SUSTAINING INFORMATION DELIVERY:

THE EXPERIENCE OF KWAME NKRUMAH UNIVERSITY OF SCIENCE AND
TECHNOLOGY LIBRARY, KUMASI, GHANA

Michael Ahenkorah-Marfo and Victor Teye

ABSTRACT

The paper reviews information delivery at the Kwame Nkrumah University of Science and Technology (KNUST), which dates back to 1993. Information delivery (which includes document and electronic resource delivery) from CD-ROM and online databases has given access to about 15,000 online journals. Sponsorship of information delivery has largely come from donors such as Danish International Development Agency (DANIDA), Norwegian Ministry of Aid to Developing Countries (NORAD) and International Network for the Availability of Scientific Publication (INASP). The bane of information delivery over the years has been the financial implications of sustainability, especially after the pull-out of sponsors. This paper analyses the situation and proposes a solution in open access journals, cost-sharing by beneficiaries, ingenuity on the part of librarians and eventual bail-out by the University administrators.

KEYWORDS: CD-ROM, Electronic journals, Cost-sharing. Open access, Document supply

Author Posting. (c) Informaworld, 2010.
This is the author's version of the work. It is posted here by permission of Informaworld for personal use, not for redistribution. The definitive version was published in Journal of Interlibrary Loan, Document Delivery & Electronic Reserve, Volume 20 Issue 4, September 2010.
doi:10.1080/1072303X.2010.503164 (http://dx.doi.org/10.1080/1072303X.2010.503164)
INTRODUCTION

Research has shown that it is not possible for a single library to depend solely on its resources to provide information to its clientele and the history of electronic information delivery at Kwame Nkrumah University of Science and Technology (KNUST) depicts this. Document delivery in KNUST started with the introduction of CD-ROM technology in 1993 (Darko-Ampem, 1999). Inadequate database acquisition was the bane of the project until 1996 when the facility was revived with support from international donors such as DANIDA.

In the same year, 1996, International Federation of Library Associations and Institutions’ (IFLA’s) section of Document Delivery and Interlibrary Lending saw the need to bridge the wide North-South gap in information flow (Ahenkorah-Marfo, 2006). It therefore conceived an interlibrary and document delivery programme in order to overcome the challenges with interlending in developing countries. Alemna and Cobblah (2004) stated that a group was established under the chairmanship of Neils Mark to undertake two pilot projects in English speaking Africa, Ghana and Kenya. The first of the two, named Ghana Interlibrary Loan and Document Delivery Network (GILLDDNET) was born in 1996 at the Balme Library, University of Ghana, Legon. The Danish International Development Agency (DANIDA) and Norwegian Ministry of Aid to Developing Countries (NORAD) sponsored the GILLDDNET from its inception in 1996 to 2003.

The aims and objectives of the GILLDNET were to:

- Find methods for document delivery to developing countries;
- Improve general access to and flow of information;
• Establish electronic network links with a regional and global approach to improve universal availability of publications and information;
• Improve the competence of staff in handling interlibrary loans and document delivery systems;
• Support negotiations with main document centres/libraries to attain favourable bulk treaties for the participating libraries; and
• Develop the project as a model for emulation by other African and third world countries that do not have such a system already in place (Alemna and Cobblah, 1998).

The formal Interlibrary Lending and Document Delivery (ILL/DD) service began in Ghana in 1998. The participating libraries, which consisted of the then five public university libraries, including KNUST, and the Centre for Scientific and Industrial Research (CSIR) were able to search online catalogues and other databases on behalf of users. Technically the users had access to the Danish Library catalogues and databases but because of limited number of computers the Library thought it wise do it on behalf of users. Photocopies of selected articles were then ordered by the Balme Library on behalf of participating institutions from Danish libraries for users.

Alemna and Cobblah (2004) further indicate that the participating Ghanaian libraries were unable to significantly meet user demands for document delivery and this is attributed to the following factors:

• Participating libraries depended mostly on the Danish libraries which were not able to meet all the requests because they did not have some of the requested materials;
• Lack of institutional financial commitment to the ILL/DD service constituted a serious setback to the effective running of the service; and

• Lack of formal and well organized interlibrary loan procedures.

