THE GLOBAL DIVIDE

University Libraries in Africa like their counterparts in developed world support the functions of their parent institutions by making available information for learning, teaching and research. University libraries are central to all academic efforts. Both students and faculty need information. Libraries in Africa have difficulties satisfying the information needs of their users. This is because the amount of information created these days is so huge that using the traditional method of locating and retrieving information leaves much to be desired. Locating access to the collections with the card catalogue is time-consuming, frustrating and unattractive to users. As such, the collections in the libraries are under-utilized. At the same time, inadequate funding affects the number of materials the libraries can acquire. Coupled with this, the high number of student enrollment and newer courses being introduced every now and then increases the need for better access to these collections. These factors paint the picture of “information famine” or “hunger in the midst of plenty” in Africa.

Set against this background, academic libraries in Sub-Saharan Africa should have been sharing their resources to make up for the individual institutional deficiencies in
their stocks. The present state of the collections does not make sharing easy. The development of a very effective information delivery system among libraries is the answer to efficient sharing as well as improving teaching, learning and research activities in the universities. This means that something has to be done to the collections. This is the missing link and it is online cataloguing.

ONLINE CATALOGUING
The extensive use of computers, information and communication equipment has made great impact on libraries in other parts of the world. These technologies have accelerated the rate at which library services and functions are carried out. At the touch of the button, one can have access to huge amounts of information regardless of one’s location, the location of the items and their format. It also allows libraries to share their resources. The use of information and communication technologies in libraries to provide access to and sharing of information within academic libraries in sub-Saharan Africa is quite recent. The story of establishing an online cataloguing in academic libraries in sub-Saharan Africa has just begun.

INFRASTRUCTURES
While library automation offers fast, accurate and efficient access to rich and diverse collections, it is a very expensive and cost intensive enterprise. Infrastructures need to be in place to make online cataloguing possible. Very efficient electrical wiring that will support all the required equipment has to be in place. Power supply should always be available and reliable. A high number of computers and accessories need to be procured. Information and telecommunication gadgets, Local Area Networks (LAN), software and very cheap bandwidth are other requirements for an effective online cataloguing to be in place.
Considering the number of issues competing for the financial support from governments, libraries have very little chance of receiving huge amounts of money for the provision of the necessary ICT infrastructures, equipment, software, licenses and MARC records that are the backbone of online cataloguing.

FUNDING OF ACADEMIC LIBRARIES
Libraries in Sub-Saharan Africa receive financial support from different sources: local, national and international bodies.
Local Sources
On the local front, the universities provide funds for the general running of the libraries. Within the universities, students are levied. In Ghana, students pay Academic Facility User Fees (AFUF) and the libraries get a percentage of such monies. Libraries also generate revenue internally by providing products and services: such as, lamination, comb binding and photocopying. Once a while, gifts and donations are received from individuals.

National Sources
Governments of various countries in Sub-Saharan Africa provide some form of financial support to the universities. These are in the form of state and federal subventions. In addition, Educational Trust Funds, which accrue from levies of special taxes, are used to support educational projects including projects in the universities. Some of these are the Educational Trust Fund (ETF) in Nigeria, the Tanzania Education Agency (TEA) in Tanzania and the Ghana Education Trust Fund (GETFund) in Ghana.

INTERNATIONAL PARTNERS
Financial support for online cataloguing in academic libraries in Africa also comes from different international bodies. The international partners have made appreciable contributions towards library automation in Africa, especially Sub-Saharan Africa. Most of the donors have focused on universities and the libraries have benefited from the sponsorship. With financial support, African universities and their libraries are being assisted to build capacity to make use of information and resources from the rest of the world with the aim of bridging the information gap. In the same way, information generated from Africa can also be disseminated globally. So far, most of the university libraries that have made substantial progress in implementing online cataloguing have received financial assistance from one or more international institutions. Injecting external financial resources into academic libraries has greatly improved their quest to have online cataloguing.

The Carnegie Corporation of New York
The Carnegie Corporation of New York has been in Africa several decades ago assisting developing countries to identify and solve their problems through improving
access to books and promoting libraries. Its track record has been impressive. In 1999, the President of Carnegie Corporation of New York (CCNY) set up the International Development Program (IDP). Its main function, according to the President, was to implement the Corporation’s activities in Sub-Saharan Africa; particularly to, “strengthen a limited number of Commonwealth African universities to serve as models of successful transformation…and position selected African public libraries for the information age.” Since then, a lot of activities have taken place in some university libraries in the sub region.

Carnegie Corporation’s University partners are University of Ghana, Legon and University of Education, Winneba, in Ghana; Makerere University in Uganda; the University of Dar es Salaam in Tanzania; Ahmadu Bello University, Nigeria; the University of Jos, Nigeria and Obafemi Awolowo University Ile-Ife, in Nigeria. While strengthening the universities, Carnegie Corporation has funded projects relating to automation within these libraries.

