A Three Steps Strategy for Acquiring and Promoting E-resources at College Libraries in Purulia District (West Bengal): A Case Study

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Electronic resources are becoming increasingly important to libraries of all types and sizes. The paper discusses present situation of the e-resource availability at the degree college libraries of Purulia District, West Bengal. This paper addresses the acquisition of electronic information resources and its collection development policy to guide the librarians at College Libraries in the selection of electronic reference-resources. Instead of focusing on how well a given publication/e-resource fits into or supports the collection, the policy gives general guidance on the selection of electronic resources. The general collection development guidelines for electronic information resources include relevance and potential use of the information, redundancy of the information contained in the product, demand for the information, ease of use of the product, availability of the information to multiple users, stability of the coverage of the resource, longevity of the information, cost of the product, predictability of pricing, equipment needed to provide access to the information, technical support, and availability of the physical space needed to house and store the information or equipment. This paper is based on exhaustive survey of college libraries in Purulia District, West Bengal. It was found that a majority of college libraries do not subscribe to e-resources. A three step strategy is put forward to introduce e-resources at all college libraries in Purulia District, West Bengal. The paper also lists a few openly available e-resources and benefits of joining library consortia. In the end, the paper lists best possible draft policy for e-resource acquisition. A few suggestions are also put forward for its implementation in the near future.

Keywords: E-resources, E-publishing, Information Communication Technology (ICT), College Libraries, Acquisition Policy, Purulia District, Library Consortia, INFLIBNET, Infonet

1. Introduction

Over the last decade, developed college libraries in most of the states in India have been spending a large share of their budgets to acquire or gain access to electronic resources from publishers and vendors. Ten years ago, the user of a typical library would have found little more than a handful of the more prominent periodical indexes and abstracts— all in CD-ROM format. Today, user would find a daunting array of resources that might include hundreds of databases and thousands of electronic journals. Electronic resources have enabled libraries to improve services in a variety of ways. The major advantages of eresources (1). are:

- Technical support available electronically and via telephone
- Resource available 24/7

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- Remote access to authorized users
- Platform independent
- Stable and durable URLs for electronic journals
- Training/instruction alternatives for limited port resources
- > No limits to fair use of information (e.g. printing, emailing)
- Adequate system response (speed, downtimes, etc.)
- Assurance of easy and permanent access to archival electronic material

2. Scope and Limitations

The scope of the study is limited to survey of existing LIS infrastructure in 16 college libraries in Purulia District, in order to fulfill the academic needs of users. It focuses on the digital resources and services available in all college libraries in Purulia District, West Bengal.

Purulia District is located at the South West of West Bengal, which is situated in the border area of Jharkhand and West Bengal states. As per demographic survey of 2001, the total population of this district is 2,538,233. The literacy rates of males and females are 74.18% and 37.15% of the total population (2). Literacy percentage of this district is 56.14 % (excluding 0-6 year's population). The male literacy percentage is 74.18% and female literacy percentage is 37.15%. In rural and urban areas the literacy percentages are 53.82 and 75.96 respectively. The male literacy percentage has been increased from 62.17% in 1991 to 74.18% in 2001. The female literacy has been increased form 23.24% in 1991 to 37.15% in 2001. In case of rural areas, female literacy has been increased to 14.34% over 1991 and in urban areas it is 7.36% over 1991 (3).

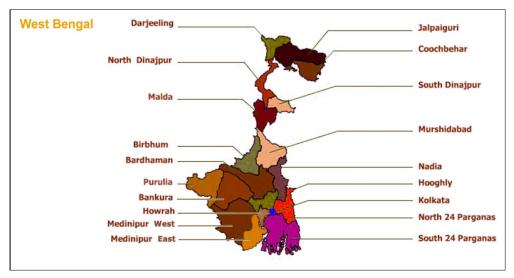


Figure 1. Map of West Bengal

Purulia District has 20 Blocks. At present District possesses 11 Degree colleges, one B.Ed. College (Purulia), one Polytechnic College (Purulia) and one Industrial Training Institute (Raghunathpur). There are total 16 Degree Colleges in Purulia District. One College is remaining for University affiliation. More or less each block has one college, except Bundwan and Santuri. The geographical location of the Colleges in the Purulia District is presented in the given map (4).

