

Enabling Electronic Resource Access for Distance Learners

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Abstract

Distance Education is gaining lot of prominence in the country due to various socio-economic parameters and the rising demand for education. The country has got a very comprehensive Distance Learning system comprising a national open university, 12 state open universities and 127 directorates of distance education attached to campus universities. The Indira Gandhi National Open University operates through a three-tier system having University Headquarters at Maidan Garhi, New Delhi; 64 Regional Centres in various States and 1621 Study Centres scattered all over the country. Library and Documentation Division (L&DD) is a hierarchical system with the Central Library at the Headquarters followed by branch libraries located at Regional Centres and Study Centres. To provide equitable information access to distance learners at par with the current national initiatives for campus based learners, the Library is working to form a library consortium, NODLINET (National Open and Distance Learners' Library Network) for distance learning institutions as the network of national Open University, state Open Universities and directorates of distance education in campus universities in the country. Distance learning Libraries should concentrate on fulfilling the information needs and requirements of distance learners by exploring modern information technologies, developing library networks and negotiating with information providers to strike better learner friendly licensing and access models. The paper discusses the different barriers in providing electronic resources and services to the distance learners and arrives at viable suggestions for overcoming the same.

Keywords: Distance Education, Library Services, e-resources, NODLINET

1. Introduction

Distance Education is gaining lot of prominence in the country due to various socio-economic parameters and the rising demand for education. The campus based education system is not able to cope with the increased demand for training, education and updating knowledge. Distance learning has emerged as a viable option for lifelong learning and as a means for human resource development in the country. The importance of distance education is being realized by the educators and policy makers across the globe as it has the potential to provide access to higher education. It is a very encouraging form of education which has something to offer to people across the whole society. It is acquisition of knowledge and skills through mediated information and instruction. It covers all technologies and supports the pursuit of life long learning for all.

1.1. ODL System in India

The country has got a very comprehensive Open and Distance Learning (ODL) system comprising a national open university, 12 state open universities and 127 directorates of distance education attached

to campus universities. These institutions together offer 2500 programmes and 5000 courses through a network of 5000 study centers utilizing the services of 84000 academic counselors. The study reveals that out of total number of students pursuing higher education in the country, 25% do it through distance mode and this figure is likely to grow to 60 % in the coming years. Due to this popularity in distance education, a new user population has grown up in number and visibility. [1]

1.2. Library Services for Distance Learners

Distance learning library services refers to those library services in support of college, university, or other post-secondary courses and programs offered away from a main campus, or in the absence of a traditional campus. These courses may be taught in traditional or nontraditional formats or media, may or may not require physical facilities, and may or may not involve live interaction of teachers and students. The phrase is inclusive of courses in all post-secondary programs designated as: extension, extended, off-campus, extended campus, distance, distributed, open, flexible, franchising, virtual, synchronous, or asynchronous. [2]

According to the Association of College & research libraries' guidelines, "members of the distance learning community are entitled to library services and resources equivalent to those provided for students and faculty in traditional campus settings." (ALA, 2002) The guidelines very clearly state that the traditional on campus library services themselves cannot be stretched to meet the library needs of distance learning students and faculty who face distinct and different challenges involving library access and information delivery. Special funding arrangements, proactive planning and promotion are necessary to deliver equivalent library services and to achieve equivalent results in teaching and learning and generally to maintain quality in distance learning programmes. Similarly ILA 'Guidelines for Library Services to Distance Learners' argues that traditional library services designed for on-campus users will not meet the requirements of distance learners. [5]

The National knowledge Commission (NKC) has recommended that a national Information and communication technology (ICT) infrastructure must be set up through Government support for networking all Open and Distance Education (ODE) institutions. The Commission has further stated that the 'digital broadband Knowledge Network' proposed by NKC should have provision for interconnecting the major ODE institutions and their study centres in the first phase itself. Eventually, minimum connectivity of 2 mbps must be extended to the study centres of all ODE institutions. A national ICT backbone would enhance access and e-governance in ODE, and enable the dissemination of knowledge across all modes, that is, print, audio-visual and internet based multimedia. [6]

