Managing Editor
Mr. Ramesha Naik G S

Editor-in-chief
Mr. Lokesha Naik
Librarian, GFGC, Huliyar, Tumkur, Karnataka

Associate Editors

Mr. Narasappa K C
Librarian, G. F. G. College
Bhatkal, Karnataka.

Mr. Sharanabasappa
Librarian, G.F.G. College
Badami, Karnataka.

Editorial Board

Dr. Ramesha : Professor, D.L.I.Sc Bangalore University, Bangalore, KN
Dr. Veerabasaviah M : Professor, D.L.I.Sc Bangalore University, Bangalore, KN
Dr. JayaramaNaik K G : Associate Professor, D.L.I.Sc Bangalore University, Bangalore
Dr. Kishor Kumuar : University Asst. Librarian, Alagappa University Karaikudi, T N
Dr. Dharani Kumar : Asst. Professor, D.L.I.Sc Kuvempu University, Shivamogga, K N
Dr. Niranjan Singh : Librarian, Central Institute of Hindi, Agra, U P.
Dr. Anitha S Rai : Chief Librarian, New Horizon College of Engineering, Bangalore.
Mr. DongeHolde : International Community School, Addis Ababa, Ethiopia.
Mr. Keshava Murthy K C : Chief Librarian, Jayadeva Institute of Cardiovascular Sciences and Research, Bangalore.
# Table of Contents

1. Role of E-Resources in Growth and Development of Higher Education in India.  
   **Narasappa K.C and Dr. P Dharani Kumar**  
   02-07

2. Awareness of Information Literacy among Undergraduate Students of Government Degree College, Huliyar, Karnataka: A Study.  
   **Lokeshanaik and Dr. Kishor Kumar**  
   08-14

3. Internet and Electronic resources usage at Bangalore Medical college and Research Institute Library, Bangalore: A Critical Study.  
   **G S Ramesh Naik and Lokesha Naik**  
   15-20

4. Electronic Information Resources In J R D Tata Memorial Library IISc: A Glance  
   **Umesh M and Dr. Sujatha H.R**  
   21-29

5. Digital Information literacy skills a survey among users of City Central Library, Belgaum  
   **Sharanabasappa and Dr. Anitha S Rai**  
   30-37

6. Impact of Information Technology and role of libraries in 21 Century  
   **Venkatesha**  
   38-41
ROLE OF E-RESOURCES IN GROWTH AND DEVELOPMENT OF HIGHER EDUCATION IN INDIA

Narasappa K.C
Librarian
Govt., First Grade College, Bhatkal,
Uttara Kannada(D),
narasappakc25@gmail.com

Dr. P Dharani Kumar
Assistant Professor
Dept. of Library and information Science  Kuvempu University,
Shivmogga, Karnataka
dr.dharanikumarp@gmail.com

Abstract
There is a large quantity of subscribed e-journals which are containing quality rich information in technical institutions libraries. Consortia based access of e-resource has been provided in most of the Indian libraries of higher education and research institutions during last decade. The library environment is currently undergoing a rapid and dynamic revolution leading to new generation of libraries with the emphasis on e-resources. UGC-INFONET and INDEST consortium are two major initiatives that have come to the rescue of academic libraries so that they can cater to the needs of academic depending upon them. This paper briefly highlighted consortia for effective use of e-resources in Indian libraries, advantages, disadvantages of e-journals consortia.

Keywords: Library Consortia, High education, E-resources

1. Introduction
In the modern age of information technology and internet knowledge is most powerful system in the world. Our Indian higher education system is very large in the world. The development of internet, e-publishing industry has most powerful number of e-resource was available through the internet. The Internet and electronic publishing have changed the role of libraries all over the world in providing access of e-resources to the users. The launch of UGC –INFONET e-Journals consortium in 2004 has changed the entire situation and enriched the resources of university libraries. University libraries in India have access to large number of scholarly journals from major national and international e-resource are subscription of the libraries. The UGC was formally established only in November 1956 as a statutory body of the Government of India through as Act of Parliament for the coordination and maintenance of standards of University education in India. Electronic resources are clearly changing the whole scenario of how the publishers, authors, librarians and readers are managing the information.
2. Higher Education in India

The Educational System of India has a large higher education system. The growth rate of educational institutions in India was very slow before independence in 1947. Today there are a total of 665 universities, including 45 Central universities, 322 State universities, 128 deemed universities, 192 Private universities along with 35829 colleges that provide education in all disciplines. The number of teachers is 3.1 million, and 7.8 million students are enrolled in higher education.

In last three years UGC has taken certain steps to improve the Network infrastructure and access to scholarly journals to all universities which is described in later part of this paper. Still we have long way to go and extend these facilities to remaining universities and colleges which needs additional grants. For XI plan, INFLIBNET has prepared comprehensive document to cover networking facility to all the universities and facilitate scholarly journals to entire universities and colleges

3. Definition of E-Resources

E-resources can be full text database that allows you to for relevant articles in your subject area for a book or journals that has been made available in electronic format that are accessed on electronic device such as a mobile phone, computer, web pages, etc. These are published resources in electronic versions/format such as encyclopedias, pamphlets, e-books, e-journals, databases etc.

4. Types of e-resources

E-Resources major types are:
- Online e-resources, which may be include
- E-journals(Full text & bibliographic)
- E-books
- On line Databases
- Web sites
- Other electronic e- resources may be include
- CD Rom
- Diskettes
- Other portable computer databases

5. Effective use of e-resources

E-journals have been increased in Indian libraries providing access of e-resources on the basis of subject wise collection of publishers through consortia. Some of the publishers like INDEST-AICTE Consortium, Springer, ASME, Elsevier, Emerald, McGraw Hill, Taylor, Wiley and other world renowned publishers are famous for e-journals and e-books publishing work. These may be delivered on CD ROM, on tape, via internet and soon. Over the past few years a numbers of techniques and related standards have been developed which allow documents to be created and distributed in electronic form. Due to the applications of ICT users internet and to provide the
access to books, current and previous issues of journals issues publishers have begun expanding their business market for e-resources and can serve better and faster compared to the print mode.

6. Library Consortia in India

Changes are the law of nature and as it is very important in the present library culture libraries are not untouched by the change which is affecting almost every activity in the library. Library Consortia is the sharing of resources among the participant’s libraries. Presently most of the Indian libraries are covered in different consortiums to provide the access of e-resources to their users. INDEST-AICTE and UGC-INFONET Digital Library Consortium are two large consortium covering most of the Universities and technical education institution in India.

6.1. UGC-INFONET Digital Library

The university Grant Commission was established by an act of Parliament in 1956. It is an autonomous advisory organization for the promotion and co-ordination of university education and for the maintenance of standards. UGC give direction for the development higher education in India. It was launched in the year 2004 by UGC through INFLIBNET for providing access of e-resource to the university and academic libraries in different phases. All Universities covered under section 128 of the UGC Act, 1956 are eligibility to get access to e-resource through the Consortium.

The UGC has played an important role in the improvement of University and College libraries. Modern Indian higher education is passing through the phase of knowledge revolution. UGC realizing the value of the library and its role in higher education accepted most of the recommendation of the several committees and commissions. UGC are providing financial assistance for collection development, acquisition of books, periodicals and e-resource.

6.2. INDEST-AICTE

The “Indian National Digital Library in Engineering Sciences and Technology (INDEST) Consortium” was set up in 2003 by the Ministry of Human Resource Development on the recommendation of an Expert Group appointed by the Ministry under the chairmanship of Prof. N Balakrishnan. The IIT Delhi has been designated as the Consortium Headquarters to coordinate its activities. The Consortium was renamed as INDEST-AICTE Consortium in December 2005 with the AICTE playing a pivotal role in enrolling its approved engineering colleges and institutions as members of the Consortium for selected e-resources at much lower rates of subscription. The Consortium enrolls engineering and technological institutions as its members and subscribe to electronic resources for them at discounted rates of subscription and favorable terms and conditions. The Ministry provides funds required for subscription to electronic resources for 62 centrally-funded Government institutions including major
technological institutions are IITs, IISc Bangalore, NITs, ISM, IIITs, IIMs, NITTR's and few other institutions that are considered as core members of the Consortium. The INDEST-AICTE Consortium is the most ambitious initiative taken so far in the country. The consortium subscribes to over 6500 electronic journals from a number of publishers and aggregators.

6.3 INFLIBNET

Information and Library network Center is a integrated and information system created in 1991 to support teaching and research in higher education. It is a National Programme initiated by the UGC in 1991 with its Head Quarters at Gujarat University Campus, Ahmadabad. The information and library network center will network 123 Universities, 23 institutions, 6100 Colleges, and 200 Libraries affiliated to other organizations through UGC. INFLIBNET is a major player in promoting scholarly communication among academicians and research activities in India. INFLIBNET has developed “SOUL” is software for automation in –house functions. SOUL is installed at university libraries and has developed five utility software packages for participating universities. INFLIBNET has many services and activities are run for the development of Indian higher education to the each and every people of India.

6.4 Council of Scientific and Industrial Research (CSIR)

Council of Scientific and Industrial Research (CSIR) has also formed a consortium with National Institute of Science, Communication and Information Resources (NISCAIR) as the nodal agency. To augment CSIR research and development activities, NISCAIR implemented an agency for access to electronic Journals. On behalf of CSIR, it has entered into an agreement with Elsevier to access its 1500 e-journals and intends to subscribe to more CSIR consortium has extended its access to other providers of e-journals. CSIR India a premier national R&D organization is among the world’s largest publicly funded R&D Organization.