The IFLA/DANIDA project ended in December 2003. Just before it ended in 2002 the Programme for the Enhancement of Research Information (PERI) was introduced.

This time round the about seventeen sponsors of PERI who are external agencies like Association of Commonwealth Universities (ACU), Food and Agriculture Organization (FAO), International Foundation for Science (IFS), Association for the Development of Education in Africa Working Group on Higher Education, Atlantic Philanthropies etc, through INASP subscribed to some databases, which together offered about fifteen thousands online journals to enable the KNUST Community and the other participating libraries access freely articles from electronic journals.

As the university introduces more programmes there is also the need to subscribe to more databases to meet the demands of both faculty and students. The cost involved in document delivery can therefore be enormous. Besides the sponsors have shifted some of the cost involved in document delivery to beneficiary institutions.

This study proposes solution to the sustainability problem in open access and cost sharing by beneficiaries of KNUST document delivery service.

**OBJECTIVES OF THE STUDY**

This paper seeks to examine the document delivery system in the KNUST Library with respect to:

i. Types of e-resources available;
ii. Databases on subscription;

iii. Patronage;

iv. Funding/sponsorship; and

v. Challenges.

The study also seeks to propose solution to the challenges facing document delivery in the KNUST Library as a way of sustaining document delivery to facilitate teaching, learning and knowledge dissemination.

LITERATURE REVIEW

Interlibrary loan is a service in which a user of one library can borrow books or receive photocopies of documents that are owned by another library (Wikipedia, 2010). Most libraries participate in interlending schemes, which may be locally, regionally, nationally or internationally recognized.

Document delivery (DD), an addendum to ILL, on the other hand, may also be used for a related service, namely the supply of journal articles and other copies on a personalized basis, whether these come from other libraries or direct from publishers. The end user is usually responsible for any fees, such as costs for postage or photocopying (Wikipedia, 2010).

ILL/DD had developed from situations like the use of book advertisement, printed union catalogue, word of mouth from a friend or an authority etc. to discover potentially useful titles (Virginia, 1997). Today, out of the concept of library cooperation, resource and knowledge sharing, DD has developed into a globally advanced system trying purposely to address the needs of information seekers and users. Sellers and Beam (1995) observe that new models for document delivery in libraries are emerging as technology
enables end-user ordering through electronic interfaces. Anthes (1999) makes a strong case for the basis of DD by identifying rapidly escalating cost of library documents as the major cause for resorting to the concept. He thus observes that “whilst periodical prices have increased at least 9% annually, library budgets had suffered consistent decline”. Libraries therefore had to respond to this situation in part by cancelling expensive journals and emphasizing “access” to information over “ownership”. One component of access, he proposes, is document delivery. What Anthes simply means by this is that, rather than libraries trying to always purchase (ownership) materials to be able to meet the needs of its users, they can as well rely (access) on other libraries to meet such needs.

Further to Anthes (1999) argument, Morris and Blagg (1998) add that “academic libraries are increasingly faced with demands for faster, more effective services from an ever broader user base. This combined with decreased resources and increasing journal subscription costs has caused many to consider switching from “just in case” to “just in time” provision. The advent of networked information, they continue, has been the major enabling factor in allowing electronic document delivery (EDD) to become a viable option.

Per their work titled “Current document delivery practices in UK academic libraries” Morris and Blagg (1998), investigated thoroughly the ILL/DD system in Britain and made very revealing results. They found out that DD, by and large, is centered on few main libraries, the main one being the British Library Document Supply Centre (BLDSC) - over 85% of academic libraries in Britain depend on it for DD services. Other important libraries in the DD services are London and Manchester Document Access (LAMDA), British Medical Association (BMA)) and local and regional sources
such as Hatrics, a co-operative of libraries in the South of England and the Leeds City Library Service Patent Unit.

