 1999.

Discussing the seriousness of the dwindling resources of universities in Ghana, Alegbeleye (1993) painted a bleak picture of the acquisition situation in the premier university library in Ghana - The Balme Library. Between 1977 and 1978, books acquired by The Balme Library through purchases stood at 2,395 but by 1980-81 this had drastically dropped to 482 and was still as low as 590 in 1989-1990. With this scenario, disaster management should be top priority for university libraries since it will be very difficult for the government of Ghana or the management of such libraries to restock or restore in full any academic library hit by disaster. Currently, most, if not all of these libraries, do not have budgets to purchase textbooks but depend on charity and exchange programmes. It is thus imperative for those on whom rests the responsibility of preserving and caring for these materials that disaster management should form an essential part of the management functions of libraries in Ghana.

Looking at disaster in a generic information management context, Alegbeleye (1993) defined the term as any event that "results in the sudden removal of records and documents from accessibility and use". Anderson and McIntyre (1985) relating the term more closely to libraries define it as "an unexpected event with destructive consequences to their (library) holdings..." A more embracing definition for the purposes of this article is offered by Eden and Matthews (1996) who see disaster as "any incident which threatens human safety and/or damages, or threatens to damage a library's buildings, collections, (or items therein) equipment and systems."

There are varied causes and for that matter classifications of disasters. (Alegbeleye, 1993; Bulgawicz and Nolan, 1988). The simplest and the most common however are the grouping into natural and man-made categories. Natural disasters are happenings over which man has very little or no control and are generally initiated by such events as floods, earthquakes, storms, cyclones, and hurricanes among others. Man induced disasters include war-time destruction, bombings, rioting, malicious vandalism, arson, negligence, power surges and failures, etc. Irrespective of source of disaster, the

destruction and devastation it causes or threatens to cause to library resources and the provision of library services remains a critical factor in the management of libraries.

Disasters have been with libraries from time immemorial. According to Eden and Matthews (1996) a disaster does not have to be big to be serious. The loss of a rare or unique 11th century manuscript due to a minor leak, they claim, can be a disaster of national or international concern. Copious documentation of disasters in libraries abounds in the literature, (Buchanan, 1988; Fortson, 1992; Harvey, 1993; Alegbeleye, 1993; Addrey, 1996; Pepra, 1998; Adinku, 1999). Some of the most devastating library disasters in history include the 3rd century AD fire demolition of the library at Alexandria; the 1966 Florence flood which destroyed manuscripts in the Bibliotheca Nazionale Centrale; the 1966 fire at the Jewish Theological Seminary Library, the 1986 fire which destroyed the Los Angeles Central Public Library, among others.

Kisiedu (1996) is of the view that West Africa seems to be relatively free from disasters. Alegbeleye (1993), however, has on record prominent disasters within the West African region. These include the fire at the library of the Nigerian Institute of Policy and Strategic Studies; the 1988 arson by students which destroyed documents in the Records Centre at Bo in Sierra Leone; the 1988 rainstorm which destroyed books in the Nigeria Forestry Research Library; and the destruction of documents in the National Library of Nigeria in 1990.

Records indicate that Ghana has experienced a series of flood, earthquake, fire and arson-related disasters over the years (Addrey, 1996; Pepra, 1998; Adinku, 1999). Those worthy of mention among others are the 1939 earthquake which destroyed the Aglionby Library; the 1984 Agricultural Development Bank Head Office fire which resulted in the loss of valuable records; the fire outbreak at the Ghana Broadcasting Corporation in 1989 destroying the Film Archives and Library; and the 1990 fire which razed through the Headquarters of Ghacem, destroying valuable documents.

From the literature, there is no doubt that information disaster has been with the world over the years. Research into the management of disasters and recovery procedures, however, came to the fore after the famous Florence flood which brought together many experts in paper conservation from all over the world. This notwithstanding, it was only around the close of the 1970s that recognition was given to the principle of disaster planning as an integral part of library management (Morgan and Smith, 1997). Yet, Eden and Matthews (1996) feel that the subject remains one of the managerial activities which are put off until a later date. The attitude of "it won't happen here" is neither here nor there. Disasters are real. They do not respect persons or boundaries. They can happen to

any library in any form. It is very imperative, that planning for them should constitute an integral part of the overall management functions of the library.

According to Matthews (1994) the publication in 1985 of a disaster plan by the National Library of Scotland marked the beginning of increased attention to disaster control planning as a component of library and information management in the U.K. It has stimulated research into library disaster management and control. This study, an exploratory one, seeks to survey a number of academic libraries in Ghana with a view to determining their disaster preparedness.

Methodology

The study covered 17 academic libraries in Ghana. Polytechnics were granted tertiary institutional status by the government of Ghana as a result of the recommendations of the University Rationalisation Committee Report (1988). This thus increased the number of tertiary academic institutions in Ghana from the previous number of eight to seventeen. Head librarians of these academic libraries formed the target population. Head librarians were the respondents because they are more knowledgeable in issues affecting their individual libraries and are more aware of the plans, programmes and policies of their libraries than any other staff.

The survey instrument used was the questionnaire. Questions were framed and mailed to head librarians of all academic libraries in Ghana on 10th November 1999. The questionnaire asked for information on location of the library, disaster experiences as a result of location, type of collections, storage of collections and type of equipment in the library. Questions relating to broad areas such as disaster awareness, prevention, preparedness and recovery were also asked. After follow-up letters, 12 out of the 17 head librarians responded by 30th May 2000- being a response rate of 70.6%. In all, about five months and three weeks were devoted to data collection.

Findings

The central objective of this study was to find out the disaster management status of academic libraries in Ghana. The findings of the survey brought out interesting scenarios.

Libraries and Disaster Experience

The names of the academic libraries which responded to the questionnaire and the year they were established have been provided in table 1. A cursory glance at the table shows that two (16.7%) academic libraries were established in the late forties, five (41.7%) in the sixties and the remaining five (41.7%) in the nineties. For those that were established earlier, that is, in the forties and sixties, one would have expected that having been established for so long they should have put in place disaster management plans for their libraries. Even for the newer libraries, it would be expected that in view of scarce resources for library provision and the fact that there is financial austerity in book acquisition, they would put in place measures to avert or mitigate any library disaster. This was not the case as revealed by the survey results.

Table 2 shows the location of academic libraries covered by the survey. The location of some of the libraries as seen from table 2 shows that some of them are prone to disasters emanating from earthquakes, strong tidal waves from the sea and industrial fumes, gases and fires. The disaster experiences of libraries covered in the survey as a result of their location show that only one (8.3%) library experienced a fire outbreak once and another library in an earthquake zone has cracks in the walls of the library building. The rest of the libraries (83.3%) have so far not experienced any disaster whatsoever due to their location.

Table 1: Year of Establishment of Academic Libraries

Libraries	Year Established
1. Accra Polytechnic Library	1949
2. Balme Library, University of Ghana	1948
3. Cape Coast Polytechnic Library	1990
4. Central University Library, Accra	1998
5. GIMPA Library, Achimota	1962
6. Ho Polytechnic Library	1967
7. Koforidua Polytechnic Library	1997
8. Takoradi Polytechnic Library	1962
9. University of Development Studies Library	1993
10. University of Science & Technology Library	1962
11. University College of Education Library	1992
12. University of Cape Coast Library	1962

Table 2: Location of Libraries

Area	Number of libraries	%
Earthquake zone	1	8.3
Close to the sea	3	25
Close to industrial area	2	16.7
Area liable to flood	-	-
None of the above	6	50

Storage of Collections and Equipment in the Library

The intention here is to know the type of collections in the libraries, how the materials are stored and the type of equipment in the libraries. Table 3 brings out the stock or type of collections in the libraries.

Table 3: Type of Stock in the Libraries (N=12)

Type of material	Number of libraries	%
Books	12	100
Periodicals	11	91.7
Manuscripts	4	33.3
Microforms	3	25.0
Audio-Visuals	3	25.0
Electronic documents (e.g. CD-ROM, Magnetic tapes, Floppy disks etc.)	9	75.0

All the libraries covered in the survey had books as part of their stock. In addition, eleven (91%) stored periodicals, four (33.3%) had manuscripts, three (25%) kept microforms, another three (25%) had audio-visuals and nine (75%) kept electronic documents. All these libraries should thus have disaster management plans for their stock since all the materials they keep are susceptible to disaster. The findings of the survey show that the storage of the collections is done in various ways.

Table 4: Storage of Collections

Type of Storage	Number of Libraries	%
Shelves	12	100.0
Boxes (e.g. pamphlet box)	8	66.7
Metal cabinet	5	41.7
Floor	-	-
Others (e.g. cupboard)	2	16.7

As portrayed by table 4, no library kept its materials on the floor. Rather, all the libraries kept most of their collections on shelves. For additional protection, eight (66.7%) of the libraries used protective boxes while five (41.7%) used metal cabinets. Library materials unprotected on shelves are more prone to such disasters as fire, theft and mutilation. Such materials can also be affected by floods if they are placed on the lower rungs of the shelves. Collections stored in boxes and metal cabinets are less exposed to theft and mutilation. Fire-proof cabinets are very protective of materials during fire hazards.

Table 5: Equipment in Libraries

Equipment	Number of Libraries	%
Microform cameras	3	25
Microform Readers/Printers	4	33.3
Computer systems	10	83.3
Photocopiers	12	100.0
Air-conditioners	8	66.7

The libraries were asked to state the equipment they used. Table 5 above shows the results. A look at table 5 shows that all the libraries had photocopiers, ten (83.3%) had computer systems and eight (66.7%) had air-conditioners. Few libraries had microform cameras and microform readers/printers. All the equipment listed above are susceptible to disasters. It goes without saying that the more equipment a library has the more serious it has to be with regard to disaster management and preparedness.

Disaster Awareness

All libraries must be aware of the various disasters that are likely to occur to them. Academic libraries in Ghana were asked to indicate the variety of potential disasters that could befall them. Seven (58.3%) libraries indicated that fire could occur in their libraries, two (16.7%) stated that their libraries could be flooded and only one (8.3%) library indicated that it was likely to experience an earth tremor or earthquake because it is in an earthquake zone. More than half, to be precise seven (58.3%) of the libraries surveyed stated that they were likely to experience mutilation through vandalism or mob action. However, all the libraries showed that they were likely to experience cases of theft. On the issue of actual experiences that these libraries have had with regard to some of these disasters, table 6 portrays the findings.

Table 6: Disaster Experiences

Type of Disaster	Number of Libraries	%
Fire	2	16.7
Flood	1	8.3
Earthquake	1	8.3
Mutilation	6	50.0
Theft	10	83.3
None of the above	1	8.3

Most of the libraries covered in the survey have had one type of disaster or the other but indications are that they did not cause very serious destruction to information resources. Stealing of library materials seems to be more widespread than the other problems. Ten (83.3%) out of the twelve libraries covered by the study reported theft cases. Mutilation of library books was also quite widespread. Six (50%) of the libraries experienced it. Stolen materials and mutilated books have to be replaced every now and then and this could be a drain on the finances of the library. Two (16.7%) libraries had experienced fire disasters. Fire is very destructive since total collections could be completely destroyed. In Ghana, fire hazards in information centres/libraries are commonly caused by faulty electrical wires or faulty electrical connections. Only one (8.3%) library had experienced flooding as seen from table 6. Flooding in Ghana could be caused by heavy thunderstorms which rip off roofs. However, the most common form of flooding is the situation where during periods of water shortage, taps in the libraries are not turned off after the day's work and when the taps start running again, the rooms get flooded.

Disaster Prevention

Disaster prevention involves the surveying of the library environment (buildings inclusive), identifying possible risks or situations which can lead to disasters and taking action or putting in place guidelines and procedures to eliminate or minimise such risks. Possible risks to look for include: damage to building, faulty equipment and fittings, unauthorised access, fire, flooding, thunder and lightning among others.

According to Bulgawicz and Nolan (1988) any effective disaster prevention plan should embrace the following key elements: a clear policy statement; activation authority; task organisation; information distribution procedures; monitoring of destructive forces; provisions for employee training; and ongoing review. They were, however, quick to point out that, to be really effective, a disaster prevention plan must reflect the geographical, physical and operational characteristics of the institution. As an aspect of disaster prevention, buildings that are to serve as library buildings have to be purpose-

built. However, the survey results portray that half of the libraries surveyed were purpose-built and the other half were not.

Out of the twelve libraries covered in the survey ten (83.3%) indicated periodic building maintenance inspections, while two (16.7%) did not. Building maintenance inspections help in the early detection of disasters. Of the ten (83.3%) libraries that conducted building maintenance inspections, two (16.7%) libraries did so once a year, one (8.3%) library did it once in three months and seven (58.3%) libraries did it when there was the need. The more regular the inspection the better it is for any library so that disaster problems could be detected early before any harm is caused. As portrayed in table 7, libraries were asked to state devices used for the prevention of some disasters.

Table 7: Disaster Prevention Devices

Type of Device	Number of Libraries	%
Smoke detectors	3	25
Fire alarms	2	16.7
Intruder alarms	-	-
Fire fighting devices	8	66.7
Fire proof cabinets	-	-
None of the above	3	25

From table 7, it can be seen that three (25%) libraries used smoke detectors, two (16.7%) had fire alarms, eight (66.7%) possessed fire-fighting devices and three (25%) did not have any of the above. Interestingly, none of the libraries had intruder alarms and fire-proof cabinets. Libraries without disaster prevention devices are at greater risks than those which have. Servicing of library equipment like computers, air-conditioners, photocopiers is very essential to keep the machines in a good state to promote good services. Servicing of these equipment also helps to prevent disasters like fires from faulty electrical wires. The findings of the survey reveal that one (8.3%) library did not have any servicing arrangement in place for its equipment. The implication is that the machines are only repaired when they break down. However, the remaining 11 (91.7%) libraries had servicing arrangements for their equipment.

