

## MANAGING INFORMATION RESOURCES FOR DISTANCE EDUCATION

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### ABSTRACT

*This article discusses the complementary role of distance education in post-secondary/tertiary education. Effective management of library/information services in support of distance education ensures a higher level of success in the programme. The traditional methods of library and information provision are discussed together with proposals for a mixture of the old with ICT services. Strategic policies and plans should be evolved to co-ordinate library/information services for distance education from a centralised institution.*

**Keywords:** *Distance education; library services; managing information*

### INTRODUCTION

Formal education at the tertiary level in Ghana, until recently, had been mainly residential/campus-based, that is, students were resident and had face to face interaction with their tutors for the full duration of the programme. This had been running smoothly and perfectly until economic constraints and rapid population growth necessitated the search for other forms of meeting the high demand for tertiary education.

Other constraints that pose problems to the policy of higher education have been inadequate numbers of lecturers, large numbers of applicants; insufficient residential facilities; and lack of infrastructure and logistics. The demand for higher education has outstripped the facilities available.

It became imperative therefore to provide post secondary education through the distance learn-

ing mode. Gupta and Ghosh (2002) have observed that "open and distance learning, characterised as flexible and more responsive to the demands of learners, is the manifestation of the new learning environment. This new environment, especially with respect to the delivery of appropriate information and knowledge to the learners at a place and time of their choice, contributes to a dramatic revolution in education and training of library professionals." Thus "distance education is now recognised as an important mode of providing education that also ensures that professionals remain occupationally competent".

### Distance Education

Distance learning has been around since literacy made it possible for information to be transferred by means other than by speech and visible action. Physical separation of learner from the source or seat of learning has been the defining characteristic. The Commonwealth of Learning defines Distance Education as "the delivery of learning and training to those who are separated

mostly by time and space from those who are teaching or training. The teaching is done with a variety of "mediating processes" used to transmit content, to provide tuition and to conduct assessment or measure outcomes" [www.col.org/resources](http://www.col.org/resources) Distance education allows the provision of education to a wider segment of the population from a distance. This means that the teacher and the learner are not face to face in a classroom. A two-way communication system still takes place to make learning successful.

Distance education may also be described as supplementary aspects of conventional education. Some of these aspects are "self study," private study," "home study" or "correspondence teaching". These terms are associated with private sector provision which imparts skills in professional, vocational and recreational subjects as well as in educational basics. This aspect is sometimes referred to as distance learning. (a local example is the Presidents Special Initiative in distance learning programme on national television (GTV). In distance learning the teacher and the student are separated all the time.

Distance education however, is more advanced because of its support systems of a two-way communication process between learner and teacher. At times, monthly face to face meetings are arranged, where progress on the learners' work can be discussed, that is, an occasional meeting between student and teacher.

Distance education, involves teaching and learning leading to the award of diplomas and degrees, by extending tertiary education to off-campus sites, while distance learning provides education for all and also creates opportunities for life-long learning. Distance education is best run at the tertiary level where the students might have attained some level of advancement and maturity in the field of study, thus having no difficulty in understanding basic concepts and theories.

### **Rationale for Distance Education**

The growing demand for higher education in Ghana evidenced by the large number of qualified applicants who could not be absorbed by the tertiary institutions, has frustrated many prospective students. For example, at KNUST in 2003, the total number of applicants was 14,451. Of this, 12,732 qualified for admission, but only 5,526 were actually admitted. Not even half the qualified number was admitted. The picture is the same for all the 5 state universities and this has been going on for some years now. It is possible that some candidates might have applied to more than one institution, thus swelling up the number of applicants to any one institution

Another shortfall of conventional education is the shortage of trained manpower to handle the large number of on-campus students.

### **Advantages of Distance Education**

Distance education provides opportunities for those who could not join in the main stream of education, for various reasons, to gain formal qualifications. Some other benefits of distance education include:

- Upgrading and enhancing the professional level of knowledge to those (working class adults) who do not have formal qualifications, but need higher education to obtain diplomas/degrees to enable them keep their positions.
- Supplementing and enriching the formal qualifications of those who need higher qualifications for their career development, prevent them becoming obsolete and promote social mobility, or change to new careers altogether.
- Providing self-supported and less expensive professional education to the working professionals living in distant locations, who cannot leave their jobs, home and family, to go to school.

