Usage of E-Resources in Himachal Pradesh University, Shimla, with Special Reference to the UGC-Infonet Digital Library Consortium

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Introduction

Libraries spend a large portion of their budget on subscription of scholarly literature, especially on peer-reviewed journals and databases. Though, Information explosion, increase in the cost and availability of scholarly information in electronic mode are some of the important factors responsible to open the gate for library consortium. A library consortium is a formal association or a joint venture of homogeneous libraries that operates on mutual approved terms to share the resources among members. According to US Federal Communications Commission (FCC Form 470) ‘library consortium is any local, statewide, regional or national cooperative association of libraries that provides the systematic and effective coordination of the resources of schools, public, academic and special libraries and information centers, for improving services to the clientele of such libraries’. In paucity of funds in libraries and information needs of the users placed cutthroat need of the library consortia. Mushrooiming of many library consortia in all around the world have been observed during the last decade. Many countries have been started taking serious steps to establish different national consortia to develop quality oriented academic and research environment in their respective countries. Similarly, in India University Grants Commission (UGC) has launched an ambitious program called UGC-Infonet in December 2003. This program is aiming to facilitate the Indian universities with
state of the art technology for productive communication and to provide online access to peer reviewed e-resources. Information and Library Network Centre (INFLIBNET) is a nodal agency to monitor and to execute the program systematically. So far more than 171 universities and around 600 colleges have already been incorporated into this national virtual venture. Himachal Pradesh University is the single university which caters the higher educational needs of state’s people. Since January 2005, university has been getting access to e-resources under UGC-Infonet program. This paper is an attempt to review the usage of e-resources given to this university, and offers some suggestions to make maximum use of the facility extended by UGC through UGC-Infonet Digital Library Consortium.

International Scenario of Library Consortia

As per the latest trend a consortium is not restricted to one geographic region but it has become a global phenomenon today. Many professional associations and network centres have been running various successful library consortia which are setting the examples at global arena. The Net Library, an eContent division of OCLC (Online Computer Library Centre, Inc.) has increased its boundaries by subscribing to thousands of scholarly books from various prominent publishers and making it available to the member libraries. Net Library has also been signing agreements with many leading libraries to convert their print collection in to electronic form (Grogg and Ashmore, 2005) to strengthen the library coordination all around. In UK, CURL (Consortium of University Research Libraries) is being running with the motive to increase the ability of research libraries in terms of sharing resources for the benefit of the local, national and international research community. The FinELib (Finland National Electronic Library Consortium) is a national consortium comprises with all universities, polytechnics and public libraries as well as various research institutes of Finland (Hormia-Poutanen, 2005). Within Thailand, THAILINET (Thai Academic Libraries Network) and PULINET (Provincial University Library Network) were merged together to formulate ThaiLIS (Thai Library Integrated System) consortium for improving the higher educational system in the country. The HEAL-Link (Hellenic Academic Libraries Link) is the consortium aimed at developing cooperation involving all the academic libraries in Greece. The same way, primary goal of the NEICON (National Electronic Information Consortium) is to provide Russian organizations with access to scientific information resources via the Internet. This consortium includes classical and specialized universities, public libraries, academic institutes and other noncommercial organization of the country (Hormia-Poutanen, 2005).

In China, CALIS (China Academic Library and Information System) funded by the Chinese Government is a national academic library consortium. The GAELIC (Gauteng and Environs Library Consortium) is a biggest library consortium in South Africa with the objective of providing speedy information cost effectively (Darch, Rapp and Underwood, 1999). The Higher Educational Library Information Network (HELIN) Consortium, USA is a joint venture of academic and health libraries of the country. The program GALILEO (Georgia Library Learning Online) is the consortium of University System of Georgia. It is covering more than 2000 academic institutions like K-12 schools, public libraries, research institutions and colleges etc. The OhioLINK, The Pennsylvania Academic Library Consortium (PALCI) and various other library consortia in USA are working to provide better information services to their members with minimum financial input (Hiremath, 2001). International Coalition of Library Consortia (ICOLC) is known as consortium of consortia. This self-organized international group is providing listing of nearly 200 consortia from all across the world. The Yale University Library, Connecticut, USA keeps the record of the ICOLC meetings and maintains its public web site. We can see that all nations are taking their keen interest for providing access to online scholarly resources. The reason for rapid growth of library consortia is well
indicated by Allen, Hirshon and Helmer (1998) as, ‘the most important development for academic libraries during the current decade has been move from organizational self-sufficiency to a collaborative survival mode as personified by the growth of library consortia’.