6.5 HELINET (Health Sciences Library & Information Network)

A Health Science Library & Information Network hosted by Rajiv Gandhi University of Health Sciences, Bangalore. HELINET is the first medical library consortium launched in the country with an objective of networking the libraries affiliated to the University to promote resource sharing, especially with reference to international medical journal and database. The health science education in India and the status of information technology and internet access infrastructure in the health science colleges. The digital library resources and activity at RGUHS are presented in detail. The formation and role of HELINET is the first resources sharing network and e-journal consortium in the medical education sectors. HELINET adopted an indigenously developed and locally available e-journals gateway for its need. J-Gate enables online access to all the consortia members for the e-journals.
subscribed by the consortia. It further enables shared access to printed journals through its customized database service.

7. **Open Access Journals System**
   Open Journal System is a Journal management and publishing system that has been developed by the Public Knowledge Project through its federally funded efforts to expand and improve access to research. Compressive indexing, content part of the global system, OJS is open source software made freely available to journals World Wide for the purpose of making open access publishing a viable option for more journals as open access can increase a journals readership as well as its contribution to the public good on a global scale.

8. **Google Reader**
   It is web-based aggregator developed by Google. It is used for reading and managing RSS feeds. Users are required g-mail accounting to use this free of cost services. User can subscribe RSS feeds from different e-resources in the Google Reader. Users need to click at subscribe button in the Google Reader than enter the URL of RSS feed. It will provide the facility to change the name of tag, create new folder, change folder etc. users can also unsubscribe the RSS feeds. Feeds from other feed reader can also be important in the Google Reader. Users send the feeds in social networking websites like Face book, Twitter.

9. **Advantages of library Consortia**
   The advantages for libraries if they buy their resource through consortia can include.
   - Consortia based subscription to electronic resources provides access to wider number of electronic resources at substantially lower cost.
   - Shared access to information sources to libraries.
   - Facilities to build up digital libraries
   - Optimum utilization of Fund
   - Ability to achieve goals
   - Smaller libraries can benefit
   - Helpful to provide better library services like CAS and SDI
   - Possible ability to attract foreign investment
   - The consortium have been offered better terms of licenses for use, archival access and preservation of subscribed electronic resources, which would not have been possible for any single institution and e-resources open any time.

10. **Disadvantages of library Consortia**
    Some of the important disadvantages of the library consortium are as below
    - Absence of a printed copy of journals.
    - Confusion for libraries, vendors and patrons.
    - Unreliable telecommunication links and insufficient bandwidth.
Copyright problems.
Lack of archiving and back files availability.
Duplication of effort.
Reduced buying power.
Users are not accepting e-journals as per with the printed journals.
Internet Access id necessary.
Required training of staffs in handling electronic documents.

11. Conclusion

Library consortia have really understood that the subscription of cost effective and also avoids redundant expenses and duplicate subscriptions. Consortia purchasing projects have become a basic tool that expand collections and support co-operative technological development for libraries. The effort of UGC-INFONET and INDEST-AICTE consortium are appreciable and will definitely strengthen higher education system in India free and highly subscribed access to scholarly e-resources will help educational institutions in fulfill their mission in to reality. So it is essential that every user should be oriented from the latest technologies to maximize use of e-resources in minimum efforts.

Reference:

4. UGC-Infonet[ a network for Indian Universities]: user guidelines, New Delhi: ERNET, 2003, p 1-100.
5. http://web.inflibnet.ac.in/info/ugcinfonet.jsp

*****
AWARENESS OF INFORMATION LITERACY AMONG UG STUDENTS OF GOVERNMENT DEGREE COLLEGE, HULIYAR, KARNATAKA; A STUDY

Lokesha Naik,
Librarian
BMS Govt., First Grade College,
Huliyar, Tumkur District

Dr. Kishor Kumar
University Asst. Librarian
Alagappa University, Karaikudi
Tamilnadu

Abstract:
The study investigates to find out the awareness of Information Literacy concept among undergraduate students of Government Degree College, Huliyar and emphasizes the relevance of information literacy programmes in a college library setup for better usage of resources.

Keywords: Information literacy, college library, undergraduate students.

Introduction:
The library is a dynamic institution providing access to digital print information and fostering the lifelong learning skills essential for health and human services professional however, in a world of unprecedented increase of information no library can afford to acquire all the materials necessary to meet all the needs of its users. The high rate of inflation of scientific materials and the trend towards expensive electronic information storage and retrieval; system have further placed libraries in a difficult financial position. The library has embraced new information technologies in order to serve its client etc., in the most efficient and cost effectively possible.

Information Literacy
Information literate people are those who have learned how to learn. They know how to learn because they know how information is organized, how to find it, how to use information in such a way that others can learn from them. Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed, and assume greater control over their own learning.
• Literacy meanings
  – Able to read and write
  – Literacy is deliberately taught and consciously and deliberately learned
  – ability to read and write impacts considerably on a person’s potential to communicate and learn
• Information literacy defined...
  – “the ability to access and evaluate information effectively for problem solving and decision making”
  – Information literate people know how to be lifelong learners in an information society.
  – They recognize when information is needed and have the ability to locate, evaluate and use effectively the information needed.

Methodology:
The present study is based on the survey method using structured questionnaire and set the scope of the present study limited to the awareness of information literacy concept among undergraduate students of government Degree College, Huliyartumkur dist. The questionnaire has been devised keeping in view the objectives of the study. The questionnaire is divided into two parts, part 1 deals with background information and part deals with information literary practices and characteristics of the study population.

Analysis and Interpretation of data
Based on the data collected from eighty nine respondents an attempt has been made to analysis and interpret the data in terms of awareness of IL concept among undergraduate students.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>43</td>
<td>48.32</td>
</tr>
<tr>
<td>Female</td>
<td>46</td>
<td>51.68</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table-1 Gender
In this table majority of the respondents are female 51%(N-46) where in 48% (43) are males.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-20</td>
<td>58</td>
<td>65.18</td>
</tr>
<tr>
<td>21-22</td>
<td>29</td>
<td>32.58</td>
</tr>
<tr>
<td>23 and above</td>
<td>2</td>
<td>2.24</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table -2 Ages
Table-2 indicates the age of the respondents which is grouped in three stages i.e., 18-20 years, 21-22 years and 23 and above. Sixty five percent (58) of the study population is between the age group of 18-20 years, 33% (29) from 21-22 years and only 2% (2) belongs to the age group 23 and above.
Table-3 Email Account

It is found that 60% (54) of the population don’t give an email account whereas 39% (35) of the respondents have their email accounts. Hence it is clear that maximum number of the study population is no aware of internet and its use and facilities.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>35</td>
<td>39.33</td>
</tr>
<tr>
<td>No</td>
<td>24</td>
<td>60.67</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table – 4 use of WWW

Table no -4 indicates that 51%(46) of the study population uses www and remaining 48%(43) are not aware of the concept www.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>46</td>
<td>51.68</td>
</tr>
<tr>
<td>No</td>
<td>43</td>
<td>48.32</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table -5 Full text articles

This table indicates 65% (58) of respondents are not using the full text articles whereas 35%(31) are aware of and using the full text articles.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>50</td>
<td>56.17</td>
</tr>
<tr>
<td>No</td>
<td>39</td>
<td>43.83</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table-6 experience of computer course

Question was asked to the respondents whether they had any computer courses or not it was found that 56%(50) of the students have the experience to computer courses and remaining 43%(39) have not received any computer course hence maximum number of students received the computer course.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Read complex documents</td>
<td>5</td>
<td>5.62</td>
</tr>
<tr>
<td>B Locate, evaluate and use information effectively</td>
<td>10</td>
<td>11.23</td>
</tr>
<tr>
<td>C Search the free web for information</td>
<td>30</td>
<td>33.71</td>
</tr>
<tr>
<td>D Summarize information you read</td>
<td>5</td>
<td>5.62</td>
</tr>
<tr>
<td>E Don’t know</td>
<td>39</td>
<td>43.82</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table – 7 IL Describes as
Table – 7 IL Describes as question was asked to describe IL. Forty three percent (39) of the population cannot describe what the IL is 33%(30) says it is searching the fee web for information, 11% (10) describes as locating, evaluating and use of information, whereas 5%(5) describes as it is reading complex documents and summarizing information which they read.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Conomic</td>
<td>64</td>
<td>71.92</td>
</tr>
<tr>
<td>B Ec*</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C Economis*</td>
<td>15</td>
<td>16.85</td>
</tr>
<tr>
<td>D Eco*</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E In reference book</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>F Don’t know</td>
<td>10</td>
<td>11.23%</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table – 8 best way to truncate the word ECONOMICS

Question was asked to the students that what is the best way to truncate ECONOMICS in order to get the variant words. It is found that 72% (64) says Economic 17% (15) indicates economic, whereas 11% (10) of the respondents not aware of how to truncate ECONOMICS. The term Ec*, Eco* and reference.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Publishes articles of internet to a non-academic audience</td>
<td>59</td>
<td>66.29</td>
</tr>
<tr>
<td>B Normally includes advertisements</td>
<td>12</td>
<td>13.48</td>
</tr>
<tr>
<td>C May be published weekly, monthly</td>
<td>18</td>
<td>20.23</td>
</tr>
<tr>
<td>D All the above</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E Don’t know</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table no 9 describing a magazine

