RE-THINKING CHANGING ROLES OF ACADEMIC AND RESEARCH LIBRARIANS IN TANZANIA: REFLECTIONS, PROSPECTS AND CHALLENGES.

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Abstract:

Academic and research libraries are central hearts of universities and their survival depends on their ability to satisfy the information needs and demands of users from a wide range of disciplines. This paper argues that information and communication technologies have brought about profound and unprecedented changes in the way information is accessed, stored, retrieved and delivered, However, in view of this, the role played by librarians must change from mere custodians to educators, facilitators, synthesisers of user information needs and trainers of trainers. The paper also argues that despite the benefit potentials of new information and communications technologies, libraries will continue to focus on their traditional roles, which are collection preservation and dissemination, but, what will and must change are the techniques used in ensuring effective use of library resources in both print and non print forms. This also requires integrating information technology and library resources to support teaching, learning and research and access to information. This demands that librarians be resourceful, forward looking and plan strategically to ensure effective use of library resources and IT facilities. Finally, it stresses that librarians must play a leading role in setting library policy directions and priorities in their institutions in order to achieve organisational change, improve performance and efficiency and in order to sustain their key objectives, which pertain to selection, organisation and preservation of knowledge and ensure its access. The paper also stresses that resource mobilisation, training and retraining of staff and users is crucial in order to enjoy the benefits of new technologies.

Introduction

The role of Academic and Research libraries

Academic and research libraries are not only central to academic life of teaching, learning and researching, but also the heart of campus information and the lifeblood of study and research and scholarly communications (Hughes, 2002). Furthermore, these libraries are key sources of information and important repositories of a wide variety of cultural artefacts and ideas for service to the community for preservation and availability for future generations.

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They are also important links between scholars and users of scholarly communications (ARL, 2002 and IFLA, 2002). According to the Association of Research Libraries, (ARL, 2002:4) stresses that a key role of research libraries is to:

> *Support advanced levels of research and to build collections to anticipate possible future needs, in addition to meeting the immediate demands of undergraduate and graduate instruction.*

Taken in this context their key role is to ensure and provide access to valuable knowledge, quality and relevant resources to support teaching, learning and research and in line with the mission and goals of their parent institutions. As such, selection , acquiring, collating, processing, disseminating,preserving and indexing are part and parcel of their activities. Therefore, their survival largely depends on their ability to satisfy information needs of the academic and research community from a wide range of disciplines including the growing student body. Investment and effective use of information technology resources is also a crucial factor.

However, in the context of Tanzania, the growing demands on library resources due to expanded student enrolments and programmes does not necessary mean an increase in the library budget. For example, during the academic year covering the period 1999 to 2002 the University of Dar es Salaam library budget allocation for books was approximately USD$ 26,263.65 and USD$ 61,899.5 for journal subscriptions (UDSM Library Strategic Plan). In such a situation the librarians have to be resourceful and must have clearly articulated goals, objectives and strategies. Similarly they must plan strategically in order to ensure a balanced collection using the meagre resources and to ensure proper targeting, integration and marketing of library resources services and facilities to support teaching, learning and research This is likely to increase the visibility of librarians in communities they serve.

This also means librarians must have the expertise to mobilise resources from a wide range of donors including the local business community and must exploit the full potential of the Internet. In view of the changing information and IT environment, librarians' expertise is increasingly becoming a critical factor in their performance of their diffused roles in academic and research libraries. Hence librarians will need to reconsider their traditional roles which have revolved mainly on services provision to become educators, knowledge creators, analysts and knowledge and information disseminators. This further dictates that librarians increasingly become partners in the teaching and learning process and also play a leading role in fostering the integration of IT resources including bibliographic

instruction techniques into teaching and learning, to promote effective use of electronic resources and resource sharing (Pradt-Lougee, 2002). In this respect, the role of librarians will be to set the library and information policy direction in their institutions.

Challenges

As indicated earlier, the role and survival of academic and research libraries depends largely on their ability to satisfy and meet user needs from a wide range of disciplines, and the extent to which they have effectively integrated library and IT resources to support teaching, learning and research and service to the community as well as their ability to build comprehensive and balanced collections.