Kleiner and Hamaker (1997) provide a tested model which according them underlies the success story of DD system in The Louisiana State University (LSU). The model includes - obtaining the support of the university administration; enlist the aid of deans, directors, and department heads to embark on a DD trial; enlist campus wide cooperation in support of document delivery; assign DD responsibility to an effective library department; design a proactive program to introduce DD as a collections component; market the program to the campus; prepare selectors to participate in the project; if journal needs surveys are conducted, the library should establish procedures for tabulating and analyzing the data; and collect, analyze, and report results to faculty, administrators, the university at large, and the profession.

The ILL/DD idea was introduced in Africa by IFLA. At one of its sections on the subject matter a decision was reached to extend the service to the third world so as to enable this part of the world to take advantage of advances so far made in resource sharing (Alemna and Cobblah, 2004). As part of the initial preparations an investigation was carried out to prepare the grounds for a trial project.

In Ghana, a trial project, dubbed Ghana Interlibrary Loan and Document Delivery Network GILLDDNET, an interlibrary lending and document delivery service was started 1996. This involved six academic and research libraries, including the libraries of KNUST, University of Cape Coast, University College of Winneba, University for Development Studies, Council for Scientific Industrial Research and the Balme Library of the University of Ghana, Legon being the coordinating centre of the project. This project operated for eight years (between 1996 and 2003). In the assessment of Alemna
and Cobblah (2004), the project made some minimal gains in enhancing the capacities of the libraries, helped them to maximize the use of the limited resources and raised the status of librarians within the university community.

In spite of the gains, the project encountered some teething challenges that were to be lived with till it eventually phased out in 2003. Among these were donor-fatigue, connectivity and the attendant communication challenges, over reliance of Ghanaian participating institutions on the four Danish libraries led to many unmet request and lack of trained personnel to run the project.

**METHODOLOGY**

Background information was on study was obtained from documentary sources such as books, periodical literature, pamphlets and reports. Four staff members of the Electronic Information Department - an Assistant Librarian, Systems Librarian and two para-professionals - were interviewed by researchers on the impact of document delivery in KNUST Library. The interview, which was conducted in March, 2009 sought to find the types of e-resources available, the number of databases on subscription, the number of full text document accessed between 2000 and 2009, the problems/challenges encountered with document delivery and any other relevant information pertaining to document delivery in the KNUST Library.

**RESULTS**

**Types of E-resources**

It was found out through the interview with staff of the Electronic Information Department that the resources involved in document delivery are mostly internet-based.
These resources are both indexes and full text and cut across all disciplines studied in the university – humanities, arts, engineering, medicine, sciences, planning and architecture.

These databases include:

1. Blackwell Synergy
2. Gale (Thompson Learning)
3. African Journal Online (AJOL)
4. MCD / Emerald
5. Oxford University Press Online Journals
6. Global Online Research in Agriculture (AGORA)
7. Health International Network Access to Research Initiative (HINARI)
8. Institute of Physics
9. Bio One
10. Oxford University Press Reference Online and
11. The Cambridge University Journals

Items 3, 4, 5 and 6 were the only ones sponsored by Italy based organization, Electronic Information for Library Network (eIFLnet). This is an independent foundation that negotiates and advocates for the wide availability of electronic resources by library users in transition and developing countries (Wikipedia, 2010).

The databases are accessed through two main ways – by Internet Protocol address authentication and also logging in with username and password. This is to prevent abuse.

Usage Statistics

academic years, a total of 6,577 online searches were made out of which 261 full text articles were ordered for researches free of charge.

Table 1 below represents a list of databases subscribed by the university and the number of full-text documents downloaded between 2005 and 2009.

