

**DIGITAL LITERACY AMONG USERS IN LAW INSTITUTE  
LIBRARIES IN PUNE: A STUDY**

**SYNOPSIS**

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TILAK MAHARASHTRA VIDYAPEETH, PUNE  
FOR THE DEGREE OF**

**DOCTOR OF PHILOSOPHY**

**In**

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Under the Board of Moral and Social Sciences**



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## **CERTIFICATE OF THE SUPERVISOR**

It is hereby certified that the work entitled “Digital literacy among users in law institute libraries in Pune : a study ” is an original research work done by Mrs. Ashwini P. Mahadik under my supervision for the degree of Doctor of Philosophy in Library and Information Science to be awarded by Tilak Maharashtra Vidyapeeth, Pune. To best my knowledge this thesis

- Embodies the work of candidate himself/herself
- Has duly been completed
- Fulfils the requirement of the ordinance related to Ph.D.  
Degree of the Tilak Maharashtra Vidyapeeth, Pune
- Up to the standard in respect of both content and language for being referred to the examiner.

**Dr. Madhukar N. Shewale**  
**Research Guide**

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<b>CHAPTERS AND SECTIONS</b>	<b>TITLE OF THE CHAPTER</b>	<b>PAGE/S</b>
<b>PRELIMINARY PAGES</b>	CERTIFICATES	i
	ACKNOWLEDGEMENT	ii - iii
	TABLE OF CONTENTS	iv - xiii
	LIST OF TABLES	xiv - xv
	LIST OF FIGURES	xvi - xvii
	LIST OF ABBREVIATIONS	xviii - xx
<b>CHAPTER I</b>	<b>INTRODUCTION</b>	
1.1	Introduction	1
1.2	Importance of Libraries	2
1.3	Law Libraries	3
1.4	What is Literacy and Information Literacy?	4
1.5	What is Digital Literacy?	5
1.6	Needs of Law Users	6
1.7	Reason to Select the Present Research Topic	7
1.8	Background of the Research Study	8
1.9	Statement of Problem	9
1.10	Objectives	9
1.11	Hypothesis	10
1.12	Scope and Limitation	10
1.13	Research Method	11

1.13.1	Structure of Questionnaire	11
1.13.2	Structure of the Librarians Questionnaire	12
1.13.3	Observation Technique	14
1.13.4	Data Analysis and Presentation	14
1.13.5	Style Manual Used for Presenting Citations	14
1.13.6	Population and Sampling	15
1.14	Structure of the Research Study	17
	Summary	18
	References	19
<b>CHAPTER II</b>	<b>LITERATURE REVIEW</b>	
2.1	Introduction	22
2.2	Importance of Literature Review	22
2.3	Facets of Literature Review	23
2.3.1	Types of Literacies	24
2.3.2	Information Literacy	24
2.3.3	Information Literacy Instruction (ILI)	27
2.3.4	Information Literacy Models	28
2.3.5	Information Literacy Skills	31
2.4	Benefits of Information Literacy	32

2.5	Scope of Information Literacy	33
2.6	Aims of Information Literacy	33
2.7	Necessity of Information Literacy	34
2.8	Digital Era	34
2.9	Digital Divide	37
2.10	Digital Humanities	38
2.11	Digital Natives	39
2.12	Standards	40
2.13	Information and Communications Technology	41
2.14	Library Literacy	40
2.15	Literary Literacy	43
2.16	Media Literacy	44
2.17	Network Literacy	44
2.18	Computer Literacy	45
2.19	Visual Literacy	48
2.20	ICT Literacy	48
2.21	Digital Literacy	49
2.22	Concept of Digital Literacy	49
2.23	Developmental Digital Literacy	51
2.24	Digital Literacy Practices	52
2.25	Dimensions of Digital Literacy	54

