Information Literacy for College Libraries with Special Reference to Lower Assam: A Study

Thesis submitted to the Mizoram University
for the award of Degree of
DOCTOR OF PHILOSOPHY
in
Library and Information Science
(School of Economics, Management and Information Science)

by
Maya Moyee Narzary
(Regn No: MZU/Ph.D/304 of 30.10.2009)

Supervisor
Prof. Pravakar Rath
Head
Department of Library & Information Science

Department of Library and Information Science
Mizoram University
Aizawl-796 004, Mizoram

2013

D E C L A R A T I O N

I hereby declare that the thesis entitled "**Information Literacy for College Libraries with Special Reference to Lower Assam: A Study"** submitted by me has not previously formed the basis for the award of any Degree or Diploma to Mizoram University or any other University or examining body.

Aizawl, Mizoram — Maya Moyee Narzary

Dated: — Research Scholar

MIZORAM UNIVERSITY

(A Central University)
DEPARTMENT OF LIBRARY & INFORMATION SCIENCE
Tanhril, Aizawl- 796004, Mizoram

C E R T I F I C A T E

This is to certify that the thesis entitled "**Information Literacy for College Libraries with Special Reference to Lower Assam: A Study"** submitted by **Maya Moyee Narzary** for the award of **Doctor of Philosophy** in **Library and Information Science** is carried out under my guidance and incorporates the students bonafide research and this has not been submitted for award of any degree in this or any other university or institute of learning.

Aizawl, Mizoram
Dated:

Prof. Pravakar Rath
Supervisor

A C K NO W L E D M E N T

No work can achieve its desire height without sincere motivation and support. To complete and submit this thesis entitled "***Information Literacy for College Libraries with Special Reference to Lower Assam: A Study***" I came across different learned people who directly or indirectly rendered me their utmost support and help. To express my sincere gratitude to them, at this moment words are falling short for me. Even though, it's my immense pleasure to jot down some words of gratitude and appreciation for them.

At the outset I offer my wholehearted bowing to the Almighty for spiritually bestowed on me his warmed blessings and instilling confidence to complete the work.

I express my deep sense of profound gratitude to my supervisor, Prof. Pravakar Rath, Head, Department of Library and Information Science, Mizoram University, Aizawl, a dynamic academician and a noble teacher, for his untiring effort, guidance, suggestions and support throughout the completion of the research work.

I would like to extend my gratitude to Dr. R.K. Ngurtinkhuma, Professor and Dr. S.N. Singh, Associate Professor, for their morale support. I also express my sincere obligation and gratefulness to Dr. R.N. Mishra, Associate Professor for his utmost help and valuable suggestions and other staffs of the Department of Library and Information Science, Mizoram University, Aizawl for their assistance and support in carrying out the research work.

I extend my obligation to the Librarians, Faculties and Students of Cotton College, Kokrajhar Government College, Handique Girls' College, B. Borooah College, Kanya Mahavidyalaya, and Hamidadad College of Lower Assam for their humble response and cooperation in providing necessary information and opinion pertaining to my work.

My obligation goes to Inspector of Schools, Shri Surendra Nath Goyary, Chirang and other staffs of the office for providing me the necessary information including Shri Hementa Kumar Das, Librarian, SCERT, Assam for his permission to use the library. I pay my homage to Late Anjan Goswami for his kind help and support.

I am indebted to give my warmed gratitude to my husband, Shri Surajit Brahma and little adorable daughter Nishka Brahma for their relentless support, encouragement, understanding and sparing valuable time, enabling me to complete the research work in stipulated time. Simultaneously, my father, mother, and mother-in-law are the persons who mentally and spiritually boosted me to complete the work and I really indebted to their support and encouragement. I also convey my sincere gratitude to other family members who supported and encouraged me to complete the work.

Last, but not the least, I express my sincere thanks to those who directly or indirectly helped and supported me in completing the work.

Aizawl, Mizoram Maya Moyee Narzary

Dated:

TABLE OF CONTENTS

LIST OF TABLES

LIST OF MAP/GRAPHS

LIST OF PHOTOGRAPHS

LIST OF APPENDICES

ABBREVIATIONS AND ACRONYMS

AAHE-	American Association for Higher Education
AASL-	American Association of School Librarians
ACRL-	Association of College and Research Libraries
A.D-	Anno Domini (After Christ)
AECT-	Association for Educational Communications and Technology
AHSEC-	Assam Higher Secondary Education Council
AIRS-	Advance Information Retrieval
AJ-	Abstracting Journals
ALA-	American Library Association
ALIA-	Australian Library and Information Association
ANTS-	Animated Tutorial Sharing
ANZILL-	Australian and New Zealand Institute of Information Literacy
APA-	American Psychological Association
ASLA-	Australian School Library Association
B.A-	Bachelor of Arts
BBC-	B.Borooah College
BCA-	Bachelor of Computer Application
B.Ed.-	Bachelor of Education
BIS-	Bibliographic Instruction Section
BLIS-	Bachelor of Library and Information Science
BRGF-	Backward Region Grant Fund
BSc. (IT)-	Bachelor in Science (Information Technology)
BSc.	Bachelor of Science
CALIBER-	Convention on Automation of Libraries in Education and Research Instituions
CALIS-	Computer Application to Library and Information Services
CAP-	Community Access Program
CARL-	California Academic and Research Libraries
CARL-	Canadian Association of Research Libraries
CAS-	Chemical Abstract Service
CAS/SDI-	Current Awareness Service/ Selective Dissemination of Information
CAUL-	Council of Australian University Librarians
CBFL-	Computer Based Functional Literacy
CBSE-	Central Board of Secondary Education
CC-	Cotton College
CCLI-	California Clearinghouse on Library Instruction
CD-ROM-	Compact Disc Read Only Memory

CIC-	Community Information Centre
CILIP-	Chartered Institute of Library and Information Professionals
CKP-	Consult a Knowledgeable Person in the Field
CP-	Carrying out Projects
CRIG –	CAVAL Reference Interest Group
CSU-	California State University
DC-	Discussion with Colleagues
DCA-	Diploma in Computer Application
DCU-	Dublin City University
DEE-	Director of Elementary Education
DELNET-	Developing Library Network
DPEP-	District Primary Education Programme
DESIDOC-	Defence Scientific Information and Documentation Centre
DHE-	Director of Higher Education
DIET-	District Institute of Education and Training
DISCUS-	Developing Information Skills & Competence for University Students
DLRS-	Discussion with Librarian or Reference Staff of the Library/other Library
DPI-	Director of Public Instruction
DRDA-	District Rural Development Agency
DRTC-	Documentation, Research and Training Centre
DRW-	Doing Research Work
DULS-	Delhi University Library System
EMPATIC-	Empowering Autonomous Learning Through Information Competencies
Ent.-	Entertainment
ERIC-	Education Resources Information Center
FRIENDS-	Fast, Reliable, Instant, Effective Network for Distribution of Services
GII-	Global Information Infrastructure
G.U-	Gauhati University
HC-	Hamidabad College
HGC-	Handique Girls' College
H.S-	Higher Secondary
HSLC-	High School Leaving Certificate
HSSLC-	Higher Secondary School Leaving Certificate
IASLIC-	Indian Association of Special Libraries and Information Centers
ICAR-	Indian Council of Agricultural Research
ICSSR-	Indian Council of Social Science Research

ICT-	Information and Communication Technology
IFAP-	Information for All Programme
IFLA-	International Federation of Library Associations and Institutions
ISS-	Information Scattered in too many Sources
IIT-	Indian Institute of Technology
IJ-	Indexing Journals
IL-	Information Literacy
ILDD-	Information Literacy and Document Delivery
ILP-	Information Literacy Programme
INDEST-	Indian National Digital library in Engineering, Science and
AICTE-	Technology- All India Council of Technical Education
INFLIBNET	Information and Library Network
INSDOC-	Indian National Scientific Documentation Centre
Int.-	Internet
IV-	Information is too Vast
IPR-	Intellectual Property Right
ITI-	Industrial Training Institute
JELIT-	Journal of E-Literacy
JCCC-	J-Gate Custom Content for Consortium
JRF-	Junior Research Fellowship
KGC-	Kokrajhar Government College
KM-	Kanya Mahavidyalaya
LC-	Library Catalouge
LIASA-	Library and Information Association of South Africa
LILAC-	Librarians' Information Literacy Annual Conference
LILI-	Learn Information Literacy Initiative
LKL-	Lack of Knowledge in using the Library
LLP-	Lifelong Learning Programme
LIRT-	Library Instruction Round Table
LIS-	Library and Information Science
LISA-	Library and Information Science Abstract
LISTA-	Library, Information Science & Technology Abstracts
LOEX-	Library Orientation Exchange
LSUS-	Library Staff are Unwilling for Service
LT-	Lack of Time
M.A-	Master of Arts
MA-	Material is not Available
M.Com-	Master of Commerce
MDGs-	Millennium Development Goals
MEDLARS-	Medical Literature Analysis and Retrieval System
MHRD-	Ministry of Human Resource Development

MIL-	Media and Information Literacy
MKCL-	Maharashtra Knowledge Corporation Ltd.
MLA-	Member of Legislative Assembly
MLIS-	Master of Library and Information Science
MLiSc-	Mater in Library Science
MSSW-	Madras School of Social Work
NAAC-	National Assessment and Accreditation Council
NAARM-	National Academy of Agricultural Research Management
NASA-	National Aeronautics and Space Administration
NASSDOC-	National Social Science Documentation Centre
NCERT-	National Council of Educational Research and Training
NCLIS-	National Council for Library and Information Services
NCSI-	National Centre for Science Information
N.E-	North East
NeGP-	National e-Governance Plan
NFIL-	National Forum on Information Literacy
NEHU-	North East Hill University
NII-	National Information Infrastructure
NIIT-	National Institute of Information Technology
NIRD-	National Institute of Rural Development
NISCAIR-	National Institute of Science Communication and Information Resources
NITA-	National Information Technology Agenda
NITC-	National Information Technology Council
NKC-	National Knowledge Commission
NKN-	National Knowledge Network
N-LIST-	National Library and Information Services, Infrastructure for Scholarly Content
NLM-	National Literacy Mission
NPTEL-	National Programme on Technology Enhanced Learning
NSW-	New South Wales
OAI-	Open Archives Initiative
OASIS-	Online Advancement of Students Information Skills
OPAC-	Online Public Access Catalogue
PCL-	Preparing Class Lecture/anticipated topic in the class
P.G-	Post Graduate
PGDCA-	Post Graduate Diploma in Computer Application
PIKs-	Public Information Kiosks
PNM-	Perpustakaan Negara Malaysia (National Library of Malaysia)
PPP-	Public -Private Partnership
PRIMO-	Peer Reviewed Instruction Materials Online

QULOC-	Queensland University Libraries Office of Cooperation
QUT-	Queensland University of Technology
RA-	Review of Articles
R&D-	Research and Development
RSS-	Rich Site Summary/Really Simple Syndication
RTI-	Right to Information
SAFARI-	Skills in Accessing, Finding, and Retrieving Information
SALIS-	Society for the Advancement of Library and Information Science
SCERT-	State Council of Educational Research & Training
SCIL-	Seminar Committee: Information Literacy
SCONUL-	Society for College, National and University Libraries
SDC-	System Development Corporation
SEBA-	Secondary Education Board of Assam
SIS-	Society of Information Sciences
SPSS-	Statistical Package for Social Sciences
SQL-	Structured Query Language
SSA-	Sarva Shiksha Abhiyan
ST-	Schedule Tribe
TILT-	Texas Information Literacy Tutorial
TLT-	Teaching, Learning and Technology
UEP-	User Education Programme
UGC-	University Grants Commission
UGC-INFONET-	University Grants Commission- Information Network
UNESCO-	United Nations Educational Scientific and Cultural Organization
U.K-	United Kingdom
UK-	Updating Knowledge
VKC-	Village Knowledge Centre
VPTs-	Village Public Telephones
VSAT-	Very Small Aperture Terminal
WANULIP-	Workshop on Automation and Networking of University libraries
WGL-	Working Group on Libraries
WILU-	Workshop on Instruction in Library Use
WPP-	Writing and Presenting Paper
WSIS-	World Summit on the Information Society
WWW-	World Wide Web
XML-	Extensible Markup Language

CHAPTER- 1

INTRODUCTION

1.1 Introduction

The growth and development of global information society which is ultimately leading to a knowledge society has optimized the use of information from different walks of life. Now learning has become a continuous process. Hence in this ICT driven society, information literacy has become the pillar for the independent lifelong learning. Moreover information literacy empowers the people to thrive successfully in the ocean of information. Mention may be made that an information literate person can seek, evaluate, use and create information efficiently and effectively to meet their personal, social, occupational and educational goals. In Alexandria Proclamation (2005) it has been considered as the basic human right to survive in this digital world. It is evident that the informed and updated citizens are always participative, thus encourages social inclusion, which is indeed crucial for any nation to take full advantage of emerging opportunities for the shared advantages.

In the global scenario, some countries have realized the importance of information literacy since it is knitted with continuing learning i.e. lifelong learning and is well recognized in their respective national policies/agendas. Whereas in some countries it is in nascent stage and many encouraging initiatives have been undertaken to attain the desired acclaim.

1.2 Information Literacy-What it Comprises ?

Since the time immemorial, human beings have always been dependent on information. In this ever changing digital world, we can access to different information within no time. But to have the desired/precise information, requires some training /skills to avoid the consequences of information overload (Information Fatigue Syndrome) and data smog. Thus information literacy comprises the competencies/skills to identify his/her information need, and have the capabilities to locate, evaluate, use, create and communicate information within cultural and social context with some legality. Information literacy extends beyond technological fluency to information fluency. It includes searching skill, evaluating skill, interpretative skills and referencing skills which ultimately empowers individuals, communities and the nation as a whole.

1.3 Information Literacy- What UNESCO Means?

The term 'information literacy' was first devised by Paul Zurkowshi in 1974, the then President of United States Information Industry Association in a proposal to the National Commission on Library and Information Science. He described information literate individuals as "trained in the application of information resources to their work" (Owusu-Ansah, 2005, p. 367). However, the definition developed by the ALA, Presidential Committee on Information Literacy: Final Report (1989) as the ability to recognize when information is needed and "locate, evaluate, and use effectively the needed information" (O'Connor, 2009, p. 79) is widely accepted worldwide. Moreover, American Association of School Librarians (AASL) and Association of College Research Libraries (ACRL) has extended the definition by publishing Information Literacy Standards for Student Learning: Standards and Indicators (1998) and Information Literacy Competency Standards for Higher Education (2000) respectively.

Likewise, United Nations Educational, Scientific and Cultural Organization (UNESCO) connote "Information Literacy" to provide people with the skills and abilities for critical reception, assessment and use of information in their professional and personal lives. It is considered as prerequisite to use Information and Communication Technology (ICT), its various tools and services. Information literate persons are usually a confident user of information and an active contributor of new knowledge. UNESCO through IFAP (Information for All Programme) engaged to deal with the challenges of information literacy worldwide.

It is worthwhile to mention that several definitions has been propound by different authors, organizations, association and groups, but the sole notion is to equip the people/individual to address the complexities in the use of information in the digital era.

1.4 Need of Information Literacy in Library

The need to raise the awareness about information literacy is well stated in the ALA's final report (1989) as:

> "To respond effectively to an ever-changing environment, people need more than just a knowledge base, they also need techniques for exploring it, connecting to other knowledge bases and making practical use of it. In other words the landscape upon which we used to stand has been transformed, and we are being forced to establish a new foundation called information literacy. Now knowledge-not minerals, or agricultural products or manufactured goods-is this country's most precious commodity and people who are information literate-who know how to acquire knowledge and use it-are America's most valuable resources." (ALA, 1989, p. 9)

The ALA report indicates the need of information literacy in general parlance relating to the contemporary milieu as the strong base of the lifelong learning.

In the present context, emerging technologies, products and services has necessitated the deliberation on information literacy. It is evident that in higher education, Research and Development institutions and in professional practices it is getting more attention as it enhances academic performance and professional accountability. Moreover it is considered as indispensable entity in teaching, learning and research.

In this transitional period, libraries are also at crossroad providing both traditional as well as ICT enabled services. The old concept of library has changed, now it has been epithet as knowledge centre and professionals as the knowledge managers. Therefore, to tackle the various complexities in managing, organizing and developing the library system, information literacy should be adopted as the core of continuous learning and development by the professionals. On the other hand, availability of online databases in public domain, e-journals subscription through different consortium, host and aggregators has necessitated to equip the users with information literacy skills to capitalize the relevant information resources. Henceforth, users should be trained up to tap relevant resources validating its currency, authenticity and usability. Thus, information literacy is the aggregation of different literacies i.e. basic literacy, library literacy, ICT literacy, visual literacy, media literacy, tool literacy, research literacy, publishing literacy, and critical literacy

1.5 Role of Library Professional in Information Literacy

Adapting to an emerging technology is the survival factor for the library and information professionals. Simultaneously in this changing environment their role has also been changed from "passive providers of information support to more pro-active providers of information itself" (Jain, 2006, p. 645). The role of library professionals are conceived as the promoter, facilitator, expert consultant, adviser, teacher/trainer and a change agent to "help other domains develop and put their information literacy policies, programs and projects in place" (Chakravarty, n.d., p. 16). These emerging roles of library professionals will be instrumental in effective and efficient use of different resources of the library and would be able to bring proximity between user and their needed information.

In the academic environment, library professionals are required to provide different services under the purview of information literacy (Jain, 2006, p. 646)

- Orientation of staff as well as students.
- OPAC training.
- To put the rules and regulation on college website
- Provide information on mail.
- Send latest booklist by mail or manual.
- News Bulletin.
- E learning and web based instructions/Internet.
- Feedback form.
- Display board / Guides.
- Assist on internet for information search.
- Use of Audio Visual Method/Power Point presentation.
- To train how to use online journals.
- Information retrieval through digital resources
- Printed booklet.
- Lectures, Library tour.
- Offline CDROM browsing and search pattern
- Make aware of copyright issue & IPR.

Moreover, library processionals should work in close coordination with different experts in the field like media expert, programmer, faculty (subject expert) to bring

out an effective information literacy program with sound pedagogy and assessment method.

1.6 Statement of the Problem

Assam is considered as the gateway of North- Eastern regions, which includes seven states popularly known as seven sisters viz. Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and in 2001 one more state, Sikkim, has been included in its fraternity. Geographically it is surrounded by the seven states, West Bengal and two countries viz. Bangladesh and Bhutan occupying an area of 78,438 sq. kms i.e, about 2.4 per cent of the country's total geographical area.

Assam symbolizes large and exceptional assemblage of varied natural scenery and cultural background. It is the state of two river valleys based on the two main river systems- Brahmaputra valley and Barak valley. For the administrative and revenue convenience it has been divided into 27 districts- 24 districts in Brahmaputra valley and 3 districts in Barak valley. According to the 2011, Census of India, the population of Assam is "3, 11, 69, 272 of which 1, 59, 54, 927 are males and 1, 52, 14, 345 are females" (Govt. of Assam, 2011-12, p. 7).

Due to the advent of information and communication technologies, having access to the needed information is an easy affair. Many researches have been carried out in the different aspects of library and information profession of which information literacy is one of the important areas where some special attention is needed.

College libraries are important segment of library and information system and cater maximum users like university and public libraries. Information Literacy for college libraries could serve as an important tool for young users to enter into higher education. The ability to access, use and retrieve information is the most fundamental needs of college students which facilitates growth and development in their educational career. Moreover, information literacy is considered as the most effective tool for college libraries. Therefore this new concept has prompted the scholar to undertake a research problem with special reference to colleges (Government, Provincialised, and Non-Provincialised) located in Lower Assam for the greater interest of the users.

1.7 Objectives of the Study

The present research problem has following objectives:

- to study the level of information literacy awareness of users and staff of a college library
- to make an assessment of present status with regard to information literacy
- to develop a model or standard of information literacy for imparting skills among the users and library staff.
- to suggest measures to be undertaken by college library authority and library staff for effective implementation of information literacy practices so as to promote professional competency of both users and staff.

1.8 Scope of the Study

Brahmaputra Valley is divided into four divisions under the respective commissions- Upper Assam Division, Lower Assam Division, North Assam Division and Hills & Barak Valley Division. The study entitled *"Information Literacy for College Libraries with Special Reference to Lower Assam: A Study.",* has covered only the 12 districts of Lower Assam Division out of 27 districts of Assam having nearly about 76 provincialised Colleges, 86 non-provincialised / venture colleges and 2 Government Colleges. The study is confined to the general academic colleges which impart Arts, Science and Commerce only. Some of the academic colleges provide the degree courses on one stream only. This study does not cover any professional, vocational and technical/medical etc. colleges. The lists of Government, provincialised and non-provincialised/ venture colleges in Lower Assam are given in the Appendix -1. The coverage of the study includes proportionate selected randomly from the Government, Provincialised and Non-provincialised /venture colleges (2-Governemnt i.e. Cotton College and Kokrajhar Government College, 2 Provincialised i.e Handique Girls' College and B.Borooah College and 2 Non-provincialised/venture i.e Kanya Mahavidyalaya and Hamidabad college). Mention may be made that Government Colleges signify- the colleges which directly comes under the State government. Provincialised Colleges are those which receives deficit grants-in-aid from the State Government, and Non-provicialised/venture colleges are those which receives adhoc grants from the State Government, where teachers are given remuneration by the

parent body based on the students' admission fees and public donation. However, the sample colleges should represent all the 12 districts.

1.9 Methodology

The following methodologies were adopted for data collection, analysis, and interpretation in order to derive appropriate conclusion of the research problem:

A) Questionnaire Method**:** The six colleges under study have been selected on the basis of date of establishment. The researcher has framed a two separate structured questionnaire to solicit information from users, and library staff/library authorities to acquaint and appraise the concept of information literacy and the extent of its implementation in college libraries. A total number of 759 questionnaire were distributed among the users randomly comprising the faculties and the students, out of which a total number of 687 respondent have responded which constitute 91%. Further the scholar distributed another set of questionnaire to the librarian of the colleges under study and the scholar got a response rate of 100%. Data obtained from both the questionnaire were tabulated for analysis and inferences accordingly were drawn by the scholar.

B) Interview Method**:** Selective interview of the leading experts were carried out by the scholar who have implemented information literacy in their libraries, planners and policy makers associated with higher education in the state and college management to solicit their opinion and practice of information literacy in college libraries as a policy.

C) Case Study Method**:** The best and healthy practices being implemented at national level with regard to information literacy in college libraries shall act as a model or standard in the present research problem.

Data Analysis and Interpretation: Data analysis obtained through the structured questionnaire explored the truth prevailing in the libraries. It facilitates the researcher to draw viable inferences to satisfy the objective of the study. The numerical variables are analyzed with the help of MS-Excel which is supported by tables and graphs to deduce various statistical inferences which form the basic of research. It also explore means to the researcher to test various hypothesis formulated by the researcher.

1.10 Hypotheses

The present research problem has the following tentative assumptions:

H_1: Inadequate number of library staff and ICT infrastructure has serious impact on information literacy.

H_2: Lack of awareness by both users and authority result into non-implementation of information literacy programmes in colleges.

H_3: Absence of national and state level policy on information literacy hinders promotion and propagation of information literacy in enhancing professional competency of both users and staff.

1.11 Review of Literature

Information literacy is a global phenomenon, though the word has been endorsed in the 1974, tremendous work has been done in the realm of information literacy since 1980s all over the world. Rader (2002) mentioned that in 1970s most of the publications were concerned to user education. In 1973 nearly 28 publications were reviewed while in 2002 the publication goes up to nearly 300 which are related to information literacy. To consider annually, about 60% of the publications deals with academic libraries and 20% related to information literacy instruction in school media centers.

By scanning different databases like LISA (Library and Information Science Abstract), ERIC (Education Resources Information Centers), LISTA (Library, Information Science & Technology Abstracts), and many other multi-disciplinary databases Pinto, Cordon, & Diaz (2010) found that in the last thirty years though the term is not frequently used but it came into view in large of selected text. Furthermore, occurrence of the term is highest as compared to other related terms. The authors also highlights that number of articles in computer literacy is followed by information literacy and subsequent progress in the field is evident through different publication like monographs and doctoral thesis. As the review of literature is an important aspect of research, the scholar has reviewed and consulted different publications-primary and secondary sources, which are published between the periods

of 2000 to 2013. Some of the core literatures reviewed are given below and are arranged chronologically:

Choudhury & Sethi (2009) makes a comprehensive study to identify the level of skill and usefulness of information literacy in the rapidly changing scenario for the library professionals of university libraries of Orissa.

Singh (2009) describes and demonstrates the set of information literacy skills that makes a person a competent lifelong learner to find, evaluate, filter and use information in an effective manner.

Catts & Lau (2008) provides a basic conceptual framework for measuring information literacy and is designed to serve as a reference to facilitate the elaboration of information literacy indicators.

Lwehabura & Stilwel (2008) investigates the status and practice of information literacy so as to determine the best ways of introducing or improving information literacy programmes in four Tanzanian universities.

Saunders (2008) explores the possibility of support that information retrieval systems and information literacy standards which can further information literacy instruction by providing librarians impending development.

Varalakshmi (2007) has suggested three types of models for trainers, under graduates and post graduate and the necessary procedures for their application in the Indian perspective especially in higher education.

Chauhan, Chand, & Murthy (2006) describes the efforts initiated by INFLIBNET through UGC-Infonet: E-Journals consortium to provide awareness to academicians and to train them in the use of e-resources available through consortium up to optimum level.

Crawford (2006) focuses on the impact of Electronic Information Services (EIS) on Glasgow Caledonian University students, both past and present.

Devi &Devi (2006) highlights the ways in which library professionals can support an information literacy programme in some selected academic libraries of Manipur.

International Federation of Library Associations and Institutions (IFLA) (2006) have provided vital guidelines which comprises different concepts, principles and procedures to the library and information professionals for creation of effective information literacy program. Information literacy leads to lifelong learning process and for its successful implementation, concern institutional support is indispensable.

Singh & Joshi (2006**)** conducted a study to determine the information literacy skills of students and to provide a background for the development of an information literacy schedule for the undergraduate students of the college.

Karisiddappa & Rajgoli (2005) states that in the international scenario, like in USA, UK and Australia much work has been done in information literacy. However the authors concluded with a note that such initiatives should also be taken by the government of India.

Nyamboga (2004) presents the results of a study concerning to the training opportunities for library and information professionals in India and how the Indian University libraries are providing information skills and information literacy program to the users.

1.12 Chapterisation

The present research problem comprises the following chapters:

Chapter-1 Introduction: This particular chapter deals with the meaning of the term 'Information Literacy', its need in library, role of library professionals, statement of the problem, objectives, scope of the study, methodologies, hypothesis and literature review pertaining to the research work.

Chapter-2 Information Literacy: Trends and Developments- International and National: This particular chapter highlights the different initiatives rendered by different international bodies, and countries of the world which gives a glimpse of information literacy trends.

Chapter-3 Information Literacy in Academic Libraries (Colleges and Universities): This particular chapter deals about the initiatives and various studies carried out in different academic libraries of India in the context of information literacy.

Chapter-4 Information Literacy Scenario in College Libraries of Lower Assam: This particular chapter illustrates the general educational system in Assam, information literacy in academic libraries of Assam, information literacy in college libraries of Lower Assam and information literacy in six colleges of Lower Assam under study.

Chapter-5 Data Analysis and Findings: The fifth chapter consists of the data analysis and the different findings of the study which are stated in different categories. Moreover, the chapter comprises the testing of hypotheses.

Chapter- 6 Suggestions and Conclusion: Based on the different findings, Information Literacy Model has been developed for the library staffs and library users which are suggested for the Colleges of Lower Assam. In addition, some of the scope of further research in the area has also been highlighted with conclusion.

Bibliography: At the end of every chapter references are arranged according to 6th edition of the American Psychological Association style manual. Simultaneously in the end of the thesis comprehensive bibliography is also arranged in accordance to the same style manual.

1.13 Conclusion

Since the existence of this world, information plays a vital role in all realms of life. Information is created through some mechanism of human intellect, where the data is the constituent part of the information and according to one's need; collected data are manipulated to serve the purpose. Moreover, when information gets mingled with human experience then it becomes wisdom/knowledge which is the ultimate. During ancient times, information was basically used for the war purpose, which highly helped in decision making and planning. Physical involvement is indispensable in whole process of sending and receiving of information. But in this 21st century, information society, lot of changes has taken place from the grassroots to top level every one is craving after the information to be the beneficiary of it. Now getting information is not a problem, but indeed having the authentic, reliable and useful information is the big question before the users of information. Users get bewildered in the heap of information available in different sources of information through internet. And in this confused situation, having the knowledge of information literacy will prove to be the boon. The next chapter deals with international trends prevailing in some countries of the world in the domain of information literacy.

References:

Andretta, Susie. (2005). *Information literacy: A practitioner's guide.* Oxford, UK: Chandos Publishing.

ALA. (1989). *Presidential Committee on Information Literacy: Final report*. Retrieved on August 30, 2012 from http://www.ala.org/acrl/publications/whitepapers/presidential.

Catts, Ralph and Lau, Jesus. (2008). *Towards information literacy indicators*. Paris: UNESCO.

Chakravarty, Rupak. (n.d). *Information literacy in the knowledge society: Empowering learners for a better tomorrow*. Retrieved on January, 25, 2013 from http://eprints.rclis.org/11393/1/Rupak_Information_Literacy.pdf.

Chauhan, Suresh K., Chand, Prem. & Murthy, T.A.V. (2006). Information literacy for Indian academicians: INFLIBNET initiatives. *Journal of Library and Information Science, 31*(1), 45-52.

Choudhury, B.K., & Sethi, Bipen Bihari. (2009). Computer literacy of library professionals in the university libraries of Orissa: An analytical study. *IASLIC Bulletin, 54*(1), 15-30.

Crawford, John. (2006). The use of electronic information services and information literacy: A Glasgow Caledonian University study. *Journal of Librarianship and Information Science, 38*(1), 33-44.

Devi, A. Hileima. & Devi, Th. Purnima. (2006, February). *Information literacy within the library: A study with special reference to academic libraries of Manipur*. Paper presented at the 4th International Convention CALIBER, Gulbarga, 210-216.

Eisenberg, Michael B., Lowe, Carrie A., & Spitzer, Kathleen L. (2004). *Information literacy: Essential skills for the information age* (2nd ed.). Westport, Connecticut, London: Libraries Unlimited.

Govt. of Assam. (2011-12). *Economic Survey*. Assam: Directorate of Economics and Statistics, Planning and Development Department, Govt. Assam.

Gross, Melissa. & Latham, Don. (2007). Attaining information literacy: An investigation of the relation between skill levels, self-estimates of skill, and library anxiety. *Library and Information Science Research, 29*(3), 332-353.

Idzwan, Mohd., Salleh, Mohd., Faiz, Ahmad., Halim, Abdul., Abdullah, Raja., Yaacob., & Yusoff, Zulkarnain. (2011). *Measuring the effect of information*

literacy on the undergraduates' academic performance in higher education. Retrieved on Nov., 11, 2012 from http://www.ipedr.com/vol5/no2/112-H10267.pdf

International Federation of Library Associations and Institutions (IFLA). (2006). *Guidelines on information literacy for lifelong learning.* Retrieved on Nov., 17, 2010 from http://www.ifla.org/.

Jain, Vinita. (2006). *LIS professionals as teachers and trainers: User education and information literacy for life-long learning*. Retrieved on March, 01, 2013 http://arizona.openrepository.com/arizona/bitstream/10150/105978/1/93.Poster-Vinita_Jain_pp645-648_.pdf

Karisiddappa, C.R. & Rajgoli, Iqbalahmad U. (2005). Information Literacy: The process of enhancement of information handling capacity. *IASLIC Bulletin, 50*(2), 74-82.

Lloyd, Anne. & Williamson, Kirsty. (2008). Towards an understanding of information literacy in context: Implications for research. *Journal of Librarianship and Information Science, 40*(1).

Lwehabura, Mugyabuso Julius. & Stilwell, Christine. (2008). Information literacy in Tanzanian universities: Challenges and potential opportunities. *Journal of Librarianship and Information Science, 40*(3),179-191.

Martin, Allan. & Madigan, Dan. (2006). Eds. *Digital literacies for learning*. London, UK: Facet Publishing.

Martin, Allan. & Rader, Hannelore. (2006). Eds. *Information and IT literacy: Enabling learning in the 21st century.* London, UK: Facet Publishing.

Mokhtar, Intan Azura., Majid, Shaheen., & Foo, Schubert. (2008). Information literacy education: Applications of mediated learning and multiple intelligences. *Library & Information Science Research, 30*(3),195-206.

Mokhtar, Intan Azura., Majid, Shaheen., & Foo, Schubert. (2008). Teaching information literacy through learning styles: The application of Gardner's multiple intelligences. *Journal of Librarianship and Information Science, 40*(2), 93-104.

Nyamboga, Constantine M. (2004). Information skills and information literacy in Indian university libraries. *Program: Electronic Library and Information Systems, 38*(4), 232-23.

O'Connor, Lisa. (2009). Information literacy as professional legitimation: A critical analysis. *Journal of Education for Library and Information Science, 50*(2), 79-89.

Owusu-Ansah, Edward K. (2005). Debating definitions of information literacy: Enough is enough!. *Library Review, 54*(6), 366-374.

Pinto, Maria., Cordon, Jose Antonio., & Diaz, Raquel Gomez. (2010). Thirty years of information literacy (1977-2007): A terminological, conceptual and statistical analysis. *Journal of Librarianship and Information Science, 42*(1), 3-19.

Rader, Hannelore B. (2002). *Information literacy 1973-2002: A selected literature review*. Retrieved on Dec., 16, 2009 from https://www.ideals.illinois.edu/bitstream/handle/2142/8464/librarytrendsv51i2i_opt.pdf

Saunders, Laura. (2008). Exploring connections between information retrieval systems and information literacy standards. *Library & Information Science Research, 30*(2).

Sayers, Richard. (2006). *Principles of awareness-raising for information literacy: A case study.* Bangkok: UNESCO.

Singh, Jnanendra Narayan., & Joshi, Taruna. (2006, September). *Information literacy skills of undergraduate students: A case study of Sri Venkateswara College (University of Delhi).* Paper presented at Knowledge, Library and Information Networking, NACLIN, 331-336.

Singh, Rajesh. (n.d). *Information literacy: A review of literature*. Retrieved on Feb., 21, 2009 from http://knol.google.com/k/rajesh-singh/information-literacy-a-review-of/1j2u7rog13yrc/6

Singh, Shashi P. (2009). Catalytic role of information literacy in educational change: A case study of university of Delhi. *Library Management, 30*(3), 163-175.

Torras, Maria-Carme. & Saetre, Tove Pemmer. (2009). *Information literacy education: A process approach professionalising the pedagogical role of academic libraries*. Oxford, UK: Chandos Publishing.

UNESCO. (n.d). *Information for All Programme*. Retrieved on March, 01, 2013 from http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/ifap/meetings/bureau/Proposal%205%20for%20the%20Preparation%20of%20the%20Draft%20Programme%20and%20Budget%202012-2013.pdf

Varalakshmi, R.S.R. (2007). Information literacy models: An Indian perspective. *Journal of Library and Information Science, 32*(1), 41-60.

CHAPTER- 2

INFORMATION LITERACY: TRENDS AND DEVELOPMENTS AT INTERNATIONAL AND NATIONAL LEVEL

2.1 Introduction

The rapid development of information and communication technology (ICT) has the wide impact in the 21st century. In this information society ushering to knowledge society, the notion about the use of information has changed and simultaneously information literacy has become a global phenomenon which has transformed the society and become a crucial issue for the political, economic, social and cultural development worldwide. From various dimension it is quite apparent that the information gap divides the nations into rich and poor, and information literacy helps in narrowing that gap. As it is getting momentum all over the world, different information literacy trends in the developed countries shows the varieties of work done on the field and can be taken as a role model to initiate in the countries where information literacy is in the nascent stage or not yet been implemented.

According to the literature review by Hannelore B. Rader –since 1973 to 2003 more than 5000 publications related to library user instruction and information literacy have been published and reviewed. New developments in education and technology during the last two decades have affected user instruction and have led to the emergence of information literacy. Based on needs related to the rapid development of information technology and the evolving information society, librarians have begun teaching information skills to all types of users to ensure that they gain information fluency so they can become productive and effective information users both in the education environment and in the work environment (Rader, 2002).

It is noteworthy that in the last decade there has been a tremendous growth in publications related to information literacy globally. During the 1970s, publications indicate that user instruction activities were of concern primarily to librarians in the United States, Canada, the United Kingdom, Australia, and New Zealand. At the present time, publications indicate a major concern with information literacy not only in the countries mentioned above but also in China, Germany, Mexico, Scandinavia, Singapore, South Africa, South America, Spain, and others (Rader, 2002).

2.2 Role of UNESCO and IFLA in Promoting Information Literacy.

UNESCO (United Nations Educational, Scientific and Cultural Organization)

UNESCO came into existence on 16 November 1945 with a mission to "contribute to the building of peace, the eradication of poverty, sustainable development and intercultural dialogue through education, the sciences, culture, communication and information" (www.unesco.org). Presently the organization has 195 Member States and 8 Associate Members. The organization is governed by the General Conferences, which is convene every two years and the executive Boards for the management of the Organization. Since 15 November 2009, the organization is headed by the Director-General, Irina Bovoka.

In 2000, Millennium Summit was held to discuss about the role of United Nations in 21st century and in 2005 World Summit was held to assess the progress of the United Nations towards achieving the Millennium Development Goals (MDGs) which is derived from the Millennium Declaration which comprises eight chapters (http://en.wikipedia.org/):

- Values and Principles
- Peace, Security and Disarmament
- Protecting Common Environment
- Human Rights, Democracy and Good Governance
- Protecting the Vulnerable
- Meeting the Special Needs of Africa
- Strengthening the United Nations.

Catts and Lau mentioned that "information literacy underpins many of the Millennium Development Goals (MDGs)" (Catts & Lau, 2008, p. 7). Furthermore, in 2000 under the Communication and Information programme, an intergovernmental programme, Information for All Programme (IFAP) was formed to "harness the new opportunities of the information age to create equitable societies through better access to information" (http://www.unesco.org/) by :

- Promoting expression and discussion on various issues-ethical, legal and societal, of the information society.

- Promoting access to information available in public domain
- Supporting training and continuing learning in communication, information and Informatics.
- Supporting the creation of local content and to encourage accessibility through basic literacy and ICT literacy.
- Promoting the use of international standards and best practices in communication, information and informatics.
- Promoting local, national and international information and knowledge network.

In a proposal for the Draft Programme and Budget for 2012-13, IFAP, Information Literacy Working Group recommends some measures to Director General to promote information literacy (http://www.unesco.org/):

- To sketch out international Recommendations with much consultation to increase the awareness about information literacy among different countries and its associated institutions.
- To plan a long term approach to put into practice the concepts and programmes as developed and support by IFAP on information literacy by educational institutions, libraries and other concerned groups.
- To develop core curriculum within National Information Society Policy framework.
- Creation of UNESCO Institute of Statistics to assess the information skill of the population and to ensure the suitable information literacy strategies by the governments.
- To organize an international conference to discuss the government and public efforts in elaboration of national information policies and to assure funding for libraries and educational institutions which implement information literacy curricula.

Furthermore, Media and Information Literacy (MIL) is also endorse by UNESCO, having the prime focus on training the teachers to incorporate MIL in the teaching and to offer suitable pedagogical methods, curricula and resources. Simultaneously, to train the teachers, Media and Information Literacy Curriculum has been published,

having 10 modules. Besides, the Organization has published many publications and funding UNESCO-IFLA Information Literacy Logo Contest, International Information Literacy Resource Directory created by IFLA.

IFLA (International Federation of Library Associations and Institutions)

This leading international body was set up in 1927 at an international conference in Edinburgh, Scotland which is entirely dedicated for the interest of library and information services and it's a mouthpiece for the library and information professionals which aim to (www.ifla.org):

- promote high standards of provision and delivery of library and information services.
- encourage widespread understanding of the value of good library and information services.
- represent the interests of members throughout the world.

Nearly 1500 members from 150 countries around the world have registered under the esteem body. Within the umbrella of IFLA, different activities are carried out by the specific sections, divisions and groups. Therefore to develop and promote information literacy education in different types of library and information institutions and to encourage international cooperation, Information Literacy Section, chaired by Maria-Carme Torras i Calvo, is bestowed with the following goals and activities to (http://www.ifla.org/files):

§ advocate for information literacy in society and increase partnership within IFLA and with other organizations or institutions (e.g. UNESCO).

§ support information professionals and other relevant partners in the provision of information literacy education in different types of libraries and information institutions for all social sectors and in all geographical areas.

§ improve communication within the section by creating and using a standing committee blog and a wiki which is open to the public.

§ develop information literacy as a multi-cultural, multifaceted concept, of relevance to the global society by exploiting the collective, international experience of the section.

To bring the different issues and challenges encountered by the professionals as well as the interest groups, the section organizes annual conferences, professional meetings, workshops, seminars and many discussions are carried out as and when prevails.

Moreover, different publications has also been brought out i.e. guidelines, newsletters, reports, statements and projects to intimate the members and the interested groups about the trends and development in the domain of information literacy. In this information society, being a informed and information literate is one of the basic needs and to imbibe the skills among the active users of information, rather IFLA recommends Media and Information Literacy to be taken up by the governments and organizations to (http://www.ifla.org/publications/...):

- ☞ commission research on the state of Media and Information Literacy and produce reports, using the Media and Information literacy indicators as a base, so that experts, educators, and practitioners are able to design effective initiatives;

- ☞ support professional development for education, library, information, archive, and health and human services personnel in the principles and practices of Media and Information Literacy and Lifelong Learning;

- ☞ embed Media and Information Literacy education in all Lifelong Learning curricula;

- ☞ recognize Media and Information Literacy and Lifelong Learning as key elements for the development of generic capabilities which must be demonstrated for accreditation of all education and training programmes;

- ☞ include Media and Information literacy in the core and continuing education of information professionals, educators and government policymakers and administrators, as well as in the practice of advisors to the business, industry and agriculture sectors;

- ☞ implement Media and Information literacy programs to increase the employability and entrepreneurial capacities of women and disadvantaged groups, including migrants, the underemployed and the employed; and

- ☞ support thematic meetings which will facilitate the acquisition of Media and Information and Lifelong Learning strategies within specific regions, sectors, and population groups.

In the international level UNESCO and IFLA are the prominent bodies to endorse and develop information literacy in a lucent manner worldwide. After the different initiatives taken by these bodies major advancement is evident in most of the countries. On the other hand many initiatives have also been taken by the different countries of the world to meet the local variation. In this chapter various national and international trends are highlighted so that one can have the overview of what is going on in the field.

2.3 Australia

In Australia Information Literacy is a recognized and well accepted concept. Many changes knowledgeable in the higher education – increase in student enrolment, overseas students, vanishing of different status between universities and colleges, introduction of life long learning strategies etc. are some of the reasons contributing towards the information literacy practice in Australia.

Many federal and legislative imperatives are instrumental in introduction, growth and development of information literacy in Australia. It is a common practice in Australian universities as it has been embedded into the curricula with different assessing strategies and outcomes.

Online Learning Tools

To acquaint the users with different number of online learning tools, many online information literacy tutorials/courses are provided. A few of such courses are given below:

1. Info Trekk and Info Trekk Plus

InfoTrekk is created by Curtin University which can be used from campus and out side the campus too. Usually, students are guided through a 10 easy steps to use any essay or presentation topic. InfoTrekk Plus also guides the students to keep up-to-date and manage the required information.

2. PILOT: Your Information Navigator

PILOT is created by Queensland University of Technology for the undergraduate students in information searching, retrieval, management and evaluation. It has the provision of local customization which is offered to different national and international institutions.

3. InfoSkills

This tutorial is created and hosted by University of Newcastle (NSW), which is designed on the basis of Australian and New Zealand Information Literacy Framework (2004).

4. LILI - Learn Information Literacy Initiative

It is created by the LEARN Network of South Australian TAFE Libraries, which supports users in searching for information using TAFE library catalogues, the World Wide Web, and electronic databases.

5. LILT

It is created by University of New South Wales (NSW), through different modules emphasizing on the fundamental research skill for undergraduate students.

6. SmartSearcher

This tutorial is created by Deakin University Library (VIC), which assists students to build up their library and information skills.

7. Monash Information Literacy Online Tutorials

These tutorials are planned by Monash University librarians for the students to develop skills necessary for finding and managing the information.

8. LITE: Online Information Literacy Programme

It is a Web based programme, which concentrates on library information, research skills and searching of information in World Wide Web.

