AFRICAN JOURNAL OF LIBRARY, ARCHIVES AND INFORMATION SCIENCE

VOLUME 12 NUMBER 1 APRIL 2002

Page

Afr. J. Lib. Arch. & Inf. Sc. Vol. 12, No. 1 (2002) 1- 14

Computer Anxiety, Phobia, Obsession and Work-Stress at the University of Ibadan: Part 2 - Evaluation of a Model

M.A. Tiamiyu, A. Ajayi and W.M. Olatokun
Africa Regional Centre for Information Science
6 Benue Road, P.O. Box 22133, University of Ibadan
Ibadan, Nigeria
arcis@infoweb.abs.net

Abstract

The study modelled the personality, demographic and experiential determinants of some computing-related behaviours among students and staff of the University of Ibadan, Nigeria. The behaviours were information anxiety, computer phobia, obsessive computing, and computer work stress. Validated scales were designed to measure these behaviours as dependent variables, as well as computing expertise, self-esteem, locus of control, personality type, age, sex, occupation and discipline of respondents, as independent variables. Models relating to these variables were proposed, and multiple regression analyses were performed to evaluate the models. Self-esteem, personality type, age and sex correlated in various ways with information anxiety, computer phobia and work-stress.

Introduction

New information and computer systems continue to create new growth and developmental opportunities for people, organisations and countries; but social and medical scientists are also worried that they also create various problems for people and societies. Notable among the problems are fatigue, computer addiction and obsession, cumulative trauma disorders, stress and other occupational safety and health-related problems, as well as social problems like isolation, alienation, depersonalisation, etc. Some people no doubt find the acquisition of computing knowledge, and the task of using computerised information systems not only easy but also fulfilling. However, other people exhibit negative reactions to computer systems, such as computer phobia, anxiety, stress, exclusion, depersonalisation, etc (Slam et al., 1990).

Socio-technical theories of organisations and the workplace emphasise that there are always technical and social aspects of any work environment, which must be harmonised to maximise worker productivity and minimise work-related problems. Such theories recognise that technology does not exist in a vacuum, and that the creators, users and benefactors of technology are invariably subject to the constraints of social and psychological factors and actions. Especially when people work with machines, there are often questions regarding how people relate to the machines, about the effects of the machines on their productivity, perceptions and well being, and about individual differences in man-machine relationships.

An appropriate question that one may ask from the perspective of a developing country is: What has been the impact of the demands of the information age on people in developing countries? More specifically, what social and psychological transformations and problems are already being created for actual and potential users of computerised systems in developing countries even at the very low developmental level of these countries?

Developing countries are probably at a stage of development of computerised information systems where developed countries were some thirty years ago, even though the global technology and competitive environment now for developing countries is markedly different from the environment for developed countries at that time. Although the computer age is just taking root in most of these countries, their organisations and people are probably not immune from the psychological and socio-economic demands and pressures of the information age. They are being persuaded or forced to embrace modern information technologies even though the prospects of their being able to afford and effectively exploit the technology is initially not very bright because of their poor socio-economic situation and lack of previous computing experience. Many developing countries are unsure about how to participate meaningfully in the global technology race, and their organisations are anxious about whether, when and how to exploit information technologies effectively for competitive advantage locally and globally. Their citizens are also being pressurised to proact or react to the imperatives of the information age in diverse ways with consequences for their psychological and social situations.

Accordingly, we undertook this study to investigate the prevalence and the interrelationships among computer-related, personality and demographic variables in a university environment in Nigeria - a developing country. In particular, we were interested in understanding the relative influence of computer experience, age, sex, occupation, disciplinary background, locus of control, self-esteem and personality type on four computer-related behavioural variables - information anxiety, computer phobia, obsessive computing, and computing work stress.

This paper reports aspects of the study pertaining to the validation of a model of determinants of the computer-related behavioural variables. Other aspects of the study had earlier been reported in the last issue of this journal (Ajayi et al., 2001).

Review of the literature

The concepts of information anxiety, computer phobia, obsessive computing and computing work-stress were articulated in the related paper (Ajayi et. al, 2001). So also were the personality concepts of locus of control, personality type A/B, and self-esteem. Hence, we limit our review of the literature here to previous empirical findings on the interrelationships among these variables.

Demographic variables and computer behaviour

Rosen et al. (1987) found that older students were more computer anxious but did not have more negative attitude toward computers than did younger students; and that feminine-identity students showed more anxiety and negative attitudes than did masculine-identity students regardless of gender. Bozionelo (1996) found a computer phobia prevalence rate of 21.39 per cent among British managers and professionals, and that the prevalence rate for women was double that for men. Fetler (1985) found that women were more negative in their attitude to computer than men. Igbaria and Parasuraman (1991) also reported an inverse relationship between computer attitudes and age.

Personality variables and computer behaviour

Emmanuele et al. (1997) found a direct relationship between computer anxiety and depression, and an inverse relationship between computer anxiety and computer experience and self-esteem. Kay (1980) found that gender and locus of control were not effective predictors of commitment to the use of computer.

Computer experience and anxiety/phobia

Jay (1985) and Henderson et al. (1995) found that computer phobia tends to correlate with computer anxiety, as well as with gender, experience, and education. In a computer phobia reduction program, Rosen et al. (1989) established that computer anxiety was related to computer phobia, and that frequent exposure to computing systems dramatically reduced both computer phobia and anxiety. Rosen et al (1987) had earlier found that computer

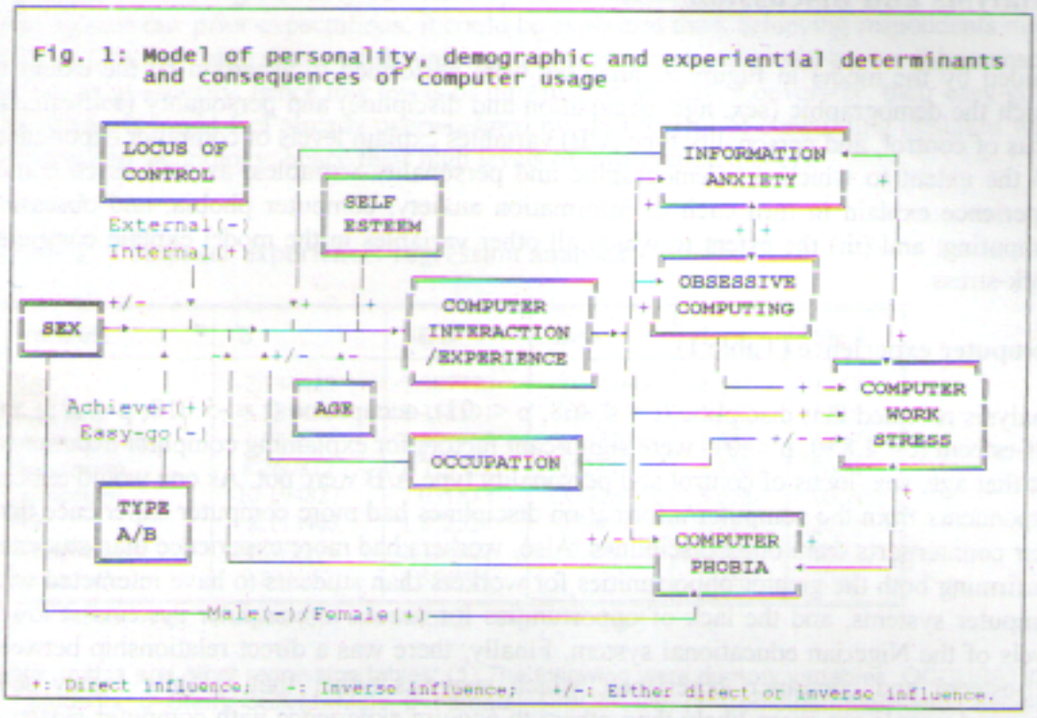
anxious students exhibited lower computer aptitude, literacy and interests than their less anxious counterparts. In a survey study of attitudes towards computer use, Igbaria and Chakrabarti (1990) found that computer experience correlated directly with positive attitudes to computer, and that higher levels of computer training was associated with lower levels of computer anxiety.

Computer interaction and work stress

O'Brien (1993) reported a positive association between heavy use of computers and job stress. However, in a survey of college students, Ballance and Ballance (1996) found that computer-related stress was not a simple by-product of increased interaction with computers, and might actually be due to other factors in the work environment. Kraut & Dumais (1990) showed that the degree of control that people have over their environments affect their level of stress with computer systems; clerical workers with more control over the day-to-day aspects of their jobs experienced less stress with computing. They also concluded that women using computers exhibited more stress symptoms than those not using computers. Guiigalt et al. (1994) in a study of Japanese information systems managers, found that the demands of software project management contributed to depressive symptoms among system managers.

The Analytical Model

A number of personality, demographic and computer-related variables, as well as the potential interaction among the variables, were highlighted in the review of empirical studies in the previous section. Based on the insight gained, we constructed a model of our expectations about the interrelationships among the variables (Figure 1).



The model should be read from left to right. Arrows indicate the expected dominant direction of influence between variables, with some of the influences being bi-directional. The personality and demographic variables activate and moderate the time-dependent causative processes in the model. These variables are expected to moderate an individual's initial and continuing interaction with computer systems toward accumulating computer experience. In turn, computer experience might generate information anxiety or computer phobia, which in turn, might feed back to stimulate or hinder further interaction with computer systems. Finally, computer interaction and experience might lead to obsessive computing and/or computer work-stress. Note also the potential bi-directional influences between information anxiety and obsessive computing, and also between computer work - stress and information anxiety, obsessive computing and computer phobia. It is further assumed that computer work stress would be determined by the interplay of all other variables in the model.

Data collection

Details of the methodology, including the validated scales, and the population and sample characteristics, were provided in the related paper (Ajayi et al., 2001).

Analysis and discussion

Guided by the model in Figure 1, analyses were performed to ascertain (i) the extent to which the demographic (sex, age, occupation and discipline) and personality (self-esteem, locus of control, and personality type A/B) variables explain levels of computer experience; (ii) the extent to which the demographic and personality variables, as well as computer experience explain in turn each of information anxiety, computer phobia, and obsessive computing; and (iii) the extent to which all other variables in the model explain computer work-stress.

Computer experience (Table 1)

Analysis revealed that discipline ($t = 4.868$, $p < .01$), occupation ($t = -5.018$, $p < .01$) and self-esteem ($t = 4.830$, $p < .01$) were significant factors for explaining computer experience, but that age, sex, locus of control and personality type A/B were not. As one would expect, respondents from the computer/information disciplines had more computer experience than their counterparts from other disciplines. Also, workers had more experience than students, confirming both the greater opportunities for workers than students to have interacted with computer systems, and the lack of opportunities for access to computer systems at lower levels of the Nigerian educational system. Finally, there was a direct relationship between self-esteem and computer experience, which suggests either that initially highly self-esteemed people are more likely than others to acquire experience with computer systems, or that increasing experience with computer systems improves the self-esteem of people.

Information anxiety (Table 2)

For information anxiety, the important explanatory variables were computing expertise (direct relationship with information anxiety, $t = 2.256$, $p < .05$); self-esteem (inverse relationship, $t = 4.206$, $p < .01$); and personality type (low/high anxiety associated with achieving/easy-going personality respectively, $t = -3.589$, $p < .01$). None of the demographic variables (age, sex, occupation and discipline) was significant.

The above results show that higher levels of computing expertise associated with higher levels of information anxiety. The explanation is that highly computer-experienced respondents are probably more aware than their less experienced counterparts of the rapid rate of technology obsolescence, as well as the need to acquire new computing skills for sustaining their initial computing skill advantages. The results also reveal that highly esteemed or achieving respondents tended to be less information anxious than their lowly esteemed or easy-going counterparts. Lowly self-esteemed respondents were highly information anxious probably due to lack of confidence in what they already know.

Although the low/high anxiety exhibited by achieving/easy-going respondents respectively was against our prior expectations, it could be explained thus: achieving respondents might believe that they have mastered the information technology and might have a false sense of information security, hence low levels of information anxiety. Conversely, their easy-going counterparts might feel already overwhelmed by, and fearful of committing mistakes with, information technology, hence their high levels of information anxiety.

Table 1: Computer experience: regression analysis

Variable	B	SE B	Beta	T	Sig T
Age	-2.144423	1.387770	-.107416	-1.545	.1249
Type A/B	-5.588455	3.498391	-.113325	-1.597	.1128
Locus of control	-1.945657	1.471967	-.095527	-1.322	.1887
Self-esteem	8.260872	1.710502	.352440	4.830	.0000
Occupation	-10.194827	2.031833	-.373230	-5.018	.0000
Sex	2.113463	1.872524	.079439	1.129	.2613
Discipline	10.372225	2.130822	.373902	4.868	.0000
(Constant)	9.841357	9.556975		1.030	.3052

[R^2 = .4556; Adj. R^2 = .4243; F = 14.582; Sig. F = .000]

Note: In this and other regression tables: (1) The following were dummy variables: OCCUPATION (1=Students, 0=Staff); SEX (1=Male, 0=Female); DISCIPLINE (1=Computer/Information Science, 0=Others). (2) For Locus of control, low/high scores imply Internal/External locus of control respectively. (3) For Personality Type A/B, low/high scores imply Type-A (Achieving) /Type-B (Easy-going) personality respectively.

Table 2: Information anxiety: regression analysis

Variable	B	SE B	Beta	T	Sig T
Computer expertise	.100568	.044579	.249921	2.256	.0259
Age	-.683909	.689985	-.085134	-.991	.3236
Type A/B	.732037	.174051	.368904	4.206	.0001
Locus of control	-.064095	.072996	-.078204	-.878	.3816
Self-esteem	-.219938	.061282	-.349782	-3.589	.0005
Occupation	1.037996	1.098852	.094436	.945	.3467
Sex	-.914280	.926821	-.085401	-.986	.3259
Discipline	.193417	1.146574	.017327	.169	.8663
(Constant)	33.647887	4.726206		7.119	.0000

[R^2 = .1915; Adj. R^2 = .1380; F = 3.582; Sig. F = .000]

Table 3: Computer phobia: regression analysis

Variable	B	SE B	Beta	T	Sig T
Computer expertise	-.249839	.063371	-.336068	-3.942	.0001
Age	-3.313176	.980833	-.223239	-3.378	.0010
Type A/B	1.102981	.247418	.300865	4.458	.0000
Locus of control	.041679	.103766	.027526	.402	.6886
Self esteem	-.367744	.087114	-.316566	-4.221	.0000
Occupation	1.328755	1.562050	.065435	.851	.3966
Sex	-3.069335	1.317503	-.155185	-2.330	.0215
Discipline	-2.254247	1.629887	-.109309	-1.383	.1692
(Constant)	41.303889	6.718437		6.148	.0000

[R^2 = .5213; Adj. R^2 = .4898; F = 16.471; Sig. F = .000]

These results show that highly computer-experienced respondents were, as expected, less computer phobic than their less experienced counterparts. Also, highly self-esteemed respondents were less computer phobic than their lowly self-esteemed counterparts, as one would also expect. Furthermore, easy-going or female respondents were more computer phobic than their achieving or male counterparts. Easy-going respondents were computer phobic probably because they perceived computers as very technical, demanding and inflexible, hence incompatible with their own easy-going personality. Female respondents might also have exhibited higher levels of computer phobia than their male counterparts due to the influence of traditional attitudes about gender roles in developing societies like Nigeria which might induce males and females to develop confidence in, or fear of, different occupations and activities respectively. Nevertheless, the finding above that older respondents were less computer phobic than younger respondents is counter-intuitive. One would have expected the reverse to be true because older people would be less likely than younger people to embrace the changes in behaviour required by computing technology. This finding is probably a reflection of the fact, already noted in the introduction to this paper, that the dearth of computing facilities in schools, colleges and universities means that most people get to learn about and use computers, and thereby overcome their initial phobia with computers, only when they are working. And they are more likely to be older than younger.

(c) Obsessive computing (Table 4)

Only computing experience (inverse relationship, $t = -3.966$, $P < .01$) and age (inverse relationship, $t = -2.677$, $P < .01$) were significant in explaining obsessive computing among the respondents. These results show that highly computer-experienced respondents did not obsessively compute, which support the interpretation that respondents who are less experienced with computer are more likely than the more

experienced to get carried away by the "glamour" of computing. The results also show that younger respondents were also more likely than the older to get carried away.

Table 4: Obsessive computing: regression analysis

Variable	B	SE B	Beta	T	Sig T
Computer expertise	-.168101	.042389	-.438830	-3.966	.0001
Age	-1.756250	.656078	-.229653	-2.677	.0085
Type A/B	-.007521	.165498	-.003981	-.045	.9638
Locus of control	-.121988	.069409	-.156353	-1.758	.0814
Self esteem	.030251	.058271	.050537	.519	.6046
Occupation	-1.642857	1.044853	-.157009	-1.572	.1185
Sex	1.691289	.881276	.165952	1.919	.0573
Discipline	.603260	1.090229	.056770	.553	.5811
(Constant)	48.576302	4.493953		10.809	.0000

[R^2 = .1945; Adj. R^2 = .1399; F = 3.625; Sig. F = .000]

(d) Computer work-stress (Tables 5 and 6)

Four variables proved significant when only computer experience, along with the demographic and personality variables were modelled as potential explanatory variables for computer work-stress (Table 5). These were personality type A/B (low/high work-stress associated with achieving/easy-going personality respectively, $t = 3.707$, $p < .01$); self-esteem (inverse relationship, $t = -3.197$, $p < .01$); occupation (students more work-stressed than workers, $t = 3.222$, $p < .01$); and sex (females more work-stressed than males, $t = -2.677$, $p < .01$). Computing experience was not a significant factor for explaining computer work-stress. This was unlike information anxiety, computer phobia and obsessive computing for which computing experience was significant (see above). Easy-going respondents were more computer work-stressed than their achieving counterparts probably because they considered computer work to be too demanding. Lowly self-esteemed respondents were more work-stressed than their highly self-esteemed counterparts probably due to unnecessary worry about their work arising from their lack of self confidence in their computing abilities. As well, students were more work-stressed than workers probably due to the effects of disruptions to university academic calendar from students' protests and workers' strikes prior to and during the period of the study in 1999.

Finally, in order to evaluate our expectation that all other variables in our model would somehow influence computer work stress, we used step-wise regression procedures to determine which among the variables best explain computer work-stress (Table 6). Only

three of the eleven variables were significant - occupation (students were more work-stressed than workers; $t = 2.854$, $p < .01$), information anxiety (direct relationship with computer work stress; $t = 3.176$, $p < .01$) and computer phobia (also direct relationship, $t = 2.870$, $p < .01$). The findings confirm, firstly, the importance of occupational variables on computer work and other types of stress, and secondly, the strong relationship between computer work-stress and information anxiety and/or computer phobia. None of the personality or demographic variables apart from occupation was significant, suggesting that their effects on computer work-stress probably operated through information anxiety or computer phobia.

Table 5: Computer work-stress: regression on demographic, personality and experience variables

Variable	B	SE B	Beta	T	Sig T
Computer expertise	.102771	053940	.203145	1.905	.0591
Age	-.807966	.834860	-.080000	-.968	.3351
Type A/B	.780600	.210596	.312896	3.707	.0003
Locus of control	-.014516	.088323	-.014087	-.164	.8697
Self-esteem	-.237062	.074150	-.299881	-3.197	.0018
Occupation	4.283685	1.329578	.309992	3.222	.0016
Sex	-3.002028	1.121426	-.223043	-2.677	.0085
Discipline	-.391813	1.387319	-.027919	-.282	.7781
(Constant)	29.720278	5.718566		5.197	.0000

[$R^2 = .2511$; Adj. $R^2 = .2016$; $F = 5.071$; Sig. $F = .000$]

Table 6: Computer work stress: step-wise regression on all variables

Variable	B	SE B	Beta	T	Sig T
Significant variables					
Occupation	.323834	.113460	.234345	2.854	.0050
Information anxiety	.286727	.090268	.253407	3.176	.0019
Computer phobia	.174869	.060937	.233608	2.870	.0048
(Constant)	1.336545	.366390		3.648	.0004
Insignificant variables					
Computer expertise			.178636	1.830	.0697
Obsessive computing			-.134104	-1.637	.1042
Age			-.003746	-.046	.9636
Type A/B			.117934	1.347	.1805
Locus of control			-.003689	-.045	.9644
Self-esteem			.011714	.133	.8945
Sex			-.128833	-1.634	.1048
Discipline			.045175	.498	.6194

[$R^2 = .2136$; Adj. $R^2 = .1948$; $F = 11.404$; Sig. $F = .000$]

Summary and Conclusion

Many of the expectations about interrelationships among the variables of the model were confirmed in the study. These include the following findings:

(1) As predicted by the model, low and high information anxiety were found associated with achieving and easy-going respondents respectively, implying that easy-going persons are more likely to feel threatened, disturbed or confused by the demands of the computer age than their achieving counterparts.

(2) Computer phobia correlated inversely with computer experience (as expected) and self -esteem (as expected, because computer phobia could be caused by low self-esteem) and age (unexpected). We had expected older respondents to be more computer-phobic than younger respondents. As noted earlier, lack of access to computing facilities in Nigerian first and second cycle educational institutions might account for the low computer exposure, and hence high phobia, among the younger respondents. Hence, people are more likely to interact with computers at work or in their studies between the ages of 25-35 years than when they were younger. Finally, females were found to be more computer-phobic than males, and had low/high computer phobia associated with achieving/easy-going respondents respectively.

(3) Obsessive computing correlated inversely with computing experience and age. These findings suggest that younger people are more likely to become computer addicts than older people; and that as people become more computer experienced, they tend to outgrow any obsessive computing they might have indulged in at lower levels of computing expertise.

(4) Computing work stress correlated inversely with self-esteem, implying that lowly self-esteemed persons are likely to be more work-stressed than highly self-esteemed persons. This finding appears to be related to this next one: that low/high computing work stress was found among achieving/easy-going respondents, because we should expect achieving persons to exhibit higher self-esteem than their easy-going counterparts. Finally, we found that females were more work-stressed than males (which might be related to the higher computer phobia found among females than males); and that students were more work-stressed than staff (possibly because students were more pressurised by their studies than were staff by their jobs).

(5) In terms of the model in Figure 1, the findings of this study suggest the following main interdependencies among the variables: (a) self-esteem and occupation are strongest

in motivating the acquisition of computing experience. In turn, (b) computing experience, along with self-esteem and personality type A/B moderate information anxiety, computer phobia and obsessive computing. Also, age was also important in explaining both computer phobia and obsessive computing, and sex was important in explaining computer phobia. Finally, and in turn, (c) information anxiety and computer phobia, along with occupation, best explained computer work-stress.

We also want to highlight here some important general observations across the separate analyses, as well as some policy and research implications.

(6) Computer experience was significant for explaining computer phobia (inverse relationship) and obsessive computing (also inverse); but not for explaining information anxiety or computing work-stress. We had earlier attributed the insignificant relationship between computer experience and work-stress to the limited opportunity and frequency of access to computers, which limits the incidence of computer-related stress among the respondents. The finding also lends support to Ballance and Ballance (1996) who had concluded that computer-related stress was not a simple by-product of increased interaction with computers.

(7) Locus of control was the only variable among the explanatory variables that did not feature as a significant explanatory variable in any of the regression analyses. It is possible that locus of control is not an important factor independently, just as was concluded by Kay (1980), but could be important in conjunction with other variables.