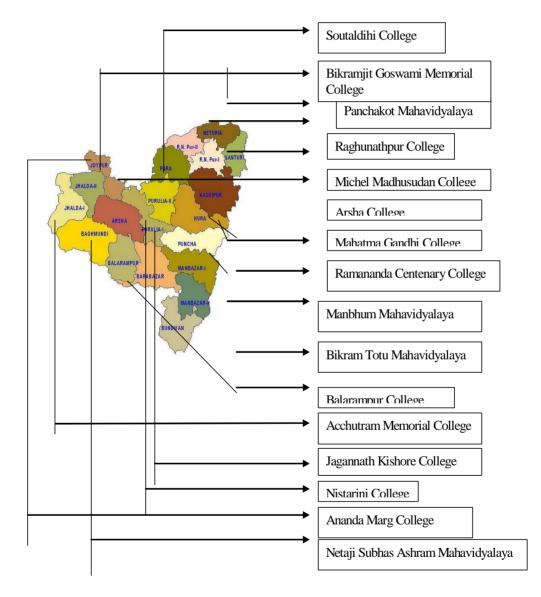


Figure 2. List of Colleges in Purulia District

3. Objectives of the Study

The objectives of the present study are:

- To assess the number of computers and other related infrastructure available at all the college libraries in Purulia District, West Bengal
- To find out the status of library automation in all the college libraries in Purulia District, West Bengal
- To know the adequacy of availability of library staff to manage the information resources
- To find out the availability of Internet facility at all the college libraries in Purulia District, West Bengal
- To suggest suitable suggestions and recommendations to improve the e-resource acquisition for the benefit of users.

4. Methodology

There are 16 degree college libraries of Purulia District, West Bengal. Keeping in view the objectives in mind, a questionnaire was prepared to collect data from the degree college libraries of Purulia District, West Bengal, India. The survey was followed by telephonic interviews with the senior library staff. This interview was undertaken in first half of 2009, spreading over 15 days. Then the data was analyzed and interpreted for the outcome and presented in the following paragraphs.

5. Findings of the Study

The actual status and e-resource availability in the existing degree college libraries of Purulia District, is shown in the given table. Despite several attempts no information was made available by four college librarians.

College Name	No. of	No. of	Library	Automation	No. of	No. of	Internet
	Computer	Compu	Software	of Library	Professiona	Non - Professionals	facility
	in Library	ters			ls Staff	Staff	
		in Office			Starr	Stall	
Acchutram	2	8	Local	Partly	Nil	2	Principal's
Memorial							Room
College							
Ananda	* * N .A .	* * N.A.	* * N . A .	* * N . A .	* * N .A .	* * N .A.	* * N .A .
Marga College							
Arsha college	* * N .A .	* * N.A.	* * N . A .	* * N . A .	* * N . A .	* * N .A.	* * N .A .
Balarampur	Nil	4	Nil	Nil	Nil	2	Nil
College							
Bikramjit	* * N .A .	* * N.A.	* * N . A .	* * N . A .	* * N . A .	* * N .A.	* * N .A .
Memorial							
College							

Table-1

Bikram Totu Memorial College	N il	2	N il	Nil	Nil	1 (Gr. D.)	N il
Jagannath Kishore College	2	8	Local	Partly(Only book database)	2 (part-time)	4	Individual Dept.
M ahatm a Gandhi College	3	5	Local	Partly(Only book database	1 Permanent	2 (part- time)	Principal's Room
M anbhum M ahavid yala ya	1	7	Local	Partly(Only book database	1 Permanent	2 (part- time)	Principal's Room
Michel Madhusudan College	N il	5	N il	Nil	1 (part-time)	2	Principal's Room
Netaji Subhas Ashram Mahavidyalaya	N il	3	N il	Nil	Nil	1 (permanent)	N il
Nistarini College	2	8	Local	Partly (Only book database	2 Permanent	3 (permanent)	Principal's Room
Panchakot Mahavidyalaya	1	6	N il	Nil	Nil	3 (permanent)	N il
Ragunathpur College	1	5	Local	Nil	1 (part-time)	3 (permanent)	Principal's Room
Ramananda Centenary College	1	7	Local	Nil	1 (part-time)	2 (permanen t)	Principal's Room
Soutaldihi College	* * N .A .	* * N .A .	* * N .A .	* * N . A .	* * N .A.	* * N .A .	* * N .A .