- A few workers may feel bored or unchallenged and may want to learn for the sake of learning.

The advantages of Distance Education are many. It allows continuous learning which helps to achieve quality in service provision. The style of teaching and learning is so flexible that one can take a longer period to get a degree and a greater number of learners can be reached than is possible through on campus education.

### Problems of Distance Education

In spite of the numerous advantages of Distance Education, it has some short-comings, as observed by Koomson (1998)

1. It involves a heavy financial outlay to get the programme started.
2. Supervision of students may not be adequate
3. Because they are lone learners, they may not have the moral support of an on-campus environment and may easily become lethargic and drop out of the programme
4. Distance learners must learn as well as cope with domestic responsibilities.

In spite of its shortcomings, distance education is the way forward for many ambitious students, who are unable to benefit from the conventional on-campus education. Governments, especially, in Africa may find some respite in distance education programmes as an alternative form of education for the growing demand for higher education.

### Mode of Delivery of Instruction in Distance Education

Distance education depends on the use of the media as the channel for the transmission of tutorial(s) and information in the form of print, human interaction, sound and vision.

The experience of the University of the South Pacific (USP) in distance teaching by satellite is worth mentioning. The USP is a regional insti-

tute that provides tertiary education in the South Pacific. It serves twelve member countries; Cook Islands, Fiji, Kiribati, Marshall Islands, Nauru and Nieu. The others are Samoa, Solomon Islands, Tokelau, Tonga Tuvalu and Vanuata. It has campuses in each country and about 7,500 students choose to study by Distance Flexible Learning (DFL), in their own home countries. The vast geographical distances the USP serves makes it difficult for all students to study at any one of the major campuses.

The university utilizes a state-of-the-art satellite communication network, USPNet, to deliver its programmes. Distance education is administered by the DFL support centre which manages the administrative and academic operations of fourteen USP centres. The centres are like small campuses and are located in each of the university's twelve member countries. The students are provided with printed materials, A/V cassettes, the Internet and live access to lectures and tutorials taking place at the main Laucala campus.

There are twenty libraries located in the USP regional countries that provide basic services like Acquisitions, cataloguing, loans, reading space, reserve collection service, interlibrary loan and photocopying as a support service in distance education.

A smaller example of a model distance education resource centre has been started at the British Council Office in Accra. The service is available to distance education students taking courses in tertiary institutions outside Ghana. This centre co-ordinates the link between these institutions and their registered students in Ghana. They receive instructions, assignments and tutorials through email or on CD. They are also issued with passwords that give them access to online resources.

Each distance education programme has to select a mode of delivery that suits the technological advancement of the region. In some cases an

integrated approach becomes imperative, but then, the mix of instructional media must meet the needs of the student in an effective and economical manner.

### **Managing Information/Library Services for Distance Education**

Distance education offers new opportunities to people who are willing to update their knowledge. The primary role of a student is to learn, therefore distance education students must be provided with facilities that support and enhance study and learning.

Management involves the coordination of human and non-human resources to attain some predetermined goals. Management of information resources must therefore bring together all factors like sources of information, professionals, equipment, infrastructure and funds that make it feasible for distance education students to be provided with information/Library services to support teaching and learning.

The ALA Guidelines for Distance learning library services, (2000) stipulates certain conditions for library services for distance education. According to the guidelines, distance learning library services "refers to those library services in support of college, university or other post-secondary courses and programmes offered away from a main campus, or in the absence of a traditional campus..." The distance learning community "covers all those individuals and agencies, or institutions directly involved with academic programmes or extension services offered away from a traditional academic campus..." it describes the originating institution as an entity, singular or collective, its/their chief administrative officers and governance organisations responsible for the offering or marketing and supporting of distance learning courses and programmes.