2.26	Digital Literacy and Digital Inclusion	54
2.27	Digital Literacy Technical	55
2.28	Experiments in Digital Literacy, (Literacy of 21 <sup>st</sup> Century)	56
2.29	Digital Literacy Higher Education	58
2.30	Information and Digital Literacy in School	59
2.31	Digital Literacy among Teacher	60
2.32	Literacy Practices in Children	62
2.33	Web-Oriented Digital Literacy	62
2.34	E-Learning	63
2.35	E-Learning for Information Literacy	65
2.36	Tools and Methodologies Innovations:	66
2.37	Focus On Local and Global Literacies	66
2.38	Pedagogy	66
2.39	Computer Experience among Librarians and Role of Librarians	70
	Summary	71
	References	72



<b>CHAPTER III</b>	<b>LAW EDUCATION AND DIGITAL LITERACY</b>	
3.1	Introduction	81
3.1.1	Meaning of Law	82
3.2	Law Education	82
3.2.1	Need of Legal Education	83
3.2.2	Legal Education in India	84
3.2.3	Legal Education in Ancient India	85
3.2.4	Legal Education During British Rule	85
3.2.5	Legal Education in Independent India	86
3.3	Changes in Legal Education	90
3.4	Law Research in Digital Age	91
3.5	Major resources in Law Science	91
3.6	Law Libraries	97
3.6.1	The Role of Law Libraries	98
3.6.2	Libraries in Law Colleges	99
3.6.3	Legal Libraries	100
3.6.4	Libraries in Courts	100
3.6.5	Public Libraries	100
3.6.6	Jail Libraries	101
3.7	Role of Law Libraries	101
3.7.1	Law Library is a Special Kind of Library	101

3.7.2	Training Given for Reference search	101
3.7.3	Librarians Awareness towards New Resources in Law	102
3.7.4	Valuable Services from Libraries	102
3.7.5	Use of Library by Law Students and Researchers (users)	103
3.7.6	Challenges among Law Users	104
3.8	Digital Literacy: A Need of the Time	104
3.9	Awareness of Laws and Librarian's Role	105
3.10	Literacy	106
3.11	Education and Libraries	107
3.12	User Needs Linked to Information	108
3.13	Digital Society	108
3.14	National Digital Literacy Mission	109
3.15	Review of Literacies Along Digital Era	110
3.15.1	Computer, Information and ICT Literacy	111
3.16	Concepts of Digital Literacy	112
3.16.1	Origins	114
3.16.2	New Look on Digital or Technological Fluency	116
3.17	Understanding Digital Literacy	117
3.18	End User	118
3.19	Digital Divide	119
3.20	Information Savvy to Information Literacy	119

3.21	Future of Information Literacy	120
3.22	The Conceptualization and Barriers to Digital Literacy	122
3.23	Digital Literacy Skills	123
3.24	Digital Literacy in Higher Education	124
3.25	Digital Literacy Models	125
3.25.1	One Dimensional Linear Model	126
3.25.2	The Digital Information Fluency Model (DIF)	126
3.25.3	Developmental Models	126
3.25.4	Making a Useful Model	126
3.26	Conclusion	126
3.27	Potential Solutions	126
3.27.1	Digital Literacy in Law Libraries	127
	Summary	128
	References	129
<b>CHAPTER IV</b>	<b>DATA ANALYSIS AND INTERPRETATION</b>	
4.1	Introduction	134
4.2	Survey of Law Libraries in Pune	134
4.3	Population and Sampling for survey of users	135
4.4	Data Analysis : Law Libraries	137
4.4.1	Growth of Law Institutes	137