New developments in information and communications technologies have not only resulted in information explosion, knowledge expansion and specialisations but is also promoting multi and interdisciplinary and collaboration research, new research methods and an increase in scholarly publications and journals (ARL, 2001). In view of the above, librarians efforts should focus on integrating new technologies into teaching, learning and research, and at the same time facilitate access and retrieval of both print and electronic resources. Moreover, effective integration of library resources and IT in teaching, learning and research also requires that librarians understand the benefits derived from new technologies, be computer literate and knowledgeable about existing library information systems and software applications. This is important in order to ensure their effective application in facilitating cataloguing, circulation, reference, collection development, serials control and preservation.

The changing information and IT environment, also requires effective use of integrated information systems in teaching and learning and closer collaboration between librarians and teaching staff in designing relevant course instruction packages and in determining the type of library print and electronic resources that should be linked to related course web pages as well as training needs and requirements (Hughes, et.al. 2002). Essentially this means librarians must be in the forefront in forming partnerships with teaching and research staff including students.

Integration of library and IT resources also requires that librarians play a leading role in fostering the integration of bibliographic instruction and user education techniques in the curriculum as well as in promoting effective use of library resources both print and non print.

Constraints and Challenges
Increased prices in library resources

Today research-and academic libraries in Africa and particularly Tanzania face many challenges not only in terms of resource constraints but also due to the opportunities, and potentials of emerging new technologies and due to the high cost of library resources both in print and non print. For example, in the context of Tanzania expanded student enrolments and programmes have also brought about growing demands on library resources. By contrast, this has not necessarily meant an increase in the library budget.

Increased Student Enrolment

The increase in student enrolments and academic programmes for example at the University of Dar es Salaam is also creating high demands on the limited library and IT resources and facilities. For example, the current trends in student enrolment at UDSM for the years 1995-2003 is about 10,300 students, both undergraduate and postgraduate. This problem is further compounded by the UDSM private sponsorship policy which is designed to democratize university education. However, the problem is that this is happening without a corresponding increase in the library budget to support acquisition of library resources.

The situation in other Universities in the country including Sokoine, The Open University of Tanzania, and the newly established private universities for example, Tumani, St Augustines, can hardly be considered to be satisfactory because they too experience similar problems and as shown by the number of students from these universities who seek to use UDSM main campus library facilities. The question then becomes how can librarians deal with resource demands and priorities of users from a wide variety of disciplines?

The Need For Strategic Planning

Planning in libraries, like in any organisation, is just as critical as financial resources. It is a means for ensuring efficient provision of quality service. It is also the basis for identifying and determining priority concerns, needs and resources, both human and physical requirements including training and retraining needs. Basically, planning is the basis for charting out the way forward, how to get there and in determining what is needed to get there. Planning in any organisational setting demands the involvement, participation of staff and stakeholders in determining priority information and IT needs. Essentially, teamwork is the key word and the purpose is to take advantage of diverse expertise, talents, skills, views and experiences. Staff involvement also tends to promote commitment and accountability and can be a motivating factor in ensuring quality feedback.

It is for this reason that the University of Dar es Salaam embarked on major restructuring and transformation from a highly bureaucratic to a more democratic and participatory governance. This also called for a move towards more facilitative leadership to move the university forward so it can meet the challenges of a modern day university.

The Place of IT in Teaching, Learning and Research in Libraries

The World Wide Web, and CD-ROM have revolutionised the way information and scholarly works including research are accessed, retrieved, communicated and made available. The Internet is also increasingly becoming a vital medium in facilitating access to alternative library resources, databases and to virtual libraries including resource sharing and exchanges between local researchers and scholars and their counterparts globally. It also facilitates the sharing of electronic resources between libraries, interlibrary loan services including access to networked union catalogues and availability of information to distance learners.