**Library Consortia in India**

Library cooperation and resource sharing in India signified in 1980s with advent of various library networks but at national level in the domain of higher education it was started with the establishment of Information and Library Network Centre (INFLIBNET) (http://www.inflibnet.ac.in). INFLIBNET Centre is a national body established by the University Grants Commission of India in 1991 for interlink all the university and R & D institutional libraries of the country for resource sharing at national level. The center has put its best efforts to give computerized environment to the academic libraries of the country. The history of library consortia for online subscription and online access in the country is just a decade old. Various subject-oriented consortia were established to improve the quality and status of research and development in 1990s. Forum for Resource Sharing in Astronomy and Astrophysics (FORSA), one of the oldest library consortia in India for physics related subject areas was established in 1982. Subsequently, the consortia like Council for Scientific and Industrial Research consortium (CSIR e-Journals consortium) for scientific and technical information for CSIR’s Labs, Indian National Digital Library in Engineering and Science and Technology (INDEST) for engineering and technology related institutions, Tata Institute of Fundamental Research (TIFR) consortium is for scientific and technical subject areas, and Health Science Library Network (HELINET) for medical sciences subject areas etc. are doing exceptionally well in their respective subject areas. Various other organization have also established consortia for their specific information needs like Indian Council of Agricultural Research (ICAR), Indian Space Research Organisation (ISRO), Indian Council of Social Science Research and Defence Research and Development Organization (DRDO) etc. UGC-Infonet Digital Library Consortium is the latest glimmer on the history of higher education in the country. This consortium is targeting to provide free flow of scholarly literature of all areas of learning from across the world to Indian Universities and other institutions dealing with higher education.

**UGC-Infonet in Indian Universities**

UGC-Infonet is an ambitious program of UGC to interconnect all universities of the country with state-of-art technology. It is a medium for collaboration among teachers and students, not only with in the country but all over the world. It is also working as a tool for distribution of quality information and e-Journals to remotest areas of the country. Overall this program is helping to provide a more accurate and up-to-date information with productive communication within the higher educational system of the country. Accordingly, this program is aiming to bring a qualitative change in the higher educational research with greater efficiency. INFLIBNET has been entrusted the responsibility of monitoring and executing the UGC-Infonet program in systematic way. Infrastructure part, i.e. UGC-Infonet is being taken care by the Education and Research Network (ERNET) at New Delhi. However quality service, enhancement of bandwidth, subscription of resources, and access to information resources are being taken care by INFLIBENT.

Access to e-resources has been given to the universities under phased manner. In the First Phase fifty universities were selected based on certain factors, viz. exiting infrastructure, number of scientific research, number of
students and research scholars enrolled and Internet connectivity in the campus etc (Prem Chand, Murthy & Chandel, 2005). Therefore, in January 2004, under the first phase access to fifty universities was given and offered free access to a number of additional universities on a trial basis to be brought them into the ambit of the program, even while they were experimenting with their newly provided connectivity, without having to commit funds on their behalf until they were fully ready to access the literature (Kembhavi, 2006). The Second Phase of additional fifty universities was added in January 2005 and universities of third phase were added in the year 2007.

Many other universities will get access to the e-resources once they get static network connectivity. These universities will be covered in the batches of 5 – 10 universities for accessing these subscribed e-resources. So far around 152 universities are being accessing consortium e-resources. This e-access is being given free of cost to the member universities and fully funded by the UGC. The usage of subscribed resources needed to be analysed. Himachal Pradesh University, Shimla comes under the Second Phase of the Universities.

**About Himachal Pradesh (HP) University**

An Act of Himachal Pradesh (HP) Assembly established the Himachal Pradesh University, Shimla on 22 July 1970. State government (Himachal Pradesh) and University Grants Commission (UGC), India are financing it. This university is accorded with grade ‘A’ by the grading system of UGC. Being a single public university in the state it is the only university catering educational needs of the state. Around 140 under-graduate, post-graduate, engineering, medical, education and Sanskrit colleges are affiliated to this university. Apart from these affiliated institutions, an International Centre for Distance Education and Open Learning, a University Evening college, a University college of Business Studies, a Regional Centre at Dharmshala and various other centres are the part of this university (Assessment Report, n.d.).