Out of the twelve libraries covered by the study, six (50%) had agreements whereby their equipment are serviced occasionally. Others had different arrangements. Three (25%) libraries had a six month arrangement, one (8.3%) library serviced every three months,

and another (8.3%) library once a month. Libraries which have their equipment serviced more frequently than others have a better chance than others of preventing disaster that could occur from faulty library equipment.

Disaster Preparedness

The preparedness phase in disaster management entails planning for preparedness to deal with disasters should they occur. The fact is that, not all disasters can be prevented. Most of the man-made ones can be predicted with some degree of precision. The most important element in preparing for disaster is the drawing up of a disaster control plan. The plan should contain information very vital for salvaging and recovery operations. This includes floor plans, evacuation routes, assembly points, priority collections, location of emergency equipment, contact telephone numbers.

There is the need to identify the staff responsible for disaster management, suppliers of emergency services and equipment, temporary accommodation and storage. Furthermore, staff need to be trained, and insurance contracts and back-ups need to be checked. All libraries need to prepare for disasters. As Cunha (1986) rightly stated "only the fool says in his heart disasters happen only to others."

The survey findings also revealed that only one (8.3%) library had a disaster preparedness plan. However, four libraries (33.3%) had basic routine guidelines to deal with emergencies. This is a very serious situation which has to be reversed. In a similar survey of "preservation management and policy" in the U.K., Matthews (1994) reported that 30% of 488 British Library and Information Services had disaster preparedness plans. Similarly, Eden and Matthews (1996) surveyed 486 public, academic and special libraries in the U.K. in 1995. Their preliminary report indicated that 13% had disaster control plans. Morgan and Smith (1997) also surveyed 12 research/academic and public libraries in the Greater Cape Metropolitan area and found out that 42% possessed formal disaster plans. These are pointers that more has to be done by academic librarians in Ghana. When respondents were asked if they did periodic disaster drills in their libraries, they all responded in the negative as they did not organise disaster drills for either staff members or patrons. The implication of this is that neither staff nor patrons were oriented to prepare for possible disasters. The consequences could be grave during a disaster.

In countries where electronic documents are highly used, there are backups for electronic information. However, in a country like Ghana the situation leaves much to be desired. The survey reveals that seven (58.3%) libraries had standard procedures for backups for their electronic information while five (41.7%) libraries did not. Only one (8.3%) library

had standard procedures for making security copies of its microfilm collections. In the case of very rare collections, none of the libraries had any standard procedures for making security copies of such materials. Only one (8.3%) academic library out of the twelve surveyed had a priority list for the purposes of salvaging its materials in times of disaster. Table 8 shows the insurance positions of the academic libraries surveyed, which indicate that majority of the libraries did not have any insurance cover for any of their properties. Two (16.7%) libraries had insurance cover for the total library system and only one (8.3%) had insured the library building.

Table 8: Insurance Cover

Type	Number of Libraries	%
The total library system	2	16.7
The library buildings	1	8.3
The collections	-	-
The equipment	-	-
The staff	-	-
None	9	75.0

Response and Recovery after a Disaster

The disaster reaction or response phase involves the implementation, should a disaster happen, of all the preparations and guidelines enshrined in a disaster plan. This is a phase that needs to be handled with care and diligence in order not to exacerbate the problem. One wrong reaction may result in another disaster. The disaster team must be in full control. For very detailed suggested reaction procedures, Matthews (1994) Eden and Matthews (1996), Buchanan (1988), McIntyre (1989), Morgan and Smith (1997) have provided adequate guidelines. To recover from disaster simply means quickly resuming service or re-establishing normal working conditions, however skeletal. This involves cleaning up, repair of damaged material, insurance assessment, falling on backups, compiling damage list among others. Eden and Matthews (1996) suggest the following steps:

- Implement plans for temporary service;
- Arrange for conservation work;
- Counsel staff; and
- Review the disaster control plan.

The findings of the survey show that 10 or 83.3% of the respondents did not have conservation units or workshops. This is unfortunate because a conservation unit or

workshop is very crucial to the existence of a library. During disasters both human and material resources are needed for the restoration of damaged documents. Table 9 reveals that most of the libraries did not have the capacity for the restoration of damaged documents.

Table 9: Human and Material Capacity for Restoration of Damaged Documents

Type of Damage	Number of Libraries	%
Water-damaged documents	1	8.3
Fire-damaged documents	1	8.3
Mutilated documents	5	41.7
None	7	58.3

The disaster management situation in academic libraries is further compounded by the fact that only one library had an arrangement with an external agency or library for collaboration to salvage disaster damaged documents. This compares closely with the findings of Morgan and Smith (1997), where only two (17%) out of twelve libraries had informal arrangements with emergency service providers. To add to this, seven (58.3%) out of the 12 libraries did not have the capacity for restoring damaged documents. From all the foregoing, it is very clear that a lot more needs to be done by academic libraries in Ghana to be able to prevent, mitigate or manage disasters when they occur.

Conclusion and Recommendations

The disaster preparedness status of academic libraries in Ghana leaves much to be desired. It is true that disasters can never be completely eliminated. However, it is believed that if the recommendations made are implemented, potentially disastrous situations would be reduced to mere inconveniences.

Libraries are very important in the life of academic institutions. In fact, they have been described as the heart or aorta of the institutions they serve. Academic libraries should thus be purpose-built, taking into account suitable architectural and structural designs. Location of such libraries should be in areas where disasters like earthquakes, tidal waves, industrial fumes, fires, etc. will not affect them. Libraries which do not conduct building maintenance inspections should start doing so and also, such inspections should be done more regularly in order to detect potential disasters quickly and to prevent them from occurring.

The use of disaster prevention devices like smoke detectors, fire alarms, intruder alarms, fire-fighting devices and fireproof cabinets in academic libraries should be encouraged. Servicing of library equipment should be done very regularly. Libraries which do not

have any servicing arrangements need to initiate such arrangements for their equipment to be regularly serviced.

The findings of the study reveal that only one library had a disaster preparedness plan. It is, therefore, recommended that all academic libraries should have disaster preparedness plans so that they can quickly, easily and efficiently deal with disasters should they occur. The plan should take cognisance of staff responsibilities, suppliers of emergency services and equipment among others. In case the disaster preparedness plans are beyond the competence of some of these libraries, they could link up with experts for help.

There should be adequate training and orientation for staff and patrons in disaster management and there should be occasional refresher programmes to update staff on new developments and new technologies in disaster management.

The study further revealed that some academic libraries did not have backups for their electronic information. They did not have the technology and know-how for making security copies of their microform and rare collections either. It is thus recommended that these libraries should try to keep backups for their electronic information and should have standard procedures for making and keeping security copies of their microform and very rare collections. Without these backups, resumption of services after a disaster will not be easy.

It is further recommended that all academic libraries should have insurance cover for the total library system. Out of the twelve libraries covered by the survey only two had conservation units. It is therefore recommended that academic libraries in Ghana should set up conservation units or workshops to help in recovery. It is well known that setting up conservation units can be very expensive. In cases where individual libraries cannot set up their own units or workshops, libraries that are near each other or in the same vicinity or city can pool their resources and set up a common unit or workshop. Finally, NADMO should seriously extend its disaster management activities and disaster training programmes to cover information resources of academic libraries in Ghana.

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Graffiti as Feedback Tool in Library Management: A Nigerian Case Study

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Abstract

This paper discusses the potential of graffiti scribbled by users on library walls, furniture and materials as feedback tool in library management. An Analysis of 285 graffiti found in different places within the library of the University of Agriculture, Abeokuta, Nigeria yielded interesting results. While 162 (56.84%) of them were social, political and religious in nature, the remaining 125 (43.16%) covered readers' opinions of different aspects of library services in the university. Those related to the library were further categorised into graffiti on (a) staff and their attitudes (25.20%); (b) quality of services rendered (20.32%); (c) noise level in the library (15.44%); (d) particulars of books used (17.88%); (e) frustration with other library users (11.38%); and (f) miscellaneous matters about the library (9.75%). Next to suggestion boxes, graffiti may be said to represent, to a large extent, users' candid opinions on library services and effectiveness. The paper recommends that university libraries should take time to study and analyse graffiti found in their libraries for their potential as feedback mechanism in library management.

Introduction

Graffiti are casual writings, rude drawings or markings on the walls of private and public buildings. They are not new as they were found in abundance on the great monuments of ancient Egypt. In modern times, graffiti, though largely regarded as a public nuisance, could be found inscribed on private as well as public buildings and monuments. They have somehow become a popular form of public expression of views about issues of concern to the writers and sometimes as an avenue of letting off steam.

This practice, although much more prevalent in the western world, has also caught on in Nigeria. These days, it is commonplace to find graffiti written all over the place,

particularly on monuments, road surfaces and perimeter fences of public and private properties. They express views on different topical, social, political and economic issues. In Nigeria, graffiti are more commonly found during election time and on occasions when burning social and political issues are being debated. In most cases, they are very brief, rude and sometimes so bold that they easily call attention to themselves.

In libraries, a more subtle form of graffiti could be found written on surfaces accessible to users. These include tabletops and dividers, walls, shelf canopies, doors in the reading areas and toilet walls and doors. Graffiti found in such places are not as bold as those found in other public places. They are mostly written with pencil or ballpoint pens and in tiny handwritings on light surfaces. At times, they come in the form of caricature drawings some of which are suggestive. Also classed as graffiti for the purpose of this study are inscriptions found on books borrowed by library users. Such inscriptions serve the same purpose of calling attention to messages that their writers wanted to pass on to others. Since messages left in public places are, in most instances, meant to serve specific purposes such as calls for changes in existing practices, it is important that library administrators should take note of them with a view to analysing their contents for the purpose of improving their services where applicable.

In the business world, organisations pay much attention to feedback from their subsystems ranging from the job performance of their employees to the marketing of their products. This is with a view to monitoring the pulse of the organisation and making amends whenever the feedback received indicate some unplanned and undesirable deviations from the organisational goals. To do this, formal and informal communication techniques that involve internal and external inputs are employed.

Over the years, public enterprises have solicited feedback on the effectiveness of their organisations through the use of such simple devices as suggestion and complaints boxes placed in strategic points in their business premises. They also use surveys, interviews and questionnaires to gauge the effectiveness of their services and users' satisfaction with them. While the use of suggestion boxes and questionnaires make for a reasonable degree of confidentiality, the latter tend to seek information and opinions on structured and pre-determined issues. In some cases, these may receive distorted or untrue responses for reasons best known to the respondents. The spontaneous nature of graffiti as well as the near complete anonymity enjoyed by their writers recommend them for serious study by administrators who are out to discover the feelings of their patrons as far as the services rendered by their organizations are concerned.

As public services, university libraries need continuous feedback so as to avoid losing touch with their organisations' objectives. Among such feedback mechanisms in popular

use in libraries are the survey methods which may include the use of questionnaires, interviews, availability, satisfaction and accessibility studies. These instruments, according to Hall (1985) seek to find out how the library is performing in the various tasks it sets for itself. Another method, though less scientific, used by university libraries to get feedback from their users is the suggestion or complaints box placed at strategic points for use by those who may wish to communicate with the library anonymously or otherwise. This may be found in many university libraries but not much has appeared in the professional literature as to their use as management feedback mechanism.

Similarly, the study of the use of graffiti as management feedback in university libraries has not featured prominently in professional discourses. Searches through the literature over the last two decades did not yield any study on graffiti in libraries as management feedback tool. Notwithstanding, it cannot be gainsaid that some library graffiti, if carefully analyzed, could serve as feedback on library effectiveness. The nearest to the type of information library graffiti may provide are the outcomes of user satisfaction surveys. The need to look beyond the conventional methods of getting feedback from users featured in a recent study by Line (1996) who discussed both the "conventional" and "less conventional" methods of finding out what users need. In the study referred to above, graffiti was not included as one of the less conventional methods of getting management feedback. Notwithstanding, Line's thoughts on the libraries of the future and the centrifugal rather than the centripetal forces that are likely to govern their operations provide some food for thought on how libraries can get to know the needs of their clientele outside the conventional methods.

In the particular case of Nigeria, no study has yet been carried out in the area of getting management feedback through the use of graffiti found in libraries. However, two local studies by Onadiran and Onadiran (1986) and Décor (1989) used the traditional survey methods to find out the attitudes, perceptions and opinions of Nigerian students on their university libraries. Nowhere in these two studies, however, was the issue of graffiti in libraries mentioned. The objectives of this study are to find out the types and nature of the graffiti found on the reading tables, walls and materials of the Library of the University of Agriculture, Abeokuta, Nigeria; the extent to which those of them related to the library reflect users' impression of the services rendered to them; and how such graffiti could be used as management feedback tool to improve services.

Methodology

Raw data for this study were gathered by scrutinising and recording graffiti found on the reading tables, walls and doors of the Library of the University of Agriculture, Abeokuta, Nigeria over a period of three months in 1999. Two library assistants were assigned this

task after the aims and objectives of the study had been carefully explained to them. Owing to the density of the writings found on some of the tables and walls and also to make sure that what the assistants copied down were intelligible, they were trained to identify handwritings that were similar where there is a cluster of writings. Another group of library assistants was also assigned the task of closely examining books returned by users for graffiti commentaries on them and copying out same with the call number of the books for the purpose of future identification.

At the end of this exercise, some 285 graffiti were identified and copied out with 213 found on the reading tables and walls while the remaining 72 came from books borrowed from the library. They were sorted into two broad groups consisting of those that were not related to the library and those related to it. Those not related to the library were further divided into three parts to show their diversity. Commentaries relating to the library were further broken down into six parts for the purpose of this study.

In view of the fact that exact time could not be placed on when the graffiti were written as they have been accumulating since the library was started fifteen years ago, their currency and relevance to the present situation in the library cannot be guaranteed. Notwithstanding, since they aggregate the feelings of library users over the period in question, their usefulness as management feedback tool cannot be ignored.

Findings and Discussion

The graffiti recorded in the course of this study were very interesting both in terms of their contents, variety and hilarity. As earlier mentioned, they were for ease of analysis first sorted into four distinct categories as detailed in table I below.