Today libraries particularly in the developed world are moving towards integrated networked information systems aimed at facilitating access to scholarly publications and research results, support teaching, learning and research, and promote independent learning. Libraries are also working towards access to networked resources and as a means for improving the quality of service. However, effective use of integrated networked information systems requires adequate investment of resources, creation of an enabling environment, a supporting infrastructure including trained personnel, computer experts and technicians as well as standardised applications both hardware and software. Standardisation and availability of core technical support services and capacities is crucial in ensuring connectivity and effective use of electronic resources at national, regional and international levels (Graf, 2002)

Similarly, in order to enjoy the benefits of integrated and networked library information systems, librarians require to be computer literate, conversant with existing library information systems and software applications. Moreover, they should be aware of a wide variety of subject, reference and bibliographic databases, including search engines. Similarly, librarians must be competent in on-line searching and retrieval techniques. They must also have the ability to conduct bibliographic instruction programmes to enhance search and retrieval skills among users.

These activities should also be guided by the mission and goals of research libraries including professional ethics and values, and should aim at promoting quality education and service, accountability and communication between information professionals and their stakeholders who happen to be students, teaching staff as well as researchers. For example computerization of the University of Dar es Salaam library now allows the library to utilise

Internet resources, CD-ROM technology, access reference resources on the World Wide Web and subscribe to on-line databases and access electronic journals through special arrangements with INASP. In this respect the library is responding to user needs in view of the expanded student enrolment and the introduction of new programmes.

Education and Training

Human resources are the most critical factor in any organisation. Training and retraining of library and teaching staff and students is crucial to ensure a pool of users who can confidently handle the demands and challenges of new technologies and effective use of networked library resources. This also demands identification of training needs and standards for both staff and student.

It is through training and retraining including participating in continuous education programmes and in-house training that libraries can develop the various levels of desired expertise, skills and competencies that would ensure realisation of desired goals. Education, training and continuing education are means through which academic and research libraries can develop management, selection, supervisory, technical and computer literacy skills. Libraries should harness these competencies to improve their performance, effectiveness, the quality of service, and also marketing library resources and facilities to users (IFLA, 2000 and Pradt, 2002).

There are a number of challenging library responsibilities that demand use of staff talents and expertise including reference, collection development, library user education, monitoring and evaluation, training, teaching and IT use and application. Thus teaching, learning and research resource requirements must be identified and assigned to professional and support staff to develop and ensure their access to users.

Apart from being the experts, librarians are also expected to use their abilities and skills in making sound judgements about the introduction of new services. This requires working closely with teaching and research staff as well as graduate students in the identification of relevant and current resources that meet user needs. Library policies, procedures and standards should strive to democratise both information and IT to ensure not only quality but also equity of access. Training and retraining of staff and users must be an integral part of services offered by academic and research libraries. Training opportunities offered by libraries must be widely advertised and must be accessible to all on campus and off campus through effective use of electronic resources. Today the changing information and IT environment demands that they be trainers of trainers and in educating the library user not only in information search and retrival techniques but also effective use of electronic resources including CD-ROMs and other documentary delivery mediums. For example, the University of Dar es

Salaam library has organised a number of IT related training sessions for both library and teaching staff to promote effective use of IT resources and ensure access to current information to support teaching and learning.

Identification of user needs and new services

Libraries develop in response to user demands. Impliedly, this requires that librarians understand information needs of their users in order to build comprehensive library collections to meet these needs. There are various alternatives through which resource constrained libraries can ensure access to a wide variety of resources for its communities. For example, libraries could introduce tailor made formal and informal computer literacy programmes and user education programmes aimed at developing user skills and competencies to ensure and allow users to effectively utilise electronic resources. Libraries should look into the possibility of introducing new services such as electronic publishing and production of electronic media such as CD ROM, electronic reference and document delivery services. Essentially, electronic publishing or in-house production of electronic resources tend to cut down on the cost of books and journal subscriptions, reduces dependency on commercial publishers, and also tends to promote local scholarship and access to locally produced scholarly publications to support development and quality decision-making including teaching, learning and research.

Collection Development, Preservation and Weeding: The need for Policies

The number of volumes and journal subscriptions the library can afford depends on the budget and determines the status and quality of their collections. Academic and research libraries are expected to meet the needs of a wide range of scholars and increased student enrolments who demand for limited library resources. They also have a responsibility to ensure these needs are met. However, no library particularly in developing countries including Tanzania can meet all the needs of users by itself. For example, over the years, dwindling budgets for books, journal subscriptions and electronic resources, have forced most libraries in these countries to cut down on book purchases and subscriptions to scholarly journals.

