

DOCUMENTATION NOTE

THE LIBRARY AS INFORMATION PRODUCER: THE CASE OF THE MINISTRY OF HEALTH LIBRARY AND DOCUMENTATION CENTRE IN MALAWI

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Libraries are often known solely as collectors of information. As a non-productive branch of an organisation, libraries can have a hard time justifying the increasingly higher costs of information materials and making that information available to users. This paper describes a USAID funded project at the Ministry of Health Library and Documentation Centre, Malawi, which reverses the stereotypical role of library as information collector to library as producer of information by using desk-top publishing and CD-ROM technology that has become more readily available in recent years.

LIBRARIES ARE OFTEN THOUGHT OF solely as collectors of information. A library buys books and audio-visual materials, subscribes to journals and needs expensive and specially designed furniture and facilities to store the materials. Even the buildings that house library collections are more expensive than is usual because of the structural requirements needed to bear the loads of books and shelving. As there is usually no immediate or tangible product that comes out of the library it appears to the outsider that the library is a 'black hole' into which institutional funding disappears at the expense of other departments. When funding becomes tight and the cost of information materials increases, a library can have a hard time justifying its existence. This is particularly true in developing countries where institutional resources can be very scarce to begin with.

In the health and medical sector libraries do not come high on the priority lists in developing countries and are seen as a luxury rather than an essential need. The thousands of dollars spent on books and periodicals each year could, in the eyes of many health care professionals, be better spent on medicines or training of health care workers. Even health planners and administrators who recognise the importance of having up-to-date medical information readily available see it as an extravagance when they are faced with more immediate health care problems that warrant their attention.

This image problem of the library not only affects the monetary resources allocated to libraries but also hinders access to locally produced materials, even within the institution. Reports, research findings, conference and seminar proceedings are difficult to obtain in library collections because

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institutional staff do not see the library as having any impact on furthering institutional objectives. At the Ministry of Health Library & Documentation Centre (LDC) in Malawi it can be very difficult to convince staff to contribute health information materials to the library because of the above mentioned reasons. This dearth of collections of locally produced health and medical information makes it very difficult to conduct effective operational research. Administrators and researchers can be disappointed when they conduct research only to find that it has been done before but they were unaware of it. This redundancy and inaccuracy can be very costly not only in the expense of the research but in the inappropriateness of programmes that may result from it.

In 1989 the United States Agency for International Development (USAID) entered into an agreement with the Government of Malawi to provide approximately US \$25 million over a five-year period for a project called Promoting Health Interventions for Child Survival (PHICS). Included in this project is a component which not only provides for operational research that will lead to better planning of programmes in maternal and child health but will also strengthen the support services needed to conduct the research. This means strengthening the library and information services in the health and medical sector.

This project has given the LDC at the Ministry of Health a chance to recreate itself in a new image; one that will show that the library can be a producer of information and more actively contribute to the institutional objectives of the Ministry of Health. By changing the image from the traditional role of the library as a collector to one of producer, the LDC can make people aware that the long term benefits of effective information services are worth the expense and contribute to the health of all Malawians, which is the institutional goal of the Ministry of Health.

The new activities that the LDC would engage in, as provided for under the PHICS project, include the establishment of a desk-top publishing unit and CD-ROM database literature searching unit. The desk-top publishing unit would be the library's information producing component. To start with, research reports and findings resulting from projects proposed and sponsored under the PHICS protocols would be published in-house at the Ministry of Health. The desk-top publishing unit at the LDC comprises a Gateway 2000 386DX/33 microcomputer, a Panasonic KX-P4450i laser printer, and a DEST 3000 scanner. Aldus PageMaker is currently being used as the publishing software to design and compose what will be camera-ready copy produced by the unit. Graphic images, photographs or maps can be scanned and placed with text in publications. A collection of scanned images can be used over and over without having to be redrawn by artists and ensuring uniformity. The CD-ROM station includes an IBM PS/2 Model 70 microcomputer, NEC CD-72 external reader and an Okidata ML391 + letter-quality dot-matrix printer.

This opens the door for the way others in the Ministry perceive the library. Neatly designed publications coming out of the LDC bring other health personnel to the library requesting help in producing their own publications.

One of the side-benefits resulting from this is that the library now gets copies of many reports that would have otherwise gone unnoticed. The LDC gets these copies because it produces them. Health administrators and planners now have some tangible product that they can look at when deciding the value of the library.

Other kinds of products being published in-house include newsletters, such as the *Malawi Drug Bulletin (MDB)*, which is co-edited and designed at the Ministry of Health Library & Documentation Centre. Camera-ready copy is produced and sent to UNICEF for printing each quarter. The *MDB* has a circulation of over 6,000 copies which reach every health worker in the country and many abroad. The *MDB* is a forum in which information from the LDC can be repackaged and made available to rural health workers who otherwise would not have access to current health and medical news. This repackaging of information is an especially important part of the function of the library as producer. Information that is available from a wide variety of sources can be repackaged and targeted to a specific audience. Repackaging can take the form of bibliographic citations of relevant materials, abstracts of articles or reprints from journals, book reviews and copies of contents pages of current periodicals. Readers can be directed to where fuller texts, if needed, may be found. A very successful example of this can be found in the University of Zimbabwe Medical Library's *Current Health Information in Zimbabwe (CHIZ)*. In the case of the *MDB*, abstracts and reviews culled from pharmaceutical sources are included with notations that the books or journals can be found at the Ministry of Health LDC or that free copies may be obtained from the publishers. This is aside from the main original articles and notices that appear in each issue. The library and its activities are highlighted because of the role they play in the production of information.