Table 1: Classification of Graffiti

Class of commentaries	No. (Total = 285)	Percentage %
Social (campus love and sex life)	67	23.50
Political (local, national and international)	32	11.22
Religious (preachments and reactions)	63	22.10
Library matters	123	43.16

The social commentaries related to individual views on such matters as love and sex life on the campus. These are the most hilarious as they contained the latest scandals and jokes about the love life of fellow students and sometimes staff. They also attracted

reactions from other students. In all, they reflect what the writers think about their university, its students and staff.

Political commentaries on the other hand showcased individual views on local, national and international politics. Some of these views were so strong and pungent that they attracted equally strong reactions from those opposed to such views. Similarly, religious commentaries contained so much dogmas and fixed positions than any other group of commentaries. These also elicited counter-reactions from those who read them. Some examples of such reactions and counter-reactions included statements such as "Jesus is the answer" to which there were such counter-reactions as "What is the question?" Finally, the fourth category of commentaries related to goings on in the library as seen from the prisms of the writers.

Breaking down commentaries relating to library matters was rather difficult because they touched on so many aspects of the services rendered as perceived by the writers. For ease of analysis, however, they were broken down into five broad categories and those that could not be placed in any of these specific groups were classed as miscellaneous as shown in table 2 below.

Table 2 : Categories of Library-Related Commentaries

Category of Commentaries	No. (Total = 123)	Percentage %
Behaviour of library staff	31	25.20
Complaints about library services	25	20.32
Noise and comfort level in the library	19	15.44
Particulars of books used	22	17.88
Frustration with other library users	14	11.38
Miscellaneous matters	12	9.75
TOTAL	123	100%

Behaviour of library staff topped the list of users' commentaries (25.20%). While 35% of the commentaries were favourable, the remaining 65% were largely unfavourable. These ranged from readers complaining that members of staff were rude, lazy and uncooperative to their being accused of being dishonest. Unfortunately, the brevity of many of these statements made it impossible to pinpoint the underlying causes of such complaints. The predominance of this type of complaints from readers, however, made it imperative for the library management to consider the need to train and re-train its staff. This was with a view to making them more responsive and polite when rendering services to users and also to be more aware of the public relations aspects of their job.

Related also to staff behaviour were complaints about library services (20.32%). Many of these commentaries were also not so favourable as they dwelt on varied issues as inadequate opening hours; untidy, disorganised and dusty shelves; users' inability to locate books they had previously used in their proper places on the shelves, mutilated books, disputes with staff over library fines, among others. The preponderance of negative comments as regards these services may be indicative of dissatisfaction with library services on the part of those who wrote the commentaries. Determining how widespread these complaints are, however, may be difficult to ascertain since not all library users engage in writing graffiti. Notwithstanding, the mere fact that there are pockets of dissatisfied users calls for management re-appraisal of these services.

Another interesting finding is the complaints about the noise and comfort levels in the library. Of the 19 (15.44%) commentaries on these, 12 related to uncomfortable noise level in the library. It is suspected that most of these commentaries may have been written when the library was still occupying temporary quarters adjacent to a lecture theatre. A contributory factor may also be the habit of some students to constituting themselves into discussion groups in the library. This practice still persists in spite of numerous efforts on the part of the library management to discourage it. Commentaries on comfort level in the library building relate to those occasions, when as a result of power outages which are common in Nigeria, readers found the interior of the library too hot and stuffy for meaningful intellectual pursuits. From the feedback on the noise level, it became obvious that management needed to provide a separate room where students could discuss with their fellow students if the noise level in the library was to be minimised.

Expression of users' frustration with their fellow users (11.38%) constitutes another category of commentaries found all over the library. These came in the form of admonitions such as "Why don't you shut up your trap and let me read", "Lover boy, do your romancing outside the library", etc. Such commentaries usually attracted replies from those who felt that they were the objects of such barbs and one could notice some elements of wit and fun in the exchanges. Behind it all however, one could feel the concern of the writers for a conducive library atmosphere. Management response to this was to ensure more frequent patrol of the reading rooms by security men so as to discourage readers who prefer to use the library for purposes other than it was meant.

Particulars of books used by readers were also found to form part of the graffiti on library furniture and walls. Such information includes authors and titles as well the call numbers of books used by the patrons. The purpose of doing this became obvious when random checks for such titles showed that many of them were nowhere to be found on the library

shelves. This feedback has to some extent helped the library in determining which titles to duplicate in addition to the statistics available from the circulation desk.

Finally, there are miscellaneous commentaries which cannot be classed with any of the five categories above (9.75%). These contained pieces of advice to the library, comparison of services rendered with those available in other libraries, commendation and outright subjective condemnation of the library. In spite of their general nature, these commentaries somehow reflect the mood and feelings of the commentators and should serve as food for thought to the discerning library administrator.

Going by the analysis of the graffiti found in the Library of the University of Agriculture, Abeokuta, Nigeria, it was possible for the library management to have a feel of what some of its clients think about the services being rendered to them. Overall, most of these commentaries were not as favourable as the library management would have expected. They also did not correlate with some published empirical studies earlier carried out by staff on the performance of the library. Notwithstanding, analysis of these library graffiti attracted a more rapid response from the library management in terms of changes in existing practices and assumptions.

Conclusion and Recommendations

This study has shown that graffiti found on library surfaces, if studied and carefully classified and analysed, could serve as an important management feedback tool. They reflect the gut feelings of the writers as at the time they were written under complete anonymity. There is no doubt that some element of mischief and lack of seriousness may be reflected in some of these graffiti, but they cannot all be dismissed as unserious and unworthy of consideration by library management.

In this case study, analysis of the graffiti largely reflected an unsatisfied clientele going by the remarks of the minority who bothered to make their feelings known through this medium. Compared to the number of students served by the library this group of users may be in the minority, but they represent an important segment of library users whose views should not be completely ignored by the management.

In view of the above, it is recommended that apart from other formal and informal sources of management information feedback mechanisms that a library might put in place, efforts should also be made at regular intervals to record and analyse the contents of the graffiti found in the library building and materials. When sorted out and properly analysed, valuable information regarding users' perception of the services rendered could

be gleaned from them. Some of the shock findings are capable of galvanising library management into immediate damage control actions as was the case in this study.

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The Effect of Information Technology on Library Acquisitions: Experiences at the University of the North, South Africa

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Abstract

Information technology has eliminated many routine tasks and increased speed in the acquisition of materials. Reduced library budget is forcing the acquisitions staff to be on the alert to new free online information and ensure that user access to information is increased, promoted and enhanced. Free electronic sources, some of which offer fulltext access, are being identified on the Web, through listservs and aggregator services. New tasks include designing the acquisitions Web page, ensuring continuous access to information and processing of licence agreements. Future plans include hyperlinks from bibliographic records in the OPAC and construction of a subscription database.

Introduction

University of the North (UNIN) is categorised as one of the South Africa's historically disadvantaged institutions (HDIs) of higher learning. It was established in 1960 and has branches in the Free State Province and in the far north of the Northern Province.

The main library is divided into four main sections, viz. Acquisitions, Cataloguing, Readers services and Subject Reference services. The library has over 168000 volumes of book titles and 2700 serial titles. The collection is arranged according to the faculties with books arranged by Dewey Decimal Classification system and serials alphabetically by title. Non-print formats like videos and microforms are kept in a separate room, access to which is through subject librarians. An online public access catalogue (OPAC) is used to search the library database. The library uses the URICA Integrated Library System and is a member of SABINET (South African Bibliographic and Information Network). The library does not belong to any consortium presently. However,

negotiations to join GAELIC (Gauteng and Environs Library and Information Consortium) which uses the Innovative Interfaces Inc. (III) (INNOPAC) system have been finalised recently. Hopefully the system will be implemented soon. The library has an Internet connection and its own Web page accessible through the University Web page. It is also connected to the Local Area Network (LAN) through which users access some of the CD-ROMs and online journals.

Impact of Information Technology on Acquisitions Procedures

The acquisitions section (Acquisitions) is divided into monographs and serials divisions. Information sources are selected by academic staff and librarians and submitted to the acquisitions section for ordering out of the library's budget.

The computerisation of acquisition procedures began in 1995 with monographs. Serials followed in 1996 when holdings were entered into the library system. Serials complexities like changes in title, frequency and volume/issue numbering; merging and split of titles and others made the automation or application of information technology to acquisition procedures difficult to implement. At the beginning manual serials procedures were done parallel to automated procedures until the library decided to migrate to INNOPAC in 1999 when all attempts at serials automation were suspended and postponed. The experience gained is that it is not always advisable to buy a module just because it is available in the system being used. It is advisable to buy only the modules which have been proven elsewhere to be effective. The use of CD-ROM databases in 1992 and that of the Internet in the late 1990s supplemented the use of the URICA system on acquisitions procedures.

Monographs Acquisition

Table 1 compares duties performed manually with those performed using information technology. The table shows that manual duties were reduced by almost half, from twenty-seven to fourteen. This has relieved the overloaded staff of some repetitive and monotonous labour-intensive tasks. The use of the Internet and CD-ROM databases resulted in the library cancelling subscriptions to some of the print bibliographic sources used for searching and identifying recommended titles and thus releasing more space on the shelves for other materials. Table 1 also shows that formats like CD-ROM databases and Internet sources are also used for identification. These are advantageous in that they are more up-to-date than the print versions and can be used simultaneously by more than one person at a time resulting in speedy completion of acquisitions procedures. Through the use of the Internet, acquisition staff have been able to identify Web sites like

ACQWEB (<http://www.library.vanderbilt.edu/law/acqs/acqs.html>) with many "live" links and that help, for example, in locating e-mail addresses and URLs of web sites of suppliers and publishers and newsletters. The Acquisitions department uses the Internet also to search catalogues of other libraries like Library of Congress to identify and verify recommendations and citations.

Acquisitions staff have also registered for listservs and subscribe to online journals like ACQNET that devote its issues to the problems and concerns of acquisitions. Through listservs staff are able to communicate with colleagues globally to share ideas on and solve acquisition-related problems, keep up-to-date with new developments and for professional development. They are timeously informed of relevant conferences, meetings, workshops, scholarships and jobs. In future they will be subscribing to INNOPAC listserv through which they can get advice from experienced colleagues. Thus, the participation of acquisitions staff in various listservs keeps them updated with information on acquisitions issues.

Table 1: Manual and Computerised Acquisitions Compared

Manual	Computerised
1. Fund allocation to departments	1. Fund allocation departments
2. Receive recommended titles on standard cards	2. Receive recommended titles on standard cards
3. Search, identify & verify title using 3.1 Print bibliographic sources 3.2 Library holdings (catalogue & physical verification)	3. Search, identify & verify title using 3.1. Print bibliographic sources 3.2 Library holdings (library system & physical verification) 3.3 CD-ROM Databases 3.4 Internet
3. Expenditure control by entering individual prices and calculate the fund balance	
Order by: 5. Completing y order form 6. provide numerical order numbers for eachder 7. file one form in an "On-order-file" 8. file one form in the catalogue	4. Order (during this process steps 4 to 6 in the manual system are automatically completed in one process whilst steps 7 to 9 are totally

9. File one form in a "Date-ordered-file"	eliminated). An "on order" note appear automatically on the bibliographic record including the OPAC.
10. Mail two order forms to the supplier using surface mail	5. Print & e-mail, if possible or send orders by post. Presently many orders are copied to the email facility and emailed to the suppliers who have the facility.
11,12 & 13 When the ordered title is received retrieve all the order forms from respective files (mentioned in steps 7, 8 and 9) and update information using the book itself and the invoice.	6. When the ordered title is received provide the book with a barcode, input the no. on the barcode and enter the actual price in the system to update the accessions register and the fund balance. The record (including the OPAC) is automatically updated with an "In process" note.
14. Update the financial record with the actual cost of the material and calculate the new balance.	7. Manual steps 11, 12, 13,14,15,16, 18 & 19 are either automatically completed or eliminated in step
15. Record the bibliographic, cost & supplier information of the volume on the next unallocated number in the accessions register	
16. Write the accessions no. on the 3 forms.	8. Paste the barcode label bearing accessions number in the book
17. Stamp the book with ownership stamps, accessions no and tattle tapes	9. Stamp the book with ownership stamps, accessions no and tattle tapes and a barcode
18 & 19. File forms in the receipt file and the catalogue and discard the third form	
20. Inform the department about the received book using the university surface mail	10. Inform the department about the received book by email as already explained.
21. & 22. Retrieve forms from date-ordered-file for	11. Instruct the computer to

long outstanding orders and from the on-order-file	generate claims for outstanding orders & send to supplier by surface mail or email. Steps 21 to 23 in the manual system are eliminated.
23. Complete the claim form & send to supplier	
24 & 25. Receive order status report & record the status of the order on the form in the on-order-file and date-ordered file and in the catalogue	12. Receive order status reports and record status on an order record to automatically update all the records in the system. This eliminates steps 24 & 25 of the manual system.
26. Inform the department about the status of the order using the university surface mail	13. Inform departments about the status of the order using email as already explained
27. Compile a limited no. of management reports that a human manual capacity can allow	14. Instruct the system to produce various management reports needed and timeously

In addition to transmitting orders and/or communicating with booksellers (as indicated in table 1) e-mail is also used for communication with colleagues, academicians, listservs among others. E-mail is preferred because it is fast and independent of time zones and allows communication with more than one person at a time. It saves on surface mail costs and ensures safe mail delivery with no worry of delivery problems that occur, for example, when post office workers are on strike.

Use of information technology in monographs acquisitions has reduced the backlog which has always characterised the division. In the manual system it was not unusual to find boxes of unopened book parcels lying on the floors, recommended titles being processed months after submission and duplicate order forms packed in boxes waiting to be filed in respective files as indicated in Table 1, steps 7 to 9. Information technology has eliminated the latter whilst books are processed promptly unless there is a systems problem.