Thus, common sense would dictate that libraries purchase only what they can afford. Building comprehensive and well-balanced collections that meet the needs of a wide variety of users from different disciplines is relevant and crucial to the survival of any academic and research library. This can be achieved partially through a variety of ways including effective use of the Internet, CD-ROM and interlibrary loans. Libraries can also build comprehensive and balanced collections by deliberately acquiring or subscribing to multidisciplinary, cross-disciplinary and interdisciplinary resources and core journals both in print and non-print.

Electronic publishing offers immense opportunities for scholars and researchers to share, exchange, communicate and make known the state of knowledge in their disciplines and also contribute to the growth of theories in the discipline. Also for libraries to access and disseminate knowledge generated through research to users to support teaching, learning and research. Moreover, research depends on availability and access to previously published research and the value of research results lies in its publication, accessibility and availability to scholars who produce it and who are also the major consumers of research results.

Collection development is a collective effort requiring the involvement of librarians teaching staff, researchers and graduate students. This however is easier said than done because for example at the University of Dar es Salaam a majority of stakeholders rarely participate in collection development despite frequent reminders requesting them to participate in selecting titles for courses they teach.

Preservation

Another role of academic and research libraries in Tanzania is to preserve national cultural heritages for future generations and safeguard these valuable resources against humidity, destructive insects and from other environmental and chemical factors. This also requires that policies be put in place and clearly spelt out standards for preservation. (ARL, 2002). Preservation can take various forms, such as bound volumes, microfilming, and microfiches or through digitisation. For example, the University of Dar es-Salaam with support from NORAD managed to microfilm its East Africana manuscripts and newspaper collections and is currently developing an electronic database for thesis and dissertations submitted at the University of Dar es Salaam to ensure their accessibility to future generations. Despite this, the microfilm and fiche collection is the least utilised resource due to lack of appropriate reading equipment and due to poor marketing. Furthermore, while digitisation, microfilming and microfiching can substantially reduce mutilation of scarce library resources and preserves space, however, preservation of resources recorded on magnetic and optic tapes poses major challenges since little is known about how long such resources can be sustained. This is an area that needs to be looked into seriously. These resources should also be widely marketed and publicised to users so that they can be effectively utilised. This area needs immediate attention and adequate investment resources for equipment including training in order to ensure their access over time.

Academic and research libraries in Tanzania can also learn from their counterparts in developed countries, which have established cooperative buying ventures to increase their purchasing power. For example, in the United States the Association of Research Libraries in collaboration with

institutions of higher learning, libraries, scholarly communities, university presses and the Association of American Universities launched the Scholarly Publishing and Academic Resources Coalition (SPARC) (ARL, 2002) to market and disseminate scholarly publications. These libraries have also been affected by escalating prices of library resources. These libraries also use the Internet extensively to market and disseminate scholarly publications. For Tanzania, sustaining such collective ventures requires much support and commitment from university authorities, library managers and stakeholders. It also requires mobilisation of needed resources and strategic planning and setting priorities.

Brief Discussion

While research libraries support all sectors of academic life, increased student enrolment and financial constraints, require that librarians critically re-think or re-examine their roles in order to deal effectively with these challenges and at the same time remain relevant to their mission. In developed countries academic and research libraries are increasingly becoming technologically oriented and are using technology to strategically target students and teaching staff in meeting their information needs and requirements (Hughes, et.al.). This technology is also being utilised to promote intra-campus collaboration between academic libraries and departments to ensure effective use of this technology including access to electronic library resources cost effectively. Similarly, in view of the shrinking book budgets and journal subscriptions, clearly, integration of new technologies in teaching, learning and research in Tanzania is no longer an option but a necessity and a means through which users from a wide range of disciplines can be assured of access to information that meets their needs. The new role of librarians will be to build partnerships with teaching staff, technology specialists and instructional technologists to ensure the quality and integration of technology in libraries and availability of library resources to users.