This table shows the respondents awareness of magazine and its publications. Sixty six percent (59) of respondents indicate that a magazine published articles for a non-academic audience, 14% (12) indicates it normally includes advertisements and 20% (18) of respondents have the opinion that magazine mat published weekly, monthly.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Newsgroups</td>
<td>39</td>
<td>43.83</td>
</tr>
<tr>
<td>B Encyclopedia</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C Book</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>D video</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E Don’t know</td>
<td>50</td>
<td>56.17</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>
Table No 10 Publications such as magazines and journals are called. Table No 10 Publications such as magazines and journals are called here the respondents have to answer the question about the publication such as magazines and journals are called. Fifty six percent (50) of the population is not aware about publications whereas 44% (39) of the respondents indicates it is newsgroups.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Journal article</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B Encyclopedia</td>
<td>10</td>
<td>11.24</td>
</tr>
<tr>
<td>C Book</td>
<td>35</td>
<td>39.32</td>
</tr>
<tr>
<td>D Video</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E Don’t know</td>
<td>44</td>
<td>49.44</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table no 11 best places for looking broad introduction to topic
Here the question was asked if a student look for a broad introduction of a topic were should they consult for. It is found that 50% (44) indicate non awareness 40% (35) consult to books and remaining 12% (10) consult encyclopedias.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Journals</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>B Newspaper articles</td>
<td>42</td>
<td>47.19</td>
</tr>
<tr>
<td>C Book</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>D Video</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>E Don’t know</td>
<td>47</td>
<td>52.81</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table no 12 Information about something happened last month
Question was asked that if they need information about what happened last month where they should look for? Fifty three percent (47) they are not aware of where as remaining 47% (42) referring to newspaper articles.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author</td>
<td>39</td>
<td>43.82</td>
</tr>
<tr>
<td>ISBN</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Title</td>
<td>20</td>
<td>22.47</td>
</tr>
<tr>
<td>Call no</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Don’t know</td>
<td>30</td>
<td>33.71</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table-13 Arrangement of books
Here indicates the arrangement of books in an academic library. Forty four percent (39) of respondents indicates the according to author, 23% (20) indicates to title and 34% (30) are not aware about the arrangement.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A The number stored used to identify the book</td>
<td>16</td>
<td>17.97</td>
</tr>
<tr>
<td>B used to locate the book on the library shelves</td>
<td>5</td>
<td>5.63</td>
</tr>
<tr>
<td>C The phone number of the author</td>
<td>45</td>
<td>50.56</td>
</tr>
<tr>
<td>D Allows you to order the book online</td>
<td>3</td>
<td>3.37</td>
</tr>
<tr>
<td>E Don’t know</td>
<td>20</td>
<td>22.47</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 14 call no., of books is
Here question has asked to the students that what a calla number is. Fifty one percent (45) indicates it is a phone number of the author 18% (N= indicates a call number is the number store use to identify the book 6% (5) used to locate the book on the library shelves, and 4% (3) allows you to order the book online.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Only public access content</td>
<td>12</td>
<td>13.48</td>
</tr>
<tr>
<td>B Online public access catalogue</td>
<td>10</td>
<td>11.24</td>
</tr>
<tr>
<td>C Offering public allowed content</td>
<td>17</td>
<td>19.10</td>
</tr>
<tr>
<td>D Original property available</td>
<td>50</td>
<td>56.18</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 15 OPAC stands for
This table shows what is meant by OPAC fifty six percent (50) indicates original property available 19% (17) offering public allowed content 14% (12) indicates only public Access content, and remaining 12% (10) indicates OPAC stands for online public access catalogue.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Far more reliable than books and magazines</td>
<td>31</td>
<td>34.83</td>
</tr>
<tr>
<td>B Factual because the internet is constantly monitored by world educational organizations</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>C Required by law to be accurate, timely and appropriate.</td>
<td>48</td>
<td>53.94</td>
</tr>
<tr>
<td>D Comes from many varied sources such as business, the government, or private citizens</td>
<td>48</td>
<td>53.94</td>
</tr>
<tr>
<td>E Don’t know</td>
<td>10</td>
<td>11.23</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

Table no 16 finding information on internet
This table shows that 54% (48) of the respondents indicates that the information available on internet comes from many varied sources such as business, the private, government or private citizens 35% (31) is more reliable than books and magazines where as 12% (10) of the respondents are not aware of the information available on internet.
Summary and findings:

- It is found that majority of the respondents didn’t have their email accounts and they are also not aware of the facility and services available on internet.
- More number (46) of students using www.
- Nearly 65% of the population is accessing full text article.
- Fifty six percent of the population has experience of computer course.
- Majority of the population that 44% (39) are not aware about IL.
- Seventy two percent of the population used ECONOMIC to truncate the word ECONOMICS.
- Majority of the population that is 66% describes a magazine as it published articles to non-academic audiences.
- Fifty six percent of the study population is no aware of the publications such as magazines and journals are called.

Conclusion:

The ultimate of any library service is to ensure that the select are able to access the information purpose from which they request it this raises the need of information literacy to client with foal assisting client to identify and select relevant information using appropriate search strategies and being able to evaluate, organize and synthesis that information a meaningful presentation conduction various IL practice in library environment.

References:


*****
INTERNET AND ELECTRONIC RESOURCES USAGE AT BANGALORE MEDICAL COLLEGE AND RESEARCH INSTITUTE LIBRARY, BANGALORE: A CRITICAL STUDY

G S Ramesh Naik
Librarian
Bangalore Medical College and Research Institute
Bangalore

Lokesha Naik
Librarian
BMS Government First Grade College
Huliyar,
Tumkur District

Abstract:
The present study is of descriptive in nature using normative survey. This is an assessment study that describes the extent of status of the parameters prevailed in the study environment. The researcher has chosen data collection methods thorough structured questionnaire survey and observation. A pilot study was made and the findings were used to modify and refine the data collection tool. In this study an attempt is being made to highlight the access to Internet-based information services in the Bangalore Medical College and Research Institute (BMCRI).

Keywords: Search Engine usage, internet access, E resources

Introduction:
E-resources is very much evident right form the day of existence of libraries, that libraries are providing abandoned and varied information on different areas of subjects on and all who visit it. The internet has undergone rapid development, with significant impact on social life and on modes of communication. In recent years, the rapid development of technologies led to the emergence of an array of new forms of sources, such as online communities, social sites and social networking sites, where consumers share information and personal stories and construct knowledge.
Since past few years’ information have begun to appear on the internet. As a result Librarian and information specialists from all over the world have started to evaluate electronic information resources of data applying standards tools both different and the same as those used for print data. The main intension is to achieve the highest quality of access and information throughout the World Wide Web virtual library unfortunately; ultimate standards have yet to be agreed, even though some criteria do already exist.
It has not been possible to adapt traditional evaluation criteria because the very newness itself of electronic resources demands new standards. The internet carries both non-professional and
professional information. There is distinct difference between a site and a database. An internet site can be any URL in the internet, which contains a document, a collection of data or just an index to some sources gathered by some good-hearted persons. The concept of electronic resources is regarded as the mines of information that are explored thorough modern ICT devices, refined and redesigned and more often stored in the cyber space in the most concrete and compact form and can be accessed simultaneously form infinite points by a grate number of audience.

**Objective of the study:**
- To examine information seeking behavior of post graduate in the dentistry in the IT environment in BMCRI.
- To determine the types of information used by them.
- To understand and analyze the use of information technology in information seeking.
- To explore the students’ awareness regarding IT based resources and services in the library.

**Research Methodology**

The survey method was selected for data collection through questionnaire. The survey collected information on the PG students’ knowledge of computer, use of online databases and library e-resources. The author designed a questionnaire to determine both the knowledge and use of e-resources among PG students.

**Data Analysis:**

<table>
<thead>
<tr>
<th>Questionnaires distributed</th>
<th>Responses received</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>33</td>
<td>91.25</td>
</tr>
</tbody>
</table>

Totally 40 questionnaires distributed and 33 were received back and the response rate is 91.25%.

**The preference towards channels of information seeking:**

There are many possible delivery channels that can be used for seeking information. To study the different channels of information such as internet, library, friends, conferences, librarian etc., respondents were asked to mention their preferred channels for information and is represented in the following table.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Channels/ Modes of Information seeking</th>
<th>Respondents</th>
<th>Percentage</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Search the internet</td>
<td>58</td>
<td>79.5</td>
<td>01</td>
</tr>
<tr>
<td>02</td>
<td>Browse the library</td>
<td>45</td>
<td>61.6</td>
<td>02</td>
</tr>
<tr>
<td>03</td>
<td>Consult teachers/friends</td>
<td>30</td>
<td>41</td>
<td>03</td>
</tr>
<tr>
<td>04</td>
<td>Attending conferences</td>
<td>25</td>
<td>34.2</td>
<td>04</td>
</tr>
<tr>
<td>05</td>
<td>Consult the Librarian</td>
<td>09</td>
<td>12.3</td>
<td>05</td>
</tr>
<tr>
<td>06</td>
<td>Others</td>
<td>02</td>
<td>2.7</td>
<td>06</td>
</tr>
</tbody>
</table>
From the above table it is established that this being the era information technology a majority (79.5%) of the respondents prefer the internet as their main channel for seeking information, since it provides the users advanced, updated information related to their field of interest at a fast pace.

The traditional method seeking information through the library is not lagging behind since 61.6% respondents prefer their mode of information seeking thought the library.