The Partnership to Strengthen African Universities

In 2000, four major American donors namely; the Carnegie Corporation of New York, the Ford, the MacArthur and the Rockefeller Foundations collaborated and launched, “The Partnership to Strengthen African Universities.” This was a scheme to improve the capability of higher education in Africa. The Partnership focuses on countries in Sub-Saharan Africa. A key area of interest of the international donors is to position African universities to be part of the global intellectual community by accessing and sharing knowledge globally. This led to funding of various automation activities in university libraries. The Partnership supports universities in Ghana, Nigeria, Uganda, Tanzania, Mozambique and South Africa.

MacArthur Foundation

The John D. and Catherine T. MacArthur (MacArthur) Foundation with headquarters in Chicago, is a private and independent foundation that helps groups and individuals to improve upon their human conditions. The Foundation finances projects in 65 countries with particular emphasis on four one of which is Nigeria. It has been in Nigeria since 1994 financing several projects. The Foundation’s activities are run through the Global Security and Sustainability Program, with the aim of “strengthening universities and academic infrastructure, especially in Russia and
Nigeria” 5 MacArthur has also provided grants to support four libraries namely: Ahmadu Bello University, Zaria, Bayero University Library Kano, University of Ibadan, Ibadan and University of Port Harcourt. This pursuit is based upon the belief that strong universities and intellectual freedom are essential to developing and sustaining healthy democratic societies.”

**The Mortenson Center for International Library Programs**
The Mortenson Center for International Library Programs at the University of Illinois, Urbana-Champaign, USA, is a non-degree professional development programme for librarians all over the world. With grants received from the Carnegie Corporation and the MacArthur Foundations, the Center has assisted the staff of the Carnegie and MacArthur grantee libraries to make strides in library automation with the hope that the libraries will better serve the teaching, learning and research needs of users. The Center, in 2006, hosted 16 librarians from 10 libraries. Their exposure included library-related technologies, first-hand fully automated library functions, variety of technology-related issues through presentations, educational sessions and workshops. Site visits to universities libraries throughout Illinois gave the librarians the opportunity to see the library management systems and processes in place at other institutions other than University of Illinois, Urbana-Champaign.

**Online Computer Library Center (OCLC)**
The staff of OCLC gave training sessions, lectures and practical in online cataloguing and retrospective conversion processes to some librarians from the Carnegie and MacArthur grantee institutions.

**Donor Support for Online Cataloguing**
In strengthening universities and the libraries, donors have focused on the provision of and development of ICT infrastructures on the campuses and in the libraries to enable users have reliable access to the Internet and the Web. All the grantee libraries have some input for library automation infrastructure. Various degrees of ICT infrastructure development, supply of computers, accessories and computer laboratories are found at the University of Ahmadu Bello, Zaria, University of Obafemi Awolowo, Ile-Ife, University of Ibadan, University of Port Harcourt all in
Nigeria; the Universities of Ghana, Education, Winneba, Makerere, Uganda and Dar es Sallam, Tanzania.

**Automating the Library Catalogue**
An important prerequisite for online catalogue is the computerization of bibliographic records of the collections. Bibliographic records on card catalogues need to be automated to improve access. Most of the MacArthur and Carnegie grantees are addressing the issue of access to current print collections, by automating access to their collections. The University libraries of Jos, Port Harcourt, Ghana and Education, Winneba use the Bibliofile cataloguing module to create the bibliographic records of the newly acquired collections. The Hezekiah Oluwasanmi Library at Obafemi Awolowo University and Balme Library of the University of Ghana are using OCLC.

**Retrospective Conversion**
Converting the libraries’ backlog of manual card catalogues to MARC format is also a very big task being undertaken by the libraries to facilitate online cataloguing. The Hezekiah Oluwasanmi Library at Obafemi Awolowo University Library in Ile-Ife, Nigeria is using both OCLC and in-house options to do conversion. Bayero University Library outsourced the conversion task. Makerere University Library, the Osagyefo Library of the University of Education, Winneba and University of Ibadan are doing in-house retrospective conversion. Others are using the Bibliofile software, while some libraries are manually keying in the bibliographic information from catalogue cards into computers.

**MARC Format**
While doing retrospective conversion to increase the number of records to be accessed online, very relevant issues are being tackled. The online records have to be of international standard; that is, following the AACR2 rules to compose bibliographic description and determine access points in cataloguing. The records also have to adhere to the standards of machine-readable cataloguing (MARC) format, so that the records can be interpreted and retrieved in online environment. Equally important, is the fact that all academic libraries should be able to share each other’s records. Mortenson Center has collaborated with Yale University to provide resources and
personnel to train some staff in the MARC 21 format skills. Carnegie and MacArthur
grantee staff benefited from this training.

Library Management System (LMS)
Very robust library management systems including the online public access catalogue
(OPAC), cataloguing, acquisitions, circulation and serials modules are required for
any modern library automation. A few libraries are using the free CDS-ISIS-the
database project which was developed by UNESCO. The University of Ghana is
using the Millennium Innopac obtained from Innovative Interface Incorporated. It is
operating the OPAC, cataloguing and circulation modules. Six of the Carnegie
grantee libraries have recently completed licensing agreements for acquiring Virtua
LMS from Visionary Technology in Library Solutions (VTLS).