<table>
<thead>
<tr>
<th>NO</th>
<th>DATABASE</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Institute of Physics</td>
<td>77</td>
<td>87</td>
<td>193</td>
<td>213</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Annual Review</td>
<td>67</td>
<td>132</td>
<td>653</td>
<td>856</td>
<td>30</td>
</tr>
<tr>
<td>3</td>
<td>Beech Tree Publishing</td>
<td>-</td>
<td>-</td>
<td>36</td>
<td>122</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>National Academic Press</td>
<td>-</td>
<td>23</td>
<td>78</td>
<td>101</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>Mary Ann Liebert</td>
<td>-</td>
<td>354</td>
<td>308</td>
<td>856</td>
<td>93</td>
</tr>
<tr>
<td>6</td>
<td>Geological Society</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>43</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>JSTOR</td>
<td>-</td>
<td>4161</td>
<td>23,945</td>
<td>22,479</td>
<td>849</td>
</tr>
<tr>
<td>8</td>
<td>Nature Publishing</td>
<td>-</td>
<td>-</td>
<td>344</td>
<td>474</td>
<td>76</td>
</tr>
<tr>
<td>9</td>
<td>Oxford University Press</td>
<td>273</td>
<td>658</td>
<td>567</td>
<td>669</td>
<td>59</td>
</tr>
<tr>
<td>10</td>
<td>University of California</td>
<td>-</td>
<td>-</td>
<td>332</td>
<td>298</td>
<td>32</td>
</tr>
<tr>
<td>11</td>
<td>Royal Society Journals Online</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>Royal Society for Chemistry-RSC Archives</td>
<td>46</td>
<td>352</td>
<td>444</td>
<td>494</td>
<td>23</td>
</tr>
<tr>
<td>13</td>
<td>Cambridge University Press</td>
<td>-</td>
<td>386</td>
<td>947</td>
<td>567</td>
<td>89</td>
</tr>
<tr>
<td>14</td>
<td>KIT SDI</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>67</td>
<td>44</td>
</tr>
<tr>
<td>15</td>
<td>Access to Global Online Research in Agriculture (AGORA)</td>
<td>789</td>
<td>10,989</td>
<td>13,563</td>
<td>13,856</td>
<td>342</td>
</tr>
<tr>
<td>16</td>
<td>Health Internetwork Access to Research Initiative (HINARI)</td>
<td>216</td>
<td>8,530</td>
<td>9,009</td>
<td>11,085</td>
<td>88</td>
</tr>
<tr>
<td>17</td>
<td>Online Access to Research on the Environment (OARE)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>977</td>
<td>33</td>
</tr>
<tr>
<td>18</td>
<td>EBSCO</td>
<td>2,188</td>
<td>1,592</td>
<td>2603</td>
<td>2214</td>
<td>388</td>
</tr>
<tr>
<td>19</td>
<td>Emeraldinsight</td>
<td>3577</td>
<td>36,980</td>
<td>126,660</td>
<td>7,022</td>
<td>391</td>
</tr>
</tbody>
</table>
In most cases where users are not able to get the full text documents but rather the abstracts, they rely heavily on the library to order these materials for them from the British Library Document Supply Centre and African Journals Online (AJOL). Table 2 depicts statistics for articles ordered for users from 2005 to 2009.

Table 2: Statistics of Document Delivery from 2005 to 2009

<table>
<thead>
<tr>
<th>NO</th>
<th>DATABASE</th>
<th>YEAR/NO OF FULL TEXT DOCUMENTS ORDERED FOR USERS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2005</td>
</tr>
<tr>
<td>1</td>
<td>African Journals Online</td>
<td>65</td>
</tr>
<tr>
<td>2</td>
<td>British Library Document Delivery Centre</td>
<td>247</td>
</tr>
</tbody>
</table>

Source: Electronic Information Department records, 2009.
*Statistical data available as at 28th February, 2009.

It must be noted that no document was ordered for users who were not able to get the full-text documents between 2007 to 2009 from British Library Document Supply Centre. This is because the volume of request kept on increasing and the KNUST library could no longer pay for the cost involved.
Challenges

One main challenge encountered with PERI has been that because the KNUST Library pays subsidized fee for subscribed online journals, access to full text documents was limited. Even though the cost of online subscription was reduced, total cost of all databases was quite high. This is because over the years the number of databases subscribed to has continued to increase with the view to satisfy the demands of users. Each additional database comes with a cost to the university. The increasing cost of subscription fees poses a big challenge to the university. The tendency is to reduce the subscription list which in turn affects the information made available to users.

The escalating costs involved in document delivery could, however, not be borne by INASP alone and the shift of some of the cost exposes the library and for that matter its users to the North – South gap in information flow again.