**Purpose of Information Seeking:**

There may be different intentions for any user to look for information such as, for updating knowledge, for examination purpose, for research and for writing and presenting paper. Hence to study these the respondents were asked their reasons for seeing information and the results are shown in the following table

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Purpose</th>
<th>Respondents</th>
<th>Percentage</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>For updated medical information</td>
<td>56</td>
<td>77</td>
<td>1</td>
</tr>
<tr>
<td>02</td>
<td>For preparing exams</td>
<td>45</td>
<td>62</td>
<td>2</td>
</tr>
<tr>
<td>03</td>
<td>For conference</td>
<td>35</td>
<td>47.9</td>
<td>3</td>
</tr>
<tr>
<td>04</td>
<td>For doing research work</td>
<td>27</td>
<td>37</td>
<td>4</td>
</tr>
</tbody>
</table>

**Computer and Internet Knowledge.**

The use of computers and internet by the people in all walks of life is increasing day by day. The internet plays a vital role in accessing information resources. This is reflected by the steady increase in the use of computers and the internet in teaching and learning. The evolving nature of dental knowledge and technology requires dental students to develop computer skills. To study the computer and internet literacy of the respondents, they were asked to judge whether they are computer literate or not, and the findings are given in the table

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Conversant with computers</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>67</td>
<td>91.7</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>6</td>
<td>8.2</td>
</tr>
</tbody>
</table>

**Use of Internet:**

Internet is a global network connection millions of computers. The internet can provide opportunities for inquiry-based learning. Students and teachers can network, study, and work together with others around the world teaching strategies can be shared through communication with other educators and may be added across the
curriculum. Hence the respondents were asked whether they use the internet for their information need and their responses are given in the table:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Use of Internet</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yes</td>
<td>68</td>
<td>92.5</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>5</td>
<td>7.5</td>
</tr>
</tbody>
</table>

According to the above tale vast majority of respondents use of internet (92.5%) and few respondents (7.5%) don’t use the internet. This shows that most of the respondents are computer literates and they use internet to keep up to date with most recent developments in their field because information resources, such as medical product information, continuing education resources, online supply catalogs and reference information, have made the World Wide Web increasingly accepted in dentistry. Medical college and research community publish academic information primarily, while practicing Doctor’s recommend patient education material and information about their practices. The author interviewed few of the respondents and made an attempt to know the reasons for not using the internet by 7.5% of the respondents. It was found that the main reasons are lack of interest and confidence, lack of computers, high cost of computers and software and also lack of computer education etc. therefore it is recommended that librarians should provide computer and internet facilities in their libraries.

**Purpose of Internet Use**

There may be different purposes for the use of internet such as education, communication, entertainment, research news, and sports.

<table>
<thead>
<tr>
<th>Sl. no.</th>
<th>Purpose</th>
<th>Respondents</th>
<th>Percentage</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Education</td>
<td>59</td>
<td>80.8</td>
<td>1</td>
</tr>
<tr>
<td>02</td>
<td>Research</td>
<td>34</td>
<td>46.5</td>
<td>2</td>
</tr>
<tr>
<td>03</td>
<td>News/communication</td>
<td>30</td>
<td>41</td>
<td>3</td>
</tr>
<tr>
<td>04</td>
<td>Entertainment</td>
<td>28</td>
<td>38.3</td>
<td>4</td>
</tr>
<tr>
<td>05</td>
<td>Sports</td>
<td>8</td>
<td>10.9</td>
<td>5</td>
</tr>
</tbody>
</table>

The above table reveals that the students main purpose to use the internet is mainly for education (80.8%).

**Place of Availing the Facility of Internet:**

As use of the internet becomes more interesting and more essential to dental students, an increasing number are using several locations to go online and significant numbers are moving beyond the tradition places of access-home and work. Hence to study the places such as home, library and internet café form where the respondents would like to use the internet, it was asked form where they would prefer to use the internet and their responses are mentioned in the following table.
<table>
<thead>
<tr>
<th>Sl. no.</th>
<th>Place</th>
<th>Respondents</th>
<th>Percentage</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Home/hostel</td>
<td>60</td>
<td>82.1</td>
<td>1</td>
</tr>
<tr>
<td>02</td>
<td>Library</td>
<td>17</td>
<td>23.2</td>
<td>2</td>
</tr>
<tr>
<td>03</td>
<td>Internet café</td>
<td>2</td>
<td>2.8</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>73</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Form the above table of maximum users are using internet at their places (82.1). The reason behind preferring to use internet at home hostel might be because students can access internet through their laptops even after college/library hours since each student is issued a laptop during their admission time.

**Summary and findings**

- It is found that majority of the respondents didn’t have their email accounts and they are also not aware of the facility and services available on internet.
- More number (92%) of students using www.
- Nearly 65% of the population is accessing full text article.
- Fifty six percent of the population has experience of computer course.
- Majority of the population that 88% are using internet for the purpose of Education.
- Eighty two percent of the population used internet in their hostel/home.

**Conclusion:**

Through the application of information technologies, have been created for cataloging, indexing, information retrieval, reference, and other purposes; however, relatively few of these systems have evolved into production systems that are used in the day-to-day operations of libraries. Fox reminds us that: "While IT research has been underway for more than three decades, it is only in the past six years that IT’s impact has been measurable." To some degree, the lack of penetration of information technologies in libraries is due to the fact that appropriate tools and techniques have only been widely available for a relatively short time. However, there were other theoretical, technological, fiscal, and human resource barriers as well, and these significant problems are ongoing. This paper has outlined some of the major limitations of selected information technologies of particular interest to libraries and suggested some possible strategies for making progress in building intelligent library systems. It is critical that we seek the middle ground between the view that IT will revolutionize libraries in the foreseeable future and the view that it will have little or no effect. IT offers us a powerful set of tools, especially when they are combined with conventional and other innovative computing tools. However, it will not be an easy task to master those tools and employ them skillfully to build truly significant intelligent systems. Libraries and vendors who have ambitious system development goals are likely to need to invest substantial resources in achieving those ambitions...
Reference:

*****
ELECTRONIC INFORMATION RESOURCES IN J R D TATA MEMORIAL LIBRARY IISC: A GLANCE

Umesh M  
Librarian,  
Government First Grade College  
Yagati, KadurTq, ChikmagalureDist -577140

Dr. Sujatha H.R  
Librarian, Selection Grade,  
Sri VenkataramanaSwamy College,  
Bantwal-574211

Abstract:  
The Indian Institute of Science recently celebrated its first Centenary; this institute has been able to make many significant contributions primarily because of its unique character. It is neither a national laboratory which concentrates solely on research and applied work nor a conventional University which concerns itself mainly with teaching, research in frontier areas and education in currently important areas of technology. On account of its being a relatively small institution, it is able to innovate and introduce new systems of imparting knowledge such as courses under a unit system and trying out methods of evaluation aimed at identifying the best and the brightest talents.

Keywords: IISc, J R D Tata Memorial Library, e-resource,

1. Introduction:  
The Indian Institute of Science, Bangalore has been at the forefront of research and education. It has always strived to live up to the expectations of its Founder, J.N. Tata, who believed that fundamental research was essential for India to take its rightful place in the world. Today the Institute has a very high international reputation in the academic world, in view of the fact that it has expertise both in conventional and emerging areas of science and engineering, and provides facilities for graduate, post-graduate, research and short term training programs. The institute encourages bright, young school and undergraduate students to undertake a career in research in science and engineering. In order to ensure that the Institute attracts the best Indian students, it now has special programs like Young Science Fellowship program, Young Engineering Fellowship program and Kishore VaigyanikPtotsahanYojana.

2. Historical Development of Indian Institute of Science:  
JAMSETJI NUSSERWANJI TATA (1839-1904), was a true visionary, who even before the dawn of the 20th Century, understood that the progress of this country depended crucially on research in Science and Engineering. He was convinced of the need for a national level institution devoted to original investigations in all branches of
learning and their applications for the benefit of humanity in general and India in particular.

After consulting several authorities in our country, he constituted a Provisional Committee to prepare a plan for the setting up of an institute of higher professional education. On 31st December, 1898, a draft prepared by this Committee was presented to Lord Curzon, the Viceroy-designate. The Secretary of State for India requested the Royal Society of England for an expert opinion. The Royal Society, in turn, sought the opinion of prof. William Ramsay, Nobel Laureate and discoverer of the noble gases. Prof. Ramsay toured the country and recommended Bangalore as the ideal location for the proposed institute. Though a different opinion was expressed by experts consulted by Lord Curzon, Bangalore was finally selected. On the initiative especially of Mysore Dewan, sir K Seshadrilyer, His Highness Shri KrishnarajaWodeyar-IV, the Maharaja of Mysore donated 372 acres of land in Bangalore with the promise of providing other necessary facilities. Thus the original scheme of Jamesetji Tata became a tripartite venture between the Tata’s, the Government of Indian and the government of Mysore.

The Committee recommended that ‘the Institute be devoted to experimental science and aim at training students in experimental methods; carrying out original research and discharging the functions of an accepted authority and referee on all scientific problems arising within its own domain’.

The constitution of the Institute was approved by the Viceroy Lord Minto with himself as Patron. The necessary Vesting order was signed on 27th May 1909. The principle authority governing the Institute would be its Council. The Council would be assisted in the formulation of the academic policies of the Institute by the Court. The Director would be the executive authority, to be assisted by the Senate and the Science and Engineering Faculties.

Early in 1911, the Maharaja of Mysore laid the foundation stone of the Institute. On 24th July the same year, the first batch of students was admitted to the Departments of General and Applied Chemistry under Norman Rudolf, and Electro-Technology under Alfred Hay. Within two months, the Departments of Organic Chemistry began functioning.

The architecture of the main building which today houses administrative offices and the Faculty Hall, is in classical style. It is in gray granite, and is crowned by a handsome tower which has become one of the landmarks of Bangalore. In front of it stands the work of Gilbert Bayes, a noble monument erected in memory of J N Tata. At its feet is an inscription which will remind future generations
of the generosity of Jamsetji Tata and the dedication with which he worked for the welfare and India.