This university has 32 teaching departments offering various courses. These departments are containing 286 faculty members, 89062 students of post-graduate and under-graduate courses and about 1519 research scholars are engaged in PhDs. Over all around 135000 students are enrolled in various discipline of higher education through the regular and distance modes of learning. The University has a beautiful central library with approximately 2 lakh (0.2 millions) books with subscription to more than 300+ print journals every year. In the year 1995 INFLIBNET has selected this library for financial support to automate it and automation is nearly to finish. Many of the teaching departments do not have departmental library due to paucity of funds which increases burden on central library to fulfill information needs of the users.

UGC-Infonet and UGC-Infonet: E-Journals Consortium in HP University

Himachal Pradesh University comes under second phase of UGC-Infonet members. This university has provided 512 Kbps SCPC bandwidth and link commissioned on 11th May 2004. Access to some of the e-resources has given to this university on trial basis for the year 2004 and subscription based access is being given on 1st January 2005.

Access to JSTOR and Nature online has also been given to this university in April 2006. Other resources are American Institute of Physics, American Chemical Society, American Physical Society, Annual Reviews, Blackwell, Cambridge University Press, Institute of physics, SpringerLink, Emerald, Taylor & Francis, Euclid Project, Oxford University Press, and many more.

**User Awareness Programs**
Awareness is known as the key to success of any program, the same is relevant in the case of effective usage of available e-resources. In the year 2005 and 2007, INFLIBNET has conducted a one day user awareness program in the university to make the research scholars and faculty members aware about UGC- Infonet initiative and about the e-resources which are being given to them. The advance user orientation program was also conducted in the year 2007 in this training of e-resources management, information search, downloads and, copyrights issues etc. were given to the users as well as to library staff.

Usage Statistics

According to INFLIBNET’s ‘UGC-Infonet Digital Library Consortium: Summary April 2006’ a report of the usage statistics during the year 2005 this university is ranked at 81 position amongst 120 universities and in 2006 it was on 79th position. This shows modest usage of e-resources by this university. The university has downloaded around 7000+ full-text articles during the year 2005 and 2006. It has been observed that 17% of the whole usage of the university, was made during the month of April.

The average download per month in 2005 is 192 and in the year 2006 this average dwindled to 180 downloads per month. This shows 0.5% per month less usage than the last year’s usage. The main reason of this decrease was late renewal of e-resources, which provoked publishers to stop the e-access. Discontinued access led drastic decrease in the usage of e-resources. The maximum explored electronic resource in the year 2005 and 2006, is American Institute of Physics and American Physical Society (AIP/APS). Britannica Encyclopedia On- Line (BOL) is the least used resource in the year 2005 as well as in 2006. BOL is a general reference tool only and central library of the university has subscription to print and CD-ROM version of this document that leads to the low usage of this product. Blackwell Publishing (BWEL), Taylor and Francis (T&F) and Royal Society of Chemistry (RSC) downloads have been increased in 2006 as compare to year 2005.

Usage of Institute of Physics (IOP) is static according to average downloads. Usage of CUP and RSC gives a serious not because subscription paid amount for these two products is around Rupees one million for this university and cost per article download is evaluated more than Rupees two thousand which is quite high, especially in a developing country like India, as compare to other e-resources.

Cambridge University Press (CUP) is the prominent e-resource for the humanities and social sciences. The University has been accessing 189 e-journals from CUP. Out of 189 e-journals only three journals have occupied 55% of total usage during the year 2005. It shows that most of the CUP journals have not explored even once during the whole year. The evaluation of CUP usage of the university is rendering to put immediate efforts to improve the usage. INFLIBNET with the help of CUP office in India has already planned expedite the usage of this product by conducting regular user awareness programs.

SpringerLink is well known for scientific, technical, medical related information and few social sciences journals. Access to over 1150+ e-journals through SpringerLink (Springer and Kluwer) are available to the university. In total usage of SpringerLink in the university, 85% of the total downloads is in the area of Biotechnology which comprises technologies used in Botany, Zoology and medical sciences, etc. The students and researchers who are engaged in the areas of Biotechnology are frequent users of SpringerLink.