(8) Sex was important in explaining computer phobia (females more phobic than males) as previously established by many studies (Henderson et al., 1995; Igbaria and Chakrabarti, 1990; Kraut and Dumais, 1990; Rosen et al., 1987). Sex was also important in explaining computer work stress, probably as a result of associated computer phobia.

(9) Age was an important main factor for explaining computer phobia and obsessive computing, with younger respondents being more phobic and tending to obsessively compute than older respondents. These findings suggest that the younger respondents, who were mostly also students, were more likely to be computer-phobic initially than the older counterparts, but are also likely to become addicted to computers once they overcome their phobia. As noted elsewhere in this paper, most Nigerian university students outside of the computer/information science disciplines only get to interact with computer systems at the university, and hence are likely to be initially more computer phobic than the staff who often get access to computer systems, even if infrequently, at work. There is clear need for educational policies for integrating computer usage into the educational curriculum at the first and second cycle levels in Nigeria.

In conclusion, this study has evaluated a model of the relationships between various personality, demographic and experiential determinants and consequences of computer systems usage among students and staff of a Nigerian university who, as noted earlier, are generally more aware and exposed to computer age developments than most other socio-economic groups in the country. The findings of the study also provide insight to the factors that might influence the effectiveness of strategies for improving computer attitudes and skills among organisational personnel in Nigeria and other developing countries. Our findings have also confirmed the findings of earlier studies which were undertaken during the 1980s in developed countries, a period when the widespread availability and use of microcomputers was just gaining momentum in those countries, just as it is now in Nigeria.

References

Ajayi, A. Olatokun, W.M. and Tiamiyu, M.A. (2001) Computer Anxiety, Phobia, Obsession and Work Stress at the University of Ibadan: Part 1 - Prevalence and Correlates. *African Journal of Library, Archives and Information Science*, 11(2) 167-183.

Ballance, C. T. and Ballance, W. W. (1990) Psychology of Computer Use. XXXVII. Computer-Related Stress and Amount of Computer Experience. *Psychological Reports*, 78: 968-970.

Bozionelo, N. (1996) Psychology of Computer Use. XXXIX. Prevalence of Computer Anxiety in British Managers and Professionals. *Psychological Reports*, 78: 995-1002.

Emmanuele, S., Dale, J.A. and Klions, H.L. (1997) Psychology of Computer Use: XXLII. Problem Solving and Humour as a Function of Computer Anxiety. *Perpetual and Motor Skills* 84 (1) 147-56.

Fetler, M. (1985) Sex Differences in the California State-wide Assessment of Computer Literacy. *Sex Roles*, 13: 181-192.

Guiigalt, Y., Asakura T. and Haratani T. (1994) Work Stress and Depressive Symptoms Among Japanese Information Systems Managers. *Industrial Health*, 32(4) 231-8.

Henderson, R., Deane F., Barrelle, K. and Mahar, D. (1995) Computer Anxiety: Correlates, Norms and Problem Definition in Healthcare and Banking Employees Using Computer Attitude Scale. *Interacting With Computers*, 7(2) 181-193.

Igbaria, M. and Chakrabarti, A. (1990) Computer Anxiety and Attitudes Towards Microcomputer Use. *Behaviour and Information Technology*, 19: 229-241.

Igbaria, M. and Parasuraman, S. (1991) Attitudes Towards Microcomputers: Development and Construct Validation of a Measure. *International Journal of Man-Machine Studies*, 35: 553-573.

Jay, T. (1985) Defining and Measuring Computer Phobia. In: R.E. Eberts & C.G. Eberts (eds.) *Trends In: Ergonomics. Human Factors II*, Amsterdam: North-Holland, pp. 321-326.

Kay, R. H. (1980) Predicting Student-Teacher Commitment to the Use of Computer. *Journal of Educational Computing Research*, 6 (3) 299-309.

Kraut, R.E. and Dumais, S. (1990) (Bellcure) Computerisation and the Quality of Working Life: The Roles of Control. *ACM Sicious Bucection*. 11(23) 56-58.

O'Brien, J.A. (1993) *The Nature of Computers*. Orlando, FL: Harcourt Brace Jovariovich, pp.393-395.

Rosen L.D., Sears, D.C. and Weil, M.M. (1987) Computer Phobia Behaviour. *Research Methods, Instruments and Computers*, 19 (2) 167-179.

Rosen, L.D., Sears D.C. and Weil, M.M. (1989) *The Model Computer Phobia Reduction Program: A Longitudinal Evaluation*. Domingues Hills, CA: California State University, 107 p.

Slam, C., Levi, D. and Young, A. (1990) Impact of New Technology on the Work Force: Anticipated Stress in Japan and the United States. In: K. Nora and O. Brown (eds.) *Human Factors in Organizational Design and Management*. Amsterdam: Elsevier Science.

* M.A. Tiamiyu is the acting Director of Africa Regional Centre for Information Science, University of Ibadan, Nigeria. He attended the University of Ibadan, Nigeria and the University of Western Ontario, London, Canada. He holds M.Sc. Economics and Ph.D Information Science.

* A. Ajayi is a graduate of the Africa Regional Centre for Information Science, University of Ibadan, Nigeria. He holds M. Inf. Sc.

* W. M. Olatokun is a lecturer at the Africa Regional Centre for Information Science, University of Ibadan, Nigeria. He holds M. Inf. Sc.

Afr. J. Lib. Arch. & Inf. Sc. Vol. 12, No. 1 (2002) 15 - 26

Resource Mobilisation for Library and Information Services Development in Africa

Elizabeth Kiondo
University of Dar- es- Salaam Library
P.O. Box 35092
Dar-es-Salaam, Tanzania
kiondo@libis.udsm.ac.tz

Abstract

This paper discusses the need for information professionals in Africa to mobilise resources for effective provision of library and information services. Resource mobilisation should include financial, human and material resources that are indispensable to providing innovative and dynamic information services in the 21st century. The rationale for resource mobilisation is discussed within the context of the current socio-economic and technological environment that is not only characterising library and information services development but also developments in other sectors. The paper identifies and discusses major areas of library resource mobilisation by highlighting what is going on in Tanzania in particular and Africa in general. The paper concludes that in order to survive in the information market of the 21st century, there is need to strive for innovative and sustainable services.

Introduction

The history of library development in most African countries can be divided into three distinct phases. First, rapid development with the assistance of donors in the 1960s and 1970s, then sharp decline in investment and services in the 1980s and revival in the 1990s characterised by modern innovative (information technology) IT projects, new approaches in management and planning, and a new organisational cultural dispensation. This brief history can be squarely viewed in the context of the socio-economic and political environment that characterised these developments. In the first two decades after independence most public institutions in Africa were mostly dependent on government subvention to manage their activities. All that was needed of managers was to draw up an annual budget and submit it to the government for funding. In the 1980s, most sub-Saharan African countries suffered severe economic crises that were characterised by declining Gross Domestic Product (GDP),

inadequate foreign exchange and budget deficits that crippled most African governments' ability to sustain social and economic services. The crisis led to sharp decline in budget allocations that constrained public institutions' capabilities to discharge their duties effectively. The library was no exception to this precarious situation. In Uganda, for example, library services suffered tremendously during the regime of Amin, the former president of Uganda (Mugasha 2001). In Kenya, Malawi and Tanzania the situation was not different as inadequate government grants severely affected library and information services (Utah 2001; Tanui 2001; Nawe and Kiondo 2001).

It was not until the 1990s that libraries and parent organisations began to look for alternative ways of funding their activities as a matter of survival. Alternative ways of financing libraries and higher education was the most viable option and to a great extent coincided with the desire to apply information technology to library and information services. As a result, resources mobilised were directed towards innovative information technology projects, building capacity on the part of human resource to handle IT applications, and the acquisition of modern equipment and facilities such as heavy duty photocopiers, desk top publishing units, integrated library software packages and computers. These developments should be viewed in the context of changing organisational culture from depending solely on government and donor subvention to identifying and internalising alternative ways of mobilising financial resources. The following section discusses the rationale for library resource mobilisation and the importance of the strategic planning document as a resource mobilisation tool.

Rationale for Library Resource Mobilisation

In the 1980s and 1990s, library literature was dominated by two major issues: dwindling budgets amid skyrocketing prices of information, and whether to charge or not to charge for service to offset the deficit in resources for library and information services provision (Kagoda-Batuwa, 1996). While the debate was going on some libraries took the initiative to introduce user fees and to employ various resource mobilisation techniques as a strategy to raise income for sustainable services. Today, the issue has shifted to how to effectively mobilise resources for library development including charging for services. Zink (1995) noted that resource mobilisation was a logical extension of diversity of information age and that most libraries would eventually have to face that fact of life as the only way to serve as an effective information disseminator.

Zink's argument is based on the current library and information service environment that is characterised by information explosion, budgetary cuts, increased user demand for service and the desire to apply information and communications technology (ICT) in information management. There is now a general consensus among information professionals in Africa

and elsewhere that effective resource mobilisation strategies are the way forward for libraries and information centres (Heery, 1999; Mugasha, 2001; Tanui, 2001; Utah, 2001). In addition, resource mobilisation is viewed as a catalyst for improving services as users will demand value for their money and professionals will be inclined to provide efficient cost-effective services and to attract more users in order to justify charging for services and further funding from potential donors.

Strategic Planning for Effective Library Resource Mobilisation

To effectively mobilise resources for library development, there is a need to develop a vision and formulate a mission statement that will guide strategic development plans and activities. For instance, the vision of Rands Afrikaans University, South Africa, is to develop "a dynamic, future-oriented and financially secure information centre, providing a high quality service to our community ..." (Boltman, 2001). It is noted here that the quest for financial security is a vision that the library is working towards achieving. In this endeavour, the library has envisaged the establishment of a business development centre that will be charged with the task of managing and administering income generation for the library. Makerere University Library's vision is to be a "provider of excellent library and information services and its mission is to meet the learning, teaching and research needs for sustainable and regional development" (Mugasha, 2001).

To achieve tangible output in an efficient and cost-effective manner, organisations are called upon to develop strategic plans. Strategic planning documents not only spell out the mission, vision and objectives of organisations, they also stipulate activities to be undertaken to achieve the objectives, resources required, performance indicators, expected output and, sometimes staff who will be responsible for managing and coordinating the planned development activities.

The need to develop strategic plans that will guide the cause of action cannot be overemphasised. The document can also be used as a resource mobilisation tool that can be sold to donors for funding. Strategic planning forms the basis for mobilising financial, human and materials resources in a systematic and planned way. Marketing the strategic planning document to potential donors is now one of the fundamental activities of library managers.

Resource Mobilisation Strategies

The following sections identify and discuss major strategies for library resource mobilisation, highlighting the situation in Tanzania in particular and Africa in general.

Technology Resource /Library Fee

Webster and Middletown (1990) identify what they call the technology resource fee as a potential source of funding library technology application projects. Some African university libraries have succeeded in integrating student funds into library budgets. Makerere University in Uganda has led the way by slowly integrating student fees and allowances into library budgets. In their innovative approach, the first step was to introduce a book provision policy that allowed for book allowance given to government sponsored students to be allocated to a book bank system. Secondly, the library receives 5% of tuition fee paid by privately sponsored students. According to Mugasha (2001) the income from this source is the biggest and represents the library's main source of income. Thirdly, Makerere University students pay an average of US $4.5 as library fee. This represents the second largest source of income for the library (Mugasha, 2001). The initiatives to solicit for a share of institutional income can partly be attributed to institutional reform process but also the initiative of the librarians themselves to convince management of the dire need for adequate resources for library development. To convince management for a fair share of institutional resources require not only sound planning but also good lobbying and advocacy skills. This may not be easy to achieve given the attitude of most top management decision-makers in higher learning institutions of not giving information services due attention. However, it is important to note that integrating student's funds into library budgets require strategic planning, good communication and student involvement (Webster and Middleton, 1999).

Project Write-ups and Solicitation of Donor Funds

Project proposal write-ups and solicitation of donor funds to finance the activities outlined in the project proposal is another area that needs close attention by African information professionals. This area needs vision, initiative and strategic planning. The project proposal write-ups should not only be based on strategic planning but should also be formulated to conform to the interests of donors at that particular time. For example, donor agencies have recently been called upon to work on projects that will contribute towards closing the digital divide between the North and the South. As such, information technology application projects are high on the agenda of most donors, it is therefore up to African librarians and information workers to use their initiative and creativity to write successful IT application project proposals.

Some libraries have successfully taken advantage of these developments to work out innovative information technology projects through their own initiative. According to Utah (2001), one of the strategies the Mzuzu University Library in Malawi employs is to design project proposals for funding of library defined tasks, resources and equipment. Through this strategy the library managed to secure funds from the Japanese International Development

Cooperation to enhance computer network status for user services in the library. A follow- up project (Information, Communication and Educational Technology project) to enhance communication and information exchange in the tertiary education sector was also initiated by the library (Utah, 2001). On the other hand, the University of Dar es Salaam (UDSM) Library has initiated a number of information technology projects funded by the Carnegie Corporation of New York as part of UDSM ICT capacity building programme. Funded activities include, among others, electronic conversion of the library catalogue, creation of computerised union catalogue, electronic information services and information literacy courses. Through project proposal write-ups, the University Library has also secured Sida/Sarec funds to develop local content materials for wider accessibility through the Internet.

ICT Training Units Short Courses in Information Management

Training is another area where libraries can mobilise financial resources. Given rapid developments in ICT and its application in library and information services, there is a need to develop the skills of librarians, library assistants and other library staff. Designing and conducting short courses in computer skills, database management, Internet services, and other IT applications are of critical importance. The University of Mzuzu conducts short courses in computer skills to outsiders and plans are underway to make ICT outreach services a major source of income for the library. The University of Dar es Salaam Library has established an ICT training unit. The training unit serves a double purpose: it reduces training costs on the part of the library to train its staff outside the library, and it also generates income as outsiders (mainly university students and other members of the University community) pay for the training services.

Consultancy Services

Consultancy services provided to private, government and non-government organisations by information professionals could be another source of generating funds for library development. Information professionals should strive to use their expertise to generate income not only for the institutions that get a percentage of the consultancy fee, but also for the experts involved in the consultancy. At the University of Dar es Salaam, 5% of the money generated from consultancy service is paid to the library, institute or faculty. At Mzuzu University in Malawi, 20% of the consultancy fee is paid to the library (Utah, 2001).

Fund-Raising

Fund-raising is another area in which libraries in Africa can mobilise finances for library development. Fund-raising is a popular way of mobilising funds in America and Europe, but

in most African countries it is an area that people have tended to shy away from. Fund raising needs planning, cooperation of potential contributors, vision, justification and special skills and techniques that many librarians lack. It is not surprising, therefore, that in a survey of income generation experiences of eight African university libraries, it was found that only the Makerere University indicated fund-raising as one of its strategies used for resources mobilisation for library development (Rosenberg, 2001). Mugasha (2001) reported that in 1998, Makerere University mounted a fund- raising campaign for the library whereby the equivalent of US $ 20,000 was raised. Fund-raising as a means of mobilising resources should be considered in libraries that are severely constrained in terms of resources. Fund-raising techniques can be learnt from non-governmental organisations and other public institutions that have successfully mounted such campaigns. Martin (1998) argued that increased cost of managing information services and decreased funding make it increasingly necessary for library directors to become heavily involved in fund-raising. In this age of competition and output-oriented performance indicators, the role of librarians and library directors become more demanding in terms of mobilising resources to ensure that the library is running smoothly. Library managers are now assessed on the basis of the amount of resources they have been able to mobilise and use effectively for tangible and visible output. Therefore, library managers should not overlook fund-raising as a resource mobilisation strategy.

Charging Users for Services

In most African countries library and information services were provided freely to users as they were paid and sustained by government and to a lesser extent by donors. However, given skyrocketing costs of managing and providing services, coupled with declining budgets, charging users for services is longer an issue for debate. It is now considered almost inevitable to charge for service either on full or partial cost-recovery basis. Therefore, charging users for services is now on the agenda and is being implemented by both public and academic libraries. Charging users for services enhances quality, as users demand quality services, promotes accountability and, to some extent, sustainability. Cost-sharing and cost-recovery policies have been popularised and slowly users are accepting the need to pay for services to improve quality and promote sustainability. At the University of Dar es Salaam Library, *User Sensitisation Workshop* participants (mainly users) were advocating for a well-planned and more controlled mode of paying for information services to ensure equitable access to information services by all users. The following are specific areas where libraries charge for services:

Library User Fee

Library user fees are mainly charged to external users of services in academic libraries and to all users of the services in the case of public libraries. In the case of academic libraries user fees can also be extended to students, as it is at the University of Makerere where all students pay annual library user fees upon registration. In a survey of eight university libraries, it was only the University of Makerere that charged students user fees (Rosenberg, 2001). Charging students an annual fee is a good strategy that enhances the library's capability to mobilise financial resources. From this source Makerere University was able to mobilise the equivalent of US $ 25,620 over a three-year period (Mugasha, 2001). Other universities are mobilising substantial amounts from external users. For example, University of South Africa has been able to realise the equivalent of US $ 84,801 over a three-year period (Pienaar, 2001).

E-mail and Internet Services

E-mail and Internet services are new services that have been introduced in several libraries and information centres. These services are expensive to sustain because there are several costs associated with the provision of the services, such as maintenance of facilities and paying Internet connection charges. These are additional costs to the already constrained library budgets. To recover the costs associated with the services, most libraries charge a cost-recovery fee in order to sustain the service. For example, the University of Dar es Salaam Library is charging for the use of e-mail and Internet services on cost-recovery basis. The library has been able to mobilise the equivalent of US $ 12,034 over a three-year period (Nawe and Kiondo, 2001). This money was used to sustain services by paying for maintenance costs and Internet connection charges.

Photocopying, Printing and Binding Services

Through charging for photocopying, printing and binding services many libraries in sub-Saharan African countries have been able to generate substantial amount of financial resources. In a survey of income generating experiences of eight university libraries in Eastern, Central and Southern Africa it was found out that all the surveyed libraries generated substantial amount of money from these services (Rosenberg, 2001).

Renting Facilities (conference rooms/carrels/ equipment)

Renting facilities such as conference rooms and carrels have also been identified as another area where libraries can mobilise some financial resources. Library facilities are rented out for seminars and workshop, study carrels or some equipment.

Inter-Library Loan Services

Inter-library loan service is very costly, hence most libraries charge users on cost-recovery basis to sustain the service. Whereas the service is provided free at the University of Dar es Salaam, it is charged at cost-recovery basis in most South African university libraries such as the University of Pretoria and the Rand Afrikaans University (Boltman, 2001; Pienaar, 2001).

Human Resource Mobilisation

Human resources are central to any organisation because these are expected to undertake the activities spelt out in strategic planning documents. In order to provide modern, quality, innovative and dynamic services in the information age, there is need to strategically mobilise human resources in a systematic way. Human resource mobilisation refers to attracting and maintaining qualified staff, and to training and retraining of current staff in order to empower them to cope with the rapidly changing library and information services environment. In mobilising human resources for library development, the emphasis should be on quality rather than quantity. In the above context human resource mobilisation should involve drawing human resource development strategies, motivating staff financially and psychologically to enable them to make tangible contributions towards the realisation of the mission of the organisation.

As part of mobilising its human resources for effective discharging of services, the University of Dar-es-Salaam Library has drawn up a human resource development plan in its strategic planning document. It has therefore:

- Conducted training needs assessment;
- Planned and implemented human resource development;
- Established an ICT training unit for skilling its human resources;
- Conducted sensitisation workshops (i) to empower its human resource for challenges; and opportunities of the changing environment, and (ii) to sensitise human resources for new roles and responsibilities in the changing organisational cultural dispensation.

Mobilisation of Materials Resources

Provision of modern information services require acquisition of modern equipment and facilities such as hardware and software, printed and electronic resources, air-conditioners and grilling for the conducive and secure working environment. Libraries and information centres need to strategically plan for the acquisition of these material resources in order to be able to cope with the demand for modern services. Therefore, human resource mobilisation should go hand in hand with financial and material resource mobilisation. In fact one of the objectives of searching and employing alternative ways of mobilising financial resources is to

be able to sustain services by ensuring that all the material resources required for effective provision of services are available. For example, the Makerere University Library has used the funds from its income generating strategies to purchase vehicles, renovate the library building, purchase books, chairs and tables, purchase computers and accessories (Mugasha, 2001). In general, most libraries are free to utilise financial resources to meet their daily resource needs. As is the case with the Makerere University Library, most other libraries have used mobilised financial resources to fund their staff development and training needs. According to Rosenberg (2001) existence of mobilised income "has become crucial for services to continue. it gives libraries some degree of independence and can pay for those extras... which the library budget of today does not include.

Sources of Support for Library Development

Information workers in Africa should frequently update their knowledge of sources and areas of support for library development as a resource mobilisation strategy. As professionals it is important to share and exchange ideas and to search the Internet for news and good practice. There are several national and international organisations that can provide support in the form of training, book and equipment purchase, short courses for continuing education, conference participation as well as funding for library development projects. This section presents a brief (selected) overview of sources of support for library development that could be used to mobilise resources.

- **International Federation of Library Association (IFLA)**

This is a worldwide organisation created to provide librarians with a forum for exchanging ideas, promoting international cooperation, research and development in all fields of library activity (www.ifla.org/III/index.html). IFLA administers a number of grants and scholarships to enable aspiring library and information professionals from all over the world to enhance their training and to provide funding for new and exciting projects in the field of librarianship. Its funding programmes include *The Margaret Winjnstroom Fund for Regional Library Development*, and the *Bart Nwafor Staff Development Programme* that supports scholarship and attachment programmes in Africa.

- **International Network for the Availability of Scientific Publications (INASP)**

INASP is a cooperative network of partners whose mission is to enhance information within and between countries especially those with less developed system of publication and dissemination. The main objectives are to promote access to dissemination of scientific and scholarly information and knowledge, to promote in-country capacity building in production,

organisation, access and dissemination of information. The activities include advisory and liaison services, African journals online service, and support for publishing projects and libraries in Africa (www.inasp.org.uk/infor/inasp.html).

- **Sida/Sarec**

Sida/Sarec is a Swedish development corporation that funds several development and ICT projects. In its development programme, it has a provision for library support. It has consistently supported library activities, including ICT projects at Sokoine University of Agriculture, Morogoro and University of Dar es Salaam libraries, both in Tanzania.

Mobilising Local Support

The current trend is to mobilise support from local private, public and non-governmental organisations to support information development and management projects. Tripartite partnership in development means that the private, the public and the civil society should work together to steer development. It is therefore important to lobby local partners for support. The University of Dar-es-Salaam Library has been able to receive support for equipment from the Tanzania Breweries. Other private/public organisations may follow suit in the future. This is another area of support that can be cultivated and developed as part of a resource mobilisation strategy.

Conclusion

Inadequate funding, the desire to apply IT and the demand for timely and cost-effective information services call upon information professionals to seriously engage in resource mobilisation. Therefore, the information professionals of the 21st century need to possess skills not only in discharging their duties as professionals but also skills in negotiating with donors, marketing information services, managing income generating projects, project proposal writing, strategic planning, fund-raising and managing innovative information technology projects. The ultimate objective is to strive for innovative and sustainable services. Resource mobilisation should make tangible impact on library development. Therefore, the issue at stake should not only be resource mobilisation but also effective use of mobilised resources.