Presently, a project is underway where relevant free online books are being identified. Hopefully, this will save the library the cost of what can be accessed freely on the Web while the funds could be spent on other needed materials that may otherwise not be purchased.

Serials Acquisition

The library subscribes to 2,700 print journal titles and 49 CD-ROM databases. Forty-three of these CD-ROM databases are bibliographic in nature and six are full text with some being full image. Access to seventeen of the databases of which one is full-text is available on the LAN. Due to financial constraints, escalating prices and the fluctuation in the value of the Rand (South African currency) in foreign markets, additions of new print subscriptions to the collection were no longer affordable. Users, on the other hand, began to enquire about the online journals, which are increasing in numbers daily and becoming more popular. These developments prompted the library to consider the acquisition of online journals.

Online Journals

An online journal is regarded as a serial publication that is delivered through the Internet and made available through the World Wide Web (hence Web journals) commonly displayed in PDF (portable document format) or RealPage, which is an image of the text page. It is necessarily not an equivalent of the print version (Luther, 1997) as it lacks information like letters to the editor and others.

An online journal is believed to be cheaper (Rabine & Rich 1998, Born 1999) than its print version. With appropriate information technology online journals and information can be accessed remotely by many users simultaneously for twenty-four hours a day and seven days a week outside the walls of the library. As UNIN has Internet connections that allow users this convenience, the library took an undertaking to develop an online journal collection that will become an authoritative source for research and teaching and which will augment and supplement the print collection by engaging in the following projects:

Identification of Free Web Journals

This entails identifying and selecting relevant free journals on the Web that support teaching and research programmes at UNIN. These journals may be offered free of charge for an indefinite period or may be offered on trial for a certain period for introductory purposes by publishers. Such journals may be provided in full text, abstracts or table of contents only and may be versions of the library print subscriptions. Identified free Web or online journals are listed on the acquisitions Web page. Free online journals are identified through listservs, subscription agents, publishers, electronic journal directories which include *ARL Directory of Electronic Journals*, newsletters and

academic discussion lists, *CIC Electronic Journal Collection* and discussion with colleagues at other libraries.

Registering to Listservs

Another project involves identifying free online journals by registering to listservs. Through listservs acquisitions librarians subscribe to electronic journals and newsletters like *Newsletter on Serials Pricing Issues* and *ACQNET*. The library is still to discover listservs and related electronic journals that are relevant to the curriculum, or report on relevant areas of research programmes and other professions at UNIN. The advantage of listservs is that information comes through the e-mail with no requirements for authentication, with access being restricted only by registration condition.

Access to Online Versions of Current Print Subscriptions

This involves the identification and determination of free access to the Web versions of current print subscriptions. The Acquisitions department has been able to identify free Web versions and online access has been set up and is already available to many of them as users are allowed full text access and/or abstracts and table of contents of library print subscriptions on their desktops. Problems of the unavailability of online access to the remaining few are being investigated. The experience so far is that access unavailability may be due to technical problems emanating from local or publishers'/provider's site.

Access is provided by a publisher/agent through an IP (Internet Protocol) address and/or user ID and password and is available to the UNIN community on campus. UNIN does not as yet serve as Internet service provider to its authorised users that would allow them online access off campus.

Aggregator Services

Aggregator services are normally offered by a subscription agent "who assembles, or aggregates, the electronic journals from multiple publishers and offers the end user access to the library's electronic journals through a single location" (Born 1999). The user is provided with one user ID and password that allow her/him full text access to the journals subscribed to by the library through that agent. Users are accorded additional access as they are able to search many titles in the aggregator's database and read citations and or abstracts of titles irrespective of whether the library subscribes to the title or not. Aggregator service has an additional benefit of offering users a convenience of a single interface and increased access. Users are no longer overwhelmed with many user IDs and passwords and can access fulltext articles displayed in PDF. Fortunately the library has

been offered more than one-year free access to EBSCOhost and Swetsnet, which are subscription agents for more than half of the library's print subscriptions. In addition, users at UNIN are able to browse table of contents (TOCs) of the Institute of Physics electronic journal free of charge which enables them to link to journal Web sites for them to view selected full text articles of recent issues.

Subscription to Electronic Version Only

For this project an investigation of the prices of online subscriptions was made to establish their cost effectiveness and the following pricing models were revealed:

- Subscription price of the online version is lower than that of its print counterpart.
- The online version is priced the same as the print counterpart.
- Access to the online version is available only through print subscription (already mentioned).
- One subscription price acquires both the electronic and the print versions at approximately 10 to 20 per cent above the cost of the print subscription.

These pricing models indicate that an online journal is not always cheaper. An advantage of an online version is that it enables the library to meet the needs of users who "in general, ... prefer to have remote, free and speedy access to the most current information" (Promis and Rawan, 1999). Mode of delivery should thus be one of the factors to be considered in assessing a journal for inclusion in the collection. Transition from print to electronic sources should therefore not be for cost saving but to improve, increase and enhance information access.

Subscription to online version only could be encouraged especially where it is cheaper than or same as (the first two models listed above) its print counterpart. At UNIN this could not be done due to the following problems:

- Some senior students, academics, and researchers who are the main users of journal information are without the infrastructure to access online information, the Internet and the library online catalogue.
- Frequent power failures and the unreliable network, which can be down for many consecutive days or weeks or more than a month.

Subscribing to online journals only would mean that all the users would not have access to information every time they require. Cancelling and/or replacing print with electronic subscriptions is thus still inopportune and might not be advisable in the foreseeable

future. However, subscription to online journals was not ignored altogether or dropped but the library decided to "embrace the potential of e-serials ..." (Chadwell & Brownmiller 1999) by making use of free and relevant Web journals.

In addition to identification, the use of information technology resulted in changes in and additional duties and tasks being done by Acquisitions.

Impact on Acquisitions Duties And Services

Receiving

As with print sources, after an order has been placed it is established if the material is being received. Once the authorisation to access the electronic information has been received, the agent or publisher sets up the library's access. Acquisitions staff test the availability of access which was instantaneous in some cases whilst in some it took longer than anticipated. When accessibility problems are encountered all the features of the system are tested to diagnose the problem. This includes checking if all the equipment are in a working condition and finding out if the IP addresses, modes of access and helper applications and interface programs are still working. At one stage the library discovered that problems were due to changed university's IP addresses and new ones had to be obtained. If the problem is not of local origin, the service provider solves the problem. After access is confirmed and made available, regular testing must be done to ensure continuous availability. These problems have come to make the managing of electronic sources a challenge to the Acquisitions department.

Online journal issues are always received three to four weeks earlier than their print versions. Notifications on the availability of new issues are most of the time not announced and, as a result, receipt of issues cannot be checked-in as accurately as with print, CD-ROM subscriptions and those received through listservs. Regular checking for uninterrupted or continuous receipt of issues is a necessity. Due to time constraints, users at times alert the library to the unavailability or non-receipt of new issues.

Provision of Access to Electronic Information

Selected free Web journals and online versions of library print subscriptions are listed alphabetically by title on the Acquisitions Web page with a "live" link to the source. Additional information about the listed journal includes the duration of the availability of the free access to the title, if applicable, the availability of the library's print version, if any, and whether fulltext access is allowed or that abstract and/or table of contents only are available. Notes like "on order" (as has already been done with CD-ROMs)

"negotiating licence agreement" and/or "access being set-up" that indicate the status of the electronic subscription are also included. Particulars of the subject librarian users must contact to access the information are also given.

Acquisitions receives authentication for access, usually in the form of IDs and password from the service providers. When access availability has been confirmed notes are removed from the title on the Web page. Users are then informed of access availability and mode of access through their respective subject librarians. The latter are responsible for training users and facilitating their access to online information. Staff members who initially recommended the purchase, those whose subjects are covered by and those who have shown interest in the print version are specifically informed of the existence of the electronic information and access procedures.

Training and Staff Development

Information technology is changing rapidly and in compliance with our strategic action plan, staff are being trained and educated continuously to help them acquire skills and knowledge required to perform duties, handle changes and to be up to date with developments. A training programme is drawn up at the beginning of the year based on perceived, anticipated and expressed needs. Training is designed in such a way that it is timely and skills-oriented and covers, among others, aspects like search engines, URLs, electronic resources, Internet searching and connectivity, e-mail, software and hardware trouble shooting.

Depending on the topic, training is conducted informally on the job and formally in-house or outside of the library by knowledgeable library and/or university staff and/or outside people. Staff are also sent to other libraries for observations and to attend workshops, courses, symposia, seminars, conferences and meetings and are encouraged to be members of professional associations. This gives them an opportunity to learn more about procedures and processes in a different environment from theirs.

Creation of Acquisitions Information Technology Specialists and Web-Designers

Due to budget constraints the library cannot afford to employ the services of specialists in information technology. The Acquisitions staff are expected to acquire the expertise knowledge through hands-on experience, reading relevant literature, informal training and talking to specialists in the field. Staff are expected to have high-level skills to handle electronic sources. Staff need to have a reasonable knowledge of information system design for effective communication of problems and needs with systems

personnel, programmers and service providers (Gomez 1999). They have to learn and understand, among others, e-mail, file transfer protocol (FTP), Telnet, WWW and formats like PDF in which electronic journals are delivered. They need to have adequate knowledge required to make decisions in purchasing interface software like helper applications and other programs required to view, download, print, compress and decompress the files. They should be able to determine if the capacity of equipment at UNIN can handle the browsers and helper applications required, and be able to diagnose and solve problems and have technical knowledge to troubleshoot hardware and software. They must have advanced knowledge to surf the "net" and to identify free electronic sources, understand licence agreements and copyright issues. A process is being experienced where staff are gradually moving from being acquisitions clerks to "specialists in the acquisition of electronic resources" (Slight-Gibney, 1999).

Acquisitions staff have an additional responsibility of designing and maintaining the acquisitions Web page so as to showcase free Web journals that support teaching and research. They must be able to use tagging programs like HTML or XML to display information and use hypertext links to the text. As they are not trained, they consult literature and colleagues locally, nationally and internationally for advice. For technical reasons the Acquisitions Web page is presently being accessed through the library LAN. In the near future this will be accessible through the University Intranet.

The skills required of Acquisitions staff are turning them into specialists. They are doing less of routine tasks and doing more of intellectual jobs. Though two staff members have been given the responsibility of coordinating electronic sources, all the staff members are involved in all the aspects and with time the workflow will be streamlined for them to specialise.

Inter-Sectional Cooperation

Before the use of information technology, the four sections in the library were working independently. For example, in the manual system, Acquisitions department used order forms to record bibliographic and order information, which were filed away after the materials were received, whilst the cataloguers created a new bibliographic record according to standards when they received the material. The use of information technology requires library sections to cooperate and work together for the benefit of library users. The pre-catalogue record, for example, is created by acquisitions staff, the cataloguers amend and update this record to facilitate access to information and the updated record is used in the OPAC. During the selection process of CD-ROM databases, all the sections and academicians are involved in decision making. Acquisitions works hand in hand with systems personnel when a free Web journal is

acquired to ensure that the format will be accessible with the available technology. There is a continuous communication with subject librarians regarding features of electronic sources for them to educate users in accessing information.

Licence Agreements

Licence agreements are given when dealing with electronic information sources. For access to be allowed, a licensed agreement is signed by Acquisitions department to ensure that the limitations and restrictions stipulated are adhered to. Before any agreement is signed the library studies its content to ensure that users' needs are not compromised. Should there be any unsatisfactory clauses, Acquisitions department will negotiate with the publisher for a favourable clause. Specifically studied are restrictions on mode and type of access, capabilities for access and information transfer. So far, the library has never encountered any controversial clauses and the users have never complained. Uninterrupted access to the present electronic subscriptions is still a thorny issue.

Possible Future Developments

In future the Acquisitions department plans to

- Encourage and train selectors to submit their orders by e-mail. The selectors will no longer be compelled to submit recommended titles during library opening hours but can submit them whenever it suits them.
- Access database of suppliers through remote login and allow for online ordering and to export and download records from external sources like SABINET and OCLC.
- Indicate the availability of the online journal and its duration in the bibliographic record with a "live" link to the source. This information will also be available to users in the OPAC.
- Investigate the possibility of lending the electronic sources through the ILL.
- Purchase online articles of the current scholarly print sources that are expensive but not regularly used and to cancel print subscriptions.
- Construct a database of journal titles of library print and electronic subscriptions.

Conclusion

Due to technical problems described, the Acquisitions department has not as yet embraced information technology to the desired degree. A start has however been made and University resources have to be adapted for all the users to benefit. As with any other change, anxiety and fear result in resistance and this is alleviated through frequent meetings where feedback and problems are discussed. The results of the various projects have not been evaluated as yet to establish if users' needs for speedy and remote multi-user access are being met. In the next few years the Acquisitions department hopes to complete tasks and achieve the goals it has set regarding availability, promotion and enhancement of electronic information access by users.

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Applied Bibliometrics and Cooperative Acquisition, as Tools for Selecting Journals and Sharing in Nigerian Fisheries Libraries

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Abstract

One hundred and eight journal titles in ranked order were identified as been used by Nigerian fisheries scientists. These were grouped into four zones. The first of 7 titles (6.5%), the second with 11 titles (10.5%), the third with 26 titles (24%) and the fourth with 64 titles (59.0%), contributing 46.6%, 17.7%, 18.8% and 16.9% respectively to the total information needs of the scientists. The cost of acquisition of the first twenty-five titles on the list is put at N2.4 million (US\$ 25000). However, evidence from budgetary allocation shows that none of the fisheries libraries had ever received N.5 million (US\$ 5000) for capital expenditure. A theoretical approach using bibliometrics for judicious selection combined with a well-articulated Cooperative acquisition has been proposed as tools to solving the problem inhibiting journal acquisition in Nigerian fisheries libraries.