9. AIRS Online

Advanced Information Retrieval (AIRS), created by Queensland University of Technology (QUT/QLD), it is a coursework compulsory for the doctoral scholars at QUT.

10. RMIT Postgraduate Information Research Skills Tutorial

This is an online tutorial created by RMIT University, for the postgraduate students for searching of information required for current research, a literature survey, solving laboratory problems and other research needs.

Statements and Standards

Among the different publications, monograph by Christine Bruce in 1997, The Seven Faces of Information Literacy is worth mentionable. Besides, other statements and standards in the credit of Australia are:

- Bundy, A. ed. (2004) Australian and New Zealand Information Literacy Framework: principles, standards and practice. Second edition Adelaide: Australian and New Zealand Institute for Information Literacy which can be access online in http://www.caul.edu.au/content/upload/files/info-literacy/InfoLiteracyFramework.pdf

The Australian and New Zealand information literacy framework is based on the ACRL standard with some updates. The standard discusses about the information literate person whereas in ACRL standard emphasis is given on information literate student. It consists of six standards and several learning outcomes:

Standard One: The information literate person recognizes the need for information and determines the nature and extent of the information needed.

Learning Outcomes: The information literate person

1. defines and articulates the information need.
2. understands the purpose, scope and appropriateness of a variety of information sources.
3. re-evaluates the nature and extent of the information need.
4. uses diverse sources of information to inform decisions.

Standard Two: The information literate person finds needed information effectively and efficiently.

Learning Outcomes: The information literate person

1. selects the most appropriate methods or tools for finding information.
2. constructs and implements effective search strategies.
3. obtains information using appropriate methods.
4. keeps up to date with information sources, information technologies, information access tools and investigative methods.

Standard Three: The information literate person critically evaluates information and the information seeking process.

Learning Outcomes: The information literate person

1. assesses the usefulness and relevance of the information obtained.
2. defines and applies criteria for evaluating information.
3. reflects on the information seeking process and revises search strategies as necessary.

Standard Four: The information literate person manages information collected or generated.

Learning Outcomes: The information literate person

1. records information and its sources.
2. organizes (order/classifies/stores) information.

Standard Five: The information literate person applies prior and new information to construct new concepts or create new understandings.

Learning Outcomes: The information literate person

1. compares and integrates new understandings with prior knowledge to determine the value added, contradictions, or other unique characteristics of the information.
2. communicates knowledge and new understandings effectively.

Standard Six: The information literate person uses information with understanding and acknowledges cultural, ethical, economic, legal, and social issues surrounding the use of information.

Learning Outcomes: The information literate person

1. acknowledges cultural, ethical, and socioeconomic issues related to access to, and use of, information.
2. recognizes that information is underpinned by values and beliefs.
3. conforms with conventions and etiquette related to access to, and use of, information.
4. legally obtains, stores, and disseminates text, data, images, or sounds.

The standard encompasses the generic skills along with information skills, and values and beliefs.

- CAUL (2000) Information Literacy Standards. Canberra: Council of Australian University Librarians.
- CAUL (2004). Best Practice Characteristics for Developing Information Literacy in Australian Universities.
- ALIA Statement on Information Literacy for all Australians
- Australian Library & Information Association (2003). Australian School Library Association Policy Statement on Information Literacy

Organizations, Associations and Peak Bodies

Many organizations, associations and bodies are associated with support of the information literacy policy and its implementation in Australia and some of the main groups are:

1. Australian Library & Information Association (ALIA) Information Literacy Forum http://alia.org.au/groups/infolit/.
2. Australian and New Zealand Institute (ANZIIL) for Information Literacy http://www.anziil.org/.
3. Council of Australian University Librarians (CAUL) http://www.caul.edu.au
4. The Australian School Library Association Inc. (ASLA) http://www.asla.org.au/.

5. Queensland University Libraries Office of Cooperation (QULOC) http://www.quloc.org.au/.

Professional Development Training for the Librarians

Training the trainers is one of the main concerns in Australia and most of the teaching and learning activities are carried out at an organization level.

- ANZIIL Professional Development Group http://www.anziil.org/groups/pd/pd.htm
- QULOC Information Skills and Services Working Party http://www.quloc.org.au/.
- CAVAL/CRIG Seminar Committee: Information Literacy (SCIL)

2.4 Germany

In Germany information literacy is mainly concern with the public and university libraries in association with schools and colleges based on the specific needs of the students which endorse the learning practice and reflect as a lifelong learner. Since late nineties information literacy activities are progressing as new electronic medias are approved by the academic libraries (university libraries). According to the official investigation carried out by the Institute of Social Studies in Dortmund (2001), it is noticed that current skills of the students were inadequate in accordance with the use of electronic resources. Eventually, the regional authorities encouraged academic self –government by dropping public responsibility and funding.

Through "Lernsystem Informationskompetenz" (Information Literacy Learning System) (internet platform), activities of teaching public librarians are supported. Through the implementation of German Library Act (2008) by the parliament of Thuringia, supports the educational role of public libraries by promoting information literacy training activities for the non-collegiate users. Moreover "Blended Learning" is prevalent in the universities where the library staff members and e-learning through university's intranet goes on simultaneously. On the other hand information literacy programmes are mandatory for the university students.

Key Information Literacy Products

— "DOT Informationskompetenz" is the online-tutorial designed by Dusseldorf University Library.
— The University Library of Freiburg recommends course-based online information literacy products to the students
— "DISCUS" (Developing Information Skills & Competence for University Students) is a bilingual online-tutorial developed by Hamburg-Harburg University Library where teaching librarians support scientific search and retrieval.
— Konstanz University Library, online-tutorials for newly enrolled undergraduate and for advanced graduate learners too.

"BibTutor" is a project by the German Research Center for Artificial Intelligence at Kaiserlautern University and funded by the Federal Ministry for Education and Research is devoted for the development of an electronic tutor system for research in information sources.

Publications

The first publication was the translation of ACRL (Association of College and Research Libraries) standards in 2002 followed by "Standards for the Advancement of Information Literacy" by the Information Literacy Working Committees of the Federal states Nordrhein-Westfalen (2003), Baden-Württemberg (2006) and Bayern (2009). There are many articles in journals and reports concerning to the information literacy instruction. Besides, many guidelines has also been published to promote information literacy in universities to embed information literacy and integrate blended learning.

Organizations

Organizational support is sublime in promotion /implementation of the information literacy in different setting. The groups which are associated with information literacy in Germany are:

- AG Informationskompetenz in Nordrhein-Westfalen (2002), teaching librarians from universities and universities of applied sciences
- Thüringenweite AG Benutzerschulung (2002), teaching librarians from universities and public libraries
- Netzwerk Informationskompetenz in Baden-Württemberg (2003), teaching university librarians.
- AG Informationskompetenz in Bayern (2006), teachings librarians from universities and universities of applied sciences
- AG Informationskompetenz in Rheinland-Pfalz und im Saarland
- Netzwerk Informationskompetenz Hessen
- Netzwerk Informationskompetenz Sachsen

The above mentioned groups are concern with the support and development of information literacy in the local level and the organization of different programmes for the professionals and training for them. Furthermore "professional school" (Arbeitsstelle Hochschuldidaktik der Universität Freiburg) is also established to train the professionals.

2.5 United States and Canada

Information Literacy is an accepted educational goal all over the United States and Canada. In Boyer Commission report in 1955 it has been argue that "to achieve an appropriate level of academic competence students must become intelligent information consumers who see information as 'an essential commodity for survival'" (Andretta, 2005, 26). Thereafter in the early 1970s library instruction programmes have been started, by 1980s academic libraries started instruction programmes and by 1990s information literacy has been integrated in curriculum of some of the universities and colleges. In the year 1977, American Library Association (ALA) and Association of College and Research Libraries (ACRL) established Library Instruction Round Table (LIRT) and Bibliographic Instruction Section (BIS) (Instruction Section) respectively.

In United States, school librarians have active participation in defining the need for Information Literacy in schools. In 1987 the American Association of School Librarians (AASL) in association with the Association for Educational Communications and Technology (AECT) has produced Information Power. In response to the Final Report of American Library Association Presidential Committee on Information Literacy (1989), National Forum on Information Literacy (NFIL) was formed in 1990 which promotes Information Literacy nationally, internationally, and within their own programs. Even though Information literacy is mainly concerned to the librarians as information literacy programmes are conducted in different level of schools (elementary, graduate), it is also carried out in some of the public libraries.

Organizations Associated with Information Literacy

- American Association of School Libraries (AASL) and the Association of Educational Communications and Technology (AECT) created *Information Literacy Standards for Student Learning* by expanding *Information Power* for students in Kindergarten through high school.
- *Information Literacy Standards for Higher Education* was produced by the Association of College and Research Libraries (ACRL) in 2000 which is supported by American Library Association (ALA) and the American Association for Higher Education (AAHE).

It consists of five standards and twenty two performance indicators with several outcomes under each performance indicators:

Standard One: The information literate student determines the nature and extent of the information needed.

Performance Indicators:

1. The information literate student defines and articulates the need for information.
2. The information literate student identifies a variety of types and formats of potential sources for information.
3. The information literate student considers the costs and benefits of acquiring the needed information.

4. The information literate student re-evaluates the nature and extent of the information need.

Standard Two: The information literate student accesses needed information effectively and efficiently.

Performance Indicators:

1. The information literate student selects the most appropriate investigative methods or information retrieval systems for accessing the needed information.
2. The information literate student constructs and implements effectively-designed search strategies.
3. The information literate student retrieves information online or in person using a variety of methods.
4. The information literate student refines the search strategy if necessary.
5. The information literate student extracts, records, and manages the information and its sources.

Standard Three: The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.

Performance Indicators:

1. The information literate student summarizes the main ideas to be extracted from the information gathered.
2. The information literate student articulates and applies initial criteria for evaluating both the information and its sources.
3. The information literate student synthesizes main ideas to construct new concepts.
4. The information literate student compares new knowledge with prior knowledge to determine the value added, contradictions, or other unique characteristics of the information.
5. The information literate student determines whether the new knowledge has an impact on the individual's value system and takes steps to reconcile differences.
6. The information literate student validates understanding and interpretation of the information through discourse with other individuals, subject-area experts, and/or practitioners.

7. The information literate student determines whether the initial query should be revised.

Standard Four: The information literate student, individually or as a member of a group, uses information effectively to accomplish a specific purpose.

Performance Indicators:

1. The information literate student applies new and prior information to the planning and creation of a particular product or performance.
2. The information literate student revises the development process for the product or performance.
3. The information literate student communicates the product or performances effectively to others.

Standard Five: The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

Performance Indicators:

1. The information literate student understands many of the ethical, legal and socio-economic issues surrounding information and information technology.
2. The information literate student follows laws, regulations, institutional policies and etiquette related to the access and use of information resources.
3. The information literate student acknowledges the use of information sources in communicating the product and performance.

This particular standard is adopted in most of the academic setting; moreover the standard is used as the base of the Australian standards with some modifications and additions.

- California Academic and Research Libraries (CARL**)**
- California Clearinghouse on Library Instruction (CCLI)
- Canadian Association of Research Libraries (CARL)
- LOEX (Library Orientation Exchange) Clearinghouse for Library Instruction
- WILU - Workshop on Instruction in Library Use.

Information Literacy in Canada

Number of universities in Canada has included information literacy as a credit course, and ACRL standards are followed for the purpose. Canadian University Information Literacy Initiatives is an important educational site; Canadian Research Libraries Information Literacy Portal is also an important site which is maintained by the Information Literacy librarians in different academic institutions all over the Canada and in the public libraries Community Access Program (CAP) offers Information Literacy instruction. World Summit on the Information Society (WSIS), formed International ICT Literacy Panel which is instrumental in bringing educators, librarians and policy makers in one platform to access students information literacy and IT skills.

Moreover, to develop the National Higher Education ICT Initiative, they tied with several large university systems viz. California Community College System, California Community College System, California State University, University of California (Los Angeles), University of Louisville, University of North Alabama, University of Texas System, and University of Washington.

Information Literacy Products/Online Learning Tools/Tutorials

Some of the information products and tutorials are listed below (UNESCO, 2007):

- ANTS: Animated Tutorial Sharing project**:** to produce an open source tutorials. http://www.brandonu.ca/library/COPPUL/
- The Big6 Information Literacy for the Information Age. http://www.big6.com/
- Bruin Success with Less Stress. University of California Los Angeles. http://www.library.ucla.edu/bruinsuccess/
- Building Information Literacy Strategies for Developing Informed Decision-Makers and Independent Lifelong Learners. http://www.edu.pe.ca/bil/
- California State University Information Competence Initiative (http://www.calstate.edu/ls/infocomp.shtml) : under this initiative many programmes and tutorials have been initiated- Resources for Teaching and

Learning (http://www.calstate.edu/ls/Resources.shtml), California State University (CSU) Information Competence Tutorials, OASIS (Online Advancement of Students Information Skills), etc.

- Dalhousie University Libraries Information Literacy Tutorials http://www.library.dal.ca/How/Tutorials/
- Library Research Roadmap. York University Library http://www.library.yorku.ca/roadmap/
- Multimedia Educational Resources for Learning and Teaching Online. http://www.merlot.org/merlot/index.htm
- PRIMO: Peer-Reviewed Instruction Materials Online *Project SAILS* - Kent State University and the Association of Research Libraries (ARL) https://www.projectsails.org/ to test the level of information literacy skills attained by the group of students according to ACRL standards.
- TILT - Texas Information Literacy Tutorial.
- University of Washington Information Literacy Learning http://www.lib.washington.edu/uwill/
- A WebQuest to Information Literacy comprises various tools, standards with learning outcomes and the format for creating information literacy learning environment.

Standards, Rubrics, and Best Practices

As information literacy is well established in the various educational institutions different standards, rubrics has been brought out for the whole academic community and having a good practice of the same (UNESCO, 2007):

- American Library Association /ACRL/STS Task Force on Information Literacy for Science and Technology. (2006). *Information Literacy Standards for Science and Engineering/Technology.*
- American Library Association. *(2000) Information Literacy Standards for Higher Education.*
- American Association of School Libraries (AASL) and the Association of Educational Communications and Technology (AECT). *Information Literacy Standards for Student Learning*.

- Best Practices Initiative Institute for Information Literacy. (2003) *Characteristics of Programs of Information Literacy that Illustrate Best Practices: A Guideline.*
- Canadian Association for School Libraries. (2003*) Achieving Information Literacy: Standards for School Libraries in Canada.*
- *Information Competency in the California Community Colleges.*
- Information Literacy in Canada. (http://blog.uwinnipeg.ca/ilig/archives/standards/)
- *Rubrics for Assessing Information Competence in the California State University Prepared by the CSU Information Competence Initiative.*

One of the important aspects of information literacy is training to the trainers, therefore some of the institutions/organizations that provide such training are (it is not a comprehensive list):

- Institute for Information Literacy Immersion.
- TLT Group (Teaching, Learning and Technology) (http://www.tltgroup.org)

2.6 South Africa

In South Africa, there were a lot of political uncertainties which directly influenced the governance and form of educational institutions. After the first South African democratic elections in 1994, many dramatic changes have taken place in all spheres, basically in education sector as it has been accepted as vital for social and economic development with the concept of lifelong learning, by gradually dissolving the apartheid structures. As a result some initiatives had also been taken in the domain of libraries and information services as Council for Library and Information Services (NCLIS) was established in 2001 and become active in 2004. It is a landmark as it has become a body to advice Ministry of Education on education and training meant for the library and information services and one of its goals is to "provide optimal access to relevant information to every person in an economic and cost-effective manner" (UNESCO, 2007, p.158). Within a short period of time i.e. by mid 2005 nearly 11, 373 libraries were established which includes academic, public, special and government libraries.

The Western Cape Library Cooperative Project, 1992 report also known as Senn Breivik Report was instrumental in recognizing the significance of information literacy, which focused on the cooperative academic planning with limited economic resources. Henceforth in 1995, INFOLIT Project was started with the following goals (UNESCO, 2007, p.159):

- promoting the concept, value and importance of information literacy in the context of globalisation and redress to key players in the region,
- launching a series of pilot projects which explore and establish various means of spreading information literacy education in the region,
- investigating information literacy models, programmes and initiatives in other countries that could be adapted to local conditions.

Thus, many programmes and workshops have been organised to bring the awareness on information literacy among the library professionals and the faculties and provides a platform to discuss and share the experiences.

Information Literacy Products for Higher Education in South Africa

Most of the higher education institutions in South Africa, provides library orientation classes and also organises some additional training programmes on request by students or the other users but a few academic institution has incorporated information literacy modules with the academic curriculum. Basically librarians are mainly concerned with imparting the information literacy education/instruction with close coordination with the subject librarian in classrooms/computer laboratories or through virtually through Web-CT. However in some of the universities, information literacy module is offered in library schools in undergraduate degree. Some of the courses rendered by the libraries are (UNESCO, 2007, p.161)

- Cape Peninsula University of Technology
- University of Cape Town
- University of Johannesburg
- University of South Africa
- University of the Western Cape

Organizations Related to Information Literacy

In South Africa most of the initiatives have been taken by the Library and Information Association of South Africa (LIASA) regarding the professional development of the library and information workforce. In 1998, National Library of South Africa came into existence by the act of parliament by merging the South African Library in Cape Town and the State Library in Pretoria, and one of the functions is to bring information awareness and information literacy. On the other hand since 2002 LIASA is organizing many workshops and training programmes to guide the library professionals on curriculum design, teaching and assessment methods.

2.7 United Kingdom

In the United Kingdom, information literacy has not been so recognized. Being in the global information society, their focus is on information technology rather than information literacy and as such media literacy which is one of the components of information literacy is given more priority by the government. Though the country has taken initiative for lifelong learning, "the development and integration of information initiatives in United Kingdom Higher Education sector is therefore driven by individual institutions and organizations operating within the educational environment" (Andretta, 2005, p. 34). Eventually group of libraries and library professionals, Society for College, National and University Libraries (SCONUL) developed "7 pillars model of information literacy (SCONUL Task Force on Information Skills, 1999) and it has been adopted by many universities in United Kingdom and Ireland as a framework. On the other hand School Library Association has also profound interest in information literacy as information literacy is highlighted in various events. But in the school level, the concerned librarian uses different models for designing an information literacy programme for the students. Moreover SCONUL promotes information literacy though conferences and by publishing books. Later in 2004, the definition created by the Chartered Institute of Library and Information Professionals (CILIP) is coupled with SCONUL model.

In higher education other than the SCONUL model, , some of the universities have the institutional framework base on Association of College and Research Libraries

(ACRL) standard and Big Blue Project viz. Manchester Metropolitan University's Infoskills. In 2003, a 3-level Information Literacy Framework was also produced by librarians in Dublin City University (DCU) which is used as a base for designing and development of different information literacy programmes.

Though information literacy is not emphasized by the United Kingdom Government to include in the agenda of public libraries, the People's Network Project (i.e. internet connection in public library and training librarians to support internet use) automatically compel to focus on information literacy. Now the public libraries are playing vital educational role in educating the citizens to use the internet for various purpose by organizing different training session.

Information Literacy Products for Users

Some of the tutorials which are developed for different category of users are (it is not a comprehensive list) (UNESCO, 2007):

- Judge: web sites for health.
- Netskills. TONIC.
- Open University Information Literacy Unit
- Open University: SAFARI: Skills in Accessing, Finding, and Reviewing Information**.**
- Open University: MOSAIC: Making Sense of Information in the Connected Age.
- South Bank University, England. Information Quest.

Publications and Organizations Related to Information Literacy

Some of the publications which are the credit of United Kingdom are:

- The Journal of e-literacy (JELIT) (http://www.jelit.org/index.html)
- The Journal of Information Literacy (http://www.informationliteracy.co.uk/) .
- Library review (periodical)

Besides many research has been carried out into the field and getting published in different journals; university websites; as Ph.D thesis, dissertations etc.

The two main groups which are working in the area of information literacy are:

- SCONUL Working Group on Information Literacy.
- CILIP Community Services Group Information Literacy Group. (http://www.cilip.org.uk/specialinterestgroups/bysubject/informationliteracy)
- SCONUL "7 pillars of Information Literacy" (SCONUL Task Force on Information Skills, 1999). The model recognizes the seven skills i.e seven pillars in the access and use of information (Chakravarty, n.d, p11-12):

1. the ability to recognize a need for information.
2. the ability to distinguish ways in which the information 'gap' may be addressed
   - knowledge of appropriate kinds of resources, both print and non-print
   - selection of resources with 'best fit' for task at hand
   - the ability to understand the issues affecting accessibility of sources
3. the ability to construct strategies for locating information
   - to articulate information need to match against resources
   - to develop a systematic method appropriate for the need
   - to understand the principles of construction and generation of databases
4. the ability to locate and access information
   - to develop appropriate searching techniques (e.g. use of Boolean)
   - to use communication and information technologies, including terms international academic networks
   - to use appropriate indexing and abstracting services, citation indexes and databases
   - to use current awareness methods to keep up to date
5. the ability to compare and evaluate information obtained from different sources
   - awareness of bias and authority issues
   - awareness of the peer review process of scholarly publishing
   - appropriate extraction of information matching the information need

6. the ability to organize, apply and communicate information to others in ways appropriate
   - to the situation
   - to cite bibliographic references in project reports and theses
   - to construct a personal bibliographic system
   - to apply information to the problem at hand
   - to communicate effectively using appropriate medium
   - to understand issues of copyright and plagiarism.
7. the ability to synthesize and build upon existing information, contributing to the creation of new knowledge

Training for the Trainers

In United Kingdom, students of Library and Information Science are taught about the information literacy through modules and for the professional development different programmes are organized by professional groups and associations. The two main conferences which connect the library professionals are (UNESCO, 2007):

- LILAC Librarians' Information Literacy Annual Conference started in 2005. http://www.cilip.org.uk/specialinterestgroups/bysubject/informationliteracy/lilac/lilac2006
- eLit started in 2002

2.8 Poland

In Poland information literacy is an accepted concept, even though it is not so evident in the professional area. Therefore libraries and the professionals laid utmost efforts to promote and develop information literacy in Library and Information Science and in different types of libraries. In Poland there is always a vast gap between librarians and the lecturer/academics, which is one of the main hindrances in integrating information literacy in academic curricula. But the formation of Information Literacy Committee (Educational Information Committee) within the Polish Librarians Association in December 2010 is really remarkable in the field of information literacy and set seven long term goals in a programme of the committee (2011-13) as (Poland, 2011, p.2):
Goal 1 – to initiate programmes aiming at increase of information competences of

Polish libraries users;

Goal 2 – to organize scientific meetings and other educational events aiming at increase of librarians' knowledge and competences in the domain of information literacy;

Goal 3 – to elaborate a uniform dictionary of Polish terms related to information literacy;

Goal 4 – to conduct information activities;

Goal 5 – to elaborate Polish information literacy guides and manuals;

Goal 6 – to prepare Polish information literacy State-of-the-art reports;

Goal 7 – to cooperate with international organizations and institutions dealing with information literacy.

Currently the Committee is actively involving in:

- translation of key-documents: The Prague Declaration and The Alexandra Proclamation;
- translation of Guidelines on Information Literacy for Lifelong Learning;
- conducting a survey aiming at exploring the scope of information literacy education in Polish LIS academic institutes (university departments of LIS studies);
- conducting a survey aiming at exploring the scope of information literacy education in Polish academic libraries (the existing content of library instructions). (Poland, 2011, p. 2-3).

But till now there is no official translation of the term 'information literacy'. There is a varied opinion regarding the translation of the term, and every now and then Polish authors use the original English term.

Information Literacy Products and Projects

There is a visible difference between the library instruction and the information literacy. In Polish academic libraries, library instruction is delivered to the BA first-year students and provides some online courses also. To popularize and develop the information literacy and at the same time to train the professionals, some initiatives has been taken (Poland, 2011).

- MedLibTrain: It was a joint project of Polish and Norwegian medical librarians, Medical Library of the Jagiellonian University Collegium Medium and Norwegian Library Association, Section for Medicine and Heath. Eventually, a manual for the professionals was brought out in 2010 which is helpful for the librarians who organize library courses.
- Bibweb and Login: It was the online course for the librarians regarding the use of internet in daily library activities. It was started in 2003 and terminated in 2010.
- Login: biblioteka : A course started in 2011 for the librarians in providing a better services to the users. This particular course is designed and financed by Information Society Development Foundation, prepared by the Torun University Institute of Information Science and run by the University of Warsaw Library.
- Alfabetyzacja Informacyjna – Information Literacy Blog by Ewa Rozkosz, a librarian from University of Lower Silesia Library, chairperson of Information Literacy in Polish Librarians Association and has been request to promote and coordinate the InfoLit Global database in Poland.
- EBIB. Electronic Library – Portal for Librarians (http://www.nowyebib.info/en/). It was created in 1999 for the Polish librarians, but since 2002 till 2010 EBIB functioned within the structures of the Polish Librarians Association as the Commission for Electronic Publishing. And since 2010, EBIB Association is the official publisher of monthly open access journal EBIB Bulletin.
- The EMPATIC- (Empowering Autonomous Learning Through Information Competencies). It is an international project consisting of five international partners- represented by Jagiellonian University Institute of Information and Library Science (Krakow) Poland, MDR Partners (UK), Istituto di Ricerca sull'Impresa e lo Sviluppo (Italy), Technical University of Crete (Greece) and Turkish Librarians Association. They jointly targeted to create framework for the effective Lifelong Learning Programme (LLP) and information literacy programmes.

Conferences or Workshops Pertaining to Information Literacy

Since 2009, Poland is represented in IFLA Standing Committee as to be a part of initiatives taken worldwide for encouraging information literacy. Some of the events organized on information literacy are (it is not a comprehensive list) (Poland, 2011):

- Under the EMPATIC project an International Workshop on Information Literacy Development in the School Sector was organized at the Jagiellonian University in 2011. During the workshop discussion is focused on strategies, models and methods of information literacy in school level throughout the European Union and Polish educational milieu.
- Library in Educational Space: Functions and Challenges in 21st Century, 2011, Conference, were organized at the Pedagogical University of Krakow.
- E-learning: A challenge for libraries, Conference was organized consecutively in Sept. 2010 and Sept. 2009. The main aim of the conference was to encourage e-learning as a modern way of teaching-learning process in the information society and which need to be adopted in the libraries.

2.9 Malaysia

Information literacy and information literate is not a recent concept for the Malaysians but it is more obvious in different forms. Previously, information literacy was usually related to information technology literacy. In Malaysia, National IT Agenda (NITA) was passed by the National IT Council (NITC) in 1996 to encourage the use of ICT (Information and Communication Technology) in the Malaysian society and change it into information society and ultimately into a value-based knowledge society. In most of the instances IT literacy is given more emphasis than information literacy, except the training programmes conducted by some Malaysian librarians. Generation of more IT literate graduates or workforce is one of the priorities of the Malaysian authorities, as it was perceived that IT enabled workforce will contribute to the information literate person. National Library of Malaysia, (Perpustakaan Negara Malaysia, PNM) is supporting the national objective (100% literacy) of Malaysia by promoting reading through Reading Promotion Policy and planning for a information literacy package for trainers at the basic, intermediate and

advanced levels that can be used in information searching workshops. Under the Reading Promotion Policy, nine programmes and a series of activities are included. Some of the activities lined up for the information literacy are (Edzan, 2008, p.267):

— develop a networking of partners in promoting information literacy;
— create and develop online information literacy programmes with a view to encourage and develop a society and a culture that is rich in knowledge and information literacy;
— organise information literacy programmes at libraries and suitable institutions;
— implement online information literacy programmes to encourage and to develop a society and a culture that is rich in knowledge and information literacy;
— create a Malaysian information literacy database of reading programmes, research, experts and reading activities carried out at the national level;
— implement online search and information skills courses and workshops.

Moreover, other public libraries are also organizing different programmes (workshops, talk) on information skills targeted for schools (both teachers and students); government and private agencies and the general publics.

Information Literacy in School Education

Malaysian authorities has initiated information literacy in school level, as in the 31st Annual Conference of the International Association of School Librarianship incorporating the 6th International Forum on Research in School Libraries, the then Minister of Education, Tan Sri Dato' Musa Mohamad, has given stress on the reading culture of the students in the school level. Henceforth certain measures have been highlighted, and one of the measures is "reading and information literacy courses for state resource centre personnel to expose them to effective reading and information skills for them to carry out such courses in localized situations" (Edzan, 2008, p.267). Information literacy is not included in the curriculum of the schools but smart schools emphasizes on critical thinking, manipulation of information and use of information in various discipline and in everyday life. Specifically librarians and medium coordinators are responsible for imparting information literacy. Consciousness about

the information literacy is reflected in various events-workshops in collaboration with IFLA, UNESCO; and other Southeast Asian countries, through different initiatives, activities, and planning in the school levels.

Information Literacy in Higher Learning Institutions

In Malaysian universities, the most commonly used terms are: information skills/library skills/ library instruction/library orientation etc rather than the information literacy. Most of the universities in Malaysia conduct library orientation programmes, library/information skills programme, and other programmes within the libraries for the users in use of information. These programmes are solely planed and delivered by the library/librarian. To bring uniformity and standardized the programmes conducted in different institutions, some information literacy model, courses and framework have been proposed. Base on the studies carried out by different authors, information literacy in higher education can be summed up as:

- In some universities information skills are introduced as the compulsory subject for the undergraduates and the course is updated regularly.
- Most of the universities, conducts library orientation /user education programme.
- In some universities provides subject related voluntary training session on request.
- Online database searching skills, research guidance service and other specialized information skills programmes are provided to the final year undergraduates and research students.
- Some universities offers compulsory credit courses for first undergraduates or as an elective course.

Trained library professionals is prerequisite for any information literacy programmes, therefore to train up professionals different training programmes have been organized by the universities, UNESCO, National Library of Malaysia and other elite organizations.

2.10 India

Effective implementation of information literacy is possible with well-organized Information Literacy Programme (ILP) and accepting it as one of the priority in government's policy. Before the enactment of Right to Information Act in 2005, common citizen were not allowed to access any information under the custody of public authority. Citizens have no legal right to be acquainted with different public policies, expenditures, wage employment, basic education, health care, etc. Thus created a gap in having an active participation in the decision making process to comprehend their socio-economic development (Singh, 2012). Thereafter different e-governance services have been initiated by the government of India through G2C services (Government to Citizen) by establishing different information kiosk in its different states for the common people to serve their different information needs. These can be assumed as the one step forward towards the information literacy in India. Furthermore on the other hand for the greater cause, Government of India has formed Information Technology Task Force (1998) and subsequently in 2000 Information Technology Bill was passed to boost e-commerce in India.

Information Literacy Initiatives at School Education

At the school levels, public schools give more priority to library use as compared to the governmental or government aided schools. But a residential schools (6^{th} to 12^{th} class) established by Government of India especially for the rural children, Navodaya Vidyalayas, and Kendriya Vidyalayas has a good practice of using the library as a library hour, and the pupils are given assignment/projects to accomplish using the library resources. Experiencing the importance of information technology in all walks of life, most of the middle and high schools have started computer classes to provide the computer literacy to the pupils, which is one of the components of the information literacy.

Ghosh & Das states that most of the public, convent and government schools have library facilities with good information arrangement and provides classes and demonstration on the use of different library resources (atlas, encyclopedia, dictionaries, etc). "Indian National Scientific Documentation Centre (INSDOC) (Now

National Institute of Science Communication and Information Resources, NISCAIR) developed an audio-visual programme for junior school children about how to find information from print as well as electronic format sources" (Ghosh & Das, 2006, p. 8).

Information Literacy in Higher Education Institutions

It is a common phenomenon in most of the Indian universities and research institutions, as Kaur points out that:

> "in India, information literacy is imparted mostly at institutions of higher learning. This includes user education, library instruction and bibliographic programmes which are not adequate enough to meet the present information requirement of the students. In universities, a course on research methodology is included where library research techniques are included, which is conducted for research degree programs. The schools of library and information science and university and college libraries also conduct the orientation programs for their faculty and students to make them aware of electronic resources and how they can use these resources" (Kaur, 2009, p. 558).

Ghosh & Das have also mentioned that "the Indian Medlars Centre of National Informatics Centre conducts a user-training programme in every four month on their information products and services, like, IndMed databases, medIND open access journal literature, OpenMED open access archive, UNCat union catalogue databases, etc., which are designed mainly for health professionals and health librarians" (Ghosh & Das, 2006, p. 9).

Information Literacy Programmes for Library and Information Science Professionals

For the effective information literacy programmes, trained library professionals are prerequisite. But no denying the fact that to reap the fruitful information literacy programme assistance/support of different experts is solicited.

To make Library and Information Science teachers and professionals capable of adapting to the new emerging technologies, orientation/refresher courses are conducted in academic staff colleges of the universities. "At the school level the organizations like National Council of Education Research and Training (NCERT) and State Council of Education Research Council (SCERT) conduct regular orientation programme/refresher courses for the school librarians" (Ghosh & Das, 2006, p.9). On the other hand since 2001 NIITs (National Institute of Information Technology), to some extent, are also contributing to lessen the digital divide. Moreover "UGC (University Grants Commission) and ICAR (Indian Council of Agricultural Research) together organize training programmes for the agricultural librarians in searching information in digital environment" (Senthilkumaran, 2011, p.360). Besides, there are several institutions or organization which provides many professional development courses and programmes for library and information professionals.

Documentation Research and Training Centre (DRTC)

The DRTC (http://drtc.isibang.ac.in/DRTC/), Bangalore of the Indian Statistical Institute organizes different training programmes in various areas for the library and information professionals. "In December 2003 a workshop was run, in conjunction with colleagues from the University of Hyderabad and Dalhousie University in Canada, on the Semantic Web with topics including metadata, Resource Description Framework, retrieval in Indian languages, web ontology and taxonomy and XML" (Nyamboga, 2004, p. 234).

Information and Library Network (INFLIBNET)

INFLIBNET (www.inflibnet.ac.in/index.jsp) was established in1991, which provides training to university library professionals in the use of network for rendering many services to the users which includes (Nyamboga, 2004, p. 234):

- Computer Application to Library and Information Services (CALIS) - a four-week intensive training programme focusing on the practical aspects in the use of computers in libraries.

- Workshop on Automation and Networking of University Libraries (WANULIP).
- Onsite training in various topics.
- Training in library management systems for university library staff.
- Convention on Automation of Libraries in Education and Research Institute is held annually.

Other Organizations

Indian library Association (ILA) , the Indian Association of Special Libraries and Information Centers (IASLIC- www.iaslic.org/), National Institution of Science Communication and Information Resources (NISCAIR), National Social Science Documentation Centre (NASSDOC), Society of Information Sciences (SIS) and Developing Library Network (DELNET- http://delnet.nic.in/) all plays a significant role in orienting library and information science professionals of the country to acquire the skills of access to information. In December 2005, ILA organized 51st All India Conference with focus on "libraries, information literacy, and life long learning". In this conference it recommended to form a National Information Literacy Mission and the National Information Literacy Task Force to implement information literacy competency development programmes throughout the country. In October 2005 an international information literacy workshop was also held at the Punjabi University, Patiala to promote information literacy in South and South East Asia.

Information Literacy Programmes by National Institutions/Organizations

Other than the professional organizations, different national institutes/organizations are also providing information literacy programmes. Some of the programmes are listed below (Gedam & Agashe, p. 2009):

- **Information Literacy Programme in Colleges The Hindu (e-newspaper) Oct 04, 2006:** The programme aims at bridging the awareness divide between colleges in the urban and rural areas and to enable students in the rural colleges to access subject-related information across a variety of formats including access to subject gateways in the internet and to train students to

use the OPAC (Online Public Access Catalogue), to provide Information Technology skills, searching electronic sources, and storing the information.

- **Central Library. IIT, Madras :** Realizing the importance of information literacy, it has brought out different brochures, pamphlets, tutorials, conferences, invited talks, specialized presentations for the faculty, students, industries, library staff and librarians. Some of the information literacy programmes conducted by the Central Library are (http://www.cenlib.iitm.ac.in): Springer Link Database, JCCC, Science Direct and Scopus by Elsevier India, National Workshop on E-Resources Management for Excellence, Web Resources and Services available at the Central Library of IIT Madras, Half-Day Workshop on Information handling in Digital Era, Role of Electronic Databases in R&D Excellence by Edutech India Pvt.Ltd and many more other programmes.
- **Right To Information (RTI) India:** The RTI literacy programme being conducted in the district with the objective of spreading information among the different sections of the society www.rtiindia.org/.../15883-right-information-literacy-programme.html .
- **SALIS (Society for the Advancement of Library and Information Science):** The current focus is to reach the unreached LIS professionals to minimize the digital divide. It provides need-based service to the profession and for the advancement of the Library and Information Science. In collaboration with UNESCO and Madras School of Social Work (MSSW), SALIS is organizing a Workshop on Information Literacy Competency Development for Library and Information Science professionals and special educators at MSSW.

Information Literacy Programmes Conducted by Government of India

Government of India has also initiated many information literacy programmes as a project; some of the programmes are given below (Gedam & Agashe, 2009):

- **Sarva Shiksha Abhiyan (SSA):** Launced for 2001-2010, for Universal Elementary Education in India, by the Department of Elementary Education

and Literacy, MHRD, Govt. of India, New Delhi. (www.educationforallinindia.com/ssa.htm)

- **District Primary Education Programme (DPEP):** Initiated in 1994 for universalisation of upper primary education in some states of India- Assam, Haryana, Karnataka, Kerala, M.P, Maharashtra, Tamilnadu, Gujrat, Andra Pradesh, Himachal Pradesh, Orrisa, West Bengal, Uttar Pradesh, Rajasthan (www.educationforallinindia.compage81.html).
- **National Literacy Mission (NLM):** Initiated in 1988 to make 80 million adults in the age group of 15-35 literate.
- **Tara Akshar (2005-2006):** To develop Hindi literacy program (www.tarahaat.com/Literacy.aspx).
- **CBFL (Computer-Based Functional Literacy)** an outstanding initiative from the Tata Group (www.tataliteracy.com/index.htm).
- **National Portal of India:** It is a project under the National e-Governance Plan, Department of IT, Ministry of Communication & IT. It is an aggregator of all Indian Government websites to provide single window access to different information and services provided by different departments of Indian Government and other stakeholders (http://india.gov.in).

Information Literacy-Government Policies

Some of the polices which are adopted by the Government of India are (Deshpande & Dakhole, 2011):

- **The National e-Governance Plan (NeGP):** The main objective is to bring public services closer to citizens. Therefore, accordingly the infrastructure is evolving even to the remotest of villages, and digitization of records is undertaken to make easy, reliable access over the internet.
- **Department of Information Technology, Govt. of India:** Its policy objectives are-

  e-Government: Providing e-infrastructure for delivery of e-services.

  e-Industry: Promotion of electronics hardware manufacturing and IT-ITeS industry.

e-Innovation/R&D: Providing support for creation of innovation infrastructure in emerging areas of technology.

e-Education: Providing support for development of e-skills and knowledge network.

e-Security: Securing India's cyber crime.

Many states have individual IT policies viz. Goa State IT Policy (2005), Haryana IT policy (2000), Mizoram IT Policy (2001), Manipur IT Policy (2003), Orissa IT Policy (2004), Andhra Pradesh ICT Policy (2005-2010), Information Policy of Assam 2000 (ITPA 2000) and many more to incorporate IT in education policy initiatives so that the future generation may become "Techno-savvy" and information literate.

Information Literacy and Government Initiatives

In a knowledge society, knowledge is a super power which has tremendous effect on the social, economic, professional development of a person in particular and a country in general. To sustain economic growth, employment generation and to strengthen the information infrastructure of the country, Government of India and the state Governments has undertaken different initiatives and e-governance projects. Some of the programmes/projects are given below (Deshpande & Dakhole, 2011):

- **National Knowledge Commission of India:** In June 2005, the Govt. of India has established National Knowledge Commission of India to establish a knowledge-oriented paradigm of development and to address the digital divide in India. Their focus areas are: Access to Knowledge, Knowledge Concepts, Knowledge Creation, Knowledge Application, and Knowledge Services.
- **Rashtriya Computer Literacy Drive:** This is initiated by Sunita Infotech, to make "India 100% computer literate" and spread the Quality Education on IT by providing knowledge, skills, solution and services through pioneering efforts and usage of appropriate technology at a very affordable cost.
- **National Knowledge Network (NKN):** This particular network is designed to provide high speed connectivity with best bandwidth capacity to all knowledge related institutions in the country. Till now 774 institutes have

been connected in the network and 66 virtual classrooms have also been set up.

- **National Digital Library:** It is an initiative taken by Govt. of India to establish the Digital library of India. The project is going on and the prominent activities under this project is to set up Mega Centers and Scanning Centers in collaboration with IIS, Bangalore and Carnegie Melon University, USA.(http://www.new.dli.ernet.in)
- **Public Information Kiosks (PIKs):** This is an action research project of National Institute of Rural Development (NIRD) which works as an information cum communication centre.
- **Village Knowledge Center (VKC):** It serves as an information dissemination center providing instant access to farmers to latest information/ knowledge available in the field of agriculture, starting from crop production to marketing. The knowledge centre will be connected to a central studio using technology viz. WiMax/VSAT/leased line.
- **Swift Jyoti:** To bridge the digital divide , under the NIIT SWIFT programs, SWIFT Jyoti has been effectively used to proliferate computer literacy among the masses. It has targeted broadest section of the society from six-sixty years old, and the duration of the SWIFT Jyoti programs is 18 hours.
- **e- Choupal**: Through this web portal farmers can access latest local and global information on weather, scientific, farming practices as well as market prices at the village in regional languages. Besides, the farmers are provided information, products and services they need to enhance farm, productivity, improve farm-gate price realization and cut transaction costs. It also facilitates supply of high quality farm inputs as well as purchase of commodities at their door step.
- **FRIENDS Model (Fast, Reliable, Instant, Effective Network for Distribution of Services)**: It is a successful initiative of the Kerala state. The aim of the project is to create single window, enabling the citizen to pay taxes and other utility payments. FRIENDS counter handles bill payment of seven departments: revenue, motor vehicles, civil supplies, local bodies, universities, electricity, water, and telephone. Initially, it was conceived as a

multi purpose service centre but now it also acts as a information kioskas on Govt. activities.

- **The Akshaya Project**: Akshaya was started as a e-literacy project in 2002 in Malappuram district of Kerala to bridge the digital divide and it aims at achieving 100% literacy. The project has helped in taking IT to the remotest part of Kerala.
- **MKCL (Maharashtra Knowledge Corporation Ltd.):** MKCL is a major initiative of Maharashtra Govt. to make the citizens an IT literate. MS-CIT is an IT literacy course started by MKCL in the year 2002.
- **Bhoomi Project:** This project is jointly sponsored by Ministry of Rural Development, Govt. of India and State Govt. of Karnataka, for computerization of land records. The system works with the software called Bhoomi designed by National Informatic Centre, Bangalore.
- **Gyandoot:** It is a sincere effort of the rural-oriented ICT applications in India. In Dhar district of Madhya Pradesh, in 30 places computer are installed connected through an intranet Gyandoot, which provides information in the vegetable market for product prices and access to land record. The Gyandoot intranet project has won the CSI TCS Award for Best IT Usage and has been awarded Stockholm Challenge IT award.
- **Community Information Center:** Dedicated to eight North-Eastern states of India and Jammu & Kashmir. Through this CICs the people of the locality can access internet and can do e-mail, printing, data entry and word processing. Training to the users are also provided.
- **Bharat Nirman Plan:** Under this plan the Department of Telecommunications has the responsibility of providing telecom connectivity to the villages, which are not covered under Village Public Telephones (VPTs). It also provides knowledge centers to each and every panchayat & village, in the area of irrigation, roads, health care, etc.

Besides, there are many other initiatives (e-courts, e-districts, e-office, e-hospital, etc.) which are undertaken by the Government for the citizens to bridge the digital divide, to reach the unreached and for the better social inclusion. But in the academic

milieu there must be some initiatives regarding IL policies, guidelines, standards, projects reviewing the existing education policies.

National Knowledge Commission (NKC) and Libraries.

Library and Information System and services (LIS) is one of the major concerns of National Knowledge Commission (NKC). Therefore NKC has taken initiative to review the present scenario of LIS in India and to set up a roadmap to provide an appropriate and need base library services to the citizens. To accomplish the task, Working Group on Libraries (WGL) was formed and which includes senior library professionals, technical experts and bureaucrats. The group was anticipated to recommend some major changes needed for the libraries and information professionals to become a driving force to bring about a knowledge economy. The key objective was to overcome "information poverty" and recommended the following (Dasgupta, 2007):

- To set up a National Commission on Libraries.
- To prepare a National Census of all Libraries
- To revamp Library and Information Science education, training and research facilities.
- To re-assess staffing of libraries.
- To set up a Central Library Fund.
- To modernize library management.
- To encourage greater community participation in library management.
- To promote Information Communication Technology (ICT) applications in all libraries.
- To facilitate donation and maintenance of private collections.
- To encourage public-private partnerships in development of library and information services.