References

Boltman, H. G. (2001) Library Services: Rand Afrikaans University. In: Rosenberg, D. (ed.) *Income Generation Experiences from University Libraries in Eastern, Central and Southern Africa.* Oxford: INASP, pp. 27- 34.

Bosseau, D. L. (1993) The Changing Face of Information Provision: Facing Reality. *Information Management Report*, Oct: 9-11.

Harris, C. (1996) Resourcing for Academic Libraries. *New Review of Academic Librarianship* 2: 1-129.

Heery, M. (1999) Winning Resources. *Bottom line* 12(2) 1999:57-67.

IFLA "about IFLA" (www.ifla.org/III/index.html) 25/07/01.

IFLA (www.ifla.org) 25/07/01.

INASP (www.inasp.org.uk) 25/07/01.

INASP "Activities involved" (www.inasp.org.uk/infor/inasp.html) 25/07/01.

Kagoda-Batuwa, Sarah (1996) Free Versus Fee: The Challenge of Government Libraries in Uganda *62nd IFLA Conference Proceedings* – August 25-31, 1996.

Martin, K. Susan (1998) The Changing Role of the Library Director: Fund-Raising and the Academic Library. *Journal of Academic Librarianship*, 24 (1) 3-10.

Max, E. Graf et al. (1995) Library Materials Fund Allocation: A Case Study. *Journal of Academic Librarianship*, 21 (1) 39- 42.

Mugasha, J. (2001) Makerere University Library. In: Rosenberg, D. (ed.) *Income Generation Experiences from University Libraries in Eastern, Central and Southern Africa.* Oxford: INASP, pp. 57 -70.

Nawe, J. and Kiondo, E. (2001) University of Dar-es-Salaam Library. In: Rosenberg, D. (ed.) *Income Generation Experiences from University Libraries in Eastern, Central and Southern Africa.* Oxford: INASP, pp.49-56.

Piennar, A. (2001) Academic Information Services, University of Pretoria. In: Rosenberg, D .(ed.) *Income Generation Experiences from University Libraries in Eastern, Central and Southern Africa.* Oxford: INASP, pp.35 -40.

Prochaska, Alice (1998) The British Library and Its Digital Future as a Research Library. *Library Review*, 47 (5) 311-316.

Rosenberg, D. (ed.)(2001) *Income Generation Experiences from University Libraries in Eastern, Central and Southern Africa.* Oxford: INASP, pp: 1 - 10.

Sida/Sarec (www.dsv.su.se) 25/07/01.

Tanui, Tirong Arap (2001) Margaret Thatcher Library, Moi University. In: Rosenberg, D. (ed.) *Income Generation Experiences from University Libraries in Eastern, Central and Southern Africa.* Oxford: INASP, pp. 11- 20.

Utah, J. (2001) Library and Learning Resource Center. In: Rosenberg, D. (ed.) *Income Generation Experiences from University Libraries in Eastern, Central and Southern Africa.* Oxford: INASP, pp. 21 - 26.

Webster, J. and Middleton, C (1999) Paying for Technology: Student Fees and Libraries. *Journal of Academic Librarianship*, 25 (6) 462-472.

Zink, S. (1995) 61st Government Information in a World of Change. *61st IFLA Conference Proceedings*, Istanbul, 1995.

* Elizabeth Kiondo is Associate Director (Technical Services) at the University of Dar-es-Salaam, Library, Tanzania. She attended the University of Dar es Salaam, Tanzania, the University of Toronto, Canada and the University of Natal, South Africa. She holds the BA (Hons) , MLS and Ph.D degrees.

Afr. J. Lib. Arch. & Inf. Sc. Vol. 12, No. 1 (2002) 27 - 39

Moving a Small Library in an African Setting

Adriaan Swanepoel
Library Services
Technikon Pretoria
Private Bag X680
Pretoria 0001
Republic of South Africa
e-mail: swanepa@techpta.ac.za

Abstract

This paper presents ideas and practical experiences gained by the author in his involvement in moving some small special and academic libraries. The emphasis is on ways to calculate shelf space, mark and prepare shelves, pack, unpack and re-shelve books and periodicals. Considering the importance and necessity of timely planning, this paper also gives information on the role and function of a planning committee for moving. The paper ends with a few practical suggestions on moving a small library.

Introduction

Moving a small library is often erroneously regarded as an exercise that does not involve much planning and organising, and even less need for research. Such views often lead to bottlenecks, uncoordinated activities, delays and mistakes. Although much can be learned from experiences gained from other libraries and from articles like this one, nothing can replace thorough and timely planning.

The aim of this paper is to contribute to existing literature on the moving of libraries by presenting ideas and practical experiences gained by the author in his involvement in moving some small special and academic libraries during his employment at the Department of National Education (now the Department of Education), the Documentation Service of the National Defence Force, and the Library Services of Technikon, Pretoria. The contents of this paper, however, could be applicable to other library types. Although librarians who plan such library moves have to deal with issues ranging from budgeting to motivating staff, experience has shown that the main concern of librarians is how to move books and periodicals. The emphasis of this paper is therefore on ways to calculate shelf space, how to mark and prepare shelves, and how to pack, unpack and re-shelve books and periodicals. This paper also gives information on the role and function of a planning committee for moving. Another matter briefly discussed is the moving of library furniture and equipment. The paper ends with a few practical suggestions on moving a small library.

The Need for a Planning Committee

The size of a library does not necessarily reflect the number and variety of tasks involved in moving its contents. In fact, many of the activities may only differ in terms of scale. Even in the case of a small academic library, the scope and content of the tasks involved in planning and organising a library move are of such a nature that the involvement of a number of people in the college or university is required. The following persons are well suited to form part of a planning committee: The librarian, or a senior library staff member who has the authority to make decisions regarding matters that involve the library move. This includes budgeting in time to acquire the necessary funds, recruiting part-time workers, approving last minute changes in time schedules, and liasing with the management of the institution.

- At least one other library staff member. This member could have the responsibility of compiling and submitting statistics, planning and preparing the logistics of the move, and keeping library staff and users informed and motivated throughout the move. This member will most likely also be the one who supervises the actual move and who will, according to Grey (1992), walk around, look around and visit work in progress.

- A representative of the institution's computer department. Moving computer equipment requires special attention and, therefore, technical advice with regard to site preparation, moving, reinstallation and testing hardware and software is essential.

- A representative of the institution's finance department. In some small libraries the librarian does not always have the authority to approve expenditures unrelated to everyday library matters. Even if the librarian may authorise items within the budget for moving, it is most likely that unexpected expenses or additional costs, which were not part of the approved budget, will occur shortly before or even during the library move. This may take the form of taking out additional insurance, hiring additional casual workers or fixing a broken elevator. It is, therefore, important to have someone on the planning committee who is authorised to budget for and approve expenditures not included in the librarian's mandate.

- A representative of the department that planned and managed the construction, alteration or renovations to the building where the library will be moving. Apart from using his technical knowledge, this member of the planning committee could be involved in numerous practical

matters, such as submitting floor plans, arranging site visits, coordinating the move with other activities, such as the completion of the new premises, liaising with electricians regarding the move, and the connection of electrical equipment, such as the library's access control system, and many more.

- A representative of the organisation's purchasing department. Usually this will be the department responsible for ordering new furniture and appliances, inviting tenders and signing maintenance or hire purchase contacts with vendors.

Tasks of a planning committee

In general, a planning committee will be involved in matters such as estimating the costs and drawing up preliminary budgets, setting time schedules, creating sequences of events and deciding on priorities, organising project moving teams, planning a publicity campaign and keeping the organisation's management informed about costs, time scales and slippages.

In short, a planning committee should coordinate the planning process as well as the actual moving. According to McDonald (1994) the planning committee should have "responsibility and authority for all aspects of the relocation of the library - human resources and finance, as well as procedural and physical aspects."

Moving the Book Stock

Moving a library's books and periodicals is probably the aspect where there is the greatest possibility of things going wrong. It is, therefore, imperative to take great care and spend sufficient time on planning this task.

It is most likely that the layout of the bookshelves in the new library will differ from those in the old library. This may be the result of additional shelving space in the new library, or due to a different floor layout. It is also likely that the new library will have shelving areas for special collections that, due to a lack of space in the old library, had to be part of the normal book stock. Therefore it is important that the planning committee should give much thought to the following questions:

1. Where will each collection or subcollection be housed? This issue should have been dealt with during the planning stage of the library, but if it was not, the planning committee should identify the area(s) where the different collections, e.g. the reference collection, the study collection and the adult fiction collection have to be moved.

2. Where will the sequence of each book collection start? If a collection is to be housed on a single area on single floor or level, the decision on where to start and where to end the sequence may be easy. But more planning is required if a book collection has to be moved to different floor levels or even to different areas on the same level. Questions that need to be addressed are:

   (a) Should the sequence start on the ground floor and carry on upwards to the top floor, or *vice versa*?

   (b) How will the library deal with a sequence that has to be is continued in one area and continued in another area, e.g. across a passage or on the next floor? A solution may be to discontinue a sequence at the end of a logical entity, for example, at the end of a specific subject range or an alphabetical range.

   (c) How will the books in each separate collection be distributed throughout the stacks? If each shelf in the new library will contain exactly the same number of books as in the old library, the removal, packing, unpacking and re-shelving of the book stock could be a relatively easy task

In such circumstances the shelves in the old library as well as the new library could simply be marked from 1.n. When the books on shelf No. 1 in the old library are packed into a container, the container should also be marked "No. 1." The books in container No. 1 will have to be unpacked on shelf No.1 in the new library. The same pattern would then be used for all the other shelves. However, if the books are to be distributed differently in the new library, careful planning is needed. A method that the author has applied with success at Technikon Pretoria Library Services is to do the following exercise on paper with regard to each separate collection:

1. Draw a front view picture of every row of shelves where the collection, e.g. the reference collection, will be moved.

2. Number all the shelves from 1 to n, where n can be any number from 2 upwards, starting with the top left shelf of row No. 1. and ending with the right bottom shelf of the last row. Do not number the bottom or top row of shelves if you plan to reserve the shelves for future extensions. The number of the last shelf will also indicate how many shelves are going to be used for unpacking the books.

3. Still on paper, divide the collection into manageable subdivisions according to the main categories of your library's

classification scheme. If the library has large numbers of books in a particular subject category, divide that category into smaller categories. In libraries where books are classified according to the Dewey Decimal Classification (DDC) system, sub-categories could be DDC 510 - 519, DDC 520 - 529, etc.

4. Count the number of books in each category or sub-category.

5. Summarise all the individual counts in order to arrive at the total number of books in the collection.

6. Count the number of shelves on which the books are going to be unpacked. This number should be the same as the last shelf of the last row of shelves (see step No. 2 above).

7. Divide the total number of books in the collection with the number of shelves to be occupied. The result is an indication of the average number of books in that particular collection that will have to be unpacked on each shelf in the new library. Say, for example, that the average number of books per shelf is 21.

8. Multiply the average number of books per shelf with the number of books in each subject category (or sub-category). The result is the number of shelves each subject category (or subcategory) will occupy. It will also indicate at what shelf number each subject category will start and at what shelf number it will end. If, for instance, category DDC 001 - 019 contains 290 books, and if the average number of books per shelf is 21, that category will occupy 13.8 shelves (rounded off to 14 shelves). It also means that the first book in the category DDC 001 - 019 will have to be unpacked on shelf No. 1 and the last book in the category will have to be unpacked on shelf No. 14. The first book in the next subject category will obviously be on shelf No. 15.

9. Still on paper, follow the same procedure with the entire subject categories as described in the preceding paragraph (step No. 8) until all the books are evenly distributed throughout the available shelves.

Packing, Unpacking and Re-Shelving Books

Notwithstanding careful planning, the unpacking and re-shelving of books in a pre-planned order could easily go wrong. It is therefore important that a library

should use a system of marking its containers in such a way that the sequence of the containers, and therefore the sequence of the books, will not be disrupted. It is also important for the librarian to set aside ample time for those activities, in order to prevent the time schedules of the book movers and the shelf movers from overlapping. One way of ensuring that the disruption of book sequences is limited to the minimum, is to follow the steps set out below. This procedure was used with success by the author during the move from Technikon Pretoria's old library to a new main library in October 1994. However, a library that has to re-use all or part of its existing book stacks (as was the case with the Natural Sciences Library of Technikon Pretoria) will have to include a few extra steps in the planning process, since this would involve the dismantling of the stacks in the old library, storing the containers, and re-erecting the stacks in the new library. The procedure is described below:

1. Start at the beginning of a subject category (e.g. DDC 001 - 019) and remove from the shelves the average number of books at a time that are going to be unpacked on the new shelves. If, for example, the average number is 21 books per shelf (see step No. 7 in the previous section), then 21 books at a time will have to be removed from the old shelves and packed into containers. The sequence of the books should be maintained as far as possible. Some librarians suggest that books should be removed in the reverse order from the shelves, beginning with the last book on a shelf. Thus, when the books are unpacked, the books at the top of the container are the ones that go on to the shelf first.

2. Mark each container with a consecutive number and with a marking that indicates the subject category involved, e.g., *Box No. 1, DDC 001 - 019, Study Collection*. The second container in the series will be *Box No. 2, DDC 001 - 019, Study Collection;* the third container will be *Box No. 3, DDC 001 - 019, Study Collection*, etc.

3. Unpack the containers in the following way: Start with container No. 1 in each subject category and unpack the contents on the first shelf of that category. If, for instance, DDC 510 - 519 starts on shelf No. 210, the contents of the first container in that category will have to be unpacked on shelf No. 210. The second container in that category will have to be unpacked on shelf No. 211, the third container on shelf No. 212, etc.

Number and mark the rows, bays and shelves where a particular book collection is to be moved. Then mark the side panels of each row of bookshelves with clearly visible stickers indicating –

- the name of the collection to be unpacked on that particular row of shelves;
- the range or subject category;
- the position where the unpacking should begin; and
- the position where the contents of a container should end.

The numbers on the shelves should correspond with the numbers on your paper layout. This will ensure that the movers have a clear indication of where a particular sequence should start and end. It should also prevent the movers from unpacking books on unmarked shelves reserved for future expansions.

It is important to discuss the procedures of packing, unpacking and re-shelving the books with the movers before hand and even to provide training, if necessary.

Moving Periodicals

The planning process of moving periodicals is often more complicated than the planning involved in moving books - especially if library staff want the periodicals in the new library to be distributed more evenly or with more expansion space between different titles.

A quick, but workable, procedure is as follows:

Draw a front view picture of every row of shelves where the periodical collection will be moved.

- Number the shelves consecutively from 1.n. Do not number the top or bottom row of shelves if you plan to use those shelves for future expansion.
- Print an alphabetical title list of all the current and cancelled periodicals in stock.
- Count the number of shelves occupied by each title and write down the number next to the particular title on the printout.
- Still on paper, start with shelf No. 1 and allocate the same amount of shelf space to the first serial title (e.g. Aardvark Journal), plus the amount of extra shelving required for expansion in the next x number of years. If, for example, Aardvark Journal occupies three shelves in the present library, and it will need two more shelves for expansion in the next x years, the individual copies of Aardvark Journal will have to be moved to shelves Nos. 1, 2 and 3 in the new library, and shelves Nos. 4 and 5 will have to be kept

open. The second journal title in the alphabetical order (Amphibian Journal) will then start on shelf No. 6.

- In the same manner, continue allocating shelf space for all the periodicals. If all the periodicals do not fit into the allocated space, reduce the amount of shelving needed for future expansion.

Librarians should take great care that packers keep rigidly to the alphabetical order when they remove periodicals from the shelves to pack into containers. Unbound copies should not be removed from their boxes or folders. To ensure that unbound copies are kept in their sequence, secure the contents of each box or folder with string beforehand. Although it may be time-consuming, it is advisable not to unpack shelves simultaneously at more than one spot. Instead, start with the first title in the collection (e.g., Aardvark Journal) and work systematically through all the titles up to the last title in the collection. Mark every container with a consecutive number (e.g., 1, 2, 3, ...n) and with the title of the periodical in the container. Start unpacking container No.1 on the first shelf designated for periodicals, following with container No. 2, etc. Remember to use a copy of your shelf layout (see step No. 3) as a checklist.

Moving Furniture and Equipment

- Before setting a preliminary date and time for moving furniture and equipment, consult all the persons involved, e.g., building contractors, electrical contractors, moving contractors, and the telephone company. A final date will probably only be set after much consultation.

- Draw a detailed plan to scale of every section in the library where furniture and equipment will have to be moved, indicating the exact position of each piece of furniture or equipment on the plan. Use a different colour to indicate the positions of new furniture. Number each piece of furniture and equipment on the plan. Give copies of this plan to everyone who will supervise the actual moving of the furniture and equipment.

- Mark each piece of furniture and equipment with a label that can be removed without damaging the surface, indicating the number of the piece of furniture or equipment, floor level, department, room number, where applicable, and the name of the staff member in whose office or department the item must be placed.

- Fix pieces of cardboard with masking tape on the floor of the new site where each piece of furniture or equipment has to be placed, and give

the cardboard pieces the same number as the furniture and the equipment to which they refer.

- Check the stipulations of licence agreements, service contracts and hire purchase agreements on moving and reinstallation of furniture and equipment. This is especially applicable to moving and reinstalling computers, photocopiers and access control systems.

- Obtain the necessary quotations and time schedules if any equipment will have to be dismantled, moved or reinstalled by an outside company. Include the above-mentioned time schedules in the rest of your time schedules.

- Check that the data cabling in the new library is of the same type as in the existing library. If not, replace the network cards in computers, or buy and install the necessary adaptors if the same network cards will be used.

- Arrange with staff of your computer department to test every piece of equipment as soon as it has been reinstalled in the new library.

Outsourcing

One of the options that a planning committee has when planning a library move is to decide whether to make use of the parent institution's own staff or to use contractors outside the parent organisation. Often, the decision is influenced by the amount of money available for the move. But in some cases the decision is made in favour of an outsider contractor due to special skills required, as in the case of moving computer networks, or due to contractual arrangements with suppliers of leased appliances. Regardless of whether or not a librarian has the authority to outsource certain activities with regard to the library move, or whether or not he/she has to arrange for outsourcing through other departments in the parent organisation, the following activities are involved:

- Listing all items that have to be dismantled, disconnected, moved, reinstalled, reconnected and tested by contractors outside the parent organisation.
- Obtaining the necessary quotations from different contractors well in advance.
- Including the quoted costs in the budget for moving the library.
- Notifying contractors whether their tender applications were successful

or not.

- Drawing up the necessary contracts or agreements.

Conclusion and Recommendations

Guidelines in the previous sections that deal with specific issues like allocating shelf space and moving books and periodicals have been discussed. Moving a library, however small, requires good planning and organising and with informed and motivated staff. It requires a lot of hard work, but could be an exciting venture to be enjoyed by everyone. A successful library move could possibly best be described in the words of Col. John "Hannibal" Smith of the *American TV series The A-Team: I love it when a plan comes together.*

Nevertheless, there are a number of suggestions of a general nature that every planning committee should seriously consider including on their checklist in order to manage the move as effortlessly as possible.

- It is crucial to know well in advance when the new building will be finished and when all contractors and sub-ontractors will be off the premises. A planning committee should obtain this date from the project manager before finalising a date with the moving contractors and before informing all other relevant parties. It could be frustrating to arrive at the new library premises and find electricians and carpenters still doing last minute jobs.

- Users, suppliers, management and colleagues should be informed in advance when the library or certain departments or services in the library will close due to the move, and when it will reopen.

- Care must be taken to protect the old and new building and their furniture against accidental damage. Doors, elevators and carpets are especially exposed to damage and should be covered. McDonald (1994) suggested that even the routes taken by trolleys outside the building might be covered to facilitate smooth and easy movement.

- There should be plans to keep staff morale high - before, during and even after the move. These issues are well covered in an article by Moreland and Robison (1993).

- Spares of critical equipment should be available in the library and the librarian should find out where spares could be obtainable on very short notice. Examples are spare wheels for book trolleys, spare tools for dismantling or fixing purposes, and extra coverings for floors, containers, etc.

- A task list for every person involved in the move should be compiled. On the days of the actual move everyone should know exactly what is expected of him or her. Kurkul (1983) is of the opinion that each task assignment "necessitates written and/or verbal communication of job tasks, procedure demonstration, safety regulations, performance evaluation of progress, and disciplinary action."

- Make someone responsible for keys and let him or her keep an inventory of all keys and their whereabouts. This includes keys of the old building, keys of items in transit, keys to the new building, offices, etc.

- Make lists available in the old library as well as in the new library of key personnel with their responsibilities, and where and how to contact them.

- Have the following people on standby on very short notice: a handyman, cleaners (janitor), a building contractor and first aid personnel.

- Check the load limit of the elevators and post a sign on the outside and inside of the elevator indicating the load limits in practical terms such as maximum load: three trolleys and two people. (Tucker, 1987).

- Reserve specific areas for empty containers.

References

Grey, B.J. (1992) Making your Move. *American Libraries*, 23 (4) 330 - 31.

McDonald, Andrew (1994) *Moving your Library*. London: Aslib, 36 p.

Moreland, Virginia F. and Robison, Carolyn L. (1993) Moving a Library Collection: Impact on Staff Morale. *Journal of Academic Librarianship*, 19 (1) 8 - 11.

Kurkul, Donna Lee (1983) The Planning, Implementation and Movement of an Academic Library Collection. *College & Research Libraries*, 44 (4) 220 - 234.

Tucker, Denis C. (1987). *From Here to There: Moving a Library*. Bristol, Indiana: Wyndham Press, 179 p.

*Adriaan Swanepoel is the Deputy Director, Library Services at Technikon Pretoria, South Africa. He attended the University of Pretoria. He holds the degrees of M.Bibl. and D. Litt et Phil.

ADRIAAN SWANEPOEL

Afr. J. Lib. Arch. & Inf. Sc. Vol. 12, No. 1 (2002) 39- 45

The Reorganisation of the University of Dar-es-Salaam Library, Tanzania

J. Msuya
University of Dar es Salaam Library
P.O. Box 35092
Dar-es- Salaam, Tanzania
Jangawemsuya@yahoo.com

Abstract

This paper is on the study conducted in 2000 on the reorganisation of the University of Dar-es- Salaam Library, Tanzania. It highlights the objectives of the reorganisation, showing the central idea behind the exercise and the rationale for the reorganisation. The paper also outlines the physical movements of materials that took place and the procedure that was followed. Finally, a presentation is made on lessons that other libraries can learn from the reorganisation experience.

Introduction

Reorganisation of libraries is a process that is carried out from time to time as the need arises. The process can be seen as an overhauling of the library in terms of reviewing the organisation of the materials in the library, human resources deployment, organisational structure, workflow, etc. This is done with a view to improving performance in order to increase efficiency and provide better service to customers.

In mid-2000, the University of Dar-es-Salaam (UDSM) Library was reorganised. This involved a massive shifting of materials from one section of the library to the other. Some library departments were dismantled while others were merged. There was a transfer of staff members to new departments and the library organisational structure was also changed. What was the rationale for this exercise?