One can realize the real situation in the degree college libraries of Purulia District from the above table. Till now some college library have no provision to acquire e- resources.

6. E-Resources

The advances in networking and communication technology have made the information services available to the users on their desktop. Internet and its most used component WWW has turned into a biggest source of information with widest coverage and the fastest access. It is the most powerful tool for global communication and exchange of information.

"Electronic resources" refer to those materials that require computer access, whether through microcomputer, mainframe, or other types of computers, and that may either be locally mounted or accessed remotely via the Internet (5). This policy covers both free Internet resources and electronic resources purchased or licensed by the libraries from a commercial source, a non-profit organization, a professional organization or any external institution. Some of the common types are:

- Indexing and abstracting databases
- ➡ Full-text (aggregated) databases
- E-journals
- E-books
- **C** Reference databases (directories, dictionaries, encyclopedias, etc.)
- Numeric and statistical databases

Electronic resources are of increasing importance to faculty and students. With the rapidly growing body of electronic information, what is universally available must be considered in relation to what should be available college libraries in Purulia distt (WB). It is therefore clear that successful collection development, regardless of media, will reflect academic priorities already established at the college level. The libraries are committed for taking a leadership role in collaborating with academic departments in providing electronic resources to support instruction and research. The e-resources should be fairly used for academic purposes only.

Fair use principle states that use of copyrighted materials for purposes such as criticism, comment, news reporting, teaching, scholarship, or research, is not an infringement of copyright as described in the Digital Millennium Copyright Act (6).

7. Management of E-Resources

The management of digital resources has never been an easy process. The rapid expansion of digital resources compounded with changing formats and sales models in the short life of Web-based delivery systems has particularly made the management process more complex. Further, from the very beginning, details relating to purchasing, licenses, access, and usage have been kept in ad hoc systems built by inhouse teams or by the individual librarian needing to organize her workflow.

There are now several vendors providing more or less integrated ERMS services. The most dominant vendors of these systems are Ex Libris, Innovative Interfaces Inc., and Serials Solutions. There are also community-developed projects such as Colorado Alliance's Gold Rush systems as well as open source systems, such as HERMES at Johns Hopkins University. In addition, there are likely dozens (or more) homegrown systems that librarians are using to address complex management details (7). E-resources Management and Search Solution (ERMSS) developed by Total Library Solutions Pvt Ltd is a customized e-resources management and search solution which can be easily integrated with the existing web portal of the library. This solution provides the linking of all the e-resources subscribed by the library. ERMSS is useful for the library member students, researcher and all knowledge seekers. They can easily view, access and search within all the e-resources contents with the same interface. The main software system attributes are **reliability, availability, security and portability.**

8. Three Step Strategy for E-Resource Acquisition

8.1 Strategy 1: To Subscribe to Open E-Resources Available Freely in Public Domain

8.1.1 E Books

- http:// www.free-ebooks.net/
- http:// www.ebookdirectory.com/
- http:// www.getfreeebooks.com/