4.4.2	Users of Library	137
4.4.3	Daily Visitors of Library	139
4.4.4	Availability Digital Materials	140
4.4.5	Library Services	141
4.4.6	Law Databases	143
4.4.7	Library Induction	145
4.4.8	Infrastructure Availability in Libraries	146
4.4.9	Digital Literacy Programme (DLP)	147
4.4.10	About Digital Literacy Programme	148
4.5	Data Analysis: Law Library Users (Students and Faculties)	150
4.5.1	Utilization of Library Resources by Users	151
4.5.2	Frequency of Library Visit	151
4.5.3	Time Spent in Library by Users	152
4.5.4	Knowledge of Digital Literacy among Users	153
4.5.5	Attendances to Digital Literacy Program (DLP)	154
4.5.6	Purpose of Using Digital Information	155
4.5.7	Source of Required Information	157
4.5.8	Consulting to Resource Persons	158
4.5.9	Access Digital Information	160
4.5.10	Use of Information Sources for Preference Purpose	161

4.5.11	Awareness of Services Provided by Libraries	162
4.5.12	Frequently Used Law Databases	164
4.5.13	Awareness of Current Information Sources for Information on Enacted Laws	167
4.5.14	Awareness of Using Library	169
4.5.15	Sources Used for Finding Analogous Articles	170
4.5.16	Accessing ICT Literacy Skills by Law Users	171
4.5.17	Awareness of Digital Literacy Program for Users	172
4.5.18	Assessing Internet Literacy Skills	174
4.5.19	Accessing Information Retrieval Skills From E-Resource.	176
4.5.20	Accessing Skills of Digital Information Usage	177
4.5.21	Need Training for Digital Literacy	178
	Summary	179
<b>CHAPTER V</b>	<b>FINDINGS, SUGGESTIONS AND CONCLUSION</b>	
5.1	Introduction	181
5.2	Findings Based on Literature review	181
5.3	Findings based on Librarians survey	183
5.4	Findings based on Law Users	185
5.5	Findings Based on Law Librarians Interviews	188
5.6	Findings based on Law Library user's on Digital Literacy	188

5.7	Suggestions	189
5.8	Best Practices to Enhance Digital Literacy	190
5.9	Testing of Hypothesis	192
5.10	Scope for Further Research	193
	Conclusion	193
	References	194
	References	195
	APPENDIX I : Questionnaire For Librarians	209
	APPENDIX I : Questionnaire For Library Users	214

<b>TABLE NO.</b>	<b>TITLE OF THE TABLE</b>	<b>PAGE NO.</b>
1.1	Law Institute libraries in Pune city	10
1.2	Components of librarian's questionnaire	12
1.3	Components of users' questionnaire	13
1.4	Sample as per Morgan Table	16
3.1	National Law Universities in India	88
3.2	Types of Law Library and their Users	98
4.1	User Population for Survey	136
4.2	Growth of Law Institutes in Pune under survey	137
4.3	Users of Library	137
4.4	Daily Visitors of Library	139
4.5	Availability of Digital Materials	140
4.6	Library Services	141
4.7	Law Databases	143
4.8	Library Induction	145
4.9	Availability of Infrastructure in Library	145
4.10	Organising Digital Literacy Programme	147
4.11	About Digital Literacy Programme	148
4.12	Law Library Users	150
4.13	Frequency of Library Visit	151
4.14	Time Spent in Library by Users	153

4.15	Knowledge of Digital Literacy among Users	154
4.16	Attendance to Digital Literacy Program	155
4.17	Purpose to Use Digital Information	156
4.18	Source of Required Information	157
4.19	Consulting Resources Person	158
4.20	Access Digital Information	160
4.21	Use of Information Sources for Preference Purpose	162
4.22	Awareness of Services Provided by Libraries	163
4.23	Frequently Used Law Databases	166
4.24	Awareness of Current Information Sources for Information on Enacted Laws	168
4.25	Awareness of Using Library	169
4.26	Sources Used for Finding Analogous Articles	170
4.27	Accessing ICT Literacy Skills Among Law Users	172
4.28	Awareness of Digital Literacy Program for Users	173
4.29	Assessing Internet Literacy Skills	174
4.30	Accessing Information Retrieval Skills From E-Resource	176
4.31	Accessing Skills of Digital Information Usage	177
4.32	Need Training for Digital Literacy	189