With the establishment of the University grants Commission in 1956, the Institute came under its purview as a deemed University. Currently the total land holdings of the Institute is 443 acres. The Government of India granted Rs.30 crores towards renovation of the old buildings and improvement of the basic infrastructure. During the past ten decades, many of the alumni and faculty members of the Institute have gone on to leadership positions in science and technology in the country, to create and nurture laboratories, scientific institutions and industrial undertakings. Sir C V Raman, H J Bhabha, Vikram A Sarabhai, JC Ghosh, MS Thacker, Brahman Prakash, S Bhagavantam, S Dhawan, C N R Rao and scores of others who played a key role in the scientific and technological progress of our country have been closely associated with the Institute. The Institute boasts of a large number of Bhatnagar awardees, Fellows of the National Academies of Science and Engineering, and recipients of other distinguished national and international honours.

The council of the Institute confers Honorary Fellowship on eminent scholars and scientists and on those who have made noteworthy and lasting contributions to the cause of Science and Industry in India. Among the 25 recipients of this distinction are PandithJawaharlal Nehru, Sir M Visveshravaraya, Sir C V Raman, J R D Tata, Viram A Sarabhai, Indira Gandhi, S Dhawan and C N R Rao.

3. Objectives of the Institute:
   - To provide for advanced instruction and to conduct original investigations in all branches of knowledge and, in particular, in such branches of knowledge as are likely to promote the material and industrial welfare of India.
   - To establish and maintain chairs and lectureships in Science, Arts and Technology.
   - To provide suitable libraries, laboratories and equipment.
   - To cooperate as far as possible with such recognized institutions as exist or are founded in future for cognate objects in Indian, and
   - To do all such things as are incidental necessary or conducive to the attainment of all or any of the objects of the Institute.

4. Academics - Departments / Centers
   - Division of Biological Sciences
   - Division of Chemical Sciences
   - Division of Mathematical & Physical Sciences
   - Division of Electrical Sciences
   - Division of Mechanical Sciences
4.6. Centers
- J.R.D.Tata Memorial Library

5. About J.R.D Tata Memorial Library

Indian Institute of Science (IISc), Library Bangalore, was established in 1911 and it is one of the first three departments started in the Institute. It is regarded as one of the best scientific and technical libraries in India. Apart from the main library it has departmental libraries also. The library moved in to the present premises in January 1965, built out of grants provided by University Grants Commission (UGC), in commemoration of the Golden Jubilee Celebrations of the Institute in 1959. In 1995 the library was renamed as "J.R.D Tata Memorial Library". The National Board for Higher Mathematics (NBHM) has recognized this library as Regional Center for Mathematics for the south region and continued to award a special grant towards subscription of Journals in Mathematics. It is no exaggeration to state that the IISc library is the largest and finest of its kind in this part of the world.

The primary mission of the library is to support the educational and research programmes of the institute by providing physical and intellectual access to information, consistent with the present and the anticipated educational and research functions of the institute. In accordance with the objectives of the institute, the library aims to develop a comprehensive collection of documents useful for the faculty and the research community of the institute. The secondary mission is, to serve as a resource center for the scholars and scientific community of the country. The collection of the library which includes books, journals, reports, standards and patents is regarded one of the richest collections in the country, in the field of science and technology. This rich and valuable collection built over ten decades has some of the rare reference materials and several important journals. This vast reservoir of knowledge, on a conservative estimate, is worth over Rs. 400 crores. The annual budget of the library is over Rs. 12.00 crores of which subscription towards periodicals alone is about 11.00 crores. The library currently receives over 1734 periodical titles of which 1210 are subscribed while the remaining titles are received as gratis and on exchange basis. About 800 titles are accessible online due to library subscription. In addition, over 10,000 Journals are accessible due to INDEST Subscription. The total holdings of the library exceeds 4,11,676 documents. Under the Corporate Membership Facility (CMF), reference alone facility has been extended to Corporate Organizations, Industries and Academic Institutions involved in R&D activities. Currently about 200 organizations, industries and Academic Institutions are availing this facility.

The library has been using the LIBSYS an Integrated Library Management software package with all the modules for the library housekeeping operations. The library Online Catalogue database has more than 1.50 lakh records of books (Bibliographic Information) and
information about 1,72,000 back volumes of periodicals. Using LIBSYS OPAC, users can search the Library Online Catalogue by Author, Title, Subject, and keywords. Also, the users can know the latest additions of periodicals and books and the status of a document (whether on shelf or on issue). Reservation of a book can be done Online.

The J.R.D.Tata Memorial Library Annexe and Digital Library located opposite NCSI was inaugurated on 12th March 1998 by Mr. Ratan Tata. Some of the library collections like technical reports, standards, patents and theses are located in this building.

6. E-Resource Collection:

6.1 Abstracting, Indexing and Bibliographic Sources

The most important electronic reference tools used in libraries worldwide is the bibliographic sources. Both major bibliographic resources and numerous Abstracting and Indexing services with the ability to search vast collections of Table of Contents (TOC), Conference Proceedings and data from Books and Serials are offered. The benefit of these large sources is that they cover many subjects and thus facilitate a multidisciplinary approach. Thus, J R D Tata Memorial Library entered the development phase of e-resources collection during 1994-95. Library embarked into subscribing e-version of following Abstracting and Indexing periodicals along with the back files and stopped print subscription of the same from 1994.

- INSPEC (Physics, Electrical & Electronic Engineering, Computers & Control, IT) (1969+)
- CA (Chemical Abstracts) (Chemistry) (1987+)
- MathSci and MathSciNet (Mathematics (1940+))
- BIOSIS (Life Sciences) (1992+)
- INIS (Nuclear Research and Technology) (1970+)
- COMPENDEX (Engineering) (1989+)
- MEDLINE (Medicine) (1966+)
- Current Contents (1994+)
- SCI (Science Citation Index) (1993+)

The acquisition of the above mentioned premium Bibliographic databases covering all most all the subjects of interest to faculty, students and staff of IISc opened the Intranet access to meet their information requirements instantly.

6.2. Electronic Journals

In the year 1998, a few publishers namely Elsevier, Academic, Springer etc had offered access to their Online Journals free of cost against subscription to print version as an additional gesture. The library made use of this facility by registering such free online journals officially. Thus, the library entered the second phase towards the e-resource collection development without much of budget
constraint. The goal of E-Journals is to provide desktop access to freely available electronic version of journals subscribed by IISc Library and free e-journals of relevance to IISc. To this end a web-accessible directory was developed containing a database of all journals subscribed by IISc. The directory also contains several free peer-reviewed electronic journals. Thus the database stores a variety of information such as e-resources holding details, internet addresses and etc., about each journal including links to the journal's website. Using these links, users can visit the journal site and access the full text of articles.

6.3. INDEST (Indian Digital Library in Engineering Science and Technology) Consortia

In the year 2003, JRDTML entered into e-resource collection development in a very big way. Based on the recommendations of the expert group on Consortia-based subscription to Electronic Resources appointed by the Ministry of Human Resources Development under the Chairmanship of Prof. N. Balakrishnan, IISc, Bangalore, it was decided to set-up a consortium for subscription to the following electronic resources for IITs, IISc, RECs/NITs and a few other institutions. The consortia is fully funded by MHRD and operated through its headquarters at the IIT, Bombay. The expert group also recommended gradual decrease in print resources to which the beneficiary institutions are currently subscribing. However, the publishers namely Elsevier, Academic Press and Springer Verlag have linked their print subscriptions and the libraries and as such institutions are not allowed to delete these print subscriptions. Hence, JRDTML is continuing their print subscription to journals from these publishers for the time being.

* Full Text Databases
  - IEL (IEE/IEEE publications includes Journals, Standards and Conference Proceedings)
  - Science Direct (Elsevier)
  - Springer Verlag’s Link
  - ASCE Journals
  - ASME Journals
  - ABI/Inform
  - Applied Science and Technology Plus
  - ACM Digital Library

* Bibliographic Databases
  - COMPENDEX
  - INSPEC
  - Web of Science
  - Sci Finder Scholar
  - MathSci Net

Through INDEST Consortium, all IITs and IISc have been having access to a large number of e-journals. This initiative from MHRD has certainly enhanced the range of e-journals accessible to the research
communities in these institutions and is bound to yield immense benefits. Consortia such as INDEST certainly do have objectives of not only to providing wider access to information, but in the long term, also to save the library funds, on the print subscription. The Institute had been subscribing to various database resources that are now currently being subscribed for by INDEST for all its members. Hence, all of the databases are being subscribed by the J R D Tata Memorial Library is no longer subscribed.

Thus, the Institute faculty, students and researchers are greatly benefiting by the bulk of e-resources access, which are mainly due to the INDEST consortium subscription which facilitates online access to over 4000 e-journals and a host of databases. Apart from these, over 600 journals are accessible online to Institute researchers due to print subscription or print plus online subscription to some journals like Nature, Science, Proceedings of the National Academy of Sciences, which are heavily used and most popular Science magazines. However, the current level of access to e-resources still appears to be very inadequate mainly due to publishers’ policies. Even in the case of INDEST subscriptions, most of the science e-resources are accessible only from 1995 onwards. This may pose a serious setback when one is looking for back-references. Furthermore, in almost all cases where their library subscriptions have online access, the access is not possible beyond the current subscription year. To overcome this problem library purchased the use full e-back files, for the IISc faculty, students and researchers. Now all e-resources and e-back files can access within the campus I.P. only

* E-Back Files Collection
  - JSTOR
  - PROLA
  - ACS
  - ELESVIER SCIENCE
  - SPRINGER
  - WILEY INTERSCIENCE
  - AIP
  - IOP

7. Library Services
  - Reference Service
  - Current Awareness Service
  - Inter Library Loan
  - Photocopying Facility
  - Scanning Facility
  - Document Delivery Service
  - Interaction Service
  - WEB OPAC

7.1 Reference Services
  Reference staff is available in the reading room to suggest sources of information and to assist in locating the required material.
Only a skeleton staff is available after normal working hours. Hence, at such times the senior staff on duty at the information desk may be approached for any help in location of the required documents.