In August 2006, the recommendations were submitted to the NKC and approved for the implementation. It is encouraging that if the recommendations are followed in a definite way then it will be a turning point for the library and information professionals in rendering the quality services to the society.

2.11 Conclusion

In countries like USA and Australia information literacy is recognized as one of the national agenda. Therefore the development of information literacy is really remarkable in those countries. Information literacy education will flourish in right perspective if it is considered seriously by the government through different policies and initiatives for better implementation in all sectors leading to an ultimate goal of lifelong learning. Though the development of information literacy is not even, it is getting momentum worldwide. In most of the countries, user orientation, user education and other similar programmes are conducted in the academic libraries but to develop information literacy in a standardized way some countries has proposed some agendas and framework suitable for the particular country or to meet the localized needs. It is a good omen to be in an information society.

The next chapter elaborates the information literacy initiatives undertaken by different academic libraries of India.

References:

ACRL. (2000). *Information Literacy Competency Standards for Higher Education*. Retrieved on January, 22, 2013 from http://www.ala.org/acrl/standards/informationliteracycompetency

Andretta, Susie. (2005). *Information literacy: A practitioner's guide.* Oxford, United Kingdom: Chandos publishing.

Babu, B. Ramesh. (2008). Information literacy- competency standards and performance indicators: An overview. *DESIDOC Journal of Library and Information Technology, 28*(2), 56-65.

Bundy, Alan. (2004). Ed. *Australian and New Zealand Information Literacy Framework: Principles, standards and practice*. Retrieved on January, 21, 2013 from http://www.caul.edu.au/content/upload/files/info-literacy/InfoLiteracyFramework.pdf

Catts, Ralph., & Lu, Jesus. (2008). *Towards information literacy indicators*. Paris: UNESCO.

Central Library: Indian Institute of Technology, Madras. Retrieved on August, 23, 2010 from http://www.cenlib.iitm.ac.in/docs/library/index.php?page=infolit

Chakravarty, Rupak. (n.d). *Information literacy in the knowledge society: Empowering learners for a better tomorrow.* Retrieved on January, 25, 2013 from http://eprints.rclis.org/11393/1/Rupak_Information_Literacy.pdf.

Choudhury, Subhajit., (et.al). (n.d). *E-democracy and citizen empowerment through e-governance and other e-initiatives in India, Nepal and Bangladesh: A case study*. Retrieved on August, 10, 2011 from http://www.csi-sigegov.org/1/16_339.pdf

Dash, Shefali S. (2012). Ed. *E-governance for citizen empowerment*. New Delhi: National Informatics Centre, Government of India.

Dasgupta, Dr. Kalpana. (2007). *The National Knowledge Commission and Libraries: A vision for the future.* Retrieved on August, 18, 2011 from http://www.dlaindia.org/srr7.htm

Deshpande, Shirish. M., & Dakhole, P.S. (2011). *Information literacy: Government policies and initiatives in India.* Retrieved on August, 11, 2011 from http://shodhganga.inflibnet.ac.in/dxml/bitstream/handle/1944/1634/42.pdf?sequence=1

Edzan, N.N. (2008). *Information literacy development in Malaysia: A review*. Retrieved on July 19, 2010 from http://www.librijournal.org/pdf/2008-4pp265-280pdf

IFLA Media and Information Literacy Recommendations Retrieved onMarch, 8, 2013 from http://www.ifla.org/publications/ifla-media-and-information-literacy-recommendations

Gedam, Pranali B., & Agashe, Ajay T. (2009*). Information literacy competencies and programmes in India.* Retrieved on June, 27, 2010 from http://crl.du.ac.in/ical09/papers/index_files/ical-88_100_227_2_RV.pdf

Ghosh, S.B., & Das, Anup kumar. (2006). *Information literacy initiatives in India with special reference to emerging knowledge economy*. Retrieved on Sept., 24, 2010 from http://eprints.rclis.org/7246/1/InformationLiteracyICIL06_Paper_full.pdf

Karisiddappa, Dr. C.R., & Rajgoli, Iqbalahmad. (2007). Blooming knowledge society and information literacy in India. *Sri Lankan Journal of Librarianship and Information Management, 3*(1), 1-13.

Kaur, Prabhjeet., etal. (2009). *Information literacy curriculum for undergraduate students*. Retrieved on Sept., 24, 2010 from http://crl.du.ac.in/ical09/papers/index_files/ical-93_179_380_2_RV.pdf.

Kumar, Sudhir. , Choudhury, Subhajit. , & Shah, Leena. (2004). *Information literacy mission in digital environment: A prospects and plan for developing society in India*. Retrieved on August, 16, 2012 from http://archive.ifla.org/IV/ifla70/papers/145e-kumar.pdf.

Millennium Summit

Retrieved on March, 1, 2013 from http://en.wikipedia.org/wiki/Millennium_Summit

National Informatics Centre (NIC). (2009). *Guidelines for Indian government websites: An integral part of central secretariat Manual of Office Procedure*. Department of Information Technology, Ministry of Communication and Information Technology, Government of India.

Nyamboga, Constantine M. (2004). Information skills and information literacy in Indian university libraries. *Program: Electronic Library and Information Systems, 38*(4), 232-239.

Orde, Heike vom., & Wein, Dr. Franziska. (2009). *Information literacy: An international state-of-the-art report.* Retrieved on August, 11, 2011 from http: www.ifla.org/files/information-literacy/publications/IL-state-of-the-art.pdf

Poland. (2011). *Information literacy state-of-the-art report*. Retrieved on August, 16, 2011 from http://www.ifla.org/files/information-literacy/publications/il-report/poland-2011.pdf

Rader, Hannelore B. (2002). *Information literacy 1973-2002: A selected literature review*. Retrieved on Dec., 16, 2009 from https://www.ideals.illinois.edu/bitstream/handle/2142/8464/librarytrendsv51i2i_opt.pdf

Rajaram, Shyama. (2006). *Information literacy gap: Challenges in bridging the divide.* Retrieved on Sept., 24, 2010 from http://ir.inflibnet.ac.in/dxml/bitstream/handle/1944/564/21(cal%2006).pdf?sequence=1

Senthilkumaran,P. (2011). Information literacy programmes in India. *SRELS Journal of Information Management, 48*(3), 357-363.

Singh, Salini. (2012). Right to information and information literacy: An Indian perspective. *SRELS Journal of Information Management, 49*(1), 5-19.

Singh, Shashi P. (2009). Catalytic role of information literacy in educational change: A case study of university of Delhi. *Library Management, 30*(3), 163-175.

Torras, Maria-Carme. (2009-10). Annual report: Information Literacy Section. Retrieved on March, 8, 2013 from http://www.ifla.org/files/assets/information-literacy/publications/annual-report/2009-2010.pdf

Training the trainers in information literacy, Port Dickson, Malaysia, 11-14 August 2008. Retrieved on August, 17, 2011 from http://www.consol.org/index.php?option=com_weblinks&view=category&id=49&Itemid=182

UNESCO. (2007). *Information literacy: An international state-of-the-art-report*. Retrieved on March, 5, 2009 from

www.infolitglobal.info/...UNESCO_IL_state_of_the_art_report_-_Draft070803.doc

UNESCO

Retrieved on March, 10, 2013 from http://www.unesco.org/

CHAPTER-3

INFORMATION LITERACY IN ACADEMIC LIBRARIES (COLLEGES AND UNIVERSITIES OF INDIA)

3.1 Introduction

Over the last decade, electronic resources have become one of the most significant and effective components in the library collection. The major factor behind this demand is the continuous development of information technology and the multidimensional as well as multifarious demand of information by the user which needs to be fulfilled pin-pointedly and exhaustively in a short period of time. It is quite evident that the old 'book centered' concept of librarianship has been replaced by the 'reader centered' concept and instead of 'Library service', 'Information service' (Goswami, 2001) is emerging which emphasizes on access and use of information in an IT dominated environment.

Now-a-days, information are available in the finger tips, provided if the users are skilled enough to thrive highways and the byways of accessing diverse source of information (subject gateways, open sources, portals, etc) located in a remote host. To have the full advantage of IT in accessing information, some kind of training and awareness is desirable for the user community. In accordance to that Users' Education is provided to the users of the library in the Indian context, which is basically consists of four components- users' awareness, users' orientation, interest profiling and bibliographic instruction**,** and seems to be obsolete/ineffective in this IT dominated information society.

In colleges, hardly any user education programme is organized. But in universities, user education programmes include a 'library tour' to acquaint users with different library facilities/services and sections. As a part of the program, in most of the libraries the librarian delivers an introductory lecture to fresher on library use, basically on the first day of the academic session. Furthermore, in some of the universities researchers and faculty members approaches the librarian to know about different tools and techniques. In special libraries, as the new entrant is less as compared to academic libraries, the special users are intimated about new updates as and when persist and in public libraries there is no such institutional arrangement for user education programmes. Last but not the least, in the school level libraries, except the CBSE no other schools are providing a library service in the true sense.

In this IT era, user education is not so effective and sufficient as far as empowerment of the users is concerned. Information literacy has the wider perspective than user education, as information literate person can locate, evaluate and effectively use information in the process of lifelong learning. In India, information literacy is broadly accessed in three categories- "access to government information, access to administration records and information facilitation through IT application" (Goswami, 2001, p.59). In the academic environment, information literacy deserves a special attention since well information literate student has the potential of being the successful, confident and enduring lifelong learner in this digital society.

3.2 Information Literacy and Higher Education

Many remarkable changes can be seen in the education system of our country. The fundamental driving forces contributing towards the change in the higher education are (Gaddagimath, 2006):

- **Societal Needs**: Higher education has undergone many transitions like from student to learner, from faculty centric to learner centric, from teaching to the design and management of learning experiences and eventually from the Synchronous, classroom based instruction to asynchronous computer based learning.
- **Technology Driven**: Rapid advances in ICT have influenced the every sphere of life, and it has immensely affected the education system also. Now-a-days delivering educational services to anyone, anytime, anyplace is possible with different technologies. Students demands 'Plug and Play' experiences and 'Plunge in and learn' through participation and experimentation. Therefore teachers should act more like a consultant or a coach to motivate, inspire, and manage an active learning process.
- **Emerging Research Area**: In the present time research is not confine to one discipline only rather its domain is extended to inter disciplinary, multi disciplinary, cross disciplinary and extra disciplinary research also.
- **Focus on Library**: In higher learning institutions and research, library has been given due importance as it is one of the intellectual focal point. Preservation and dissemination of knowledge is one of the important

functions of the academic libraries which are available in many forms (text, image, sound etc.) and can be distributed and shared world wide through networks.

Change is inevitable, and there is no denying the fact that the change in use of information; advent of technology; development of different information systems, networks, search engines, etc. has necessitated a new kind of literacy other than the basic literacy of reading and writing. In this electronic era the new kind of literacy is termed as the "information literacy".

It is a continuous process of learning; it bridges the gap between the formal education and education beyond that. Many organizations and authors have defined it in many ways according to their perceptions. It is an evolving multifaceted concept. ANZIIL and ACRL argues that information literacy framework can be operated at the multiple levels: institutional level for policy development and also provides evaluation strategies; programme level to frame curriculum objectives, learning outcomes and assessment criteria; student level to raise awareness among the students and its success depends on the " level of flexibility that characterizes provision to take into account the levels of variations in the students' information literacy skills at the point of entry" (Andretta, 2005, p.51).

Toby Bainton in 67th IFLA Council and General Conference asserts that information technology skills and information skills are the crucial constituent of information literacy. IT skills includes-basic skills (use of mouse, keyboard, printer etc.), standard software (word processor, spreadsheet, etc) and network applications (email, internet, web browsers). From the user point, it does not demand to be the expert. Whereas, information skills signifies having knowledge about different information sources, search strategies, evaluation criteria etc. Further, he highlights that information skill programmes should (Bainton, 2001,p. 9):

* Have clear aims and are based on sound pedagogical foundations;
* Have quality and feedback mechanisms built in;
* Attempt to measure initial and final competence to demonstrate impact;
* Be managed and delivered cost-effectively;
* Make valid use of new technology and other innovations.

Information literacy so to say it's an IT and information skills/ competencies, attitude and knowledge requires in access, use, evaluation and communication of the information with ethics and legalities which can be applied at different levels for different objectives. Whatever may be the case, information literacy education can be imparted successfully with the active collaboration between information specialist and the subject experts.

SCONUL assert it as "Information literacy encompasses library user education, information skills training and education, and those areas of personal, transferable or 'key' skills relating to the use and manipulation of information in the context of learning, teaching and research issues in higher education" (Streatfield, 2008, p. 102).

The Chartered Institute of Library and Information Professionals (CILIP) define information literacy as "knowing when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner" (Bewick, 2010, p.99).

Edward k. Owusu-Ansah, Reference Librarian/ Assistant Professor and Coordinator of Information Literacy at the college of Staten Island, City University of New York, expressed his view regarding the Information Literacy in higher education. The author opines that academic librarians are entrusted with the new and unusual role. More often librarians are responsible for providing suggestions and procedure for achieving information literacy. But the debate engulfed over the meaning of the concept perturbs in providing roadmaps. Usually it lacks institutional support/recognition which undermine in developing actual solutions at achieving information literacy in higher education (Owusu-Ansah, 2003).

Likewise, Rajesh Singh in his review of literature on information literacy describes it as the core instructional pedagogy in higher education, which induces the skill to identify information needs, seek out resources to meet those needs, analyze, evaluate, synthesize, and communicate the resulting knowledge. He further states that a person cannot be expert overnight but expertise skill can be attained with due course of time and practice. If these skills are imbibed early in the students then definitely it will

yield potential in their higher education, workplace in future and be the responsible citizen of any country (Singh, n.d).

In most of the Indian universities e-resources are mainly subscribed on individual basis through licensing or consortia through UGC-Infonet E-journal Consortium concerning to the arts, humanities, social science to computer and pure science; and INDEST- AICTE Consortium (Indian National Digital Library in Engineering Sciences and Technology- All India Council of Technical Education). Whereas some of the colleges avail the e-resource services through N-LIST (National Library and Information Services Infrastructure for Scholarly Content). Simultaneously training programmes pertaining to the use of e-resources are conducted by the producers or vendors on their products.

3.3 ICT (Information and Communication Technology) and Information Literacy

Information is a commercially exploitable commodity and an individual uses it for the personal development, decision making or for any other reason. Therefore, it has been produced/generated, communicated and used excessively. But in locating and communicating the required information more often some problems are confronted as (Pandey, 2011, p. 39):

- ☞ large volume of information causes overload at the processing end.
- ☞ increasing time lag between generating and publishing information.
- ☞ interdisciplinary nature of growth in science possess problems in locating the desired information.
- ☞ proliferation in the growth of primary and secondary journals presents problems in bibliographic control.
- ☞ language and other communication barriers.

Nevertheless, to store, organize and communicate the information many electronic devices have been produced. The concept of using machines for storage and processing of information can be traced back to late 1960's as online bibliographic databases were produced as a by-product of primary printed publications. In 1961 the worlds first computer based periodical, Chemical Titles, was introduced by Chemical

Abstract Service (CAS) which is a division of American Chemical Society and is the most authoritative and comprehensive source of chemical information, covering 750 chemically oriented journals. The concept of online search came into existence when two organizations – M/s. Lockheed under M/s. Dialog Information Services in 1972 and M/s. System Development Corporation (SDC) in 1973 provided software and computing facilities to sort and search databases through telecommunication networks. Moreover, fast advancement in ICT, storage media, and software packages have made storage, processing and communication of information possible all over the world at a very fast speed. Thus this change has necessitated the adoption of information literacy education to avail the benefits of information and communication technology.

3.3.1 Issues Concerning to Use of Information and Communication Technology

Information and Communication Technology has eased the access and use of information. But this is not the end of the problem, even the development of the internet generally and the World Wide Web (WWW) in particular, which is the most heavily used tool for accessing information, also bears some problems (Cooke, 1999):

- Information overload/Information Explosion: Publishing through internet has became so simple that who so ever have minimum computing knowledge can upload any kind of information in the net, and eventually which has resulted in the unbelievable volume and array of information on the desired area of interest. Sometimes internet seems to be time-consuming effort in the search of required information.
- Availability of vast quantities of useless information: Generally, notion about the internet is that it is the panacea to all our information need. Put the keywords/search option and in no time one can have the required information. But the fact is that useless or junk type of information is always embedded with the seeking information.
- Potential for inaccurate materials: Accuracy, timeliness and reliability of information is the foremost criteria in the use of any information. Lot of information in the internet sometime doesn't have detail about the organization or individual responsible for producing the information, which becomes difficult on the users end to rely on that particular information.

- Ephemeral nature of materials disseminated via personal home pages: Personal home pages, now-a-days is a trend to share information in the internet. These type of home pages are very temporary/short-lived in nature. Generally it happens that without the notification of removable of the site, disappearance of the site puts before the user a scenario 'file not found'. It also happens, that even the organization or individual of repute do not maintain the up datedness of the information.

Besides, all of the above, issues which engulf internet are- a lack of a central coordinating body for the internet, cyber crime, information security, etc.

Information explosion and on other hand the various advantages, facilities of ICT has enhanced many new services through which information access, retrieval, use and dissemination has become very viable. But the very crucial question is the quality of information. Cooke explains it as "in relation to information available via internet, quality is often used to refer to sources which contain original content, or sources which are accurate and reliable." Furthermore, he opines that "quality assessment is not a straightforward procedure involving the identification of the presence or absence of different features or facilities. Instead, quality assessment is a complex process involving consideration of a wide range of interrelated issues which are of varying importance depending upon the nature of the source and the needs of the user" (Cooke, 1999, p.16). Thus, in the electronic environment users must be information literate to use the available information.

3.3.2 Development of National Information Infrastructure and Global Information Infrastructure

It is worthwhile to mention that the development of National Information Infrastructure (NII) and Global Information Infrastructure (GII) is revolutionizing the whole society and the economy of the country by providing unbound access to digital libraries, databases, government departments, educational institutions, e-learning opportunities, e-commerce, cultural opportunities, etc. The United States Information Infrastructure Task Force (1993), considers GII more than a network of networks and opine that internet is the originator of the GII and it encompasses five vital components (Mutula, 2007, p.5):

- Communication networks, such as telephone, cellular, cable, and satellite networks;
- Information equipments/appliances, including computers, televisions and telephones;
- Information resources, including educational materials, medical databases, television programmes and commercial software;
- Applications such as telemedicine, electronic commerce and digital libraries;
- People of all skill levels and backgrounds.

All these arrangements are meant for the greater benefits of the mass as a whole. It seems like fulfilling the implications of 'Five Laws of Library Science' and mitigates digital divide. It is well known that every entity has different attributes and like a two sides of a coin merits/demerits or advantages/disadvantages are prominent and equally inseparable too. If there is a problem then definitely there will be a solution. To combat ever increasing problem of information storage, retrieval, use and communication of the same ICT is used. To harness the maximum benefit of it, information literacy is the only way out.

3.4 Information Literacy in Academic Libraries

Though we are concerned with knowledge society, the fact is that in the academic environment use of library and its resources by the academic community is very slim. No doubt there are some exceptions, but usually the reading habit among the pupils are deteriorating. In 1986 Carnegie Foundation Report, it was mentioned that:

> "The quality of a college is measured by the resources for learning on the campus and the extent to which students become independent, self-directed learners. And yet we found that today, about one out of every four undergraduates spends no time in the library during a normal week, and 65 percent use the library four hours or less each week. The gap between the classroom and the library, reported on almost a half-century ago, still exists today" (ALA, 1989, p. 6)

There is a lot of shift like “Education for All” to “Information for All”, and ultimately to “Information Literacy for All” as Christine Susan Bruce, Queensland University of Technology explains that:

> **“**Information literacy is a natural extension of the concept of literacy in our information society, and information literacy education is the catalyst required to transform the information society of today into the learning society of tomorrow**”** (Bruce, 2004, p.1).

In the academic environment the tremendous growth of the e-information resources in the form of CD-ROM Databases, Online Journals, audio and visual materials, e-books, institutional repositories etc. have a great impact and based on these many varied services are rendered by the libraries and other information centers. Libraries are epithet as the temple of knowledge which acquire and create such a vast array of heterogeneous resources for the potential users and its use, but the intruding fact is that how to make optimal utilization of all these resources. Therefore to settle the prevailing problem, information literacy in simple words fluency or set of skills are required to use these e-resources. Thus librarian should motivate the users, staff, faculties and concerned parent organization about its impact on the whole learning process and the librarian should act as the teaching librarian or the educator; and take the responsibility of designing and delivery of the Information Literacy Programmes (ILPs).

Kasowitz and Pasqualoni describes that in higher education information literacy skills/instruction is delivered through three approaches i.e. online, formal information literacy course and across the curriculum. In the Indian context, Constantine M. Nyamboga surveyed the six university libraries in India namely Bangalore University, Cochin University of Science and Technology, Gulbarga University, University of Hyderabad, Kuvempu University and Mangalore University and he found that all the libraries provide traditional and computing library skills. Only the University of Hyderabad Library conduct training for using the OPAC throughout the year to new students as a part of orientation programme. Other Universities conduct lectures on library and information use to the fresher during the ‘library tour’ using ICT and moreover it is not compulsory. Eventually, he suggests that “all Indian universities unify and undertake a programme in information literacy and further make it

compulsory for all students whether undergraduates, postgraduates or research scholars. Facilities including computer laboratories for hands-on training should be provided and the courses should be assessed/examined with relevant credits awarded. To achieve this effectively the library and information professionals need to possess the right skills in appropriate areas, as well as having a wide range of knowledge in various sources of information and teaching skills" (Nyamboga, 2004, p.238).

Prabhjeet Kaur, et.al writes that **"**there is a need to develop ILP which are more suitable in Indian higher education environment keeping in view the skills and competencies of college students" (Kaur, 2009, p.557) .

Bavakutty and Nasirudheen assert that "adequate measures have to be taken in higher educational and research institutions to equip the students with information literacy skills even during their graduation/post-graduation period" (Bavakutty, 2008, p. 121). Stress is given on the urgency of information literacy programme to be imparted in the universities and research institution in regular basis and suggests establishing training and research centers in universities and research centers for promoting information literacy among the user community.

Shashi P. Singh in his research paper writes that ILP is not encouraging. User education, library instruction and bibliographic instruction programmes are provided in higher learning institutions. Likewise, research methodology which also includes library research techniques are offered in universities for research degree programmes. In corporate organizations and R&D centers, the latest information resources available within and outside the organization are taught (Singh, 2009). Further the author mention that the barriers in promoting information literacy in India are due to the traditional education system, overpopulation and low literacy rate.

In Hindu, online edition of India's national paper, highlights that the Department of library and Information science, University of Kerala has taken a positive effort to implement information literacy in affiliated colleges under the university by preparing a proposal to place it before the syndicate with an endeavor to bridge the awareness divide between the college students of urban and rural areas. In the beginning, the programmes will be conducted for under graduate, postgraduate and research

programmes in colleges in rural areas. " The Information Literacy packages will aim to provide students the basic information about IT tools, to introduce to them electronic sources of information, train them in searching for information stored in a multi-media format, train students to use computer-aided instruction packages, introduce various online search programmes and methods to identify sources of information, including subject gateways, in the Internet and train students to use the 'Online public Access Catalogue'(OPAC)" (Mahadevan, 2006, p. 1).

On the basis of different findings of different scholars and authors it is quite evident that the concept of information literacy in the context of academic libraries in India is very recent and gradually it is getting ground. Rather it is better known by library orientation, library instruction and bibliographic instruction, more broadly by user education which is prevalent in most of the university libraries and in the colleges.

3.4.1 Information Literacy Programmes in University of Delhi

University of Delhi is one of the premier universities of India which came into existence in the year 1922. In an interview with Mr. Rajesh Singh, Deputy Librarian, E-Resources & Training, Central Library, University of Delhi, it was revealed that nearly 80 colleges have been affiliated under this esteemed university covering the south campus and north campus having 4 lakhs of students and 11000 faculty members. He measures the success of Information Literacy Programmes (ILP) with the amazing increase in the use of e-resources. And since 2007, 2 lakhs/year of hits on e-resources have been established which indicates the highest user and top contribution in research publications. Keeping in view the information needs and skills necessary for different categories of users, to use varied available e-resources, ILP conducted by the Delhi University Library System (DULS) seems to be a fruitful and unique venture and which has the tremendous effect on the whole academic community having the objectives as (Singh, 2009, p.433):

- To acquaint the users with the academic power of Internet;
- To provide an indication as to what is there on Internet related to the area of study and research;

- To show how web resources could be of immense use in their academic pursuit and research;
- To show the usefulness of various multimedia resources on web in teaching, learning and research;
- To promote the use of subscribed databases in academics and research;
- To describe specific features of various databases being subscribed by DULS and assessable through UGC-Infonet Digital Library Consortium;
- To acquaint the users with the use of various search techniques to retrieve relevant information;
- To recognize the need for information, and to evaluate, organize, interpret, and communicate information in all its formats;
- To promote that Information Literacy is for participants' academic and vocational success and for lifelong learning;
- To provide research-integrated instruction in collaboration with the faculty and in alignment with research objectives;
- To establish a direct interaction between users and library professionals;
- To explain the necessity of bibliographical citations and its usefulness;
- To promote the use of standardized citations of bibliographical references;
- To find out the implications of Information Literacy Program on library services, library staff and users' approach to the library.

As the ILPs are not so noteworthy in other Indian Universities, it is worthwhile to mention about ILPs in Delhi University Library System (DULS) as the best programs ever in the realm of information literacy.

Previously the university library was named as the Central Reference Library and now it was Delhi University Library System. The ILP was initiated in the year 2006 and for the first two years the NASSDOC (National Social Science Documentation Centre) financially supported the programmes, but the support is not sufficient for conducting the programmes and it has been stopped. In the year 2009, under the ILDD (Information Literacy and Document Delivery) budget the programmes are conducted. Till now more than 51 Information Literacy Programmes are conducted in the library and other affiliated colleges of the university. Regarding the delivery of ILP in its affiliated colleges, one college is selected as the venue and other nearby

colleges join the programmes and the college where the programme is organized arranges refreshment for the participants.

Usually the ILP is delivered to the students, faculties, research scholars and also for training the trainers which is supported by the Delhi University. Online Tutorials are supported/sponsored by the Department of Information Technology, Government of India and it has provided with 4 computers, 1 projector, 1 server, and 2 printers. Most of the programmes are delivered by DULS and some of the programmes are conducted with active collaboration of publishers, and aggregators about their products and services.

The course content for the different categories of users is almost same. However based on the users need in the present situation the course content is designed and does not follow any information literacy model. To deliver the programme effectively –PowerPoint presentation, multimedia etc are used.

Different Information Literacy Programmes at Delhi University Library Systems (DULS)

DULS has different valuable collections comprising- books, database, journals etc. which are listed below in Table 3.4.1 (A):
Source: (http://crl.du.ac.in)

Table no. 3.4.1(A): Collections of Delhi University Library System

Sl No.	Collections	Quantity
1.	E-Resources Databases	118
2.	Books	15,29,000
3.	Current Journals	1,290
4.	Bound Journals	3,66,000
5.	Ph.D. Theses	18,500
6.	M.Phil Dissertations	14,000
7.	Manuscript	700
8.	CD-ROM	2,500

To make user aware of these resources and optimize its use, basically, ILP is conducted once in a year at the beginning of the session for the students and in the individual departments with close coordination between faculties and dedicated professionals from the central library to deliver the information literacy programme with subject specifications. The different users of the library are- postgraduate students, faculty members and research scholars (MPhil, PhD. and DLitt.). Accordingly to impart different level of skills to different level of users, two levels of information literacy programmes are designed in Delhi University Library. The first level is for the researchers and the second level is subject based information literacy programmes for students and faculties. The diversified ILPs for different categories of users are:

- E-Resource Orientation Programs
- Online Searching Techniques
- Open Access Resource Orientation Programs
- Hands on Trainings
- Workshop on E-Resources and Bibliographical Citations
- Instructions for Bibliographic Citations
- Exposure to Copyright and Plagiarism Issues
- Citation Analysis
- Online Information Literacy Tutorial- it consists of 5 modules-

Module1: **Basic Computing**- basic components of computers, use of mouse, different types of memory, computer networks etc.

Module2: **Web Browsers**- downloading files, saving files, printing a webpage, etc.

Module3: **Online E-Resources**- categories of information on web, search techniques, etc.

Module 4: **Web –Resources** -DULS subscribed database, evaluation criterion, etc.

Module 5: **Citations**- citation analysis, etc.

DULS has taken further steps to make users aware about different changes prevailing due to technological as well as product upgradation through- DULS Websites, E-Mail Alerts for faculty members, E-referencing, and Brochures, Pamphlets even E-brochures & E-pamphlets.

Further, Workshop on Information Literacy and Competency for faculties and research scholars in the discipline of Science/Social Science and Arts & Humanities to promote the use of e-resources in teaching, learning and research is also conducted with an idea to (http://crl.du.ac.in):

- Expose the audience with the availability of electronic resources which are being subscribed by the Delhi University and can be accessed Campus wide.
- Expose to the public domain electronic resources in the field of Sciences/ Social Sciences and Arts & Humanities.
- Provide a practical demonstration with the help of certain standard rules generally being followed for citation of bibliographical references, footnotes etc.
- Demonstrate various search techniques for searching precise and relevant information on the web.
- Orientation to citation and analysis databases such as Scopus

Besides, "Training for Authors" is conducted by Springer; and "Information Literacy for Research Competency", a short term course of 60 hours for M.Phil and Ph.D students are also organizes by the DULS. Furthermore, "Training the Trainers: Workshop on Information Literacy and Competency" a two days programme for University and College Library professionals are also organized with an aim "to train the library and information professionals for onward transmission of the skills to end users" for complete awareness and training on different aspects of information literacy.

All the programmes conducted by DULS have its own importance. One of the fine practices in DULS is the feedback analysis, which is collected through a specific feedback form distributed to the participants at the time of presentation of every ILPs, to assess the usefulness and hit of the programs and indeed it is the most successful one. Different feedbacks reveal that users are very much contented with the programmes which are relevant to their courses, and useful for their learning/teaching/research. Henceforth the use of different resources has increased tremendously which resulted in more research publications.

Information Literacy Courses in University of Delhi

In comparison to other universities of India, the initiatives by University of Delhi are really noteworthy. In the year 2007, the Department of Library and Information Science, University of Delhi has included a compulsory paper on information literacy at MLISc 2nd Semester (Bhatt, 2011). In addition, according to Rajesh Singh and S. Majumdar based on the booming ILPs and feedbacks, DULS has proposed to incorporate Information Literacy Course as an elective/optional credit point course into the curriculum of the post graduate students. The course is proposed to be of one semester in the beginning of the first semester. But after a lot of deliberations, the Governing Body of DULS came to a conclusion that rather it should be initiated as the short term course, "Information Literacy for Advance Learning", for the post graduate students and research scholars as the pilot study and accordingly it will be adopted as the regular course in the post graduate level as desired based on the outcome of the study. The details of the course content are listed below in Table 3.4.1 (B)(Singh, 2009, p.534):

Table no. 3.4.1(B): Information Literacy Course Content

Sl. No.	Content	Duration	Brief Description of the Content
1.	Information Literacy	04 hrs	Definition, philosophy and overview, objective and purpose, standards, coverage and indicators, components, models, recent trends.
2.	General Computer Concepts	04 hrs	Introduction to computers, hardware, software, system software, application software, various operating systems, general purpose software suit like- MS-Office.
3.	Hands on Practice	02 hrs	MS-Office
4.	Basics of Networking & Internet	03 hrs	Networking concepts. Introduction, history, architecture, & components of Internet. www, e-mail management, etc.
5.	Research Strategies	04 hrs	How to do a research?, research setting and design, critical thinking skills, formulation of research questions; identify research topics by

			applying critical thinking to research questions, identify keywords/ key ideas in the research questions.
6.	SPSS	03 hrs	Basics of SPSS
7.	Hands on Practice	02 hrs	Using SPSS for data analysis
8.	Sources & Types of Information	04 hrs	Use of library, format of sources of information-print vs e-resources, and finding aids, popular vs scholarly journals. Library reference collection and services in print. Ordering materials from various sources (inter-library loan, for example) Library homepage familiarization activities (e.g., checking borrower information at the library via the homepage, asking librarians questions via virtual reference), Critical issues in scholarly communications.
9.	Database Concepts	02 hrs	Overview of databases, scope, coverage. Creation and updation of databases. SQL concepts. Review of database functions.
10.	General Databases	02 hrs	Overview of databases, scope, coverage and search features, search result analysis and limiting, expanding the search results. Registering with database(s).
11.	Hands on Practice	02 hrs	With various general databases
12.	Web Resources	04 hrs	Introduction to web resources. Subject directories, search engines, meta search engines. OAI, RSS, Wikies, blogs, newsgroups and forums. Application of critical thinking skills to using web resources, evaluate web resources.
13.	Hands on Practice	02 hrs	Using subject directories, search engines, meta search engines.
14.	Online Resource	03 hrs	Features of online e-resources, Information

	& Searching Techniques		Retrieval System, formulating a search strategy, recall vs relevance, search techniques, employing specific search techniques. Title, subject, author, keyword searches.
15.	Hands on Practice	02 hrs	Formulating a search strategy, employing specific search techniques for online searching with examples.
16.	Discipline Specific Database (two groups: Science & Social Science optional)	03 hrs	Overview of databases, scope coverage and search features, search result analysis and limiting expending the search result, registering with the databases.
17.	Hands on Practice	03 hrs	With various subject specific databases
18.	Information use Ethics	02 hrs	Define plagiarism, what constitute plagiarism, how to avoid plagiarism, demonstrate ethical use of information, copy right issues.
19.	Group Discussion & Brain Storming	02 hrs	Plagiarism and copyright issues
20.	Citation Standards	04 hrs	Importance of citations, ranking system and standardization of bibliographical references using standard tools, various citation patterns and their use.
21.	Reporting Research	03 hrs	Writing research out come, drafting, editing and final communication.

Such kind of course will be beneficial for the whole academic community, and for this endeavor there must be an active cooperation between the parent organization, faculties and the library professionals for the success of the programs. Indeed, the library professionals have to take every possible initiative or the leading role to raise awareness about information literacy- its need and benefits, and in designing the programmes according to the prevailing environment. For these purpose, the professionals must be competent enough to pass on the skills and knowledge to the users. It is apt to note that the different information literacy programs conducted by

DULS are really a herald of new trend and can be considered as a torch bearer for the other academic institutions.

3.4.2 Information Literacy in Other Academic Libraries of India

University Libraries of Orissa

B.K.Choudhury and Bipin Bihari Sethi considers Information literacy as knowing information about information. It refers to the combination of skills which is concentrated on the information research and use. To assess the level of information literacy among the library professionals of three academic libraries of Orissa, India namely Parija Library, Utkal University, Vanivihar (PL,UU); Prof. Bhubaneswar Behera Central Library, Sambalpur University, Jyotivihar (PBBCL, S.U) and R.P.Padhy Library, Berhampur University, Bhanjavihar (RPPL, B.U) different aspects of information literacy have been taken by the authors and found that (Choudhury & Sethi, 2009):

- The professionals of PBBCL are more computer literate than the other two university libraries.
- The library professionals of PBBCL have undergone different courses like- PGDCA (44.45%), DCA (33.33%) and (11.11%) each short term and informal course. Moreover the professionals (75%) of RPPL have done informal courses and (44.44%) of PL have done short term courses.
- The professionals of PBBCL and PL are having more skill in computer fundamentals, programming, internet & multimedia. But the professionals of RPPL have only computer fundamentals skill.
- A pride position of most prominence goes to PBBCL for offering 'training/orientation' to its professionals and more than half (55.55%) of the professionals of this library have undergone training provided by the library. But the (22.22%) professionals of PL have taken the training from computer institute and outside agency. While the professionals of RPPL have not undergone any training except (50%) who have acquired through the self study method.

- Almost all the three universities have interest in orientation for use of electronic resources, online catalogue, operation of library management software's, and use of OPAC and Web OPAC.

- All the professionals of PBBCL use online information resources whereas the professionals of other two libraries rarely use online information resources as their library lacks such facilities.
- 50% of professionals of RPPL are aware of Copy Right and Intellectual Property Right, which is highest in comparison to other two libraries.
- It is found that (55.56%) & (22.22%) professionals of PBBCL and PL respectively can evaluate web resources; while the professionals of RPPL don't have the skill to evaluate web resources.
- 77.78% professionals of PBBCL uses search engines. Out of different search engines Google is highly used, which is highest as compared to other two libraries.
- 88.89% of professionals of PBBCL, possess skills to use OPAC and Web OPAC, while the professionals of other two university lack these skills.

Eventually they summed up that the professionals of PBBCL are more efficient than the professionals of other two libraries and suggested that they should be more aware about copyright/IPR, and different consortiums.

Shreemati Nathibai Damodar Thackersey (SNDT) University Library-User Education Programme

SNDT (Shreemati Nathibai Damodar Thackersey) Women's University was set up in 1916 and in its Branch Library, Pune, User Orientation Programme is carried out every year for the new students at the beginning of the academic session and also for the faculty members. In the programme, users are acquainted about membership procedure, library rules, timings, various services, basic knowledge of classification scheme, technique of using catalogue, art of reading books and preparing bibliographies etc.

Kailas Pawar, et.al describes that depending upon the level of readers/users i.e. from class XIth to PhD, the programmes are arranged. For the Junior college students, brief

library tour is organized which includes basic information about the library and the use of basic reference sources like dictionaries and encyclopedias. For undergraduates, along with the library tour and basic information, the use of periodical literature, searching through the recent periodicals, surfing Internet, use of online databases, CD-ROM databases, information retrieval using search engines are also taught. For the post graduate students, other than basic information, intensive subject wise library instructions are also given and demonstrate them how to search literature by selecting a term from particular subject using various sources like dictionaries, encyclopedias, textbooks, periodicals etc. Moreover, the library has prepared 'Bibliographic Pathfinders' which includes list of class numbers useful for the subject along with its alphabetical subject index under sought headings; annotated list of periodicals; annotated list of reference and bibliographic sources. Pathfinders provides guidelines to the students in their subject of interest and it is updated regularly to accommodate new sources, changes in curriculum, progress in the subject and many other changes. Instruction on the preparation of reference list and bibliography as per APA or other standards are also taught. (Pawar, et.al., 2006).

Moreover network connectivity in the library permits user to access electronic products, services and databases such as J-Stor. In the university, every year "Granthotsav" is celebrated to promote reading habits among the students and book exhibition, different competition for the students are the part of the celebration (Pawar, et.al., 2006).

Shrimati Manjulabai Raojisa Kshatriya (SMRK) Library- User Education Programme

S.M.R.K.,B.K.,A.K., (Shrimati Manjulabai Raojisa Kshatriya Arts and Fine Arts, Shriman Babubhai Kapadia, Commerce & Athawali Kulkarni Home Science) Mahila Mahavidyalaya was established in the year 1985 and it has the permanent affiliation to SNDT (Shreemati Nathibai Damodar Thackersey) Women's University (1916). The college was started by the Gokhale Education Society, Nashik, Maharastra, which was established on Feb. 1918 by Prin.T.A. Kulkarni. It is worthwhile to mention that since 1977 the SNDT Women's University library, is conducting User Education Programmes (UEP) for staff, students & for 225 affiliated college students. In the

university level, “Library skills and methods” was offered as the elective course in university curricula but unfortunately this course is discarded from the new course.

The S.M.R.K.,B.K.,A.K., college library has the sufficient number of book collection and facilities also. Under the extension service the college arranges Library Orientation Programmes and extension lectures under User Education Programme. Further the library adopts some crucial steps in designing and its implementation of User Education Programme.

First step: Identifying the Users- Most of the users/target group are the newly admitted students of Junior College, Senior College as well as P.G Diploma First year students.

Second step: Identifying the Goals- ‘Empowerment of women through quality education’ is a mission of the college. Therefore to carry out this sublime causes the college feels that simply providing UEP by instructions to carry out specific task but also to develop a range of skills.

Third step: Identifying the objectives- The College has set up the following objectives:

- To communicate an atmosphere of helpfulness and friendliness.
- To motivate users to come back and make use of the resources.
- To introduce the organization of the collection with specific goal of reducing user anxiety about trying to locate materials.
- Library policies-rules, regulations, Advance Learner Policy.
- Specific services such as library loan, computer search.
- The library sections and appropriate staff members.
- The physical facilities of the building itself.
- To find books on specific subject through list catalogue and using subject heading, guide list, stack arrangement plan.
- To use CD’s and audio cassettes through appropriate channels.
- To use reference tools.
- To conduct a search in an indexing service.

Fourth step: Resources for UEP- Inspite of inadequate staff and limited resources, existing staffs’ enthusiastic and supportive attitude as well as the competent assistants

has overcome the limitations. And the college arranges good instructional material and maintains it.

Fifth step: Formulation of Course Content- Depending on the different literature available in the library and facilities of the library the course content of the UEP is prepared.

Sixth step: Choosing Methods & Media- The College is using Orientation Lecture as the direct method and organizes exhibition, extension lectures, display, documentation lists, and charts as the indirect methods.

Seventh step: Implementation of UEP- Library Orientation Programme is conducted for the 1st year students of each faculty at the starting of the academic year. And to support this programme different other programmes are arranged like- extension lectures on "Obligations Of borrowers", "How to use the library resources for research", "Knowing the book", demonstration on Library Software", "Talking Dictionary in Marathi: a software and arranges exhibition on "New references" in specific subject area.

Eighth step: Evaluation of UEP- UEP is evaluated in an informal way through suggestion box and student's feedback form and the programme is revised accordingly.

The authors conclude that they achieved success in creating library culture in the college among students and staff. But due to the examination oriented pattern of the Junior College, students are not so aware about the reference books and periodicals. Therefore to develop a reading skill among the students of this group special effort and redesigning of UEP is required.

National Academy of Agricultural Research Management (NAARM) - Training Programme

R.B. Gaddagimath has developed a package 'Scientific Information Management' for the Scientist of Indian Council of Agricultural Research and faculty of State Agricultural Universities at National Academy of Agricultural Research Management (NAARM), Hyderabad. The objectives of the programme are (Gaddagimath, 2006, p.304):

- To impart knowledge on various aspects of information generation and transfer.
- To provide the scientists with basic skills for information collection.
- To expose different methods of storing scientific information.
- To make the scientists aware of the different information handling agencies.
- To provide techniques for information search from the secondary periodicals, reference sources and other databases (online, CD-ROM etc.)
- Research Communication through Scientific papers, Review papers, Technical reports, Poster presentation etc.
- To provide skills for editing and proof reading.
- Basic skills for Rapid Reading, Comprehension, etc.

Based on the objectives and target group, different topics were developed to serve the purpose (Gaddagimath, 2006, p.304-05):

- Generation and transfer of scientific information.
- Scientific paper writing.
- Citation indexing and SCI (Emphasis on project Management).
- Personal documentation.
- Frontiers in agricultural information services at national and international level.
- Review paper writing and Index to Scientific Review.
- Proof reading and editing.
- Speed reading skills.
- Technical report writing.
- Poster sessions as a medium of research communication.
- Research front specialties, ISI atlases in the sciences.
- Information technologies and access to scientific information.
- Online information accesses Networking and CD-ROM in agricultural sciences.
- Science mapping and structuring the developing specialized areas/subjects.
- Scientific information management tools for curriculum design and development.
- Book reviewing and art of scientific book writing and reviewing.
- Citation analysis and productivity and impact of research.
- Notes making and notes taking.

- Use and evaluation of secondary periodicals and reference sources in agricultural sciences.
- In-house publishing and running a refereeing system.

Information Literacy Programmes in Academic Libraries of Navi Mumbai

Vijay Pattar and Satish Kanamadi have conducted a survey to study the content and delivery methods of information literacy programmes in academic libraries of Navi Mumbai which has been limited to 12 engineering colleges out of 157 engineering colleges in Maharashtra. Different findings of the study are (Pattar, 2010):

- Most of the engineering college libraries are conducting ILP for the students and the faculty members.
- In these colleges, librarians are the key person who conducts the ILPs.
- The foremost methods of delivering ILPs are the 'Introductory briefing in the orientation program' and 'library tour'. The college libraries never used the 'library guide' and 'online and web-based instructions'.
- Regarding the content of the ILPs, most of the college libraries includes general introduction about library facilities and services and reference sources. Less importance is given to 'Bibliographic instruction' and 'Documentation research work'.
- Most of the college libraries do not have any evaluating process for the ILPs conducted.