The Objectives of the Reorganisation

The re-organisation of the University of Dar-es-Salaam Library was based on the need to improve library services. The library felt that it could improve its services through increased efficiency in the following ways:

- Saving clients' time by reducing the time spent in moving from one part of the library to the other seeking library materials scattered all over the library;
- Enabling users to identify themselves with a particular department or section of the library, hence creating a sense of ownership;
- Bringing library clients closer to the library staff by making the clients identify themselves with a particular group of library staff who will serve them on a daily basis;
- Increasing responsibility and accountability of members of staff;

Management of Change

Changes are always difficult to accept. Human beings prefer maintaining the status quo to venturing into a new system which they are not sure of. In order to ensure that all staff were on board and no one was left behind in this exercise, the reorganisation involved all staff right from the planning to the implementation and evaluation stages. The procedure that was followed to ensure a democratisation of the decision-making process and participation of both library staff and stake holders was as follows:

- The library formed a Space Utilisation Committee which worked out the entire modality for reorganisation.
- Library staff were involved through a series of meetings and consultations.
- Library stakeholders were involved through representation in the Senate Library Committee.
- The Senate Library Committee which is the Advisory Board to the Library was presented with the reorganisation plan which they endorsed.
- In August 2000, a workshop on familiarisation with the new system was held after the exercise. It involved all members of the library staff (The Library, 2001).
- In March 2001, another workshop was conducted to evaluate the outcome of the exercise.
- In April 2001, a workshop was held to sensitise library users on the rationale for reorganisation. Participants were picked from the student community both undergraduate and postgraduate, academic staff and researchers. Faculty representatives to the library were also included.

The Library Organisational Structure

Some library departments were merged while others were completely dismantled. This necessitated changes in the organisational structure of the library to reflect those changes.

The traditional structure where the library was mainly organised along library functions was changed to fit in the new system where the library was organised according to broad subject areas.

The new organisational structure has the Director as the Head of the library. Three Associate Directors assist the Director. The first one is in charge of Readers services, which constitutes the departments of Law, Social Sciences and Science and Technology. The second one is responsible for Technical Services which is comprised of departments of Acquisitions, Reference and Information Technology. The third one is in-charge of Research and Publications. This one is responsible for Research and Publications, and the East Africana Collection which houses all local publications and special collections. While Divisions are under Associate Directors, Departments are under Heads of Departments.

Rationale for the Reorganisation of the Library

At the reorganisation workshop for library workers, Msuya (2000) identified the following factors as the rationale for reorganisation:

(i) Increased student enrolment.
(ii) Organisation of the library according to broad subject areas.
(iii) Introduction of information and communication technology.
(iv) Completion of library extension.

Increased Student Enrolment

One of the objectives of the University of Dar es Salaam Institutional Transformation Programme, popularly known as Programme Management Unit (PMU)/ (UDSM, 2000) was to increase student enrolment. The programme has enabled the number of students at the University of Dar es Salaam to increase steadily with time in all its three campuses. Student enrolment increased from 3459 (3215 undergraduates and 244 postgraduate students) in the 1994/95 academic year to 4973 in the 1999/2000 academic year, made up of 4765 undergraduates and 208 postgraduates.

The increase in the number of students is supposed to be backed with expansion of library services. This necessitated some kind of reorganisation to provide extra space for more chairs and tables. Therefore, there was a need for reviewing the library space utilisation plan to accommodate the increased number of students. The reorganisation provided more space for additional chairs and tables for the increased student population.

Organisation of the Library According to Broad Subject Areas

The library departments were originally organised according to library functions such as cataloguing, circulation, etc. For a long time, the library had felt that there was need to organise its departments according to subject areas, locating all types of materials on the same subject together. This means that books, journals, special reserve items and other publications on a particular subject should be located in one place. The decision was intended to assist different user groups in accessing all their materials in one place. It was not until the year 2000 that a firm decision to implement this plan was reached.

Introduction of Information and Communications Technology

The introduction of Information and Communications Technology (ICT) to library services has also necessitated the reorganisation of the library. The computerisation of the University of Dar-es-Salaam library started in 1988 with the acquisition of a few computers which were mainly used for word processing. As time went by, more computers were purchased for CD ROM databases. With the computerisation of the catalogue and introduction of on-line information retrieval services, more computers were acquired. Additional space was therefore needed for computers that were introduced for public access catalogues, Internet services and e-mail services.

The reorganisation of the library was necessary in order to accommodate the new innovation. Rooms which were formerly used for housing books are now designated for ICT-related functions such as computer cluster for students, computer-based reference services, computer training labs, server room, etc.

Completion of Library Extension

With the financial assistance from the Norwegian Agency for Development (NORAD), the library building was extended by three bays in all three floors in the Eastern wing. The expansion increased the library space by 1,000 square metres. In order to utilise this space optimally, it was necessary to revisit space utilisation plan so that all sections of the library could benefit from the increased space.

The Expected Outcome of the Reorganisation

What exactly did the library want to achieve by the reorganisation exercise? One of the expected outcomes of the exercise was bringing the services closer to the users thus save their time. The idea was that library users should spend much time moving from one part of the library to the other seeking materials of different types. For example:

Why should a science student:

- go to the Science Collection for science books;
- go to the Periodicals Section for science journals;
- go to the East Africana Section for local and research materials; and
- go to the Special Reserve Section for Special Reserve materials?

This movement was considered unnecessary and a waste of time. It had to be stopped through the placement of materials of the same subject area together even if they are of different form/type. There is also the creation of a sense of belonging and commitment to a specific part of the library. If faculties have all their materials placed in one section of the library, the users will identify with their specific collections and will therefore be committed to them.

An improvement in the relationship between library staff and users was another expected outcome of the reorganisation. It was expected that if the library was organised under broad subject areas, each department would have specific library staff serving specific users, then this would promote interaction between users and library staff and improve the existing relationship between the two groups. Users could identify themselves with specific members of library staff.

There was also the issue of creation of a sense of responsibility and accountability among the library staff. Each section is now fully responsible and accountable for all activities going on in their area, including provision of reference service to their users. In case of any problems or users not being satisfied with the services offered in their specific sections, then there are staff that are responsible and accountable.

Lessons for other Libraries

One of the lessons to be learned from the UDSM Library reorganisation experience is that introducing changes is not something that is easily accepted by all staff. The staff had their own ways of doing things which they were used to. Introducing changes means subjecting them to a learning process, and at the same time placing them in a world of uncertainty and the unknown. This is a challenge to all library managers and administrators as observed by Nozero and Vaughan (2000) that: "Change is not only desirable but also mandatory. How to manage and direct change, and internalise continuous change into the culture of the academic staff is a challenge faced today by library administrators and managers."

Another lesson is that whenever any innovation is introduced into the workplace, workers and stakeholders must be fully involved. This will reduce the level of anxiety and

resistance to changes. For example, one faculty proved to be difficult in accepting to be moved from one part of the library building to another despite having been represented in the planning phase. As a result, the exercise had to be delayed until the matter was resolved.

Equally important is proper planning of activities. Who is to do what and when? This means that serious consideration should be given to matching members of staff with tasks to be performed and their supervision and coordination. Timing is also important in terms of the most appropriate period to implement the exercise. The reorganisation of the entire library is appropriate if implemented during the long vacation when there is minimum use of the library.

It is also important to consider mechanisms of motivating staff. This is important because the task was tough, tedious and repetitive in nature. At the beginning, most of the staff were very enthusiastic. They were eager to do the job. As time went on, they got bored with the task. The work was no longer interesting. Therefore, there should be a system of continuously motivating staff and encouraging them to keep the staff morale high throughout the exercise.

For a library's reorganisation programme to be successful in an academic institution, it must have support from the top management of the University. In this case, for example, the University of Dar-es-Salaam Library had full support from the office of the Vice Chancellor, the Chief Academic Officer and the Chief Administration Officer. Some of the members of the management participated in the opening of the workshops. This support was very important for the success of the exercise.

Conclusion

The library's reorganisation was part of the University of Dar-es-Salaam Institutional Transformation Programme. It had addressed matters that were also stipulated in the University-wide transformation programme, such as expanded student enrolment, computerisation of the university and optimal utilisation of the existing physical and human resources (University of Dar es Salaam: 2000), which were all articulated in the University of Dar-es- Salaam Five-Year Rolling Strategic Plan.

The reorganisation of the UDSM Library is not yet over. It will be subjected to review from time to time just like the library strategic plan. The new sections, new processes and operations will continue to be evaluated. The review is intended to improve the reorganisation exercise. Consultative meetings with library staff and stakeholders will be

the basis of evaluation and means of getting feedback on the success and constraints resulting from the reorganisation.

References

University of Dar-es-Salaam. The Library (2001) *Proceedings of the UDSM Library Workshop to Review the Impact of the staff Sensitisation Workshop Held on 31st August 2000 and 28th March 2001.*

Msuya, J. (2000) Factors that Led to the Reorganisation of the University of Dar es Salaam Library. *Paper presented at the Re-organisation Workshop held at the University of Dar es Salaam on 31st August 2000.* Unpublished.

Nozero, V. A. and Vaughan, J. (2000) Utilisation of Process Improvement to Manage Change in an Academic Library. *The Journal of Academic Librarianship*, 26 (6) 416 – 421.

University of Dar-es-Salaam (2000) *UDSM Five-Year Rolling Strategic Plan 2000/2001 2004/2005. Version 1.*

University of Dar-es-Salaam (2000) *Institutional Transformation Programme (PMU/UDSM 2000). Facts and Figures 1999/2000.*

University of Dar-es-Salaam. The Library (2000) *The University of Dar es Salaam Library Strategic Plan.*

* J. Msuya is a senior librarian/lecturer at the University of Dar-es-Salaam Library. He attended the University of Natal, South Africa. He holds a Ph.D in Information Studies.

J. MSUYA

Afr. J. Lib. Arch. & Inf. Sc. Vol. 12, No. 1 (2002) 47 - 57

The Provision of Library Support Service in Colleges of Education in Botswana

O. S. Oladokun and B.T. Fidzani
University of Botswana Library
P/Bag 0022
Gaborone, Botswana
E-mail: Oladokun@mopipi.ub.bw ; Fidzanib@mopipi.ub.bw

Abstract

As a result of the affiliation of the colleges of education (COE) in Botswana to the University of Botswana, the libraries attached to the colleges were assessed with a view to finding out if they met the standards recommended for college libraries. Thus, the guidelines recommended in "College Library Standards, 1995 edition" were used in assessing the six colleges surveyed. The main factors used in assessing the libraries were: mission statement, collection, staffing, budget, technical services/materials organisation, library services, library administration and facilities. The findings revealed that most of the factors enumerated above were found to be inadequate in the six college libraries surveyed. Recommendations were made to all stakeholders to ensure that the libraries were considerably improved to enable them to perform the functions for which they were established.

Introduction

There are six colleges of education (COE) in Botswana – four of them producing primary school teachers and the remaining two, secondary school teachers. All the colleges are affiliated to the University of Botswana. They are: Francistown College of Education; Lobatse College of Education; Serowe College of Education; Tlokweng College of Education; Molepolole College of Education; and Tonota College of Education. The first four are geared towards primary school teachers, while the last two are for secondary school teachers.

In order to ensure the production of quality teachers for schools, the government directed that the teacher training institutions in the country should get affiliated to the University of Botswana.

It is pertinent to note that through this system of affiliation, the University has the responsibility for the maintenance of academic and professional standards of the diplomas for which the students in these institutions are prepared. The terms of affiliation made a proviso of three fundamental functions for the would-be affiliated institutions. First, it states that the institutions that wish to be affiliated to the University have to meet and maintain the standards, in terms of staff, facilities and resources, deemed appropriate by the University.

Secondly, the University will moderate the results of the students on programmes leading to awards of diploma in the colleges to ensure that they meet the standards required by the University. Thirdly, the affiliated institutions may, if they so wish, seek the advice and assistance of a University faculty or department in the development and review of their programmes. (University of Botswana Calendar, 2000/01).

In fulfilment of the terms and conditions of affiliation, the University of Botswana Library has the obligation to ensure that the library collections and services of the colleges, among other academic structures, are of a high quality. The University of Botswana Library (UBL), therefore, is of the belief that the libraries of the affiliated institutions should compare well with international standards for tertiary level college libraries. In carrying out its role, and to rule out the possibility of doubts, the UBL presented the required standards and recommended guidelines to the principals of these affiliated colleges in the 1995/1996 academic year for their information and consideration. With the provision of the benchmarks, and in clear appreciation of the inadequacies of their libraries, the colleges pledged to improve collections and services.

On the strength of the above, this study was conducted during the 1998/1999 academic year to determine the extent of compliance with the required standards and recommended guidelines for the college of education libraries in Botswana. The study aimed to examine how well the libraries provide good educational and intellectual support to classroom based-student learning and to lecturers' research in relation to the expected standards. The study was also out to suggest ways to further improve the library operations, equipment and technology with a view to improving the quality and standard of service in these libraries.

Methodology

In order to obtain a good measure of reliability in this study, the instruments used to collect data comprised a questionnaire, observation and interview. The four-page questionnaire comprised closed and open-ended questions. It was mailed to the institutions. Observation and interview schedules were used to enable the librarians and principals present their views and even volunteer information which they might not want to commit into writing. Visits were also arranged by the researchers to

observe and assess the existing facilities in order to gain first hand information on existing facilities.

Results of Findings

The primary mission of libraries within the colleges is to provide academic support to students and staff. The libraries have the responsibility to meet the information resource and service needs of the population it serves, as they relate to the programmes offered within the college. In order to ensure that the college libraries meet these needs of the population they serve, the standards set were taken from the United States of America and the United Kingdom, Library Associations (*College Library Standards 1995 Edition*) to enforce the college library standards. The Standards cover eight broad areas by which the quality of a library can be assessed. These include: mission statement, collections, staffing, budget, technical services/ material organisation, library services, library administration and facilities.

The issues raised in this study are in line with the above eight headings since they embrace significant areas on which the quality of any library can be appraised. All the identified areas need to be reviewed on a regular basis to ensure conformity with the changing information resource and service needs of the population served.

Mission Statement

In developing the mission statement of a library, librarians need to focus on the overall mission of the college. This accounts for the reason why commentary under Article 1.1 of the guideline states that the library should seek in a formal or structured way the advice and guidance of the primary users, the classroom faculty and students. It enjoins the existence of consultations with the college administration, in particular those officers responsible for academic programmes and policies. The guideline further succinctly states that a college library shall develop an explicit statement of its mission in accordance with the mission of the college.

The researchers observed that the mission statements of the college libraries were broad and general. For instance, all of them indicated that they supported the teaching, learning and research of the institutions they served. Their mission objectives were not clear-cut enough to provide a measure by which the user community that the libraries serve could understand and evaluate the appropriateness and effectiveness of their services. It is observed that they need to restate their aims and objectives in explicit and quantifiable terms. The study also revealed that the formulation of the mission statement was the product of the perception of the college librarians alone. If any, it was devoid of any form of consultation with the library primary users and college policy makers. It was also noted with concern that not much was done on periodical review which was stipulated in the guideline. Most of

the librarians appeared not to give any premium to the statement of library objectives which should also be reviewed and revised periodically as necessary.

Collection

The guideline on collection states that collections shall comprise all types of recorded information. This includes print and audio-visual materials, sound recordings, materials used with computers, etc. The guideline further states that the collection should boast of 15 volumes of books for each of the full-time equivalent (FTE) student and 100 volumes per faculty member. This is in addition to having a basic collection of 85, 000 volumes.

It is remarkable to note that at the time of this study none of the colleges moved close to meeting this target. None of them had CD-ROM or materials in machine-readable format or materials used with computers. Indeed, none of the libraries had a single computer of its own to keep pace with the stride in the modern information and communications technology (ICT) world. Sadly enough, the collection of the libraries surveyed was further debilitated by the common denominator of acquiring books in multiple copies that ranged from two to ten or more in some cases. The corollary of this common phenomenon among the college libraries is that the collections might be large superficially when in reality there were only few titles available. An example will probably suffice here. In one college library the total collections were 6,665 volumes. When counted in title terms the collection was reduced to 2,218.

A number of reasons were found traceable to acquisitions of materials in multiple copies. Firstly, it was noted that virtually all the college libraries were short-staffed. This is treated in greater detail under staffing below. It is however important to state that the entire responsibility of the library, including selection and cataloguing processes, among others, rested squarely on the shoulders of only one professional librarian found in each of the libraries. The implication of this is multifarious. For example, it was observed that thoroughness in selection might be missing.

Secondly, it was noted that the process of tendering for books to acquire by the college libraries left so much to be desired. For example, experience has shown that the winner of tender often found it difficult or impossible to supply all the selected items. The bid to exhaust the votes allocated for books at the last minute before the end of the financial year could result in fire brigade approach, which includes acquiring the materials in multiple copies.

The third reason observed was the absence of a collection development policy that could guide the acquisitions of library materials. It was therefore common to see some principals taking up the role of acquisitions librarians without applying any clear-cut policy. Of course, the absence of clear development policy did no good to the credibility of librarians as well. The study revealed that the libraries were used as

dumping grounds where some departments in the college passed leftovers of the self-purchased textbooks after distributing the rest to their students.

Staffing

In determining the guideline on library staffing, the basic criteria considered include the library's need for services, programmes and collection organisation. The guideline prescribed adequate size and quality staff that would meet the above needs. The quality in staff is unambiguously spelt out as it stipulates that the college library shall need a staff composed of qualified librarians and skilled support staff.

While it is noted that librarians that headed all the six college libraries were degree holders, it is regrettable that the libraries did not have adequate professional staff. Each of the libraries had only one professional librarian. This was even in the face of the formula for librarians, which stated in part and enjoined a library to have one librarian "for each 5,000 volumes or fraction thereof, added and/or withdrawn per year". The guideline states that enrolment, collection size and growth of collection should determine the number of librarians required by the college. The guideline was still awaiting application at the time the study was undertaken.

The staffing situation was also not helped by the inadequate or total lack of support staff in the libraries. The guideline directs that the library should have "no less than 65 per cent of the total library staff". The study revealed that only three of the six colleges had skilled support staff – three did not have. Even then, the three that had skilled support staff could not meet the minimum percentage of 65% of total staff required. The highest of the three colleges that had skilled support staff was the Molepolole College of Education which had 40%. The other two colleges of education had one skilled support staff each. Two different establishments were responsible for the recruitment of library staff to the colleges. The Botswana National Library Service (BNLS) was to ensure that professional staff were supplied, while the college were to recruit support staff.

Other libraries that are not mentioned above did not have skilled support staff. It is needless to say that a single-man library creates an unhealthy environment for any serious academic work, especially in residential campuses. There is little a single person can do in an academic environment where students reside 24 hours a day.

Budget

The guideline on budgeting clearly recommends that the library budgets, exclusive of capital costs and the costs of physical maintenance, should not fall below six per cent of the college's total educational and general expenditures. It is pleasing to note that all the colleges of education met this criterion as shown in table 1. For example, Francistown and Serowe Colleges of Education had the highest budget with 10.4%

each of their institutional budgets. Tonota and Molepolole Colleges of Education followed them with 7.9% and Lobatse and Tlokweng Colleges of Education with 7.3 %.

Although, the budget appeared healthy for each library, the situation on the ground was far from being adequate. This is because the basic collection of 85,000 volumes recommended as standard requirement was yet to be met by any of the libraries. It is hereby submitted that a lot still has to be done on budget with a view to meeting the collection standard.

Table 1: Percentage of Library Budget to Institution

Institution	Library Budget %
Francistown College of Education	10.4
Serowe College of Education	10.4
Tonota College of Education	7.9
Molepolole College of Education	7.9
Lobatse College of Education	7.3
Tlokweng College of Education	7.3

Technical Services / Organisation of Materials

Article 3.1 of the guideline states that there shall be a comprehensive catalogue of the library's holdings that permit identification of items, regardless of format or location, by author, title, and by subject as appropriate. It further stipulates that library collections "shall be organised by approved conventions and arranged for efficient retrieval at time of need". In making their selections of materials to be organised, the respondents were asked to name the selection tools they consulted. It is important to note that out of the variety of tools, such as global books in print (GBIP), book reviews, the Internet, publishers catalogues and pre-selection slips, publishers' catalogue was the only tool used by all the colleges. Other tools were hardly available to them.

The respondents were asked to state the classification scheme and cataloguing rules they used. All of them indicated that they used *Dewey Decimal Classification* (DDC) scheme and *Anglo-American Cataloguing Rules* second edition (AACR2) for cataloguing. There is no problem with the cataloguing rules used. However, some of the college libraries did not follow the rules strictly. The use of *Sears List of Subject Headings* as claimed by the libraries did not correlate with the subject headings assigned to most books.

It is known that the essence of cataloguing and classifying materials is to facilitate easy and efficient retrieval and storage. But our investigation revealed that some recent and already processed publications were in cartons in the office or in

storerooms when very old materials were prominently displayed in their multiple copies on the shelves.

Library Services

The commentary on the guideline indicated that the primary purpose of college library service is to promote and support the academic programme of the parent institution. The library should therefore maintain a range of services that will ensure an optimal library use. The questionnaire, in conformity with this expectation, itemised a range of services a college library should perform. These include library orientation, bibliographic instruction service, reference service, reprographic service, CD-ROM search service and reserve collection service, among others. Services like library orientation service, reserve collection service, issue and return service, current awareness service and inter-library loans service were undertaken by all the libraries. One of the libraries did not have a reprographic service. This has serious implications for the safety of materials in the library. Some valuable pages of library materials could fall victims of rip-off by unscrupulous users who might otherwise want to photocopy. None of the college libraries had CD-ROM facility. Whilst all the libraries performed library orientation, none was undertaking bibliographic instruction and information literacy skills service. Plans were already underway to get all the libraries automated.

Library Administration

Article 7 of the guldeline states, "the college library shall be administered in a manner which permits and encourages the fullest and most effective use of available library resources". In carrying out the above responsibility, Article 7.3 directed the institution to "have a standing advisory committee comprising students and members of the classroom faculty which shall serve as a channel of formal communication between the library and its user community". It is noted with satisfaction that the six college libraries complied with this directive. In most cases, the Deputy Principal (Academic) headed the committees. Article 7.2 of the guideline had earlier advised that the Librarian should report to the chief academic officer of the institution. One conspicuous omission found in most libraries was the lack of clearly written policies and procedures covering library internal governance and operation activities, which article 7.4 enjoined them to have.

The questionnaire sought to know how often the librarians arranged meetings with the teaching staff. Three colleges indicated twice a term, two reported regularly and the remaining one, once a term. The result of the question on how often the librarian sought formal audience with the principal or deputy principal was as varied as tabulated in table 2 below.

Table 2: Meeting with the Principal / Head / Deputy Principal

Frequency	Number	Percentage
Rarely	1	16.7
Regularly	3	50.0
Once a term	1	16.7
Twice a term	1	16.7
Total	6	100

There were two burning issues which all the librarians complained about. One was shortage of staff – professional and non-professional. The second problem, which is an offshoot of the first, bothers on the confusion that often arises on who should be consulted on staff matters. While the college librarians would prefer to be under the auspices of their respective colleges and the colleges were ready to absorb them, the BNLS would still like to maintain the secondment of librarians to the colleges.