7.2 Current Awareness Services
- Weekly display of periodicals (Every Tuesday)
- Weekly display of Books (Every Monday)
- Weekly List of Articles: Display of Photocopies of articles published by the I.I.Sc. Faculty/students in various periodicals, being received in the library. (Library notice board)

7.3 Inter Library Loan
Books/Journals (not available with us) may be obtained from other libraries on request. Inter Library Loan (ILL) cards of major libraries in Bangalore are available to faculty and students. These cards can be obtained from the circulation counter against IISc library borrower cards.

The list of libraries coming under this service:
- Tata Institute of Fundamental Research (TIFR, IISc Campus)
- National Aerospace Laboratories (NAL, Bangalore)
- Indian Space Research Organisation (ISRO, Bangalore)
- Raman Research Institute (RRI, Bangalore)
- Central Power Research Institute (CPRI, Bangalore)
- University of Agricultural Sciences (UAS, Bangalore)
- Bangalore University (BU, Bangalore)
- Indian Institute of Management (IIM, Bangalore)
- National Institute of Mental Health and NeuroSciences (NIMHANS, Bangalore)
- Indian Statistical Institute (ISI, Bangalore)
- Hindustan Aeronautics Limited (HAL, Bangalore)

7.4 Photocopying Services
Photocopying of materials available in the library is provided on payment basis. Coupons are available from the library office during working hours. This service is for I.I.Sc. Faculty, students and staff members only. The photocopying machines are located in each floor of the library. Users are requested not to take out the materials from one floor to another floor for photocopying.

Additional photocopying facilities are available to outsiders/permit holders and institute users from a commercial Photocopy center located in the ground floor and first floor.

7.5 Scanning Facility
A scanner is made available in the first floor lounge area to facilitate to take color images from journal issues for presentation purposes and other academic activities.
7.6 Document Delivery Subsystem

The library offers DDS (material if it is with us) to the students and researchers from other research centers and universities on special request. Researchers can send complete reference of the document they need through the respective Librarian/Principal to the Librarian. This service offered on cost basis without violating copyright law.

7.7 Interaction Service

This is an e-mail service. It enhances the interaction between the user and the library. Through which the requirements of both the sides are met and solved. This service includes
1. To verify whether you have really borrowed the material or someone else has misused your card.
2. To remind you to return the long due library material.
3. Verification regarding the documents borrowed.

7.8 Web OPAC

Web-OPAC is the latest tool of OPAC. Web OPAC is an OPAC, which is available on the web and with the help of internet connection any person whether user or staff can access it from anywhere in the world and in any time.

8. Conclusion:

I.I.Sc, is a one of the oldest R&D Institution of the Country, people look at the Library of IISc as a national resource facility in the field of Science & Technology. A library such as JRD Tata Memorial library is nearly a century old and has the largest collection of back volume archives of many important S&T journals. In fact, it boasts of unbroken volumes right from the first issue in several prestigious journals such as Nature and Proceedings of the Royal Society. But they will not be able to share their e-resources with the above said category of external users. Because of the license restrictions, now a day's Library is making serious effort to evolve a mechanism to help external users to access our e-resources.

9. References


*****
DIGITAL INFORMATION LITERACY SKILLS A SURVEY AMONG
USERS OF CITY CENTRAL LIBRARY, BELGAUM

Sharanabasappa
Librarian
Govt., First Grade College
Badami, Bagalkot, Karnataka
Sharanua@gmail.com

Dr. Anitha S Rai
Chief Librarian
New Horizon College of Engineering
Marathalli, Ring Road, Bangalore, Karnataka
anithasrai@gmail.com

Abstract:
Digital Information literacy is the set of skills and knowledge that allows people to find, evaluate and use of information that they need, Information technology skills are the basic skills to be acquired in the use of information. In the era of lifelong learning Digital information literacy is relevant for all age group citizens. Digital Information literacy is considered to be the standard for acquiring higher education. Library and information skills, internet skills and computer skills are now integrated into Digital information literacy skills. The paper highlights the ways and means the users search the information from different digital information sources. Further, the study finds the digital information resources used by the city central library users to get information relating to their interesting areas.

Keywords: Digital information Literacy, Users, City central Library, Computer knowledge.

Introduction:
Digital Literacy has led to great increases in information that can be conveniently and quickly accessed and facilities the collaboration and sharing of computer knowledge. In the society has been transformed by the rapid development and diffusion of information and communication technology (ICT) into fields such as education, business, health, agriculture and so on. Information users may be bewildered by a variety of digitized information. The process of identifying and selecting information has become complex. It is critical to promote information literacy (IL) in the digital age. Computers have become a necessary part of this digital society, and skills for computer use are a common prerequisite to many job application. The Department Education, Training and Employment states that “to live and work in the technology enabled world of the 21st century, high level skills in the use of information and communication technology (ICT) are essential for all citizens”.

SOUTH INDIAN JOURNAL OF LIBRARY AND INFORMATION SCIENCE, ISSN 2395-3195, VOL. 01, ISSUE 02.
**Digital Information Literacy:**

Digital literacy is a new literacy, and may it be decomposed into several sub-literacy's. One such decomposition considers digital literacy as embracing computer literacy, network literacy, information literacy and social media literacy. Previous conceptualizations of digital literacy focused on the practical skills associated with using computers (now considered computer literacy). These include hardware skills, such as connecting devices, and software skills, such as using application packages. Contemporary conceptualizations of digital literacy add to these traditional skills, and embrace knowledge, skills, attitudes and behaviors, particularly with respect to networked devices (which include smart phones, tablets and personal computers). Digital literacy differs from computer literacy in a number of significant ways. While it embraces the practical skills that computer literacy incorporates, there is a much greater focus on sociological, political, cultural, economic and behavioral aspects of digital technologies.

Digital literacy is the ability to locate, organize, understand, evaluate, and analyze information using digital technology. It involves a working knowledge of current high technology, and an understanding of how it can be used. Digitally literate people can communicate and work more efficiently, especially with those who possess the same knowledge and skills. Research around digital literacy is concerned with wider aspects associated with learning how to effectively find, use, summarize, evaluate, create, and communicate information while using digital technologies, not just being literate at using a computer.

**Digital Literacy and Library:**

One of the task force’s first acts was to determine a common definition of digital literacy that would speak to all types of libraries and the diverse communities they serve. Digital literacy is the ability to use information and communication technologies to find, understand, evaluate, create, and communicate digital information, an ability that requires both cognitive and technical skills.

In addition to supporting access to information, community development and lifelong learning, libraries continue to support literacy. Literacy remains central to the ability to learn, grow and achieve in society. Libraries support all literacies—from basic reading and writing to digital literacy to literacies in specialized areas like health, financial or government information. Libraries meet people where they are and provide supports that deepen the literacy skills needed for people to survive and thrive in the digital age. Policymaking should reflect multiple dimensions: digital literacy is the ability to use information and communication technologies to find, understand, evaluate, create and communicate digital information. Basic reading and writing skills are foundational; and true digital literacy requires both cognitive and technical skills.
Methodology:
Keeping in view the above objectives in mind, total 120 questionnaires were randomly distributed among the city central library users in Belgaum city. In addition to questionnaire method, interview and observation method were also used to know digital information literacy skills among them, 79 filled in questionnaires were received back this constitutes with the response rate of 66% of the total response and same was used for analysis and interpretation purpose.

Objectives:
- To know the purpose of using digital information resources.
- To find out the computer and internet literacy skills of city central library users.
- To know the frequency using digital information resources.
- To know the users familiarity with the digital information sources.
- Finally to know the users options and suggestions about the importance of information literacy.

Scope:
The study covers only users of City Central Library in Belgaum to know their digital information literacy skills.

Data Analysis:
Gender wise distribution:
The gender-wise analysis of response data indicates the extent of use of city central library by male and female users. Therefore, the investigator has analyzed the responses gender-wise.

Table-1: Gender wise distribution of respondents

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Gender wise</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>53</td>
<td>67.08</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>26</td>
<td>32.91</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>79</td>
<td>100</td>
</tr>
</tbody>
</table>

The table describes the gender-wise distribution of respondents in which 53 (67.08%) were male and 26 (32.91%) were female.

Age-wise Distribution:
The age-wise analysis of response data indicates the extent of use of city central library by users belonging to different age groups. Therefore, the investigator has analyzed the responses age-wise.

Table-2: Age wise distribution of respondents

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Age in years</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>21-25</td>
<td>27</td>
<td>34.17</td>
</tr>
<tr>
<td>2</td>
<td>26-30</td>
<td>19</td>
<td>24.05</td>
</tr>
<tr>
<td>3</td>
<td>31-35</td>
<td>11</td>
<td>13.92</td>
</tr>
<tr>
<td>4</td>
<td>Above 36</td>
<td>22</td>
<td>27.84</td>
</tr>
</tbody>
</table>
The table shows that out of 79 respondents 27(34.17) belong to the age 21-25 years and 26-30 age group users are responding 19 (24.05%) respectively. Those users who belong to the age group of 31-35 are 11(13.92%) and above 36 age groups are responding 22 (27.84%) respectively.