Introduction

The importance of fish to Nigerian national economy cannot be over emphasised. It is the cheapest and most wholesome source of animal protein available to the common man in Nigeria. Elliot (1985) noticed that fish constituted about 48% of animal protein intake in Nigeria, while beef, pork and other types of meat constituted the remaining 52%. Fish was so cheap and common that it was affordable to the ordinary people until recently when its price rose as a result of the widening gap between supply and demand. By 1981, about 40% of fish consumed in Nigeria was imported. The Federal Government of Nigeria had projected the fish protein requirement of the country in the line with its

Nigeria had projected the fish protein requirement of the country in the line with its objectives of fish self-sufficiency to nearly 1.3 million tons (FMAWRRD 1986). The shortfall between demand and supply made this target unachievable. It is therefore important for researchers to seek new ways for improving production so as to bridge the demand and supply gap. Librarians have an important role in making relevant literature available to researchers on how the target can be met. Since most of the knowledge required will be found in journals, it is important that librarians provide appropriate and timely information to research scientists by ensuring that they have access to relevant literature hence, journals which constitute the most important source of information to scientists must be readily made available to them. The information needs of scientists are often met through reading well-established scientific journals and secondary bibliographic services (French, 1990). Voss and Wiedeman (1981) in their study on information habits of Grassland Scientists, found that scientific journals ranked highest. Wood and Bower (1969) showed that journal literature accounted for 90% of the demand in a search for requests for medical literature that reached the National Lending Library for Science and Technology. Osiobe (1986) found that scientific technical journals and monographs are the dominant information sources used by health professionals in Nigeria. Result from a broad study (Ibeun, 1995) shows that Nigerian fisheries scientists have a very high preference for journals as a source of information.

Given the fact that prices of journals are escalating annually and with the constant devaluation in the national currency, it is obvious that most fisheries libraries would not be in a position to meet their obligations. As many fisheries journals are published abroad, it means that purchasing these journals involves a substantial foreign exchange component, which will be a formidable problem to fisheries libraries in Nigeria. There is therefore a need for fisheries libraries in Nigeria to co-operate in the acquisition of journals, which will lead to the sharing of resources among the cooperating libraries. Therefore, this study is aimed at identifying the most used journal titles by Nigerian fisheries scientists. Results accruing from this study, hopefully, will lead to the identification of "core" fisheries journals, which cooperating fisheries libraries can share in acquiring. Thus, a formation of meaningful library cooperation will enable scientists who have the mandate to increase fish production, have access to what can be termed the "core" fisheries journals. Bibliometrics studies have been used extensively to determine the "core" journals of a discipline. Bradford's law of scattering has provided a tool for determining the important journals in a field of discipline.

Methodology

Two hundred and fifty Nigerian Fisheries Scientists were identified in *An Inventory of Human and Material Capacities in Fisheries in African States* (FAO, 1992). In all, two

hundred and twenty (220) copies of a validated questionnaire drawn up for this study were mailed out. One hundred and seventy (170) responded, of which 151 were scientists and only 19 were identified as policy makers. Only responses from the scientists were used for this analysis. Respondents were requested to list titles of journals they were fond of using. By this request, it was expected that the most important journals in the discipline will be listed by respondents. Thus, a title was scored one mark each time it was listed. These were summed up and computed for analysis. This afforded the investigator the opportunity of ranking the journals to determine the relative importance from users' point of view.

One hundred and fifty one of the respondents who are researchers formed 76% of the total respondents. The geographic spread of respondents shows responses from 26 out of the former 30 states and Abuja forming 83.9%. This is an indication that the response was representative.

Results and Discussion

In all, 108 journal titles were identified as being used by Nigerian Fisheries Scientists. Table 1 shows conformity with Bradford's law of scattering reported in other sciences. The seven most listed titles recorded 40, 39, 32, 27, 17, 11 and 10 occurrences (see column 1 on the table 1). This shows that the seven titles contributed 46.6% (see column 8, item 7 in table 1.). Figure 1, which is derived from table 1, shows graphically the extent of scattering of the journals used by Nigerian Fisheries Scientists. It shows that 26 titles which formed 24% of the total journal identified formed 72.75% of the total occurrence. Table 1 shows that 44 titles which formed 40.74% constituted about 83% of total number of journals used.

Implication to Nigerian Fisheries Libraries

The implication of this interpretation is that four distinct zones of scattering have been identified (Table 2). The first and second zones with 18 titles, forming about 16.7% of the total number of occurrence, contributed 64.3%. The titles in the two zones are of significance to any fisheries library in Nigeria.

Table 1	
Rank of Periodical Title	
Determination of rare journals used by Nigerian Fisheries Scientists	
1	40
2	39
3	32
4	27
5	17
6	11
7	10
8	46.6%
9	26
10	72.75%
11	44
12	83%
13	108
14	40.74%
15	83%

Table 1: Ranking of Journals Listed by Respondents

No of Occurrence (NA)	No of Title	Cumulation Title Listed		Total No of Occurrence	Cumulation of Occurrence (A)	% Title $\frac{(T) \times 100}{TT}$	% of Occurrence $\frac{A \times 100}{AA}$	Cumulation by each Occurrence $\frac{NA \times 100}{AA}$
		NO	Log (T)					
1	2	3	4	5	6	7	8	9
40	1	1		40	40	0.93	10.58	10.58
39	1	2	0.30	39	79	1.85	20.90	10.32
32	1	3	0.48	32	111	2.78	29.37	8.47
27	1	4	0.60	27	138	3.70	36.51	7.14
17	1	5	0.69	17	155	4.63	41.01	4.50
11	1	6	0.78	11	166	5.56	43.92	2.91
10	1	7	0.85	10	176	6.48	46.56	2.65
8	2	9	0.95	16	192	8.33	50.79	2.12
7	2	11	1.04	14	206	10.19	54.50	1.85
6	2	13	1.11	12	218	12.04	57.67	1.59
5	5	18	1.26	25	243	16.67	64.29	1.32
4	8	26	1.41	32	275	24.07	72.13	1.06
3	3	29	1.46	9	284	26.85	75.07	0.79
2	15	44	1.64	30	314	40.74	75.13	0.53
1	64	108	2.03	64	378	100.00	100.00	0.26
		(TT)			(AA)			

Fig 1: Percentage Distribution of Occurrence among Periodical Titles.

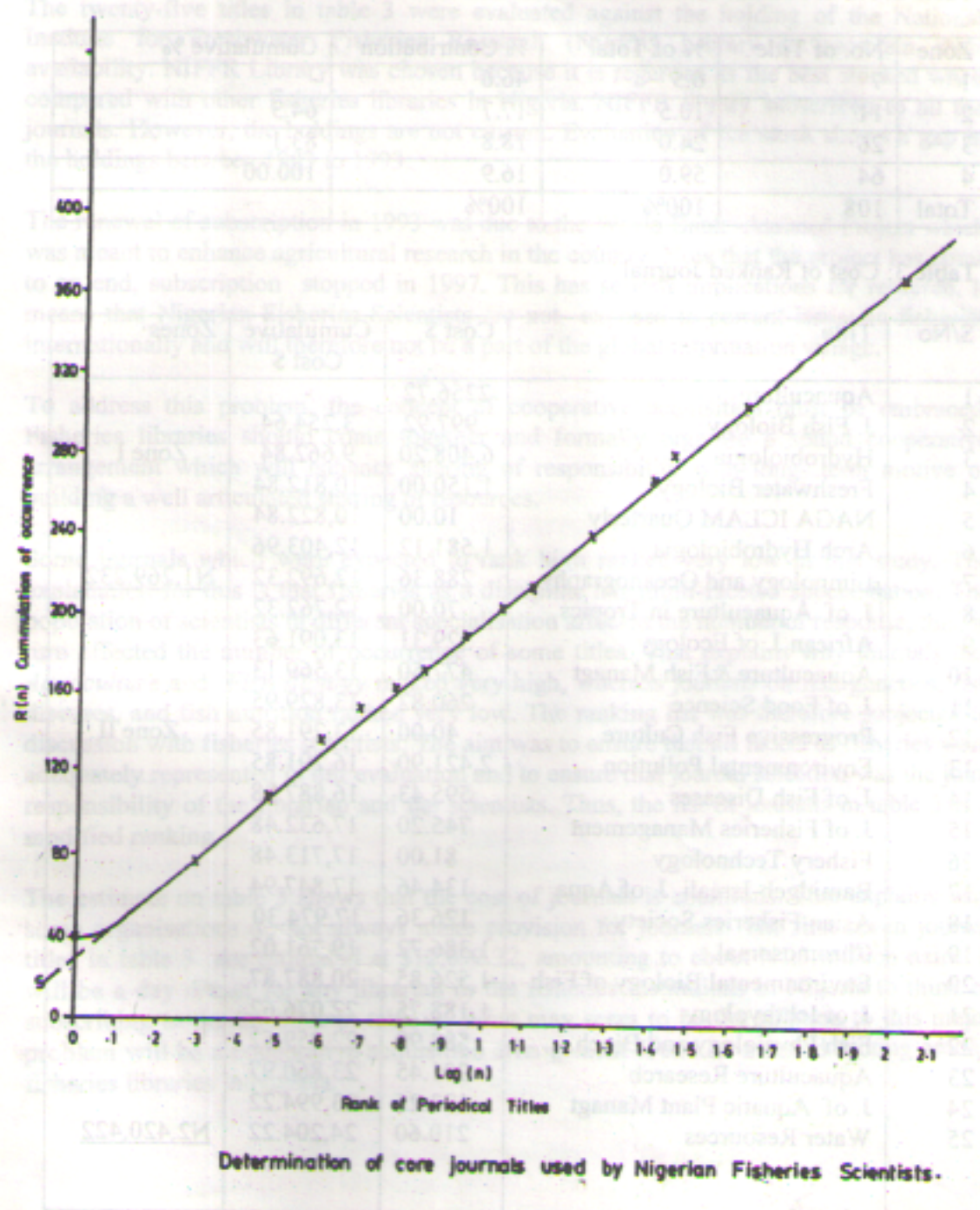


Table 2: No of Journal Titles in each Zone and their % Contribution

Zone	No. of Title	% of Total	% Contribution	Cumulative %
1	7	6.5	46.6	-
2	11	10.5	17.7	64.3
3	26	24.0	18.8	83.1
4	64	59.0	16.9	100.00
Total	108	100%	100%	

Table 3: Cost of Ranked Journal

S/No	Title	Cost \$	Cumulative Cost \$	Zones
1	Aquaculture	2256.72	-	Zone I
2	J. Fish Biology	997.92	3,254.64	
3	Hydrobiologia	6,408.20	9,662.84	
4	Freshwater Biology	1,150.00	10,812.84	
5	NAGA ICLAM Quarterly	10.00	10,822.84	
6	Arch Hydrobiologia	1,581.12	12,403.96	
7	Limnology and Oceanography	288.36	12,692.32	
8	J. of Aquaculture in Tropics	70.00	12,762.32	Zone II
9	African J. of Ecology	329.31	13,091.63	
10	Aquaculture & Fish Managt	477.50	13,569.13	
11	J. of Food Science	260.82	13,829.95	
12	Progressive Fish Culture	40.00	13,291.85	
13	Environmental Pollution	2,421.90	16,291.85	
14	J. of Fish Diseases	595.43	16,887.28	
15	J. of Fisheries Management	745.20	17,632.48	
16	Fishery Technology	81.00	17,713.48	
17	Bamidgeh-Isreali J. of Aqua	134.46	17,847.94	
18	Asian Fisheries Society	126.36	17,974.30	
19	Chromosomal	1,386.72	19,361.02	
20	Environmental Biology of Fish	1,526.85	20,887.87	
21	J. of Ichthyology	1,188.75	22,076.62	
22	Fish Physiology and Bioch.	882.90	22,959.52	
23	Aquaculture Research	901.45	23,860.97	
24	J. of Aquatic Plant Managt	133.25	23,994.22	
25	Water Resources	210.60	24,204.22	

The twenty-five titles in table 3 were evaluated against the holding of the National Institute for Freshwater Fisheries Research (NIFFR) Library to ascertain their availability. NIFFR Library was chosen because it is regarded as the best stocked when compared with other fisheries libraries in Nigeria. NIFFR library subscribed to all the journals. However, the holdings are not current. Evaluation of the stock shows a gap in the holdings between 1983 to 1993.

The renewal of subscription in 1993 was due to the World Bank -Assisted Project which was meant to enhance agricultural research in the country. Now that the project has come to an end, subscription stopped in 1997. This has serious implications for research. It means that Nigerian Fisheries Scientists are not exposed to current issues in fisheries internationally and will therefore not be a part of the global information village.

To address this problem, the concept of cooperative acquisition must be embraced. Fisheries libraries should come together and formally organise a sound cooperative arrangement which will enhance sharing of responsibility with long-term motive of building a well articulated sharing of resources.

Some journals which were expected to rank high ranked very low in this study. The explanation for this is that fisheries as a discipline has multi-faceted specialisation. The population of scientists in different specialisation affected the number of response, this, in turn affected the number of occurrence of some titles. That explains why journals like *Aquaculture* and *Fish Biology* ranked very high, whereas journals on fish genetics, fish diseases, and fish nutrition ranked very low. The ranking list was therefore subjected to discussion with fisheries scientists. The aim was to ensure that all facets of fisheries were adequately represented in our evaluation and to ensure that journal selection was the joint responsibility of the librarian and the scientists. Thus, the list of journals in table 3 is a modified ranking.

The estimate on table 3 shows that the cost of journals is enormous. That explains why some organisations do not always make provision for journals. The first seven journal titles in table 3 are estimated at \$12,692.32, amounting to about N1.3 million naira. It will be a day dream for any librarian in the fisheries institutions in Nigeria to think of subscribing to the 25 titles in table 3. What may seem to be the solution to this major problem will be a cooperative acquisition arrangement found on a sound footing among fisheries libraries in Nigeria.

Conclusion and Recommendation

The article has justified the role of applied bibliometrics in judicious selection and acquisition policy of a library. Effective cooperative acquisition among libraries of common interests seems to be the method of grappling with the problem of information explosion coupled with high prices of journals. This may be the time for libraries in Africa to group libraries of like terms for the purpose of efficient acquisition as it is currently happening in some parts of the world.