The main thrust of library and information resources and services in institutions of higher

education is to meet the information needs of their faculty and students whether on campus or in distance education. Distance education students are entitled to information/library services as those provided for traditional campus settings.

### **The Role of the Librarian**

To manage information resources for distance education, the librarian, must co-ordinate the activities of all the stakeholders i.e. (students, faculty and governing body), and perhaps determine standards that may not necessarily be the traditional standards of librarianship. He serves as a link between the resources and the individuals or institutions involved in distance education programmes. The distance education programme being organised and run by the University of Education, Winneba, in the Kumasi Campus is examined in this article. In terms of policy or governing authority, that establishes the philosophy for the programme, the Ministry of Education issued a policy by establishing the Centre for Continuing Education in University of Cape Coast with study centres all over the country. As the originating institution, it is responsible for offering, marketing and supporting distance education in Ghana. It is doubtful if any librarian was involved in the formulation of the policy, but the responsibility rests on the librarian to acquire, organise and disseminate information/library services for the programme. The Librarian at the centre of these agencies (faculty, students, originating institution,) must link library services to each unit. The success of his activities depends on good planning, commitment of all the people involved and adequate funding.

### **Support Services**

Upon the payment of the prescribed fees, distance education students are supplied with printed study materials and textbooks. There are twelve Regional Study Centres all over the country; Accra, Atebubu, Bechem, Cape Coast, Enchi, Hohoc, Koforidua, Kumasi, Navrongo, Tamale, Wa and Winneba. They have co-ordinators and subject tutors to provide students

with guidance in their studies and, organise tutorials and arrange examinations. Four of the centres have library collections to support learning. All the centres are located in existing institutions. A Librarian would therefore have to organise his services based, in the short term, on the existing facilities but the ideal situation in the long term will have to be permanent buildings at the regional centres.

### **Organisation of Library/Information Services**

The Centre for Continuing Education should have the responsibility to organise library services for its distance learners. It should also secure funding for the library services, is responsible for policy decisions, recruitment and retaining of staff, and the development of modest collections to suit the needs of students.

### **Library/Information Functions**

Information science as defined by the World Book Encycpaedia (2001) "is the study of the recording, storage, retrieval and use of information". It can be deduced that library/information functions are those functions that make it possible for information to be processed and stored for easy retrieval by users. Some of these functions are Acquisition, Cataloguing Classification, Indexing and Abstracting, the output of these being retrieval functions. Retrieval Systems make it possible for users to find the stored information.

Effective management of these functions for the purpose of distance education should start from the Centre for Continuing Education. It must decide what types of materials would be included in the collection, taking into consideration the purpose of the library, the needs of the distance learners and available funds, in short, a collection development policy.

### **Infrastructure**

In the long term, it is advisable to plan for a library/resource centre to be part of any buildings

of the regional and district centres for distance education. In the short term, small collections should be developed at all the regional centres where the students meet monthly. Some of those towns may have public or school libraries, which the distance learners may have been using. These collections may not be tailored to their specific needs. Collections should rather be developed may be, as extensions of those libraries that would serve the specific information needs of the distance education students.

### **The Collection**

The library should stock a number of core textbooks, a reference collection, journals or photocopies of articles. Others are reports, video tapes and cassettes and CD Roms, brochures on distance education for students to consult, course calendars, annual reports, information on organisations and agencies, for example, catalogues of Universities abroad; unpublished materials e.g. dissertations or project works of distance education students. The library is an access point for locating and acquiring information, so brochures on admissions, courses available elsewhere, fees, duration of courses, subjects that can be offered, news etc., must be provided. Decisions on what should go into the collections at each regional centre should be taken by the central organ, so that there will be uniformity and balance in the collections.

### **Staff**

Recruitment of untrained staff should be avoided. People with professional qualification in librarianship, a first degree or diploma in library studies should be employed. One qualified staff at each regional centre who, may also double as the administrator should be enough to start with. He must have support staff like a cleaner and clerk/typist.