The National Knowledge Commission has further recommended a National Education Foundation to develop a web-based repository of high quality educational resources and web-based common open resources. Open educational resources (OER) must be created online through a collaborative process, pooling in the efforts and expertise of all major institutions of higher education. The OER repository would supply pedagogical software for various programs run through ODE and be available for utilization by all ODE institutions. An enabling legal framework that would allow unrestricted access without compromising intellectual authorship must be devised for this purpose. [6]

2. Library System at Indira Gandhi National Open University (www.ignou.ac.in)

The Indira Gandhi National Open University was established by an Act of Parliament in 1985. Today it serves the educational aspirations of about 1.5 million students in India and 35 countries abroad through 21 Schools of Studies and an elaborate network of 65 regional centres, 1400 study centres, and 41 overseas centres. The University is making all efforts to take higher education to the doorsteps of the hitherto unreached. Apart from teaching and research, extension and training form the mainstay of its academic activities. It also acts as a national resource centre; and more importantly, functions as an apex body to promote and maintain standards of distance education.

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2.1. Library Collection

The Library System has the following collection:

Books at CL	Journals	Books at RCs & SCs	Microfiches	Microfilms	CD-ROMS	Photographs
89579	365	240199	7558	199	3248	499

2.2. Electronic Resources

Besides, it also subscribes to the following 15 online databases:

Resources	Coverage
Proquest's ARL	Full text articles on a broad range of subjects including arts, business, humanities, social sciences, and the sciences
Proquest's ABI/INFORM	4000 journals with more than 2,950 full-text titles from Business, Economics and Management
IEL Online	132 transactions, journals and magazines
J-gate	16685 e-journals with links to full text at publisher sites; access to 914 online-only journals, which are not available in print
ACM Digital Library	54000 on-line articles from 30 journals and 900 proceedings of the Association for Computing Machinery.
Emerald-95	Provides online access to 95 well reputed, authoritative and peer reviewed journals which cover all aspects of modern librarianship
CREDO Reference	General reference collection from over 50 publishers
Netlibrary	185 titles (includes one audio book too) from the fields of Science, Social Sciences, Linguistics, Languages, Computer Science, Economics, Business, Management, Philosophy, Theology, History, Physics, Chemistry, Earth sciences and Biology
Project Muse	300 high quality Humanities, Arts, Social Science and Science journals from 60 scholarly publishers.
JSTOR	773 titles from various disciplines
MathSciNET	Mathematical Reviews and Current Mathematical Publications
India stat	Socio-economic statistical data and useful information on India.
WTO elibrary	More than 900 books in English, French, Spanish, Russian and Arabic Tourism Fact book included

2.3. Other services

The Library also provides the following services:

- ◆ reference services;
- ◆ bibliographic and informational services;
- ◆ library user instruction;
- ◆ assistance with non-print media and equipment;
- ◆ interlibrary loan services;

3. Library Consortium

To provide equitable information access to distance learners at par with the current national initiatives for campus based learners, the Library is working to form a library consortium, NODLINET (National Open and Distance Learners' Library Network) for distance learning institutions as the network of national Open University, state Open Universities and dual mode institutions (directorates of distance education in campus universities) in the country. NODLINET may also provide accredited standards

and guidelines for the establishment of distance learning library facilities, apart from e-resource access and digitization. The national network and consortium will help to establish linkages with other national library networks and will deliver information to the various stakeholders of open and distance learning system - faculty, counselors, researchers and students in remote settings across the country. This project has been approved by IGNOU's apex body and is being executed in the 11th Five Year Plan period, 2007-2011. IGNOU and DEC under the aegis of MHRD will be the coordinating agency for implementing the project. The target beneficiaries of this project will be distance learners dispersed in remote and far flung areas, academic counselors and faculty members and researchers in the distance education stream who are otherwise deprived of information resources and services. The network is visualized to provide strong academic support system to distance learners by extending seamless access to information; both licensed content and indigenously generated content

Three core groups have been formed for smooth execution of the project:

Technology group: To technical aspects such as which technology to be deployed for facilitating services along the length and breadth of the country.