Under such a system, three freshwater fisheries libraries can use an agreed formula to subscribe to the journals in zones 1-2 listed in table 3. The ideal arrangement would be that the three libraries should subscribe to all the titles in zone one which are seven in number and are regard as core. This will give the advantage to scientists in the institutions having access to the core journals in the field. It will also mean that each of the participating libraries will need an initial sum of N1.3 million naira for journals in zone 1. There are 11 titles in zone two. Each library will be required to subscribe to at least three titles each alternately, mean that all the libraries will subscribe to 18 titles whereas each is paying for 10 titles. Increasing the number of titles subscribed to by each library will then depend on funds. By this method, library 'A' will send photocopies of content page of journals to which library 'B' does not subscribe and vice versa.

The content pages will be circulated among scientists, thereby allowing photocopy request to be made from the holding library. The more in number the participating libraries, the less the cost to the participating libraries. In a situation where each participating library can not subscribe to the seven titles in zone 1, the arrangement could be that all participating libraries pay alternately for the titles on the list. With this arrangement, each library will subscribe to at least 8 titles in table 3 and having access to 25 titles. In a situation where titles are allocated alternately and payment will lead to library 'A' paying substantially higher, a suitable and agreeable arrangement could be worked out by the participating libraries.

For this arrangement to be efficient one of the libraries should be appointed a co-ordinating library. Funds could be contributed to the co-ordinating library for ordering and getting the required titles and photocopies of table of contents to the participating libraries. For an effective cooperative acquisition, there is a need for a planning meeting of the participating libraries. Such a meeting will workout operational guidelines of the acquisition policy system. This principle is most needed in developing countries where libraries are poorly funded. The support of the management of all organisations will be highly required for this mapped out system to work.

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ISO Standards and Records Management: The Case of the Botswana Meat Commission

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Abstract

In 1997 the Botswana Meat Commission (BMC) appointed consultants to advise on ways of improving records management activities in the company. This paper presents the results of the efforts of the BMC to set up effective ways of managing its records. It also explores the use of ISO (International Standards Organisation) 9000 standards in the management of BMC records. The paper explains the steps followed by BMC and the consultants to have their records systems streamlined to meet ISO requirements and concludes by arguing that there is no way BMC could have resisted ISO 9000 certification if it was to continue being a player in the world beef industry.

Introduction

Apart from diamonds, the cattle industry has played a pivotal role in the growth of Botswana's economy. Cattle have been a source of livelihood for the Batswana since the traditional societal days. In the traditional Setswana society, families that had no cattle were given mafisa (that is, cattle given to a family that does not have the means to own them while taking care of the cattle they can milk them and use them for transport purposes, but they are not allowed to kill or sell them).

BMC, formerly known as the Bechuanaland Protectorate Abattoirs Limited was established in 1954 in response to the increased livestock production in the territory. The then Bechuanaland Protectorate Government requested the Commonwealth Development Corporation to erect an abattoir in Lobatse. At its inception three shareholders owned the abattoir with 50% of the share capital held by the Colonial Development Corporation. The Bechuanaland Protectorate Government and the Livestock Producers Trust each held 25% of the total share capital. A subsidiary company of the Bechuanaland Meat Commission was formed in the same year in the name of the Export and Canning

Company Limited (ECCO). The Bechuanaland Protectorate Abattoirs Limited owned 60% of the shares of this company while Mr. C. Hurvits owned the remaining 40%.

In 1963 a Commission of Inquiry into the affairs of the Bechuanaland Protectorate Abattoirs Limited recommended that the company be converted into a statutory corporation. As a result the Bechuanaland Meat Commission was established through Law Number 22 of 1966. As this was the year that Bechuanaland Protectorate gained independence and became Botswana, the name of the commission also changed to Botswana Meat Commission. That same year, the Botswana Meat Commission bought the share capital owned by both the Colonial Development Corporation and the Livestock Producers Trust. It then went on to buy also the shares owned by Mr. C. Hurvits in the Export and Canning Company. Since its inception, BMC has been a non-profit making organisation which is expected to pay income tax following specially laid down procedures. BMC is also expected to pay back to livestock producers any surplus revenue as bonuses for the livestock supplied to it. This measure was introduced to promote livestock production in Botswana.

In 1973, BMC products were allowed entry into the European market. Being one of the many competitors for a share of this market, BMC had to convince its customers that its products were of a high quality. The way to do this was through accreditation with a certifying body for ISO 9000 compliance.

BMC has three branches. They are the Lobatse abattoir, the Francistown abattoir and the one in Maun. Presently, the first two are operational whilst the last one has been temporarily closed down due to the culling of cattle in this area following the outbreak of the *contagious bovine pleuropneumonia*. The Lobatse abattoir has a killing capacity of 800 cattle a day whilst Francistown is 400 and Maun was 150. BMC is divided into the following departments:

- Livestock department whose responsibility is the procurement of cattle from livestock producers.
- Production department whose responsibility is to slaughter cattle, debone the carcasses, store and package the beef products.
- Quality department whose responsibility is to ensure that BMC produces quality products in line with ISO 9000 standards.
- Marketing department whose responsibility is to market BMC products.
- Engineering department whose responsibility is to ensure that BMC machinery are serviceable and in good working condition.

- Finance department whose responsibility is to manage the finances of the corporation.
- Tannery whose responsibility is to tan the livestock skins.
- Stores and Supplies whose responsibility is to purchase and supply items needed to run the affairs of BMC.
- Human Resources whose responsibility is to employ BMC staff and ensure that a conducive welfare is in place for them.
- Corporate Services whose responsibility is all administrative issues concerning BMC.

Records Management Initiatives at BMC

Without proper records management initiatives, organisations are likely to face problems of high paper proliferation in their offices and experience retrieval difficulties. Even with the right records management programme, some organisations still face problems of retrieving appropriate records when needed.

BMC operates a decentralised registry system with central control. That is, each department has its records maintained by a personal secretary and a records management officer whose responsibility is to supervise all records keeping activities of the commission. Ever since its establishment, there is little evidence to suggest that BMC has ever initiated a company-wide records management programme. It was only in 1996 that BMC came to realise that it had problems with retrieving records it had created, received and maintained. Internally, the organisation was experiencing problems in the storage and retrieval of its recorded information. Externally, BMC having decided to operate a quality management system was under pressure to institute and implement measures that were in conformity with ISO requirements. In particular, there was pressure from external ISO auditors who recommended that BMC initiate an effective quality records management programme in compliance with ISO 9000-9004 requirements. As the pressure mounted from the auditors, BMC realised that their records were in a state of total disarray. Recorded information that was known to exist became hard to retrieve. Files would be created without any titles; filing was hardly done, and letters would be acted upon when not filed. Moreover, BMC was under considerable pressure from ISO auditors to ensure that their records were managed in accordance with the provisions of the ISO 9000 standards. Specifically, section 4:16 of ISO 9002 requires that BMC, as a certified organisation, establish procedures for the "identification, collection, indexing, access, filing, storage, maintenance and disposition of quality records" (Botswana Standard, 1998). What the standard proposes is that any certified company should put into place a records management programme that would ensure proper management of the documentation created as a result of the business

activities carried out. Section 4:16 further decrees that "Quality records shall be maintained to demonstrate conformance to specified requirements....." All quality records should be legible and shall be stored and retained in such a way that they are readily retrievable in facilities that provide a suitable environment to prevent damage or deterioration and to prevent loss. Retention times shall be established and recorded (Botswana Standard, 1998).

The interpretation BMC derived from this section was that it needed a records management programme. The organisation now realised that to remain certified they were to conform to all the requirements of the standards. Although ISO records requirements are not mandatory, non-conformance to them would impact negatively on BMC's overseas markets as most of their foreign customers would only conduct business with ISO certified companies. As the organisation had no professional knowledge in establishing records management programmes, the Botswana National Archives and Records Services (BNARS) was approached. Whilst the responsibility of BNARS in terms of records management is to "serve as a focal point for efficient management of all operational records within government" (Association of Commonwealth Archivists and Records Managers, 1992) it nonetheless was to assist parastatals as well. When this approach was made, BNARS had a serious shortage of personnel. Hence, the anticipated assistance was never forthcoming.

Since the company lacked a fully trained records manager and was keen to meet all ISO records keeping requirements, it opted to engage the services of professional records managers from the University of Botswana to initiate and implement an effective and operational records management programme. Initially, the terms of reference for the consultants were to develop a records retention and disposal schedule for BMC records. However, after consultations with the consultants, it was agreed that the full benefits of a quality records management programme would only be realised when all the phases of the records life cycle were addressed. In order to achieve the task before them, the consultants set about three objectives for themselves. These were:

- To have a series of discussions with BMC officials so as to understand the nature of the records management problems they were faced with.
- To inspect BMC records storage facilities, retrieval tools, procedures for handling and retrieving records with a view of updating them.
- To ensure that BMC managed its records well to comply with all records management requirements of ISO 9000.

In order to fully undertake the first and second objectives, the consultants adopted a records survey approach. This system availed them the opportunity of "a comprehensive gathering of information about records created by or received (Botswana National Archives and Records Services, 1992) by an organisation. The approach was in two facets. The first concerned interviews with both action officers and registry staff. Interviews with action officers were intended to enable the consultants understand the functions of the various departments of BMC; the nature of records each department created, received and used; the frequency of use of the records; the type of information that was shared between departments and other organisations with whom BMC co-operated with, and lastly, get to understand the user's perception of the services rendered by the registry and the secretaries. Other interviews with registry staff which enabled the consultants to know the types of records kept, procedures for opening and closing files; file titling; storage, retrieval and disposition procedures and other matters affecting the operations of the registry (Association of Commonwealth Archivists and Records Managers, 1992). The interviews were followed by a physical inspection of the records storage areas including the registry and the pseudo-registries maintained by the secretaries. The intention of this survey was to verify data collected during the interviews. The starting point deviated from the norm of first surveying the current records and then shifting attention to the non-current ones. The two ran concurrently. The consultants would survey a department for both the current and non-current records. The physical surveys of the departments were intended to gather data on the quantity and quality of records each department had, the types of records maintained, rate of accumulation of the records, storage conditions and that of the equipment used. Records control systems were also evaluated. The idea of the evaluation was to understand how mail was handled, how records were created and classified, how these were retrieved, how file movement was controlled and the availability of records retention and disposal schedules. Initially, the survey was restricted to the Lobatse abattoir. Later, however, it was extended to the Francistown abattoir where the records management situation was similar.

Survey Results

The results of a 1997 Records Survey conducted by the consultants revealed that the importance of records was not fully appreciated at BMC and that the management of records was done on an ad-hoc basis. The trend was that officers who had picked up records management concepts put them to use in their respective departments. When these officers left the departments, the systems collapsed. What then resulted was the development of pseudo-records management systems that relied a lot on the people who had set them up. Moreover, each department used systems that differed from those of sister departments. Perhaps the greatest factor that seemed to frustrate the efforts of

these officers was the high accumulation of paper records. Whenever the accumulation became uncontrollable the records would be boxed and dumped into a storeroom along with redundant office equipment. By the time the consultant undertook the survey, it was virtually impossible to retrieve any information from the so-called "archives store".

The results of the survey also revealed that the officer appointed to the position of Records Management Officer was not a fully trained records manager. Therefore, the officer was not well-prepared to professionally handle all the records management problems faced by the commission. Meeting records management requirements as stipulated by ISO 9000 series was bound to be a major problem. The survey results further showed that the creation of records at BMC was done without following any conventions. Records that were created did not have reference numbers. Some of the files did not even have file titles. Those that had file titles had broad ones that led to all related issues being filed in them.

File maintenance and use was another problematic area. Procedures that acted as a benchmark for the maintenance and use of the files were non-existent. Incoming mail that was processed and ready for action was attached to the respective files prior to submission to action officers. Replies to these in many instances never found their way into files. The result was that files had an incomplete account of what might have transpired. In reality this led to the proliferation of loose sheets of paper that found their way into the nearest file or files having similar titles. Information that was known to exist was not easily retrievable. The filing equipment in use was no longer serviceable, making the security of the records questionable. The main records stores were more of a dumping grounds for records. There were no procedures that were followed when records were deposited into these storerooms. The shelves were so overfilled that boxes occupied any available space on the floor. In one of the BMC branches the shelves had collapsed and files were strewn all over the floor. The storerooms also had no light and electricity had to be tapped from a nearby building.

Appraisal of records was another problematic area. No procedures were in place to assist in the appraisal of records. In most instances records were removed from the offices when no space was available to store them. What was done was to remove the "old records" either to the storeroom or have them burnt. Some of these records found their way to an in-house records centre of the Botswana National Archives and Records Services. These records were sent to this facility by the then Librarian and there was no record of what had been deposited. It was only in 1997 that the Records Management Officer came to know about them having visited the National Archives and asked for a copy of the list that reflected what had been transferred from BMC.

Steps to Rectify the Situation

In a bid to address the above mentioned problems the consultants did the following:

- A records retention and disposal schedule was designed and approved for the commission. The schedule now requires revision as it has been established that some types of records were erroneously missed or new types of records are now being created.
- Appraisal of records was undertaken. Records selected for preservation were listed, cleaned and boxed. Those not worthy of permanent preservation were destroyed through burning.
- The main records store was turned from a 'dumping' ground into a records centre and procedures developed to facilitate its smooth operation. The same was done for the Francistown abattoir.
- A decongestion exercise was carried out on all departmental records including the Francistown abattoir.
- A new keyword classification system was developed to facilitate the filing and retrieval of current records.
- Training of secretaries from both the Lobatse and Francistown abattoirs was held in Lobatse. During this training the secretaries were imparted with skills of using the keyword classification system and using the records centre and also the interpretation of the records schedules. This training was followed by one for the executive officers of the commission who were also introduced to the use of the new systems.
- A new records storage facility was built and fitted with new shelves.
- A proposal to establish an information resource centre to house the records centre, a library and an archive is still under consideration.