<b>FIGURE NO.</b>	<b>TITLE OF FIGURE</b>	<b>PAGE NO.</b>
2.1	Literature Review benefits to researcher	23
3.1	Conceptualization and Barriers to Digital Literacy	122
4.1	User Population for Survey	136
4.2	Users of Library	138
4.3	Daily Visitors of Library	139
4.4	Availability Digital Materials	140
4.5	Library Services	142
4.6	Law Databases	144
4.7	Library Induction	145
4.8	Availability of Infrastructure in Library	146
4.9	Organising Digital Literacy Programme	147
4.10	Digital Literacy Programme	148
4.11	Frequency of Library Visit	152
4.12	Time Spent in Library	153
4.13	Knowledge of Digital Literacy	154
4.14	Attendance to Library Induction / Digital Literacy Programme	155
4.15	Purpose to Use Digital Information	156
4.16	Source of Required Information	158
4.17	Consulting to Resource Person	159
4.18	Access Digital Information	160

4.19	Use of Information Sources for Preference Purpose	162
4.20	Awareness of Services Provided By Library	164
4.21	Frequently Used Law Databases (Students)	166
4.21.1	Frequently Used Law Databases (Faculty)	167
4.22	Awareness of Current Information Sources for Information on Enacted Laws	168
4.23	Awareness of Using Library	169
4.24	Sources Used for Finding Analogous Articles	171
4.25	Accessing ICT Literacy Skills among Law Users	172
4.26	Awareness of Digital Literacy Program for Users (Faculty)	173
4.26.1	Awareness of Digital Literacy Program for Users (Students)	173
4.27	Assessing Internet Literacy Skills (Students)	175
4.27.1	Assessing Internet Literacy Skills (Faculty)	175
4.28	Accessing Information Retrieval Skills From E-Resource	176
4.29	Accessing Skills of Digital Information Usage	177
4.30	Need Training for Digital Literacy (Students)	179
4.30.1	Need Training for Digital Literacy (Faculty)	179

## ABBREVIATIONS USED

<b>AALL</b>	<b>American Association of Law Libraries</b>
<b>ADR</b>	<b>Alternative Dispute Resolution</b>
<b>ADRJ</b>	<b>Australasian Dispute Resolution Journal</b>
<b>AIR</b>	<b>All India Reporter</b>
<b>ALA</b>	<b>American Library Association</b>
<b>ARIC</b>	<b>Asia Regional Integration Center</b>
<b>ARL</b>	<b>Association of Research Libraries</b>
<b>BCI</b>	<b>Bar Council of India</b>
<b>CLA</b>	<b>Corporate Law Adviser</b>
<b>DESIDOC</b>	<b>Defense Scientific Information and Documentation Centre</b>
<b>DL</b>	<b>Digital Literacy</b>
<b>DLP</b>	<b>Digital Literacy Programm</b>
<b>e.g.</b>	<b>For example</b>
<b>E-archives</b>	<b>Electronic Archives (Back Volumes of Journals)</b>
<b>E-books</b>	<b>Electronic Books</b>
<b>E-database</b>	<b>Electronic Database</b>
<b>E-Journals</b>	<b>Electronic Journals</b>
<b>E-IL</b>	<b>Electronic Information Literacy</b>
<b>E-literacy</b>	<b>Electronic Literacy</b>
<b>E-mail</b>	<b>Electronic Mail</b>
<b>E-resources</b>	<b>Electronic Resources et al</b>
<b>etc.</b>	<b>and so forth</b>
<b>HTML</b>	<b>Hyper Text Markup Language</b>
<b>HTTP</b>	<b>Hypertext Transfer Protocol</b>
<b>IASLIC</b>	<b>Indian Association of Special Libraries &amp; Information Centres</b>
<b>ICAR</b>	<b>Indian Council of Agricultural Research</b>
<b>ICFAI</b>	<b>Institute of Chartered Financial Analysts of India</b>
<b>ICT</b>	<b>Information &amp; Communication Technology</b>
<b>IL</b>	<b>Information Literacy</b>