The beneficiary libraries, notably the Kwame Nkrumah University of Science and Technology, University of Ghana, University of Cape Coast, University for Development Studies, University of Education, Winneba and the libraries of Council for Industrial and Scientific Research were asked by INASP to bear sponsorship cost at a discount of 98% of the total cost for the e-resources they needed. This amounted to about fifty thousand pounds sterling (£50,000). In 2005 the beneficiary libraries formed a consortium, the Consortium of Academic and Research Libraries in Ghana (CARLIGH) that sought funding from their parent institutions and other donors to make sure that the facility was subsequently utilized. Another reason for the formation of the consortium was to pool
resources together and to have a strong bargaining power. The parent institutions have, however, been struggling financially to take up this responsibility.

**Reasons for the Escalating Cost of Document Delivery**

The following explain the increasing cost of document delivery in the KNUST Library:

i. Some journals are of late published only electronically and may not be available in print format. The full text can be accessed in only e-format. Licenses / fees must of necessity be paid for, in order that the journal articles can be accessed on the Internet especially for those that are not on open access;

ii. More lecturers and other researchers became aware of the existence of document delivery facility in the Library and wanted to take advantage of the facility;

iii. Also the production cost of the electronic materials is always on the increase and this invariably factors or feeds into the market price. Some publishers are not ready to offer concessionary prices to buyers in developing world like Africa, just as some do; and

iv. It is also a fact that publishers get high returns for their publications in advanced countries in Europe and America, where buyers have high purchasing power. In developing world like Ghana, the high rate of poverty and low purchasing power make the publications, either print or electronic, unaffordable, no matter the level of concession offered.

There is no doubt that other alternatives must be explored to sustain documentary delivery.
EXPLORING OTHER ALTERNATIVE ACCESS

1. Open Access Resources

Open access literature is composed of free, online copies of peer-reviewed journal articles and conference papers with usually no licensing restrictions on their use by readers. They can therefore be used freely for research, teaching and learning. Open access is made possible by a scholarly communication reform movement that aims to make scholarly literature freely available to the public (Suber, 2004). From the Budapest Open Access Initiative (BOAI) definition of open access, the rights of users to "read, download, copy, distribute, print, search, or link to the full texts of these articles" are considered mandatory. (http://www.doaj.org/doaj?func=loadTempl&templ=about#definitions).

There are many publicly accessible databases that can provide research information free online. In addition to these, there are also various online union catalogues and indexing/abstracting services (eg Scirus and MEDLINE) that can be used to route requests to avoid borrowing fees. For example the KNUST Library accesses the sciencedirect database through Royal Tropical Institute, the Nertherlands, which subscribes to this resource. Libraries and Librarians in developing economies like KNUST may equip themselves with sites that provide links to free full text materials.

Again government publications, reports and white papers are often posted on the website of the sponsoring organizations. International Organization such as UN and its subsidiaries also post publications on their websites.

Open access resources come in different forms. Some of these are journals, self-archived articles and search tools.
2. Journals

Researchers in the KNUST Community can access about one hundred journals on Biomed Central (http://www.biomedcentral.com/browse/journals). Others include HighWire Press (http://higwire.Stanford.edu/) which provides over 800,000 free full-text scientific and medical articles; Directory of Open Access Journals (DOAJ) covers over 3,886 free, full text, quality controlled scientific and scholarly journals. It also includes over 1,380 searchable journals at article level and a volume of over 260,508 articles. (http://www.doaj.org); Medical researchers can also access over 160 open access journals in the medical area on PubMedCentral (http://www.pubmedcentral.nih.gov/). Public Library of Science –PLoS- (http://www.plos.org/) also lists scientific journals and articles. Other open access resources are: Scientific Electronic Library Online (SciELO) - http://www.scielo.org/. Access to Global Online Research in Agriculture (AGORA) - http://www.aginternetwork.org/en/. Open J-Gate - http://www.openj-gate.com/ and Digital Library of Information Science and Technology (Dlist) - http://dlist.sir.arizona.edu/

3. Self-Archived Articles

When authors make copies of their own publications openly accessible on the web it is called self-archiving. Such resources can be part of either a subject repository or institutional repository.