Facilities

The guideline on facilities stipulates that the library building shall be calculated on the basis of a formula which takes into consideration the size of the students' body, the size of staff and its space requirements and the number of volumes in the collection. It states that the needs of persons with disabilities should receive special attention in the design of library building. In order to ensure this compliance, the guideline recommends that a new library building should represent a coordinated planning effort involving all campus constituents. Formula C (a) of the guideline declares that for the library of a typical residential college (which is the same with the colleges studied), there shall be one study location for every four FTE students. Each study station is assumed to require 25 to 35 square feet floor space. Only one of the colleges gave consideration to the special needs of people with disabilities who may come to the library in wheel chair. A librarian reported that he was not consulted in the building of a new library. Space for books in most of the libraries was grossly inadequate as processed books were seen in cartons competing for space with librarians in their offices. The specification on study space was discussed as attempts were made to maximise every little space available for readers. As if this inconvenience was not enough, most of the libraries were stuffy for lack of air-conditioners even as proper illumination was not given due regard. Hardly did the researchers find any library that could accommodate a quarter of the students. Even in the colleges where new library buildings had just been put up, old furniture still adorned the libraries. Table 3 reveals the number of students in the institutions and the readers' seats.

Table 3: Space for Users

Institutions	Students Number	Readers Seats	% of Seats to Students
Francistown COE	236	52	22.00
Lobatse COE	310	80	25.80
Molepolole COE	640	120	18.75
Serowe COE	206	26	12.60
Tlokweng COE	300	N.A	N.A
Tonota COE	638	90	14.10

* N.A. Not available

Conclusion and Recommendations

This study is an eye-opener to the operations of the libraries in colleges of education in Botswana. The study also points out a number of grey areas needing attention. It is therefore imperative for all role players and stakeholders to improve the quality of libraries in the colleges of education in Botswana. These role players include the Ministry of Education, the University of Botswana Library, the Botswana National Library Service, the authorities of the colleges of education and the librarians themselves.

While the Ministry of Education, under which the colleges operate, provides adequate funding, as all the libraries received at least the recommended minimum funding allocation of 6% of the institutional allocation, there is a need to improve the funding of college libraries. At least four of the colleges need to have new library buildings. The librarians also wanted to have their catalogues in machine-readable formats and other operations assisted by computerisation. But unfortunately funds were not available or sufficient to acquire their required software package. The recommended basic collection of 85,000 volumes was also not met in all the libraries. The Ministry of Education and the Department of Teacher Education should therefore give consideration to increased funding to the college libraries.

It is important for the University of Botswana Library (UBL) to arrange training, workshops, seminars, etc to assist the librarians, especially in the areas of ICT. The UBL can also help to update the college librarians in the technical area of librarianship which is another perceived area of inadequacy. Such opportunities will get them updated with recent trends and development in the library and information scene.

The BNLS as the body responsible for the recruitment of professional staff to the college libraries needs to be more sympathetic to the plight of the single librarian posted to each of these libraries. A single librarian cannot be attentive in a library where students reside on campus. It is therefore not surprising that college libraries

either have to close or in extreme cases operated by unskilled staff when the only librarian is unavailable. It is needless to say that adequate opening hours will be guaranteed when the libraries have adequate staffing. There is a need to review the mode of recruitment of librarians in the colleges. Rather than BNLS being the appointing authority, and the colleges, the supervising authorities, it is suggested that the colleges should be allowed to recruit librarians directly.

And to the college librarians, they may have to make strong representation to the relevant authorities on the need to provide efficient and effective library service in the colleges. There is also the need for the librarians to work out the modalities of professional interaction with their University of Botswana professional colleagues. There is no doubt that there is still much to be done in all the college libraries in order to make their services effective and efficient.

References

ACRL Standards for Community, Junior and Technical College (1994) Learning Resources Programmes. *College and Research Library New* 55 (5) 572 – 582.

Standards for College Libraries, 1995 edition. http://www.ala.org/acrl/guides/college.html.

University of Botswana Calendar 2000/01.

Acknowledgement

The authors acknowledge contributions made by our colleagues Ms Asafu-Adjaye and Mrs Mwemutsi through collection of data from some institutions.

* O.S. Oladokun is a librarian at the University of Botswana Library. He attended Obafemi Awolowo University and the University of Ibadan, both in Nigeria. He holds BEd and MLS.

* B. F. Fidzani is a senior librarian at the University of Botswana Library, Gaborone. She attended the University of Botswana. She holds BEd, Postgraduate Diploma in Education, Postgraduate Diploma in Librarianship and MLIS.

O. S. OLADOKUN

B. FIDZANI

Afr. J. Lib. Arch. & Inf. Sc. Vol. 12, No. 1 (2002) 59 - 67

Assessment of School Library Service in a Local Government Area, Lagos State, Nigeria: A Case Study

A.S. Obajemu
Medical Library, College of Medicine,
University of Lagos,
P.M.B. 12003 Lagos, Nigeria.
E-Mail: Obajemu@Usa.Net

Abstract

This paper assessed the library collection, staffing, building space, furniture and the profile of eight secondary schools in Oshodi/Isolo Local Government Area of Lagos State, Nigeria. The evaluation was based on the "Lagos Library Board for Schools Libraries Standards". The findings showed that school libraries were yet to achieve any meaningful growth in the educational system of Lagos State. The school libraries were completely undeveloped, under-staffed, under-used and improperly organised. Also the facilities were inadequate and the collections were obsolete. Suggestions on the revenue generation strategies in order to reduce over dependency on the state Ministry of Education for fund were made in the paper.

Introduction

A good library is indispensable if academic excellence is to be achieved in any academic setting. It adds breadth and depth to learning. Every secondary school needs a good library as a source of knowledge. It enlarges teacher's teaching and individualises opportunity for students to follow up their enquiries actively. Thus, a school library helps pupils to select, discover, appraise and criticise information passed on to them. It encourages the development of personal reading, pleasure and enhancement of life.

Students' age group in secondary schools fall within the receptive age bracket and if the library is properly introduced to them at this period, it is often presumed that they will develop and acquire the useful ability necessary for the achievement of the ultimate independent learning capabilities. It is expected that good education should go beyond classroom lecture.

A school library collection is a depository of knowledge generally with specific emphasis on the school's curricula. Thus, a standard school library offers a wide variety of materials that can answer the quest of developing the mind of the students. It is important that its resources should extend beyond printed materials to graphics, pictures, films and other audiovisual resources in an effort to make learning an all-inclusive realistic experience for the students. The main objective of the school library is educational; therefore, it is important that the library expands according to the evolving new trends and teaching techniques. Thus, there should be regular review of the status of the library in comparison to the facilities and the population of the school community. The school library should acquire the position of the central teaching/learning laboratory and media centre. The staff should be trained professional(s) who can handle the library services and activities effectively.

Literature Review

Utor (1987) pointed out that the provision of school libraries in Nigeria has been neglected or non-existent. The books are old, disused and unorganised. Udo (1987) shared the same view and declared that school library services in Nigeria are still at the developing stage displaying inadequacies in staffing, funding and services provided. He had attributed the falling standard of education to poor development plans and policies of the education system which overlooked some vital educational components. The falling standard of education was most noticed in the year 1985, which had the worst West African School Certificate result in its 44 years of existence. It recorded 70.1% failure and 29.9% passes. As a result of this, the Federal Government instituted a committee to find out the cause(s) of the general failure. One of the recommendations of the committee was the need for well-equipped libraries in secondary schools because academic excellence may not be achieved if good libraries are not established and run effectively.

Besides, the National Policy on Education (1981) states among other things that libraries are one of the most important educational supportive services. Every state ministry needs to provide funds for the purpose of establishing libraries in the nation's educational institutions and to train librarians and library assistants to provide good library services.

Tawete (1995) reported that the lack of vision of what school libraries can provide to education had led to their slow development in Africa. He advocated the innovative idea of joint school/public libraries in Africa.

Methodology

The researcher employed both the observation and interview techniques in this study. Several visits were made to the schools (see table 1) and interviews were held with teachers in charge of the libraries and students were randomly sampled for interview

in order to ascertain their satisfaction. School records were critically checked and analysed, the collections were examined to determine the suitability or otherwise, (that is, to determine whether the collection was in line with the school curriculum or not). Furthermore, data on West African Examination Council/Senior Secondary Examination results were obtained in order to ascertain the effect, if any, on the educational achievement or otherwise of students of schools with good libraries and those which were below the minimum standards.

School Library Standards

Lagos State Library Board (n.d) outlined the importance of standards for the school libraries among which are: to promote development, to measure not only the quantity of services given but also the quality,and to serve both as goals which schools should try and attain as well as the irreducible minimum to qualify a school for recognition as having an ideal library. For the purpose of uniformity and efficiency in services, the researcher used *Lagos State Library Board Standards for School Libraries* to evaluate the eight selected secondary schools libraries in Oshodi/Isolo Local Council, Lagos state.

Table 1 presents brief information about each school studied viz. the year the school was established, number of classrooms available, the population of the schools and ownership. Most of these schools were established in the early 1980s except Ronik Comprehensive College that was established in 1993. Out of the eight schools surveyed, the State Government owned six while the remaining two were owned by private individuals.

Table 2 shows the physical facilities available in these school libraries. The Standard provides for a minimum of two standard classrooms each of size 30' x 24' (10.5m x 8.4m) which is 88.20^2 x 2 equalled to $176.40m^2$ minimum dimension standard. This size will conveniently contain 60 students at a time. All the schools surveyed met the required space standard.

Table 1: Schools Profile

Schools	Year established	No. of classes	No. of students	No. of teachers	Type of proprietor
Apata Memorial High School	1982	32	960	80	Private
Okota Secondary School	1982	26	900	36	Public
Eko Girls Grammar School	1980	30	1047	44	Public
Ire- Akari Grammar School	1980	20	811	39	Public
Okota High School	1980	22	1075	53	Public
Ronik Comprehensive	1993	12	310	33	Private
Ansar-Udeen Comp. School	1980	30	1692	45	Public
Central High School	1980	26	1145	50	Public

Table 2: Physical Facilities

Schools	No. of chairs	No. of reading tables	Library Dimension	Fans/AC	Shelf	Type of catalogue
Apata Memorial High School	34B	34	1200m^2	6F	10	Book catalogue
Okota Secondary School	12B	6	750m^2	2F	2	None
Eko Girls Grammar Sch	29C	7	750m^2	1F	2	None
Ire- Akari Grammar School	42C	6	750m^2	2F	12	None
Okota High School	36C	6	750m^2	None	5	None
Ronik Comprehensive	40C	8	1100m^2	2F & 3AC	12	Card catalogue
Ansar-udeen Comp. School	26C	2	750m^2	None	5	None
Central High School	14B	7	1200m^2	None	None	None

Key: B – Benches F – Fans
C – Chairs AC – Air conditioners

The Standard recommends 6'6" (1.98m) height for secondary school library shelves. The shelves are expected to stand away from the windows. They may rest on the walls. Four out of the eight libraries visited had low shelves while three had high shelves. It was further discovered that Ire-Akari Grammar School and Ronik Comprehensive College had the highest number of shelves (12) each, which were slightly followed by Apata Memorial High School with 10 shelves. Central High School was the only library that did not have shelves at all.

Moreover, the Standard recommends ceiling fans for use to supplement natural ventilation. It stressed that air conditioners are expensive and prone to fire accidents and as such, should not be used. Among the schools surveyed, Apata Memorial High School had six ceiling fans while Ronik Comprehensive College had two fans and three air conditioners.

The Standard recommends that every school should have a cabinet with drawers for the purpose of filing catalogue cards of the library. Among the libraries visited by the researcher, only Ronik Comprehensive College had a catalogue cabinet while Apata Memorial School used book catalogue for its entries. Others did not have catalogue cabinet. The Standard recommends the use of date due labels, book pockets, 3 x 5 catalogue cards, stamp pads, dating machine, and typewriter. Ronik Comprehensive College was the only library that catalogued and classified its collection, using Dewey Decimal Classification scheme and had date due labels, book pockets, stamp pads but did not have dating machine and typewriter. Apata Memorial School had stamp pads only. Other libraries did not have these.

Table 3: Book Collection

Schools	Non- fiction	Fiction	Reference books	Total proprietor
Apata Memorial High Sch	2500	150	133	2783
Okota Secondary School	340	50	-	390
Ire-Akari Grammar Sch	493	216	-	709
Eko Girls Grammar Sch	456	81	16	553
Ronik Comprehensive	944	486	118	1548
Okota High School	2375	231	8	2614
Ansar-Udeen Comp. Sch	117	24	-	141
Central High School	-	-	-	-

Table 3 shows the book collections of the libraries surveyed. The Standard stipulates that every post-primary school library should have a basic collection of 2000 titles for schools with less than 500 students and 3500 titles for schools with more than 500 students. The Standard further recommends that the make-up of the collection should be in the following percentages:

(1) Works of reference – 15% of the total stock

(2) Text books – 60%
(3) Supplementary books – 3%
(4) Fiction (story) books – 30%
(5) Non-curricular books – 2%

The stock of the libraries were grossly inadequate. In other words, the basic collection of titles were not commensurate with the population. Only Apata Memorial High School and Okota High School met the basic total stock requirement. Ronik Comprehensive College's total stock was 1548 though it fell below basic requirement it was commensurate with the population of only 343. Central High School had no book collection. Okota Secondary School, Ire-Akari Grammar School and Ansar-Udeen School libraries did not have reference materials. Eko Girls Grammar School and Okota High School had very few reference works. Apata Memorial School had the highest number of reference materials followed by Ronik Comprehensive College. Seven out of eight libraries studied had fiction and non-fiction books but they were below the basic requirement as earlier mentioned.

In recognition of the importance attached to periodicals, the Standard emphasises that every school library must have on subscription a few periodical titles including newspapers and magazines. It states thus:

(a) every school library must have on subscription at least 10 different titles of periodicals excluding newspapers.
    (i) Scientific journals – 40%
    (ii) Arts, social sciences – 30%
    (iii) Others including recreation, etc – 30%
(b) every school library should subscribe to at least five different Nigerian newspapers with national coverage.

However, only two private schools, Apata Memorial High School and Ronik Comprehensive College subscribed to two and three newspapers on daily basis respectively. None of them subscribed to learned journals.

When the audio-visual collection was surveyed it was found that many of the schools did not have slides/film projectors, maps/atlases and artefacts, videotapes and computers. Only Apata High school had all the media listed above in its school library. Ronik and Ire-Akari had atlases and maps in their libraries. The others did not have the audio-visual materials. Although the standard did not prescribe the minimum audio-visual requirement, they are not commonly used in schools due to prohibitive cost and lack of necessary accessory equipment. However, school libraries are encouraged to preserve them. The materials include artefacts, newspaper clippings, records, tapes, cartridges, films, filmstrips, micro-films, microfiche, charts, film projector, overhead projector, slides, etc. Among the schools surveyed, only Apata Memorial High School had a few of these but they were yet to be installed or organised for use.

Staffing

For the purpose of efficient and effective running of school libraries, the Standard recommends that each school library should have professional/teacher librarian(s) to organise the library and to acquire relevant materials. Thus, the Standard recommends that the staff of every school library should consist of:

(a) 1 teacher/professional librarian
(b) 1 library assistant or clerk
(c) 1 library attendant

The teacher librarian must possess at least a National Certificate of Education (NCE) or a university degree plus a diploma or certificate in librarianship. From the findings of the study it was found that only Apata Memorial High School and Ronik Comprehensive College had professional librarians in their libraries.

Analysis of West African Examination Results 1995-1999

Efforts were made to obtain West African Examination Council (WAEC) results beginning from 1995-1999 in order to determine whether those schools with good and functional libraries were better off in terms of academic performance than those ones with poor/without libraries. It was discovered that Ronik Comprehensive College which had produced just two sets of graduating students in the WAEC/Senior Secondary Examinations in 1998 and 1999, recorded the best results. It had 100% success with four credits and above. Apata Memorial High School record of performance ranged from 70.2% to 80% since 1995 to 1999. It ranked second in the academic achievements. Eko Girls Grammar School had 48.9%, 30.5%, 30.4%, 7.4% and 10.4% in 1995 to 1999 respectively. Okota Secondary School on the other hand had 92.5%, 22% 29.6%, 12.6% and 34.7% from 1995 to 1999 respectively. Similarly, Okota High School had 12.7%, 9.1%, 9.2% and 23.7% in 1996 to 1999 respectively.

The findings above show clearly that schools which had met the minimum standard requirement in terms of library materials collection, staffing situation and other facilities had shown tremendous good records of academic achievements in their WAEC results. They include Ronik Comprehensive College and Apata Memorial High School. The other schools performed far below average except Okota Secondary School which had 92.5% in 1995, but the results in the subsequent years were woeful. It was further established that the schools which displayed poor performance were public schools. These libraries were completely neglected, undeveloped and unorganised for use and this situation might have contributed to their poor academic performance. Although there is no evidence that the schools that performed excellently did so solely because they had good libraries, nevertheless, this

study has shown that the quality of school libraries correlate with the educational performance of the schools.

Conclusion and Recommendations

At this point, it must be stressed that Ronik Comprehensive College and Apata Memorial High School were the only two private schools that had made positive steps towards providing their school libraries with quality service. This may be attributed to the competition among the private schools. They see good library facilities as one of the means of attaining educational excellence and as well as providing a conducive atmosphere to the students and the likes. The study further unravelled the total neglect of the school library development by the Lagos State Government. The libraries were grossly underfunded, understaffed, understocked, unorganised and no longer in line with the present curriculum. This study confirms that school library services in Lagos State are still at an embryonic or developing stage and display inadequacies and the authorities concerned have not made meaningful impact towards upgrading them to the required standards. This may perhaps have contributed to the low academic achievements in WAEC results. Thus, there is a need for well-equipped school libraries in Nigeria, if the findings from the sampled study are representative of school libraries in Nigeria. The school principals, staff and the students interviewed blamed the state Ministry of Education for the abject neglect. Abu (1997) suggested some revenue generation strategies the school libraries could embark upon. Among these are: the support of parents/teachers association (PTA), alumnus association and the philanthropists. Lastly, school libraries can sell books on agreement with the publishers and the commissions accruing from sales can be used to develop libraries.

References

Abu, J.A. (1997) Funding and Revenue Generation in Nigerian Libraries: The Library as a Factor in Dwindling Economy. *Paper presented at a National Workshop on Effective Library Management*, at Luchia Hotels Limited, Kaduna, pp. 1-15.

Federal Republic of Nigeria (1981) *National Policy on Education.* Lagos: Federal Government press, pp. 12.

Lagos State Library Board (n.d) Standards for School Libraries in Lagos State. Lagos, 29p.

Tawete, F. (1995) Joint School/Public Libraries: A Catalyst for School Library Development in Africa. *African Journal of Library, Archival and Information Science* 5(1) 31-38.

Udo, V.M. (1987) *The Role of School Libraries in Improving the Quality of Education.* In: The School Library (edited by J.K. Utor). Zaria: Department of Library Science, Ahmadu Bello University, Zaria, pp. 1-11.

Utor, J.K. (1987) *School Librarian as Educational Facilitator* In: The School Library (edited by J.K. Utor). Zaria: Department of Library Science, Ahmadu Bello University, pp. 12-1.9

* A.S. Obajemu is a medical librarian and Head, Cataloguing and Classification Section of Medical Library, College of Medicine, University of Lagos, Nigeria. He attended Ahmadu Bello University, Zaria, Nigeria. He holds a BLS degree.

A. S. OBAJEMU

Afr. J. Lib. Arch. & Inf. Sc. Vol. 12, No. 1 (2002) 69-80

The Utilisation of Archival Information by Researchers in Kenya: A Case Study of the University of Nairobi

Henry N. Kemoni
Department of Archives and Records Management
Faculty of Information Sciences, Moi University
P.O. Box 3900,
Eldoret,
Kenya.
E-mail: kemoni12001@yahoo.com

Abstract

The study sought to investigate the utilisation of archival information by the University of Nairobi researchers and the extent to which their information needs were met by the Kenya National Archives and Documentation Service (KNA&DS). The total population sample consisted of 55 respondents, namely: 45 researchers drawn from the Departments of History, Government and Anthropology and 10 archives personnel. Data were collected through the use of face- to -face interviews. The major findings of the study revealed that researchers used a variety of information sources to satisfy their information needs and that some of the existing access regulations need review. The study also found that the researchers relied more on archives personnel to access information, that the existing KNA&DS promotional methods were not effective and that both researchers and archives personnel faced problems in accessing and providing information. Among the recommendations of the study are that the KNA&DS needs to review some of the access regulations, introduce a user education programme, devise new promotional methods, conduct information user studies, and speed up the on-going computerisation programme.

Introduction

Information is a vital resource in stimulating socio-economic development. Mazrui (1999) emphasises the important role that information plays in the world today. He notes that for a while now, the distribution of real power is based not on " who owns what" but "who knows what". Among the various sources of information are records and archives. According to Mazikana (1990), the uses of records and archives include: verification of facts, compilation of reports and studies, research, policy formulation, planning and implementation, handling of legal claims, project planning and evaluation as well as administration and protection of national interests. It is, therefore, evident that one of the key uses of information held in an archives is

research. Dearstyne (1987) observes that archival information has an important contribution to research. It leads to individual enlightenment, provides solutions to practical problems, brings benefits to the public good and leads to scholarly advances.

The KNA&DS is one of the information providers in Kenya. According to the Public Archives and Documentation Service Act (Cap19), the institution is mandated to acquire, process and disseminate information to various users including university researchers. It is the custodian of all government records and archives selected for permanent preservation. Besides the archival collection, the institution also houses the reference library with a comprehensive collection of official and non-official publications and other materials. Other sources of information found at the institution include: periodicals (e.g. newspapers and specialised journals) research and technical reports, conference proceedings, official publications (e.g. Kenya Gazette) dissertations and theses, reference materials (e.g. books, encyclopaedias, dictionaries, maps and atlases) and textbooks on a broad range of disciplines.

This study investigated the information needs of researchers at the University of Nairobi and the extent to which the KNA&DS is meeting those needs. The study is important in ensuring that the KNA&DS remains focused not only on the specific needs of its users but also potential users.

Objectives of the study

The study was carried out to investigate the utilisation of archival information by the University of Nairobi researchers and the extent to which their information needs were being met by the KNA&DS. Specifically, the study was to:

- Identify the information needs and information seeking behaviour of the University of Nairobi researchers.
- Establish why some potential researchers do not use information sources available at the KNA&DS.
- Establish the existing policies and practices and their effectiveness in promoting access to information held by the KNA&DS.
- Identify the methods used by the KNA&DS and their effectiveness in promoting the use of information amongst the University of Nairobi researchers.
- Identify the problems that University of Nairobi researchers face in accessing information from the KNA&DS.
- Establish the problems that hinder the effective provision of information by the KNA&DS to the University of Nairobi researchers.
- Suggest solutions to the problems identified above.

Methodology

The target population of the study consisted of 45 respondents, namely: 30 actual and 15 potential users from the University of Nairobi research community. These included lecturers and post-graduate students. The purposive and convenience sampling techniques were used at various stages of the research process. The purposive sampling involves picking on a sample based on the investigator's judgement to suit his research needs. The researcher focused on three departments namely: History, Anthropology and Government. Convenience sampling was used to interview 10 actual and 5 potential users from each of the three departments. The total number of actual and potential users interviewed was 45. In addition, 10 archives personnel at the KNA&DS were also interviewed as key informants. The total population sample consisted of 55 respondents. i.e. 45 actual and potential users from the University of Nairobi, and 10 archives staff.