<b>ILA</b>	<b>Indian Library Association</b>
<b>ILI</b>	<b>Information Literacy Instruction</b>
<b>ILI</b>	<b>Indian Law Institute</b>
<b>ILL</b>	<b>Inter Library Loan</b>
<b>ILL</b>	<b>Inter Library Loan</b>
<b>ILS</b>	<b>Indian Law Society</b>
<b>INFLIBNET</b>	<b>Information &amp; Library Network Center</b>
<b>INSDOC</b>	<b>Indian National Scientific Documentation Centre</b>
<b>IT</b>	<b>Information Technology</b>
<b>IT Literacy</b>	<b>Information Technology Literacy</b>
<b>JUDIS</b>	<b>Judgments Information System</b>
<b>KSLU</b>	<b>Karnataka State Law University</b>
<b>L.L.B.</b>	<b>Bachelor of Legislative Law</b>
<b>LII</b>	<b>Legal Information Institute</b>
<b>LIS</b>	<b>Library &amp; Information Science</b>
<b>MARC</b>	<b>Machine Readable catalogue</b>
<b>NALSAR</b>	<b>National Academy of Legal Studies and Research</b>
<b>NASSDOC</b>	<b>National Social Science Documentation Centre</b>
<b>NIALS</b>	<b>Nigerian Institute of Advanced Legal Studies</b>
<b>NISCAIR</b>	<b>National Institute of Science Communication and Information Resources</b>
<b>NKC</b>	<b>National Knowledge Commission</b>
<b>NLM</b>	<b>National Literacy Mission</b>
<b>NLSIU</b>	<b>National Law School of India University</b>
<b>NLU</b>	<b>National Law University</b>
<b>NUALS-</b>	<b>National University of Advanced Legal Studies</b>
<b>NUJD</b>	<b>National University of Judicial Sciences</b>
<b>OPAC</b>	<b>Online Public Access Catalogue</b>
<b>PDF</b>	<b>Portable Document Format</b>
<b>PGs</b>	<b>Post Graduates</b>
<b>RFID</b>	<b>Radio Frequency Identification</b>

<b>SCC</b>	<b>Supreme Court Cases</b>
<b>SCONUL</b>	<b>Society of College National &amp; University Libraries</b>
<b>SENDOC</b>	<b>Small Enterprises National Documentation Centre</b>
<b>SPSS</b>	<b>Statistical Package for Social Scientist</b>
<b>TNALU</b>	<b>Tamil Nadu DrAmbedkar Law University</b>
<b>UGC</b>	<b>University Grant Commission</b>
<b>UGC-INFONET</b>	<b>University Grants Commission Information Network UK</b>
<b>UGs</b>	<b>Under Graduates</b>
<b>UK</b>	<b>United Kingdom</b>
<b>UNESCO</b>	<b>United Nations Educational, Scientific &amp; Cultural Organization</b>
<b>USA</b>	<b>United States of America</b>
<b>viz.</b>	<b>namely</b>
<b>WWW</b>	<b>World Wide Web</b>

## **CHAPTER 1: INTRODUCTION**

### **1.1. INTRODUCTION:**

Information Communication Technology (ICT) is being used in higher education sector for teaching and learning due to initiation of e-learning, distance learning, online learning etc. Libraries in academic sectors are treated as backbone of education system, electronic and digital resources, courseware's and collection is used for e-learning purposes. Libraries are adapting to the changes and serve the users as per their needs and demands in academic sector. The trends are continuously shifting and librarians are managing the change more efficiently to serve the end users. A cursory overview indicates that the developments due to ICT, other supporting technologies has made an impact on the education system, libraries, publishing system, knowledge dissemination and publications etc.