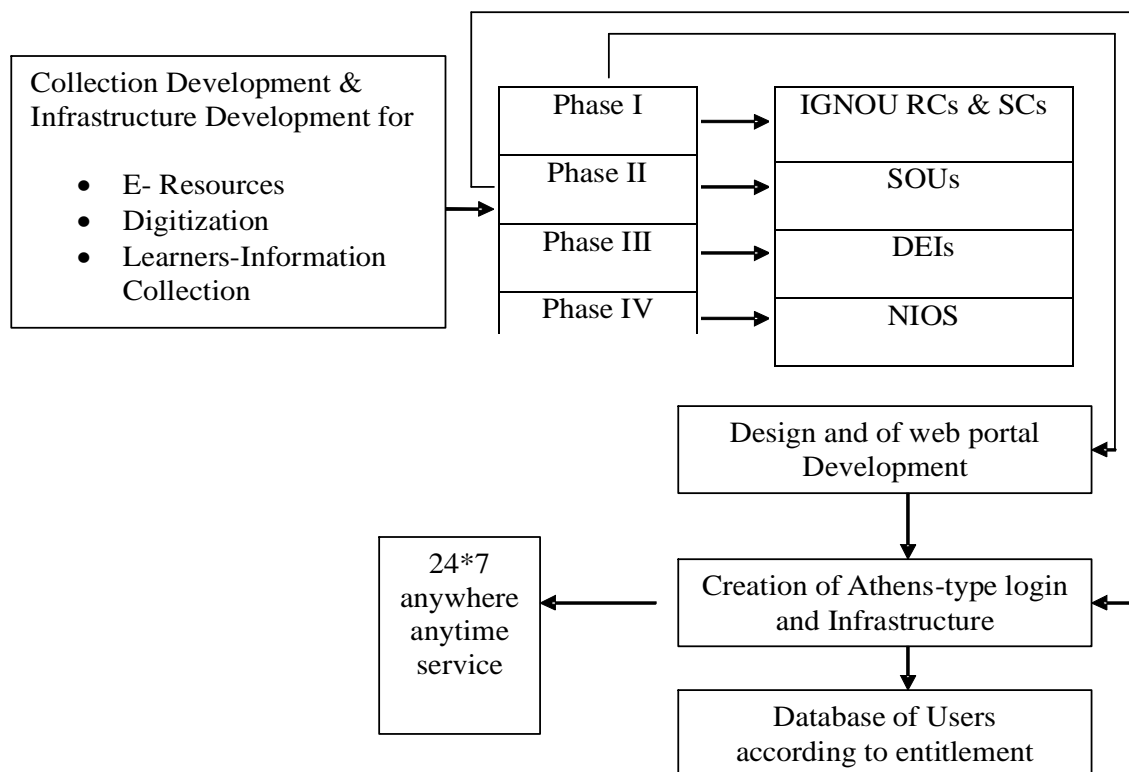
Content Evaluation Team: The team will comprise experts who will evaluate and decide upon the quality, authenticity of the content apart from planning the different information resources and services to be provided.

Finance and Management Team This team will look in to the financial and managerial aspects.

Services being planned under NODLINET

- ◆ To develop a portal for providing complete information related to distance education
- ◆ To consolidate web resources of interest to distance learning
- ◆ To provide virtual reference service
- ◆ To supply e-documentation support
- ◆ To provide interlibrary loan and document delivery within the purview of IPR.
- ◆ To develop online tutorials for distance learners.
- ◆ To develop a consortium of e-resources for open and distance learning institutions[7]

The network will provide access to more than 10,000 resources; it will provide restricted and authorized access to remote learners according to the programmes and courses which they have opted for. It is presumed that 1 million learners will use the NODLINET plat form in order to access the information which will be available 24 hours x 7 days. The system will facilitate multiple users to access the resources simultaneously. It is expected that the system will get 1000 hits per minute. A schematic of the proposed activities is presented in the figure.



4. Problems in Accessing the Information Resources

◆ Geographic Barriers

The distance learners are dispersed along the length and breadth of the country. They cannot come to the main campus library to access the physical and electronic resources of the Library. The regional and study centers are not well equipped enough so as to cater to the information needs of the learners; at times these libraries may be located far away from their homes. This 'distance' may act as disincentive for using library resources and services.