Findings

Information Needs and Information Seeking Behaviour of Researchers

The study investigated why the University of Nairobi researchers sought information from the KNA&DS. The findings revealed that 15 out of 30 researchers (50%) used information from the institution to write research proposals and papers, while 9 (30%) used it for thesis/dissertation work, and 4 (13.3%) to write books. Only 2 (6.7%) indicated that they used the information centre for general knowledge. It could be concluded from the sampled population that a majority of researchers (80%) used archival information for research work, that is, to write research proposals/theses.

When asked what sources of information they consulted at the KNA&DS, the responses of actual researchers were varied. Furthermore, researchers consulted more than one source of information as indicated in table I.

Table 1 indicates that all the researchers consulted archives files (100%). Maps and atlases were ranked a distant second (33.3%) while the use of official publications e.g. the Kenya Gazette, was ranked third (20.4%). It was found out that although researchers were required to deposit copies of their thesis/dissertation with the KNA&DS, this requirement was rarely implemented and the institution had no mechanism for enforcing this requirement. The findings also indicated that journals and conference proceedings were not used by the researchers. The researchers (8.6%) indicated that they also consulted other sources of information not provided in the range of options given. For example, researchers from the departments of Government and History cited the use of newspapers, video films, political record books, special papers, weather reports and statistical abstracts. Those from the

Department of Anthropology cited the use of population census reports and cultural material, such as artefacts and the Murumbi collection.

Table 1:Information Sources Consulted by Researchers at the KNA & DS (N = 30)

Source	Respondents	Percentage of Total
Archival files	30	100
Maps/atlases	10	33.3
Official publications	8	24,0
Research and technical reports	7	23.3
Others	6	20.0
Textbooks	5	16.6
Thesis/dissertation	2	6.6
Reference materials	2	6.6
Conference proceedings	-	-
Journals	-	-

When asked to indicate if the sources of information they used satisfied their information needs, the responses were varied. Of the 30 respondents, 22 (73.3%) indicated that they were satisfied, while 3 (10%) observed that they were not satisfied, and 5 (16.7%) indicated that they were somehow satisfied.

One main objective of the study was also to establish the information needs of the researchers who did not make use of the KNA&DS. When asked to indicate why they might seek for information in future from the KNA&DS, 46.7% of the respondents indicated that they might seek information to write research proposals and papers, while 33.3% indicated that such information could help them write thesis/dissertation work, and only (20%) observed that such information could help in writing books.

When the researchers were asked to indicate the channels they often used to access information from the KNA&DS, a majority of respondents (83.3%) cited the use of personal visits. This could be explained by the fact that the institution is located within the city centre and is within easy reach. Furthermore, the respondents felt that direct contacts and physical perusal of files elicits more useful data. Three out of 30 (10%) cited the use of research assistants. Researchers of the rank of professor used research assistants to seek information from the KNA&DS to meet their information needs. Only 2 (6.7%) respondents cited the use of telephone, mainly restricted to making research enquiries. None of the respondents used correspondence and e-mail. When asked to explain why e-mail was not used, the majority of the respondents (66.7%) expressed that they were not computer literate. In addition, the University of Nairobi Library was not yet automated. Ten out of 30 researchers (33.3%) cited the fact that the institution did not have a website on the Internet.

Potential Users' Reasons for not Using KNA&DS

The study sought to find out why some researchers were not making use of the information services offered by the KNA&DS. All the 15 potential users (100%) interviewed indicated that they were aware of the existence of the KNA&DS as an information provider. When asked to indicate the reasons which prevented them from utilising information sources at the institution, the responses were varied. Nine of the respondents (60%) cited the assumption that the KNA&DS may not have relevant and up-to-date information and preferred to use other libraries including that of the University of Nairobi. Four out of 15 (26.7%) assumed that access regulations were prohibitive and only 2 (13.3%) indicated that they used research assistants to conduct research on their behalf and did not personally seek information. The findings indicated that a majority of potential users interviewed (86.7%) did not use the KNA&DS due to assumptions associated with lack of relevant information.

Existing Policies and Practices for Accessing Archival Information

The KNA&DS has policies and practices that regulate access to information by all users. The researchers were asked to indicate if they were conversant with the KNA&DS access regulations. The findings showed that the majority (66.7%) indicated that they were aware of these regulations, while 10 (33.3%) indicated that they were not aware. Those who were aware were further asked to indicate access regulations which they found unsuitable and required a review. A majority of the respondents (60%) cited the following regulations, namely: researchers not being allowed to enter the archives search room with their bags, the 30-year access rule with regard to public archives, and the restriction of search room opening hours on Saturday to between 8.30 a.m. and 1.00 p.m. The other (40%) cited payment of a registration fee (fifty Kenya shillings, the equivalent of US 65 cents) and restricting the number of files that a researcher can access at a particular time as a hindrance. The results also indicated that the majority of respondents would like existing access regulations to be reviewed. The 30-year rule access policy was cited as an example of an access regulation that was out of tune with modern times when society is clamouring for more openness, transparency and accountability.

When archives personnel were asked to state if there were access policies which required a review in order to enhance access to archival information, they cited the following: flexibility over the 30- year access rule with regard to correspondence files; flexibility over the requirement that only Kenyan citizens over 18 years are entitled to access to public archives, extending the existing search room opening hours to include Saturday afternoons; giving the Director of KNA&DS unlimited powers to extend the closure period of public archives; and that the responsibility of determining access periods to public archives should rest with record creators and the Director. The research findings indicated that there was need to review some of the

KNA&DS access regulations, as suggested by both researchers and archives personnel.

Information Searching and Retrieval Tools

When asked to indicate the searching and retrieval tools that they used, the respondents' views varied as shown in table 2 below.

Table 2: Searching and Retrieval Tools used by Researchers (N = 30)

Tool	Respondents	Percentage of Total
Archives search-room staff	25	78.0
Archives finding aids	10	33.3
Catalogue cards	8	26.4

Table 2 above indicates that a majority of respondents (78%) used archives search room staff to access information. Archives finding aids and catalogue cards were not popular as revealed in the table.

The KNA&DS is expected to provide adequate facilities and an appropriate atmosphere for accessing and utilising information. When the researchers were asked to rate the existing search room facilities, their responses varied. A majority of the respondents (60%) rated the search room as being average while 12 (40%) rated it as being satisfactory. None of the respondents rated the search room as being unsatisfactory. When further asked to indicate whether the search room staff were willing to help whenever approached, majority of the respondents (70%) observed that they were helpful while 7 (23.3%) commented that at times they were helpful and only 2 (6.7%) indicated that they were not.

The KNA&DS has an on-going computerisation programme. Respondents were asked to state how computerisation could affect them in terms of accessing information. A majority (93.3%) indicated that computerisation could be helpful to them while only 2 (6.4%) stated that it would be of no consequence to them since they were not computer literate. When probed further to indicate the benefits of computerisation, 71.4% stated the provision of quicker and efficient services as the benefits of computerisation. The other eight respondents (28.6%) stated that computerisation would reduce researchers' costs (e.g. those associated with travelling) and could make information more accessible even outside Kenya, especially if the KNA&DS introduced a website on the Internet.

With regard to potential users, when asked whether the existing computerisation programme at the institution could affect them in terms of accessing information, all the 15 respondents (100%) were of the view that it would. When probed further to

indicate how this would affect them, a majority (66.7%) cited efficiency in information provision, faster access to information and introduction of new information services. Five respondents (33.3%) observed that computerisation would enhance resource sharing, reduction of search room routine tasks and ability to answer user queries faster.

Methods of Promoting the Use of Information among Researchers

Archives personnel were asked to indicate the specific programmes they used to promote information services to the researchers. They cited the following methods: use of publications, e.g. newsletters, brochures and leaflets, lectures/personal selling, exhibitions, such as at the Nairobi International Show and occasional use of electronic media such as the Kenya Broadcasting Corporation Programme "Press Conference". When further asked to indicate the effectiveness of these methods, it was established that the use of shows, for example, was not an effective method as it was held once a year and a majority of researchers did not normally attend it. The use of talks was only confined to the researchers who visited the institution while the use of publications was not regular. It is apparent from the findings that the institution needs to adopt promotional methods that will have a wider impact and target a majority of the users such as regular mailing of the KNA&DS publication, *The Arch News*.

When asked to indicate if they faced any problems when promoting information services to the researchers, all the archives personnel (100%) observed that this was the case. Some of the problems that were cited in the promotion of use are as indicated in table 3 below.

Table 3: Problems Faced by Archives Personnel in Promoting Information Services to Researchers (N = 10)

Problem	Respondents	Percentage of Total
Respurce constraints	7	70
Insufficient contacts between KNA & DS and University of Nairobi researchers	4	40
Inadequate promotional tools	4	40
Lack of a promotional segmentation strategy	3	30
Lack of interest by researchers	3	30
Lack of specialised knowledge and skills in promotion and marketing	2	20
Lack of information studies skills	2	20

Table 3 shows that the most cited problem by archives personnel in marketing and publicising their information services was as a result of resource constraints as cited by 70% of the respondents. This includes lack of adequate finance and personnel. Insufficient contacts and inadequate promotional tools were cited by 40% of the respondents. One interesting finding is that only 20% of the respondents cited the lack of user studies, which are vital in establishing the information needs of a user group. The lack of a promotional segmentation strategy was cited by 30% of the respondents. A promotional segmentation strategy is vital in order to address the needs of the researchers. Finally, the lack of archives personnel with specialist knowledge in the area of promotion and marketing was highlighted by only 20% of the respondents.

Problems Faced by Researchers in Accessing Information from the KNA&DS

Researchers were asked to state if they encountered any problems when accessing information from the KNA&DS. The findings indicated that (50%) of the respondents were of the view that they faced problems while 7 (23.3%) observed that they faced no problems and 8 (26.7%) said that they at times faced problems of accessing information. Those who encountered problems, whether always or at times, constituted 76.6%. Respondents were asked to specifically state the problems and their responses are summarised in table 4 below.

Table 4: Problems Encountered by Researchers (N = 30)

Problem	Respondents	Percentage of Total
Dusty and torn files	10	33.3
Inadequate search room space	6	20.0
Failure to trace files	5	16.7
Strict access rules and regulations	4	13.3
Laxity among search room staff	4	13.3
Inadequate finding aids	4	13.3
Bureaucracy	3	10.0
Unwillingness of search room staff to help	2	6.6
Racial discrimination	1	3.3

Table 4 above shows that 33.3% of the respondents ranked files being dusty and torn as the most common problem encountered followed by inadequate search room space by 20%. Files not being traced was ranked third by 16.7%. Other problems rated by the respondents included access regulations being strict, inadequate finding aids and search room staff being slow. Racial discrimination was mentioned by only one respondent. In view of the stated problems, respondents were asked to provide

recommendations which could enhance utilisation of information sources at the KNA&DS. Their responses are indicated in table 5 below.

According to table 5, the review of access regulations was cited by more than half of the researchers followed by preservation of archival files cited by 50%. Devising new promotion strategies and computerisation of information services was ranked third.

The opinion of potential users was also sought with regard to what needed to be done in order to attract them to utilise archival information. Majority of the respondents 60% cited the following proposals, namely: computerise archive holdings, revise access regulations and promote the KNA&DS through the use of seminars and talks. The other 40% cited constructing a new archives building, enforcing the rule regarding depositing of theses/ dissertations by researchers using archival information and developing linkages with the University of Nairobi departments.

Table 5: Recommendations by Researchers (N = 30)

Recommendation	Respondents	Percentage of Total
Review of some access regulations	16	53.3
Enhanced preservation of archival files	15	50.0
Devise new promotional methods	9	30.0
Computerise information services	9	30.0
Develop linkages with University of Nairobi Library	8	26.7
Construct a new archives building	7	23.3
Develop a website on the Internet	6	20.0
Train archives search room staff	6	20.0
Improve finding aids	5	16.7

Problems Faced by Archives Personnel in Providing Information Services to Researchers

When asked if they faced any problems, all the 10 (100%) archives personnel indicated that they did. When asked to state the problems, they cited the following: inadequate personnel, researchers not depositing copies of their work, inadequate finances and lack of feedback from the researchers. Other problems included inadequate publicity tools, inadequate search room space, lack of training in marketing and inability to update finding aids on a regular basis.

To address these problems, respondents were asked to provide suggestions in order to improve the provision of archival information to university researchers. Table 6 presents recommendations as put forward by archives personnel.

Table 6: Recommendations by Archives Personnel (N = 10)

Recommendation	Respondents	Percentage of Total
Construct a new archives building	6	60.0
Revise some access regulations	5	50.0
Train archives personnel	5	50.0
Enforce archive regulations	4	40.0
Mail on a regular basis KNA & DS publications list	4	40.0
Establish linkages with the University of Nairobi Library	4	40.0
Introduce specially designed publicity programmes	4	40.0
Lecturers designing projects that involve students in use of archive materials	3	30.0
Other	2	20.0

Table 6 above indicates that the construction of a new archives building was ranked first by 60% of the respondents. Revision of some access regulations and training of archives personnel was ranked second by 50% respondents respectively. Other reasons relatively mentioned were the introduction of specially designed publicity programmes, establishing linkages with the University of Nairobi library and enforcing some access regulations, e.g. that relating to researchers depositing copies of their works. Only 30% of the respondents proposed that there was need for lecturers to design projects that would involve students in using archive materials.

Conclusion and Recommendations

There is no doubt that there are gaps in the provision of information services to University of Nairobi researchers by KNA&DS. In order to address the problems as suggested by researchers and archives personnel, it is recommended that KNA&DS should:

- Enforce the regulation that requires a researcher to deposit a copy of his/her thesis with the institution in order to build an adequate collection for use by researchers.
- Review some of the access regulations such as: more flexibility over the 30-year access rule, extend the search room opening hours to include Saturday afternoons in order to cater for researchers who have enrolled for various courses in the recently introduced self-sponsored degree programmes at the University of Nairobi.

- Devise new promotional strategies such as the use of specially designed lectures, talks and seminars; adopting a promotional segmentation strategy; foster stronger linkages with the University of Nairobi Library and research departments; encourage University of Nairobi lecturers to design projects that will involve students to use archival materials; the use of the University of Nairobi newsletter *The Anvil* to inform the University of Nairobi researchers about the KNA&DS, as well as the use of KNA&DS publication, *The Arch News* to alert the University of Nairobi researchers about happenings at KNA&DS.
- Conduct information user studies to determine the effectiveness of the information services provided to users, such as the nature of archive collections, in relation to their information needs. User studies will identify use and non-use of archive materials and researchers' satisfaction and dissatisfaction with the information services provided.
- Retrain some archives search room staff to acquire specialist knowledge and skills in public relations and marketing. This will enable them communicate effectively with researchers generally and also design, develop and implement appropriate and effective promotional strategies.
- Introduce a user education programme that will train users on how to use the existing finding aids to access archival information. All finding aids should be updated on a regular basis and be computerised to speed up the process of information searching and retrieval.
- Speed up the on-going computerisation programme and develop its own website on the Internet to enable users such as the University of Nairobi researchers download information from within the University of Nairobi premises and also outside the country. Computerisation is likely to bring additional benefits such as a reduction in routine search room tasks, improved stock control and enhanced security of archival materials. Other benefits are improved information retrieval through automated searching and retrieval techniques and ability to answer the University of Nairobi researchers' user queries promptly.
- Lobby the government to increase its budget allocation, especially with regard to the advertising and publicity vote and create an independent vote for the search room and education service to enable the section carry out its programmes as planned without being constrained by financial resources. The department should come up with more innovative ways of raising funds through active provision of records management consultancy and binding services to other institutions.

References

Dearstyne, Bruce (1987) What is the Use of Archives? *American Archivist*, 50 (1) 77.

Mazikana, Peter (1990) *Archives and Records Management for Decision Makers*. Ramp Study. Paris: UNESCO, p.13.

Mazrui, Ali (1999). Will World Wide Web Cause Islamic Reform? *Sunday Nation*, Sept. 26, p.10.

The Public Archives and Documentation Service Act (Cap 19). (n.d.) Nairobi: Government Printer.

Acknowledgement

The author wishes to thank Dr. Justus Wamukoya and Mr. Joseph Kiplanga't for their comments/ suggestions while conducting the research on which this paper is based.

* Henry Kemoni is a lecturer in the Department of Archives and Records Management, Moi University, Kenya. He attended Moi University, Eldoret, Kenya. He holds a BA and a PG Diploma in Archives and Records Management. He is currently working on his M.Phil. programme in Archives and Records Management at Moi University, Kenya.

HENRY KEMONI

Afr. J. Lib. Arch. & Inf. Sc. Vol. 12, No. 1 (2002) 81-89

The Recognition of Women Librarians in Nigeria: An Evaluative Study

Samuel Adewale Ogunrombi and H. C. Pisagih
University Library
Abubakar Tafawa Balewa University,
P.M.B. 0248, Bauchi, Nigeria

and

V. W. Udoh
University Library
Federal University of Technology, Yola
Adamawa State, Nigeria

Abstract

Using documentary sources, the contribution of female librarians in Nigeria to library development from 1960 to 2000 was examined. The study revealed that only few female women librarians were appreciated and cited in Nigerian biographical works. The status and role of women librarians in Nigeria revealed an explicit pattern of discrimination. The remarkable contribution of women librarians to library education, professional activities, including research and publication output was discussed in the paper.

Introduction

Nigeria is blessed with talented human resources in all subject disciplines and professions. Generally, very little is known about the role of librarians in national development in Nigeria. However, there are many librarians who have used and are still using their lives, talents and energies to help develop and enrich the lives of their fellow countrymen and women. These professionals have made their mark, yet they are hardly known or appreciated by the public.

The contribution of librarians, regardless of their gender, can best be known through an assessment of their past, present, and perhaps future status and accomplishment both individually and as a collective body. Biography, one of the oldest forms of literary expression, seeks to re-create in words the life of a human being. The impulse to recall the past and to leave to posterity the record of an impressive life is a

natural craving which is not limited to any epoch. Biography has been one way of satisfying this craving.

Literature Survey

References to women librarians can be uncovered in myriads of reports, surveys and articles, yet this subject matter is rarely the main focus of investigation. Only a few studies pinpoint this subject with the poser: "what is the role of women librarians?"

As far back as 1904, Fairchild (1904) reported the increasing participation of women in librarianship with the overall verdict of no discrimination with regard to gender. Holden (1965) confirmed that women were strongly under-represented in major positions in librarianship with only "tokenism at the top position." Librarians may well have internalised the prevailing societal view of the inherent worthiness and the capability of the male and the corresponding inadequacy of the female. This view tallies with the sex type of occupations in Nigeria (Adesioye, 1994).

The status and role of women librarians reveal an explicit pattern of discrimination. This is due to the extreme complex interaction of the larger society's male/female role prescription in every category of existence, both within and outside the home. Moreover, the same societal socio-economic dynamic and structure has kept libraries and the library profession far down on its preferred resource allocation scale.

Bernard (1964) reported that it is most likely that women in top library positions reached a peak in the early part of the 20th century. Their situation probably corresponded with what was taking place in other fields, particularly in academia. Yet, as reported by Schiller (1971), it is clear that whatever it was at its high point, women's representation in certain key positions has diminished rapidly in recent years.

Sani (1997) in a study entitled *Control of civil service size in Nigeria*, confirmed the marginalisation of women in the Nigerian civil service between 1960 and 1993. In specific terms, women accounted for an average of only 14% as against the male figure of 86% of the total size of the federal civil service in any one year. The same trend held more in the state and local government civil service within the same period. He therefore posited that there is the urgent need for a major policy decision to correct this "unhealthy" gender imbalance.

The article by Edem (1995) on women librarians focussed on the influence of gender on publication output among university librarians. Edem concluded that whereas the males were more productive in academic publications, the females were more productive in work-related research and publications than their male colleagues in Nigerian universities.

Objective of the Study

The objective of this study is to examine the contribution of women librarians in Nigeria to both national development and librarianship, and, to assess the extent to which they have been appreciated and cited in biographical literature by fellow Nigerians.

Methodology

Documentary sources were used to collect the data. The period covered is 1960 to the year 2000. To ensure a comprehensive coverage of the role of women librarians in both national and professional development in Nigeria, the following documentary sources were used:

- Biographical works and directories
- Publication output by women librarians
- Annual reports of libraries
- Comprehensive listing of women librarians with doctorate degrees.

Findings, Analysis and Interpretation of Data

A perusal of literature revealed a paucity of materials on women librarians in Nigeria despite the fact that some of them have made their mark in the areas of library education and library services both at national and international scenes.

Contribution to Library Education

Library education commenced in Nigeria in 1959 with the establishment of the Institute of Librarianship at the then University College Ibadan, Nigeria's premier University.

Notable female librarians have contributed immensely to the growth and development of these university-based library schools: University of Ibadan, Ahmadu Bello University, Bayero University, Kano, University of Maiduguri and the University of Nigeria, Nsukka (UNN). Notable among these distinguished librarians are Professors F. A. Ogunsheye, the first indigenous professor of librarianship, appointed in 1973, and B. O. Aboyade, appointed in 1978. While Professor Ogunsheye distinguished herself in the area of school librarianship culminating in the establishment of Abadina Media Resource Centre, Ibadan, a model school library and training centre for school librarians, Professor Aboyade made her mark in community librarianship through the project on Rural Development Information Services (RUDIS) aimed at arousing the information consciousness of the rural communities that are basically non-literate.
In addition, Professor (Mrs.) Doris Bozimo had at various times headed the library school at the Ahmadu Bello University (ABU), Zaria. She is still actively engaged in

library manpower development. In 1999, she was re-deployed to the Kashim Ibrahim Library, ABU, Zaria, to head the university library in an acting capacity as a result of the vacuum created by the retirement of the substantive University Librarian.

Professional Activities of Women Librarians, 1962-1997

Women Librarians in Nigeria contributed immensely to the development of the library profession between 1962 and 1997 through their active participation in different professional activities.

Between 1967 and 1970, Professor (Mrs.) F. A. Ogunsheye served as the president of the Nigerian Library Association while Dr. (Mrs.) D.S. Obi served as the secretary of the Association in the 1966/67 academic year. In a related development, Mrs. V. I. Mbofung was elected the National Treasurer of the NLA in 1991.

Of the three-member NLA Endowment Fund Board of Trustees, two were women. They are Mrs. D. D. Bwayili and U. I. Mbofung. Also,, Mrs. W. O. Onyeonwu (FNLA) is the only female member of the seven-member Committee of the Fellow of the Nigerian Library Association (FNLA) from 1994 to date.

Finally, of the twelve pioneer recipients of the Fellowship of the Nigerian Library Association (FNLA) in 1989, Professor (Mrs.) F.A. Ogunsheye was honoured while Dr. (Mrs.) D.S. Obi and Mrs. Onyeonwu also became fellows in 1991 and 1992 respectively.

Women Leadership in the Special Interest Groups (Sections) of the NLA

As shown in Table 1, of the eleven special interest groups (sections) within the Nigerian Library Association (NLA), six (55%) were chaired by women librarians. This shows that gender is no barrier to the professional growth and development of women librarians in Nigeria.

