## LIBRARIES IN DISTANCE EDUCATION

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Abstract: - The paper streamlines information technology, applications of information technology in distance education and libraries in distance education. The significance of the impact of IT for library and information services lies in the reconfiguration of exiting services, the creation of entirely new services and the integration of services in ways previously unknown. Because of IT library and information centres are gradually expanding their role by functioning as publishers, database producers, and online hosts with the appropriate application of technologies viz... electronic publishing, E-mail and networking.

### Introduction

Information technology, or IT as it is commonly called, refers to those technologies and devices which facilitate efficient and effective communication. It also allows us to access and handle with ease vast amounts of information. During the last 30 years, a number of major advances in the use of computers communication technologies have occurred. These developments expedite access to mega computers which store large volumes information. The catalyst in the widespread use of modem IT systems has been the availability of low cost microelectronic machines which provide a powerful yet economical means of accessing and processing information. IT has penetrated all spheres of professional and personal

Education, and in particular distance education, is not and cannot be immune from the influence of IT.

Distance education as a system to provide learning opportunities has been in existence for a considerable period of time. Historical studies that formalized distance education programmes date from the last century. Within the last 25 years. Distance education as system of learning has attracted the attention of many institutions and individual in both national and international for a. During this period of heightened interest, there have been many changes within the discipline. Especially regarding its management, pedagogy accessibility. The April 1995 International Centre for Distance Learning (ICDL) CD-ROM database on distance education indicates that there are 835 distance teaching institution offering 29,166 courses located in almost 100 countries.

While a variety of definitions are used to describe distance education the following characteristics are common to all of these definitions. They are the

- Separation of teacher and learner.
- Individualization of learning.
- preparation and provision of learning materials and
- Establishing and using various communication channels to link tutor and student.

The principal aims of distance education are to:

- Provide educational opportunities to the masses:
- Raise the general level of education.
- Serve as an alternative to the formal system of education; and
- Provide educational opportunities for those who were unable to access

conventional education.

The worldwide communication revolution has led to the development of high-speed computers with huge storage capacities. Additionally, the availability of electronic and telecommunication technologies at reasonable prices have created a tremendous impact on almost all human activities including education.

The characteristics of distance education encourage the use of modern IT.

A principal goal of modern day distance education courses is to motivate students. The design of the self-instructional packages that students receive is firmly rooted in that aim. Therefore, the services of a well-equipped and efficient library which is conveniently accessible is regarded as being very important to the success of the academic progress of students. Given the important role that IT can play in making information more readily available, it is necessary to include a consideration of IT in any reflection on distance library services. Merging IT with library and information services to distance learners enhances the delivery of such services.

# APPLICATION OF IT IN DISTANCE EDUCATION

The ongoing developments in computer and telecommunication technologies occasion tremendous changes in the activities of the distance education institutions in administrative procedures. instructional delivery, and other functions.

Both IT and education work with the same product-knowledge-but for different goal. While IT allows for faster and more comprehensive access to information.

Central to the concept of distance education is the separation of teacher form the learner. This separation requires that communication between instructor and student takes place in some way other than by direct speech. IT therefore appears to be an ideal

channel of communication as it uses various interconnecting media-technical or otherwise- to unite the teacher and teacher and the learner and to convey the content of the course.

IT can be deployed in two different but related aspects of distance education. IT can be used to deliver the context of instruction as well as documents. Instructional TV, video and audio cassettes, teleconferencing. computer-aided instruction, interactive video disc and videographic system are some of the potential components of instructional delivery to which IT can be applied.

The application of IT to document delivery places at "the stroke of a finger" the wealth of information available- regardless of habitat. Advancements in computers and telecommunication technologies have enabled a growth in distance learning opportunities for students in homes, schools, colleges, and the workplace. According to Garrison (1985) the development of distance education can be structured into three generation of technological innovation.

- correspondence
- teleconferencing; and
- computers

Correspondence education was a major shift from the traditional face-to face interaction and it provided freedom to choose where and what to study.

Teleconferencing technology dramatically overcame the slow interaction process associated

with correspondence study and it is frequently used as a communicating medium in distance teaching.

Computers have brought about new possibilities in distance education through computer-assisted learning (CAL) and computer-assisted instruction (CAI). CAL and CAI help students to study at a distance independently as well as to experience immediate interaction with their peers and tutors.