### Ability to use computer:

Table-3: Ability to using computer

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Ability in using computer</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Have ability</td>
<td>65</td>
<td>82.28</td>
</tr>
<tr>
<td>2</td>
<td>Do not have Ability</td>
<td>14</td>
<td>17.72</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>79</td>
<td>100</td>
</tr>
</tbody>
</table>

The above table shows that out of 79 respondents 65(82.28%) of users have the ability to use computer, 14(17.72%) of users are not having ability to use computers.

### Frequency of using computer:

Table-4: Frequency of using computer

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Frequency of using computer</th>
<th>No of respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Every day</td>
<td>55</td>
<td>69.62</td>
</tr>
<tr>
<td>2</td>
<td>Once in two days</td>
<td>9</td>
<td>11.39</td>
</tr>
<tr>
<td>3</td>
<td>Thrice a week</td>
<td>7</td>
<td>8.86</td>
</tr>
<tr>
<td>4</td>
<td>Once in a week</td>
<td>5</td>
<td>6.32</td>
</tr>
<tr>
<td>5</td>
<td>Occasionally</td>
<td>3</td>
<td>3.79</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>79</td>
<td>100</td>
</tr>
</tbody>
</table>

The table -4 shows that majority of the users i.e. 55(69.62%) are using computer every day, 9(11.39%) of the using computer one in two days, 7(8.86%) of them using computer thrice a week, 5 (6.32%) of users are using computer once in a week, remaining 3(3.79%) of users are using occasionally.

### Formal training to use of computers:

Table-5: Formal training to use of computers

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Formal training in use of computers</th>
<th>Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Undergone</td>
<td>64</td>
<td>81.02</td>
</tr>
<tr>
<td>2</td>
<td>Not undergone</td>
<td>15</td>
<td>18.98</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>79</td>
<td>100</td>
</tr>
</tbody>
</table>

The table – 5 shows majority of the users i.e., 64(81.02%) of the respondents have undergone formal training to use computer, as against 15(18.98%) of them have not undergone any formal training to use of computer.
Use of Internet:

Table-6: Use of internet

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Use of internet</th>
<th>Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Use</td>
<td>68</td>
<td>86.07</td>
</tr>
<tr>
<td>2</td>
<td>Do Not use</td>
<td>11</td>
<td>13.93</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>79</td>
<td>100</td>
</tr>
</tbody>
</table>

The above table shows majority i.e., 68(86.07%) of the respondents have knowledge of using internet as against 11(13.93%) of them don’t possess the knowledge to use internet. Some of the users mentioned using computer private institutions and browsing centers.

Use of search Engine:

Table-7: Use if search engine for search information

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Search Engine</th>
<th>Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Google</td>
<td>72</td>
<td>91.14</td>
</tr>
<tr>
<td>2</td>
<td>Yahoo</td>
<td>14</td>
<td>17.72</td>
</tr>
<tr>
<td>3</td>
<td>Ask</td>
<td>8</td>
<td>10.13</td>
</tr>
</tbody>
</table>

The table shows that 72(91.14%) respondents use Google as their search engine, 14(17.72%) use Yahoo search engine, 8(10.13%) of them mentioned the other option he prefers to use Ask search engine.

Frequently used location of accessing digital information resources:

Table-8: Frequently used location in accessing digital information resources.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Location of digital information resources access</th>
<th>Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Home</td>
<td>18</td>
<td>22.78</td>
</tr>
<tr>
<td>2</td>
<td>Cyber cafe</td>
<td>30</td>
<td>37.97</td>
</tr>
<tr>
<td>3</td>
<td>Library</td>
<td>35</td>
<td>44.30</td>
</tr>
<tr>
<td>4</td>
<td>Smart phone &amp; Others places</td>
<td>16</td>
<td>20.25</td>
</tr>
</tbody>
</table>

The above shows out 79 respondent 35(44.30%) of respondents are using digital resources at their library, 30(37.97%) Users are using digital information resources at cyber café, 18(22.78%) of them are using sources at their home, remaining 16(20.25%) of them mentioned other places that they are accessing digital resources in their Smart phone and other places.
Purpose of using digital information resources:

Table-9: Purpose of using digital information resource

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Purpose of using digital information Resources</th>
<th>Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sending e-mail/communication</td>
<td>72</td>
<td>91.13</td>
</tr>
<tr>
<td>2</td>
<td>Career purpose</td>
<td>38</td>
<td>48.10</td>
</tr>
<tr>
<td>3</td>
<td>Searching and locating general information</td>
<td>28</td>
<td>35.44</td>
</tr>
<tr>
<td>4</td>
<td>Teaching purpose</td>
<td>12</td>
<td>15.18</td>
</tr>
<tr>
<td>5</td>
<td>E-books/ E-journals etc.</td>
<td>4</td>
<td>5.06</td>
</tr>
<tr>
<td>6</td>
<td>Recreational purpose</td>
<td>8</td>
<td>10.12</td>
</tr>
<tr>
<td>7</td>
<td>Blogging</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Downloading games</td>
<td>7</td>
<td>5.83</td>
</tr>
<tr>
<td>9</td>
<td>Other purpose</td>
<td>9</td>
<td>11.39</td>
</tr>
</tbody>
</table>

The table above shows that 72(91.13%) respondents stated that they use digital resource to send e-mail/communication, 38(48.10%) respondents stated that they use digital information to know about career information. There are 28(35.44%) respondents who use digital information to search and locate general information, 12(15.18%) to prepare teaching purpose, 4(5.05%) to collect e-books/e-journals. There are 8(10.12%) respondents each who use digital information sources to recreational purpose, 6(5%) respondents users are blogging purpose, 7(5.83%) respondents are downloading games purpose. There are 9(11.39%) respondents who use for others purposes like for preparing competitive examination, etc.

Users Familiarity with digital information sources:

Table-10: Users familiarity with Digital information Sources

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Familiarity of digital information sources</th>
<th>Respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Websites</td>
<td>75</td>
<td>94.93</td>
</tr>
<tr>
<td>2</td>
<td>E-news papers</td>
<td>12</td>
<td>15.18</td>
</tr>
<tr>
<td>3</td>
<td>CD-ROMs/Pen drive</td>
<td>29</td>
<td>36.70</td>
</tr>
<tr>
<td>4</td>
<td>Databases</td>
<td>7</td>
<td>8.86</td>
</tr>
<tr>
<td>5</td>
<td>E-journals</td>
<td>22</td>
<td>27.84</td>
</tr>
<tr>
<td>6</td>
<td>E-books</td>
<td>9</td>
<td>11.39</td>
</tr>
</tbody>
</table>

Table 10 shows that all the 75(94.93%) respondents are familiar with the use of websites, 12(15.18%) of them familiar with the e-newspapers, 29(36.70%) of them familiar with DC-ROMs/ Pen drive, 7(8.86%) of them familiar with Databases, 22(27.84%) users responding E-journals, remaining 9(11.39%) of them familiar with E-books.
Findings:
- Out of 79 respondents, respondents, 65 (82.27%) of user have the ability to use computer, 14(13.92%) of users are not having ability to use computers.
- Majority of the users i.e., 55 (69.62%) are using computer every day.
- Majority of the users i.e., 64 (81.02%) of the respondents have got formal training in using computer.
- Majority i.e., 68 (86.07%) of the respondents use internet.
- All the 72 (91.14%) respondents use Google as their search engine and 14 (17.72%) use Yahoo search engine.
- Out of 79 respondents, 35 (44.30%) of respondents are using digital resources at their library, 30 (37.97%) users are using digital information resources at cyber café, 18 (22.97%) of them are using sources at their home.
- Out 79 respondents, 72 (91.13%) stated that they sue digital resources to send e-mail/communication. Followed by this, 38 (48.10%) respondents stated that they use digital information to know about career information. There are 28 (35.44%) respondents who use digital information to search and locate general information, 12 (15.18%) to prepare teaching purpose.
- All the out of 79 respondent 75 (94.93%) are familiar with the use of websites, 29 (36.70%) of them familiar with the CD-ROMs/pen drive, 22 (27.84%) of them familiar with E-journals, 12 (15.18%) of them familiar with e-newspapers, 9 (11.39%) of them familiar with E-books, remaining 7 (8.86%) of them familiar with Database.

Suggestions:
- The library staff of city central library’s need to change their roles and the ways in which they provide services in response to the recent developments in web technologies. There is a need to provide training for library staff in making users more information literate.
- City central libraries need to purchase computers with internet connection to facilitate access to digital information its users as majority of the users are digital information literate.
- City central libraries need to acquire e-resources addition to its printed collection.
- The establishment of a Nation Information Literacy Program will enable to transform vision of an information society into reality and a better informed, a more involved and effective citizenry.
Conclusion:
This paper discus with the study of the ‘digital information literacy skills among users of city central library, Belgaum’. Digital literacy is those capabilities that mean an individual is fit for living, learning and working in a digital society. It is about being able to make use of technologies to participate in and contribute to modern social, cultural, political and economic life. There is an unprecedented requirement for people of all ages to have digital literacy skills for a wide variety of reasons, including employability, to reach full potential in library and for active engagement in digital world at all ages, at the end, some of the suggestions to increase to awareness among the user community by providing effective digital information literacy programmes.

Reference:
2. Ravi, Urmila and Modi, Jignesh (2009) to study computer competency and information technology Literacy of MLIS student.
3. Osuji. USA (2010), An assessment of the computer literacy level of open and distance learning students on lagoe state. Nigeria, Turkish online journal of distance education.