Information Literacy among Students of Guru Nanak Dev University

To commemorate the 500th birth anniversary of Sri Guru Nanak Dev, Guru Nanak Dev University was established at Amritsar in 1969. The objective of the University is to impart education and support research activities in the humanities, learned professions, sciences and technology. 37 academic departments exist in the University along with 2 regional campuses at Jalandhar and Gurdaspur and 3 constituent colleges at Jalandhar, Niari (Gurdaspur) and Mukandpur (Nawanshahr). The university library (Bhai Gurdas Library) was established in 1970. The library has rich collection of 4 lac documents (printed and electronic journals) and it is the member of INFLIBNET UGC-Infonet e-journals Consortium Programme and

DELNET (Developing Library Network). To access the information literacy skills and ability of the students in acquiring, organizing, evaluating and use of information Amritpal Kaur, Sarman and Sarita Rani carried out a study consisting of post graduate and Ph.D. scholars of the University. The major findings are (Kaur, 2012):

- Most of the respondents from both the categories –post-graduates and research scholars use MS-office, social networking sites and electronic mails.
- Both the category of respondents, post-graduates as well as research scholars, use information to update knowledge in their respective subject area. Further, research scholar use information to carry out their research work.
- Out of different searching tools, search engines are the most frequently used. Most of the respondents are comfortable with Boolean operators and they are not aware of wildcards/truncations searching techniques.
- Respondents from both the categories can not identify citations.
- To some extent respondents make fair use of information and request consent from the copyright holders. But these legal aspects are not known to some of the respondents.
- Most of the respondents suggested to take some initiative in the university library to start ILPs and incorporate in the curriculum of all the streams.

Assessment of Information Literacy Skills among Science Students of Andhra University

Prof. C. Sasikala and V.Dhanraju carried out a study to assess the information literacy skills among the science students of Andhra University, Visakhapatnam and the study has been confined to Botany, Physics, Chemistry and Environmental Science covering 141 students (respondents). To collect the relevant data, the authors have used questionnaire method which consist of 31 questions under seven sections. Accordingly, based on the responses received from the students, authors summed up the findings as (Sasikala, 2011):

- Other than the university library, students visit college libraries and public libraries too.
- Most of the students visits library many times regularly. The main purpose is reading textbooks followed by consulting reference books, for

competitive examination and for recreational (newspaper, magazines etc.) reading. Moreover, students use periodicals followed by internet, e-journals, online databases and library OPAC.

- Students uses ICT particularly internet for mailing purpose followed by seeking jobs, for further studies, to access online databases, and for chatting.
- Regarding the reliability and authenticity of the information available in the net, most of the students have fine awareness about the web resources as they prefer those information which are 'offered by a recognized authority on the subject or that can be verified using other sources.'
- Websites are highly accessed by the students for the information which is followed by search engines. Other web tools are not so popular among the students; the reason may be students are not so aware about those tools. Moreover most of the students use 'simple key words' other than Boolean operators and truncation.
- Most of the students are aware about copyright and plagiarism and interested to learn more about information literacy.
- Majority of the students prefer information literacy instruction which need to be included in the 'course curriculum' followed by 'printed information instruction' and 'online information literacy instruction via college websites'.

ICT Skills amomg the Internees of Rural Medical College in Tamilnadu

Murugan and others surveyed IRT-Perundurai Medical College in Tamilnadu which covers 80 internees and out of which 70 (87.5%) has responded the questionnaire. The study was carried out to find the use of library resources and services by the rural medical college internees during their study period and the level of computer literacy. The major findings of the study are (Murugan, 2012):

- Most of the internees use library and spend 2-4 hours in the library every time they visit.

- During their study period, most of the internees use reference books followed by textbooks, current journals and back-volumes. Whereas digital resources are rarely accessed by the internees.
- It is quite surprising that internees use reprographic service of the library rather than the MEDLARS service.
- All the internees (100%) are interested to pay to learn 'computer applications'.

Information Literacy through Web 2.0 in Jaypee Group of Institutes

Jaypee group is one of the expanded multinational companies in India with its guiding philosophy "Growth with a Human Face", prevailing as the leader in the area of Engineering and Construction, Cement, Private Hydropower, Hospitality, Real Estate Development, Expressways and Highways. Under the strong hold up of Jaypee Group of Institutions-3 state-of-the-art technical universities and institutions (Jaypee University of Information Technology, Solan, Himachal Pradesh; Jaypee Institute of Information Technology University, Noida, Uttar Pradesh; and Jaypee Institute of Engineering Technology, Guna, Madhya Pradesh), 1 college of education, 1 post graduate college, 1 diploma college, 2 industrial training institute and 16 schools were set up.

To support the very mission of the institutions, Learning Resource Centers are well set with modern library technology. International standard library automation software is used with internet based WebOPAC and Web 2.0 technology for resource sharing and communication of information among the institutions. "Alice for Windows" Library Management Software is used in all the institutional libraries under the group and it has been upgraded to "Liberty", which is web-enabled library management software. For the maximum utilization of the resources available in different institution, centralized cataloguing and metadata with images of the document is created. Through Library Toolbar, users are linked to different subscription –e-journals (DELNET, Springer etc.), RSS Feeds, and many more. Coming across the surpass benefits of the Web 2.0 enabled Web-OPAC; Jaypee Education System used Web 2.0 tools for the users (Ram, 2010, p.49):

- YouTube for library publicity about different recent library activities with multimedia document creation and linking to Educational Radio channels and Video Programs like National Program on Technology Enhanced Learning (NPTEL) by IIT Madras and Kharagpur.
- Flicker to send pictures and resource navigation about the new arrivals, most read, etc.
- Podcasts for providing information about different declaration and educational promos on different subject by agencies.
- FaceBook is used for reference service and document feedback.
- E-Surveys for analysis the user satisfaction of Web 2.0.
- Linkedln/Plaxo to extend library services.
- RSS and Blogs for content alerts.

Information and Communication Technology Literacy in Calicut University

The University of Calicut, Kerala, which was established in the year 1968 is located at Tenhipalam in Malappuram district, 24 km south of Calicut city. The university existed with an aim to develop workforce by providing higher education in the northern district of Kerala and promote research in many areas with specific prominence on technology, art, and culture of Kerala. The university has 31 post-graduate departments and 304 affiliated colleges. 3 years later , university library was established in the year 1971 which was named as the C. H. Mohammed Koya Library. The central library is fully computerized whereas 28 departmental libraries are partially automated. To cater the needs of the students, faculties, and research scholars the library holds variety of collections- books, Journals, Microfiche, Theses, Dissertation, etc. It has nearly 95,000 books, 218 Journals (subscribed) and nearly 2500 back volumes. The library has an exclusive UGC-INFONET centre, 50 computers with high bandwidth Leased Line connectivity which is provided to the students, research scholars and faculty members.

Haneefa and Shukkoor (2010) carried out a study confining to the library professionals of central and departmental library of Calicut University to find out the ICT literacy among the professionals. To disclose the actual situation the authors distributed structured questionnaire to 69 library professionals out of which 68

responses were received which includes- 42 professional Assistants, 10 Junior Librarians, and 16 Assistant Librarians. The questions pertain to – computer education, use/frequency of ICT-based Resources/Services/Tools, use of general purpose application software, confidence in handling -ICT tasks, internet task, high-level ICT tasks, etc. By analyzing the different data the authors concluded that –

- Professional Assistants holds both formal and informal computer education than Junior Librarians and Assistant Librarians. Most of the Junior Librarians and Assistant Librarians have informal computer education. Frequency of use of different ICT- based resources and services by the professionals are very stumpy and need to improve their knowledge and skill in the use of those resources, services and tools.
- There is a inadequate state-of-the-art ICT infrastructure in the library
- Majority of the library professionals are confident in handling ICT and internet tasks. But in handling high-level ICT tasks, they need more efforts.
- Open-source-software should be encouraged by the University for library automation, digital libraries and institutional repositories.
- The orientation and ICT training given by the University library are not sufficient for the professionals. Therefore, to have more confident ICT literate professionals more formal training should be provided to the professionals.

Use of CD-ROMs and Internet Resources by Students in Jawaharlal Nehru National College of Engineering (JNNC), Shimoga, Karnataka

Jawaharlal Nehru National College of Engineering (JNNC) Shimoga, Karnataka was eastablished in the year 1980. The college offers 8 undergraduate and 4 postgraduate programmes and providing education to nearly 2000 students with 126 faculty strength. To study the impact and problem faced by the students in the use of CD-ROMS and Internet resources, Lohar and Kumbar (2008) surveyed the college and collected data by distributing questionnaire to 150 selected students out of which 110 responses have been received. The major findings of the study are:

- Most of the students use library regularly, and access CD-ROMS and internet for latest information in their concern subject and for career development respectively. Whereas some student prefer to use printed reading material and considers it as the time consuming process.

- Lack of time, knowledge, training, and inadequate number of computer terminals are the barriers in using the digital resources.
- Majority of the students opine that CDs and internet are 'more useful' for their academic work/ study.

Use of Internet Resources in Sri Venkateswara University (SVU) Digital Library

Babu, etal. (2010) also surveyed Sri Venkateswara University (SVU),Trupati to look into the use of internet resources by the students, faculties and research scholars. The college was established in 1954 and one year later, 1955, library was set up. It is a member of UGC-INFONET Programme and has also created digital library for the benefits of the user community. The authors concludes that due to various facilities available in the library it provides different internet services-Digital Library, Harvesters, Online Journals, etc., but the fact is that in the use of these resources users are confronted with varied problems- slow internet access/downloads, information overload in the internet, problem in finding relevant information. Therefore, for the optimum utilization of the services and resources extensive training for the users should be conducted on the regular basis.

Use of E-Resources in C.V.Raman College of Engineering (CVRCE), Bhubaneswar

Satpathy and Rout (2010) conducted a survey in C.V Raman College of Engineering (CVRCE), Bhubaneswar to appraise the use of e-resources by the faculty members which includes Lecturers, Assistant Professors, Senior Lecturers and Professors of the college. To meet the various information needs of the users, the Central Library of CVRCE has subscribed to many online databases other than the INDEST Consortium. Further the library is also a member of DELNET and British Council Division, Kolkata. Based on the study the authors arrived at different findings that:

- Majority of the faculties have the computer knowledge and use internet in the department followed by 'at home', 'at cyber café' and lastly 'at central library'.

- Significantly the faculties are aware of e-resources and they highly access 'e-databases' followed by 'e-journals' and 'e-books' for different purposes basically for the 'study and teaching'.
- Faculties are well acquainted with the legal issues concerning to the use of information and most of them gives preference to those information which are evaluated on the basis of 'reliability', 'usability' and 'currency' consequently.
- Most of the faculty members recognize the usefulness and advantages of e-resources and admit that 'e-resources are not as per need'.
- So far the search strategy is concern, most of the faculties use Google/other search engine followed by 'as per the instruction of the library staff' and 'website of concerned e-resources'. This indicates that the user needs more different orientation and training programmes to optimize its use.

Information Literacy Programmes in Some Selected Libraries and Information Centers in Bangalore

Karisiddappa and Rajgoli, both jointly carried out a case study on the selected libraries and information centers of higher learning and research institutions located in the Bangalore city with various purposeful objectives pertaining to ICT infrastructure; implementation of ILPs; planning, designing and deliverance of ILPs; impact of ILPs in the use of library resources and the intellectual output of the organization. To serve the purpose questionnaire was distributed among the Head/librarians of the 31 selected libraries and unfortunately 6 libraries does not offer any ILP and in totality 23 responses have been received. On the basis of collected data the authors have observed that (Karisiddappa, 2008):

- Regarding the frequency of ILPs conducted by the libraries, most of the libraries offers it 'for the new users' followed by 'annually' and 'when requested'.
- Librarians are the key person behind the ILPs and some of the library invites 'library staff and guest professionals' followed by demonstration and presentations by 'publishers/representatives/agents'.
- Staffs also need some training to keep themselves up-to-date with the new technologies and other related developments. Even though they does not get

any such kind of training, good thing about them is that majority of the respondents were the self learner and keep themselves up to date with new technological knowledge and skills. Some of the respondent gets training from 'product vendor' followed by 'outside trainer/consultant'. Moreover they also participates in different workshops, seminars, training programmes organized by professional organizations.

- Most of the libraries have prepared 'resource help sheets, guides, and manuals' about the resources available in the library for the better use of it followed by development of 'WebPages and intranet portals', 'instructional materials including tutorials or modules'.
- Based on the different categories of users, varied ILPs are designed. However, only 10 libraries has separate ILPs for 'scientists/engineers', followed by 'students', 'faculty' and 'administrative staff'.
- Most of the libraries gives 'guidelines for searching effectively different search engines and databases', followed by ' guides for citing electronic information', 'organizing expert lectures on information literacy' and 'interactive tutorials to teach the users how to evaluate the quality of information on the internet'.
- ILPs are basically designed by 'in-house by team of library professionals as part of a range of duties' followed by 'mixed team of library professionals, IT staff and administrative people', and 'external provider briefed by the information literacy programme development team'.
- One of the important aspects of ILPs is the mode and aids used for the purpose. In this regard most of the libraries are using different audio-visual aids, multimedia etc.

The authors summed up that the overall outcome of the study is good as all the respondents of the concern libraries are interested in ILPs and possess sufficient knowledge about ILPs- its importance and advantages which is a good sign for the academic community. Further the authors acknowledge that ILP promotes use of resources, enhances research outputs, develops skills and make the users aware about legal issues pertaining to the use of information from various domains.

The motive behind highlighting all these case studies and surveys is to draw a picture of level of information literacy practices existing in the Indian colleges and

universities. Most of the colleges and universities are confined to library orientation only, a few colleges are conducting ILP for different categories of user using various methods and audio-visual aids and there are also some colleges where even library orientation is not practiced. Here we come across the urgent need of information literacy to be imparted/implemented in different higher education of India.

The need and urgency of information literacy is felt by all the library professionals and in pursuance to that in CALIBER-2011, some strategic plan has been recommended for the successful implementation of information literacy in India which are given below: (Hemavathi, 2011, p.10-11):

- Need to be enacted 'Information Act of India' or need to be establishing National Information Literacy Mission.
- This is high time, the library associations of all kind propagate and advocate the significance of information literacy programmes for the progress of the society.
- There is an ongoing need for clear, coherent and authoritative documents that define information literacy and provide a rationale for its implementation. If it is to be effective, national document or policy statement of this kind will also need to be followed up with an ongoing process of monitoring at a national level.
- In addition to broad statements of purpose, there is a need for more specific documentation outlining frameworks for curriculum development and practice. A document of this kind would need to include: a clear model of learning progression, details of specific learning outcomes, expressed in terms of competencies; and criteria and procedures for evaluation and assessment.
- Well-intended documents and frameworks are worthless without trained staff to implement them. Elements of training in information literacy should be included in initial and in-service training programmes, and be available as part of 'teachers ongoing professional development'. Distance and Open University learning may be appropriate in many circumstances, but this should be complemented by sustained opportunities for face-to-face tuition and through EDUSAT programme.

- Despite the changing and sometimes ephemeral nature of the content of media education, teaching materials can have a long shelf life if they are carefully and professionally produced. Information literacy does not by any means have to be a 'high tech' enterprise, but it should at least reflect the levels of access that students and teachers have to technology outside the campus/school environment.
- Information literacy practice should obviously reflect current theoretical advances in our understanding of people's relationships with media, and of pedagogy. In terms of pedagogy, issues that are in need of more systematic and sustained research might include: the nature of student learning about the course; the relations between 'conceptual' and 'affective' dimensions of course education; and the relations between 'theory' and 'practice'.
- There is a need for international dialogues and exchanges to be sustained, rather than merely in the form of one-off conferences taking place every year. International exchange will be much less superficial if practitioners have more sustained opportunities to visit each other's countries, for example through a system of longer-term internships.
- All the above elements are inter-related. If any one of these is absent or weakened, it puts the entire construction at risk. For instance, policy documentation or curriculum frameworks in the absence of professional development can be merely a matter of empty rhetoric. Professional development and self-organization by teachers is fairly meaningless if there are no clear curriculum frameworks for them to work within. Policy, teaching and research should be interconnected: development in each area should support development in the others.

3.5 Conclusion

There are many case studies and surveys, focusing on the lack of awareness about the e-resources which are available inside and outside the library setting and the various services related to the e-resources. Therefore there is a need to keep user abreast of the various additions of the library. It is evident from the various surveys that the proliferation of e-resources and other online databases engulfing diversified benefits

has changed the attitude of the libraries to provide quality and valuable service to the users. It is a matter of concern for the libraries and also occupies an important activity in the libraries. Though it is a good sign, but the underlying fact about the use of these resources is that users are not aware and lacks proper orientation and training. Thus this is one of the main barriers between users and the resources which lie idly because of lack of knowledge about these resources. To diminish the gap between the user and the different information resources, Information Literacy can be used as the perfect match maker between them.

Understanding the information literacy trends and developments in the academic libraries both at international and national level, the scholar has made a special study in the next chapter entitled "Information Literacy Scenario in College Libraries of Lower Assam".

References:

Andretta, Susie. (2005). *Information literacy: A practitioner's guide*. Oxford: Chandos Publishing.

ALA. (1989). *Presidential Committee on Information Literacy: Final report*. Retrieved on August, 30, 2012 from http://www.ala.org/acrl/publications/whitepapers/presidential

Babu, K. Surendra., Sarada, B., & Ramaiah, C.K. (2010). Use of internet resources in the S.V. University digital library. *DESIDOC Journal of Library & information Technology, 30*(1), 26-31.

Bainton, Toby. (2001*). Information literacy and academic libraries: The SCONUL approach (UK/Ireland).* Standing Conference of National and University Libraries United Kingdom 67th IFLA Council and General Conference August 16-25, 2001. Retrieved on June, 20, 2012 from http://archive.ifla.org/IV/ifla67/papers/016-126e.pdf

Banu, H. Akther. (2011). Moving towards knowledge society. *University News, 49*(03), 6-12

Bavakutty, M., & Nasirudheen, T.P.O. (2008). *Assessing information literacy competency of research students in India: A case study*. Retrieved on Sept., 24, 2010 from http: /dspace.fsktm.um.edu.my/bitstream/1812/297/1/10Bavakutty_In_NHW.pdf

Bewick, Laura., & Corrall, Sheila. (2010). Developing librarians as teachers: A study of their pedagogical knowledge. *Journal of Librarianship and Information Science, 42*(2), 97-110.

Bhatt, R. K. (2011). Information literacy models and competencies development initiatives in India. *ICoASL 2011: Branding & Marketing, & Strategic Direction, Best Practices & Performance Evaluation of Special Library Services.*

Bruce, Christine Susan. (2004). *Information literacy as a catalyst for educational change: A background paper, Queensland University of Technology.* Retrieved on August, 30, 2012 from http://eprints.qut.edu.au/4977/1/4977_1.pdf

Choudhury, B.K., & Sethi, Bipin Bihari. (2009). Computer literacy of library professionals in the university libraries of Orissa: An analytical study. *IASLIC Bulletin 54*(1),15-30.

Cooke, Alison. (1999). *A guide to finding quality information on the internet: Selection and evaluation strategies.* London: Library Association Publishing.

Gaddagimath, R. B. (2006). User information literacy and training in academic libraries. Proceeding of *National Seminar on Best Practices in Library and Information Services.* Bangalore: Bangolore University Library, pp. 297-306.

Goswami,P.R. (2001). Users education and information literacy in India: A synoptic view. *CLIS OBSERVER (Centre for Library and Information Studies): R&D Journal in Library and Information Science, 18*(3-4), 55-64.

Haneefa, Mohamed K., & Shukkoor, C.K. Abdul. (2010). Information and Communication Technology literacy among library professionals in Calicut University, Kerala. *DESIDOC Journal of Library & Information Technology, 30*(6), 55-63.

Hemavathi, B.N. (2011). *Strategic approach of Information Literacy Programme (ILP): Survival and success in 21st century in India.* Retrieved on August, 16, 2012 from http://www.isrj.net/July/2011/Research_Paper_Strategic_Approach_of_Information%20.html

Jaypee University of Engineering and Technology Retrieved on August, 11, 2012 from http://www.jiet.ac.in/Institute/group.php

Karisiddappa, C.R., & Rajgoli, Iqbalahmad U. (2008). In search of information literacy programmes and practices: Survey of selected institutions at Bangalore. *DESIDOC Journal of Library & Information Technology*, *28*(2), 28-38.

Kasowitz-Scheer, Abby., & Pasqualoni, Michael. (2003). *Information literacy instruction in higher education: Trends and issues.* Retrieved on January, 10, 2011 from http://surface.syr.edu/cgi/viewcontent.cgi?article=1032&context=sul

Kaur, Amritpal., Sarman., & Rani, Sarita. (2012). Information literacy among the students in the electronic environment: A case study of Guru Nanak Dev University, Amritsar. *SRELS Journal of Information Management, 49*(1), 21-38.

Kaur, Prabhjeet., Sohal, Manpreet Kaur., Walia, P.K. (2009). Information literacy curriculum for undergraduate students. *ICAL 2009- Library Services*, 556-560.

Kulkarni,S.A. (2009). User education programme and it's implementation in SMRK library. *ILA Bulletin, 45*(3-4), 31-37.

Lohar, Manjunath., & Kumbar, Mallinath. (2008). Use of CD-ROMS and internet resources by the students in JNN College of Engineering Shimoga: A survey. *SRELS Journal of Information Management, 45*(2), 235-242.

Mahadevan, G. (2006). *Information literacy programmes in colleges.* Retrieved on July, 31, 2010 from http://www.hindu.com/2006/10/04/stories/2006100409900400.htm

Murugan, B.O. Sathivel., Sornam, S. Ally., & Manohar, A. Celestine. (2012). A study on library usage and ICT skills among the internees of a Rural Medical College in Tamilnadu. *SRELS Journal of Information Management. 49*(3), 305-314

Mutula, Stephen M., & Wamukoya, Justus M. (2007). *Web information management: A cross-disciplinary textbook.* Oxford: Chandos Publishing.

National Knowledge Commission. (2006). Report to the nation, Government of India

Number of autonomous colleges under UGC. Retrieved on Sept., 19, 2012 from http://oldwebsite.ugc.ac.in/inside/374autocolleges_april11.pdf

Nyamboga, Constantine M. (2004). Information skills and information literacy in Indian university libraries. *Program: Electronic Library and Information Systems, 38*(4), 232-239.

Owusu-Ansah, Edward K. (2003). Information literacy and the academic library: A critical look at a concept and the controversies surrounding it. *Journal of Academic Librarianship. 29*(4), 219-230.

Padhi, Sambit Kumar. (2011). Issues, challenges and reforms in higher education for a knowledge society. *University News, 49* (26), 12-17.

Pandey, Raghunath., & Pillai, M.N. Velayudhan. (2011). *Digital library: Trends and prospects.* New Delhi: Jnanada Prakashan (P&D).

Pattar, Vijay., & Kanamadi, Satish. (2010). Content and delivery methods of information literacy programmes in academic libraries: A pilot study. *Information Studies. 16*(2), 103-112.

Pawar, Kailas., Panchmukhe, Sangita., & Kulkarni, Shubhangi. (2006). User orientation program. . Proceeding of *National Seminar on Best Practices in Library and Information Service.* Bangalore: Bangolore University Library. pp.469-471.

Ram, Mohan. (2004). *Universalization of higher education: Some policy implications*. New Delhi: Sarup & Sons.

Ram, Shri. (2010). Information literacy through Web 2.0 integrated WebOPAC: An experiment at Jaypee Group of Institutions. *DESIDOC Journal of Library & Information Technology, 30*(3), 43-50.

Ranganathan, R., & Rao, S.V.Lakshmana. (2011). Reformation of higher education in India: Quality concerns. *University News, 49*(10),16-20.

Saleem, Shaikh., & Gawali, Vidya S. (2011). Higher education: Not yet high in India. *University News, 49* (31),6-12.

Sasikala, C. & Dhanraju, V. (2011). Assessment of information literacy skills among science students of Andhra University. *Library Philosophy and Practice.*

Satpathy, Sunil Kumar., & Rout, Biswanath. (2010). Use of e-resources by the faculty members with special reference to CVRCE, Bhubaneswar. *DESIDOC Journal of Library & Information Technology, 30*(4), 11-16.

Sheeja, N.K. (2011). An anlytical study of university libraries in Kerala. *SRELS Journal of Information Management, 48*(1), 69-78.

Singh, K.P., & Ahmad, Shakeel. (2011). Issues and challenges in higher education. *University News, 49* (10), 1-5.

Singh, Rajesh. (n.d). *Information literacy: A review of literature.* Retrieved on Feb., 21, 2009 from http:/knoll.google.com/k/rajesh-singh/information-literacy-a-review-of/

Singh, Rajesh., & Jindal, S.C. (2009). Promoting the use of e-resources in teaching, learning and research: A case study of DULS. Proceedings of *7th International CALIBER(Convention on Automation of Libraries in Education and Research Institutions.)* Puducherry: Pondicherry University, 430-438.

Singh, Rajesh., & Majumdar, S. (2009). Information literacy for advanced learning: An academic course at University of Delhi. *ICAL 2009- Library Services,* 529-535.

Singh, Shashi P. (2009). *Catalytic role of information literacy in educational change: A case study of University of Delhi*. Retrieved on June, 19, 2009 from http:// www.emeraldinsight.com/Insight/ViewContent....

Streatfield, David., & Markless, Sharon. (2008). Evaluating the impact of information literacy in higher education: Progress and prospects. *Libri*, *58*(2), 102-109.

University of Calicut. Retrieved on August, 11, 2012 from http://www.universityofcalicut.info/

University Grants Commission. *Higher education in India: Strategies and schemes during eleventh plan period (2007-2012) for universities and colleges.* Retrieved on Sept., 19, 2012 from http://www.ugc.ac.in/oldpdf/pub/he/HEIstategies.pdf

CHAPTER -4

INFORMATION LITERACY SCENARIO IN COLLEGE LIBRARIES OF LOWER ASSAM

4.1 Introduction

Since the independence, the State of Assam underwent different remarkable changes and steadily growing with other states of the country. The State has registered 6.7 percent (base year 2004-05) growth rate in the first four years of the 11th five year plan. The State is not only endowed with natural beauty but has the rich natural and mineral resources and it has the credit of having Asia's first and world's third oil refinery in Digboi i.e. Digboi Refinery.

Agriculture plays a vital role in the socio-economic development of the State as the State has net 28.10 lakh hectares (2008-09) land out of the total geographical area of 78.44 lakh hectares for cultivation. Besides, many industrial establishments in the State are also contributing to the states' economy in particular and of the nation in general. Some of the major industries in the State are: oil refineries, tea industries, fertilizer plants, cement factory, paper mill, jute mill, rubber industries, etc. As per the Tea Board of India (2009) there are 5200 small tea growers out of which 3767 were registered with the Board. Assam tea is famous for its taste and quality all over the country. This particular industry is earning substantial foreign exchange and providing daily employment to more than 6 lakh people in average. With the state economy, literacy rate of the State is also increasing as it was 63.25 percent in 2001 census and it raise up to 73.18 percent in 2011 census. High literacy rate will somehow be instrumental in raising the awareness about information literacy and its importance in every sphere of life.

4.2 Brief Account of Assam

Assam is epithet as the land of 'red river' and 'blue hills for its serene, scenic natural beauty. The word 'Assam' has the Sanskrit origin, it is derived from the word 'Asama' which means 'peerless' or 'unequalled'. In epics and mythologies it is better referred as Pragjotishpura meaning "The City of Eastern Astrology or Astronomy" and later as Kamrupa which means "the land where the Kamdeva was reborn"(Mahanta, 2011, p. 42). Some authors interpreted it as the "Asom" which connotes the 'Ahom', a Tai Mongoloid race who ruled the state for almost 600 years i.e. from 1228 to 1826 before the arrival of British.

Before the advent of Ahom Kings, it is believed that Varman Dynasty ruled the region from 400 A.D to 13th century. Moreover, different small kingdoms ruled the State as Kacharies dominated the central and southwestern region, Jayanties ruled the Khasi and Jayantia hills, the Chutiyas over the north east and different hill tribes restrictive to their hill areas. Ahom Kings were enlightened rulers who patronized the writing of records in Buranji, thus the history of Assam can be visualize to some extent as in the Buranji.

There was fate time for the Ahom rulers as in the late 18th century the power of Ahom Kingdom declined due to internal wrangle and short sighted strategies. To tackle the revolt creeping around the different parts of the region, one of the Ahom personages, Badan Barphukan, sought the help of Burmese and consequently Burmese forces came to Assam for three times but the situation got more deteriorated when Badan Barphukan was murdered. Ultimately East India Company intervened the situation and peace was re-established by continuing the Treaty of Yandaboo in 1826. Henceforth, Assam came under the British Company in 1826 A.D.

Under the British rule, Assam was administratively attached with Bengal and in 16 Februrary1874 Assam was formed as a separate province, and Shillong as its capital. It was difficult for the whole region to be under the control of British rule and the struggle for independence was initiated in 1830 as Piyoli Barphukan, son of slain Badan Barphukan, organized an armed force to fight against the British. But their endeavor proved futile as himself and other patriots were hanged by the British Government. Maniram Dewan, a close friend of Ahom King also met the same fate. Thereafter many freedom fighters- named a few-Hemachandra Baruah, Tarun Ram Phukan, Kanaklata Baruah, Gopinath Bordoloi and many other patriots struggled for the independence of the country.

After the independence in 1947, Assam has been divided into several territories- Nagaland, Meghalaya, Mizoram, Arunachal Pradesh, Tripura and Manipur. The first chief minister of independent Assam was Gopinath Bordoloi (1938-39) and Fakhruddin Ali Ahmed (1974-77) was the first to become President of India from Assam.

Assam is the confluence of varied culture as it is an intermixture of different racial stocks. It has the mingled culture of Austrics, Mongoloids, and Aryans which contributed to the rich culture of Assam with their distinct religious beliefs.

The economy of Assam is basically agrarian which contributed more than 25 percent to the State Domestic Product during 2009-10. In Assam, nearly 87 percent of the total population dwells in the rural areas and are economically backward. Thus much emphasis is given on the rural development to eradicate poverty and to support the economic condition of the people in rural areas. According to Economic survey, Assam, 2010-11, 27 DRDAs, 21 Zila Parishads, 219 Community Development Blocks, 188 Anchalik Panchayats and 2202 Gaon Panchayats are engaged in implementing the various state and centrally sponsored programmes. Moreover, 11 districts (Kokrajhar, Bongaigaon, Goalpara, Lakhimpur, Dhemaji, Cachar, Hailakandi, Morigaon, Barpeta, Karbi Anglong and Dima Hasao) of Assam are selected for the Backward Region Grant Fund (BRGF) by the Government of India for infrastructural development.

Education is the key input for the growth and development of an individual, state and the country as a whole, thus education sector is also of much concern to the State. To cope with the increasing demand of quality education the State is putting much emphasis on technical studies. Therefore many new Polytechnique Colleges were proposed in different District of Assam under Central Assistance i.e Kamrup Rural(at Baihata Chariali), Nagaon(at Raha), Sibsagar(at Sibsagar town), Tinsukia(at Tinsukia town), Dhubri, Goalpara, Barpeta, Nalbari(at Nalbari LAC), Marigaon(at Marigaon Town), Sonitpur(at Dhekiajuli), Lakhimpur, Dhemaji, Karimganj(at Karimganj Town), Hailakandi, Karbi Anglong(at Baithalangso), Udalguri, Chirang and Baska (http://dteassam.in/index.php?menu=mnNewScheme). Likewise other projects relating to the establishment of technical institutions in the State are also under consideration.

Map No. 4.2: Different Districts of Assam

4.3 Educational System in Assam

The term education is derived from the three Greek words-"Educare", "Educere" and "Educatum". Educare means to bring up or nourish, Educere means to lead out or draw out and Educatum means the act of teaching or training. According to Webster's Student Dictionary, Education is "the development and training of one's mind, character, skills etc. as by instruction, study or examples. It is the instruction and training in an institution of learning, the knowledge and skills resulting from such instruction and training, teaching as a system, science or art, pedagogy" (Borah, 2005, p.4).

Before 1900, higher education in Assam was not prominent. Captain Jenkins, the then Commissioner of Assam (1834-61), proposed for opening of schools to provide education to Assamese youth and Government of India accepted his proposal and recommended to set up a Gauhati English School in 1835. Later on in 1858, Gauhati School was affiliated to Calcutta University (1857). In 1865, Director of Public Instruction (DPI) proposed the Government of Bengal to raise the annual allotment to instruct F.A course of the Calcutta University. Simultaneously the Government of Bengal recommended the proposal to Government of India. Accordingly in 1866, the Government of India accepting the proposal, "the Gauhati Zilla School was converted to a high or Collegiate School affiliated to the Calcutta University up to the first examination in Arts. With effect from New Years Day, this 'School' was enjoying the status of a College. Thus the Gauhati Zilla school may rightly be regarded as the harbinger of Modern education advancement in Assam" (Mahanta, 2011, p.59). The recommendation of Woods' Dispatch of 1854, has also contributed to such kind of initiations in Assam and in India as a whole, as Calcutta, Bombay and Madras University were established in 1857.

In 1874 Assam was separated from Bengal and in 1876, Colonel Keatings, the first Chief Commissioner of Assam closed down the collegiate section of the Gauhati School for the reason of- poor result, enrolment and higher cost incurred in providing the education. Thereafter students of Assam faced a lot of problem in pursuing a higher education in Calcutta; thereby the public demanded the reopening of the collegiate section and the then Chief Commissioner of Assam, Sir Charles Elliot

assured to consider the demand on the basis of results. He also extended scholarship of Rs 20/- per month to all the students of Assam who went to Bengal for study after passing the entrance exam.

Likewise, comprehending the necessity of college in the State, the then Chief Commissioner Sir Henry John Stedman Cotton decided and set up a second grade Government College at Gauhati on 27th May 1901. The College was named as the 'Cotton College' after his name and Frederic Willium Sudmersen was the first principal. Consequently, three more colleges were set up i.e Earle Law College at Gauhati (1914), Jagannath Barua College at Jorhat (1931), and Lady Keane College at Shillong (1935). Mention may be made that nearly 16 colleges were established before the independence.

After independence there was remarkable growth in the higher education so to say in the whole education system of Assam. According to the statistical report, 2011, numbers of existing educational institutions in Assam are listed below in Table No.4.3(A):

Table No.4.3(A): Types of Educational Institutions

Types of Institutions	Number
A. Higher Education	
1. University	6
2. Institute of National Importance	
2.1 IIT	1
2.2 NIT	1
3. College for General Education	
3.1 Arts, Science and Commerce College	
3.1.1 Government College	7
3.1.2 Provincialised College	189
3.1.3 College receiving Financial Assistance	172
3.2 Junior College	217
3.3 Arabic College	5
4. College for Professional Education	
4.1 Agriculture & Forestry	2
4.2 Engineering College (including private)	11
4.3 Law College	5
4.4 Management Institution	1
4.5 Veterinary	2
4.6 Medical College (including Homeo/Ayurvedic/Dental/Pharmacy/Nursing)	16

B. Secondary and Elementary Education School for General Education	933
1. Higher Secondary School	5714
2. High/Post Basic School	12985
3. Middle/ Senior Basic School	35065
4. Primary/ Jr. Basic School	74
5. Pre Sr. Madrassa/ Sr. Madrassa/ Title Madrassa (Pro.)	182
6. Sanskrit and Pali Tols	
C. Institute for Professional Education (under graduate)	
1. Polytechnic Institution	10
2. Technical, Industrial Arts and Crafts School	1
3. State College for Music	1
D. Teacher Training Institute	
1. Teachers Training College	40
2. Teachers Training School	1
E. School for Vocational, Professional, Special & Other Education	
1. Junior Technical	1
2. Handicapped	6
3. Juvenile Delinquent (Jail School)	10
4. Blind School	1
5. Deaf and Dump School	2
6. Juvenile Reformatories	4

Source: Statistical Handbook Assam, 2011

According to the previous two census report i.e 2001 and 2011, literacy rate in different districts of Assam are given below in Table N0 4.3 (B):

Table No. 4.3 (B): Literacy Rate of Different Districts of Assam

SL. NO.	DISTRICT	PERSON		MALE		FEMALE	
		2001	2011	2001	2011	2001	2011
	1	2	3	4	5	6	7
1	Kokrajhar	52.29 %	66.63 %	61.01 %	73.44 %	43.06 %	59.54 %
2	Dhubri	48.17 %	59.36 %	55.84 %	64.20 %	40.02 %	54.26 %
3	Goalpara	58.03%	68.67 %	64.86 %	72.67 %	50.85 %	64.53 %
4	Barpeta	56.00%	65.03%	64.23 %	70.72 %	47.16 %	59.04 %
5	Morigaon	58.53 %	69.37 %	65.15 %	73.66 %	51.51 %	64.99 %
6	Nagaon	61.73 %	73.78 %	68.27 %	78.19 %	54.74 %	69.21 %
7	Sonitpur	59.07 %	69.96 %	67.61 %	76.98 %	49.80 %	62.53 %
8	Lakhimpur	68.56 %	78.39 %	77.06 %	84.66 %	59.59 %	71.91 %
9	Dhemaji	64.48 %	69.07 %	74.41 %	75.66 %	53.86 %	62.13 %
10	Tinsukia	60.95 %	70.92 %	70.15 %	77.89 %	50.78 %	63.54 %
11	Dibrugarh	68.96 %	76.22 %	77.30 %	82.59 %	59.95 %	69.52 %
12	Sibsagar	74.47 %	81.36 %	81.53 %	86.75 %	66.81 %	75.69%

13	Jorhat	76.34 %	83.42 %	83.62 %	88.38 %	68.49 %	78.22 %
14	Golaghat	69.38 %	78.31%	77.14 %	84.20%	60.99 %	72.18 %
15	Karbi Anglong	57.70 %	73.52 %	67.22 %	82.12 %	47.30 %	64.62 %
16	Dima Hasao	67.62 %	78.99 %	75.67 %	85.34 %	58.39 %	72.15 %
17	Cachar	67.82 %	80.36%	75.73 %	85.85 %	59.41 %	74.62%
18	Karimganj	66.24 %	79.72%	74.69 %	85.70 %	57.28 %	73.49%
19	Hailakandi	59.64 %	75.26 %	68.24 %	81.61 %	50.46 %	68.54%
20	Bongaigaon	60.95 %	70.44 %	68.66 %	75.48 %	52.69 %	65.18 %
21	Chirang	52.61 %	64.71 %	61.82 %	71.35 %	42.87 %	57.87 %
22	Kamrup Rural	67.73 %	72.81 %	75.89 %	77.64 %	58.95 %	67.69%
23	Kamrup Metro	83.21 %	88.66 %	88.00 %	91.26 %	77.51 %	85.82%
24	Nalbari	72.66 %	79.89 %	80.95 %	85.58 %	63.71 %	73.85%
25	Baksa	59.57 %	70.53 %	70.32 %	78.55 %	48.33 %	62.23 %
26	Darrang	54.31 %	64.55 %	61.70 %	68.36 %	46.34 %	60.40 %
27	Udalguri	56.40 %	66.60 %	65.94 %	73.79 %	46.34 %	59.17 %
ASSAM		**63.25** %	**73.18** %	**71.28** %	**78.81**%	**54.61**%	**67.27** %
INDIA		**64.84** %	**74.04** %	**75.26** %	**82.14** %	**53.67** %	**65.46** %

Source: Statistical Handbook Assam, 2011

According to the Census of India, 2011 the population of India and Assam is 1210193422 and 31169272 respectively. Simultaneously the literacy rate is 74.04 and 73.18 respectively.

4.3.1 Structure of Education and Organization of Educational Administration in Assam

For the smooth maintenance, administration and supervision of the different level of education system in Assam, particular Directorate, Council and Board has been given the responsibility. In Assam most of the important educational institutions are maintained by the Government of Assam. Besides, there are many private institutions too which adds to the educational value of the State. But the difference lies in syllabus pattern, administration, fee structure and medium of instruction. Different stages of general education in Assam and the concern authority is given below in Table No. 4.3.1 (SCERT, 2003):

Table no. 4.3.1: Structure of Education in Assam

Stage of Education	Classes	Age-Group	State Level Authority		Remarks
			Administrative	Academic	
Pre-primary	------	Below 6 yrs (usually between 4 to 6 yrs)	Director of Elementary Education, Assam (DEE)	State Council of Educational Research and Training, Assam (SCERT)	A large number of Private schools hve come up, which cater for education at this stage, chiefly in urban areas.
Primary (Lower Primary/ Junior Basic)	Classes I to IV	6 to 10 yrs	-do-	-do-	Middle Vernacular and Senior Basic schools include this stage also.
Upper Primary (Middle English school/Madrassa, Middle Vernacular and Senior Basic Schools)	Classes V to VII	10 to 13 yrs	-do-	Board of Secondary Education, Assam (SEBA)	High schools and Higher Secondary schools established before the implementation of the 10+2+3
Secondary (High schools/Madrassa	Classes VIII to X	13 to 16 yrs	Director of Secondary Education, Assam (DSE)	-do-	All Higher Secondary schools in the state include Secondary stage education also.
Higher Secondary (Higher Secondary schools and Junior Colleges	Classes XI-XII	16 to 18 yrs	-do-	Assam Higher Secondary Education Council, (AHSEC)	Apart from Higher Secondary schools and Junior colleges, many Degree colleges are still catering for Higher Secondary education also. Education at

					this stage is imparted in four streams: Arts, Science, Commerce and Vocational education.
First Degree	Degree 1st yr to 3rd yr	18 to 21 yrs	Director of Higher Education, Assam (DHE)	Gauhati University Dibrugarh University and Assam University for colleges within their respective jurisdiction	Education at this stage is imparted in Degree colleges under two State Universities and one Central University. The courses offered are B.A, BSc., and B.Com. Bsc pass course students can offer one vocational subject also.
Postgraduate Degree	Previous and Final years	21 to 23 yrs	State government in the Education Department with budget under DHE	The University concerned	M.A., MSc., and M.Com. courses are offered in two state universities & two Central universities. MLibSc., MPhill., Ph.D are also offered in some of the universities.

In addition to the general education, the state has different professional and other courses at the Secondary and Tertiary levels. In the present time, in higher education i.e graduation and post graduation level semester system has been adopted. Moreover different Education Directorates which concern with the different level of education are:

Ministry of Education, Assam

Minister(s) of Education

↓

Secretariat of Education

↓

Directorates of Education

↓

- Elementary Education
- Secondary Education
- Higher Education
- SCERT
- Non- Formal and Adult Education
- Technical Education
- Library services
- State Museum
- Archaeology
- Historical Antiquarian Studies

Moreover, there are respective academic bodies which handle the academic matters pertaining to the particular level of education.

4.4 Information Literacy in Academic Libraries of Assam

Information literacy is a new concept for the academic community of India. In the previous two chapters, trends prevailing in international and national level have been highlighted and it is quite vivid that in the Indian context information literacy is not much in practice in the academic libraries; rather it is more acceptable in the form of user education or the library orientation. Further mention may be made that most of the study pertaining to information literacy is confined to the use of e-resources by the users/academic community. Eventually the various study came up with the conclusion that the use of e-resources by the users are not up to expected level rather in this electronic age quite often users opt for print versions. Likewise, in the academic libraries of Assam, information literacy is entirely a new experience for the professionals and users as well.

In Assam, university libraries are subscribing e-journals through licensing and UGC-Infonet. Out of six universities only four universities i.e. Gauhati University, Dibrugarh University, Tezpur University and Assam University are covered under the UGC-Infonet E-jounnals consortium. Thereby, these university libraries are providing e-journal services to its users. Under the UGC-Infonet programme, Gauhati University library i.e K.K Handique library is providing access to nearly 7000 e-journals to its users. Likewise, Dibrugarh University library, and Tezpur University library have subscribed to 4700, and 7196 e-journals respectively. Among these universities, Tezpur University highly access e-resources as compared to other three universities.

With regard to the use of the e-resources in different university libraries of Assam mention may be made that based on the case study on the usage of e-resources by the library users comprising-students, research scholars, faculties and non-teaching staff of the Tezpur University, the following facts have been revealed that (Mishra & Gohain, 2010):

- Users prefer to use e-resources
- Most of the students use e-resources to update knowledge
- Majority of faculties and research scholars use e-resources for writing different academic research work, writing books, articles, etc.
- Majority of faculties uses e-journals available through UGC-Infonet and INDEST Consortia to find the latest information in their concern subject. Moreover, many users does not use e-resources due to lack of awareness about e-resources.
- The faculties and the research scholars prefer to use podium for e-resources due to Wi-Fi connectivity.