Indeed, while the World Wide Web, offers unprecedented possibilities for academic and research libraries, this technology is also shaping, defining and re-defining traditional roles and functions of the library. It is also important to bear in mind that the nature or type of resources offered on the World Wide Web will not replace or change the traditional role of libraries. Libraries have three distinct roles, namely to select, organise and preserve knowledge. Unlike library resources, World Wide Web based resources are not permanent. They are here today and gone tomorrow. In short their life span is indefinite. By contrast, library resources are preserved for future generations in mind.

While integrated networked information systems tend to ensure access to current teaching, learning and research resources, however there are also a number of problems that limit their effective use including unreliable power supply, frequent power cuts and fluctuations, unreliable technical services support, and expensive telecommunications systems and services, just to mention a few. Therefore, libraries must have contingency plans to ensure uninterrupted services in case of power failure. They can do this by investing in power generators and putting in place a team of maintenance technicians who would provide the needed services.

Since IT development including infrastructure in most African research and academic libraries is heavily dependent on donor funding, durable long term plans must be put in place to sustain the emerging and changing IT and information environment and to safeguard against technology obsolescence and in case of donor fatigue.

Technology tends to have unintended consequences. For example, it tends to widen the digital gap and creates pockets of the information haves and have-nots within the same country and between countries. Perhaps for Tanzania the issues is not only access within academic institutions but also outside the classroom. Research in the discipline should focus on the identification of critical research areas that would improve library performance, effectiveness and efficiency.

Capable information managers are also needed to envision and plan dynamic technological library services needed by staff and students to push and promote the integration of both print and electronic resources efficiently and cost effectively, and to promote collaboration between professionals, teaching staff, students and technology experts. In addition, concrete strategies that would ensure proper targeting of different interest groups and their needs. Similarly, greater attention should be given to staffing and resource mobilisation.

As indicated earlier, traditional roles of libraries will not be replaced by new technologies but libraries have to change the tactics they currently use to improve provision of quality services including; creation, storage, dissemination, use, and preservation of knowledge. These are the key missions of academic and research libraries. Basically, what this means is that organizational structures and professional talents in academic and research libraries must be adapted toward creation of user-centred information resources and alternative forms of scholarly communication to ensure continued access to electronic resources and their preservation. Indeed these combined are not easy tasks, they require thoughtful and sustained creativity as well as concerted joint efforts and teamwork.

Recommendations and Conclusion

As indicated earlier, libraries are the lifeblood of universities and they are key in helping parents achieve their key objectives, which are teaching, learning, consultancy and service to the community. Hence collection development is an important function of academic and research libraries. Thus building comprehensive and balanced collections should be a major preoccupation of libraries.

However, building comprehensive and balanced library collections demands that: First, librarians become key players in university/college curriculum change and review processes, which is a basis for determining current and relevant teaching and learning resources. Second, that they become active participants in forums where research results are discussed and disseminated so that they can collect such resources on the spot. Third, that they impress upon scholars and researchers the importance of depositing their scholarly publications and research reports in libraries not only to support teaching and learning but also for preservation for future generations. Fourth, that they make it their business to find out about ongoing faculty research projects. These combined would not only ensure that library has both the resources and research tools in their disciplines to support these activities but also enhance the role and visibility of librarians in communities they serve.

Building balanced comprehensive collections also requires periodic evaluation of collections and weeding. Therefore library policies on collection development, selection, evaluation and weeding are crucial to guide and determine what should be acquired, discarded or preserved to support teaching and learning curriculum requirements. Essentially, this calls for selective acquisition. As such, evaluation of library resources should be an integral part of collection development.

To conclude, in the 21st century academic and research librarians will need to be their own strong advocates, educators and trainers on their campuses. Furthermore, librarians will need to be more proactive, resourceful and strategic in planning and designing user friendly and efficient library services including, training programmes to ensure access to a wide variety of resources in different formats and their delivery to academic and research communities. In addition, they have to draw on past experiences in promoting the role, value and contributions made by academic and research libraries in furthering education and in marketing their services and facilities.

Support policies, strategies, infrastructure, and management systems standards must also be put in place to support and sustain these initiatives. It is through improved services, good governance, and staff competence that research and academic libraries can enhance their roles and visibility on their campuses and also contribute to the furthering of knowledge. Librarians must keep abreast of new technological advancements taking place in order to take

advantage of opportunities offered by these technologies in improving library performance and effectiveness.

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