*****
IMPACT OF INFORMATION TECHNOLOGY AND ROLE OF LIBRARIES IN 21 CENTURY

Venkatesha
Librarian
New Horizon College of Education
100 Feet Road HAL II Stage Indiranagar
Bangalore-560008
Mail:venkithulas15@gmail.com

Abstract:
Information Technology is mainly concerned with collection classification and dissemination of the information of knowledge. It is currently taking center stage and transformed the whole world into a global economy. The enormous advantages it as in easing the delivery of information around the world the impact of IT and role of Libraries in the age of knowledge and information societies. It also highlights the problem faced by library and information service (LIS) sector in India achievements over the years using modern information technology.

Keywords: Information technology, Knowledge society, Libraries.

Introduction:
Information Technology as transformed the world into a global village which a globule economy. Which is increasingly dependent on the creative management and distribution of information? Over the past decades the world has been experiencing significant changes in which the need to acquire, Utilize and share knowledge has become increasingly essential. Now in the 21 century, in the knowledge and information is in its higher gear. this is an age when invisible knowledge & Information take the role of prime moves landing all sector (1).The World Bank has used metaphor Knowledge Development. Lack Knowledge is largely responsible for under development (2) In a knowledge and information oriented society, creative brains become leaders of economy and knowledge can be equated with development than the wider the knowledge gap the boarder the development gap.

Emergence of Information and Knowledge societies

Some 10,000 years ago the early ancestor of mankind, subsisted by hunting and gathering, started to building agrarian societies. Began their transitions to industrial societies in mid-18th centuries (3) Expansion of intellectuals in industrials societies. Such industrial production international trade and transaction and technological advancement. Stimulated mass distribution of education and creation of libraries. Industrial societies continued their enormous materials developments thought the 20th century. The information society has passed through four transformation stages of
development, the most radical stage of development. The most radical stage starting at the tail end of the 20th century

**Role of the Library**

In the modern knowledge society libraries have a new role and there are various types of Library models in the modern society. Where the use of electronic services and web based information sources constantly increases, libraries are managed in a more democratic way, have more flexible communication system and work organization and their service development is based on the quality and user-orientation of services. In modern Knowledge society libraries have a new role and there are various types of library models. These are follows

1. Library is a Learning and research center
2. Library is a cultural and communication center
3. Electronic library
4. Digital Library
5. Virtual library as library without walls

Libraries had been performed many important roles in the past agrarian and industrial societies. But those roles were limited in scope. In the 21st century libraries have to performed pivotal roles in disseminating and sharing the culture knowledge. In the age of knowledge libraries should be repositories all of the knowledge and information accumulated by human kind. They will have to store all kinds and forms of material and information and disseminate beyond the geographical boundaries. To days advanced information technology is enabling libraries to accomplish this immense task. Exchange knowledge has always been the most important objectives of libraries. Various systems have been developed to share and exchange the records of human knowledge. Universal bibliographic control and universal availability of publications are two major program of IFLA to exchange is the Knowledge over OCLC is the world leading library network in USA for sharing intellectual knowledge among academic community in all over the world. But Libraries in 21 century should fulfill more dynamic role. They should exchange knowledge and information with users inside and outside their country. Thus going beyond their traditional reference and landing services. This world possible when libraries agreed to expand their roles beyond the geographical boundaries by using state of art technologies.

The Modern Libraries certainly cannot be passive repository for books and other printed materials. The opposite requirements of storing increasing collection in various forms and of maintaining easy access to most part of it can only be balanced by developing information and communication technologies libraries should upgrade their service by digitizing their recourse for online use. These service should be accessible to anyone regardless of time or location though digital communication devices. Libraries can play significant role in providing a good education and knowledge of high quality. Can access whatever
knowledge and information they need by visiting libraries via the internet such as the library of congress

**Problems and opportunities Facing Libraries India**

Library and information are fundamental to the goals of creating, disseminating society in to an egalitarian, progressive knowledge-based society. It’s well known that in India. Most of libraries are Factions in Government sector. These are in academic and research institution and under the public library system. Which is again under the state and central governments? At present education being state subject and coming under the purview of different apex agencies there is no common direction or coordination among them. It is imperative that all libraries (Public Academic research, and special) change gear and develop at an accelerated pace. Development in information communication technology (ICT) have enabled libraries to provide access to all; and also bridge the gap between the local the national and the global. yet the library and information services (LIS) sector in India has not kept pace with the paradigmatic changes taking place in society. There are few libraries which are using state of art technology to their respective user community. There is lack of cooperation among the libraries of different organization and which cause the lack of union catalogues at national level. The national library failed even to do this immense task. One of the major problems faced by LIS sector in India is lack of bibliographic control at national level which causes duplication in research. A considerable number of libraries and not been developed bibliographic database of their documents for putting them on network

To summarize the major constraints faced by the libraries which militate against effective dissemination and use of information are

- A Considerable percentage of the population is illiterate or functionally literate making libraries of minimal use to them
- Poor resource allocation for infrastructure improvement and collection development for public libraries
- Lack of sufficient sanctioned posts. Forcing most service to be operated by voluntary nonprofessional staff, which damages information organization and services
- Lack of national Policies promoting ICT as a tool for development of library systems and services
- Lack of adequate trained manpower in the use of IT
- Lack of funds for acquiring necessary hardware and software facilities
- Resistance on the part of library staff to change from their traditional practices to the use of IT

Despite the above problems LIS sector in India has got remarkable achievement, ICT and to build electronic information sources. Besides INFLIBNET is national level information providing center to support University and college libraries. A number of other national networks and various library networks have al so been developing including
NICNET, ERNET, CALIBNET, ERNET, CALIBNET and DELNET etc. A number of educational institutions are members of such networks. These networks, especially INFLIBNET and DELNET, are engaged in compiling union catalogs creating various databases of experts providing training to library staff, ILL online facilities reference service, assistance in retrospective conversion etc.

**Conclusion**

The acquisition of Knowledge has therefore been thrust area throughout the world. The economy of present times depends no longer on visible resource and capital goods but on invisible knowledge and information. Therefore poor nations as well as poor individuals can create wealth through active contacts and use of knowledge and information. Libraries of 21 Century can help fight poverty and narrow the gap between rich and poor. For the first time in history poor are getting opportunity to enhance their wealth through the creation and use of Knowledge and Libraries are taking a central role in this notable movement.

**Reference**

1. Kumar K Singh S.P(2000) for information society to Knowledge society journal of LIS 25(2)104-111
5. Arunachalam s (2006) Open access currant development of India Digital library of information and technology Available [http://dilst.sir.arizona.edu/1255](http://dilst.sir.arizona.edu/1255) (last accused on 14.11.2007
UNDEARTAKING BY AUTHORS

We, the undersigned, give an undertaking to the following effect with regard to our articles entitled:

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_________________________________________________

Submitted for publication in the South Indian Journal of Library and Information Science
1. The article mentioned above has not been published or submitted to or accepted for publication in form in any other journal.
2. We also vouchsafe that authorship of this article will not be contested by anyone whose name(S) is/are not listed by use here.
3. We also agree to the authorship of the article in following sequence:

Authors’ name signature of authors

01. __________________________________________________________

02. __________________________________________________________

03. __________________________________________________________

04. __________________________________________________________

IMPORTANT:
01. All the authors are required to sign this form independently in the sequence given above.
02. Each author should have generated at least a part of the intellectual content of the paper.
03. Each author should be able to defend publicly in the scientific community, that intellectual content of the paper for which he/she can take responsibility.
04. No addition/deletion/or any change in the sequence of the authorship will be permissible at a later stage, without valid reasons and permission of the editor

This Journal and the individual contribution contained in it are protected under copyright by Librarian’s Association and the following terms and conditions apply to their use.
SUBSCRIPTION FORM

Name :_________________________________________________
Designation :___________________________________________
Organization :___________________________________________
Mailing Address :_________________________________________
City :___________________________________________________
State :___________________________________________________
Pin :_____________________________________________________
Phone no :_______________________________________________
Mobile No :_____________________________________________
Email :__________________________________________________

Subscriptions Rates:
Per Year: Rs. 2000/-
Two Years: Rs. 3000/-

© Librarian’s Association
Payment May be made by DD, Please contact Chief Editor and Managing editor through Phone or Email for any other details.
Published by
Mr. Ramesh Naik G S
Senior Librarian and Managing Editor
Librarian’s Association
South Indian Journal of Library and Information Science
Department of Library and Information Centre
Bangalore Medical College and Research Institute,
Fort Road, Kalasipalya, Bangalore
Mobile no 09844700051, 09844568621, 09964529900, 09590652694
Email: sijlis.bangalore@gmail.com, lokeshanaik@yahoo.co.in
G. Mahesh, Ph.D.
Head, National Science Library
Phone: 91-11-26863759
E-mail: gmahesh@nslcain.res.in  website: http://nsl.nic.in

NSL/ISSN/INF/2015/741
Dated: April 1, 2015

Sri Ramesha Naik,
Bangalore Medical College & Research Institute,
Fort Road,
Kalasipalya,
Bangalore

Dear Sir/Madam,

We are happy to inform you that the following serial(s) published by you has been registered and assigned ISSN (Print)

It is important that the ISSN should be printed on every issue preferably at the right hand top corner of the cover page.

We will be responsible for monitoring the use of ISSN assigned to Indian Serials and for supplying up-to-date data of the same to the International Centre for ISSN, Paris. For this purpose we request you to send us the forthcoming issue of your serial on complimentary basis.

We solicit your co-operation in this regard.

(Signed)

G. Mahesh

Head
National Science Library

SOUTH INDIAN JOURNAL OF LIBRARY AND INFORMATION SCIENCE,
ISSN 2395-3195, VOLUME 01, ISSUE 02.