◆ Technological Barriers

The technological barriers refer to unstable or slow access to the Internet as a result of the bandwidth limitation or usage of old systems/technologies. The bandwidth limitations of the internet make information resources away from the reach of potential users. Graphics rich web pages may be an effective instructional tool, but if the learner cannot download the pages in a reasonable amount of

time then the pages may not be put to good use. Since the students are remotely located and geographically dispersed with uneven technology penetration; the challenge lies in using appropriate information technology tool which is commonly available and relatively economical.

◆ **Budgetary and Staffing Restraints**

Budgetary and staffing restraints are familiar to all libraries and librarians not just the ones who serve distance learners. It seems that libraries are constantly fighting stagnant or decreasing budgets. Library services for distance learners can be expensive since many of these services require an addition or revision to current services which may require more money and staff. For instance adding toll free telephone numbers, buying required software, staffing electronic reference services (sometimes even round the clock on a seven day week), mailing books and articles are going to be added costs to the operational budget of the library.

◆ **Lack of Awareness about Resources and Services**

The distance learners more often are not aware of the information resources and services available at their libraries; since the users do not know they cannot take advantage of the services offered by a particular library.

◆ **Lack of Information Literacy**

Information Literacy is the set of skills needed to find, retrieve, analyze, and use information. Ultimately, information literate people are those who have learned how to learn. They know how to learn because they know how knowledge is organized, how to find information and how to use information in such a way that others can learn from them. They are people prepared for lifelong learning, because they can always find the information needed for any task or decision at hand." [3] It has been observed that the distance learners do not know how to access the online resources; so the information resources remain under utilized.

◆ **Problem of Interlibrary Loan and Document Delivery**

Delivery of material is often a complicated issue; it is an important part of providing equitable service to distance learners. It is another issue which requires lot of judicious planning and decision making. The distance learners who are remotely located may identify relevant library material that they need, but cannot obtain the full text online. The librarians have to decide what their policies and procedures will be for request and delivery of, articles or books. The librarians have to decide how articles both owned and loaned through interlibrary loan must be sent- through-mail, fax or electronically. Delivery of books is often a trickier decision for a library, since it involves a "returnable item". Copy right is a grave issue and what comprises infringement of copyright and fair use regarding electronic storage and transmission of print or images is still not crystal clear. Articles can be scanned and sent as images files to the distance learners. But copyright restrictions are a barrier to scanning and sending books.

◆ Acquisition and Collection Development Issues

There are two categories of learners who currently get enrolled in the distance learning stream, one is those who wish to pursue learning with earning by working in part-time or full-time jobs, there are also large number of learners who do not get admission in the regular stream. Some times these learners may not grasp the content of international publications which are primarily available in electronic form. There are also many subjects in social sciences, humanities and languages where subject is taught in a local orientation which need lot of publications published locally. So the content promoted by publishers needs careful evaluation considering all aspects of their utility for the teaching, research and academic activities in the distance education stream. Side by side, some initiatives are also required for the electronic availability of at least the major text books by Indian publishers for more and more learners to take the e-advantage for meeting their learning aspirations.

◆ Lack of Distance Learning friendly Licensing Models

Contracts or agreements with publishers/vendors/information providers are negotiated on a case by case basis. This process is very complicated in itself. Some vendors base their pricing on Full time Equivalent (FTEs) or numbers of simultaneous users. Subscription prices are generally based on site or IP address, which implies that adding other sites (regional centers and study centers) may increase the bill manifold. The vendors of the following databases were contacted for quoting price for providing access at the regional centers.

Database	Price for IGNOU Campus(Indian Rs)	Price for additional 25 Regional Centres (Indian Rs) (% over price for IGNOU Campus)
EBSCO-ASP	517270	6, 2451 (12.07%)
J-Gate	224480	8, 97920 (400%)
LISA	108398	4, 3592 (40%)
LNM	7500	3, 00000 (4000%)
Proquest's ABI/INFORM	353430	14, 13720 (400%)
Proquest's ARL	491044	19, 64176 (400%)
Project MUSE	82000	20, 50,000 (2500%)

The table reflects that for databases J-Gate, Proquest's databases like LISA ABI/INFORM, ARL, Springer's LNM (Lecture Notes in Mathematics) will cost 4 times more than the original cost. Project MUSE will cost 25 times more than the original price. This will require additional funds too and may not make justifiable purchase decisions considering the limited number of learners enrolled for a particular course in a Regional Centre.