Table 1: Gender Distribution of Leadership in Special Interest Groups of the NLA

Sections/Interest Groups	Gender of Chairmen	
	Male	Female
Academic and Research Libraries (ARL)	√	
Association of Information Scientists	√	
Association of Government Libraries (AGOL)		√
Association of News Media Libraries of Nigeria (ANLON)	√	
Cataloguing and Classification Section (CAT & CLASS)		√
Association of Law Libraries		√
Library and Information Science Teachers (LIST)	√	
Association of Women Librarians in Nigeria (AWLIN)		√
Association of School Libraries		√
Association of Public Libraries		√
Chief Executive of Public Library Boards in Nigeria	√	

Source: Nigerian Library Association (NLA), KADA '97 Programme and Notes of 35th National Conference and Annual General Meeting, April, 1997

Library Science Doctorates, 1980-1990

Data on the doctorate degrees awarded by the two most prestigious and largest university-based library schools in Nigeria – the Ahmadu Bello University (ABU), Zaria, and the University of Ibadan (UI) revealed a low number and representation of women who studied library/information science in the early 1980s and 1990s (see table 2).

Table 2: Gender Distribution of Library Science Doctorates in Nigeria

Academic Year	Gender Distribution	
	Male	Female
1980/81	3	1
1983/84	3	1
1986/87	1	1
1988/89	1	-
1989/90	3	1
1992/93	3	-
Total	14	4

Source: Data provided by ABU, Zaria and UI Library schools

Of the eighteen library science doctorates produced in Nigerian universities between 1980 and 1993, 14 or 78% were males while 4 or 22% were females. Sixteen or 89% of the total of 18 doctorates graduated from the University of Ibadan, while the Ahmadu Bello University (ABU) turned out only two (11.1%) doctoral students.

However, within the same period, a total of 721 master degree were awarded in library science/information science comprising 432 male and 289 female students. The numbers graduated by three universities are as follows: Ahmadu Bello University (111), University of Ibadan (607) and University of Nigeria, Nsukka (3). For the master degree in library/information Science, males still predominate with 60% while females accounted for 40%. This was a marked improvement for women compared with the percentage for doctoral degrees. The need to meet the requirements for research and publications, the hallmarks of academic librarianship, must have motivated more females to acquire higher degrees.

Leadership of University Libraries

An assessment of the career of leading librarians in academic librarianship in Nigeria showed that female librarians represent a tokenism at the top of university library administration. Consequently, as shown in table 2 women librarians are under-represented in leadership positions in Nigerian university libraries.

Of the thirty-six university libraries in Nigeria, thirty (83.3%) were headed by males while only 6 (16.7%) were headed by women. These female university librarians headed the libraries of the Universities of Ibadan, Jos and Uyo, Ogun State University, Ago-Iwoye, Enugu State University of Science and Technology and Federal University of Technology, Yola.

Librarians in Politics

Some Nigerian female librarians are into politics at the local, state and Federal levels. This is a welcome development in that it will afford them the opportunity to influence library development at the three tiers of government. In Bauchi and Rivers States, the female directors-general in charge of women affairs are librarians. In addition, Mrs. Winifred Onyeonwu, the former state librarian of the Bendel State Library, retired as the permanent secretary for standards and higher education of the former Bendel State in 1984. She is currently the Managing Director of Unique Bookshop, Benin-City. It is noteworthy that the Association of Women Librarians in Nigeria (AWLIN) is active in politics and made a remarkable impact in all facets of the Family Support Programmes (FSP) initiated in 1994 by Mrs. Maryam Sani Abacha, then the Nigerian First Lady (Hassan, 1991).

Table 3 : Gender distribution of Nigerian University Library Administrators

S/N	Type of Library	Gender of administrator	
	Agricultural	Female	Male
1	University of Agriculture, Abeokuta		√
2	University of Agriculture, Makurdi		√
3	University of Agriculture, Umudike		√
	Conventional		
4	Ahmadu Bello University (ABU), Zaria		√
5	Abia State University		√
6	Bayero University, Kano (BUK)		√
7	Benue State University, Makurdi		√
8	Delta State University, Abraka		√
9	Edo State University, Ekpoma*		√
10	Imo State University, Owerri*		√
11	Lagos State University, Ojoo, Lagos		√
12	Obafemi Awolowo University, Ile-Ife		√
13	Ogun State University, Ago-Iwoye	√	
14	Ondo State University, Ado-Ekiti		√
15	Nnamdi Azikiwe University, Awka		√
16	University of Abuja		√
17	University of Benin		√
18	University of Calabar		√
19	University of Ibadan	√	
20	University of Ilorin		√
21	University of Jos	√	
22	University of Lagos		√
23	University of Maiduguri		√
24	University of Nigeria, Nsukka*		√
25	University of Port-Harcourt		√
26	University of Uyo	√	
27	Usman Dan Fodio University, Sokoto*		√
	Technological		
28	Abubakar Tafawa Balewa University (ATBU), Bauchi		√
29	Enugu State University of Science and Technology	√	
30	Federal University of Technology, Akure		√
31	Federal University of Technology, Minna		√
32	Federal University of Technology, Owerri		√
33	Federal University of Technology, Yola	√	
34	Ladoke Akintola University of Science and Technology, Ogbomoso*		√
35	Rivers State University of Science and Technology Port-Harcourt		√
36	Military Defence Academy University		√

*Acting

Biographies

Biographies were perused to ascertain the extent to which notable women librarians were cited. It turned out to be a woeful exercise! In Ukegbu's (1981) *Nigeria's Who's Who*, a 95 page publication, only three women were listed. The three women listed are a pharmacist, a lawyer and a politician.

Osinulu and Jegede (1985) had 281 entries in *Who's Who of Nigerian Women*. Of this number, only eighteen (18) are librarians. Ukegbu's (1985) publication did not list any woman of note in his *Who's Who in Nigeria*. In the same vein, Igho (1989) in his treatise, *Women in the Professions*, did not list any woman librarian in a 289-page publication.

Osso (1990) in *Newswatch Who's Who in Nigeria*, with more than 2500 entries, listed eight women librarians. Akinyotu's (1989) *Who's Who in Science and Technology in Nigeria* did not list any librarian. Aina (1995) in *Who's Who in Library and Information Science Training Institutions in Africa* listed only nine female librarians from Nigeria out of the 138 educators listed.

The directory of library staff in Nigerian universities by Tamuno, et al. (1997) listed a total of 642 librarians from 32 institutions. Of this, 205 or 31.9% are females while 437 (68.1%) are males. The startling revelation is that males predominate in Nigerian University libraries.

Finally, the NIBC's *New Who's Who in Nigeria* (1999) did not give due recognition to librarians generally and female librarians in particular.

Conclusion

The modest but remarkable contribution of female librarians to the professional and socio-political development of Nigeria has been profiled. The study revealed that national biographies marginally appreciated the contribution of women librarians resulting in their poor listing. It is disheartening that even librarian-biographers never recognised their colleagues. Despite the observed lapses, many more female librarians still contribute their quota to both professional and national development in Nigeria.

References

Adesioye, Dupe (1994) Gender Equity and Empowerment of Women. *Daily Times*, Monday, January 31, p. 13.

Aina, L.O. ed. (1995) *Who's Who in Library and Information Science Training Institutions in Africa*. 2nd ed. Ibadan: Archlib and Information Services Ltd. 66 p.

Akinyotu, F.A. ed. (1989) *Who's Who in Science and Technology in Nigeria.* Akure. Federal University of Technology.

Bernard, J.C. (1964) *Academic Women.* Pennsylvania: Penn. University Press.

Igho, B.U. (1989) *Women in the Professions.* Lagos: Oxford University Press.

Edem, U.S. (1995) The Gender Factor in Publication Output of Librarians in Nigerian Universities. *African Journal of Library, Archives and Information Science,* 5(1): 25-30.

Fairchild, S.C. (1904) Women in American Libraries. *Library Journal,* 29: 157-162.

Hassan, H.R. (1991) *Women on the Move; The Better Life Programme: A Bibliography.* Kaduna: JEL Publications, vol. 1, 166 p.

Holden, M.Y. (1965) The Status of Women Librarians. *Antiquarian Bookman,* 36: 647-648.

Nigerian International Biographical Centre (1999. *The New Who's Who in Nigeria.* Lagos: Nigerian International Biographical Centre.

Osinulu, C. and Jegede, O. Eds. (1985) *Who's Who of Nigerian Women.* Lagos: Nigerian Association of University Women, 283 p.

Osso, N. (1990) *Newswatch Who's Who in Nigeria,* Lagos: Newswatch Communications Ltd., 803 p.

Sani, H.A. (1997) Control of Civil Service Size in Nigeria: A Study of Bureaucratic Growth, 1960-1993. *New Nigerian,* Nos. 10926 and 10928, August 11 and 13, p. 1-2, 11.

Schiller, A.R. (1971) Report on Women in Librarianship. *American Libraries,* 2: 1215.

Tamuno, O.G. et al. (1997) *Directory of Library Staff in Nigerian Universities.* Ibadan: CULNU.

Ukegbu, H.U. (1981). *Nigeria's Who's Who, 1981/82. Lagos*: Biographical Centre of Nigeria, 95 p.

Ukegbu, H.U. (1985). *Who's Who in Nigeria.* Lagos: Biographical Centre of Nigeria Ltd., 144 p.

* Samuel Adewale Ogunrombi is Deputy University Librarian at Abubakar Tafawa Balewa University Library, Bauchi, Nigeria. He attended the University of Ibadan, Nigeria. He holds B.Sc. (Hons) Nursing and MLS. He was on sabbatical leave at the Federal University of Technology, Yola, Nigeria, when this study was conducted.

* H. C. Pisagih is a librárian at Abubakar Tafawa Balewa University Library, Bauchi, Nigeria. She attended the University of Maiduguri, Nigeria. She holds BLS.

* V.W. Udoh is the University Librarian of Federal University of Technology, Yola, Nigeria. She attended the Ahmadu Bello University. She holds BLS, Graduate Certificate in Education, MLS and Ph.D.

Afr. J. Lib. Arch. & Inf. Sc. Vol. 12, No. 1 (2002) 91- 99

Short communications

Some Guidelines and Common Problems in Using Unesco's CDS/ISIS Software in a Research Library

H.I.T. Akinyosoye
Research Library
Development Policy Centre
P.O. Box 30733
Ibadan, Nigeria
Dpc@skannet.com

\bstract

This paper discusses first hand experience of database creation, formatting, indexing and some common problems in using Unesco CDS/ISIS software in a library. The paper is divided into three sections. The first section deals with the historical background of CDS/ISIS. The second section gives the general overview of CDS/ISIS, while the third dwells on database creation, formatting, indexing and common problems in the use of CDS/ISIS, and solutions proffered.

Introduction

Unesco released CDS/ISIS for microcomputers in 1985. It was officially called *CDS/ISIS Mini-Micro version* but is now called *CDS/ISIS* or simply *ISIS*. The first version of the package consisted of five programs which were run separately, but which acted on the same database. One program included data entry and information retrieval and the rest corresponded to the other options on the main menu of later versions: Sorting and Printing, Data Base Definition, Master File Services and System Utility Services.

In 1989, version 2.0 was released. It was little more than an amalgamation of the different programs into one but with the addition of Pascal programming to enable additional functions to be added to the basic package. The next public release was version 2.3, which included improvements in the speed of the indexing and in the space used by the indexes. The package was made more resilient; hitherto, a database could be irreparably corrupted if a power failure occurred while a record was being entered. The database then had to be restored from the previous backup. This changed from 2.3 version (Buxton and Hopkinson, 1994).

A further feature from the 2.3 version onwards is SYSPAR.PAR, a system parameter file. The program looks at this file as soon as it is loaded. It also allows sets of files used by the program to be placed in different directories. It allows the program to be set apart to start any menu or to load particular database automatically. With the introduction of the system parameter (SYSPAR.PAR), it became possible to set up a parameter file for each database so that the separate file that makes up the database can be allocated different directories or devices.

The SYSPAR.PAR file also proved necessary for putting CDS/ISIS on to a network, and version 3.0 was released in May 1992 as a "network sensitive" version. While using version 2.3, it was possible to run the software on a network by specifying certain parameters of SYSPAR.PAR as being network drives. However, a network allows a multi-user access, and files could be corrupted if two users tried to make changes to the same database at the same time. An individual record would certainly be corrupted if two users tried to update it at the same time. This problem has been overcome by the introduction of record locking and database locking in version 3.0 onwards.

The Windows version 1.31 of CDS/ISIS was released in 1998. This version of CDS/ISIS is a great improvement on the DOS version. Official version 1.4 of CDS/ISIS for Windows was released in January 2001 (http://www/unesco.org/webworld/isis).

According to Spinak (1992), the major functions provided by CDS/ISIS allow users to:

- Define database containing the required data elements.
- Enter new records into a given database.
- Modify, correct or delete existing records.
- Automatically build and maintain fast access files for each database in order to maximise retrieval speed.
- Retrieve records by their contents through a sophisticated search language.
- Display the records or portions thereof according to your requirements.
- Sort the records in any sequence desired.
- Print partial or full catalogues and/or indexes.
- Develop specialised applications using the CDS/ISIS integrated programming facility.
- Interchange database on the ISO 2709 International Standard used by leading database producers.

There are a number of factors that facilitate or enhance the potential of using the package in libraries. These include: the ready availability of the package, ease of use, and its free distribution by Unesco to non-commercial library and information centres. It is however protected by copyright and users have to licence its usage. The licence is not as restrictive as some commercially available programs, in that multiple

copying is permitted within an organisation that is a licence holder (Sam and Agyemang-Serebo, 2000).

General Overview

CDS/ISIS is a package that has been developed for bibliographic information, that is, information about documents such as books, journal articles or conference proceedings. Usually, each record in the database contains information about one document. Bibliographic data tend to be treated differently from other kinds of data, with less recourse to abbreviation. Moreover, titles of books and other works, which are contained in a bibliographic record, may be of any length, from one word to many. As a result, a method has to be found for allowing variable length fields, which many database packages do not permit.

Another feature of CDS/ISIS for bibliographic data is the need for repeatable fields. One book may have a number of authors. Each author needs to be of equal status. Many bibliographic databases implemented on general database management systems have one field for "authors", all authors are entered in one field but only the first is searchable. In CDS/ISIS, each attribute that has more than one value is entered in its own field. In other words, each field may be repeated – up to 999 times.

One important feature of the program is that the package is available in many languages including English and French. The user can change text on menus and worksheets. Messages files are stored as database files and can be edited in the same way as other database file. CDS/ISIS has features that allows it to function well in a multi-access environments.

Each database includes a master file and cross-reference files. The master file contains the data. The cross-reference file includes each record, the sequential master file number and indicates whether that record is used, unused or deleted, whether it may need to have its entries in the inverted file updated, and, in version 3 onwards, whether the record is locked. Database records are numbered from 1 but the system also has in each database, invisible to the user, a record 0 which holds information about the database, such as the next record and whether the database is a normal database or a message file (Nowicki, 1992).

Database Creation

Database creation involves the definition of a data structure. The basic features are the creation of a Field Definition Table (FDT), a worksheet and a Field Select Table (FST). It is important to note that the name of a database should not exceed six characters.

The Field Definition Table (FDT)

The creation of a FDT requires a thorough analysis of the data elements needed. A data element is an elementary piece of information and the choice of element will normally be determined by the specific requirements of the database. For instance, a database creation for a mailing list will differ from one meant for running library operations. Some of the basic questions that need to be considered are: what are the fields required? Is there a need for repeatable field and/or subfield delimiters? Should they be made searchable or not?

Worksheet Creation

The worksheet is the format which will later be used for data entry. Choosing which fields to edit and the order in which they are to appear creates the data entry worksheets. Clicking on the "less than" button will move a specific field to the data entry field, while the "greater than" button will move the field from the data entry field back to the field selection window. The "double greater than button" will move all fields at once to the data entry field. At the database definition – data entry worksheet window, one can create the "help message" not exceeding two lines that will assist data entry.

The Field Select Table (FST)

The FST, which is the last step in the definition of the database, is crucial to the retrieval of the data elements stored. It is also important for producing a printed report. If wrongly defined, the FST can make the data stored irretrievable. As such, the indexing technique and data extraction format must be properly mastered. The FST can extract one or more elements from a record. For example, a whole field or a subfield may be extracted. In other cases, it could be words, phrases, or any other piece of data which has a particular meaning to a specific application.

Formatting Language

This could be used for screen display and printing of records. Different styles and conventions can easily be followed to have the desired result. The format is an interface between what is stored in the database and the way it is to be displayed or printed through a "language" – the formatting language. The best approach to it is to make a model of the data that is to be displayed on the screen or printed before creating the display format.

A format is made up of one or more simple commands or statements separated by commas or spaces. The system executes from left to right.
For example, in formatting a single field, the format is "Vtag" whereas, in formatting the content of a sub field, the format is "Vtag^a^b.

Note that if no specific sub field delimiters are stated, the entire filed will be formatted. Examples:

V26^a	= formats sub field a	- Ibadan
V26^a V26^b	= formats sub fields a & b	- Ibadan, Longman
V26	= formats the three sub fields	- ^aIbadan^bLongman^c2001

To format the conditional or unconditional or repeatable literals before or after a field, e.g V60 the format is Vtag "zzz". In this format the text enclosed in double quotation and associated with a field is displayed/printed only if the field is present. However, in formatting 'xxx', e.g. 'Editor', the text enclosed in single quotation marks and associated field will be displayed/printed regardless of the presence or absence of the field.

Indexing Technique

CDS/ISIS allows free-text searching and the use of index for information retrieval. The free text method is a slow process when the database contains more than a few hundred records. The second method, using index, is the normal way of searching. CDS/ISIS allows setting up the index automatically and referring to it as the index or inverted file.

The Field Select Table (FST) controls the selection of terms from the database records to go to the index file. It is not possible for the computer to select terms according to their significance. Instead, the selection depends on three rules:

(i) Which fields from the record are to be indexed"? (e.g. you probably want authors indexed but not the publisher or the number of pages).
(ii) How are the index terms to be constructed from the data in these fields? For example, is the title 'Good secretarial practice' as whole field under 'G', or is it to be split up into separate words so that 'secretarial' can be searched under 's'?
(iii) A list of stopwords could be specified, which are not to be used on their own as index terms, e.g. 'in' 'of' and 'the'.

CDS/ISIS allows much flexibility in specifying each of these three rules. It is important to consider them carefully, since they determine what searches will be possible on the database. For example, one needs to index authors as separate words, so that the name "Akinyosoye, Harry" will appear under surname "Akinyosoye" and under first name "Harry". It cannot be searched as "Akinyosoye, Harry". If titles are indexed as whole fields, then 'Dictionary of Science' cannot be searched under 'Dictionary' or under 'Science'. It is however possible in CDS/ISIS to index the same field in more than one way, therefore making it possible to search under different techniques.

There are five indexing techniques as the following indicate:
(1) = Builds an element from each line extracted by the format. It signifies the whole field.

(2)= Indexes each subfield separately and so is relevant only if the field is divided into subfields.

(3)= Indexes only words or phrases which have been entered between angle brackets, for example <inflation rate>. This technique can be used to select particular terms from a lengthy piece of text such as an abstract.

(4)= Indexes only words or phrases but each term or phrase is enclosed in slashes //.

(5)= Indexes each word in the field. When using this technique, common, non-informative words such as "in" or "the" can be excluded. This can be achieved by setting up a stopword list for the database. Words on the stopword list will also not be indexed using technique (4) though they may still appear as part of phrases produced with other indexing techniques.

It is noted that there can be only one stopword list for a given database, not different lists for different fields. Stopword files are set up outside CDS/ISIS using a text editor.

Common Problems in Using CDS/ISIS

(1) How do you corrupt your Database?

Corrupted database is a database that gives error message during activation and all kinds of strange characters flash over the screen.

Corruption of a database can occur in the course of editing a record. When some records have been created or some changes made to existing records, one may not be able to search the new data immediately. This is because records are not indexed straight away i.e. search terms have not yet been added to the inverted file. For example, if it is the record with master file number 1234 that is edited and non-inverted, and an attempt is made to import about 100 records, after which one wants to update the MFN, MFN 1234 will be corrupted. When browsing this record, all kinds of strange characters will flash over the screen.

A database can also be corrupted when trying to update an inverted file when somebody else is updating a record. An inverted file is just another name for an index. The expression refers to the fact that the records are turned inside out to bring different elements from the contents to the fore in a file.

Solution

i) Reconstruct the database
- export the database in two parts, from MFN 1 to 1233 and from MFN 1235 till the end
- import the 2 parts
- re-index
- reconstruct the lost MFN 1234

ii) Copy a very recent backup copy and reconstruct last update.

(2) When one does a search and closes the window, the entire program shuts down.?

Solution

That is the way the program is written. In the recent version, 1.4 beta version, a window will pop up to ask you if you really want to close the window.

(3) I tried to export a database of 2000 records on a floppy disk. Export file was bigger than the floppy disk. I exported the database to two files – records 1 – 1000 and 1001 to the end. Export terminated abnormally. How do I resolve this problem?

Solution

The exporting function of CDS/ISIS allows you to copy some or all of the records in a database on to a floppy disk so that you can pass them to another user. One can try to export a file into a hard disk and use WinZip to transfer it to a floppy disk.

WinZip supports multiple floppies, but if it fits into two floppies, when compressed, it may fit into just one.

(4) *Is there a way to force insert/overwrite mode in CDS/ISIS syspar.par?*

Insert mode is when new characters are inserted into existing text while overwrite mode is when new characters replace existing text.

Solution

Setting in Syspar.par with parameter 10=1 does this.

(5) *In a title record (non repeatable), I have to input the per cent sign (%) because it is part of a title. How can I do this in WinIsis without losing the sign and all the text following it?*

Solution

Set parameter 8 of Syspar.par to %%. In this manner, you can enter the record and all other records which have the same format. Note that the per cent signs that you already entered are not actually part of your records and therefore no problem would occur. By setting the %% as repeat sign, from now on, you should use %% for separating the occurrences.

(6) I have reinitialised a database that should not have been reinitialised – and the latest backup is so old that we lost close to 1,500 records. After reinitialising the database, I can still find the master file, and by looking at it (notepad) I can see that it still contains all the data. Are there any possibilities to save the master file?

Solution

Reinitialisation is the emptying out of the existing records in a database. When re-initialising, you will get a warning that the master file will be cleared. You may also get a warning that the inverted file will be cleared. If you answer 'Yes' to the two warnings, the data will then be cleared and you have a database containing zero records.

Conclusion and Recommendation

In this paper we have attempted to justify the use of this package by advising users that most of the problems frequently encountered by the users of the package are surmountable. Solutions to some common problems have also been provided. It is pertinent to note that the use of CDS/ISIS as a powerful bibliographic control package is gaining ground in Nigerian libraries and information centres. It is therefore necessary for users in the various libraries and institutions to form a user-group in order to be able to exchange views and ideas, and solve problems that may arise in the course of using the software package. This would go a long way in enhancing the use of the package and encourage innovation.

References

Buxton, A. and Hopkinson, A. (1994) *The CDS/ISIS Handbook.* London: Library Association Publishing, p.1.

Nowicki, Z.M. (1992) *How to Utilise Advanced Features of Micro CDS/ISIS, Preliminary Unedited Version.* Geneva: International Trade Centre, ITC/DPMD /EDP/6. Rev.2), p.13.

Sam, Joel and Agyemang-Serebo, Michael (2000) Use of Micro CDS/ISIS in Libraries and Information Centres in Ghana. *African Journal of Library,Archives & Information Science,*10 (2) 161.