In another study carried out by Karmakar (2010), constituting the research scholar of social sciences of Gauhati University with regard to use of online resources it is also revealed that:

- ⇨ Most of the research scholars access online resources one hour daily for research work, seminar presentation, to acquaint with the trends in their subject, etc.
- ⇨ Most of the research scholars prefer to use both online and printed version.
- ⇨ E-journals are the most preferred online resources used by the research scholars.
- ⇨ One of the major problems faced by the research scholars is restricted access to the

e-resources.

⇨ Research scholars, however needs training for online search and retrieval techniques followed by training on how to filter resources effectively and raising awareness about library resources.

According to the study carried out by Sinha (2011) delimiting to the ICT awareness among the participants of refresher course of different university and college teachers of North eastern region of India, it has been remarked that:

- ❖ Most of the respondents are computer savvy and admits the importance of ICT.
- ❖ Very less percentage is using audio-visual aids in teaching- learning and in delivering a lecture.
- ❖ Some of the colleges/universities have good ICT infrastructure.
- ❖ Most of the participants have no formal training in using the ICT gadgets.
- ❖ Only a few participants are deputed for attending ICT awareness programme and hardly such type of training is organized by their respective colleges/universities.
- ❖ Interestingly most of the participants are interested to attend the training at university computer centre followed by in some new places.

In another study carried out by the same author, Sinha (2012), confining to the library users of Assam University, it is summed up as:

- ✡ Majority of the respondents uses search engines
- ✡ Most of the respondents are ICT and Internet literate.
- ✡ Majority of the respondents attends awareness/training programme organized by the university library.
- ✡ Among the various internet tools/services, social networking and web 2.0 tools are mostly used by the respondents.
- ✡ Most of the respondents are aware about UGC-INFONET and prefer to use it in university library instead of computer centre.

Based on the study carried out by different authors it could be revealed that:

- ➲ Most of the library users prefer to use print material as compared to the non-print material.

- ➲ In average, most of the users of the library access e-resources once a week/weekly.
- ➲ Among the different categories of users of the library, faculties and research scholars make use of e-resources for research work, writing of articles, writing books, etc while the most of the postgraduate students browse internet for different purposes.
- ➲ Major problems encountered while assessing e-resources are-
    - ✓ restricted access to e-resources
    - ✓ slow network connectivity
    - ✓ information are not updated
    - ✓ lack of sufficient machine/computer
    - ✓ unable to understand the process of access
    - ✓ lack of awareness, guidance and training

However, from a short telephonic interview of different academic librarians / professionals, the Scholar can make out that, most of the university libraries are mainly conducting library orientation programmes to acquaint users with different services and resources of the library which includes:

- ➢ Library tour
- ➢ Library guides.
- ➢ Awareness programme by INFLIBNET on e-resources and its use.
- ➢ Demonstration on use of e-resources from different databases available, which is generally delivered by the library professionals of the academic establishment.
- ➢ Awareness programme by publishers on their products and its use.

So far the college libraries are concern, even library orientation is not in much practice being a few exceptional. Usually users are made aware or get acquainted as and when asked by the users. Furthermore, regarding the use of e-resources, most of the college library comes under the N-LIST programme. But the Scholar has been intimated that even though print versions are more preferred by users than the e-resources. It seems that there is a lack of awareness and training.

Most of the universities are covered under the UGC-Infonet programme, therefore it is feasible to have awareness programme by the INFLIBNET. Regarding the use of e-

resources, it is mostly preferred by the research scholars and the faculties as compared to the post-graduate students who confine themselves in internet browsing only. Therefore to raise the level of usability of e-resources by the users, awareness and training programmes are very essential and it should be taken seriously by the parent body. Gradually, awareness about e-resources is taking speed but to take the maximum advantage of different resources available in the respective libraries proper dedicated training rather course should be taken up.

4.5 Information Literacy in College Libraries of Lower Assam

Academic libraries are the part and partial of educational institutions. Indeed it compliments and supplements the classroom instructional programmes/activities. The popularity of the library largely depends on its proper collection development meeting the need of the potential users and the promptness in service which is again primarily depends on the professional and trained staff. College libraries are also endowed with the same philosophy as it is one of the types of academic library. Its main objective is to further the mission and vision of the college to which it is attached to. It is an integral part of the college.

In Assam there are nearly 600 colleges catering general education to the young aspirants. In 1947-48, the number of colleges was 16 and in 2000-01 the number has been increased to 189 having the student enrollment of about 5,16,651 and 7,258 teaching staff. It is interesting to note that till 2012, even though there is a increase in the students enrollment, the number of teachers is not proportionate to the students number and more colleges has not been provincialised. Among the three universities i.e Gauhati University, Dibrugarh University and Assam University; out of 189 provincialised colleges, Gauhati University has the highest number of (101) provincialised colleges under its purview. The colleges of Lower Assam come under the Gauhati University which consists of nearly 76 provincialised colleges and 86 non- provincialised/venture colleges.

So far academic libraries in Lower Assam is concerned, it is quite distinguishable that college libraries of provincialised colleges are far more better in terms of services , staffing pattern, infrastructure and other avenues. Most of the college libraries were

established along with establishment of the college itself and in few cases college libraries were established after the establishment of the college. Previously the growth and development of college libraries directly depended on the governing body of the college, as there was no such budget for the library and library committee, but the situation got improved due to the intervention of University Grants Commission's (UGC) different Acts. Now-a-days, the college libraries are given more priority and experiencing makeover as compared to the earlier scenario. Many college libraries have undertaken initiatives to automate the library using SOUL software, providing internet facility to the users and are in the process of modernization. Besides, 97 colleges have been registered under N-LIST programme, through which e-resources are provided to the colleges under National Mission on Education through ICT, Ministry of Human Resource Development.

Most of the college libraries in Assam are run by the single professional staff (in some cases even no professional staff) and library bearer. Some colleges have separate budget for the library which helps in smooth functioning of the system, and in some cases the condition is not so conducive. In some of the college libraries of Lower Assam, the application of IT in the library is gaining momentum but there are also some college libraries which are far from IT application since there is no electricity to serve the purpose due to its remoteness.

More or less most of the college libraries in Lower Assam are rendering different services by engulfing different problems and shortcomings-

- ⇨ Most of the college libraries are rendering services in a traditional way.
- ⇨ Most of the college libraries have open access system
- ⇨ No proper collection development policy
- ⇨ Most of the college libraries lack adequate ICT infrastructure.
- ⇨ Insufficient fund for the college libraries
- ⇨ Inadequate staff in general and trained staff in particular.
- ⇨ The concept of Information Literacy programme is new to them.

- ⇨ Though Information Literacy is known to some librarians, it is difficult to implement due to lack of ICT infrastructure.
- ⇨ In most of the academic institutions there is a lack of coordination among the library staff and the concern authority.

4.5.1 N-LIST Training Programme and Support Provided by INFLIBNET

INFLIBNET center is conducting user awareness and training programme on e-resources to the users of the colleges at various places under N-LIST programme. The Plans for conducting User Awareness Programme are as follows (Singh & Deka, 2011, p.47-49):

- ★ Usually it is a one day training programme
- ★ No registration fee is charged from the participants
- ★ Participants include invited principals/librarians of colleges covered under section 12B/2F of UGC Act/Faculty, staff and students of organizing colleges
- ★ INFLIBNET will provide financial assistance of maximum of Rs. 25000/-
- ★ One/two resource person(s) is sent from the INFLIBNET center. Expenses on TA/DA for INFLIBNET's resource person are borne by the Centre. Moreover the organizer can not invite other outside experts without the consultation with the Centre.
- ★ Suitable training material is prepared both in print and CD form. The master copy is sent to the host institute in advance, makes photocopy of the same and distribute to the participants.
- ★ Publishers/aggregator and agents of E-resources are invited for product demonstration if required.
- ★ Host institute has to arrange lecture hall with a LCD projector and PC with Windows 2000/XP or later edition with MS Office loaded on it.
- ★ Host institute has to make maximum publicity of the programme in news papers and display in notice board of each department.
- ★ Wherever necessary different local library associations and professional bodies can be associated in the programme.

In addition, online tutorials and user's guide for e-resources are also provided to the registered colleges through N-LIST website. Indeed it is an encouraging initiative by

the INFLIBNET centre. As N-LIST is provided free of cost to the college libraries of North Eastern region, more colleges should be registered under this programme to access invaluable e-resources. The concern authority and the librarian should realize the importance and usefulness of this programme to incorporate the same in the college libraries as one of the important services to the users.

4.6 Information Literacy in Six Colleges of Lower Assam under Study

4.6.1 Brief Account of the Colleges

4.6.1.1 Cotton College

Cotton College is the first Government College in the undivided Assam, so to say in the North Eastern region catering to the educational need of the entire fraternity. It was established before independence under the British Rule in 27th May, 1901, because of the absolute concern and support of the then Chief Commissioner of Assam (1896-1902), Sir Henry John Stedman Cotton and constant endeavor of Manik Chandra Baruah and Rai Bahadur Bhuban Ram Das. Simultaneously, the college was named after him as a mark of gratitude and respect. Initially the college was affiliated to Calcutta University, and after independence with the establishment of Gauhati University in the year 1948 came under the Gauhati University.

The college was started with 37 and 2 students in first and second year respectively with the faculty strength of 4 excluding the first then Principal, Prof. Frederick William Sudmersen (1901-1926). The college provides different general courses-Higher Secondary (H.S), Degree (Under Graduate) and Post Graduate in Arts and Science streams. Besides, many self financing Undergraduate and Post Graduate course like-BCA (Bachelor in Computer Application), PGDCA (Post Graduate Diploma in Computer Application), etc. are also provided. Presently more than 5000 students are getting enrollment having more than 236 dedicated faculties and 21 departments in the P.G level. Since its inception, Cotton College is the place of academic excellence and one of the sought after college in the State. In the year 2004, it was accredited ‘Grade A’ by the National Assessment & Accreditation Council (NAAC) and recognized as ‘College with Potential for Excellence’ in 2005 by University Grants Commission UGC).

4.6.1.2 Kokrajhar Government College

Kokrajhar Govt. College has completed its glorious 50 years in the year 2009. It came into existence with a mission to cater college education to the people of Kokrajhar and its adjoining districts 'to provide people with opportunity of higher education so that they could shoulder the responsibility of educating their people on large scale' and the 'removal of socio-economic backwardness through education'. Once it was a backward place, embracing mainly the ST (Schedule Tribe) people. But, gradually the area got importance as it was declared as the Sub-Divisional Headquarter in 1957 and this achievement is attained because of relentless efforts by Late Rupnath Brahma. It is the only Government College in the Bodoland Territorial Council. Though it was established way back in the year 1959 with submissive endeavor of local people along with Late Sarbeswasr Das and Late Madaram Brahma, it got the Government status in 22 August, 2006.

The college started with arts stream and gradually science stream was also introduced in 1964, and in 1972 it was covered under deficit system. In addition to the general (Higher Secondary and Undergraduate) courses, Certificate Course in Basic Computer Science has been started. Moreover, Introductory Computer Science and Computer Science were introduced as an elective subject in H.S (Science & Arts) and B.Sc. respectively since 2004-2005. To assess the quality of education in the college, National Assessment & Accreditation Council (NAAC) has accredited the college as 'Grade B' in 2004 having the more than 70 faculties serving nearly 2500 students.

4.6.1.3 Handique Girls' College

The college got inception in the year 1939, it was the first Women College in North Eastern region. The college was named after the Late Radha Kanta Handique, a person responsible for the establishment of the college especially for the women and donated a huge amount for the development of the college. Since its inception, the college has the mission of 'the enrichment of Society through the transmission of knowledge from one generation to another' and goal as 'the advancement, development and empowerment of women by imparting quality education'.

The college is offering general courses in Higher Secondary (Arts & Science), Undergraduate (Arts & Science). Besides, BCA, PGDCA and many other self-financing courses are also provided in the college. The college has more than 80 dedicated faculties who are serving to more than 3300 students. The college has the provision of many scholarships other than the different State and Central Government scholarships and financial aid to the deserving students from the Students' Welfare Fund in the form books, concession in fees, etc. In 2003 National Assessment & Accreditation Council (NAAC) has accredited the College as 'Grade B+' and for the period of 2006-2009, the University Grants Commission has declared the college as a College with Potential for Excellence.

4.6.1.4 B. Borooah (Bholanath Borooah) College

The college came into existence in 1943 with a mission to act as 'a nurturing ground for the attainment of academic excellence and professional competence'. Gopinath Bordoloi, the first Chief Minister of Assam was the first Principal of the college. The college was started with 15 students in Kamrup Academy Higher Secondary School premises as an evening class to make feasible for the poor students who works whole day for the livelihood and to pursue the higher education.

The college is providing Higher Secondary and Undergraduate level of education in both the stream i.e. Arts and Science. In Higher Secondary level Commerce stream has also been started but it is a self supportive course. Moreover, other than the general degree courses like B.Sc. (IT), BBA, etc are also the self supportive course. Presently college has nearly 100 faculties and 3000 students. It is quite mentionable that the College has the Army and Naval Wing of NCC which are very active and participated in various camps including Republic Day camp and some of the cadets of the Wing have got the opportunity to join the Indian Defence Service as Officers.

4.6.1.5 Kanya Mahavidyalaya

In East Guahati Girls' High School premises first meeting was convened in 10/07/1977 to establish a girls' college under the presidentship of Khanindra Chandra Baruah as a result in 12/07/1977 resolution was passed and ultimately in 16/09/77 the

college was established in the name of Nari Mahavidyalaya, but later on unanimously the college was renamed as Kanya Mahavidyalaya. The classes were first started in a house of Indira Miri, the first principal of the college, for the three months with one student and the subject-English, Assamese, Education, Economics, History and Home Science. Later on, in 15/11/1977 the college shifted to a rented house owned by Khargeswar Sharma in Zoo Tiniali, Guwahati in a rent of Rs. 550/-.

In 1987, i.e 10 years later the State Government allotted 10 bighas of land in No.2 Hengrabari, Geetanagar under Beltola Mouza and from 1981-2005, the college has received Adhoc grants and 2005 onwards financial Assistance from the State Government. The college has not been provincialised yet, even though the strong determination of nearly 26 faculties and other staff enduring all the difficulties serving nearly 300 girl students.

4.6.1.6 Hamidabad College

Hamidabad College is one of the non-provincialised colleges in Dhubri District, as the college does not have any written record about the college; the scholar has collected some information from one of the faculty, Nazrul Islam (Deptt. of English) of the college to serve the purpose of writing a brief account about the establishment. So far his words, A, Karim (advocate), Moniruddin Ahmed Basgal Basit MLA, Hazi Abrul Hossain Pandit and many other local people convened a meeting and took a resolution to establish a college in the name Hamidabad College at Satsia in October' 1979.

The college is located in a very remote area and lacks suitable conveyance to the college. As such students from distinct places are not thronging for the admission to the college but successfully serving the local students who can not pursue higher studies in the cities or some other places. The classes were first started in a Jamidabad Janata High School with nearly about 15 students and 3 faculties and in 1983 the college was shifted permanently to Satsia in an Assam type house. Presently the college has nearly about 27 faculties and 300 students.

Photo No. 4.6(1): Cotton College Library, Kamrup (Metro)

Photo No. 4.6(2): Stack Room at Cotton College Library, Kamrup (Metro)

Photo No. 4.6(3): Kokrajhar Government College Library, Kokrajhar

Photo No. 4.6(4): Stack Room at Kokrajhar Government College Library, Kokrajhar

Photo No. 4.6(5): Handique Girls' College Library, Kamrup (Metro)

Photo No. 4.6(6): Stack Room at Handique Girls' College Library, Kamrup (Metro)

Photo No. 4.6(7): B. Borooah College Library, Kamrup (Metro)

Photo No. 4.6(8): Reading Room at B. Borooah College Library, Kamrup (Metro)

Photo No. 4.6(9): Kanya Mahavidyalaya Library, Kamrup (Metro)

Photo No. 4.6(10): Reading Room at Kanya Mahavidyalaya Library, Kamrup (Metro)

Photo No. 4.6(11): Hamidabad College Library, Dhubri

Photo No. 4.6(12): Stack Room at Hamidabad College Library, Dhubri

4.6.2 Status of the College Libraries under Study

Libraries are the inseparable part of educational institutions irrespective of type of users. Kumar (2000) asserts that "a college library serves students and teachers. It is expected to support the objectives of the college. Thus the basic function is to assist its parent body to carry out its programme. It must adequately serve the needs and requirements of the teachers and students towards reading, study and research" (Kumar, 2000, p.5). Thus library is an integral part of the teaching and learning process. Usually libraries are established along with the existence of the college itself and the college libraries under study have no exception. Moreover to assess the present scenario of information literacy in Lower Assam, six colleges under study have been tabulated below with their respective location and status:

Table No.4.6.2 (A): Location and Status of the Libraries

Name of the College	Date of Establishment	Years of Existence	Location (District)	Status
Cotton College	1901	112	Kamrup (Metro)	Govt. College
Handique Girls' College	1939	74	Kamrup (Metro)	Provincialsied College
B.Borooah College	1943	70	Kamrup (Metro)	Provincialsied College
Kokrajhar Govt. College	1959	54	Kokrajhar	Govt. College
Kanya Mahavidyalaya	1977	36	Kamrup (Metro)	Non-provincialsed College
Hamidabad College	1979	34	Dhubri	Non-provincialsed College

Cotton College (1901) is the oldest college among the other five colleges which came into existence before independence during the British period. Likewise, Handique Girls' College was established in 1939 followed by B. Borooah College in 1943, Kokrajhar Govt. College in 1959, Kanya Mahavidyalaya in 1977 and Hamidabad College in 1979 respectively. Cotton College has celebrated its centenary while Handique Girls' College, B. Borooah College and Kokrajhar Governemnt College have celebrated golden years of its existence. While the remaining two colleges are also approaching towards the golden year. Among the six colleges under study, Hamidabad College is in disadvantage stage as it is located in the most remote place

of Dhubri District of Lower Assam. Further it may be mentioned that in this fast moving world the college is lagging behind as till now there is no electricity connectivity and hard to get any conveyance to reach the place. Cotton College, Handique Girls' College, and B. Borooah College and Kanya Mahavidyalaya are located in the Guwahati city. Other than the Kanya Mahavidyalaya other three colleges are in more advance stage. Whereas, Kokrajhar Government College is located in the Headquarter of BTAD (Bodoland Territorial Areas District) and advancing fast to cope with changing environment.

Out of six colleges under study, four college libraries i.e Cotton College Library, Kokrajhar Government College Library, Handique Girls' College Library and B. Borooah College Library are more equipped and in better condition as compared to the remaining two college libraries i.e Kanya Mahavidyalaya Library and Hamidabad College Library. There is no denying the fact that to carry out the function of the library smoothly and efficiently, adequate and professionally supporting staff is indispensable. They are the backbone of the library so far rendering services to the users is concerned. It is encouraging to mention that all the college libraries under study have the librarian with requisite qualification. Moreover the librarian of Handique Girls' College Library has Ph.D degree too. Out of six college libraries, only two college libraries i.e Handique Girls' College Library and B. Borooah College Library have the Assistant Librarian. It is worth mentionable that except the librarian, other staffs of the library are non professional and Cotton College Library has the highest number of library staff (13 nos.) including the librarian. For convenience, the status of library staffs of the individual college libraries are placed below in Table no. 4.6.2 (B):

Table No.4.6.2 (B): Library Staff

Name of the Colleges	**Designation & Professional Status**	**Qualification**	
		Academic	**Professional**
Cotton College	Librarian(1)(professional)	M.A	MLISc, M.Phill
	Library Asst.(4)(2 professional, 2semi-professional)	B.Sc, LLB M.A, B.Ed. B.Sc., B.A	B.Lib.Sc. MLISc. Pursuing BLISc.
	Library Clerk(1)(semi-professional)	B.A	Pursuing BLISc.
	Grade IV(7)(non-professional)	Under matric, undergraduate	---------

Kokrajhar Government College	Librarian(1)(professional)	M.A (Eco.), B.Ed.	BLIS
	Library Asst.(1)(non-professional)	H.S,	-----
	Grade IV(2)(non-professional)	H.S.L.C	------
Handique Girls' College	Librarian(1)(professional)	B.Sc (Hons)	MLISc.,M.Phill, Ph.D.
	Asst. Librarian(1)(non-professional)	B.A	-----
	Library Asst.(1)(non-professional)	HSSLC	------
	Professional Asst.(2) (professional) (contractual)	B.A	MLISc., M.Phill
	Grade IV(3)(non-professional)	-------	-------
B. Borooah College	Librarian(1)(professional)	B.A	MLISc.
	Asst. Librarian(1)(professional)	B.A	MLISc.
	Library Asst.(1)(non-professional)	B.A	---------
	Grade IV(5)(non-professional)	Under Graduate	----------
Kanya Mahavidyalaya	Librarian(1)(professional)	B.A	MLISc.
	Library Asst.(1)(non-professional)	B.A	--------
	Grade IV(1)(non-professional)	B.A	----------
Hamidabad College	Librarian(1)(professional)	M.Com.	MLISc.
	Library Asst.(1)(non-professional)	B.A	-------
	Grade IV(1)(non-professional)	H.S	--------

4.6.3 Users of the Library

Libraries are meant for use i.e. effective and efficient use of the different library resources. Depending on the type of library, its function, users and their needs also vary. Moreover due to the proliferation of digitized information, the notion of use and access to information has also been changed. In academic libraries, users are mainly referred to the faculties and the students of the particular college/university. Though the non-teaching staffs of the particular establishment are also the bona fide users of the library, but generally they are the rare user of the same. Besides in many cases in academic libraries, non bona fide users are also allowed to use the library with some special conditions.

In the college libraries under study, Cotton College Library has highest number of users (i.e 4,984) including faculty, student and staff. On the other hand, Kokrajhar Government College Library has the highest number (i.e 100 approx) of other users which includes retired professors, research scholars, etc. The number of users in the respective libraries is given below in Table no. 4.6.3.

Table No.4.6.3: Library Users

Name of the Colleges	Faculty	Student	Staff	Others	Total
Cotton College	248	4500	236	-----	**4,984**
Kokrajhar Government College	70	2500	35	100(approx)	**2705**
Handique Girls' College	81	3306	20	2(casual users)	**3409**
B.Borooah College	100	3000	31	50	**3,181**
Kanya Mahavidyalay	26	300	18	-------	**344**
Hamidabad College	27	600	3	------	**630**

4.6.4 Opening Hour and System of Access

Opening hours of the library is also one of the main factors in boosting the use of the library. Therefore to increase the use of the library, opening hour and system of access should be suitable to the user. When users are allowed to consult and use the different study material/library resources without restriction, then definitely the use of the library can be enhanced. It is evident from the Table 4.6.4 given below that all the libraries under study remain open for 6-8 hours having the open access system and usually books are issued to the users. Whereas Cotton College Library, has both the system of access i.e. open and close. As a rule main stack room is closed for all the students but open for the faculties. Only some collections are allowed free access for the Degree major and the P.G students.

Table No.4.6.4: Opening Hour and System of Access

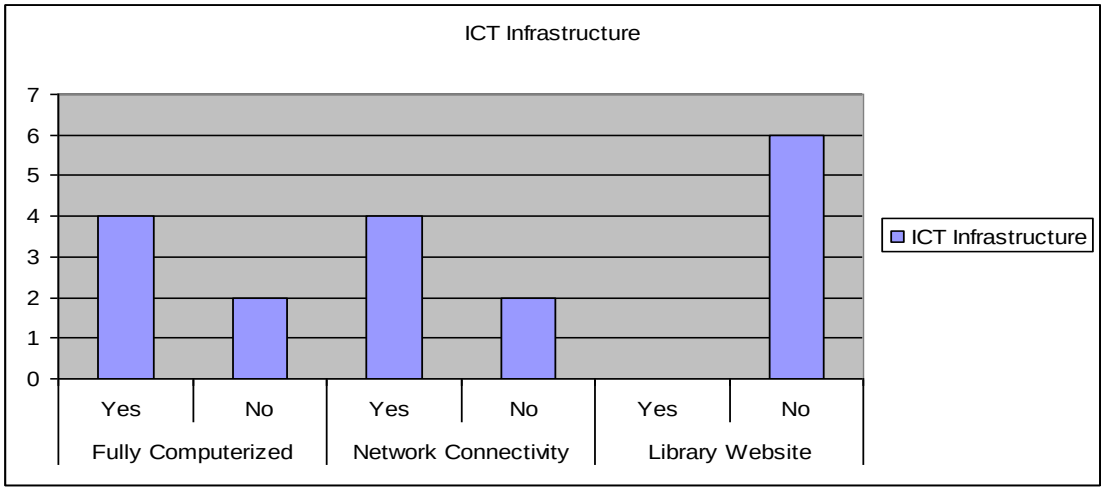
Name of the College	Opening Hours	System of Access		Books are Issued?
		Open	Close	
Cotton College	10 A.M-6 P.M	√	√	Yes
Kokrajhar Government College	10.30 A.M-4.30 P.M	√	----	Yes
Handique Girls' College	10 A.M-5 P.M	√	----	Yes
B. Borooah College	10 A.M-5 P.M	√	----	Yes
Kanya Mahavidyalaya	9.15 A.M-4 P.M	√	----	Yes
Hamidabad College	9 A.M-4.30 P.M	√	----	Yes

4.6.5 ICT Infrastructure

The exponential growth of e-resources, various network and advancement in ICT has changed the whole concept of traditional library system as far rendering services is concerned. Many value added services are rendered by using ICT in libraries which is otherwise may not be possible through the traditional system. Many college libraries of Lower Assam have initiated to automate with SOUL (Software for University Libraries) in their respective library which is a step towards the modernization of the library. Out of the six college libraries under study, only four college libraries, i.e Cotton College, Kokrajhar Government College, Handique Girls' College and B. Borooah College are fully computerize with network connectivity. But none of the college libraries under study have launched the library website. The Table 4.6.5 depicts the status of ICT infrastructure in the college libraries under study.

Table No. 4.6.5 ICT Infrastructure

Name of the Colleges	Fully Computerized	Network Connectivity	Library Website
Cotton College	Yes	Yes	No
Kokrajhar Govnernment College	Yes	Yes	No
Handique Girls' College	Yes	Yes	No
B. Borooah College	Yes	Yes	No
Kanya Mahavidylaya	No	No	No
Hamidabad College	No	No	No



Graph 4.6.5: ICT Infrastructure

To start an information literacy programme, ICT infrastructure and trained staff is the prerequisite. Through the study it has been revealed that out of six college libraries four libraries i.e Cotton College Library, Handique Girls' College Library, B. Borooah College Library and Kokrajhar Government College Library have the ICT infrastructure and two libraries i.e. Cotton College Library and Handique Girls' College Library have the trained staff.

Out of the six college libraries, two college libraries i.e Handique Girls' College Library and Kokrajhar Government College Library are conducting orientation programme for the newly enrolled students rather than information literacy. On the other hand, Cotton College Library was publishing 'Student Guide' to help the users in using the library. On the other hand three colleges libraries i.e. B. Borooah College, Kanya Mahavidyalaya and Hamidabad College have not yet initiated such programmes.

Information literacy is more advanced than the library orientation programme which encompasses both online and offline mode of delivery and hands on training to the users is well connected to the information literacy programmes. To conduct such programmes in the college libraries some of the factors which hinders in its implementation are:

- Attitude of the parent body
- Lack of skilled manpower
- Lack of separate budget

- Inadequate infrastructure
- Lack of awareness of users on e-resources
- Traditional system of education
- Course content which mainly depends on the text books and the students does not think the need of e-resources.

The above mentioned problems are usually encountered in the libraries, and as matter of fact it is beyond the control of the librarian. However the librarians of these six colleges under study are all qualified professionals. They are aware about the information literacy and anticipating to adopt it in the library activity for the greater benefit of the user community.

4.7 Conclusion

Now- a- days, everyone knows about the e-resources, but the factor behind not using these resources to the optimum level may be the digital divide and resistant to adapt the new technology. Therefore must be a massive drive to motivate the users to use e-resources. Library professionals particularly the Librarians must take the every possible initiative to mould the attitude of the parent body as well as the users to realize the importance and usefulness of information literacy in using the e-resources.

So far information literacy particularly in Assam is concerned most of the college libraries even orientation/user education is not so obvious and not much in practice. Basically users are allowed to use the library by themselves and queries related to the use of library and its resources are sort out when raised by the users. As most of the college librarians are the qualified professionals, they are aware about information literacy-its need and importance. They are hopeful to integrate information literacy as one of the important component of the library in the near future.

In the next chapter an analysis has been done on the basis of data collected from different colleges under study on diverse aspects of information literacy and interpreted to derive appropriate findings.

References

Agrawalla, Sunita (2012). *Emerging issues and education*. Guwahati: Aditya Book Distributors.

Assam University. Retrieved on Sept., 15, 2012 from http://www.assamuniversity.nic.in/lais.html

Assam Higher Secondary Education Council. Retrieved on August, 18, 2012 from http://ahseconline.org/index.htm

Barpujari, H.K. (1990). Ed. *The comprehensive history of Assam, volume-I: Ancient period.* Guwahati, Assam: Publication Board Assam.

B.Borooah College. (2010-11),Prospectus.

Board of Secondary Education, Assam. Retrieved on August, 18, 2012 from http://www.seba.net.in/index.html

Borah, Upendra Nath. (2005). *Thoughts on Education* (2nd. ed.). Guwahati, Assam: Book Land.

Borthakur, Jyotika., Das, Rumi., & Gohain, Anjan. (2010). UGC-Infonet: Its availability and use in universities of Assam. Proceeding of *PLANNER, 7th convention*. Assam: Tezpur University, pp. 102-108.

Chaliha, Parag. (2008). Assam: Through the ages. In Dinesh Ch. Deka (Ed.), *Cultural Heritage of Assam* (pp. 13-28). Guwahati, Assam: Directorate of Information & Public Relations.

Choudhury, Pratap Chandra. (1987). *The history of civilization of the people of Assam to the twelfth century A.D* (3rd . ed.). Guwahati, Assam: Spectrum Publications.

Cotton College. (2008-09), *Prospectus.*

Das, Dhrubajit., & Baruah, Dipika. (2010). Challenges and issues of college library services in Dibrugarh district of Assam: A case study. Proceeding of *PLANNER, 7th convention*. Assam: Tezpur University, pp. 241-255.

Dibrugarh University. Retrieved on Sept., 15, 2012 from http://www.dibru.ac.in/

Directorate of Technical Education Assam. Retrieved on July, 7, 2012 from http://dteassam.in/index.php?menu=mnNewScheme

Directorate of Higher Education. Retrieved on August, 18, 2012 from http://dheassam.gov.in/development.asp

Directorate of Technical Education. Retrieved on August, 18, 2012 from http://dteassam.in/

Directorate of Higher Education. Retrieved on August, 18, 2012 from http://dheassam.gov.in/

Directorate of Elementary Education. Retrieved on August, 18, 2012 from http://deeassam.gov.in/

Gait, Edward. (1997). *A history of Assam* (7th ed.). Guwahati, Assam: Layer's Book Stall.

Gauhati University. Retrieved on Sept,. 15, 2012 from http://www.gauhati.ac.in/staff.php?cat=Department&id=Library%20and%20Information%20Science

Goswami, Priyam. (2009). Assam through the ages. In Basanta Deka (Ed.), *Assam: Land and people* (pp.102-111). Guwahati, Assam: Dr. Hitesh Deka (K.C.Das Commerece College).

Govt. of Assam. (2011). *Statistical handbook, Assam*. Guwahati: Directorate of Economics and Statistics.

Govt. of Assam. (2010-11). *Economic Survey Assam.* Assam: Directorate of Economics and Statistics. Planning and Development Department.

Handique Girls' College (2009-10). *Prospectus.*

Karmakar, Gouri Sankar. (2011). Use of online resources among the research scholars in social sciences in K.K Handiqui library of Gauhati University: A study. *Journal of the Department of Library and Information Science, 2*(1), 90-99.

Kokrajhar Govt. College. (2010-11). *Prospectus.*

Krishna Kanta Handique State Open University. (n.d). Introduction to development of higher education in Assam. Retrieved on Sept., 25, 2012 from http://www.kkhsou.in/main/education/higher_education.html

Kumar, Krishan. (2000). *Library manual*. New Delhi: Vikas Publishing House Pvt. Ltd.

Mahanta, Bobby. (2011). *College Education in Assam*. New Delhi: Omsons Publications.

Medhi, Mayuri.(2010). Networking of academic libraries in Guwahati: A study. Proceeding of *PLANNER, 7th convention*. Assam: Tezpur University, pp. 56-65.

Mishra, R.N., & Gohain, Rashmi Rekha. (2010). Use and usage statistics of electronic resources at central library Tezpur Universiy: A case study. Proceeding of *PLANNER, 7th convention*. Assam: Tezpur University, pp. 183-204.

N-LIST- National Library and Information Services Infrastructure for Scholarly Content. Retrieved on 7/04/2013 from http://nlist.inflibnet.ac.in/statecollegelist.php?st=Assam

Primary education in Assam. Retrieved on August, 18, 2012 from http://www.indiaedu.com/assam/

Sarma, Chandan Kr. (2010).Ed. *Pragya.*Guwahati: Kanya Mahavidyalaya.

Satyanarayana, N.R., & Srivastava, Ranjana. (2009). Accreditation: Today's Need for Producing Better LIS Professionals. *IASLIC Bulletin 54*(2), 67-75.

SCERT. (2003). *A study in school education in Assam: Status, Issues and Future Perspectives* (Unpublished report). Guwahati: SCERT.

Sharma, Narendra Nath. (1997). Growth and development of public library services in Assam. In Bhupen Goswamee (Ed.), *Changing Trend of Librarianship in Assam* (pp.1-16). Guwahati, Assam: Guwahati Library Association.

Sinha, Manoj Kumar. (2012). Studies on ICT and internet awareness and access to e-resources under UGC-INFONET digital library consortium: A survey of Assam University library users. *SRELS Journal of Information Management, 49*(3), 263-280.

Sinha, Manoj Kumar. (2011). Information and Communication Technology (ICT) awareness amongst university and college teacher of North Eastern Region of India. *Indian Journal of Information, Library & Society, 24*(2), 34-56.

Singh, Sanjay Kumar. & Deka, Prasanta Kumar. (2011). N-LIST: Free e-resources for college libraries of N.E Region. *Journal of the Department of Library and Information Science, 2*(1), 41- 49.

University of Calcutta Retrieved on Sept., 14, 2012 from http://www.caluniv.ac.in/academic/library.htm

CHAPTER - 5

DATA ANALYSIS AND FINDINGS

5.1 Introduction

The level of awareness and assessment of present status of information literacy among the users constituting both faculties and undergraduate students and the librarian of the six colleges under study were obtained through two questionnaires meant for the user and librarian separately. Based on the data, different facets of information literacy such as, computer skill, information seeking habits, problems in seeking information, use of digital resources, etc. were analyzed. The analysis also focuses the status of information literacy prevailing in the colleges under study among the users and librarians through interview by the scholar. The questionnaires meant for the users were distributed in all six colleges with a ratio of 1:2 (i.e. 50 faculties and 100 students) among faculties and undergraduate students respectively. Mention may be made that out of six colleges as shown in Table-5.1 below 4 (four) colleges out of 6 (six) i.e, 67% colleges, the scholar distributed the questionnaire limiting to 50 faculties while, distribution of questionnaires could not be limited to 50 in two colleges i.e, Kanya Mahavidyalaya and Hamidabad College because of less strength i.e, 26 and 27 respectively. Further while, four colleges as shown in the Table were distributed with 100 questionnaires to the students, the two colleges as discussed above were distributed with the questionnaire with 1: 2 ratio coming thereby, 52 and 54 respectively.

With regard to the respondent rate of the librarians of the six colleges under study, there was a total response constituting thereby 100%.

Table No.5.1: Responses from the Colleges

Name of the Colleges	Faculty		Student		Total	
	D*	R*	D*	R*	D*	R*
CC	50	45 (90%)	100	89 (89%)	150	134 (89%)
KGC	50	43 (86%)	100	96 (96%)	150	139 (93%)
HGC	50	45 (90%)	100	89 (89%)	150	134 (89%)
BBC	50	44 (88%)	100	100 (100%)	150	144 (96%)

KM	26	22 (85%)	52	49 (94%)	78	71 (91%)
HC	27	11 (41%)	54	54 (100%)	81	65 (80%)
Total	**253**	**210 (83%)**	**506**	**477 (94%)**	**759**	**687 (91%)**

D*-Distributed, **R*-**Responded

Abbreviation. **CC**- Cotton College, **KGC**- Kokrajhar Govt. College, **HGC**- Handique Girls' College, **BBC**- B. Borooah College, **KM**- Kanya Mahavidyalaya, **HC**- Hamidabad College.

Table 5.1 reflects that four colleges such as CC, KGC, HGC and BBC have responded 45(90%), 43(86%), 45(90%) and 44 (88%) and hence, the response rate of both CC and HGC are more compared to other two colleges i.e. KGC and BBC. Further out of the remaining two colleges KM has responded more i.e. 22(85%) followed by 11(41%) from HC

With regard to the students response BBC stands at the apex by responding 100% followed by 96(96%), 89 (89%) in KGC and both CC and HGC respectively. Surprisingly out of the two remaining college i.e. KM and HC the response rate of the student in HC is more i.e. 54(100%) then 49(94%) in KM.

Overall there is a good response both from faculties and students of the six colleges covered under study.

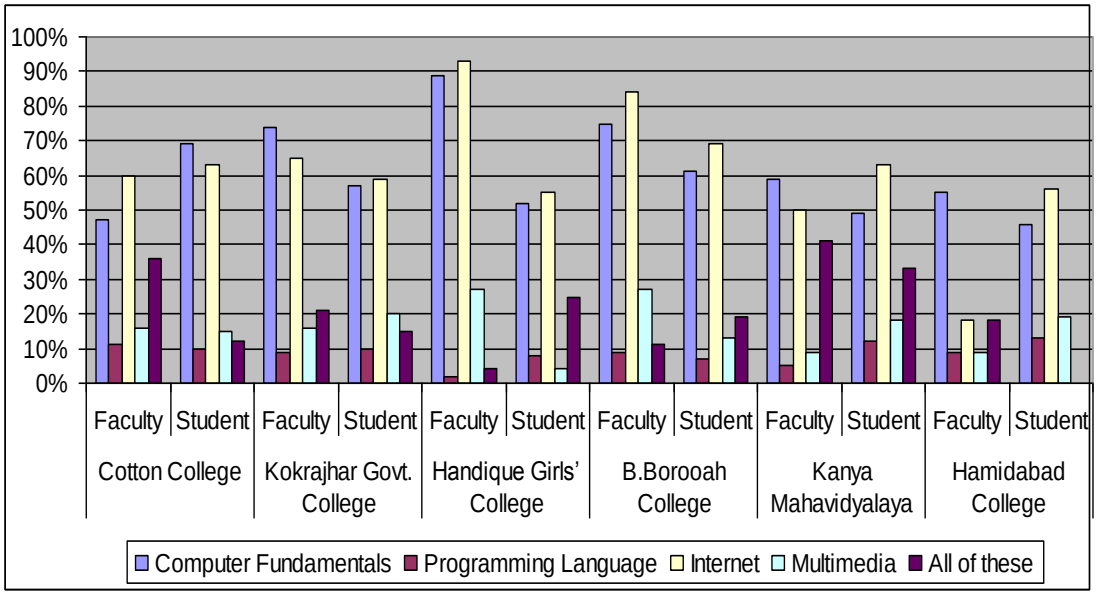
5.2 Computer Skills of the Users

Skill is connoted to the performance ability in the library to extend multidimensional services to the readers. Further, this is one of the viable components among the users such as, faculties and students as well to access the information from the library which however, requires proper training and acquaintance. Computer skill pertains to competence in operating computers and can manipulate different programmes for varied purposes. Data relating to the study obtained through the questionnaire has been depicted below in Table No- 5.2 for a clear vision supported with Graph No.- 5.2

Table No. 5.2: Information Technology Skills of the Users

Name of the Colleges		Computer Skills				
		Computer Fundamentals	**Programming Language**	**Internet**	**Multimedia**	**All of these**
CC	**F** 45	21 (47%)	5 (11%)	27 (60%)	7 (16%)	16 (36%)
	S 89	61 (69%)	9 (10%)	56 (63%)	13 (15%)	11 (12%)
KGC	**F** 43	32 (74%)	4 (9%)	28 (65%)	7 (16%)	9 (21%)
	S 96	55 (57%)	10 (10%)	57 (59%)	19 (20%)	14 (15%)
HGC	**F** 45	40 (89%)	1 (2%)	42 (93%)	12 (27%)	2 (4%)
	S 89	46 (52%)	7 (8%)	49 (55%)	4 (4%)	22 (25%)
BBC	**F** 44	33 (75%)	4 (9%)	37 (84%)	12 (27%)	5 (11%)
	S 100	61 (61%)	7 (7%)	69 (69%)	13 (13%)	19 (19%)
KM	**F** 22	13 (59%)	1 (5%)	11 (50%)	2 (9%)	9 (41%)
	S 49	24 (49%)	6 (12%)	31 (63%)	9 (18%)	16 (33%)
HC	**F** 11	6 (55%)	1 (9%)	2 (18%)	1 (9%)	2 (18%)
	S 54	25 (46%)	7 (13%)	30 (56%)	10 (19%)	00
Total	**687**	**417 (61%)**	**62 (9%)**	**439 (64%)**	**109 (16%)**	**125 (18%)**
	F=210 (31%) S=477 (69%)	**F= 145 (69%) S=272 (57%)**	**F=16 (8%) S=46 (10%)**	**F=147 (70%) S=292 (61%)**	**F=41 (20%) S=68 (14%)**	**F=43 (20%) S=82 (17%)**

F- Faculty, **S**-Student



Graph No.5.2: Information Technology Skills of the Users

The above Table discloses that the faculties of HGC have the highest internet skill 93% and thus, keeping First rank in the position followed by 37 (84%) in BBC and 28 (65%) in KGC keeping second and third position in the ranking list respectively. Further, analysis with regard to Internet skill placed in the above table reveals that, the students of BBC 69 (69%) are at the highest followed by 56 (63%) each in CC & KM and 57 (59%) in KGC thereby keeping first, second and third position respectively. Mention may be made that, the scholar has taken the percentage variable while determining the position and hence, CC and KM attend to the same percentage even if the no. of students vary. While analyzing, acquaintance of computer fundamentals among the faculties, 40 (89%) belong to HGC followed by 33 (75%) and 32 (74%) of BBC and KGC respectively. Computer fundamentals among the students discloses that, 61 students of both CC and BBC are at the highest compared to 55 (57%) and 46 (52%) in KGC and HGC respectively. Here also, due to variation of total number of students, even if there are same number of students in both CC and BBC their percentage differs which comes to 69% and 61% respectively. Further analysis of the total IT skills between 125 in total constituting both faculties and students reveal that, 43 (20%) belong to faculties followed by 82 (17%) students. It can be discussed that, out of 477 students taken under the study, 11 (2%) did not disclose their acquaintance with IT skills. This clearly indicates that, the faculties are more IT oriented than the students.

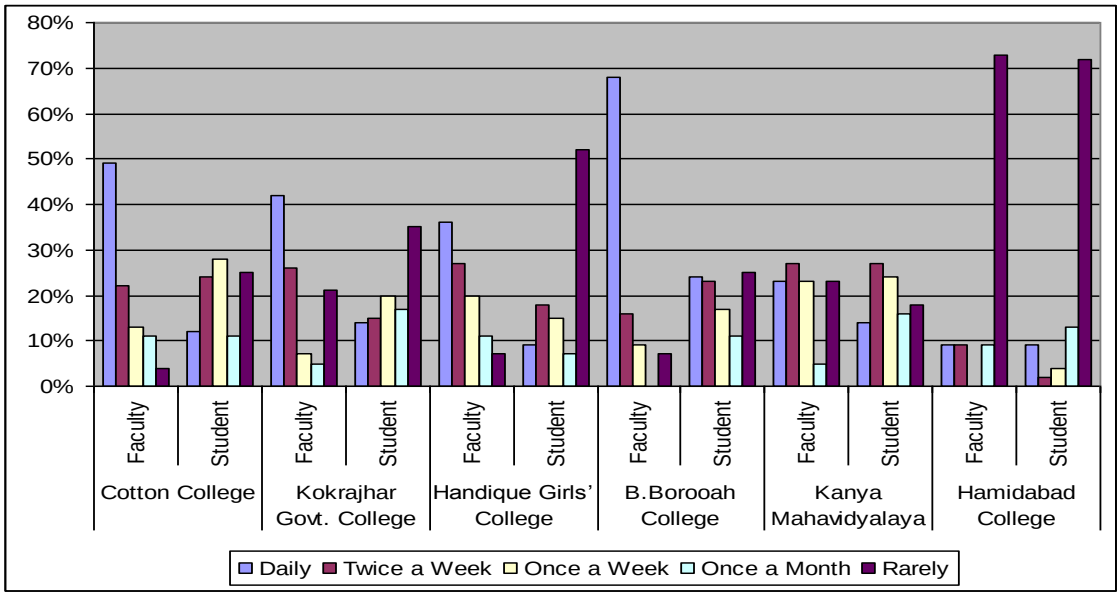
5.3 Use of Internet

Use of Internet is one of the important components of ICT. It is recognized as a common platform to access e-resources apart from other operations. Further, it is one of the mostly used modes of communication systems used including assessing information from remotest corner of the world. Data relating to this component obtained through the questionnaire is placed below in Table No.5.3 for clear understanding supplemented with Graph for a lucid observation.