The negotiations and discussions showed that even the vendors are not very clear about the pricing model. They come across such institutions very less in number in comparison to many campus

based institutions. For a distance learning institution, a model permitting access across all places where its learners are scattered considering the volume of learners at one site would be arrived at. Some of the models working at open universities abroad may not be applicable in the Indian context considering the sheer magnitude of learners enrolled in our open universities and distance education directorates. We may also need better authentication technologies to carefully identify the authentic learner with permissions for accessing resources as per the courses currently taken.

5. Suggestions for Future

◆ Implementation of Resources and Services

When the information needs of the distance learners have been assessed and services and resources have been decided, the new services should be implemented. The library staff must prioritize the resources and services to be rolled out. Due to paucity of staff and funds everything cannot be rolled out in one attempt.

The students must have remote access to e-resources. The library staff must ensure that proxy server is functioning so that users can reach the material they want. In order to provide seamless access for distance learners, the required authentication mechanisms must work perfectly with the minimum possible downtime so that authorized users can have easy access to online collections without any hassles.

◆ Promotion of Resources and Services

The library may plan to market its services to the distance learners and faculty members. The information regarding the library resources can be posted on University's web site, student listservs; it can be published in leading news papers; pamphlets can be dispatched to study centre for distribution among the students. More direct marketing could be used such as sending an e-mail to all students via a distribution list or sending them promotional pieces in the mail. These promotional items should stress what the library has to offer and ways to contact the librarian. Marketing to the faculty is also important because a recommendation from the faculty member can really drive students to the library for assistance. Marketing to faculty could include e-mails and posting to faculty listservs. The University publications like Newsletter should feature a regular column on library resources and services.

◆ Infrastructure at the Study Centers

The infrastructure at the regional and study centers libraries should be strengthened. Consortial agreements can be made with other school and college libraries which are located in the learners' vicinity. The distance learners should be allowed to use library resources and Internet facility of that library. UK Libraries Plus scheme allows borrowing from 144 academic libraries throughout the UK and Ireland. SCOUNL Research Extra allows borrowing from 158 academic libraries through out UK

and Ireland [8]. Canadian University Reciprocal Borrowing Agreement (CURBA) extends in-person borrowing privileges (determined by each lending library and borrowers are responsible for paying any fines, lost book charges or processing fees incurred) to students, faculty and staff across the country [9]. HKOU has entered in to an agreement with the Public Libraries of HK to make resources available through those libraries' workstations to OUHK students. The virtual library may provide only part of what the students need. There is little to compare with perambulating in the stacks, browsing and coming across that did not turn up in an online database and hence formal agreements with local libraries may be a solution for providing library services to students at distant sites.

◆ Orientation and User Education Programmes

The Library staff may visit different Regional Centres and Study Centres to provide education and training to the staff and learners on topics such as using the Library's online catalogue from remote sites, database searching, using electronic resources and create awareness about library practices and policies. Online tutorials and user manuals may be created to facilitate increased use of licensed e-resources.

6. Conclusion

The tremendous growth of distance education is changing the role of the academic librarians. Distance education institutions need library and information services as much as their counterparts in the campus universities. Now the librarian's role is shifting in the areas of reference, access to library collections, e-reserve, copyright, resource-sharing, document delivery, library instruction, faculty awareness, course support, service marketing and public relations. Librarians are required to collaborate and take on proactive roles in working with faculty, students and administrators; they should adapt services to the needs of widely varied and geographically dispersed distance learners. It is suggested that the Library Science Curriculum should include distance librarianship as one of the papers to train interested young professionals in this challenging area. Distance learning Libraries should concentrate on fulfilling the information needs and requirements of distance learners by exploring modern information technologies, developing library networks and negotiating with information providers to strike better learner friendly licensing and access models.

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