Subject repositories consist of collection of articles that are grouped together by academic subjects or discipline. Examples of subject repositories are:
i. arXiv (http://arxiv.org/) is in the fields of physics, mathematics, non-linear science, computer science, and quantitative biology.

ii. Repec (http://repec.org/) is in the field of economics.

iii. Cogprints (http://cogprints.org/) archives papers in psychology, neuroscience, linguistics, and computer science.

Institutional Repository, however, is an online locus for collecting, preserving, and disseminating -- in digital form -- the intellectual output of an institution, particularly a research institution (Wikipedia, 2009).

OAIster list of institutions (http://oaister.umdl.umich.edu/o/aister/viewcolls.html) for instance lists over 405 institutions. Apart from peer-reviewed literature, grey literature such as datasets, reports, conference proceedings, and student papers are also listed.

4. Search Tools

Search tools are needed to locate self-archived articles. Researchers may also find open access articles on the web using search tools like Google Scholar (http://scholar.google.com/search). Also available are CARL Metadata Harvester (http://carl-abrc-oai.lib.sfu.ca:8044/) that allows one to search for articles in the Canadian Association of Research Librarians institutional repositories. (Morrison, 2005). One can also search Highwire Press Search (http://highwire.stanford.edu/) for over 800,000 free full-text articles.

Only peer-reviewed, scholarly journals are listed. All articles are available immediately with no restrictions. The numbers of journals, and for that matter, articles continue to grow.
INTEGRATION OF OPEN ACCESS SERVICES

Document delivery services can incorporate open access resources into library search resources. For example, after exhausting traditional resources, library staff can try Google search when an item proves difficult to find. In this way researcher software can be developed to facilitate access to Open Access materials. The researcher software would be designed in such a way to link up to all open access databases. This will enable a federated search for all available information on an item.

The availability of these numerous sites tends to assist researchers and faculty members to access electronic journals free of charge thereby minimizing the otherwise huge cost involved in document delivery. Currently some of the open access databases available to the university are Directory of Open Access Journals (DOAJ), Access to Global Online Research in Agriculture (AGORA), HINARI, ELDIS, and Online Research in Environment (OARE). They supplement and complement the materials KNUST accesses from the paid subscription journals.

OPEN ACCESS WEEK

As part of its efforts to promote access to information, the KNUST joined the rest of the intellectual world in October 2009 to celebrate Open Access Week. The week’s activities include workshops, seminars and radio discussions to sensitize the KNUST community- researchers, faculty and the student population to take advantage of the open access materials and the local institutional repository.

Besides there are other resource sharing facilities that can be accessed free of charge. An example of this is The Essential Electronic Agricultural Library (TEEAL)

THE ESSENTIAL ELECTRONIC AGRICULTURAL LIBRARY (TEEAL)
TEEAL is a project created and financed by CTA (a partial contraction of the French name for the –Technical Centre for Agricultural and Rural Cooperation) to bridge the information divide between the developed world and the developing world. They work with many foundations and universities to bring agricultural research tools to those institutes and universities in remote, rural, or underprivileged parts of the globe including Kwame Nkrumah University of Science and Technology.

It provides full text access to over 130 searchable journal database, involving about 60 publishers, in the subject areas of aquaculture, crop and soil science, economics and rural development, natural resources management, food science and nutrition, livestock production, microbiology, plant protection, sustainable agriculture and veterinary medicine. This project is an offline tool (no internet line required) and on a standalone PC or shared on local area network.

TEEAL was initially formed as a database of citations, linking to articles stored on hundreds of CD-ROMs. In Ghana, the Institute of Scientific and Technological Information (INSTI) is the centre. INSTI manages the TEEAL database, runs user education programmes for user institutions, receives and meets the requests of users through document delivery. In 1999, the University of Zimbabwe took over TEEAL’s “Library in a Box” project, consisting of 130 journals with 600,000 pages of articles, stored on 100 compact discs.

Now that local area networks are more common in institutions and libraries in the developing world, LanTEEAL, the network-based variant of TEEAL, has been released to over 70 institutions. In the KNUST, the LanTEEAL is hosted by the College of Agriculture and Institute of Renewable Natural Resource. This ensures ready access to all
TEEAL materials to the research and academic community at virtually no cost. Update of the standalone version is done on yearly basis.