Table No. 5.3: Use of Internet

Name of the Colleges		**Frequency of Internet Use**				
		Daily	**Twice a Week**	**Once a Week**	**Once a Month**	**Rarely**
CC	**F** 45	22 (49%)	10 (22%)	6 (13%)	5 (11%)	2 (4%)
	S 89	11 (12%)	21 (24%)	25 (28%)	10 (11%)	22 (25%)
KGC	**F** 43	18 (42%)	11 (26%)	3 (7%)	2 (5%)	9 (21%)
	S 96	13 (14%)	14 (15%)	19 (20%)	16 (17%)	34 (35%)
HGC	**F** 45	16 (36%)	12 (27%)	9 (20%)	5 (11%)	3 (7%)
	S 89	8 (9%)	16 (18%)	13 (15%)	6 (7%)	46 (52%)
BBC	**F** 44	30 (68%)	7 (16%)	4 (9%)	00	3 (7%)
	S 100	24 (24%)	23 (23%)	17 (17%)	11 (11%)	25 (25%)
KM	**F** 22	5 (23%)	6 (27%)	5 (23%)	1 (5%)	5 (23%)
	S 49	7 (14%)	13 (27%)	12 (24%)	8 (16%)	9 (18%)
HC	**F** 11	1 (9%)	1 (9%)	00	1 (9%)	8 (73%)
	S 54	5 (9%)	1 (2%)	2 (4%)	7 (13%)	39 (72%)
Total	**687**	**160 (23%)**	**135 (20%)**	**115 (17%)**	**72 (10%)**	**205 (30%)**
	F=210 (31%) S=477 (69%)	**F=92 (44%) S=68 (14%)**	**F=47 (22%) S=88 (18%)**	**F=27 (13%) S=88 (18%)**	**F=14 (7%) S= 58 (12%)**	**F=30 (14%) S=175 (37%)**

F-Faculty, **S**-Student



Graph No.5.3: Use of Internet

The Table connotes that the 30 (68%) faculties of BBC access internet daily, followed by the 22(49%) faculties of CC and 18 (42%) faculties of KGC. Further, the Table reveals that 24(24%) students of BBC access internet daily followed by 13 (14%) students from KGC and 11(12%) students from CC. The table further reveals that out of total respondent 687, 135(20%) use internet twice a week. Further analysis reveals that most of the respondents i.e. out of the total respondent 687, 205(30%) use internet rarely in which 30 (14%) represents faculty group while, 175 (37%) represents the students population. This is, however, is not an encouraging step as the faculties at least require accessing internet almost daily to update their knowledge, and other information exchange.

5.4 Purpose of Seeking Information

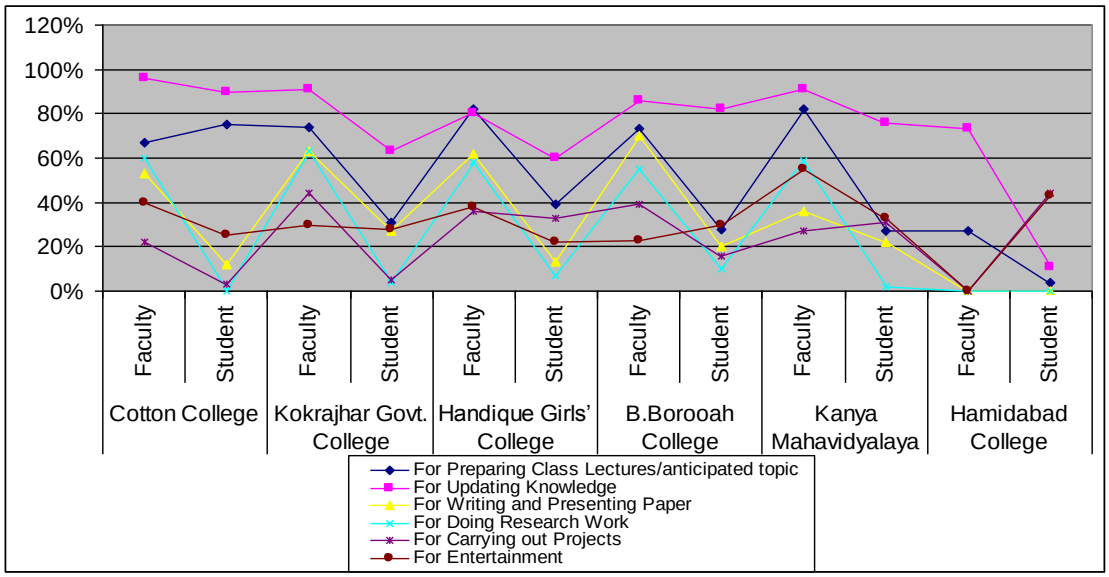
Information seeking relates to multipurpose for both faculties and students pursuing academic activities. Data relating to the purpose of information seeking obtained through the questionnaire is placed in Table No.5.4 corroborated with graph for clear visualization.

Table No.5.4: Purpose of Seeking Information

Name of the Colleges		Purpose of Seeking Information					
		PCL	**UK**	**WPP**	**DRW**	**CP**	**Ent.**
CC	**F** 45	30 (67%)	43 (96%)	24 (53%)	27 (60%)	10 (22%)	18 (40%)
	S 89	67 (75%)	80 (90%)	11 (12%)	00	3 (3%)	22 (25%)
KGC	**F** 43	32 (74%)	39 (91%)	27 (63%)	27 (63%)	19 (44%)	13 (30%)
	S 96	30 (31%)	60 (63%)	26 (27%)	4 (4%)	5 (5%)	27 (28%)
HGC	**F** 45	37 (82%)	36 (80%)	28 (62%)	26 (58%)	16 (36%)	17 (38%)
	S 89	35 (39%)	53 (60%)	12 (13%)	6 (7%)	29 (33%)	20 (22%)
BBC	**F** 44	32 (73%)	38 (86%)	31 (70%)	24 (55%)	17 (39%)	10 (23%)
	S 100	28 (28%)	82 (82%)	20 (20%)	10 (10%)	16 (16%)	30 (30%)
KM	**F** 22	18 (82%)	20 (91%)	8 (36%)	13 (59%)	6 (27%)	12 (55%)
	S 49	13 (27%)	37 (76%)	11 (22%)	1 (2%)	15 (31%)	16 (33%)
HC	**F** 11	3 (27%)	8 (73%)	00	00	00	00
	S 54	2 (4%)	6 (11%)	00	00	24 (44%)	23 (43%)
Total	**687**	**327 (48%)**	**502 (73%)**	**198 (29%)**	**138 (20%)**	**160 (23%)**	**208 (30%)**
	F=210 (31%) S=477 (69%)	**F=152 (72%) S=175 (37%)**	**F=184 (88%) S=318 (67%)**	**F=118 (56%) S=80 (17%)**	**F=117 (56%) S=21 (4%)**	**F=68 (32%) S=92 (19%)**	**F=70 (33%) S=138 (29%)**

F-Faculty, **S**-Student

Abbreviation: PCL- Preparing Class Lectures/anticipated topic in the class, **UK**-Updating Knowledge, **WPP**- Writing and Presenting Paper, **DRW**-Doing Research Work, **CP**-Carrying out Projects, **Ent.**-Entertainment.



Graph No.5.4: Purpose of Seeking Information

The component of purpose of seeking information is grouped into six different segments as reflected in Table-5.4. While analyzing all the components it could be revealed that both faculties and students of the colleges under study prefer updating knowledge followed by preparing class lectures etc. and entertainment. The detail analysis with regard to updating knowledge depicts that 43 (96%) faculties of CC out of 45 prefer to update knowledge followed by 39 and 20 constituting 91% each both in KGC and KM respectively. Further the 36 (80%) faculties of HGC prefer to update knowledge. Even if there is an equal percentage i.e. 91% of KGC and KM the number of faculties vary and the scholar has taken the percentage out of the total respondents of each college. Moreover with regard to students, BBC stands at the apex because 82(82%) students prefer to update knowledge followed by 80 (90%) students and 37 (76%) of KM respectively. Mention may be made that there is a high percentage value due to less number of respondents in the colleges discussed above and therefore there is a variation.

It is also evident from the Table that, most of the respondents i.e, 327 (48%) out of 687 other than the updating knowledge information seek information for preparing class lectures/ anticipated topic for class room teaching. It is interesting to note that, 37 (82%) faculties of HGC have responded to this purpose followed by the 32 faculties of both KGC and BBC with a value of 74% and 73% respectively. Mention may be made that the variation in percentage value is due to the variation in total of

faculties in these colleges. In addition, as reflected in the Table, 175 (37%) students out of 477 also prefer information for keeping themselves prepared for the anticipated lectures in the class. With regard to this students of CC stands at the highest as 67 (75%) students has responded followed by 35 (39%) and 30 (31%) students of HBC and KGC respectively. As a whole, 208 (30%) respondents out of 687 prefer information for entertainment also.

This is however, encouraging that most of the respondents seek information for updating their knowledge and they require broadening their dimension for use of information.

5.5 Information Seeking Habits

Different approaches are adopted to gather information required for the definite purpose. But to be a lifelong learner, regular use of different sources of information develops a skill in accessing information. Information seeking habits is one of the components of the questionnaire and the data has been reflected in Table No.5.5 supplemented with Graph No.5.5

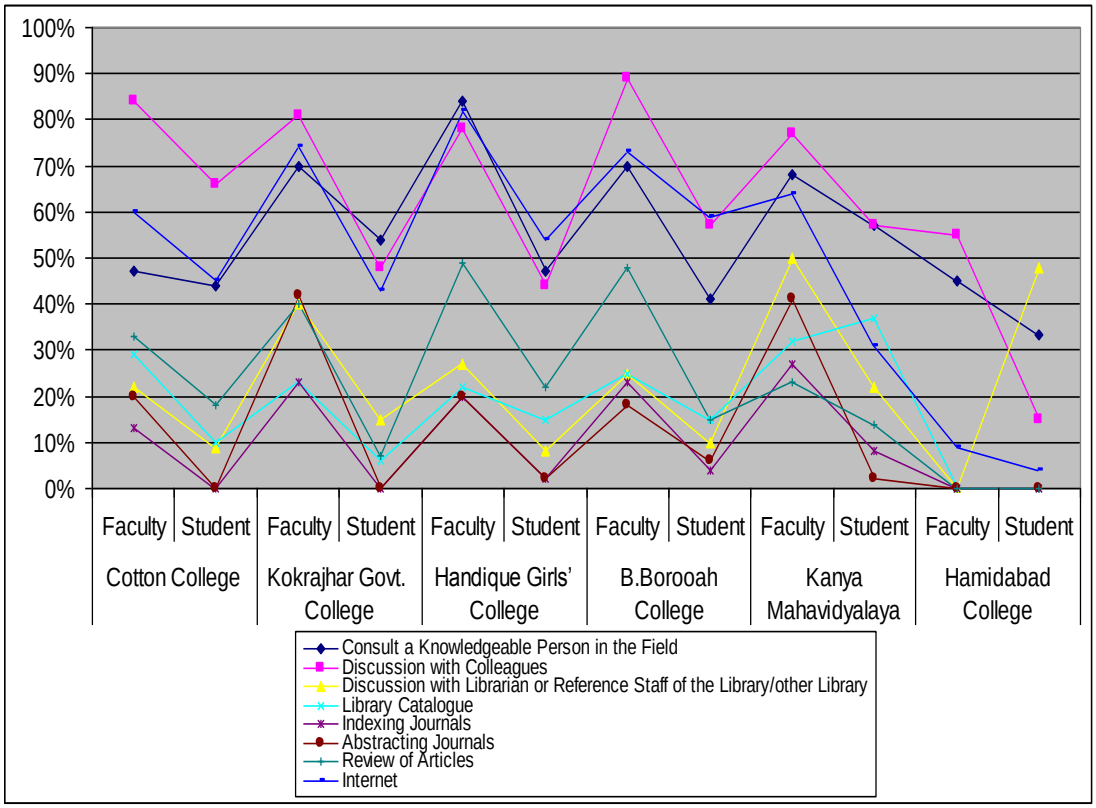
Table No.5.5: Information Seeking Habits

Name of the Colleges		Information Seeking Habits							
		CKP	**DC**	**DL RS**	**LC**	**IJ**	**AJ**	**RA**	**Int.**
CC	**F** 45	21 (47%)	38 (84%)	10 (22%)	13 (29%)	6 (13%)	9 (20%)	15 (33%)	27 (60%)
	S 89	39 (44%)	59 (66%)	8 (9%)	9 (10%)	00	00	16 (18%)	40 (45%)
KGC	**F** 43	30 (70%)	35 (81%)	17 (40%)	10 (23%)	10 (23%)	18 (42%)	17 (40%)	32 (74%)
	S 96	52 (54%)	46 (48%)	14 (15%)	6 (6%)	00	00	7 (7%)	41 (43%)
HGC	**F** 45	38 (84%)	35 (78%)	12 (27%)	10 (22%)	9 (20%)	9 (20%)	22 (49%)	37 (82%)
	S 89	42 (47%)	39 (44%)	7 (8%)	13 (15%)	2 (2%)	2 (2%)	20 (22%)	48 (54%)
BBC	**F** 44	31 (70%)	39 (89%)	11 (25%)	11 (25%)	10 (23%)	8 (18%)	21 (48%)	32 (73%)
	S 100	41 (41%)	57 (57%)	10 (10%)	15 (15%)	4 (4%)	6 (6%)	15 (15%)	59 (59%)

KM	**F** 22	15 (68%)	17 (77%)	11 (50%)	7 (32%)	6 (27%)	9 (41%)	5 (23%)	14 (64%)
	S 49	28 (57%)	28 (57%)	11 (22%)	18 (37%)	4 (8%)	1 (2%)	7 (14%)	15 (31%)
HC	**F** 11	5 (45%)	6 (55%)	00	00	00	00	00	1 (9%)
	S 54	18 (33%)	8 (15%)	26 (48%)	00	00	00	00	2 (4%)
Total	**687**	**360 52%)**	**407 (59%)**	**137 (20%)**	**112 (16%)**	**51 (7%)**	**62 (9%)**	**145 (21%)**	**348 (51%)**
	F= 210 (31%) S= 477 (69%)	**F=140 (67%) S=220 (46%)**	**F=170 (81%) S=237 (50%)**	**F=61 (29%) S=76 (16%)**	**F=51 (24%) S=61 (13%)**	**F=41 (20%) S=10 (2%)**	**F=53 (25%) S=9 (2%)**	**F=80 (38%) S=65 (14%)**	**F=143 (68%) S=205 (43%)**

F-Faculty, **S**-Student

Abbreviation: CKP- Consult a Knowledgeable Person in the Field, **DC-** Discussion with Colleagues, **DLRS**-Discussion with Librarian or Reference Staff of the Library/other Library, **LC-** Library Catalogue, **IJ**- Indexing Journals, **AJ**- Abstracting Journals, **RA-** Review of Articles, **Int**- Internet



Graph No.5.5: Information Seeking Habits

Analysis of the Table exposes that most of the respondents i.e. 407 (59%) out of 687 prefer to seek information through discussions with colleagues followed by consulting a knowledgeable person in the field 360 (52%) and browsing on internet 348 (51%) respectively. Moreover, the Table also shows that the faculties of BBC are at the apex i.e. 39 (89%) who prefer to discuss with their fellow colleagues followed by the faculties of CC 38 (84%) and KGC 35(81%). With regard to information seeking habit of the students, the Table depicts that out of 477, 237(50%) discuss with their fellow friends to receive information. Further while analyzing the total respondents, 145 (21%) out 687 prefer to consult review of article, followed by discussion with librarian or reference staffs of the library/other library 137 (20%) and library catalogue 112 (16%). It is also evident that respondents rarely use abstracting journals which constitute a total number of 62 (9%) and indexing journals 51 (7%). Surprisingly, the faculties and students of HC have hardly used the library catalogue, abstracting & indexing journals, and review of articles.

This is due to the fact that, the respondents which are the users of the library are not aware of the arrangement of library catalogue including others such as abstracting and indexing journals including review of articles. In such cases, the library needs imparting library orientation to the users so as to get abreast with the library resources and other management techniques.

5.6 Problems in Seeking Information

In this ICT driven environment, informations are available in different format which has enabled the users to use and disseminate the information with ease. But due to the ignorance or varied reason information is not accessed and used by the potential users. Some of the problems which are usually confronted by the users while seeking information are reflected in the Table No. 5.6

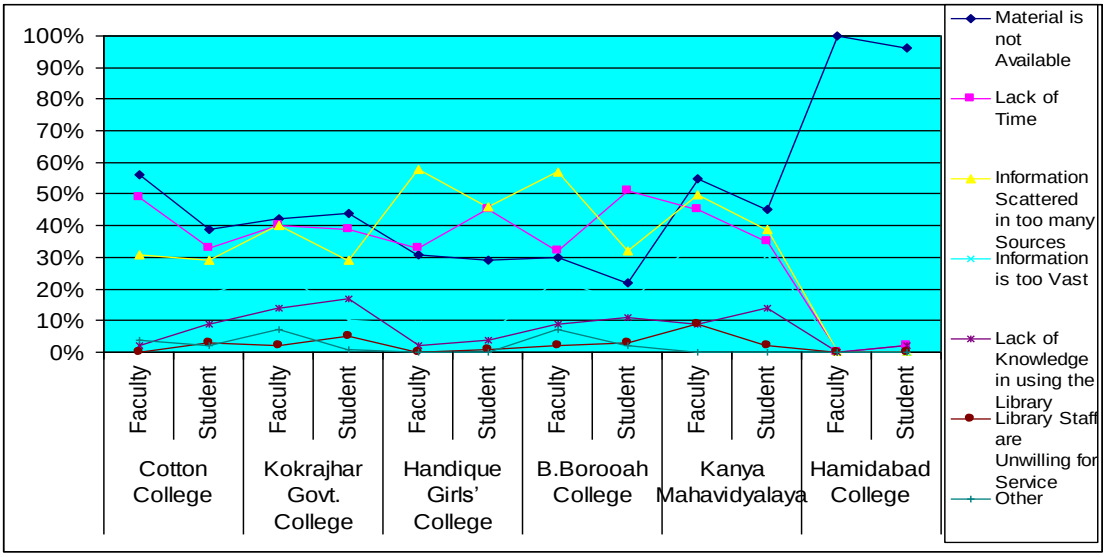
Table No.5.6: Problems in Seeking Information

Name of the Colleges		Problems in Seeking Information						
		MA	**LT**	**ISS**	**IV**	**LKL**	**LSUS**	**Other**
CC	**F** 45	25 (56%)	22 (49%)	14 (31%)	6 (13%)	1 (2%)	00	2 (4%)
	S 89	35 (39%)	29 (33%)	26 (29%)	16 (18%)	8 (9%)	3 (3%)	2 (2%)

KGC	**F** 43	18 (42%)	17 (40%)	17 (40%)	11 (26%)	6 (14%)	1 (2%)	3 (7%)
	S 96	42 (44%)	37 (39%)	28 (29%)	10 (10%)	16 (17%)	5 (5%)	1 (1%)
HGC	**F** 45	14 (31%)	15 (33%)	26 (58%)	4 (9%)	1 (2%)	00	00
	S 89	26 (29%)	40 (45%)	41 (46%)	5 (6%)	4 (4%)	1 (1%)	00
BBC	**F** 44	13 (30%)	14 (32%)	25 (57%)	10 (23%)	4 (9%)	1 (2%)	3 (7%)
	S 100	22 (22%)	51 (51%)	32 (32%)	15 (15%)	11 (11%)	3 (3%)	2 (2%)
KM	**F** 22	12 (55%)	10 (45%)	11 (50%)	8 (36%)	2 (9%)	2 (9%)	00
	S 49	22 (45%)	17 (35%)	19 (39%)	15 (31%)	7 (14%)	1 (2%)	00
HC	**F** 11	11 (100%)	00	00	00	00	00	00
	S 54	52 (96%)	1 (2%)	00	00	1 (2%)	00	00
Total	**687**	**292 (43%)**	**253 (37%)**	**239 (35%)**	**100 (15%)**	**61 (9%)**	**17 (2%)**	**13 (2%)**
	F=210 (31%) S=477 (69%)	**F=93 (44%) S=199 (42%)**	**F=78 (37%) S=175 (37%)**	**F=93 (44%) S=146 (31%)**	**F=39 (19%) S=61 (13%)**	**F=14 (7%) S=47 (10%)**	**F=4 (2%) S=13 (3%)**	**F=8 (4%) S= 5 (1%)**

F-Faculty, **S**-Student

Abbreviation: **MA**- Material is not Available, **LT**- Lack of Time, **ISS**- Information Scattered in too many Sources, **IV**- Information is too Vast, **LKL**- Lack of Knowledge in using the Library, **LSUS**- Library Staff are Unwilling for Service



Graph No.5.6: Problems in Seeking Information

The above Table discloses various problems confronted by the users while seeking information. As reflected in the above Table that, out of the total respondents of 687, 292 (43%) respondents viewed that, the one of the main problems is associated with non-availability of adequate reading materials. The 11 (100%) faculties and 52 (96%) students of HC also admit this problem. With regard to this 25(56%) faculties of CC endorses the same problem followed by the 18(42%) faculties of KGC and 14 (31%) HGC respectively. Besides, 253(37%) respondent out of 687 responded that due to lack of time followed by information scattered in too many sources 239 (35%) respondents are not able to get their required information. Status wise 22 (49%) faculties of CC confess the problem of lack of time followed by the 17 (40%) faculties of KGC and 15 (33%) faculties of HGC. Likewise, 51 (51%) students of BBC also faces the problem of lack of time while accessing information followed by the students of HGC 40 (45%) and KGC 37 (39%). From the library perspective, 61 (9%) respondents out of 687 discloses that due to lack of knowledge in using the library faces problem while seeking information followed by 17 (2%) respondents face the problem as library staffs are unwilling to provide the service. Moreover 13 (2%) responded that, other than those problems, some of the difficulties are like, (a) lack of proper training of the library staffs, (b) unknown to specific websites, (c) sometime information are contradictory, (d) lack of systematic arrangement of reading materials, and (e) unavailability of information regarding open access.

The analysis further reveals that, problems are encountered by both the users and the library staffs where both of them require orientation or training to get insight to the use of technology and make use of them for effective services.

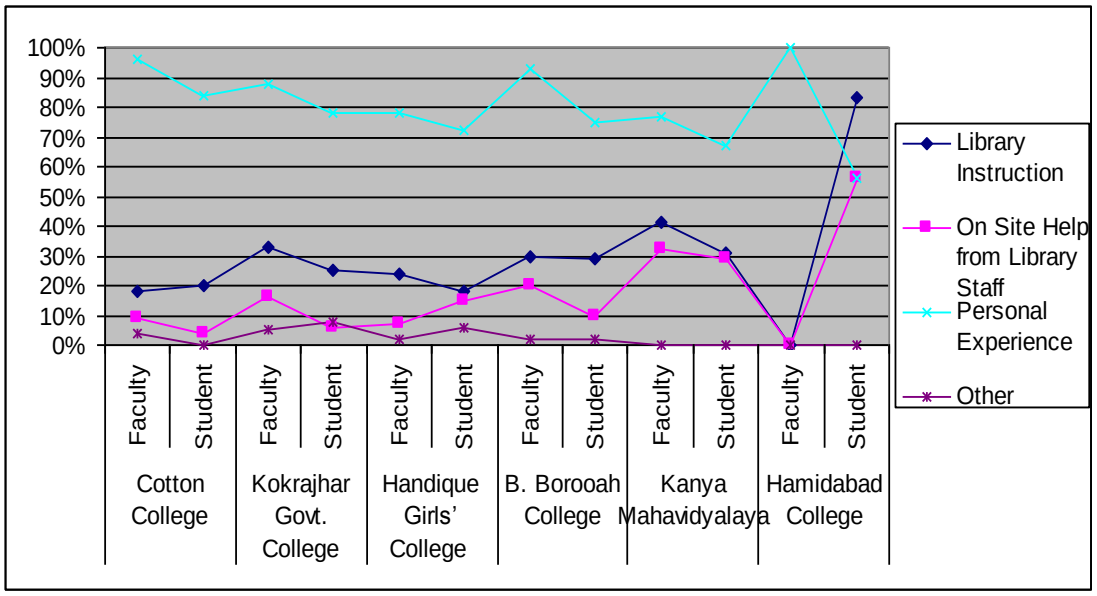
5.7 Use of Information Resources

Adequate and purposive use of information resources in the library require to know the operations of the technology to access data and or information. This is supported with the competency and skills for both the users and the staffs where the former access the information while the later provides the information with the use of technology. Data relating to the use of information resources of the colleges under study are tabulated in Table No. 5.7 supplemented with Graph No. 5.7 below:

Table No. 5.7: Learned to Use Information Resources

Name of the Colleges		Learned to Use Information Resources			
		Library Instructions	**On Site Help from Library Staffs**	**Personal Experience**	**Other**
CC	**F** 45	8 (18%)	4 (9%)	43 (96%)	2 (4%)
	S 89	18 (20%)	4 (4%)	75 (84%)	00
KGC	**F** 43	14 (33%)	7 (16%)	38 (88%)	2 (5%)
	S 96	24 (25%)	6 (6%)	75 (78%)	8 (8%)
HGC	**F** 45	11 (24%)	3 (7%)	35 (78%)	1 (2%)
	S 89	16 (18%)	13 (15%)	64 (72%)	5 (6%)
BBC	**F** 44	13 (30%)	9 (20%)	41 (93%)	1 (2%)
	S 100	29 (29%)	10 (10%)	75 (75%)	2 (2%)
KM	**F** 22	9 (41%)	7 (32%)	17 (77%)	00
	S 49	15 (31%)	14 (29%)	33 (67%)	00
HC	**F** 11	00	00	11 (100%)	00
	S 54	45 (83%)	30 (56%)	30 (56%)	00
Total	**687**	**202 (29%)**	**107 (16%)**	**537 (78%)**	**21 (3%)**
	F=210 (31%) S=477 (69%)	**F=55 (26%) S=147 (31%)**	**F=30 (14%) S=77 (16%)**	**F=185 (88%) S=352 (74%)**	**F=6 (3%) S=15 (3%)**

F-Faculty, **S**-Student



Graph No. 5.7: Learned to Use Information Resources

Analysis to the above Table reflects that overall, 202 (29%) out of 687 respondents opine library instructions as one of the major criteria for use of information resources followed by 107 (16%) who have given the option for on-site help from the library staffs. However, 537 (78%) out of the total respondents of 687 viewed that, personal experiences in the library counts much in using the information resources and this is due to acquaintance with the various library services being provided by the libraries. Experiences recognize the knowledge and expertise which, however, differs on the library environments. The Table further depicts that, status wise 43 (96%) faculties of CC gives priority to personal experience followed by the 41 (93%) faculties of BBC and 38 (88%) faculties of KGC respectively. Likewise, 75 students of CC, KGC and BBC also give priority to personal experience which comes to 84%, 78% and 75% respectively in all three colleges as discussed above. Mention may be made that, the variation in percentage is due to the variation in student number in these colleges. Moreover, 14 (33%) faculties of KGC appreciate the library instruction provided by the library staff followed by the 13(30%) faculties of BBC and 11(24%) faculties of HGC. Likewise, the students are also benefited by the library instruction as 45(83%) students of HC have responded to it followed by the 29 (29%) students of BBC and 24(25%) students of KGC. The table also depicts that 11(100%) faculties of HC rarely depends on library instruction and library staff. On the other hand, most of the student of HC i.e. 45 (83%) out of 54 rely on library instruction followed by 30 (56%) students who seeks help from library staff and depends on personal experience as

well. In addition 21(3%) respondents out of 687 admits the help from- a) friends/colleagues, b) book stores, c) internet, d) newspaper etc. in getting acquaintance with different sources of information. It is quite encouraging that one of the faculties of KGC solicits to organize at least 15 classes on library use for the students in the starting of the academic session.

It could be observed from the analysis that motivation need to be explored among the users for effective use of library resources. Further, adequate skills needs to be oriented to handle traditional and electronic resources as well among the library professionals to accelerate better and value added services to the users.

5.8 Use of Internet Search Tools

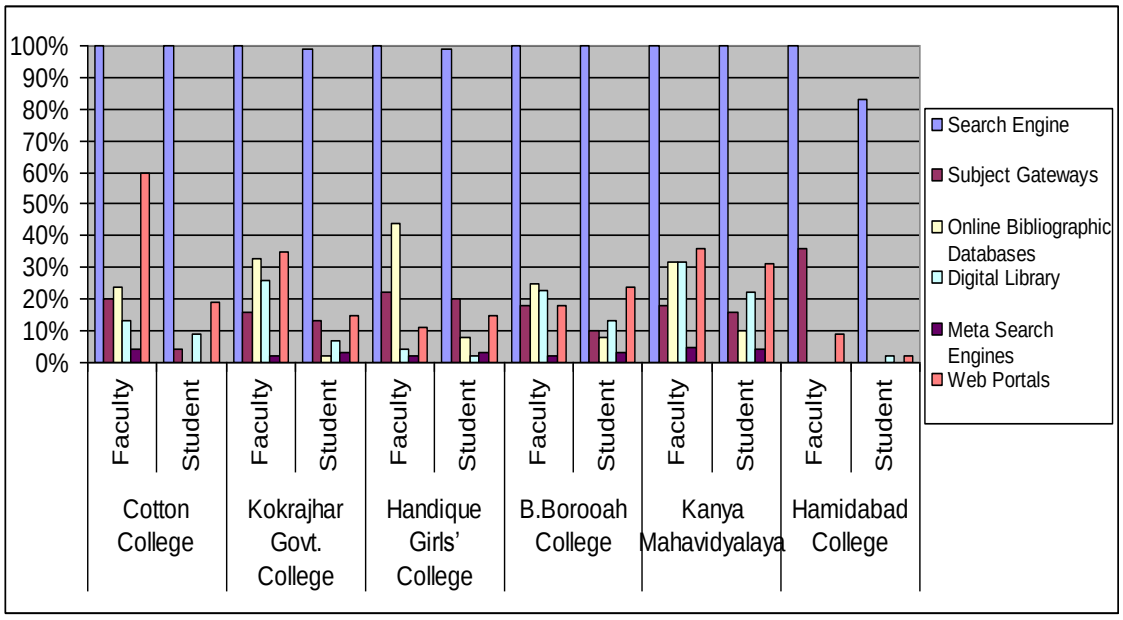
Multiple search techniques are to be employed on Internet to obtain reliable, authentic and useful information. These are essential components to search resources in a digital environment in view of proliferation of a good quantum of information. Internet search tools which are pragmatic need for proper application in the digital environment to facilitate both the library professionals and the users. In the process, the library makes the information in a usable form while, the users get the reliable and authentic information so as to bring out a sustainable research output. Data relating to this component among the faculties and students of the colleges covered under study have been tabulated in Table No. 5.8 supplemented with Graph No. 5.8 for a clear vision. The component has been segregated into six different sub-components and opinion of both the faculties and students have been reflected in the respective place for analysis.

Table No. 5.8: Internet Search Tools

Name of the Colleges		Internet Search Tools					
		Search Engine	**Subject Gateways**	**Online Bibliographic Database**	**Digital Library**	**Meta Search Engines**	**Web Portals**
CC	**F** 45	45 (100%)	9 (20%)	11 (24%)	6 (13%)	2 (4%)	27 (60%)
	S 89	89 (100%)	4 (4%)	00	8 (9%)	00	17 (19%)

KGC	**F** 43	43 (100%)	7 (16%)	14 (33%)	11 (26%)	1 (2%)	15 (35%)
	S 96	95 (99%)	12 (13%)	2 (2%)	7 (7%)	3 (3%)	14 (15%)
HGC	**F** 45	45 (100%)	10 (22%)	20 (44%)	2 (4%)	1 (2%)	5 (11%)
	S 89	88 (99%)	18 (20%)	7 (8%)	2 (2%)	3 (3%)	13 (15%)
BBC	**F** 44	44 (100%)	8 (18%)	11 (25%)	10 (23%)	1 (2%)	8 (18%)
	S 100	100 (100%)	10 (10%)	8 (8%)	13 (13%)	3 (3%)	24 (24%)
KM	**F** 22	22 (100%)	4 (18%)	7 (32%)	7 (32%)	1 (5%)	8 (36%)
	S 49	49 (100%)	8 (16%)	5 (10%)	11 (22%)	2 (4%)	15 (31%)
HC	**F** 11	11 (100%)	4 (36%)	00	00	00	1 (9%)
	S 54	45 (83%)	00	00	1 2%)	00	1 (2%)
Total	**687**	**676 (98%)**	**94 (14%)**	**85 (12%)**	**78 (11%)**	**17 (2%)**	**148 (22%)**
	F=210 (31%) S=477 (69%)	**F=210 (100%) S=466 (98%)**	**F=42 (20%) S=52 (11%)**	**F=63 (30%) S=22 (5%)**	**F=36 (17%) S=42 (9%)**	**F=6 (3%) S=11 (2%)**	**F=64 (30%) S=84 (18%)**

F-Faculty, **S**-Student



Graph No. 5.8: Internet Search Tools

Analysis of the above table reveals that most of the respondents i.e, 676 (98%) out of a total number of 687 respondents prefer search engines for searching information on the internet, followed by web portals 148 (22%) and subject gateways 94 (14%) respectively. On the other hand, a total number of 17 (2%) prefer Meta search engines compared to online bibliographic database by 85 (12%) and digital library 78 (11%). It is interesting to note that, the respondents are quite used to search engines to obtain e-resources which is a healthy sign for an institution and it leads proficiency among the users in putting value oriented teaching and research. Further, it could be noticed that, web portals and subject gateways are also equally useful to retrieve the information directly from the subject portals which again is a very encouraging attitude of both faculties and students of the colleges under study. However, 11(2%) students out of the total respondents have not responded to this question.

5.9 Frequently Used Search Engines

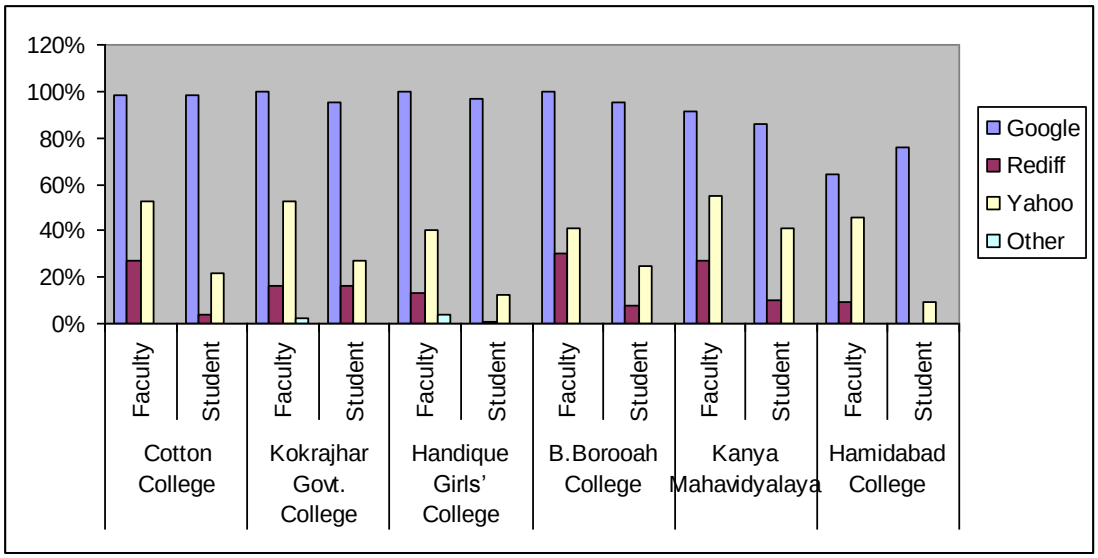
Search engines are mostly used for retrieving data or information. Search engines facilitate the users to locate the information and provide links to the source from which information could be retrieved. However, search engines also maintain its own databases and not only allow access to the users to retrieve the data but also links to other databases thereby, leading the users to access innumerable e-resources. It does not regulate the information on the web. It is a complex computer programmes which really functions to redress the problems of the users in getting resources. Data relating to the frequently used search engines by the faculties and the students of the colleges under study is depicted in Table No. 5.9 supported with Graph No. 5.9

Table No. 5.9: Search Engines

Name of the Colleges		**Search Engines**			
		Google	**Rediff**	**Yahoo**	**Other**
CC	**F** 45	44 (98%)	12 (27%)	24 (53%)	00
	S 89	87 (98%)	4 (4%)	20 (22%)	00
KGC	**F** 43	43 (100%)	7 (16%)	23 (53%)	1 (2%)
	S 96	91 (95%)	15 (16%)	26 (27%)	00

HGC	**F** 45	45 (100%)	6 (13%)	18 (40%)	2 (4%)
	S 89	86 (97%)	1 (1%)	11 (12%)	00
BBC	**F** 44	44 (100%)	13 (30%)	18 (41%)	00
	S 100	95 (95%)	8 (8%)	25 (25%)	00
KM	**F** 22	20 (91%)	6 (27%)	12 (55%)	00
	S 49	42 (86%)	5 (10%)	20 (41%)	00
HC	**F** 11	7 (64%)	1 (9%)	5 45%)	00
	S 54	41 (76%)	00	5 (9%)	00
Total	**687**	**645 (94%)**	**78 (11%)**	**207 (30%)**	**3 (0.43%)**
	F=210 (31%) S=477 (69%)	**F=203 (97%) S=442 (93%)**	**F=45 (21%) S=33 (7%)**	**F=100 (48%) S=107 (22%)**	**F=3 (0.43%) S=0 (0%)**

F-Faculty, **S**-Student



Graph No.5.9: Search Engines

Analysis of the above Table visualizes that, Google is the most preferred search engines followed by Yahoo and Rediff as 645 (94%) out of 687, the total respondents highly used Google search engine, followed by Yahoo by 207 (30%) and Rediff 78 (11%). It is worth mentioning that while, all the 43 faculties KGC including 45 faculties HGC and 44 faculties of BBC prefer Google as the most preferred search engine which comes to 100% each. So far as use of other search engines are

concerned, only 3 (0.43%) faculties from HGC and KGC use NASA Database Search Engine (Astrophysics Data System) which is a specialized database to promote teaching and research. The faculties are also of the opinion that, they use above search engine to access Science Direct, Scirus, American Chemical Society Publications, etc. Mention may be made that, Google and other search engines are used to access e-resources which however, differ in specialized search engines to access scientific database. This further requires a proper input to both the faculties and the students to get access to the e-resources using various search engines to support the subject based e-resources. However, this is an encouraging attitude of both the faculties and the students who are tuned to access the e-resources through search engines. Orientation by library will facilitate the users a wide scope to retrieve data or information from other search engines.

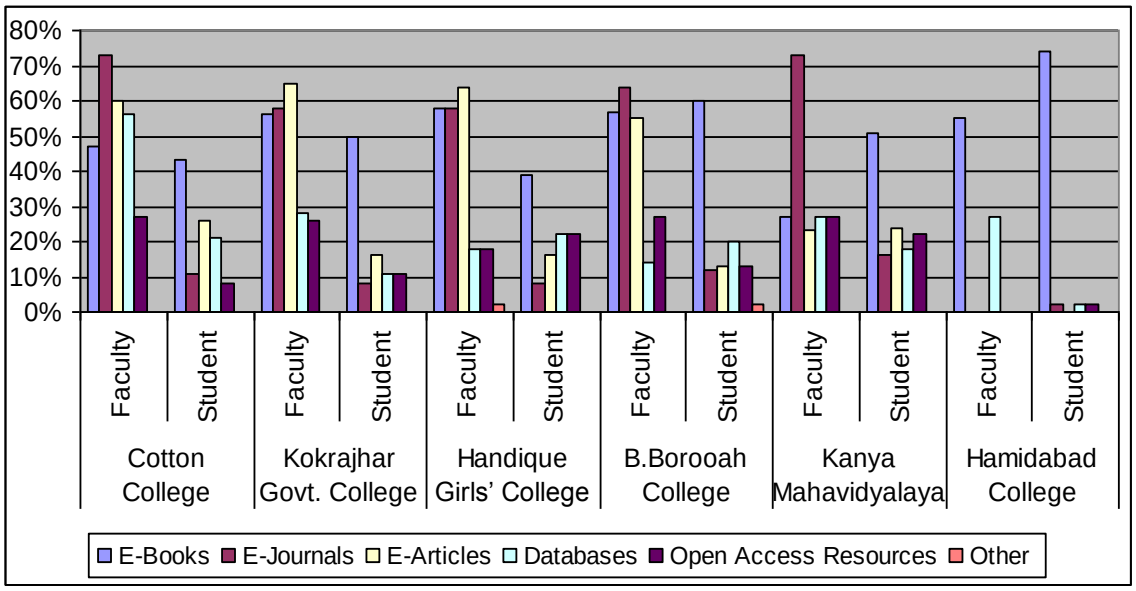
5.10 Use of Digital Resources

Digital resources play a pragmatic role in providing value based information to promote teaching and research as it allows the users in general to get an abundant scope to get teaching and research resources. This has become prevalent in view of the promulgation of ICT in libraries. Practically speaking, the library has become a hub centre to access knowledge in multidimensional form and added to this the traditional resources are supplemented adequately with digital resources which include, e-books, e-journals, databases, datasets, digital repositories etc. Data relating to this component under study is placed in the Table No.5.10 along with Graph No. 5.10 for a clear understanding. The scholar has categorized broadly the digital resources into five headings such as, e-books, e-journals, e-articles, Database, Open Access Resources etc.

Table No. 5.10: Digital Resources

Name of the Colleges		Use of Digital Resources					
		E-Books	**E-Journals**	**E-Articles**	**Databases**	**Open Access Resources**	**Other**
CC	**F** 45	21 (47%)	33 (73%)	27 (60%)	25 (56%)	12 (27%)	00
	S 89	38 (43%)	10 (11%)	23 (26%)	19 (21%)	7 (8%)	00
KGC	**F** 43	24 (56%)	25 (58%)	28 (65%)	12 (28%)	11 (26%	00
	S 96	48 (50%)	8 (8%)	15 (16%)	11 (11%)	11 (11%)	00
HGC	**F** 45	26 (58%)	26 (58%)	29 (64%)	8 (18%)	8 (18%)	1 (2%)
	S 89	35 (39%)	7 (8%)	14 (16%)	20 (22%)	20 (22%)	00
BBC	**F** 44	25 (57%)	28 (64%)	24 (55%)	6 (14%)	12 (27%)	00
	S 100	60 (60%)	12 (12%)	13 (13%)	20 (20%)	13 (13%)	2 (2%)
KM	**F** 22	6 (27%)	16 (73%)	5 (23%)	6 (27%)	6 (27%)	00
	S 49	25 (51%)	8 (16%)	12 (24%)	9 (18%)	11 (22%)	00
HC	**F** 11	6 (55%)	00	00	3 (27%)	00	00
	S 54	40 (74%)	1 (2%)	00	1 (2%)	1 (2%)	00
Total	**687**	**354 (52%)**	**174 (25%)**	**190 (28%)**	**140 (20%)**	**112 (16%)**	**3 (0.43%)**
	F=210 (31%) S=477 (69%)	**F=108 (51%) S=246 (52%)**	**F=128 (61%) S=46 (10%)**	**F=113 (54%) S=77 (16%)**	**F=60 (29%) S=80 (17%)**	**F=49 (23%) S=63 (13%)**	**F=1 (0%) S=2 (0%)**

F-Faculty, **S**-Student



Graph No. 5.10: Digital Resources

E-books are generally not free of cost. However the publishers have changed their marketing policy from traditional to electronic by promoting the use of e-book. The publishers along with the print copy are also supplementing a CD of the book. Further there are also promoting the users to access the e-books through their websites. Therefore the analysis reveals that most of the faculties and students as well i.e. 354 (52%) out of total respondents 687 access e-books and make use of them followed by e-articles accessed by 190 (28%) respondent and 174 (25%) who access e-journals respectively. The database which equally is one of the important component of digital resources are being accessed by 140 (20%) out of total 687 respondents and other than the digital resources only 3(0.43%) respondents uses Wikipedia. However, 51(11%) students and 12 (6%) faculties have not responded to the question. The analysis further reveals that it is a commendable step for both faculties and students who prefer the digital resources in any form to satisfy their information requirements.