Usage in physical science areas is towering high. As compare to other
subject areas. The 50% download of overall information downloaded, belongs to Physical Sciences. In 2005 one day user awareness program was also hosted by this department, it is being expected that user awareness program might have increased the awareness level of Physical Science students and faculty members which accelerate the usage in this area. On the other hand, statistics briefs, low usage in the area of social sciences and humanities. The reason, INFLIBNET has subscription to external literature (foreign scholarly literature) only. Research and syllabus of academic courses are mostly comprises with Indian contents because most of the Indian contents especially in the area of social sciences and humanities are not in electronic from. The reason to subscribe foreign contents only is that subscription to Indian contents within the country is quite easier and less costly than subscription of foreign contents and University can independently subscribe the Indian contents without much hassle. Although under consortium, 50% of the total subscribed contents are belong to social science and humanities subject areas. Therefore it can be assumed that lack of awareness about social science and humanities subscribed contents amongst the users led to low usage in these areas. Thus, INFLIBNET has to conduct awareness and training programs in the departments with special attention towards both these areas to improve the usage and also steps can be taken to subscribe scholarly Indian contents.

**Observed Problems**

In general if you divide whole subject areas in three major streams i.e. Natural Science, Social Sciences and Arts & Humanities, 97% of the total articles downloaded by HP University during the year 2005-07 are from the areas of Natural Sciences, 2% and 1% articles of the total downloaded articles belongs to Social Sciences and Arts & Humanities subjects respectively. Various reasons are observed for low usage in the university. Some of them are:

1. University does not have Local Area Network (LAN) facility in the campus. Only UGC-Infonet lab maintained by Central library giving few nodes to access the available e-resources to users on hourly payment basis.
2. Usage of the information related to social science and humanities subject areas is very low as compare to scientific and technical information, which is really a serious matter of concern for the decision and policy makers.
3. Lack of awareness among the research scholars and faculty members about UGC-Infonet facilities is also one of the major reasons for low usage of e-resources.
4. This is the transition period for the academic and research scholars in which information world is shifting from print to electronic information. Many of the users may not be comfortable to use e-resources. University is facing the same problem, most of its users are not well acquainted with use of computers and unable to access online resources.
5. Library is known as the heart of the institute to provide authentic, needed and speedy information to the users. But in absence of full-flashed librarian and in absence of trained library staff, library is lacking various necessary actions to motivate the users to use the e-resources.

**Suggestions**

1. Departmental libraries can play an important role to explore the e-resources exhaustively. HP University does not have departmental libraries but by establishing LAN, some nodes can be provided in the departments to facilitate the electronic access. Initially, trained professionals can be appointed to help the user to explore available e-
resources exhaustively and to motivate the users to use e-resources independently.

2. It is important to the library authority to orient or re-orient the user on the use of e-resources and the library facilities available to them. Library authority can depute some trained professionals to conduct orientation programs in the beginning of every academic session.

3. Awareness is important to explore the information and it should be given to all the academic departments of the university on regular basis with aim to address the issues like how to use, download and explore the e-resources for needed information.

4. Website of the university library is the major source to inform its users about day-to-day activities of the university, therefore, library web page should be capable to serve as a notice board for the latest development or services with regard to academic information. Addition and deletion of the information product/s can be highlighted properly in the list of available resources. In case of e-resources, user's help guides can be hosted on the website.

5. Being a monitoring and execution agency INFLIBNET should have to take care about the problems and information needs of the university. Regular updating of the usage report can be maintained and by evaluating the usage, low used resources can be tracked to take necessary actions to improve usage of resource well in time.

6. Library staff should be trained enough to make library users from literate to information literate by providing training about how to search and downloads the needed information from e-resources. INFLIBNET can also plan to give the advance training and orientation to some of the library staff members for utilizing the provided e-resources in proper way.

**Conclusion**

Free access to scholarly literature through UGC-Infonet Digital Library consortium is boosting status of Indian higher educational system. With the help of INFLIBNET, all the universities have to be geared up to meet the latest and authentic information needs of users. INFLIBNET aims to give new shape to the libraries with state-of-art technology. Under the program various quality literatures are being subscribed, based on the requirement and according to the potential of the university. This program is being evaluated in terms of usage and research output of the member universities, individually. Himachal Pradesh University is a single broad-spectrum university in the state, thus academicians and students have high expectations from this university. Therefore, university has to make a mechanism to ensure maximum use the available e-resources. Systematic and extensive utilization of available e-resources is essential to justify the initiative taken by UGC for the betterment of higher educational system in the country.

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The report can be seen at http://www.sl.universalservice.org/data/pdf/470i.pdf.

To know more about UGC, India, please visit http://www.ugc.ac.in.

Official Website of INFLIBNET Centre is http://www.inflibnet.ac.in