INSTITUTIONAL REPOSITORY

The KNUST institutional repository was established in August 2009 with the aim of creating a digital collection of the institution’s intellectual output to be shared by users both within and outside the institution.

Institutional repository has always played a major role in the dissemination of and access to an institution’s intellectual property yet the current situation in the KNUST Library needs to be revitalized by broadening the base of the repository to include areas hitherto unattended to. Currently, in the KNUST Library, a vigorous exercise is underway to create a more comprehensive database of local institutional repository including students’ theses, Online Public Access Catalogue (OPAC), lecture notes, course outline, scholarly journal articles, etc. What is now required to boost up this venture is the cooperation of interested parties, namely the faculty members, who are creators of knowledge. It is believed that when the university creates its own institutional repository, it can be linked with other institutional repositories in and outside Ghana with the bide of sharing resources.

CONCLUSION

Document delivery is indisputably needed in all academic libraries. It is one of the surest ways of getting current information for researchers and faculty members. Over the years international organizations like DANIDA, INASP, Department for International Development (DFID) and others have sponsored document delivery in KNUST Library. The study revealed that cost involved in accessing information and for that matter
document delivery can be substantially minimized through open access journals and consortial purchasing of databases and other electronic resources as in the case of CARLIGH.

It is believed by the authors that if efforts are made to implement the recommendations given in this study, the problems of sustaining document delivery will be drastically minimized.

RECOMMENDATIONS

The Role of Librarians

The guidance role of KNUST librarians in the traditional information delivery has undergone changes to effectively enable the librarian to assist the researcher.

One major role of the librarian is to provide user education to students, academic staff and researchers. This could be formal or informal. E-resource use training modules could be made available on-line for self-tuition.

To be able to provide efficient training to users means the librarian must also have the requisite training. Training for the librarian must not only be just imparting the skill to train others but also importantly is the knowledge needed to manage e-resources.

The librarian can play a vital role in bridging the digital divide by providing access to computer and the internet to those who do not have such facilities. The perception that libraries are for the elite in universities should be eradicated. Libraries are for everyone, educated and uneducated, rich and poor. They are equalizers and democratic force in access to computers, the internet, information, learning and training. (Moghaddam and Moghaddam, 2008)

Librarians’ professional role now encompasses being familiar with the various search engines, open access sites and ability to navigate the complex world wide web.
This way the innocent uninformed researchers with little knowledge on accessing free sites for electronic information will not be found wanting.

The financial implications of sustaining this, calls for the involvement of the university administrators.

The Role of University Administrators

The intellectual community is moving gradually from print/page based journal information delivery to online journals information delivery. Accumulation of back issues of journals has become a problem with academic libraries. Licenses are paid for access. Access however is not enough. This is because information accessed today may not be on the site forever.

There is the need therefore for university administrators to provide and make available funds to pay license for not only access but also archiving rights. This will enable librarians archive electronic journal articles and make them easily accessible all the time. However, beneficiaries should not be left out completely. Cost sharing by users should be considered.

Cost Sharing by Users

There is the need to sensitize the research and academic community to pay some fees to supplement the costs involved in document delivery. This could be done if for example faculty members are made to pay a token of their book and research allowances into a fund set aside to provide support to document delivery services. Financing this venture through a pool or fund invariably eases the burden on the individual.

Establishing Knowledge and Resource Sharing through Library Consortium

No single library anywhere in the world is self-sufficient in meeting the varied and wide demands of its users. One of the ways out of this situation is for individual
libraries to concentrate on collection development areas in which they have the comparative advantage. With this arrangement individual libraries can collaborate to share resources through document delivery to supplement what they already have. This is important because sharing is a give-and-take affair. This idea could be critically looked at by Consortium of Academic and Research Libraries in Ghana (CARLIGH) of which the KNUST Library is a member, as a basis to foster deeper collaboration between its over twenty members in the area of document delivery and resource sharing. Each participating member of the consortium must of necessity build an institutional repository into which other member institutions can tap.
REFERENCES


Wikipedia (2009). *Institutional repository*  