5.11 Information Literacy Awareness

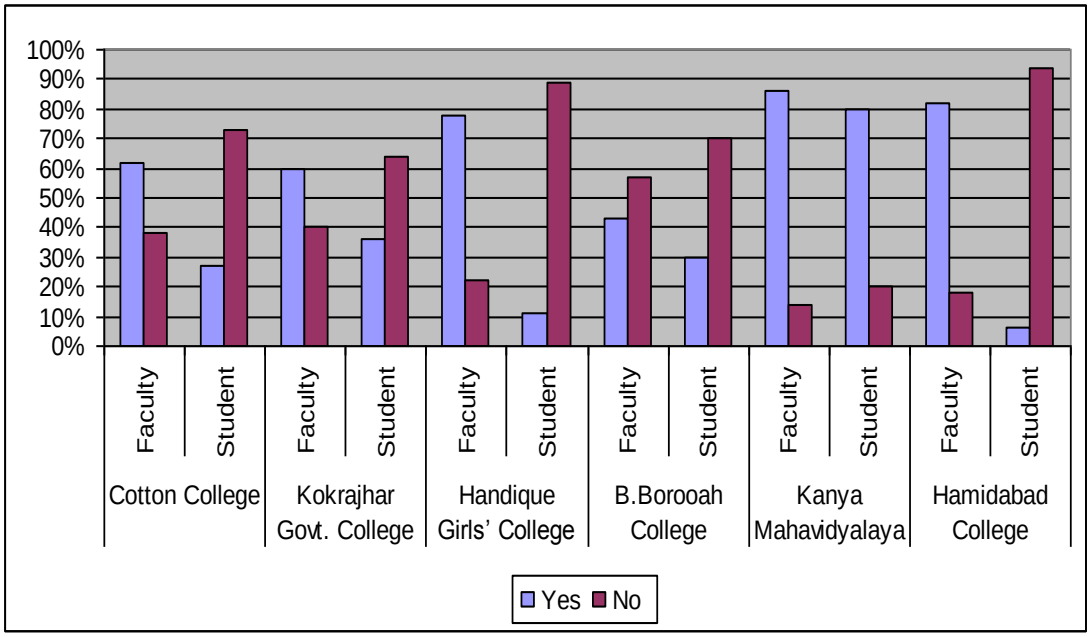
Information literacy is one of the pragmatic areas in ICT domain to facilitate the users to access various information resources in digital form. The information literacy connotes to various literacies such as computer literacy, media literacy, network literacy, hardware literacy, software literacy, etc. which are useful for application in accessing the resources from Internet. More information literacy awareness leads to

more access to information from Internet by the users. The data relating to information literacy awareness of the colleges under study have been tabulated in Table No. 5.11 supported with relevant graph.

Table No. 5.11: Information Literacy Awareness

Name of the Colleges		**Information Literacy Awareness**	
		Yes	**No**
CC	**F** 45	28 (62%)	17 (38%)
	S 89	24 (27%)	65 (73%)
KGC	**F** 43	26 (60%)	17 (40%)
	S 96	35 (36%)	61 (64%)
HGC	**F** 45	35 (78%)	10 (22%)
	S 89	10 (11%)	79 (89%)
BBC	**F** 44	19 (43%)	25 (57%)
	S 100	30 (30%)	70 (70%)
KM	**F** 22	19 (86%)	3 (14%)
	S 49	39 (80%)	10 (20%)
HC	**F** 11	9 (82%)	2 (18%)
	S 54	3 (6%)	51 (94%)
Total	**687**	**277 (40%)**	**410 (60%)**
	F=210 (31%) S=477 (69%)	**F=136 (65%) S=141 (30%)**	**F=74 (35%) S=336 (70%)**

F-Faculty, **S**-Student



Graph No. 5.11: Information Literacy Awareness

The above Table after analysis visualizes that the faculties and the students of the colleges under study have given their option with regard to information literacy awareness. It could be deduced that out of a total respondents 687, 410 (60%) are not aware of information literacy while 277(40%) are aware of information literacy. Status wise, the Table indicates that the maximum number of students of HGC 79(89%) and BBC 70(70%) are not aware of information literacy. While the faculties of HGC stand at the apex as 35 (78%) faculties has responded to the option of having the information literacy awareness followed by the 28(62%) faculties of CC and 26(60%) faculties of KGC. Many faculties have mentioned that by attending different workshops, orientation and refresher courses conducted by different universities they got information literacy awareness and on the other hand students got awareness through internet, teachers, and newspaper. It is evident form the analysis that most of the respondents are not aware about information literacy. This is due to the fact that the college libraries are lacking of providing information literacy programmes to the users which requires to be explored to facilitate the use of different dimensions of information literacy.

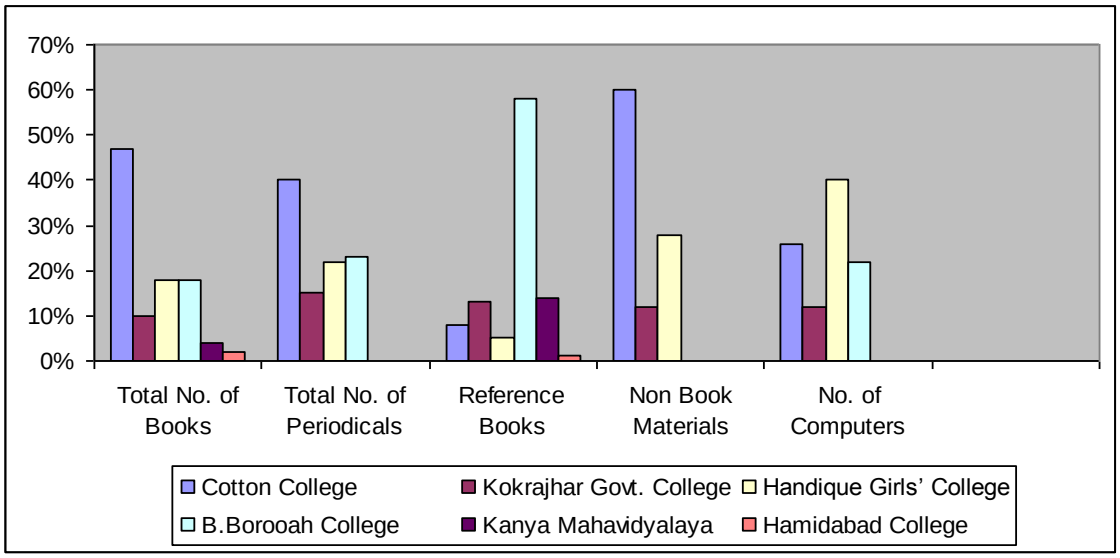
5.12 Analysis by Collection Strength

Collection refers to the resources of the library available both print and electronic form of documents. While print resources signify to various forms of documents such

as, books, journals, reports, digest, encyclopedia etc., electronic resources connotes to resources like, e-book, e-journals, e-reports etc. Libraries take many initiatives to facilitate the users in providing multiform of documents to have a wide range of choice to the readers. To render different value added new services to the users digital resources has become a part of the library collection. Further, proper and authentic, user-centric collection development depends on the collection development policy of the concerned library. Data relating to the collection development of all six college libraries have been discussed below in Table No. 5.12

Table No. 5.12: Collections of the Library

Name of the Colleges	Total No. of Books	Total No. of Periodicals	Reference Books	Non Book Materials	No. of Computers	Classification	Cataloguing	Other
CC	116991 (47%)	50 (40%)	2786 (8%)	300 (60%)	13 (26%)	DDC 22nd ed.	AACR-II	E-books, CD& DVD, E-journals,
KGC	26000 (10%)	19 (15%)	4500 (13%)	59 (12%)	6 (12%)	DDC 19th ed.	AACR-II	--
HGC	44810 (18%)	28 (22%)	1840 (5%)	143 (28%)	20 (40%)	DDC 22nd ed.	SOUL 2.0(MARC 21)	Photocopy machine, Barcode reader, barcode printer, scanner
BBC	45700 (18%)	29 (23%)	20000 (58%)	00	11 (22%)	DDC 23rd ed.	AACR-II	Atlas, photocopy machine, printer
KM	9000 (4%)	00	5000 (14%)	00	00	DDC 23rd ed.	00	00
HC	5300 (2%)	00	500 (1%)	00	00	DDC 21st ed.	00	00
Total	**247801**	**126**	**34626**	**502**	**50**	---	------	--------



Graph No. 5.12: Collections of the Library

Analysis of the Table 5.12 reflects regard to the collection development of books, CC constitute the highest i.e. 116991 (47%) out of the total number of books 247801 of all the six colleges under study followed by 44810 and 45700 both constituting 18% each in HGC and BBC. However KGC is having collection strength to the tune of 26000 (10%) of the total collections of all the colleges and thus, while CC stands at the apex both HGC and BBC are second and KGC remains at the third position.

Further with regard to the total collections of periodical covered under study, it is very discouraging to note that a total number of 126 periodicals are being subscribed by all the college libraries. However while making an analysis of periodicals subscribed by college libraries it could revealed that out of a total number of 126 periodicals CC subscribes the highest i.e 50 (40%) followed by 29(23%) by BBC and 28 (22%) by HGC and thus keep first, second and third position respectively. Likewise with regard to the reference book it is interesting to note that out of a total number 34626 reference books 20000 reference books are the total collections by BBC which constitute 58% followed by 5000 (14%) by KM and 4500 (13%) by KGC. Again while making an analysis of procurement of non-book materials by all college libraries under study it could be deduce that out of 502, 300(60%) are the collections by CC followed by 143 (28%) and 59 (12%) by HGC and KGC respectively.

While studying the number of computers available in all college libraries it could be revealed that there are altogether 50 computers which seem to be discouraging.

However, HGC is having 20 (40%) followed by CC 13(26%) computers and BBC 11 (22%) computers out of a total number of 50 computers and hence the college libraries under discussion keep first, second and third position respectively.
The overall analysis reflects that the college libraries mostly prefer to procure books and reference books. Procurement of journals in the college libraries under study has been given less attention due to the financial constraints

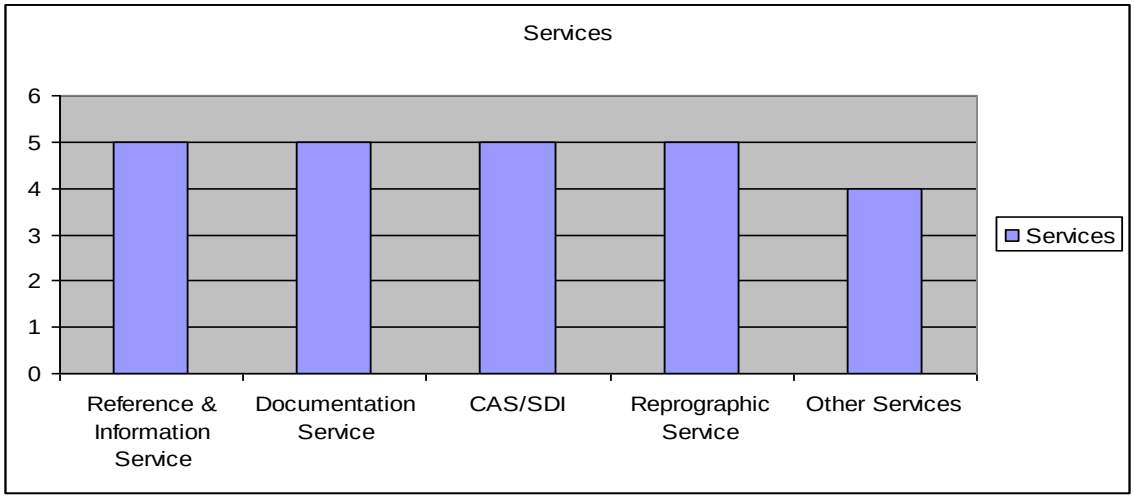
It is interesting to note that inspite of the financial crunch four college libraries have procured computers for various purposes.

5.13 Services Rendered by the College Libraries

Services are an integral part of the library function. Basically library services are meant for the users and the society as a whole. The library is recognized by its services. Data relating to the various services provided by all six college libraries under study have been grouped into five major components and the information of the respective library with regard to the library services have been obtained by the scholar which has been figured in the Table No. 5.13.

Table No. 5.13: Services of the Library

Name of the Colleges	Reference & Information Service	Documentation Service	CAS/SDI	Repro-graphic Service	Other Services
CC	Yes	Yes	Yes	Yes	OPAC
KGC	Yes	Yes	Yes	Yes	Internet, OPAC, Advance career information.
HGC	Yes	No	Yes	Yes	Internet, OPAC, N-LIST, Automated Circulation etc.
BBC	Yes	Yes	Yes	Yes	Internet, OPAC
KM	Yes	Yes	Yes	Yes	------
HC	No	Yes	No	No	-----



Graph No. 5.13: Services of the Library

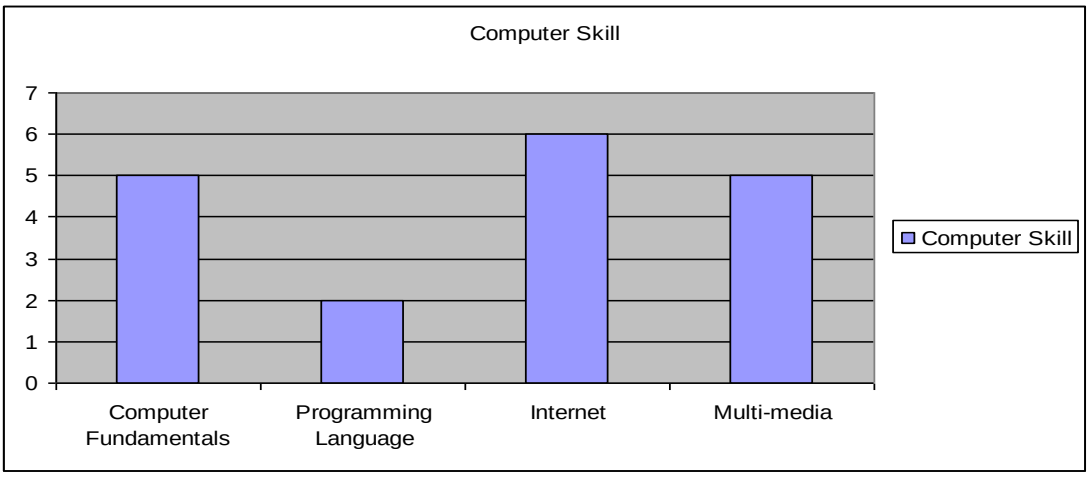
It is interesting to note that except one college i.e. HC all the five college libraries provides reference and information services. While HGC does not provide the documentation services, rest all five college libraries provides the same service. Again with regard to CAS/SDI and reprographic services, while HC does not provide the service rest all the five college libraries provide the above services. As a whole it is quite encouraging to note that all the college libraries under discussion maintain a balance at least providing various services to its reader.

5.14 Computer Skills of the Librarians

Computer skill is one of the important parameters to provide effective services to the users in an automated environment. It is also equally requires to process the information and making use of library resources effectively. As it is one of the important areas of information literacy it is essential to get acquainted with operations for handling information and dissemination. Data relating to this component obtained through questionnaire of all college libraries and submitted by the librarian of the respective college libraries are placed below in Table No. 5.14

Table No. 5.14: Computer Skills

Name of the College	Computer Fundamentals	Programming Language	Internet	Multi-media	Frequency of Access to Databases
CC	Yes	No	Yes	Yes	Daily
KGC	Yes	No	Yes	Yes	Daily
HGC	Yes	Yes	Yes	Yes	Daily
BBC	Yes	No	Yes	Yes	Daily
KM	Yes	Yes	Yes	Yes	Twice a Week
HC	No	No	Yes	No	Rarely



Graph No.5.14: Computer Skills

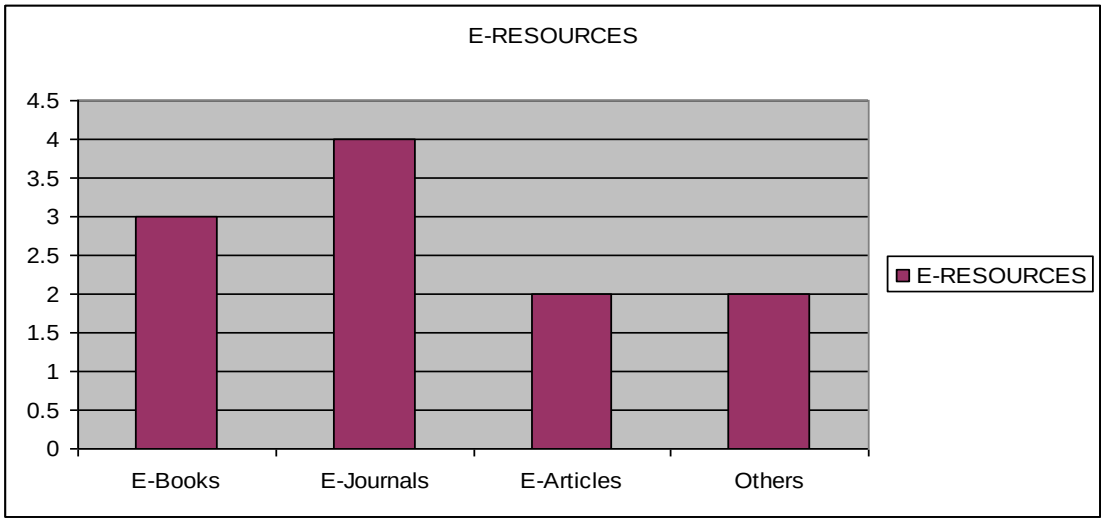
Analysis of the above Table reflects that a computer fundamental which is one of the components of questionnaire are essentially known to all five college librarian except one college i.e. HC. However with regard to programming languages placed in the table visualizes that only two college librarians i.e. HGC and KM are acquainted with the same while four college librarians are not conversant with this. It is interesting to note that while internet browsing are known to all six college librarians, the multimedia operations also equally stand in the same footing except one college librarian i.e. HC is not aware of this. The scholar while making analysis to the frequency of access to different databases could observe that four college librarians access regularly while librarian of KM access twice a week, the librarian of HC access the database rarely. It could be observed from the analysis that more or less the librarians are quite aware of the various ICT operations which is an encouraging step.

5.15 E-Resources Available in the College Libraries

ICT has pragmatic value in transforming the educational scenario both in national and international. The college educations are no exception to it. Similarly the adaptability of ICT in library services equally altered the situation. The traditional collections in the library are insufficient to meet the varied requirements of the users especially the faculty due to multidisciplinary research alternatively leading thereby, the libraries to acquire electronic resources. E-resources add a substantial value in promoting education and research. The scholar has categorized the e-resources into three broad groups such as e-books, e-journals, e-articles. Data relating to these components are placed below in Table No. 5.15

Table No. 5.15: E-Resources

Name of the College	E-Books	E-Journals	E-Articles	Others
CC	Yes	Yes	No	Provided under N-LIST, INFLIBNET
KGC	No	Yes	No	-------
HGC	Yes	Yes	Yes	Provided under N-LIST, INFLIBNET CD-ROMs/DVD
BBC	Yes	Yes	Yes	Provided under N-LIST, INFLIBNET
KM	No	No	No	-------
HC	No	No	No	-------



Graph No. 5.15: E-Resources

Analysis reflects that out of six colleges, three college libraries i.e. 50% take the option for providing e-books while e-journals services are being provided by four college libraries i.e. CC, KGC, HGC and BBC constituting thereby 67%. Two college libraries, KM and HC, i.e. 33% have not yet commenced providing e-journal services to its users. This is certainly not due to non-conversant of the librarian with e-journal rather due to the inadequate infrastructure the two libraries as discussed are not able to extend the e-journal services. Again while e-article services are being provided by two college libraries i.e. HGC and BBC which constitute 33%. Four college libraries i.e. 67% do not provide the e-article services to their users. As a whole the analysis reflects that more or less the professionals are aware of the technology and various e-resources but due to infrastructure problem beyond their control they are not able to provide the satisfactory e-resources services. It is further interesting to view that out of six college libraries CC, HGC and BBC provides e-resource services through N-LIST programme of INFLIBNET.

5.16 Training Programmes Organized in the College Libraries

Periodical training programme conducted by the library accelerate the use of library resources. This is essential in a technology based library services. Library adopts multiple technologies for acquisition of knowledge, organization of resources, and dissemination of services etc. with the help of technology. Therefore the readers require an environment to make use of the resources. Consequently the library organizes training programmes, orientation programmes, workshops etc. to abreast

with the emerging technology. However the training programmes can not be confined to technology only rather can be extended for use of bibliographic resources etc. Data relating to these facets obtained through the questionnaire of all six college libraries are placed below in Table No. 5.16 for analysis.

Table No. 5.16: Training Programmes Organized in the Library

Name of the Colleges	Use of Biblio-graphic Resou-rces	Inter-net Tools/ Search Strate-gies	Library Manag-ement Software Packages	Handling, Preservation, Conservation of Bk./N.Bk. Materials	No Partici-pation in any such Training	Others
CC	------	-----	------	--------	Yes	-------
KGC	-----	Yes	-------	Yes	-------	-------
HGC	------	----	Yes	Yes	------	Building Digital Library
BBC	----	----	Yes	-----	------	Computer Practical Classes for MLISc. Students of IGNOU
KM	-----	-----	-----	------	Yes	------
HC	-----	-----	-----	------	Yes	------

The Table visualizes that none of the college libraries impart any training to its user for use of bibliographic resources while one of the six college libraries i.e. KGC covered under study provides training programme on internet tools/search strategies to the users. Moreover it is interesting to note that while the training programme on library management software packages are being provided by only two college libraries i.e. KGC and HGC, handling preservation, conservation are given by two college libraries i.e. KGC and HGC. Further the Table also reflects that three college libraries i.e. CC, KM and HC have not conducted any such training programmes so far. It could be analyzed that the two college libraries i.e. HGC and BBC sometime provides programmes on building digital library and render computer practical classes for MLISc. students of IGNOU respectively.

The overall analysis reflects that training programme which is mandatory component of library require to be provided to users including library staff. But due to reasons beyond the control of the librarian such as finance, inadequate professional strength, trained supporting staff, etc. the college libraries under discussion are unable to conduct the training programme. The scholar while interacting with the respective college librarians ascertain that the college libraries are intended to provide such training in future to make use of effective library resources in a technology based environment.

5.17 Participation in Different Training Programmes by the Librarians

Professional capabilities are augmented through various discussions, seminars, workshops, training programmes, etc are an integral part of the library. It not only enhances the personal capability of the library professional but also excels the skill and competency to handle the both traditional and electronic resources. Many national and international bodies including various organization conducts such programmes for the librarians so as to meet the challenging requirements of users in meeting their information requirement. This has become essential in view of the changing information seeking behavior of the users. The relevant data obtained through the questionnaire is placed in Table No. 5.17

Table No. 5.17: Participation in Different Training Programmes

Name of the Colleges	Regularly Attends Workshop/Seminar/Orientation /Refresher Courses	Trained Library Staff
CC	Yes	Yes
KGC	Yes	No
HGC	Yes	Yes
BBC	Yes	No
KM	Yes	No
HC	No	No

Analysis of the Table reveals that five college librarians including the other professionals attend regularly the workshops, seminars, refresher courses etc. to excel the professional skill for implementation in the libraries. However one college librarian does not prefer to attend such programmes which affect the library services. Moreover the analysis shows that two college libraries i.e. CC and HGC i.e. 33% are

having the trained library staff whereas four college libraries i.e. 67% do not have trained library staff. It could be observed from the analysis that adequate measures requires to be undertaken for all the college covered under study to develop the professional strength so as to provide library services for a sustainable teaching and research.

5.18 Problems and Prospects in Implementation of Information Literacy

Information literacy requires instant application in the libraries to excel the services both traditional and electronic. Information literacy enhances the quality of services because of the acquired skill/competency and confidence by the librarians. The scholar obtained the views of the librarians regarding the implementation of information literacy in respective college library. All the concerned Librarians under study are interested to implement Information Literacy in their respective libraries for the greater benefits of the users/clientele in this digital era. As opined by the librarians of the colleges under study, they encounter certain problems beyond their control to implement. The prospects pointed out by the librarians are discussed below:

- Librarian of the CC appraised about the publication of 'Student Guide' and suggested for innovative planning for bringing out other publication of the library to make users aware in using library resources.
- KGC is preparing infrastructure to update and planning towards modern library along with traditional system i.e. from screen touch to Board Notice. Library Orientation is given to the newly enrolled students and further stated that for IL trained staffs and teamwork are necessary in the library.
- In HGC orientation programmes, demonstration etc are initiated for both using OPAC and N-LIST of INFLIBNET. Further detail demonstration is given to the faculties and students in using N-LIST. He stresses that users should be made interested towards the use of e-resources and the different ways to access these resources. In the college level, if the user can access N–LIST, then it's the first step towards information literacy.
- BBC librarian has given stress on digitization in future and RFID setup in the library. No orientation programme is organized for the students. According to the librarian, for IL trained library professionals are required and for this a

regional centre for advanced study for library professional may be established to guide and training.

- KM librarian is planning to organize orientation classes for the users to make them aware about different information resources.
- HC librarian highlights the different problems faced by the library. Due to insufficient number of books the library is unable to full fill the demands of the students. Besides, computerization of library is a big question as there is an electricity problem. Further the librarian points out that the library is not getting any grants from the Government for its development.

5.19 Findings

The scholar has taken the sample of faculties and students as the users of the library. Categories of users differ in their level and use of information; therefore they can not be compared to each other. For the convenience of assessing the different aspects of information literacy among the users major findings have been listed below:

5.19.1 Faculty

- It is quite notable that majority of the faculties possess knowledge of internet (70%) followed by computer fundamentals (69%) while only 8% have the knowledge of programming language.

- To access information majority of the faculties use internet daily (44%).

- For updating knowledge (88%) majority of the faculties use information and 72% for preparing class lectures/anticipated topic.

- Maximum numbers of faculties (81%) seek information by discussing with colleagues and through Internet (72%).

- Majority of the faculties (44%) have responded that the vital problem in seeking information is, most of the time material is not available and information is scattered in too many sources. Lack of time (37%) is also the one of the factors.

- It is evident that majority of the faculties use information through personal experience (88%) followed by library instruction (26%).

- Search engines (100%) are the most prominent search tool used by the faculties followed by 30% use of both online bibliographic databases and web portals. And among the different search engines the most frequently used search engine is Google (97%) followed by Yahoo (48%).

- With regard to use of digital resources majority of faculties access e-journals (61%), followed by e-articles (54%) and 51% e-books.

- In the context of awareness about the information literacy 65% faculties have responded as Yes and 35% as No.

5.19.2 Students

- 61% students have responded stating knowledge of internet followed by the computer fundamentals (57%).

- It is noteworthy that even though the students have internet skill, they use internet rarely (37%) to access information in this age of information technology and only 18% equally uses internet twice and once a week.

- 67% students indicated that they use information for updating knowledge and preparing for anticipated topic in the class (37%). Regarding the information seeking habits, 50% students discussed with their friends followed by 46% consult a knowledgeable person in the field.

- Majority of the students admits that the major hurdle in search of information is, in most of the time material is not available (42%) and the lack of time (37%). 3% responded that library staffs are unwilling to provide service.

- 74% students responded that through personal experience they have used different

information sources and 31% are benefited by the library instruction. Whereas, 16% got online help and 3% got assistance from friends, by reading paper/magazines, internet, book store, etc.

☞ Regarding the use of internet search tools, search engines (98%) are highly browsed for the information followed by web portals (18%) and subject gateways (11%). Interestingly Google (93%) is preferred by the maximum students among the different search engines available followed by 22% Yahoo.

☞ Different digital resources are available now a days and majority of students access e-books (52%) followed by databases (17%) and e-articles (16%).

☞ Last but not the least only 30 % have responded that they are aware of information literacy while 70% are ignorant about the same.

5.19.3 Library/Librarian

❄ Collections of the library are the backbone to provide services to the users. CC has the highest numbers of collection (116991), whereas the BBC has highest number of reference books (20000). Majority of the libraries have scientifically processed the collections.

❄ ICT infrastructure is prerequisite to provide the new value added services. Majority of the college libraries are fully computerized and connected to the network and provide internet and OPAC services. Moreover most of the colleges have e-journals through NLIST of INFLIBNET

❄ Librarians of all the colleges under study have the requisite qualification. Other than the librarian most of the staffs are non-professional. CC has the highest number of library staffs (12) and users (4984) followed by HGC (3409).

❄ Majority of the librarians have the computer skills and to update in different advances prevailing in the profession they participates in different training

programmes but to educate the users there is no effective training programme in the library.

5.20 Testing of Hypotheses

Based on the data analysis, interpretation and findings of the study, the following tentative assumptions were tested as follows:

H_1: Inadequate number of library staff and ICT infrastructure has serious impact on information literacy.

The scholar after undertaking the research problem has gone through varied experiences while visiting the college libraries under study. Many of the college libraries are either having core staff or managed by single professional staff. Besides these libraries do not have adequate hardware, software, internet and library website support to allow users to access internet and e-resources. As a result of which the users and staff could not be able to improve their information handling capacity or ability. Therefore, the tentative assumption drawn by the scholar is valid and accepted.

H_2: Lack of information literacy awareness by both users and authority result into non- implementation of information literacy programmes in colleges.

During the study it was also noticed that majority of users and staff although were computer literate but not having opportunity to access internet, e-resources and information searching ability in order to fulfill the very objective of information literacy. The library authority which includes Principal, Vice Principal also was not aware of importance of information literacy for both users and library staff. This was a serious concern of the research scholar during the study. Therefore the hypothesis drawn is tested and accepted.

H_3: Absence of national and state level policy on information literacy hinders promotion and propagation of information literacy in enhancing professional competency of both users and staff.

It is a fact that unlike other developed countries, so far the Government of India either at national or state level has not formulated a policy or forum to promote or propagate information literacy for efficient handling of information and create information culture among the public at large. This is more so for libraries in general and in college libraries in particular in India. Therefore considering the facts stated above, the tentative assumption drawn by the scholar proved to be valid and accepted.

5.21 Conclusion

It is quite evident that most of the users have the computer skills and use internet for searching information mainly for updating their knowledge by enduring different problems in search of the required information. It is apparent that personal experience is the base for use of different sources of information and it seems that users do not rely on the library instruction and very rarely seeks librarian/library staff for assistance. Some of the libraries are providing library orientation but not delivering any information literacy programme. The libraries which are not yet started any type of such programme should adopt it for greater benefit of the academic community. In this ICT driven society every user is aware of search engines but they are not used to other search tools and the legalities in using it. Therefore, to make the users aware about different aspects of information literacy, academic libraries are the best platform to provide such kind of programme by adopting some standards/models. In order to make the IL programme successful among the user community, the scholar has designed a model for the college libraries of Lower Assam which may be helpful for the academic community.

In the next chapter based on the analysis and findings, some suggestions are put forward for the greater benefit of the users and the nation as a whole. Moreover, some information literacy models and information literacy curriculum have also been designed and suggested for the college libraries in Assam.

CHAPTER- 6

SUGGESTIONS AND CONCLUSION

6.1 Suggestions

The emergence and growth of knowledge society has compelled the library users and public at large to develop their information handling capacity through computer literacy, electronic literacy, digital literacy, and internet literacy. Libraries in general and academic libraries in particular have more user population consisting of students, teachers and research scholars. College libraries being part of higher education the students and teachers need to be information literate so as to develop their career in building a strong foundation of higher education and research.

The research problem undertaken by the scholar addressed a number of challenging problems and issues with regard to information literacy in college libraries in Lower Assam. Based on the data analysis and findings the researcher has made the following suggestions for an integrated development of information literacy in college libraries under study.

At the Institutional Level

- ☞ As the library is the part of the educational institution, it can not function independently. To impart information literacy in the college level, the higher authority/parent organization should be convinced by the librarian/library professionals about the need and benefits of ILP to the user community and to optimize the use of the library resources.
- ☞ In most of the Colleges, lack of adequate staffs in general and trained staffs in particular has been revealed. Therefore additional staffs with professional and technical knowledge is sought to guide and train the students in this fast moving world of information.
- ☞ Along with the traditional collections, priority should also be given to e-resources, and raise the awareness about its access, use and the related aspects.
- ☞ Specific time should be allocated for the ILP (other than the course in the curriculum) and it should be compulsory for the students otherwise levied penalty.
- ☞ Adequate number of resources/materials needed for the purpose of ILP should be made available so that hands-on practice/training can be provided, as theory and practice must go hand in hand.

- ☞ Staff engaged for imparting ILP should be made free from other responsibilities or duties of the library as and when needed.
- ☞ In college level, introducing information literacy course through the regular curriculum is quite unimaginable as this approach should be imposed from the concerned university. In disposal of the college authority, it can be delivered as a short training programme meeting the academic informational need of the users.
- ☞ Most of the faculties use printed journals therefore the use of e-journals provided through N-LIST should be encouraged.
- ☞ Designing an information literacy programmes should not be confined to the librarian/library professionals only. Rather, participation of faculties and media experts is also sought to design, suggest and explore resources pertaining to their respective subjects for more effective programmes.
- ☞ Before implementing information literacy in a curriculum as a policy, college authority can organize training programmes to serve the purpose by allocating separate fund by inviting guest professionals, and publisher/agents/aggregators.
- ☞ Professionals as well as the users should be conscious about the copyright/intellectual property right and evaluation of electronic information available in various domains. Moreover, they should also be made aware of different consortia and its benefit in the academic pursuit.

At the Governmental Level

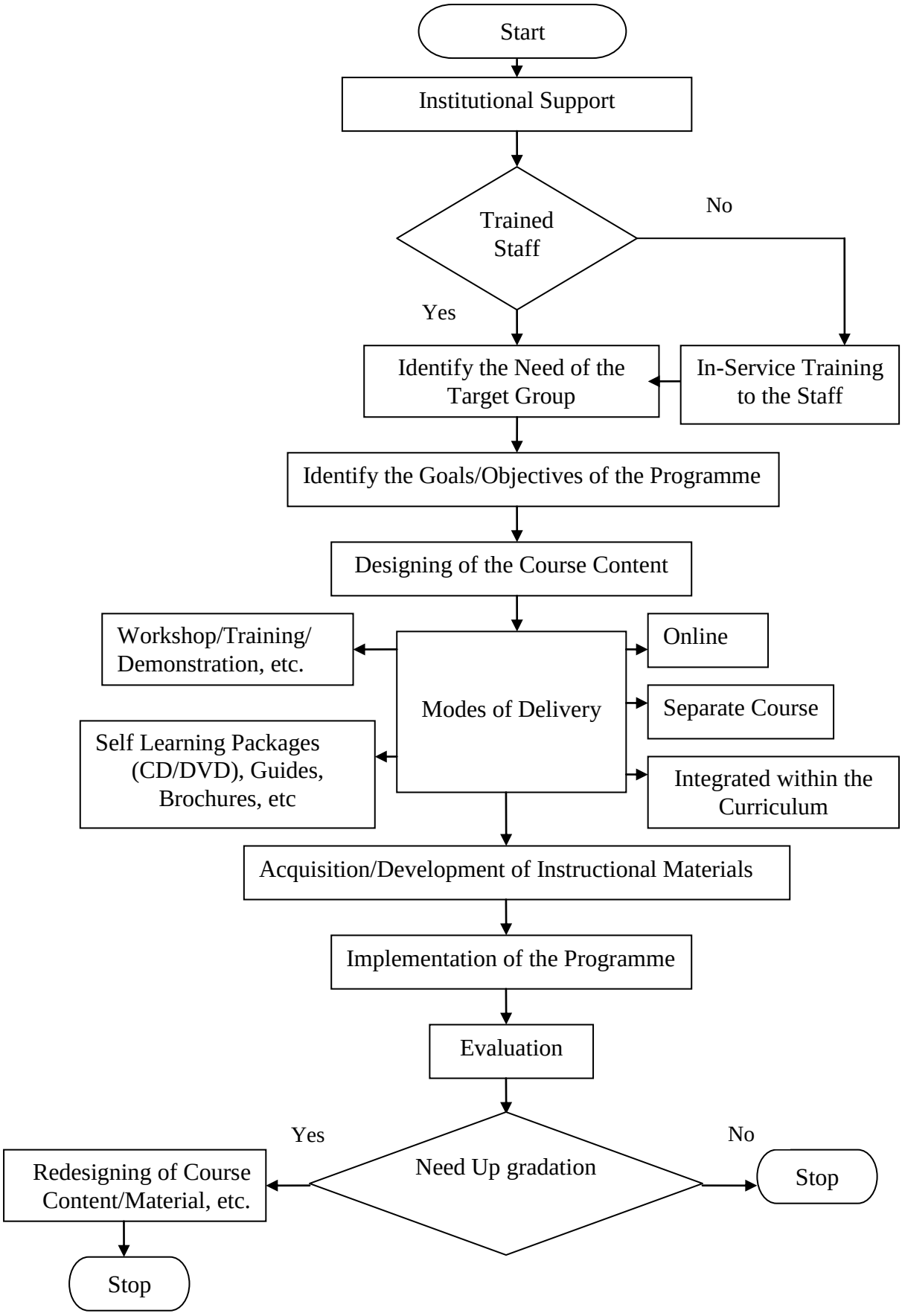
- ☞ World is moving towards global knowledge economy and to function effectively, every individual needs to be information literate, and this can be only possible or achieved if the government include information literacy in its national policies as a panacea to combat the rapid technological changes, proliferation of information sources and information overload.
- ☞ In college level, library professionals are mainly concerned with information literacy programmes (short term courses, etc.). Through consensus in the higher level it should be included in a course curriculum.
- ☞ University Grants Commission plays an important role and is responsible for the overall development of the higher education in our country. Therefore, the

commission can make an effort to introduce information literacy in higher education though some provisions or acts.

- ☞To design and develop plausible information literacy standard/framework/guidelines, there must be a brainstorming and collaborative efforts encompassing library professionals, academics, professional associations and media experts so that the product can be proposed to the competent authority.
- ☞ A group or forum should be formed in national level under the Ministry of Government of India to take initiative in national level and state level to check the information literacy programmes and activities in the respective states.
- ☞ Government of India has initiated many e-governance programmes to give G2C (Government to Citizen) services, likewise there should also be a portal for information literacy to guide and make aware about different aspects and developments in the domain of information literacy.

6.2 Planning for Information Literacy in College Libraries of Lower Assam

To start any programme, planning is prerequisite. Therefore to guide the professionals for implementing information literacy in the academic libraries the following models have been suggested:


Start
Institutional Support
Trained Staff
No
Yes
In-Service Training to the Staff
Identify the Need of the Target Group
Identify the Goals/Objectives of the Programme
Designing of the Course Content
Workshop/Training/ Demonstration, etc.
Online
Modes of Delivery
Separate Course
Self Learning Packages (CD/DVD), Guides, Brochures, etc
Integrated within the Curriculum
Acquisition/Development of Instructional Materials
Implementation of the Programme
Evaluation
Yes
Need Up gradation
No
Redesigning of Course Content/Material, etc.
Stop
Stop

To thrive in this information era, having just a basic knowledge is not an end. The real survival factor is being abreast with the latest information and happenings around the world. Today's student is the tomorrow's responsible citizen provided if they are well nurtured and zeal to be a lifelong learner. And this particular spirit is well maintained through information literacy only. It is a self-motivated and self- directed learning process. In the academic environment, information literacy is a recent concept. Before implementing it in the colleges for the greater benefits of the users, librarian should be the torch bearer in this endeavor which may involve various steps and quite interrelated to each other. To plan an information literacy programme in an academic library, feasibility study is prerequisite which are explained below:

- **Institutional Support**: Like any other activities in the college, the concerned authority does not take much interest in the library activities. Therefore to draw attention and support of the authority, the librarian has to convince them in all possible ways.
- **Trained Staff**: Human resource is one of the strong pillars of any institution, which may soar up the institution to an unmatched excellence. To lead the information literacy programme, having a trained staff in the latest technology is a must. As most of the colleges do not have the trained staff in the library, at least one staff depending on his/her qualification should be provided "training for the trainers" and dedicated for the purpose by releasing from other duties/responsibilities.
- **Identify the Need of the Target Group:** As we are concerned to the academic libraries, the main target groups are students and faculties. According to the category of users their needs also differs. Therefore keeping in view the need of the target group consideration should be made in framing the goals/objectives of the programme.
- **Identify the Goals/Objectives of the Programme:** As the time pass on, the need also changes accordingly. Today's latest happening may be obsolete tomorrow. Therefore, depending on the current need of the users goals/objectives of the programme should be considered.
- **Designing of the course content:** Course content is one of the important aspects of the information literacy programmes. Regarding this, the scholar is concern with the off line mode. Users generally hail from different

backgrounds having different attributes and learning experiences. It should be need based encompassing the resources, facilities of the library and quite understandable. Based on performance indicators provided in different information literacy models by different groups, one can be adopted as a framework in designing the content of the information literacy programme. While designing the content of the programme, it is quite advisable to consult/include subject experts to make the programme plausible. Information literacy programmes can not be successful in a real sense without the hands-on practice to the users. Therefore, there should be an equal priority to both the theory and practices with different multimedia aids. But as far as Online mode is concerned, for the development of various modules along with library professionals, it demands different experts- subject experts, programmer, graphic designer, content developer, etc. In other words, it is a team work and a joint venture.

- **Modes of delivery:** It is interrelated to the previous step. After designing a suitable course, based on the feasibility study any one of the mode can be taken for the delivery of the course i.e. Online; Special Course: short term courses etc.; Integrated within the Curriculum; Self Learning Packages (CD/DVD), Guides, Brochures; Workshop/Training/ Demonstration, etc.,
- **Acquisition/Development of Instructional Materials**: After deciding on the mode of delivery, the required material for the instruction is either acquired or developed jointly in companion of different experts to serve the purpose.
- **Implementation of the Programme:** After the designing of course content and the availability of appropriate materials for the delivery of the instructional programme, eventually the course/programme is implemented. Indeed successful implementation of the programme largely depends on the way the authority consents over the importance of the course/programme.
- **Evaluation:** To assess/determine the effectiveness of any programme, evaluation of the same is of utmost importance. Depending on the mode of delivery of the programme, different ways/methods of evaluation can be employed i.e. based on the suggestions and feedbacks received from the users/participants varied evaluation model can be used.
- **Need Up gradation:** After the assessment of the programme based on the different findings, if the need persist to accommodate the various loopholes in

the programme, the same is updated or reviewed. It is a continuous process to make the programme current and popular among the participants/users.

Once the programme gets started, it does not require to undergo the second step again, but may be considered in some exceptional circumstances. While the other succeeding steps needs to be reviewed from time to time.

6.2.1 Course Content

The course content given below can be adopted in any information literacy training programmes either in short term courses or as a curriculum. Depending upon the level of users some of the sub contents may be delimited.

- Data, Information, Knowledge and Wisdom.
  Information-Definition, Characteristics, Need.
  Role of Information
  Types of Information, Different Sources of Information-primary, secondary and Tertiary
- Introduction to Library Facilities and Services
- Information Technology-Definition, Need/Use of Information Technology, Components, Impact.
  Computer-Components- Hardware, Software (word processing, spread sheet etc.), Storage Devices
  Network-Library Network (JANET, OCLC, etc), Library Consortia (INDEST, INFLIBNET, CSIR, FORSA), Information Systems-Components (Libraries, Documentation Centers, Data Banks, Referral House, Clearing House, etc)
  Internet-Components, Different Services (email, Chat, Telnet, Video Conferencing, etc.), Downloading, Copying, Printing etc.
- Search Engines- Use, Importance and Techniques (search strategies- keyword, phrase search, wild card/truncation, Boolean search, etc)
  Different Information Retrieval Tools- Subject Gateways, Portals, Online Databases, etc.

Use of Different Digital Resources-OPAC, Web-OPAC, CD-ROMs, E-Journals, E-Books, Open Sources, etc.