THE UNIVERSITY OF EDUCATION, WINNEBA GHANA

Online Cataloguing Efforts
The University of Education, Winneba was established in 1992 as a University
College that brought together seven specialized diploma-awarding institutions. The
University of Education Act 2004 upgraded the status of the University College of
Education to a full University. The collections that the Library inherited from the
institutions had been classified with the Dewey Decimal (DDC) Classification. With
the university status, the Library started classifying its collection with the Library of
Congress Classification (LCC) scheme to conform to most academic library practices.
It also had to reclassify the old stock to the Library of Congress Classification
scheme. The University is multi sited with three campuses in Winneba which is the
central administration and two satellite campuses about 300 and 360 kilometres from
Winneba. Student population during the 2006/2007 academic year was 23,262 of
which 8,906 were Distance Education learners. Staff strength is 1,453.

The University Library System
The University Library System is made up of all the libraries on the campuses at
(Winneba, Kumasi and Mampong); departmental, hall and other libraries within the
institution. Cataloguing and classification of materials is centrally done in
Cataloguing Department at Winneba. In 1998, the University of Education, Winneba,
University of Cape Coast and Kwame Nkrumah University of Science and Technology (KNUST) Libraries received the Integrated Technical Services (ITS) Bibliofile software paid for by the International Development Agency of the World Bank. The purchase was done by Blackwell Limited. The Library pays for the annual license and upgrades of the software on a server and two workstations. The software is CD-ROM-based and is being used to build a database of MARC records, retrospective conversion as well as cataloguing newly acquired materials. Cataloguing staff also do original cataloguing for materials which do not have their records in the Bibliofile consulting the print versions of the Library of Congress Classification Schedules.

**The Online Cataloguing Project**

Since 1998, the Library put in place plans for library automation with the acquisition of the ITS Bibliofile. Records of newly acquired materials were processed in MARC format. It also started with converting the bibliographic records on the card catalogues to MARC format. The Retrospective Conversion Project is being done in-house with funds from the University. This is done on Saturdays. The library staff is converting the data on manual catalogue cards of all the University Library System to Machine Readable Cataloguing (MARC) format that can be accessed from the Online Public Access Catalogue (OPAC).

At the Osagyefo Library, electrical and networking systems and the Local area network infrastructures are being upgraded to make room for online cataloguing. Fifty computers, server, scanners and accessories are being purchased and installed in the library to allow more users have access to the resources online. A library detection system will also be installed to reduce theft. The supply, installation and configuration of all the above activities have been financed by the Carnegie Corporation of New York. Plans are also afar to acquire the Virtua Library Management System from VTLS. The Virtua Library Management System is to be paid for by the Ghana Education Trust Fund. The MARC records in the databases will be migrated into it. The OPAC, cataloguing and circulation modules will be operational. The users can have access to some of the collections online and charging and discharging of materials will be facilitated.

When the above projects are completed, then the Osagyefo Library would have made a tremendous stride in its planning and implementation of Online Catalogue.
Achievements

On the whole, with all these sources of financial support from international donors, a lot of progress has been made in terms in implementing online catalogues in Sub-Saharan Africa. Some of the success stories are:

- The University of Ghana has started using the circulation and cataloguing modules of the Millennium.
- Makerere University has done Retrospective Conversion for ¾ of its collection.
- All the Carnegie grantee libraries in Nigeria have acquired the Virtua from VTLS and have had onsite training for some of their staff.
- Some staff from Carnegie and MacArthur grantee libraries have had a two-month ‘train the trainer’ programme at the Mortenson Center for International Library Programs at University of Illinois, Urbana-Champaign, USA.
- Through consultancy services, most of the libraries have Library Automation Plans in place.
- Standardization --Most of the bibliographic records are AACR2 and MARC 21 compliant.

- Establishment of consortia - Some academic libraries in these countries have set up consortia. This is basis for partnerships and gives them bargaining power when purchasing software, journals and e-resources. They can build union catalogues to share resources and make user have access to larger collections. Some of the consortia are: CARLIGH – Consortium of Academic and Research Libraries in Ghana; NULIB – Nigerian University Libraries Consults; CUUL – Consortium of Uganda University Libraries and COTUL – Consortium of Tanzania University Libraries.

Challenges

Despite all the above, a few issues still need to be sorted out.

- The libraries lack systems librarians to handle the IT aspect of online cataloguing.
- The IT officers do not understand that library automation requires special skills. They think LMS programme is very easy to write so they will not
recommend the acquisition of robust and tested systems on the international market.

- The Procurement Law of Ghana, which was promulgated a few years ago, is very technical and detailed. The interpretation of its content sometimes make the Procurement staff delay in taking actions which affect projects.
- Difficulty in purchasing library materials- e.g. Barcodes, foil back labels which are not produced locally. The procurement law states that 3 invoices should be produced for assessment and selection.
- The cost of automation equipment is high by Ghanaian standards. Vendors of LMS are not willing to operate in Africa.
- The issue of irregular power supply in online cataloguing environment is very serious.

CONCLUSION
So far, these are what some libraries in Sub-Saharan countries have achieved with the financial support international partners.