One new facility that makes the repackaging of information readily available and easy to use is the proliferation of laser technology compact disk-read only memory (CD-ROM). Many of the online databases which were once only available via telephone hook-ups at great cost over long distances are now being published in CD-ROM format. Updates of the databases are sent on a regular basis, usually quarterly or monthly, and the user is free to search whenever he or she pleases, at no cost over the database subscription. In the health sector the most important of these databases available on CD-ROM is undoubtedly MEDLINE. User defined search formulations can be stored and run as each new update appears. These search formulations are targeted to specific users and can then be downloaded from the database for repackaging – either in paper form as a printed copy, or in electronic form where it can be stored on a floppy diskette or included in the library's own database. *CHIZ* is an example in which citations from MEDLINE using a search formulation on tropical health topics relevant to the Southern African region are downloaded and printed along with copies of the title pages of several current periodicals. *CHIZ* is handy, easy to read and contains only information relevant to its targeted audience.

The creation of a local database is very important, especially in the

developing world. Many of the established databases overlook local reports or journals so no citations of them exist anywhere – unless a library or documentation centre takes on that responsibility at a local level. Roughly 3% of the citations in MEDLINE come from journals published in developing countries. Much of the developing world's information is lost bibliographically and, in practical terms, lost physically from those who need and could benefit from it.

This has some political implications for developing countries as well: the creation and publication of a local database is a major area in which a library can be seen as an information producer, and not reliant solely on information produced by countries in the northern hemisphere. Though self-sufficiency in information resources is not a realistic goal, nor should it be a desired goal, the ability for a developing country to produce and disseminate relevant and useful information, especially in the fields of research, makes it more of an equal partner in the exchange of information – not just a north to south flow. This helps boost the confidence of researchers in developing countries because they do not feel cut off from information or feel that the information they produce is neglected by their peers in other countries around the world.

At the Ministry of Health LDC we are actively working on a local database of health information in Malawi. This database includes citations and abstracts of locally produced books and health education materials, published and unpublished research reports, indexed articles from local health and medical periodicals (including the *Malawi Drug Bulletin*, of course). This database has been published in hard copy form under the title *A select bibliography of health information in Malawi 1980-1991* with financial help from the USAID PHICS project. This database, using CDS/ISIS management software supplied by UNESCO and a modified World Health Organization WHOIS format, will also be compatible with efforts to create a continental African Index Medicus database.

One of the side-benefits of the published bibliography was the great storm of protest by authors of health information whose works were *not* listed. When told that it was because the LDC did not have copies or was unaware of their work we were flooded with copies of reports, articles, conference papers, theses etc. We are already planning to publish an addendum to the bibliography.

As the LDC is part of the Research Unit, whose mandate is to assist with guidance and financial support, including informational support, we have been working at supplying information to health and medical researchers in the country. It is also necessary to keep the rest of the health personnel informed of what research is being done. A database was created to keep track of research projects as they are approved and their progress during the project life. When results are published the bibliographic citations are entered into the Malawi Health Information database. A newsletter giving information of approved research projects and other information is published under the title *Health Research and Library Update*. The LDC also helps in preparing research project proposals for submission and reports for publication.

Financially, it is not as far-fetched as it might have seemed for a small documentation centre or library in an African country to establish itself as a

computerised publishing or literature search unit. Computer equipment has come down in price drastically in the last few years. The IBM computer, which is a 386SX with 2 Mb RAM and 60 Mb hard disk at nearly US \$5,000 in 1990 is more than twice the cost of the more powerful Gateway with 4 Mb RAM, 200 Mb hard disk and a 386 processor running at 33 Mhz instead of the IBM's 16 Mhz. PostScript laser printers and scanners are available for around US \$2,000, while a CD-ROM reader with interface boards is less than \$1,000. It would probably have been possible to run both the desk-top publishing and CD-ROM literature searching off one computer, though the work flow is much smoother with two machines. Certainly US \$10-15,000 could provide a documentation centre with the necessary hardware and software. Costs for printing publications commercially from the camera-ready copy produced by the desk-top publishing unit vary greatly for each type of publication. One thousand copies of a 100-page A4 sized book might cost up to \$4 or \$5 per copy. However, it is often the case that books from western countries are even much more expensive to obtain, especially in developing countries where access to foreign exchange can be a problem. Printing locally helps support local industry as well. Once the plates for the books have been made, additional copies could be printed at reduced costs if needed in the future. Items of a country-specific nature are often sought after by libraries and institutions in other countries. The trade or sale of locally produced materials could well subsidise the development of one's own collection or help defray the costs of the printing and equipment.

Ironically, many donor agencies seem more willing to accept proposals that involve microcomputer applications than traditional non-automated library methods. More and more microcomputers are seen as 'appropriate technology' and not just high technology. They can be cost-effective and flexible enough to move the documentation centre out of traditional roles, if desired, and give the documentalist more control over the information processes. Again, in developing countries this kind of flexibility and control over information resources is extremely important as information is perceived more and more as a key to development, and the relationship with developed countries often relies on access to information.

The two functions of the desk-top publishing unit along with the locally created database highlight ways in which the library can be seen as a producer of information and actively take part in operational research that leads to more effective planning and administration. For many developing countries this can be crucial. For libraries to prosper in financially hard times or in countries where resources are limited it is necessary to break out of the traditional mould and attract the attention of their institutions: one of the ways to do this is become a producer of information and not just a collector. It isn't easy and requires new modes of thinking, but the effort is often worthwhile because becoming a producer will actually help collections grow, and the library grows in importance in the eyes of the institution's staff.

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