- Effective and Ethical Use of Information

  Copyright

  Intellectual Property Right

  Plagiarism

  Understanding and Providing Citations Using Various Styles of References- MLA, APA, Harvard, etc.

- Evaluation of Information- Need, Different Ways- Authoritativeness, Authenticity, Currency, Usability, Reliability, etc.

6.2.2 Information Literacy Model for Library Staff

Ability

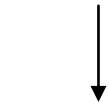
This is the information handling capacity of library staff to create use and store information for users at large (for example creating local databases, institutional and knowledge repositories etc.)

Access

Information/Database so created need to be accessed instantly with proper security. Remote and unlimited accesss (any time, anywhere and any format) allow users to make use of information resources according to their convenience (for example access to library website, library e-resources, library consortia, web OPAC, etc.

Content

Content creation in electronic environment and uploading the same in the library website. Library staff should be acquainted with various formats, standards, protocols including legal issues and to make it more user friendly for uploading and down loading (for example OCR technology, metadata creation, interoperability, MARC-21 and Dublin Core etc.)



Evaluation

Library staff should evaluate usefulness of electronic information resources through usage of particular journals, maintaining user statistics etc.

6.2.3 Information Literacy Model for Library Users

Computer Literate

Ability or capacity to handle hardware and software, creating and accessing files, data security, uploading and downloading stored files etc.

Electronic Literate

Computer literacy will lead to use of electronic databases like CD-ROM, CD-DVD, and other information resources available in electronic format.

Internet Literate

A computer and electronic literate shall prompt the users to access and use internet and its vast information resources.

Digital Literate

A regular user of internet could access digital resources available in various websites, accessing e-resources like UGC-Infonet digital library consortia or N-LIST.

6.3 Scope for Further Research

The promotion and propagation of information literacy in the developed countries have taken a sea change by the irrespective of libraries. This concept is just picking up in the developing country like India. Since India is visualizing a knowledge society by 2020, the government has recognized the value and importance of information and knowledge. The National Knowledge Commission (NKC) also emphasized the

development of libraries to serve as "gateway to knowledge". Therefore it is in this context information literacy plays an important role in accessing, storing, retrieving and handling information available through different sources. Equally important is to develop the ability or capability of users at large and the library staff associated with.

The trends and developments in information literacy and its application in the libraries in general and college libraries in particular have created serious concern to explore different areas of research avenues for its effective and efficient implementation. Few of the emerging thrust areas of research which can be undertaken by the scholars of Library and Information Science are as follows:

- Identifying parameters and guidelines for enhancing the information handling capacity of different categories of library professional "academic, public and special."
- Impact of information literacy on social, educational and economic development.
- Information Literacy for community development.
- Assessment and evaluation of information literacy on library staff and library users.
- Information competence development of Undergraduate and Postgraduate students in education process through ICT means.
- Organizational and pedagogical dimensions in providing information literacy instructions to the library users.
- Design and development of information literacy instructions for library staff and library users.

6.4 Conclusion

Use of Information Technology (IT) i.e. application of computers and other technologies in the libraries has eased the different house keeping operations of the library. Likewise the application of ICT in libraries has dramatically changed the services rendered by the libraries. It plays a pivotal role in harnessing emerging technologies and provides value added services to the users. Application of ICT is

also instrumental to design and develop online information system, website development, and virtual library.

To capitalize the varied services and its effective use, users must understand ICT – ability to select appropriate techniques and technology, evaluation of the retrieved information, its use and understanding /obeying of one important aspect in the use of information in this information age i.e. IPR/copyright. On the other hand library professionals must develop their ICT skills and should play a vital role in educating the users.

Many developed countries have embedded information literacy in their respective national policies. In the international scenario phenomenal advances are taking place in academic field, promoting IL through library acts and some are introducing it in the institutional levels.

It is evident from the present study that information literacy for college libraries can not be developed in isolation. It requires a holistic approach to integrate all the libraries under the library system which includes public, academic and special libraries. The government either at state or central level should formulate an appropriate plan or policy to recognize the value and importance of information literacy in libraries. It is equally important that the information literacy should spread over library users, library staff, attitude of the library authorities and supporting ICT infrastructure including Internet. Appropriate competency development models, guidelines, strategies need to be framed and adopted at state and national level which has a great impact on societal development and nation building.

It is in this context that the colleges which figure the maximum number as compared to universities in India should address the issues and challenges for development of information literacy in college libraries.

APPENDICES

APPENDIX-1

LISTS OF COLLEGES IN LOWER ASSAM

Government Colleges under Gauhati University

Name of the College	District
Cotton College, Guwahati	Kamrup
Kokrajhar College, Kokrajhar	Kokrajhar

Provincialised Colleges under Gauhati University

Name of the College	District
Abhayapuri College, Abhayapuri	Bongaigaon
Arya Vidyapeeth College, Guwahati.	Kamrup
B.Borooah College, Guwahati.	Kamrup
B.B.K College, Nagaon	Barpeta
B.H.College, Howly	Barpeta
B.H.B College, Sarupeta	Barpeta
B.P.Chaliha College, Nagarbera.	Kamrup
Bagadhar Brahma Kishan College, Jalahghat	Baksa
Bajali College, Pathsala	Barpeta
Bapujee College, Sarthebari	Barpeta
Barama College, Barama	Baksa
Barbhag College, Kalag	Nalbari
Barnagar College, Sorbhog	Barpeta
Barpeta Girls' College, Barpeta	Barpeta
Bhawanipur Anchalik College, Bhawanipur	Barpeta
Bholanath College, Dhubri	Dhubri
Bijni College, Bijni	Chirang
Bikali College, Dhupdhara	Goalpara
Bilasipara College, Bilasipara	Dhubri
Birjhora Mahavidyalaya, Bongaigaon	Bongaigaon
Bongaigaon College, Bongaigaon	Bongaigaon
Chhaygaon College, Chhaygaon	Kamrup
Chilarai College, Golakganj	Goalpara

Damdama College, Kulhati.	Kamrup
Dakshin Kamrup College, Mirza.	Kamrup
Dakshin Kamrup Girls' College, Mirza	Kamrup
Dimoria College, Khetri	Kamrup
Dispur College, Guwahati	Kamrup
Dudhnoi College, Dudhnoi	Goalpara
Goalpara College, Goalpara	Goalpara
Goreswar College, Goreswar	Baksa
Gossaigaon College, Gossaigaon	Kokrajhar
Guwahati College, Guwahati	Kamrup
Gauhati Commerce College, Guwahati.	Kamrup
Habraghat College, Krishnai	Goalpara
Handique Girls' College, Guwahati.	Kamrup
Janata College, Sarfunguri	Kokrajhar
Jawaharlal Nehru College, Boko	Kamrup
K.C.Das Commerce College, Chatribari	Kamrup
K.R.B. Girls' College, Guwahati	Kamrup
Kamrup College, Chamata	Nalbari
Kharupetia College, Kharupetia	Darrang
Lakhipur College, Lakhipur	Goalpara
Lalit Chandra Bharali College, Maligaon	Kamrup
Madhab Choudhury College, Barpeta	Barpeta
Madhya Kamrup College, Chenga	Barpeta
Mahendra Narayan Choudhury Balika Mahavidyalaya, Nalbari	Nalbari
Mandia Anchalik College, Mandia	Barpeta
Mangaldai College, Mangaldai	Darrang
Mankachar College, Mankachar	Dhubri
Nabajyoti College, Kalgachia	Barpeta
Nalbari College, Nalbari	Nalbari
Nalbari Commerce College, Nalbari	Nalbari
Nirmal Haloi College, Patacharkuchi	Barpeta
North Gauhati College, Guwahati	Kamrup
North Kamrup College, Baghmara	Barpeta
Pandu College, Guwahati	Kamrup

Paschim Guwahati Mahavidyalaya, Dharapur	Kamrup
Pragjyotish College, Guwahati	Kamrup
Pramathesh Barua College, Gauripur	Dhubri
Pub-Kamrup College, Baihata Chariali	Kamrup
Puthimari College, Soneswar	Kamrup
Radha Govinda Baruah College, Guwahati	Kamrup
Rangia College, Rangia	Kamrup
Ratnapith College, Chapar	Dhubri
S.B.Deorah College, Ulubari	Kamrup
Sapatgram College, Sapatgram	Dhubri
Saraighat College, Changsari	Kamrup
Sipajhar College, Sipajhar	Darrang
Sonapur College, Sonapur	Kamrup
Sualkuchi Budram Madhab Satradhikar College, Sualkuchi	Kamrup
Suren Das College, Hajo	Kamrup
Tangla College, Tangla	Udalguri
Tihu College, Tihu	Nalbari
Udalguri College, Udalguri	Udalguri
West Goalpara College, Balarbhita	Goalpara

Non-Provincialised/Venture Colleges under Gauhati University

Name of the College	District
Alamganj Rangamati College, Alamganj	Dhubri
Agia College, Agia	Goalpara
Amrit Chandra Thakuria Commerce College	Kamrup
Barpeta Bongaigaon College, Langla.	Barpeta
Bamundi Mahavidyalaya, Bamundi	Kamrup
Binandi Ch. Medhi College, Ramdia	Kamrup
Beltola College, Guwahati	Kamrup
Barkhetri College, Mukalmua	Nalbari
Birjhora Kanya Mahavidyalaya, Bongaigaon	Bongaigaon
Basugaon College, Basugaon	Chirang
Bengtol College, Bengtol	Chirang

Bodofa U.N. Brahma College, Dotma	Kokrajhar
Baska College	Baksa
Bezora Anchalik College	Kamrup
Bhergaon College	Udalguri
Commerce College, Kokrajhar	Kokrajhar
Chhamaria Anchalik College, Chhamaria	Kamrup
C.K. College	Bongaigaon
Chandrapur College	Kamrup
Dharmasala College, Dharmasala	Dhubri
Deomornoi Degree College, Deomornoi	Darrang
Dhamdhama Anchalik College, Dhamdhama	Nalbari
Dolgoma Anchalik College, Dolgoma	Goalpara
Dhubri Girls' College, Dhubri	Dhubri
Dronacharyja College	Barpeta
Dakshin Nalbari Mahavidyalaya	Nalbari
Fakiragram College, Fakiragram	Kokrajhar
F.A. Ahmed College, Goraimari	Kamrup
G.L.Choudhury College, Barpeta Road	Barpeta
Gyanpeeth Degree College, Nikashi	Baksa
Girls' College, Kokrajhar	Kokrajhar
Halakura College, Mahamayahat.	Dhubri
Hatsingimari College, Dhubri.	Dhubri
Hamidabad College, Jamadarhat	Dhubri
Hatidhura College, Hatidhura	Kokrajhar
Harendra Chitra College	Barpeta
Hari Gayatri Das College	Kamrup
Indira Gandhi College, Boitamari	Bongaigaon
Jaleswar College, Tapoban	Goalpara
Janapriya College, Baniarapara	Barpeta
Jamduar College	Kokrajhar
Kanya Mahavidyalaya, Guwahati.	Kamrup
Karmashree Hiteswar Saikia College, Guwahati	Kamrup
Khoirabari College, Khoirabari	Udalguri
Kalaguru Bishnu Rabha Degree College, Orang	Udalguri

Kayakuchi College, Kayakuchi	Barpeta
Krishanaguru Mahavidyalaya	Barpeta
Khrti Dharmapur College	Nalbari
Kampeeth Degree College	Nalbari
Luitpara College, Kalairdia	Barpeta
Milanjyoti College, Itervita	Barpeta
Manabendra Sarma Girls' College, Rangia	Kamrup
Mangaldai Commerce College, Mangaldai	Darrang
Mangaldai Degree Girls' College	Darang
Mazbat College, Mazbat.	Udalguri
Manikpur Anchalik College, Manikpur	Bongaigaon
Mahatma Gandhi College, Chalantapara	Bongaigaon
Madhya Kampeeth College, Borka	Kamrup
Maushalpur College	Baksa
Mahamaya Degree College	Kokrajhar
Narangi Anchalik College, Guwahati	Kamrup
Navasakti College	Barpeta
Pub-Bongsor College, Pacharia	Kamrup
Paschim Barigog Anchalik Mahavidyalaya, Baranghati	Kamrup
Patidarrang College, Loch	Kamrup
Progati College, Agomani	Dhubri
Rajiv Gandhi Memorial College, Lengtisinga	Bongaigaon
Rampur Anchalik College, Rampur	Kamrup
R.J. Degree College	Kamrup
Salbari College, Salbari	Baksa
Srimanta Sankar Madhab Mahavidyalaya, Bhatkuchi	Barpeta
Sontali Anchalik College, Mahatoli	Kamrup
Swahid Smriti Mahavidyalaya (Degree), Belsor	Nalbari
Swami Yogananda Giri College, Shakti Ashram.	Kokrajhar
Science College, Kokrajhar.	Kokrajhar
South Salmara College, South Salmara	Dhubri
Sarvapalli Radhakrishnan Academy	Kamrup
Swahid Swarani College	Nalbari
Thamna Anchalik College	Baksa

Tamulpur College	Baksa
Uttar Kampith Mahavidyalaya, Jagara.	Nalbari
Uttar Barpeta College, Sankuchi.	Barpeta
U. N. Brahma College, Kajalgaon.	Chirang
Uttar Kamrup Adarsa Mahavidyalaya	Kamrup
Vidya Bharati College, Kendua	Kamrup
West Guwahati Commerce College	Kamrup

APPENDIX-2

QUESTIONNAIRE-I

RESEARCH TOPIC: INFORMATION LITERACY FOR COLLEGE LIBRARIES WITH
SPECIAL REFERENCE TO LOWER ASSAM: A STUDY
SUPERVISOR: PROF. PRAVAKAR RATH
RESEARCH SCHOLAR: MAYA MOYEE NARZARY, MIZORAM UNIVERSITY

PLEASE DO NOT LEAVE ANY ITEM BLANK

LIBRARIAN/LIBRARY AUTHORITY

1. Address and Year of Establishment of College _____

_____

2. Name & Year of Establishment of the Library _____

_____

3. Name of the Librarian/in-charge _____

4. Library Staff

Sl.No.	Designation	Professional Status	No. of Post	Qualification	
				Academic	Professional
1.	Librarian				
2.	Asst. Librarian				
3.	Library Asst.				
4.	Grade IV				

5. Total Number of Users of the Library

(a) Faculty _____ (b) Students _____

(c) Staff _____ (d) Others _____

6. Total Number of Collection

(a) Total no. of Books _____ (b) Total no. of Periodicals _____

(c) Reference Books _____ (d) Non-Book Materials _____

(e) No. of Computers _____ (e) Others _____

7. Opening Hours of the Library _____

8. System of Access

(a) Open ☐ b) Close ☐

9. Books are Issued? No ☐ Yes ☐

10. Whether the Library Collection is Classified? No ☐ Yes ☐
If Yes then

(a) Classification Scheme in use _____

(b) Catalogue Code adopted _____

11. Services Rendered (Tick)

(a) Reference and Information Service ☐

(b) Documentation Service ☐

(c) CAS/SDI ☐

(d) Reprographic Service ☐

(e) Any Other Services (mention) _____

12. Is the Library is fully computerized? Yes ☐ No ☐

If yes, then software in use _____

13. Does the library have the networking infrastructure?

Yes ☐ No ☐

14. Does the library have its own website?

Yes ☐ No ☐

15. Computer Skill

(a) Computer Fundamentals ☐ (b) Programming Language ☐

(c) Internet ☐ (d) Multimedia ☐ (e) All of these ☐

16. Use of Internet and Access to Online Databases

(a) Daily ☐ (b) Twice a Week ☐ (c) Once a Week ☐

(d) Once a Month ☐ (e) Rarely ☐

17. E-resources Available in the College

(a) E-books ☐ (b) E-journals ☐ (c) E-articles ☐

(d) Others please specify_____

18. Use of Different Storage Media

(a) Floppy ☐ (b) CD ☐

(c) Digital Video Disc ☐ (d) Pen Drive ☐

19. Type of Training Programmes Organized (Tick)

(a) Use of Bibliographic Resources. ☐

(b) Internet Tools/ Search Strategies. ☐

(c) Library Management Software Packages. ☐

(d) Handling, Preservation, Conservation of Books and Non-book Materials. ☐

(e) No Participation in any such Training ☐

(f) Other Please Specify _____

20. Do you attend any Workshop/Seminar/Orientation/Refresher Course Regularly?

Yes ☐ No ☐

21. Do you have Trained Staff in the Library to Provide and Interpret the Informational and Educational needs of Clientele?

Yes ☐ No ☐

22. Does your Institution have the Strategic Plan to Implement Information Literacy?

Yes ☐ No ☐

If yes then what are the Plans _____

If No then what are the Problems?

Date: Signature

APPENDIX-3

QUESTIONNAIRE-II

RESEARCH TOPIC: INFORMATION LITERACY FOR COLLEGE LIBRARIES WITH
SPECIAL REFERENCE TO LOWER ASSAM: A STUDY
SUPERVISOR: PROF. PRAVAKAR RATH
RESEARCH SCHOLAR: MAYA MOYEE NARZARY, MIZORAM UNIVERSITY

PLEASE DO NOT LEAVE ANY ITEM BLANK

FACULTY/STUDENT

NAME OF THE COLLEGE: _____

1. Name _____

2. Department_____

3. For Students.

Stream (Arts/Science/Commerce) _____TDC (1st yr. /2nd yr. /3rd yr.) _____

Gender: Male ☐ Female ☐

4. Computer Skill (Tick)

(a) Computer Fundamentals ☐

(b) Programming Language ☐

(c) Internet ☐

(d) Multimedia ☐

(e) All of these ☐

5. Use of Internet and Access to Online Databases. (Tick)

(a) Daily ☐ (b) Twice a Week ☐ (c) Once a Week ☐

(d) Once a Month ☐ (e) Rarely ☐

6. Information Seeking Habits. (Tick)

(a) Consults a Knowledgeable person in the field. ☐

(b) Discussion with Colleagues. ☐

(c) Discussion with Librarian or Reference Staff of the Library/ other Library ☐

(d) Library Catalogue. ☐

(e) Indexing Journals. ☐

(f) Abstracting Journals ☐

(g) Review of Articles ☐

(h) Internet ☐

7. Purpose of Seeking Information. **(Tick)**

(a) For Preparing Class Lectures. ☐

(b) For Updating Knowledge ☐

(c) For Writing and Presenting Paper. ☐

(d) For Doing Research Work ☐

(e) For Carrying out Projects ☐

(e) For Entertainment ☐

8. Problems in Seeking Information. (Tick)

(a) Material is not available ☐

(b) Lack of Time. ☐

(c) Information Scattered in too many Sources. ☐

(d) Information is too vast. ☐

(e) Lack of Knowledge in using the Library ☐

(f) Library Staff are Unwilling for Service ☐

(g) Other (please specify)

_____

_____

9. How you learned to use Information Resources. (Tick)

(a) Library Instruction ☐

(b) On site help for Library Staff ☐

(c) Personal Experience ☐

(d) Other (please specify) _____

10. Use of Internet Search Tools. (Tick)

(a) Search Engine. ☐

(b) Subject Gateways ☐

(c) Online Bibliographic Databases ☐

(d) Digital Library ☐

(e) Meta Search Engines ☐

(f) Web Portals ☐

11. Search Engines Frequently Used. (Tick)

(a) Google ☐

(b) Rediff ☐

(c) Yahoo ☐

(d) Any other please specify _____

12. Use of Digital Resources. (Tick)

(a) E-books ☐

(b) E-journals ☐

(c) E-articles ☐

(d) Databases ☐

(e) Open Access Resources ☐

(f) Any other please specify ☐

13. Are you Aware of Information Literacy? Yes ☐ No ☐

If Yes then How

_____

_____

_____

_____

_____

Date: Signature

BIBLIOGRAPHY

ACRL. (2000). *Information Literacy Competency Standards for Higher Education*. Retrieved on January, 22, 2013 from http://www.ala.org/acrl/standards/informationliteracycompetency

Agrawalla, Sunita (2012). *Emerging issues and education*. Guwahati: Aditya Book Distributors.

ALA. (1989). *Presidential Committee on Information Literacy: Final report*. Retrieved on August 30, 2012 from http://www.ala.org/acrl/publications/whitepapers/presidential.

Andretta, Susie. (2005). *Information literacy: A practitioner's guide.* Oxford, UK: Chandos Publishing.

Assam University. Retrieved on Sept., 15, 2012 from http://www.assamuniversity.nic.in/lais.html

Assam Higher Secondary Education Council. Retrieved on August, 18, 2012 from http://ahseconline.org/index.htm

Babu, B. Ramesh. (2008). Information literacy- competency standards and performance indicators: An overview. *DESIDOC Journal of Library and Information Technology, 28*(2), 56-65.

B.Borooah College. (2010-11),Prospectus.

Babu, K. Surendra., Sarada, B., & Ramaiah, C.K. (2010). Use of internet resources in the S.V. University digital library. *DESIDOC Journal of Library & information Technology*, *30*(1), 26-31.

Bainton, Toby. (2001*). Information literacy and academic libraries: The SCONUL approach (UK/Ireland).* Standing Conference of National and University Libraries United Kingdom 67th IFLA Council and General Conference August 16-25, 2001. Retrieved on June, 20, 2012 from http://archive.ifla.org/IV/ifla67/papers/016-126e.pdf

Banu, H. Akther. (2011). Moving towards knowledge society. *University News, 49*(03), 6-12

Barpujari, H.K. (1990). Ed. *The comprehensive history of Assam, volume-I: Ancient period.* Guwahati, Assam: Publication Board Assam.

Bavakutty, M., & Nasirudheen, T.P.O. (2008). *Assessing information literacy competency of research students in India: A case study*. Retrieved on Sept., 24, 2010 from http: /dspace.fsktm.um.edu.my/bitstream/1812/297/1/10Bavakutty_In_NHW.pdf

Bewick, Laura., & Corrall, Sheila. (2010). Developing librarians as teachers: A study of their pedagogical knowledge. *Journal of Librarianship and Information Science, 42*(2), 97-110.

Bhatt, R. K. (2011). Information literacy models and competencies development initiatives in India. *ICoASL 2011: Branding & Marketing, & Strategic Direction, Best Practices & Performance Evaluation of Special Library Services.*

Board of Secondary Education, Assam. Retrieved on August, 18, 2012 from http://www.seba.net.in/index.html

Borah, Upendra Nath. (2005). *Thoughts on Education* (2nd. ed.). Guwahati, Assam: Book Land.

Borthakur, Jyotika., Das, Rumi., & Gohain, Anjan. (2010). UGC-Infonet: Its availability and use in universities of Assam. Proceeding of *PLANNER, 7th convention*. Assam: Tezpur University, pp. 102-108.

Bruce, Christine Susan. (2004). *Information literacy as a catalyst for educational change: A background paper, Queensland University of Technology*. Retrieved on August, 30, 2012 from http://eprints.qut.edu.au/4977/1/4977_1.pdf

Bundy, Alan. (2004). Ed. *Australian and New Zealand Information Literacy Framework: Principles, standards and practice*. Retrieved on January, 21, 2013 from http://www.caul.edu.au/content/upload/files/info-literacy/InfoLiteracyFramework.pdf

Catts, Ralph., & Lau, Jesus. (2008). *Towards information literacy indicators*. Paris: UNESCO.

Central Library: Indian Institute of Technology, Madras. Retrieved on August, 23, 2010 from http://www.cenlib.iitm.ac.in/docs/library/index.php?page=infolit

Chakravarty, Rupak. (n.d). *Information literacy in the knowledge society: Empowering learners for a better tomorrow.* Retrieved on January, 25, 2013 from http://eprints.rclis.org/11393/1/Rupak_Information_Literacy.pdf.

Chaliha, Parag. (2008). Assam: Through the ages. In Dinesh Ch. Deka (Ed.), *Cultural Heritage of Assam* (pp. 13-28). Guwahati, Assam: Directorate of Information & Public Relations.

Chauhan, Suresh K., Chand, Prem. & Murthy, T.A.V. (2006). Information literacy for Indian academicians: INFLIBNET initiatives. *Journal of Library and Information Science, 31*(1), 45-52.

Choudhury, Pratap Chandra. (1987). *The history of civilization of the people of Assam to the twelfth century A.D* (3rd . ed.). Guwahati, Assam: Spectrum Publications.

Choudhury, B.K., & Sethi, Bipin Bihari. (2009). Computer literacy of library professionals in the university libraries of Orissa: An analytical study. *IASLIC Bulletin 54*(1),15-30.

Choudhury, Subhajit., (et.al). (n.d). *E-democracy and citizen empowerment through e-governance and other e-initiatives in India, Nepal and Bangladesh: A case study.*Retrieved on August, 10, 2011 from http://www.csi-sigegov.org/1/16_339.pdf

Cooke, Alison. (1999). *A guide to finding quality information on the internet: Selection and evaluation strategies.* London: Library Association Publishing.

Cotton College. (2008-09), *Prospectus.*

Crawford, John. (2006). The use of electronic information services and information literacy: A Glasgow Caledonian University study. *Journal of Librarianship and Information Science, 38*(1), 33-44.

Das, Dhrubajit., & Baruah, Dipika. (2010). Challenges and issues of college library services in Dibrugarh district of Assam: A case study. Proceeding of *PLANNER, 7th convention*. Assam: Tezpur University, pp. 241-255.

Dash, Shefali S. (2012). Ed. *E-governance for citizen empowerment*. New Delhi: National Informatics Centre, Government of India.

Dasgupta, Dr. Kalpana. (2007). *The National Knowledge Commission and Libraries: A vision for the future.* Retrieved on August, 18, 2011 from http://www.dlaindia.org/srr7.htm

Deshpande, Shirish. M., & Dakhole, P.S. (2011). *Information literacy: Government policies and initiatives in India.* Retrieved on August, 11, 2011 from http://shodhganga.inflibnet.ac.in/dxml/bitstream/handle/1944/1634/42.pdf?sequence=1

Devi, A. Hileima. & Devi, Th. Purnima. (2006, February). *Information literacy within the library: A study with special reference to academic libraries of Manipur*. Paper presented at the 4th International Convention CALIBER, Gulbarga, 210-216.

Dibrugarh University. Retrieved on Sept., 15, 2012 from http://www.dibru.ac.in/

Directorate of Technical Education Assam. Retrieved on July, 7, 2012 from http://dteassam.in/index.php?menu=mnNewScheme

Directorate of Higher Education. Retrieved on August, 18, 2012 from http://dheassam.gov.in/development.asp

Directorate of Technical Education. Retrieved on August, 18, 2012 from http://dteassam.in/

Directorate of Higher Education. Retrieved on August, 18, 2012 from http://dheassam.gov.in/

Directorate of Elementary Education. Retrieved on August, 18, 2012 from http://deeassam.gov.in/

Edzan, N.N. (2008). *Information literacy development in Malaysia: A review*. Retrieved on July 19, 2010 from http://www.librijournal.org/pdf/2008-4pp265-280pdf

Eisenberg, Michael B., Lowe, Carrie A., & Spitzer, Kathleen L. (2004). *Information literacy: Essential skills for the information age* (2nd ed.). Westport, Connecticut, London: Libraries Unlimited.

Gaddagimath, R. B. (2006). User information literacy and training in academic libraries. Proceeding of *National Seminar on Best Practices in Library and Information Services.* Bangalore: Bangolore University Library, pp. 297-306.

Gait, Edward. (1997). *A history of Assam* (7th ed.). Guwahati, Assam: Layer's Book Stall.

Gauhati University. Retrieved Sept,. 15, 2012 from http://www.gauhati.ac.in/staff.php?cat=Department&id=Library%20and%20Information%20Science

Gedam, Pranali B., & Agashe, Ajay T. (2009*). Information literacy competencies and programmes in India.* Retrieved on June, 27, 2010 from http://crl.du.ac.in/ical09/papers/index_files/ical-88_100_227_2_RV.pdf

Ghosh, S.B., & Das, Anup kumar. (2006). *Information literacy initiatives in India with special reference to emerging knowledge economy*. Retrieved on Sept., 24, 2010 from http://eprints.rclis.org/7246/1/InformationLiteracyICIL06_Paper_full.pdf

Goswami,P.R. (2001). Users education and information literacy in India: A synoptic view. *CLIS OBSERVER (Centre for Library and Information Studies): R&D Journal in Library and Information Science*, *18*(3-4), 55-64.

Goswami, Priyam. (2009). Assam through the ages. In Basanta Deka (Ed.), *Assam: Land and people* (pp.102-111). Guwahati, Assam: Dr. Hitesh Deka (K.C.Das Commerece College).

Govt. of Assam. (2011). *Statistical handbook, Assam*. Guwahati: Directorate of Economics and Statistics.

Govt. of Assam. (2010-11). *Economic Survey Assam.* Assam: Directorate of Economics and Statistics. Planning and Development Department.

Govt. of Assam. (2011-12). *Economic Survey*. Assam: Directorate of Economics and Statistics, Planning and Development Department, Govt. Assam.

Gross, Melissa. & Latham, Don. (2007). Attaining information literacy: An investigation of the relation between skill levels, self-estimates of skill, and library anxiety. *Library and Information Science Research, 29*(3), 332-353.

Handique Girls' College (2009-10). *Prospectus.*

Haneefa, Mohamed K., & Shukkoor, C.K. Abdul. (2010) . Information and Communication Technology literacy among library professionals in Calicut University, Kerala. *DESIDOC Journal of Library & Information Technology, 30*(6), 55-63.

Hemavathi, B.N. (2011). *Strategic approach of Information Literacy Programme (ILP): Survival and success in 21st century in India.* Retrieved on August, 16, 2012 from http://www.isrj.net/July/2011/Research_Paper_Strategic_Approach_of_Information%20.html

Idzwan, Mohd., Salleh, Mohd., Faiz, Ahmad., Halim, Abdul., Abdullah, Raja., Yaacob., & Yusoff, Zulkarnain. (2011). *Measuring the effect of information literacy on the undergraduates' academic performance in higher education*. Retrieved on Nov., 11, 2012 from http://www.ipedr.com/vol5/no2/112-H10267.pdf

IFLA Media and Information Literacy Recommendations Retrieved on March, 8, 2013 from http://www.ifla.org/publications/ifla-media-and-information-literacy-recommendations

International Federation of Library Associations and Institutions (IFLA). (2006). *Guidelines on information literacy for lifelong learning.* Retrieved on Nov., 17, 2010 from http://www.ifla.org/.

Jain, Vinita. (2006). *LIS professionals as teachers and trainers: User education and information literacy for life-long learning*. Retrieved on March, 01, 2013 from http://arizona.openrepository.com/arizona/bitstream/10150/105978/1/93.Poster-Vinita_Jain_pp645-648_.pdf

Jaypee University of Engineering and Technology Retrieved on August, 11, 2012 from http://www.jiet.ac.in/Institute/group.php

Karisiddappa, C.R. & Rajgoli, Iqbalahmad U. (2005). Information Literacy: The process of enhancement of information handling capacity. *IASLIC Bulletin, 50*(2), 74-82.

Karisiddappa, C.R., & Rajgoli, Iqbalahmad. (2007). Blooming knowledge society and information literacy in India. *Sri Lankan Journal of Librarianship and Information Management, 3*(1), 1-13.

Karisiddappa, C.R., & Rajgoli, Iqbalahmad U. (2008). In search of information literacy programmes and practices: Survey of selected institutions at Bangalore. *DESIDOC Journal of Library & Information Technology*, *28*(2), 28-38.

Karmakar, Gouri Sankar. (2011). Use of online resources among the research scholars in social sciences in K.K Handiqui library of Gauhati University: A study. *Journal of the Department of Library and Information Science, 2*(1), 90-99.

Kasowitz-Scheer, Abby., & Pasqualoni, Michael. (2003). *Information literacy instruction in higher education: Trends and issues.* Retrieved on January, 10, 2011 from http://surface.syr.edu/cgi/viewcontent.cgi?article=1032&context=sul

Kaur, Amritpal., Sarman., & Rani, Sarita. (2012). Information literacy among the students in the electronic environment: A case study of Guru Nanak Dev University, Amritsar. *SRELS Journal of Information Management, 49*(1), 21-38.

Kaur, Prabhjeet., Sohal, Manpreet Kaur., Walia, P.K. (2009). Information literacy curriculum for undergraduate students. *ICAL 2009- Library Services,* 556-560.

Kokrajhar Govt. College. (2010-11). *Prospectus.*

Krishna Kanta Handique State Open University. (n.d). Introduction to development of higher education in Assam. Retrieved on Sept., 25, 2012 from http://www.kkhsou.in/main/education/higher_education.html

Kulkarni,S.A. (2009). User education programme and it's implementation in SMRK library. *ILA Bulletin, 45*(3-4), 31-37.

Kumar, Krishan. (2000). *Library manual*. New Delhi: Vikas Publishing House Pvt. Ltd.

Kumar, Sudhir. , Choudhury, Subhajit. , & Shah, Leena. (2004). *Information literacy mission in digital environment: A prospects and plan for developing society in India*. Retrieved on August, 16, 2012 from http://archive.ifla.org/IV/ifla70/papers/145e-kumar.pdf.

Lohar, Manjunath., & Kumbar, Mallinath. (2008). Use of CD-ROMS and internet resources by the students in JNN College of Engineering Shimoga: A survey. *SRELS Journal of Information Management, 45*(2), 235-242.

Lloyd, Anne. & Williamson, Kirsty. (2008). Towards an understanding of information literacy in context: Implications for research. *Journal of Librarianship and Information Science, 40*(1).

Lwehabura, Mugyabuso Julius. & Stilwell, Christine. (2008). Information literacy in Tanzanian universities: Challenges and potential opportunities. *Journal of Librarianship and Information Science, 40*(3),179-191.

Mahadevan, G. (2006). *Information literacy programmes in colleges.* Retrieved on July, 31, 2010 from http://www.hindu.com/2006/10/04/stories/2006100409900400.htm

Mahanta, Bobby. (2011). *College Education in Assam*. New Delhi: Omsons Publications.

Martin, Allan. & Madigan, Dan. (2006). Eds. *Digital literacies for learning*. London, UK: Facet Publishing.

Martin, Allan. & Rader, Hannelore. (2006). Eds. *Information and IT literacy: Enabling learning in the 21st century.* London, UK: Facet Publishing.

Medhi, Mayuri.(2010). Networking of academic libraries in Guwahati: A study. Proceeding of *PLANNER, 7th convention*. Assam: Tezpur University, pp. 56-65.

Mishra, R.N., & Gohain, Rashmi Rekha. (2010). Use and usage statistics of electronic resources at central library Tezpur Universiy: A case study. Proceeding of *PLANNER, 7th convention*. Assam: Tezpur University, pp. 183-204.

Murugan, B.O. Sathivel., Sornam, S. Ally., & Manohar, A. Celestine. (2012). A study on library usage and ICT skills among the internees of a Rural Medical College in Tamilnadu. *SRELS Journal of Information Management. 49*(3), 305-314

Mutula, Stephen M., & Wamukoya, Justus M. (2007). *Web information management: A cross-disciplinary textbook.* Oxford: Chandos Publishing.

Millennium Summit Retrieved on March, 1, 2013 from http://en.wikipedia.org/wiki/Millennium_Summit

Mokhtar, Intan Azura., Majid, Shaheen., & Foo, Schubert. (2008). Information literacy education: Applications of mediated learning and multiple intelligences. *Library & Information Science Research, 30*(3),195-206.

Mokhtar, Intan Azura., Majid, Shaheen., & Foo, Schubert. (2008). Teaching information literacy through learning styles: The application of Gardner's multiple intelligences. *Journal of Librarianship and Information Science, 40*(2), 93-104.

National Informatics Centre (NIC). (2009). *Guidelines for Indian government websites: An integral part of central secretariat Manual of Office Procedure*. Department of Information Technology, Ministry of Communication and Information Technology, Government of India.

National Knowledge Commission. (2006). Report to the nation, Government of India

N-LIST- National Library and Information Services Infrastructure for Scholarly Content. Retrieved on April,7, 2013 from http://nlist.inflibnet.ac.in/statecollegelist.php?st=Assam

Number of autonomous colleges under UGC. Retrieved on Sept., 19, 2012 from http://oldwebsite.ugc.ac.in/inside/374autocolleges_april11.pdf

Nyamboga, Constantine M. (2004). Information skills and information literacy in Indian university libraries. *Program: Electronic Library and Information Systems, 38*(4), 232-239.

Owusu-Ansah, Edward K. (2003). Information literacy and the academic library: A critical look at a concept and the controversies surrounding it. *Journal of Academic Librarianship. 29*(4), 219-230.

Owusu-Ansah, Edward K. (2005). Debating definitions of information literacy: Enough is enough!. *Library Review, 54*(6), 366-374.

O'Connor, Lisa. (2009). Information literacy as professional legitimation: A critical analysis. *Journal of Education for Library and Information Science, 50*(2), 79-89.

Orde, Heike vom., & Wein, Dr. Franziska. (2009). *Information literacy: An international state-of-the-art report.* Retrieved on August, 11, 2011 from http: www.ifla.org/files/information-literacy/publications/IL-state-of-the-art.pdf

Padhi, Sambit Kumar. (2011). Issues, challenges and reforms in higher education for a knowledge society. *University News, 49* (26), 12-17.

Pandey, Raghunath., & Pillai, M.N. Velayudhan. (2011). *Digital library: Trends and prospects.* New Delhi: Jnanada Prakashan (P&D).

Pattar, Vijay., & Kanamadi, Satish. (2010). Content and delivery methods of information literacy programmes in academic libraries: A pilot study. *Information Studies. 16*(2), 103-112.

Pawar, Kailas., Panchmukhe, Sangita., & Kulkarni, Shubhangi. (2006). User orientation program. . Proceeding of *National Seminar on Best Practices in Library and Information Service.* Bangalore: Bangolore University Library. pp.469-471.

Pinto, Maria., Cordon, Jose Antonio., & Diaz, Raquel Gomez. (2010). Thirty years of information literacy (1977-2007): A terminological, conceptual and statistical analysis. *Journal of Librarianship and Information Science, 42*(1), 3-19.

Poland. (2011). *Information literacy state-of-the-art report*. Retrieved on August, 16, 2011 from http://www.ifla.org/files/information-literacy/publications/il-report/poland-2011.pdf

Primary education in Assam. Retrieved on August, 18, 2012 from http://www.indiaedu.com/assam/

Rader, Hannelore B. (2002). *Information literacy 1973-2002: A selected literature review*. Retrieved on Dec., 16, 2009 from https://www.ideals.illinois.edu/bitstream/handle/2142/8464/librarytrendsv51i2i_opt.pdf

Ram, Mohan. (2004). *Universalization of higher education: Some policy implications*. New Delhi: Sarup & Sons.

Ram, Shri. (2010). Information literacy through Web 2.0 integrated WebOPAC: An experiment at Jaypee Group of Institutions. *DESIDOC Journal of Library & Information Technology, 30*(3), 43-50.

Ranganathan, R., & Rao, S.V.Lakshmana. (2011). Reformation of higher education in India: Quality concerns. *University News, 49*(10),16-20.

Rajaram, Shyama. (2006). *Information literacy gap: Challenges in bridging the divide.* Retrieved on Sept., 24, 2010 from http://ir.inflibnet.ac.in/dxml/bitstream/handle/1944/564/21(cal%2006).pdf?sequence=1

SCERT. (2003). *A study in school education in Assam: Status, Issues and Future Perspectives* (Unpublished report). Guwahati: SCERT.

Saleem, Shaikh., & Gawali, Vidya S. (2011). Higher education: Not yet high in India. *University News, 49* (31),6-12.

Sarma, Chandan Kr. (2010).Ed. *Pragya.*Guwahati: Kanya Mahavidyalaya.

Sasikala, C. & Dhanraju, V. (2011). Assessment of information literacy skills among science students of Andhra University. *Library Philosophy and Practice.*

Satyanarayana, N.R., & Srivastava, Ranjana. (2009). Accreditation: Today's Need for Producing Better LIS Professionals. *IASLIC Bulletin 54*(2), 67-75.

Satpathy, Sunil Kumar., & Rout, Biswanath. (2010). Use of e-resources by the faculty members with special reference to CVRCE, Bhubaneswar. *DESIDOC Journal of Library & Information Technology*, *30*(4), 11-16.

Saunders, Laura. (2008). Exploring connections between information retrieval systems and information literacy standards. *Library & Information Science Research, 30*(2).

Sayers, Richard. (2006). *Principles of awareness-raising for information literacy: A case study.* Bangkok: UNESCO.

Senthilkumaran,P. (2011). Information literacy programmes in India. *SRELS Journal of Information Management, 48*(3), 357-363.

Sharma, Narendra Nath. (1997). Growth and development of public library services in Assam. In Bhupen Goswamee (Ed.), *Changing Trend of Librarianship in Assam* (pp.1-16). Guwahati, Assam: Guwahati Library Association.

Sheeja, N.K. (2011). An anlytical study of university libraries in Kerala. *SRELS Journal of Information Management, 48*(1), 69-78.

Singh, Jnanendra Narayan., & Joshi, Taruna. (2006, September). *Information literacy skills of undergraduate students: A case study of Sri Venkateswara College (University of Delhi).* Paper presented at Knowledge, Library and Information Networking, NACLIN, 331-336.

Singh, K.P., & Ahmad, Shakeel. (2011). Issues and challenges in higher education. *University News, 49* (10), 1-5.

Sinha, Manoj Kumar. (2012). Studies on ICT and internet awareness and access to e-resources under UGC-INFONET digital library consortium: A survey of Assam University library users. *SRELS Journal of Information Management, 49*(3), 263-280.

Sinha, Manoj Kumar. (2011). Information and Communication Technology (ICT) awareness amongst university and college teacher of North Eastern Region of India. *Indian Journal of Information, Library & Society, 24*(2), 34-56.

Singh, Rajesh. (n.d). *Information literacy: A review of literature.* Retrieved on Feb., 21, 2009 from http:/knoll.google.com/k/rajesh-singh/information-literacy-a-review-of/

Singh, Rajesh., & Jindal, S.C. (2009). Promoting the use of e-resources in teaching, learning and research: A case study of DULS. Proceedings of *7th International CALIBER(Convention on Automation of Libraries in Education and Research Institutions.)* Puducherry: Pondicherry University, 430-438.

Singh, Rajesh., & Majumdar, S. (2009). Information literacy for advanced learning: An academic course at University of Delhi. *ICAL 2009- Library Services,* 529-535.

Singh, Salini. (2012). Right to information and information literacy: An Indian perspective. *SRELS Journal of Information Management, 49*(1), 5-19.

Singh, Shashi P. (2009). Catalytic role of information literacy in educational change: A case study of university of Delhi. *Library Management, 30*(3), 163-175.

Singh, Sanjay Kumar. & Deka, Prasanta Kumar. (2011). N-LIST: Free e-resources for college libraries of N.E Region. *Journal of the Department of Library and Information Science, 2*(1), 41- 49.

Streatfield, David., & Markless, Sharon. (2008). Evaluating the impact of information literacy in higher education: Progress and prospects. *Libri, 58*(2), 102-109.

Torras, Maria-Carme. & Saetre, Tove Pemmer. (2009). *Information literacy education: A process approach professionalising the pedagogical role of academic libraries*. Oxford, UK: Chandos Publishing.

Torras, Maria-Carme. (2009-10). Annual report: Information Literacy Section. Retrieved on March, 8, 2013 from http://www.ifla.org/files/assets/information-literacy/publications/annual-report/2009-2010.pdf

Training the trainers in information literacy, Port Dickson, Malaysia, 11-14 August 2008. Retrieved on August, 17, 2011 from http://www.consol.org/index.php?option=com_weblinks&view=category&id=49&Itemid=182

UNESCO Retrieved on March,10, 2013 from http://www.unesco.org/

UNESCO. (2007). *Information literacy: An international state-of-the-art-report*. Retrieved on March, 5, 2009 from www.infolitglobal.info/...UNESCO_IL_state_of_the_art_report_-_Draft070803.doc

UNESCO. (n.d). *Information for All Programme*. Retrieved on March, 01, 2013 from http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/ifap/meetings/bureau/Proposal%205%20for%20the%20Preparation%20of%20the%20Draft%20Programme%20and%20Budget%202012-2013.pdf

University of Calcutta Retrieved on Sept., 14, 2012 from http://www.caluniv.ac.in/academic/library.htm

University of Calicut. Retrieved on August, 11, 2012 from http://www.universityofcalicut.info/

University Grants Commission. *Higher education in India: Strategies and schemes during eleventh plan period (2007-2012) for universities and colleges.* Retrieved on Sept., 19, 2012 from http://www.ugc.ac.in/oldpdf/pub/he/HEIstategies.pdf

Varalakshmi, R.S.R. (2007). Information literacy models: An Indian perspective. *Journal of Library and Information Science, 32*(1), 41-60.