- http:// www.e-book.com.au/freebooks.htm
- http:// www.planetpdf.com/free_pdf_ebooks.asp
- http:// www.gutenberg.org/
- http:// www.bestebooksworld.com/
- http:// www.manybooks.net/
- http:// www.witguides.com/
- http:// www.floodle.net/
- http:// www.onlinefreeebooks.net/engineering-ebooks/
- http:// www.'freecomputerbooks.com/
- http:// www.onlinecomputerbooks.com/free-engineering-books.php
- http:// www.freebookzone.com/
- http:// www.freetechbooks.com/
- http:// www.acrobatplanet.com/
- http:// www.bin95.com/ebooks/free_ebooks.htm
- http://www.freebookcentre.net/.../Free-Mathematics-Books-Download.html
- http://www.e-booksdirectory.com/mathematics.php
- http:// www.xpmath.com/ebooks/math_ebooks.php

8.1.2 Free E Journals (Free e-journals available on-line)

Indian Journals

Current Science	http://www.ias.ac.in/currsci/index.html
Journal of Chemical Sciences	http://www.ias.ac.in/chemsci/index.html
Proceedings-Mathematical Sciences	http://www.ias.ac.in/mathsci/index.html
Journal of Earth Systems Sciences	http://www.ias.ac.in/jessci/index_body.html
Sadhana	http://www.ias.ac.in/sadhana/index.html
Pramana -Jrl of Physics	http://www.ias.ac.in/pramana/index.html
Journal of Bioscience	http://www.ias.ac.in/jbiosci/index/html
Bulletin of Materials Science	http://www.ias.ac.in/matersci/index/html
Journal of Astrophysics and Astronomy	http://www.ac.in/jaa/index/html
Journal of Genetics	http://www.ias.ac.in/jgenet/index/html
Resonance	http://www.ias.ac.in/resonance/index.html
Journal of the Indian Institute of Science	http://journal.library.iisc.ernet.in/
Indian Journal of Pure and Applied Mathematics	http://insa.ac.in/html/home.asp
Proceedings of the Indian National Science Academy:	http://insa.ac.in/html/home.asp
Indian Journal of Historical Science	http://insa.ac.in/html/home.asp

Down To Earth	http://www.downtoearth.org.in
Employment News	http://www.employmentnews.gov.in

8.1.3 Free Databases

Open J-Gate	http:// www.openjgate.com		
DOAJ	http://www.doaj.org		
Indian Standards (BIS)	http://pearl.nitt.edu/BIS		
NPTEL	http://books.nitt.edu/nptel/index.php		
MIT Open Courseware	http://ocw.mit.edu/OcwWeb/web/home/home/ index.htm		

8.2 Strategy 2: To Become a Part of Existing Library Consortia

8.2.1 Library Consortia

Library consortia have come up in many countries of the world. In India too several consortia have been developed such as Forum for Resource Sharing in Astronomy and Astrophysics (FORSA), Indian National Digital Library in Science & Technology (INDEST), INFONET project of UGC, Health Sciences Library & Information Network (HELINET), CSIR E-Journals Consortium, Department of Atomic Energy Libraries Consortium, DRDO Consortium, ICMR Consortium and Indian Institutes of Management Library Consortium. Besides, efforts are on to develop consortia by ICAR, ICSSR and other government agencies. However, if we look into their functioning, it is clear that most of them have been set up with the aim of procuring e-journals at competitive prices and sometimes sharing the e-journal resources. No consortium aims at sharing other resources, especially print resources, which still form the major part of Indian libraries (8).

8.2.2 UGC-INFONET Digital Library Consortium

The UGC-Infonet Digital Library Consortium was formally launched in December, 2003 by Honourable Dr. A P J Abdul Kalam, the President of India soon after providing the Internet connectivity to the universities in the year 2003 under the UGC-Infonet programme. The Consortium proved to be a recipe to university libraries which have been discontinuing subscription of scholarly journals because of "Se-rials Crisis". The term "serials crisis" refers to exponential and continuing increase in subscription cost of scholarly journals. The crisis is a result of rise in cost of journals much faster than the rate of inflation, increase in number of journals and the paucity of funds available to the libraries

The Consortium provides current as well as archival access to more than 5000 core and peer-reviewed journals and nine bibliographic databases from 23 publishers and aggregators in different disciplines. The programme has been implemented in phased manner. In the first phase that began in 2004, access to e-resources was provided to 50 universities who had Internet connectivity under the UGC-Infonet Connectivity programme of the UGC. In the second phase, 50 more universities were added to the programme in the year 2005. It has now extended to 155 out of 171 that come under the purview of UGC, have been provided differential access to subscribed e-resources. These e-resources covers almost all subject disciplines including arts, humanities, social sciences, physical sciences, chemical Sciences, life sciences, computer sciences, mathematics and statistics, etc in three different phases. The programme is wholly funded by the UGC and executed by the INFLIBNET (Information and Library Network) Centre, Ahmedabad.