Spinak, E. (1992) *Utilities for MICROISIS*, 2nd ed. Washington, DC: PAHO HQ Library, pp.67-68.
Unesco (1998) *CDS/ISIS for Windows*. Paris: Unesco, p.53.
Buelinckx, Erik. (2000) Percent sign. CDS-ISIS@NIC.SURENET.NL.
The CDS-ISIS User Forum, http://www.unesco.org/webworld/isis/isis.htm Sept. 2000.

* H.I.T. Akinyosoye is the Research Librarian at the Development Policy Centre, Ibadan, Nigeria. He attended Obafemi Awolowo University and the University of Ibadan, both in Nigeria. He holds B.Ed and MLS.

Afr. J. Lib. Arch. & Inf. Sc. Vol. 12, No. 1 (2002) 101 – 107

Cataloguing Information Agenda for the New Millennium in Nigerian Libraries

Christopher O. Ola
Kenneth Dike Library, University of Ibadan,
Ibadan, Nigeria

Abstract

This paper conceptualises the creation of an Online National Bibliographic Network in Nigeria as the cataloguing and classification information agenda for the new millennium. To this end, a virile and efficient communication network system that will enhance the linkage of databases from the local, through zonal offices, to the national level is proposed as a preparatory step to ultimately connecting the international grid of databases. The continued relevance of cataloguers in professional practices is established. The attendant problems of "biblio-techno-volution"' are examined, while the role of the Federal Government of Nigeria, the Nigeria Library Association, the National Library of Nigeria, other library institutions, commercial agencies and individual librarians in meeting the challenges occurring in the business of creating access to the world of information is discussed.

Introduction

The rapid growth in computerisation, information technology (IT) and telecommunication systems has led to a sudden surge in automation and global advances in information handling and dissemination.

Libraries in Nigeria are making efforts at computerising their services and are at varying stages of automation. Just like in the traditional setting, all efforts are geared toward improving access and devising means of getting library materials to the users in the fastest and most efficient way possible. Unfortunately, most libraries are still very far from computerising.

In formulating a cataloguing information agenda in the new millennium, the focus must be more inward rather than relying absolutely on external efforts, especially, where Nigeriana and Africana materials are concerned. According to Igbeka (1998), "cataloguing information on monographs can be obtained using Library of Congress National Union Catalogue (Book form). The production of this stopped in 1982. It was then replaced with microfiche form, whose production also stopped in 1991. In

place of this came LC (CD-MARC) Bibliographic tapes... the production of this has also been stopped and LC bibliographic information can now be accessed only through the Internet." These changes are incessant and for every change, there are enormous inconveniences in terms of financial, policy and structural implications.

It is noteworthy that libraries are adopting digitised systems for handling and distributing information. Even in Africa, the Association of African Universities (AAU) has initiated a project known as Database of Africa Theses and Distribution (DATAD) and the Rhodes University library in South Africa is pioneering the Network of Digital Library of Theses and Dissertations (NDLTD). It is unfortunate that Nigerian universities are not part of these efforts due to lack of funds (Ikem, 2000). There is no doubt that the Internet has revolutionised the provision of library and information services to users. But are Nigerian libraries part of this global networks? Since there is no network system of any sort, we can neither begin to envisage viable Internet connectivity and digitised methods of information transfer cannot be attained.

Cataloguing Information Agenda

Cataloguing is done to ensure consistency in the practice. Obviously, the need for consistency and standardisation is important to the practitioner. The information provided in any catalogue (be it card or electronic) depends on the set of cataloguing codes and the policy adopted by the library. The Anglo-American Cataloguing Rules, second edition gives three alternatives tagged the three levels of bibliographic information: the first level description gives the barest or minimum information; the standard bibliographic information translates to the middle level description; while the full bibliographic information translates to the third level description.

In furtherance of standardisation, it is being proposed that this new millennium should witness more result-oriented and focused efforts by Nigerian cataloguers to network with the aim of sharing bibliographic records through electronic forms. Thus, the cataloguing information agenda being suggested is the creation of an Online National Bibliographic Network (ONBN). This system should be properly planned by instituting the network as a special project under the auspices of the National Library of Nigeria. The personnel to handle the project should be carefully selected cataloguers across the nation. This set of cataloguers should form the core of experts to formulate the policy of the project and to establish the initial database. They should be given tenure appointments during which they will undergo necessary training and then be involved in re-training others who will take over from them after their tenure and after establishing the central office.

Online bibliographic networking involves the systematic interchange of materials, bibliographic data service, information or occasional transfer of such resources from a central office to a number of libraries. Network refers to multi-library organisations

designed to facilitate interlibrary loans, reference, duplicate exchange, processing and the like (Wynar, 1985). The concept of a network of bibliographic databases is not new. According to Tedd (1993), large bibliographic agencies such as Online Computer Library Centre (OCLC) and Research Libraries Group (RLG) set up networks of terminals for accessing bibliographic records for cataloguing purposes since the 1970s. In Britain, the UK Office of Library Network (UKOLN) was set up at Bath University in 1990 to produce a common strategy for networking in the UK library and university community. In Africa, bibliographic networks have been established to facilitate resource sharing and information transfer. An example is the SABINET, South African Bibliographic and Information Network (Van Niekerk, 1986).

Network Structure of the Online Bibliographic Control System

The national bibliographic network should have a structure that will enhance integration. The policy guiding the creation of a centralised office for bibliographic control will have to be worked out. Suffice it to say that it is important that the local and zonal networking systems should be established. In doing this, topological considerations must be made in determining network policies and procedures. Issues concerning linkages and configuration of computers across libraries must be based on variables type, size and geographical location of libraries in the network. For instance, it may be easier to network all academic libraries in a zone; all public libraries in a zone; and all special libraries in a zone than to network all University libraries in the country, or all research libraries in the country or all public libraries. It should be noted that not all libraries can be connected at the initial stage. Consideration must be given to problems of proximity and type of libraries in Nigeria. For inclusion in the bibliographic network system, the following should be considered:

1. The mandate of the participatory libraries, that is, in terms of policy, patrons/clients, limitations, etc.
2. The available resources, that is, capacity, types of materials, special collections, etc.
3. The available facilities, that is, telephone, computers, existing network systems, e.g. Local Area Network (LAN), Campus-wide Network, Wide Area Network, etc.
4. Personnel, e.g. librarians/information scientists, technical staff, computer analysts, library assistants, etc. who are sufficiently knowledgeable in information technology.
5. Availability of funds, although the ONBN should be a special project funded basically by government, library patrons should be prepared to make provision for maintenance costs, personnel costs, consumables like stationeries, diskettes, etc among others.
6. In order to avoid the problems of location, consistency and variations, the establishment of specialised zonal databases should be considered. This

means, for example, that academic libraries within a zone can only have a few variations in their cataloguing practices, and therefore, should be suited for linking up in a zonal network system.

The separate databases created will then be linked up within a central zonal network system which will in turn be linked to the National Network. For convenience, the project could be carried out in phases, viz:

- Phase I – Local Network System (LNS). The first phase of this project will take care of identifying eligible libraries in their individual capacity at the local level. The libraries that have met the set standards would enter the preparatory stage. Necessary local area networking would be done; telephone installations would be made; other auxiliary services like constant electricity would be provided; maintenance and technical staff would be on the stand-by.
- Phase II – Zonal Network System (ZNS). After the LNS phase, the stage is set for the Zonal Network System. All identified and certified libraries would be linked up in a Wide Area Network with an office in the most centrally located library in each of the six zones. All the public and academic libraries in the network in a zone will have a central bibliographic control unit where the ZNS will be coordinated.
- Phase III – National Bibliographic Network System (NBNS). This is the stage where all zonal bibliographic offices are linked together in one centre possibly under the coordination and control of the National Library of Nigeria.

There are six regional zones and thirty-six states in Nigeria. Each of these zones has at least five states within it. The zones can also be used for bibliographic resource sharing and electronic networking.

Each of these zones has well-established public, special and academic libraries that can serve as zonal offices for the zones. For example, the North-Central zone has about six university libraries (Benue State University Library; Federal University of Agriculture Library, Makurdi; Kogi State University Library, Ayangba; University of Ilorin Library; Federal University of Technology Library, Minna; and University of Jos Library). In addition, there are other higher institutional, research and special libraries. Almost all the states have State Library Boards. Branches of the Library Boards are established in various parts of the states. Research and other institutional libraries could be categorised as academic libraries and should therefore be linked up in the network with academic libraries in the various zones. Hence, reputable university libraries in each zone could be made the main zonal host for the network. The National Library of Nigeria (NLN) has branches in most of the states of the federation. Cognisance should be taken of the locations of all these libraries in making design decisions to connect them to the state, and hence to the ZNS.

Cataloguing networks can be used as a database for pre-order verification, spotting location for possible inter- library loans, public service uses like citation verification and solving bibliographic problems. It is also a development that will act as impetus to libraries that are yet to computerise to start doing so as the reality of the inevitability of global network system begins to dawn on them.

On the whole, the Online National Bibliographic Network will be preparatory to Integrated Services Digital Network (ISDN) whereby voice, data, fax, and other multi-media information will be transmitted on a single link in a digital manner through the use of fibre optic technology. This communication system is already in use in many countries of Europe and America (Tedd, 1993).

The Relevance of Cataloguers in the New Millennium

The cataloguers will continue to determine subject contents of materials and give appropriate headings. They will continue to determine subject headings of all items entered even in an automated environment. They provide the necessary description of various dimensions of all library materials. Users will only access whatever they provide as online. Intellectual decisions are the prerogative of humans, and all that are technologically achievable are the functions of intellectual investigations and comprehension. This is accentuated by the fact that it is not all that are intellectually feasible that are technologically achievable. "A computer system is only as good as, or as bad as the human beings who design, implement and operate the system" (Tedd, 1993).

The human aspects of the on-going IT have not been of particular interest to practitioners. The fact is that human beings are prone to fear of change. Some practitioners may never be part of the proposed information agenda. It is not all those involved in information handling today that will be partakers in the implementation of the information agenda in the new millennium.

Recommendations

- Government must have clear-cut policies on libraries in Nigeria. Information provision and education generally must be given the priority they deserve. For information to be properly utilised it has to be communicated to the appropriate quarters. Communication networks in Nigeria should be overhauled without which no meaningful development could be achieved. also the supply of electricity must be regular. Immediate steps should be taken to establish the Central Office of the Online National Bibliographic Database and zonal offices opened in the six zones of the country.

- The Nigerian Library Association and the Cataloguing and Classification Section of NLA could help in identifying those to be involved in pursuing the cataloguing agenda. The Associations need to be involved in setting up the centres and they must engage in evaluative measures to regulate the project. Besides, periodic training and retraining of members must continue through workshops and conferences. Opportunities of international exposure should be explored for members so that the nation can keep abreast of developments in the profession around the world. They should participate more in national discussion in order to gather support and recognition. Decisions taken at meetings, workshops and conferences should be pursued vigorously and practitioners be result-oriented.

- The National Library of Nigeria must continue to act its role as the vanguard for the development of libraries. The NLN is usually the body to execute most decisions of national interest. It therefore needs to ensure that government is made compliant on the various decisions taken at conferences.

- A library is as good as its cataloguers. User satisfaction and public relations are remotely controlled from the technical sections. They constitute the remote control that herd all users and library staff toward the direction they think is appropriate. In order to improve access, cataloguers must be empowered through training. Necessary equipment for networking should be made available. The heads of libraries have a lot to do in this regard. They must make connections (nationally and internationally) and use these to promote the objectives of their libraries. Internal and external sourcing for funds and less reliance on government; outreach programmes embodying exchange missions to libraries at home and abroad will make this proposition a reality.

References

Horner, John (1970) *Cataloguing*. London: Association of Library Assistants.

Igbeka, J.U. (1998) *Original Cataloguing: A Practical Manual*. Ibadan: Stirling-Horden Publishers. pp. 29.

Ikem, J.E. (2000) Personality Interview with Mr. Joseph Ezenwani Ikem, University Librarian, Kenneth Dike Library, University of Ibadan, Ibadan, Nigeria. *African Journal of Library, Archives and Information Service*, 10 (1) 83-88.

Ola, Christopher O. and Adeyemi, B.M. (1998) Information Technology: An Erosion of Cataloguing and Classification Practices? *Paper presented at the 36th Annual Conference of Nigerian Library Association (NLA) held at National Universities Commission (NUC), Abuja from 3rd to 9th May, 1998.*

Tedd, Lucy A. (1993) *An Introduction to Computer-Based Library System* 3rd Edition. Chichester: John Wiley. 316 p.

Van Niekerk, Ilse (1986) SABINET: Description and Development: A Brief Overview. *In: Bleimschein, Sue (ed). Computer Application in Information Systems: Proceedings of a Workshop.* Cape Town: School of Librarianship, Cape Town University.

Wynar, Bohdan S. (1985) *Introduction to Cataloguing and Classification* 7th Edition. Littleton, Colorado: Libraries Unlimited, 641 p.

* Christopher O. Ola is a senior librarian at Kenneth Dike Library, University of Ibadan, Nigeria. He attended the University of Ibadan. He holds BA, MLS.

Afr. J. Lib. Arch. & Inf. Sc. Vol. 12, No. 1 (2002) 109 -112

Book Reviews

Documenting and Researching Southern Africa: Aspects and Perspectives by Dag Henrichsen and Girgio Miescher (Eds). Basler: Basler Africa Bibliographien, 2001, 192 p. ISBN 3-905141-76-0. Price (not stated)

This book offers an opportunity to celebrate a famous literary figure, Carl Schlettwein, who is singularly renowned for safeguarding the literary treasures of the Namibian people and acknowledged for his tireless and onerous effort in collecting and setting up special collections in pre- and post- independence Namibia. The occasion marked by a symposium was an opportunity for professionals from the fields of library, archives and information management to pay tribute to him in the form of presentations.

The book has an excellent introduction with a detailed overview of what the collection of the thirteen essays is about. The essays are multifaceted and cover such aspects as collection development and accessing, use of oral information, photography and posters as important sources of information, utilisation of automated systems and cooperative projects.

The preamble of the book is a keynote address by Namibian Minister of Higher Education and Employment Creation, Dr. Nahas Angula, *Deconstructing the Past, reconstructing the future: Knowledge workers in Southern Africa.* A fascinating tribute to Carl Schelettwein's selfless efforts in establishing the Basler Africa Bibliographien. It pays special acknowledgement to his endeavours in promoting collection and preservation of information resources on Southern Africa. The paper raises a crucial issue of locating and bringing back Africa's information displaced. It is remiss to achieve this without the collection and preservation of oral traditions. However were we to say that this is important, we would be greatly disappointed that out of the thirteen essays only a sublime two made mention of the importance of preserving memory through collection of oral sources. Suffice to say that more attention would have done justice to this aspect.

The book is made up of a collection of essays grouped into three major themes; *Libraries and Archives: Changing Traditions and New Challenges; The Basler Afrika Bibliographien and Carl Schlettwein* and *Old and New Collections.* The themes highlight the pertinent issues and concerns faced by librarians and other information managers and as such address the challenges and new contexts currently faced by libraries in and outside Africa. The authors emphasise the importance of library and archival collections as a resource for studies in different disciplines. In particular, special collections, posters and photographs are introduced and efforts by libraries

and archives in the acquisition and accessing of such collections are presented as a challenging commitment.

Contributors to the first theme, *Libraries and Archives: Changing Traditions and New Challenges,* include Marianne Gei-Khoibes, Barbar Turfan, William Hillebrecht, Phyllis Bischof, and Paul Jenkins. They give a detailed account of the changing traditions, new challenges and new potentials for libraries, archives and research collections with focus on the Namibiana Library of the University of Namibia, School of African Oriental Studies in London and the potential of the archives of Basel Mission Society. The authors, drawing from their experiences, observations and interviews with colleagues, trace the historical origins of the collections with a view to identifying the major challenges and opportunities for development.

Dag Henrichsen, Sonia Abun-Nasr, Susanne Hubler and Hartmut Leser in the second theme *The Basler Afrika Bibliographien and Carl Schlettwein*, make an attempt in contextualising aspects of Basler Afrika Bibliographien in broader developments and, in particular, bringing important materials to Namibia. Sonia Abun-Nasr and Susanne Hubler portray Carl Schlettwein as an active author and publisher and they present a bibliography of his works. Hartmut Leser, in emphasising the importance of co-operative projects, discusses the idea of forming the Basler Geomethodische Colloquium (BGC) which had common interests with Basler Afrika Bibliographien and focused on African themes leading to exchange of information and research collaborations.

The final theme *Old and New Collections* presents five essays by Marcelelle Weiner, Teresa Cruz e Silva, Regula Iselin, Simone Chiquet and Guido Koller, and Giorgio Miescher.

The synopsis of the book outlines institutional and individual co-operation as well as automated systems in a more generalised sense. Strategies for co-operation, challenges and opportunities to pool limited resources to overcome obstacles are mentioned. An overview of expandable projects that could benefit Africa is explored. Automated systems are the new catch phrase. Their limitations and opportunities in the fields of librarianship and archives are highlighted. With the advent of information technology and most importantly the use of the Internet, various contributions in this volume give insights into the practical developments of the Internet in different aspects of library operations.

The volume is highly selective in its choice of topics and perspectives. Many aspects are not mentioned here which might be regarded as equally important. An example is publishing and politics of collecting and accessing information. Readers with interests in Africa will find the issues discussed important in documenting and researching Southern Africa.

Documenting and Researching Southern Africa is a valuable read for those interested in changing the way information management is accomplished, as well as those outside the borders of Namibia who may be interested in building valuable collections for research purposes. The essays offer a starting point for opportunities for co-operative efforts and the use of technology for managing management. Despite its limitations, the strategies suggested are worth further exploration and research. The book is worth reading and is therefore recommended.

Segomotso Masegonyana Keakopa
Lecturer
Department of Library and Information Studies
University of Botswana

Income Generation: Experiences from University Libraries in Eastern, Central and Southern Africa by Diana Rosenberg (Ed.) Oxford: The International Network for the Availability of Scientific Publications (INASP), 2001, 91 p.

Libraries in Africa have in the past faced a myriad of problems. The lack of money has often been considered the "root of all evil." Indeed, in any discourse on the adoption of technology, the development of book collections or the training of staff, funding has always been one the of greatest handicaps. This has been evident in the discussions at the 1996, 1998 and 2000 meetings of the Standing Conference of African, National and University Libraries in Eastern, Central and Southern Africa (SCANUL-ECS), which dwelt heavily on the subject. A call for networking and the exchange of experience and information between libraries resulted in a volume of case studies of successful income generation by eight university libraries in six African countries. This resulted from the realisation that there is a movement away from total reliance on government funding towards additional sources for library income. The nine authors who contributed to the six case studies in this volume present generally different experiences from their institutions although using a similar format of presentation of the issues. The university libraries are: Moi University in Kenya, Mzuzu University in Malawi, University of Dar es Salaam in Tanzania, Makerere University in Uganda, Copperbelt University in Zambia and three universities in South Africa namely, Rand Afrikaans University, University of Pretoria and University of South Africa.

The case studies concentrated on two basic issues, first, the main sources of income currently available to university libraries in the region. This varied greatly from the more common sources like overdue fines and photocopying to the more rare consultancy, information searching and training services. The second issue is nature, level and experience of income generation by these libraries. It is apparent from the case studies that while some libraries operate on a partial or full cost-recovery level, a

few are out to make profits and have formalised business development units. The portion of the total library income from income-generating activities varies greatly from less than 2% at the University of South Africa to almost 100% at the Copperbelt University.

The editor, Diana Rosenberg, in the introductory chapter, argues that "income generation is here to stay and that in the future the university library will be asked to become more self-sufficient and not only be responsible for generating income but also be held accountable for it."

Being a seminar publication on income generation, this volume presents a groundbreaking effort in assisting libraries supplement their funding options. However, it is hoped that this will not be the only publication for reference. One hopes that future publications will build on this volume and take into account two issues. First, while university libraries have received all the attention in this volume, the experiences of national libraries would be of great interest, especially considering that they don't have the luxury of relying on a physically and bureaucratically closer parent institution. Additionally, all the experiences have come from the Anglophone countries in the region. The experiences from Lusophone and Francophone nations would certainly present a more wholesome representation of the situation within the region.

Shadrack Katuu
Lecturer, Department of Library and Information Studies
University of Botswana
http://skatuu.8m.com

New Publication

The African Publishing Companion: A Resource Guide by Hans Zell. Glais Bheinn: Hans Zell Publishing Consultants, 2002. 256 p. ISBN 09541029-0-8 Price: £ 80.

The guide appears both in print and electronic versions. It provides detailed information about African publishing and the book trade. Also included in the companion, are: a detailed list of African publishers' e-mail and website directory; book trade and allied associations; book development councils and other book promotional bodes; and reproduction right organisations.

The guide also contains information on authors and writers associations; organisations, donor agencies, and networks supporting African publishing and book development; schemes, book series, and other projects promoting African book and journal publishing; books in print;

Other issues treated in the guide are bibliographic and reference tools; journals and magazines/book review; principal dealers and distributors of African books outside Africa; major book sellers/library educational supplies in Africa; African book fairs and other promotional events; African books and literary awards outlets; book industries training courses and training institutions ; African book publishing statistics and publishing capacity ; researching African publishing; main issues and topics in African publishing; and a bibliographic guide to the current literature and index.

This guide is recommended for any one interested in all aspects of publishing in Africa.

Afr. J. Lib. Arch. & Inf. Sc. Vol. 12, No. 1 (2002) 115 – 116

Professional News and Events

Programme for the Enhancement of Research Information (PERI)

International Network for the Availability of Scientific Publications (INASP) has announced the completion of the first phase of PERI, which is a programme that will enable researchers in Africa have full access to on-line journals and databases in Africa. It provides wider access and dissemination of scientific and scholarly information and knowledge between developing and transitional countries. Only researchers, academics, scholars and librarians in Ghana, Tanzania and Uganda will be able to have access to current awareness databases, full-text on-line journals and document delivery at no cost. Researchers, academics, scholars and librarians in the three countries are expected to contact INASP at INASP@gn.apc.org. It is expected that this opportunity will be extended to other countries in due course.

Blackwell's Support for Research in Africa

Blackwell publishers in association with 500 learned societies and INASP are providing at reduced rate online access to 600 leading peer-reviewed journals. The funding is supported by INASP, ENRECA (Danida) and Sida:Sarec. Researchers, students, lecturers, librarians and medical professionals within non-commercial organisations in Ghana, Kenya, Malawi, Mozambique, Tanzania and Uganda will benefit from the assistance.

Report of a Conference

Standing Conference of African University Libraries Western Area (SCAULWA)/West African Library Association (WALA) Conference. Accra, Ghana, 9-15 September 2001.

The conference which was jointly organised by the Standing Conference of African University Libraries Western Area (SCAULWA)/West African Library Association (WALA), attracted 78 participants from 16 countries (Barbados, Benin, Botswana, Cameroon, Cote d'Ivoire, France, Gambia, Ghana, Guinea, Niger, Nigeria, Senegal, Sierra Leone, South Africa, Togo and the United Kingdom). Participants included librarians, library school educators, information specialists, publishers and other information-related workers. African Journal of Library, Archives and Information Science was also represented at the conference.

The SCAULWA conference focused on various aspects of resource sharing among university libraries, and the development of librarianship profession in West Africa was the focus of WALA. SCAULWA was held 11- 12 September while WALA followed immediately from 13-14 September.

The next SCAULWA conference is billed to take place in Ghana in 2003, while WALA conference will be held in Nigeria, also in 2003.

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.