### **Cataloguing and Classification**

Cataloguing and classification are tools used in organising knowledge in the library.

There are various forms of this, but one standard of Classification and Cataloguing should be adopted for all the regional and district centres. This ensures uniformity and easy movement of materials from one centre to the other in response to changing needs of students. Presently, all library materials for the centres that have library collections are catalogued at the University of Education, Winneba and sent to the centres. The Library of Congress Classification Scheme is recommended because distance education programmes are of tertiary level and may take advantage of the University Libraries, which are using the L.C. Access to the collection, should be by author and subject. Other relevant pieces of information that would go into the collection should be organised by compiling local indexes or list of subject headings. The titles could be listed and arranged alphabetically. Through these means the Librarian would have control over information bearing material in the collection.

Some of the instruction materials may have been recorded already in form of CD-Rom or audio visual tapes. All forms of A/V materials should be well organised on shelves and labels provided either by course or subject.

It may be easier to shelve by the course. Distance learning involves home study and the library serves as a support service.

### **Equipment**

More than one thousand students are enrolled in the distance education programme being run by the Kumasi campus of the University of Education, Winneba. They visit the regional centres on a monthly basis and require library services. Basic furniture provided should therefore accommodate a sizeable number of readers. Computers, a fax machine and telephone facilities will assist the librarian in receiving information and materials from headquarters or instructors and passing them on to the students. The computers at these centres must have Internet con-

nectivity for use by students and the librarian for searching online databases. A photocopying machine is essential.

### **Reference and Lending Functions**

#### **Reference Functions**

Mention was made earlier of a modest reference collection that will include dictionaries, encyclopaedias, handbooks, materials on education, core textbooks, A/V materials, CDs theses, past questions and other unpublished materials, handouts, and the like. The Librarian has to search Internet sites and bookmark relevant materials for students to access. To be able to do this well, he must have the profile of students. The service should include current awareness features like compilation of current acquisitions lists and photocopies of table of contents of journals. He may answer some reference questions immediately, some, he may have to send the request to a bigger library for help. At times he may not be able to answer all but provide a source. The Librarian can procure photocopies of articles from other libraries for students. These should be reserved in the library for probable future use by other students.

The Librarian must be computer literate and be ready to teach computer skills to students for information retrieval. He would have to advise/instruct students on the use of printed and electronic information datasets which are indexing and abstracting services which allow search for articles on subjects. The Librarian should assist faculty in placing materials at the centre, these should be readily available for the student to use. He would also have to consult faculty on what materials to acquire. Where there is a reliable postal system, some requests can be sent to students within the month, at a cost to the student.

#### **Lending Functions**

Borrowing may be allowed where the library's collection can accommodate it. Though students are supplied with the core textbooks upon registration in the distance education course, some

may need more support materials. Borrowing time should be about four (4) weeks so that books can be returned during the monthly visits. Students may be guided to use the resources of other libraries or the Librarian would arrange inter-library loans for them. Such materials should be kept for use in his library only and he has to return them at the appropriate time.

### **Serials/Journals**

It may be financially difficult for the regional/district centre libraries to subscribe to and maintain a respectable collection of journals. It would be more expedient to rely on partnership with other well-endowed institutions for help. Such partnerships could be with the Kumasi Virtual centre for Information Technology (KVCIT). The KVCIT at KNUST has an example of management of information resources by sophisticated software. It is in partnership with the AVU (African Virtual University) which is a satellite-based education network, targeting post-secondary school students throughout Africa. It has started study centres in University of Cape Coast and KNUST, Kumasi. The AVU has engaged the Royal Melbourne Institute of Technology (RMIT) in Australia, which provides access to its digital library resources. The digital library includes course textbooks, collateral readings for courses, a broad spectrum of abstract and index databases appropriate to the academic environment; and subscriptions to a core collection of approximately 14,000 journal titles. AVU has developed operating agreements with local partner institutions, in this case UCC and KNUST so that registered students in the distance education programme use their AVU student identification cards to utilise partner institution libraries and related facilities. This service is available right here in Ghana. The Central organ can go into discussions with the KVCIT and conclude some agreements of partnership.