The benefit of subscription to e-resources would also be extended to the colleges, to begin with the College for Potential with Excellence (CPE). The Consortium also has to launched its "Associate Member-ship Programme" wherein private universities and other research organizations would be welcomed to join the Consortium for selected e-resources (9). The list of e-resources available through this consortium can be found on the INFLIBNET's website.

List of Government/Government-aided Institutions provisionally short-listed by the AICTE for providing access to electronic resources through the INDEST consortium:

- S Bengal Engineering College, Shibpore, Howrah, West Bengal
- S Jadavpur University, Jadavpur, Kolkata, West Bengal
- Calcutta University, Kolkata, West Bengal
- S Burdwan University, Burdwan, West Bengal

8.3. Strategy 3: To Recruit an Electronic Resources Acquisitions Librarian for Independent Subscription

Electronic resources acquisitions librarian position offers an opportunity for an energetic, service oriented librarian with strong communications skills to work in a collegial, team environment managing the library's subscription based electronic resources.

Responsibilities of Electronic Resources Acquisitions Librarian

 establishes professional relationships and communications with vendors, publishers and consortia, researching and assessing products, offers, and services

- negotiates license agreements and costs in coordination with University Purchasing and Legal Counsel to obtain the best possible terms and conditions
- provides electronic resource acquisition and subscription renewal, establishing trials and pilots when appropriate
- troubleshoots access, maintenance, and other performance issues related to electronic resources
- assists in maintenance of link resolver software and the ERM, tracking new software features and upgrades
- designs cost efficient, effective workflows, documenting them in procedures
- prepares management reports in support of collection development needs
- actively communicates licensing and electronic resources best practices with library departments to promote mutual understanding of issues related to electronic resources procurement, access, and workflows (10).

The e-resource collection development policy should:

- Supports undergraduate curriculum and faculty research
- Balance of content
- Benefits the greatest number of users
- Online content is the same as print equivalent
- Usage statistics correspond to current standards

9. Selection Criteria for the Acquisition of E-Resources

The library aims to provide a high quality, scholarly and relevant collection to support the teaching, learning and research needs of the University. The selection criteria for e-resources acquisition as given by Deakin University Library (11) is reproduced for the kind reference of all the library professionals. The following general criteria are used when considering the acquisition of any information resource. Additional selection criteria for the acquisition of electronic information resources are listed separately beneath:

- Relevance
- Quality
- Currency
- Format
- Duplication
- Price and cost effectiveness

Additional selection criteria for the acquisition of electronic resources

9.1 Content

The information should be:

- comprehensive with no content excluded or embargoed
- updated regularly
- stable not subject to volatile changes or withdrawals

9.2 Technical requirements

The product should:

- preferably be web based
- be able to be networked
- use standard technologies and readily available plug-ins
- be IP or proxy authenticated rather than password
- be able to monitor and restrict concurrent usage
- be technically stable with few 'bugs'
- provide stable direct linking to databases, journal titles, issues and individual articles
- not involve use of persistent cookies
- not require difficult set up or security requirements

9.3 Functionality/Usability

The product should:

- be easy to use and intuitive.
- provide guidance through menus, help screens and tutorials
- provide screen designs and layout aids that facilitate usage
- provide searching and browsing that is 'user friendly', accommodates both basic and sophisticated searching and allows limiting to full text only
- provide useful help screens and tutorials
- have an acceptable response time

9.4 Licensing

The license should:

- allow institutional wide access and remote user access
- **a** allow printing, downloading, storing, emailing, caching and interlibrary loans