- Another recommendation was made to train the Records Management Officer at least to degree level.
- The creation of a position of Records Officer in the branch abattoirs was made and plans are underway to recruit a Records Officer for the Francistown Abattoir.

The Way Forward

Several lessons have been learnt from this project.

- Firstly, it has been observed that there should be a clear understanding that ISO requirements are desirable but are not mandatory. However, any organisation seeking ISO accreditation should develop its own policies and procedures. Once approved, the organisation must operate within these policies and procedures. Failure to do so will be considered non-conformance. Under ISO requirements where non-conformance occurs, explanations must be provided or requests for exemption sought.
- There will be initial resistance from some employees who do not see the need for change. Regular consultations and discussions on the benefits to be realised must be continued.
- Trained staff are needed to implement a quality records management system. If these are not available, consultants are an option. It would be desirable to have trained staff so as to ensure continuity of the quality records management programme. Training is essential for all employees to understand and appreciate the programme.
- It was also observed that it is important to involve the managers at each stage of records management programme development. This way, they would feel that they own the system.
- The success of any quality records management system is based on the understanding of the functions and activities of the organisation. This understanding will lead to the understanding of the types, quality and quantity of records created, maintained and used.

- It was noted that successful implementation of a quality records management programme requires total commitment from the top management of an organisation. Not all top management will accept changes easily. It was observed that where managers accept the changes, model systems should be implemented there to serve as models for others to see.
- The continuity of the programme requires that there should be regular review and monitoring. Already BMC is reviewing the records retention and disposal schedules.
- Finally, every activity of the organisation should be documented and procedures should be created to reflect the activities.

The role that records play in most organisations is never fully realised. The realisation in most instances occur only when records cannot be found or are "conveniently lost to subvert evidence, or when they are subpoenaed, to be used in pending litigation".

The ISO 9000 family of standards lays emphasis on the role recorded information plays in ensuring products that are of quality. This is so since it is impossible to determine product quality by simply looking at the product. It is through records that a producer can show that his product has attained the level of quality as prescribed by the customer. Accreditation to ISO 9000 has enabled companies to identify any deficiencies that may exist in their products. This therefore results in these companies making continuous improvements as a way of assuring customers of their commitment to continue providing quality products. Accreditation to ISO 9000 further gives a company international recognition as being committed to quality. This then proves to the customer that a company's products have achieved consistency and dependability. All these will be possible if the companies so accredited will keep quality related information that "is critical to corrective actions, quality planning, continuous improvement and design reviews...." Therefore, the proper recording and storing of quality data is critical to a successful ISO 9000 system.

BMC produces beef products for both local and international markets. Since the company does not enjoy monopoly in this trade, it is tasked with producing quality products that would compete with products from other world abattoirs. In support of this, the Executive Chairman of BMC said "The global market is fiercely competitive since the customer has a free choice of what to buy, where to buy and from whom to buy (Mannathoko, 1996). Records are the only gateway of showing customers that BMC does produce beef

products that meet international quality requirements. In this aspect, Brumm (1995) sees recorded information as providing evidence on how a product was made. Hence, records contain evidence that may exonerate BMC or hold it accountable. By attaining ISO 9000 certification and employing consultants to streamline its records management activities, BMC wanted to provide confidence to its clients. This it did through the availability of records that can prove to clients that BMC produces quality products and that it intends to continue with the production of products that are of the same quality if not better. Through records BMC also demonstrates to its clients its ability to produce products of high quality (Mannathoko, 1996).

Conclusion

As the world is increasingly becoming a global village, there is no-doubt that fierce competition for markets is on the cards. The survival of the fittest type of platform will be the order of the day. What better way to display fitness by organisations than to have proper documentation of their products and seeing to it that these documents are well utilised and maintained.

The advent of the global village is bound to force organisations into producing quality products. To ascertain quality, organisations are expected to have quality records. Quality records will be none other than those providing evidence of how the products came into being. ISO 9000 series has been designed to cater for this. Therefore, in this competitive market driven world economy, BMC could not resist the opportunity brought about by being ISO 9000 certified. To this end, the BMC Executive Chairman is of the view that through the "highly acclaimed and internationally acceptable system, BMC would not only give assurance to its present customers and retain its market share but would also be able to attract new customers since it would have a competitive edge in assuring its potential customers of consistent quality products (Mannathoko, 1996).

To comply with section 4:16 of ISO 9000, companies require well-trained records managers. Records management is a specialised field which can only be handled by experienced professionals. There is no way BMC could have achieved these results without expert advice. Also required to sustain the system is long-term commitment. Establishing a new system is not enough. It must be supported by a team of experts. In this regard, management and the records management staff must co-operate.

In conclusion, there is no doubt that the status of records management at BMC has been raised. Records management now falls directly under Corporate Services.

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SHORT COMMUNICATIONS

Employee -Driven Staff Training and Development : The University of Natal Libraries (Durban) Experience

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Abstract

This paper examines the concept of staff training and development within the South African context. The changing labour legislation in South Africa makes it mandatory for the employer to provide training and development. However, staff have an important role to play in staff training and development. The paper gives an account of the role that the staff can play, via their unions and worker organisations, in developing themselves.

Introduction

Libraries are currently undergoing massive and unprecedented change. New technologies now available mean that a user or researcher can gather information with the stroke of a key on a computer keyboard. Library catalogues can be accessed directly from offices of individual users. Document delivery via fax or the World Wide Web is a reality. This means that the researcher may not even have to physically enter the library to gather materials. Not only are reference services affected by applications of new technology, so is 'book' circulation and the acquisition of other library materials. Cataloguing systems are also automated in many libraries. These new systems, on the one hand, increase efficiency among library employees and on the other hand, creates a void in the knowledge of library process and other library related activities. Technology also provides users with new methods of using the library that are in some cases easier (Shoaf 1996).

More and more libraries are announcing and/or advertising positions that require individuals who can set up and troubleshoot information networks. When the author graduated fifteen years ago, this was clearly the work of computer experts. Now, in addition to being able to use the resources of a library, negotiate the reference interview, and teach how to read the table of contents, library personnel must also be able to install and operate hardware and software. Where is the training for librarians that teaches these skills coming from?

While this implies the need to develop professional librarians, the same need also exists for support library staff members who make up the largest proportion of all library employees and who have been affected by the general evolution of library processes and automation systems now adopted in most libraries (Shoaf 1996).

It is absolutely critical that libraries have staff training and development programmes to ensure that staff are equipped to deal with changes to their working environment. Staff training and development will play a key role in ensuring that the demands of a dynamic profession are met. Before engaging in discussion on the issue of staff development, it is important to place into context the evolution of the concept staff training and development within the University of Natal Libraries (Durban), that is, how it developed from a form of protest action to structured programmes for development. There have been numerous induction courses and other work related training programmes which were put together by the management of the University of Natal Libraries (Durban). These involved, amongst others, orientation programmes for new staff, computer courses such as word processing packages, Internet, GroupWise, and simple efficiency related courses such as how to answer the telephone. The discussion in this article, however, focusses on staff training and development programmes that were organised by the library staff themselves, and not management.

Towards the end of 1990 there was a change in library management, and with this change came a change in management style. The minimum educational qualification requirement for the post of library assistant (persons employed at the issue desk or in inter-library loans or in acquisitions) was a matriculation certificate (grade 12 or twelve years of schooling).

The new library management recognised and accepted that there was potential among these categories of workers who had served the library well for many years. Everyone one of them come from a disadvantaged background. Library staff organised themselves and negotiated with management. Management accepted that something had to be done for these categories of library staff who basically had no career path in the library unless

they went back to school. Together, library staff and management, initiated a period of training and upliftment with the intention of promotion. The library actively applied the principles of equal employment opportunities (EEO) and affirmative action (AA) even before the University had crystallised such principles. The principle of co-determination was being applied in the library.

Thus, the first step towards staff development came from the recognition that there was potential among the library attendants. That resource was tapped and developed. It was developed in the sense that the staff were given the opportunity to skill themselves during their free time under the supervision of more senior staff. This process had the support of management.

Burrell et.al. (1997) states that it is important for any staff development programme to be regarded primarily as a motivational instrument. Further, it is a tool to facilitate development and growth and a tool to aid individuals to realise their potential. To ensure that the staff were not overwhelmed by returning to the studying environment, it was decided to enrol the staff for a computer course at matriculation level N3 (This is the equivalent of the twelfth year of schooling in a technical stream of study). Furthermore, it was important to make the course as inexpensive as possible so that as many of the 'lower category of staff' could afford to enroll.

Negotiations were conducted with a local technical college to offer a computer course at N3 level for staff from the University. Keeping the group together was important for support and encouragement, and the development of closer working relationships. After much negotiations, the University subsidised the computer course. At the end of the negotiation process, nineteen members of the library support staff were enrolled for the course.

The aims of the above exercise, from the point of view of the co-ordinators, were multi-fold. Firstly, there was a need to reintroduce formal studying and formal training to staff who had not engaged in formal studying for a long time. Secondly, there was a need to rejuvenate staff motivation in the workplace. Thirdly, it was important to get staff to work as a team. Fourthly, there was a need to help staff to broaden their knowledge base.

Did the programme succeed? Yes it did. Most of the staff continued with studying, some of them liaising directly with the technical college to continue with N4 (which is the National Diploma in Library and Information Studies. It is a three-year full-time diploma). Of the nineteen staff members who enrolled for the above course, thirteen passed with distinction. Only one person dropped out of the course.

The next project in this staff training and development exercise was to get the staff to enroll for library and information studies (LIS) qualifications. There was an intense period of trying to create a group, within the greater Durban region, that would enroll for the National Diploma in Library and Information Studies. There were discussions with heads and individuals from libraries of local tertiary educational institutions as well as the large municipal library services. The management of the University of Natal Libraries (Durban) committed itself to making its premises available for conducting lectures. However, the problem of staff without matriculation certificate enrolling for the programme was still a major problem. The co-ordinators began negotiating with a local Technikon (polytechnic) which offered the National Diploma in Library and Information Studies. The negotiations centred around three issues. The first issue was the viability of the Technikon offering the programme part-time (that is, after normal working hours). The second issue was the acceptance of prolonged work experience (prior learning) in a library environment as an alternative to a matriculation certificate. The third issue related to the minimum number of students required to start a part-time class. With regard to the latter, the co-ordinators had discussions with heads and individuals at local libraries to ensure that there was a minimum number and more to start a part-time class.

Studying via the local technikon was the preferred option. This was the preferred option primarily because staff could attend formal lectures on a regular basis. The alternate option was to engage in discussions with Technikon South Africa (TSA), another institution offering the National Diploma in Library and Information Studies. Technikon South Africa is a distance learning institute which meant that the staff would have to study through correspondence. The co-ordinators considered this option problematic because the culture of studying among the library staff concerned was still in its early stages of being rekindled. The computer course had been their only formal studying in a long time. It was felt that continuous attendance at lectures would promote the culture of studying and, more importantly, direct contact with the lecturer would ensure a greater depth of understanding. After much negotiation between the co-ordinators and the local technikon, the issues relating to part-time classes and recognition were resolved. The University of Natal Libraries (Durban) staff registered with the local institution (which is M.L. Sultan Technikon) for the National Diploma in Library and Information Studies. Unfortunately, staff from the other libraries pulled-out of the programme which meant that the issue of minimum class number became a problem again. The whole project collapsed. However, the staff did not throw in the towel.

After much deliberations, it was decided to re-examine the TSA option. The recognition of prior learning as a criterion for acceptance was an unresolved issue. After considerable negotiation, TSA accepted prior learning as an alternative to the matriculation certificate. The University supported this new 'venture' and offered to

subsidise the programme. The library of the University of Natal (Durban) enrolled twelve members of staff at TSA in April 1996. Library management was supportive and provided accommodation in the form of an office for staff to study in and use as a library within the larger library. Computer facilities were made available and most importantly, there was commitment from most of the professional and para-professional staff to provide assistance. However, the co-ordinators were concerned about the fact that staff were engaging in formal studies without tutoring support. The support for the programme was phenomenal with fellow members of staff who freely gave their time and energy to generate income to sustain the programme. Members of staff, both professional and support staff, worked together on income generating projects. Staff used their relevant expertise to prepare bibliographies for publication, set-up libraries for non-governmental organisations and serve as consultants using their Peromnes expertise in assisting with restructuring at sister institutions. Income from this consultancy work was invested in contracting-out lecturers, and buying reading materials for library staff who were registered for the National Diploma in Library and Information Studies.

Unfortunately, three members of staff dropped out of the programme mostly for personal reasons. Of the remaining nine members of staff, there were three members of staff who attained distinctions in both subjects enrolled for in their first year of study. One of those staff members who had dropped out of the programme was considered to have the potential to complete the programme. After a great deal of probing, it was realised that he was not very happy to study LIS. He preferred computer technology and its application to libraries. At a later date, he was encouraged to go out and seek a computer course that would be beneficial to himself and the library.

In February 1997, the above mentioned member of staff came back with a proposal to do a computer course at a local computer college. The course involved preparing the candidate for a job as a computer technician. A motivation was put forward to library management which accepted its validity. Three members of staff were sent on the course which ran for twelve weeks. Their role, over and above learning to repair and trouble-shoot, was to evaluate the course and see how the course could be tailored to develop as many staff as possible from the library. These three members of staff were impressed with the standard of the college and the programme.

In 1998, the Library registered twelve members of staff with the same technical college for the 'A plus computer course' (this is an international computer qualification with a technical bias). Lectures were conducted on a Saturday. At the end of the of the programme the staff had to write two examinations, one a theory paper and the other a practical paper. Eleven of the twelve staff members wrote the examination and passed

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while the outstanding person chose not to write as he was at the time actively involved in salary negotiations with the University as part of his trade union responsibilities.