### **Opening Hours**

Flexible but adequate service hours should be

operated for optimum access to the library users. For example, while students are on the monthly visit to the centre, service hours could be slightly extended for them to make full use of the library.

### **Orientation or Bibliographic Instructions**

The Librarian must instruct students on how to find and use relevant library materials. This could be organised as a short orientation to start with and later, detailed bibliographic instruction. This will make them acquire independent and effective information literary skills. He must however be ready at all times to guide and explain rules, regulations and repeat instructions when necessary.

### **Summary and Conclusion**

#### **Summary**

Distance education involves conventional home study, supported by a variety of aids and occasional tutorial, and library/information services. In distance education, study, is mainly off-campus and it is possible to continue even if the student relocates during the course. Well organised distance education programmes lead to professional qualifications, or diplomas and degrees. Policies on information and library services in distance education should be enacted and controlled from the central agency to the regional/district centres, as the regional centres serve as points of contact where the students are guided in the search for information and independent use of study and research materials. In this way, library services increase the chances of success in distance education.

#### **Conclusion**

The right combination of strategic policies and plans in managing information resources like libraries, learning centres, or information centres; a blend of print and electronic sources should serve to promote distance education programmes, making them increasingly popular to many prospective tertiary education applicants.

Managing library and information services for distance education should therefore include management of resources through both print materials and ICT. A modest blend of print and ICT in library services is essential for success of distance education. The libraries at the distance education centres will be small from the start; the librarian for that matter will have to contact bigger libraries like those of the tertiary institutions to be able to satisfy the requests and needs of students. The provision and management of library services is one of the supportive structures that would encourage more people to register in the distance education programmes.

According to the ALA Guidelines for Distance Learning Services (2000) "the distance education library programme shall have goals and objectives that support the provision of resources consistent with the broader institutional mission"

### Recommendations

Appropriate management of information resources is an ingredient for the success of distance education. Much is being done, but the following recommendations, if considered, will enrich the programme.

Accessibility to information is more important than where the information is located, in that, collaboration and resource sharing in partnerships with the KVCIT, for example, and other agencies will help the Centre for Continuing Education in serving its students. The Centre for Continuing Education, which is the legally constituted body on distance education in Ghana, should explore the opportunity of entering into partnership agreements. Another collaborative arrangement could be made with the university libraries to pave the way for distance library services to be registered in the Programme for the Enhancement of Research Information (PERI) which provides information through electronic means. It is sponsored by International Network for the Availability of Scientific Information (INASP). It provides access to over 7,000 full

text journals on line as well as citation, bibliographic and reference databases. Sponsorship agreements could be sought for off-campus library services to become beneficiaries too.

The Ghana Library Board, which is responsible for providing public library services, has regional libraries in all the regional capitals in the country and even in the districts. It is economically wise to collaborate or liaise with the Ghana Library Board in collection building to share what little resources are available. These agreements should be spearheaded by the Centre for Continuing Education.

The base of all library services, at least in our country, is still the print media. Distance Education students need to borrow materials for home study. Even at the regional centres some may be more comfortable reading printed material. There may not be enough computers at the centres to be used by the majority of students and so collections should be built, even if in borrowed premises at these centres, to satisfy the information needs of distance education students.

Another option is to identify one community, public or district library to receive a collection of basic works and reference books in order to provide information needed by distance learners. These units become part of an information system to house bibliographic resources and materials that may not be available in the libraries themselves but may be found in university, polytechnic or special libraries elsewhere in the country. Students are then informed and directed to locate these materials.

It is recommended that the Centre for Continuing Education includes in its policy statement, the employment of librarians for the regional and district centres and one or two at a central point to harness and co-ordinate the activities of the others. To save cost, the librarians at the regional centres could double as administrators.



This means that the National Policy on distance education must provide for information resources. Librarians must be involved from the planning stage and making of policies so that plans for the design of study centres all over the country would make provisions for libraries/information /learning centres.

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