While IT offers tremendous advantages to distance education on its own, the use of other technological aids for distance education should not be disregarded. These are audiovisual material such as audio and videocassettes, radio and television broadcasting. video discs ect. Sometimes these media can be used in association with IT a great effect. The telephonic is also frequently used in distance teaching as an interactive medium.

Distance teaching requires technologies that cheap. reliable. are easy to use. multifunctional and easily accessible to the majority. This limits the integration of some technologies into distance education systems For example, good quality CAL or CAI and interactive video discs are expensive to produce. Television, radio, audio and videocassette players. and microcomputers are some of the media that are commonly available in homes in developed countries.

# IT AND LIBRARIES IN DISTANCE EDUCATION

Recent innovations in the field of information technology have made the outreach library services possible and effective. Each new technological development that takes place impacts on libraries and information centers. IT has affected most of the routine operations of library and information services such as circulation and cataloguing services.

#### These include

- a reduction in the time required to carry out routine tasks;
- the opportunity to improve record keeping procedures and
- the ability to link intra and inter-library activities an unprecedented ways.

IT enables the integrative nature of library services to be actualized, eliminating the need for traditional departments such as acquisitions and cataloguing as it allows these activities to be executed from the same workstation.

In many libraries, IT-based services which enrich the access routes to information such as CD-ROM and online searching facilities are now commonplace. Thus, on a growing basis, IT aware clientele are expecting such services to be readily available. IT has changed the focus of library routines form technical activities and procedures to client-oriented services. IT has also changed the mission and goals of library and information centers. The emphasis has shifted from the mere custody of a documents accessing and exploiting

information. Whatever its form and wherever it is available.

As a result user-oriented services have gained greater importance in library and information sciences. These profession are no longer limited to collection building and other technical activities. Corporation, inter-lending and document delivery facilitated by telecommunication links are very important aspects of the work of today's information providers.

Computer-assisted retrieval is now a common phenomenon. Electronic micrographics, electro-magnetic and electronic video-based systems are gaining ground as carriers of information in libraries. The convergence of technologies has given rise to an interchange between various forms and types of information products and services. For example, convergence of computer and micrographic technologies provide us with the computer-based microfiche catalogues. IT can also be used to assist in the retrieval of information from databases held in other microforms. The of convergence computers with telecommunications facilitates online searching via networks. And finally, the convergence of optical disk technology with computer-assisted retrieval is enhancing the use of databanks. All of these will impact significantly on the delivery of library services to distance learners.

The significance of the impact of IT for library and information services lies in the reconfiguration of existing services, the creation of entirely new services and the integration of services in ways previously unknown. Because of IT library and information centres are gradually expanding their role by functioning as publishers, database producers, and online hosts with the appropriate application of technologies viz... electronic publishing, E-mail and networking.

Technology can play a key role in a distance education library system. Two important areas of support to this system are:

- access to information; and
- delivery of information.

Libraries in distance teaching institutions, therefore should try

to convert all their bibliographic records to computer readable formats in order to provide remote students with access to their collections and services through and online facility.

IT can solve a number of problems associated with studying at a distance.

Online access to computerized catalogues not only provides access to the local library's database, but also to the remote databases and catalogues of other libraries through national and international gateways.

But providing bibliographic information about a document is only the beginning of library and information services. Access to the actual document or the information stored therein is the ultimate requirement of the client. The distance between the library and the student adds a facet to the delivery of distance library services that traditional library and information services do not

have to consider. The use of IT to access database that provide full text information can solve this problem to a great extent. Other technologies that can help considerably in the document delivery process include E-mail and fax. Journal articles can be easily transmitted by these technologies. However, for books the traditional methods of dispatch must continue to be used until full text digital transmission is practicable and copyright regulations permit.

The use of multi-media packages in instructional delivery requires that these resources and their associated technologies are easily accessible to distance learners. Thus, in addition to providing books. libraries have a vital role in providing multi-media resources to support distance education. The availability of a wellequipped media centre for distance learners is therefore essential if all modern technological innovations are to be exploited to their fullest. The integration of print and non-print resources to support the library and information needs of distance learners is important. The resources of such a service would include in house and commercially produced multi-media learning packages.

In addition to providing the multi-media packages libraries must also take the steps necessary to ensure that these materials are utilized to the maximum. Bibliographic multi-media instruction for distance learners is therefore an important task that distance librarians have to perform.

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