- allow copies of individual articles to be included in Deakin course packs (print and electronic) or stored for e-readings or e-reserve
- be compliant with disability legislation
- protect user confidentiality and privacy
- Provide seamless authentication. IP recognition is preferred
- be readily accessible through the University's proxy cache
- have satisfactory warranty/indemnification clauses
- have satisfactory conditions of renewal/cancellation
- ⇒ preferably allow walk-in and other user access such as alumni/MIBT
- preferably allow archival access and perpetual access

9.5 Archiving/Ownership

Electronic resources can be owned in perpetuity or leased. Although ownership is preferable there will be instances where only lease is available or where ownership must be purchased separately. If archival ownership is available it is preferred that archives are stored on the publisher or third party servers rather than provided in CDROM format.

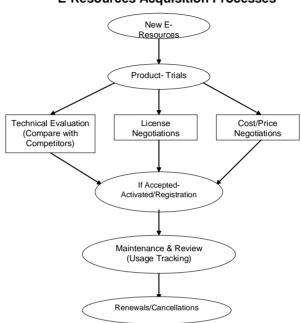
9.6 Publisher/Vendor Services

The vendor should:

- be reliable and stable.
- provide adequate support materials and training should be provided
- provide a trial period should be available on request for evaluation
- resolve access problems promptly
- provide satisfactory renewal and invoicing services
- provide usage statistics on a regular basis
- provide title lists, stating coverage of titles including embargo periods
- provide regular updates of any database changes/additions/deletions

9.7 Price and Cost Effectiveness

- The Library prefers concurrent user pricing over pricing based on site or student numbers
- The cost of content and platform/access fees should be clearly distinguished
- The pricing model for databases/packages should be clearly explained
- Titles should preferably be able to be cancelled or added individually



E-Resources Acquisition Processes

9.8 Exclusivity

If it is determined that the resource contains information that is not available elsewhere, and is considered essential, the resource may be acquired despite it's failing some criteria. A risk analysis should be conducted to decide whether the resource will be purchased. Some failures carry greater risk. In this instance, the decision to acquire will be at the discretion of the University Librarian.

9.9 Training and Support for Staff and Information Users

With the number of e- journals being published and the variety of different interfaces, more sophisticated searching and retrieving skills are necessary. If library staff is provided with adequate training and support in order to be aware of new development of technology, more flexible and suitable services can then be available for users. The information provider role of libraries remains important but the delivery and type of services might have to adapt to the changing technology and users' needs.

10. Conclusion

The goal of the libraries is to provide an effective combination of print, non-print and electronic resources, and the integration of the use of these-resources in support of teaching, learning and research

at the University. Electronic resources, however, pose challenges not encountered with the acquisitions of traditional library materials, such as access, interface, and technical support and licensing. The libraries therefore need to formulate a separate electronic resources collection development policy to address these issues.

11. Further Suggestions

Based on the detailed study and its outcome, the following suggestions are recommended:

- Concern institutional authority should be positive minded for up gradation of the library.
- The College Governing Body should look into the availability of computer lab with internet facility, EDUSAT and INFONET in the library.
- Library staffs should be involved for e-resource acquisition and its promotion.
- There must be a provision for proper evaluation of the users feedback
- Authorities must allocate suitable/adequate grant for library modernization.
- Authorities must establish Internet search facility in library for the esteem users
- Librarians must organize free full text online search facility from various publishers
- Library staff must increase awareness of e-resources available in library among users through Intranet and Internet
- To introduce Open Access ("Free to Read" and download) full-text books and journal sites like PubMed Central, DOAJ, etc to users.
- To regularly organize user awareness and training programmes
- With the increasing influx of electronic resources into libraries the user orientation programmes should be implemented
- More computer terminals should be installed in libraries for facilitating easy and quicker access
- Budgetary resources should be increased gradually for strengthening digital resources in libraries.
- Finally, the library should conduct regular evaluations and assessments to determine the effectiveness of the digital resources in meeting information needs of the users.

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