The cost of the course was 'crippling' for the staff concerned. For reasons of affordability, it was decided to approach the lecturer concerned with the request that the University provide the venue and equipment for a course designed for library staff at a tertiary institution. With the assistance of the Information Technology Department at the University of Natal, a course was designed. The course began in May 1999 with a formal examination in November of the same year. Fifteen members of staff were enrolled for the course. For the first time, professionally qualified staff were 'allowed' to participate in a development programme. There was a downside to this course in that the course was not part of the curriculum of an accredited learning institution. The course was put together as an independent programme and as such there was no official body to endorse the certificate issued. All the staff could get, in terms of a 'qualification', was a certificate of attendance countersigned by the University's Staff Training and Development Department. It must be said that the University played a major role in ensuring the success of this programme. The University gave a sixty per cent subsidy for the course. Over and above providing such a large subsidy, the University made the facilities available free of charge including the venue and use of computer equipment.

Conclusion

In terms of the theoretical application of the staff training and development process, it would seem that the process was 'haphazard'. However, what the programmes did achieve were renewed motivation, decreased absenteeism, development of computer skills which enhanced work performance, increased mobility within the organisation and possible mobility within the open labour market. According to the earlier discussion in this article, these are elements of a good staff training and development programme. In terms of employment equity and skills development, the programme has set a strong foundation for the future application of the recently legislated Employment Equity Act and Skills Development Act. The initiatives also highlight the role that professional bodies and unions can play in the development of fellow colleagues and the profession as a whole, an area which needs to be researched.

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The Botswana Collection : An Evaluative Study of the University of Botswana Library Special Collections

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Abstract

This study was conducted to investigate the awareness and usage of the Botswana Collection by the students of the University of Botswana. A questionnaire survey was utilised for data collection from the students in all the five faculties of the University of Botswana. The study showed that the awareness of the Botswana Collection and its information services provided, and the usage of the information materials, was high amongst the faculties of Education, Humanities, and Social Sciences. It was found that the rate of awareness of the Botswana Collection and its information services provided was low in the Faculties of Science and Engineering and Technology. The majority of the students from these two faculties did not use the Botswana Collection because either the materials were not relevant to their learning, and research needs or they were not aware of the materials and the services provided by the collection.

Introduction

Financial constraints have put pressure on libraries to emphasize the selection of quality materials and the provision of quality service. These factors have forced universities to justify the existence and maintenance of certain programmes and departments in terms of their immediate value, because of limited financial resources. Gakobo (1985) opined that the only viable justification for the acquisition and maintenance of special collections in academic libraries is in their ability to support the teaching, learning, and research activities of their parent institutions.

The concept of special collections in Britain, Germany, and United States of America developed around the late 16th century, early 17th century and early 19th century respectively when some books were set aside on the basis of their rarity, value or fragility (Drew and Dewe, 1992).

Feather (1994) indicates that special collections in academic libraries play an important role by supporting the teaching, learning and research activities of the institutions through the acquisition of valuable and relevant sources of information in terms of their relation to academic programmes and research needs. As a result special collections have been in existence for a long time to meet the diverse information needs of increasing number of students and to support teaching and research.

African countries have also followed the trend by establishing and developing special collections in public and university libraries.

The University of Botswana Library

The special collection at the University of Botswana Library is known as the Botswana Collection. The collection, has a mission to meet by acquiring and making available and accessible valuable materials for the purpose of supporting the teaching, learning and research needs of the University of Botswana. The Botswana Collection forms a special collection on Botswana and the Southern African Development Community (SADC) region. Materials in the Botswana Collection are in various formats in the form of current and retrospective information sources. The services provided include assistance to readers, reference services, photocopying services and preservation of materials.

Although it is necessary to preserve and conserve materials for the future, their accessibility and immediate use by the clientele is very crucial. If the information resources are not used by students and teaching staff, the learning and research mission of the University may not be fully realised. It is, therefore, important for the Botswana Collection to identify the information needs of its clientele in order to provide the required materials as well as justifying its existence by meeting the University's goals of learning and research.

This study was to establish the extent to which the students of the University of Botswana were aware of the Botswana Collection and its services and to establish the extent to which the Botswana Collection catered for the information needs of students of the University of Botswana.

Methodology

This study was designed to cover a representative sample of students from the Faculties of Education, Engineering and Technology, Humanities, Science and Social Sciences. At the time the study was carried out (academic year 1996/97) there were five faculties. The student population included undergraduate and graduate students, both full-time and part-time.

In order to obtain a representative sample of the whole student population, a random sampling technique was used by first obtaining a stratified sample for students. A student list was stratified into sub-parts of 1st, 2nd, 3rd, 4th and 5th year of study. Of the 354 students who received the questionnaire, 193 (54.5%) completed and returned them. The questionnaire was distributed through individual lecturers to students in their respective classes. Also, copies of the questionnaire were distributed through fellow students in the same programmes as the sampled students.

Research Findings

Awareness of the Botswana Collection and its Information Services

Awareness of the existence of the collection and the services offered is crucial for students to consult the materials. Respondents were asked whether they were aware of the Botswana Collection and its information services, as well as whether they consulted the Botswana Collection for their information needs respectively. The majority (86.5%) of the respondents stated that they were aware of the Botswana Collection, and also another 77.2% of the respondents were aware of the information services provided by the Botswana Collection. On the other hand, only 69.4% of the respondents consulted the Botswana Collection for their information needs.

Table 1: Student Awareness of Information Services
(Number of Respondents = 193)

Faculty	Awareness of Botswana Collection	Awareness of Information Services	Consultation Botswana Collection
Education	19	19	16
Engineering and Technology	10	5	5
Humanities	52	49	47
Science	25	20	11
Social Sciences	61	56	53
Total	167 (86.5%)	149 (77.2%)	134 (69.4%)

Students' Reasons for Using the Collection

When respondents were asked why they used the Botswana Collection, a variety of reasons were given. It was found that a large percentage (78.4%) of students used the collection for assignment purposes, while 33.6% used the collection for research purposes. Only 5.2% of the respondents used materials for general knowledge. The survey revealed that except for the Faculty of Science, the percentage of students who used the materials for assignments purposes was high in all the faculties. The majority of students used the Botswana Collection materials mainly for assignments purposes.

Table 2 : Reasons for Use of Materials
(Number of Respondents = 134)

Faculty	For assignment purposes	For research purposes	For gaining knowledge
Education	15	10	0
Engineering and Technology	4	2	1
Humanities	40	11	0
Science	1	3	6
Social Sciences	45	19	0
Total	105 (78.4%)	45 (33.6%)	7 (5.2%)

Types of Materials Normally Used

The student respondents were asked to state the types of materials they normally used in the Botswana Collection. The findings show that a high percentage (63.4%) of the students used books, pamphlets etc for their information needs, followed by 61.9% who used government publications, while 48.5% of the respondents used theses and dissertations. The least used types of materials were local newspapers (25.4%), press clippings (11.9%), SADC materials (16.4%), and audio/visual materials (8.2%).

Table 3: Types of Materials Normally Used by Students
(Number of respondents=134)

Types of information materials used	Number of respondents	Percentage
Books, pamphlets etc.	85	63.4%
Government publications	83	61.9%
Theses and dissertations	65	48.5%
Local newspapers	34	25.4%
SADC materials	22	16.4%
Press clippings	16	11.9%
Audio/visual materials	11	8.2%

Conclusion

The Botswana Collection, being a special collection in an academic library, has an important role to play by supporting the learning and research activities of the University of Botswana. This role is realised through having relevant information resources available and easily accessible to the students. The students, on the other hand, have to be aware of both the collection and its information services for the above role to be realised. This research established that the majority of students were aware of the Botswana Collection and most of them were also aware of the information services provided. Furthermore, the research established that most of the students consulted the Botswana Collection.

Again, the study has shown that a large number of students used the collection for learning purposes while doing their assignments while a number of them used it for research purposes. It has been established therefore that the role of the Botswana Collection which is that of providing support for learning and research, is generally being fulfilled. In view of the low level of awareness, it is recommended that the Botswana

Collection should carry out more user awareness programmes about the Collection and its information services especially for the faculties of Science and Engineering and Technology.

New Publication

References

Introduction to Library Science by B.B. Edoka. Owerri: Papyrus Publishing.

Drew, P.R. and Dewe, M.D. (1992) Special Collection Management: The Place of Printed Ephemera. *Library Management*, 13(6) 8-14.

The book is intended to introduce the reader to the essential components of
Feather, J. (1994) Special Collections in the University Library in Harris, Colin (Ed.) *The New University Library: Issues for the 90s and Beyond*. London: Taylor Graham. pp. 19-30.

Gakobo, J. (1985) The Role of the Special Collection in the Academic Library. *Types of International Library Review*, 17: 405-418.

Classification, Cataloguing, Shelving and storage of books, Reference and information sources, Service to library users, Resource sharing and information networks, Computer application, Management: Organisation and personnel. The book is comprehensively indexed.

For further information about the book, contact Prof. B.B. Edoka, Department of Library Science, University of Nigeria, Nsukka.

New Publication

Introduction to Library Science by B.E. Edoke. Onitsha (Nigeria): Palma Publishing and Links Company, 2000, 191p. ISBN 978-43651-7-1. Price : US\$15.50.

The book, written essentially to introduce the reader to the essential components of library science, is easily readable, as it can be easily be comprehended by a layperson with no formal education in library science, as well as students in various library and information science courses.

The book is divided into twelve chapters. These are *Brief historical survey, Types of library, Acquisition of information materials, Preliminary book processing, Classification, Cataloguing, Shelving and storage of stock, Reference and information sources, Service to library users, Resource sharing and information networks, Computer application, Management: Organisation and personnel*. The book is comprehensively indexed.

For further information about the book, contact Prof. B.E Edoke, Department of Library Science, University of Nigeria, Nsukka.

Professional News and Events

Professor Lor appointed National Librarian in South Africa

Professor Peter Lor was recently appointed the first National Librarian of the National Library of South Africa. It will be recalled that the State Library, Pretoria and the South African Library, Cape Town were merged by an act of parliament to form the National Library of South Africa. Prof. Lor has contributed immensely to the library and information profession in Africa. He was one of the three people that pioneered the African Libraries listserve; he was also instrumental to the unification of the various professional library associations that were formed during the apartheid era, into one single professional association. Prof. Lor has served as an external examiner to many universities in the Southern African region. Prior to his appointment, he served the profession in various capacities. He served as the University Librarian of the University of Bophuthatswana (now University of the NorthWest), Professor of Library and Information Studies at the University of South Africa and the Director of the State Library, Pretoria. Prof. Lor has written extensively. We wish him a successful tenure.

Swets Subscription Service and Blackwell's Information Service Merge

The merger between the two took place in early 2000. As a result of the merger, the two organisations have integrated their system and services. The new organisation is now known as Swets Blackwell.

Postgraduate Programmes in Information and Knowledge Management at Stellenbosch, South Africa

The University of Stellenbosch, South Africa has commenced the Master's degree in Information and Knowledge Management and BA Hons Information Science, in recognition of the importance of the information sciences for the successful integration of private and public sector enterprises in South Africa into the global knowledge economy. Both courses will be based on two short concentrated lecture blocks of one week each per year complemented by computer assisted group work and communication using Webs platform and voice over Internet technology. Potential students are expected to have

access to e-mail and the Internet. For further information, contact Prof. Ben Fouche, Department of Information Science, University of Stellenbosch, P/Bag X 1, Matieland 7602 Stellenbosch, South Africa, bf@maties.sun.ac.za

Forthcoming Conference and Book Fair

August 3- 11, 2000 Harare, Zimbabwe. The annual Zimbabwe International Book Fair will take place from 3rd to 11th August 2001. The Book Fair theme is *Transformation* while the country focus is *Senegal*. The Indaba theme is *Changing Lives: Promoting a Reading Culture in Africa*. For further information, contact ZIBF, P.O. Box CY 1179, Causeway, Harare, Zimbabwe. Email: ZIBF@samara.co.zw

August 18-24 2002, Glasgow, Scotland. The 68th IFLA General Conference and Council will be held from 18-24 August 2002. The conference theme is *Libraries for Life: Democracy, Diversity and Delivery*. For further information, visit IFLA 2002 Conference web site. <http://www.org/iv/ifla68/>

AIMS AND SCOPE

African Journal of Library, Archives and Information Science is established mainly to provide a forum for librarians, archivists, documentalists, information scientists and other information related professionals in Africa to report their research findings but with emphasis on African setting. The Journal is refereed by distinguished scholars. Emphasis is on empirical research; however manuscripts of high quality on theoretical aspects of the three information related disciplines will be considered for publication.

NOTES TO CONTRIBUTORS

Three copies of the manuscripts typed double space on one side should be submitted. Ample margins should be provided. The title, author's name, position and place of work should appear on the first page. Subsequent pages of not more than 15, should include an informative abstract of not more than 100 words. Manuscript will be considered only if it has not been published elsewhere.

References and notes should be indicated in the text by names of authors and date of publication in brackets. The list of references should be listed at the end of the text.

References to journal articles should be in the following order: Author(s) date, title, journal's name, volume number, issue number and inclusive pagination e.g.

Mazikana, P.C. (1987) "Archives and Oral History: Overwhelming Lack of Resources" *Information Development*, 3 (1) 13 - 16.

References to books should be in the following order: Author(s), date, title, place of publication, publisher, pagination eg.

Aboyade, B. O. (1989) *The Provision of Information for Rural Development Ibadan*: Fountain Publications, 104p.

References to contributors in collected works should be in the following order: author(s), date, title of contribution, name of the editor, title of the collected works, place of publication, publisher and inclusive pagination e.g.

Neill, J. R. and Kotei, S. I. A. (1981) "Towards a National Information System for Botswana" in Inganji, Francis (ed.) *Use of Information and Documentation for Planning and Decision Making*. Gaborone : NIR, pp. 36 - 53.

No charge is made for publication. Twenty five copies of reprints of each major article will be supplied to the principal author.

Manuscripts and other editorial materials should be directed to the Editor in Chief, Dr. L. O. Aina, Department of Library and Information Studies, University of Botswana or to any member of the editorial board nearest to you.