ACRL Research Planning and Review Committee, point out the trends in higher education as they relate to academic librarianship. Trends in current technological and educational environments are changing and continuously, but the changes or trends affects different libraries at different rates. The 2018 top trends share several overarching themes, including the impact of market forces, technology, and the political environment on libraries. (ACRL 2018)

The brief trends reported by ACRL (2018) are briefed under:

**Publisher and vendor Landscape:** Publishers and database providers continue to move beyond their traditional functions of research dissemination and distribution into areas of enriched discovery, analytics, productivity, and research workflow.

**Open Education Resources (OER):** Open Educational Resources (OER) continue to demonstrate importance in a number of ways: sustainable collections in libraries, affordable textbooks for students, new options

for curriculum development, and avenues for digital scholarship etc. This has initiated opportunities for librarians to cultivate partnerships with faculty in the discovery, advocacy, and preservation of OER.

Research Datasets, Acquisition, Data collection, Analytics and Text Mining, Data science etc. plays an important role in libraries to support higher education system. Academic Libraries will become a part of this trends. Relevant mining techniques and methods like information extraction, information retrieval, classification, and clustering to different ways of text summarization based on electronic and digital resources. Open Access collection, digital collection development, demand driven acquisition in digital form is the future of academic libraries.

All these trends reflects on collecting e-resources and digital resources in libraries for support to remote e-learning practices in education system. Thus, trends in LIS and education systems one changing the future role of libraries and users also need to develop information and digital literacy to cope up with the situation to handle. All the academic libraries have developed automated libraries and moved towards digital and virtual libraries and slowly migrating towards e-collection development.

## **1.2 IMPORTANCE OF LIBRARIES:**

The libraries are treated as power house of information or knowledge, and provide services to the users. All type of libraries, functions to support the user needs and initiate the collection development, organisation of collection and disseminating information to users by providing different services to users. Libraries are treated as backbone to human education development. Libraries are constantly changing their faces due to transformation that took place like ICT, digital publishing, Internet, Open access, etc. User needs are fulfilled as per the nature of the users. In Academic libraries, users are basically students, faculty and researchers who use it for their educational

support. Universities are seeking to play a key role in the research and development process. An important element in the research process is the accessibility of information resources and services provided by libraries. Postgraduate students are key producers of research in universities, and an important element in their research process is the access to information. Academic libraries in providing better services to postgraduate students for their research. Academic sector is spreading in specialisation covering different specialised institutes with well-developed subject libraries, e.g. medical libraries, engineering libraries, management libraries, Law libraries, etc. Each discipline has specialised collection in their subjects.

### **1.3 LAW LIBRARIES:**

The law librarians and the law libraries plays an unique and integral role in shaping the quality of the legal system at all levels by the virtue of their unique collection and services. A law library is a special library used by law students, lawyers, judges and their law clerks, historians and other scholars of legal history in order to research the law. Law librarians helps legal researchers in navigating law library collections and assist in legal research. ICT and WWW has rapidly evolved from a technological into a social medium. Web 2.0 has become a metaphor for the distributed and decentralized collaboration networks on a global scale. The challenge to all law librarians, is no longer availability and direct provision of resources. The new role of law librarians is to advocate free access and open source information usage. Law librarians are information professionals that specialize in facilitating access to legal information.

A law library may contain print, computer assisted legal research, and microform collections of laws in force, session laws, superseded laws, foreign and international law, and other research resources, e.g. continuing legal education resources and legal encyclopaedias, legal treatises, and legal history. Some law libraries serve scholars too. ([https://en.wikipedia.org/wiki/Law\\_library](https://en.wikipedia.org/wiki/Law_library))



#### **1.4 WHAT IS LITERACY? AND INFORMATION LITERACY?**

Literacy in general refers to the ability to read and write, knowledge of a particular subject, particular type of knowledge. Literacy is critical to economic development as well as individual and community well-being. Literacy is the skills which are needed for reading and writing. They include such things as awareness of the sounds of language, awareness of print, and the relationship between letters and sounds. Other literacy skills include vocabulary, spelling, and comprehension.

Types of Literacies are of different forms and types that people in different fields in the society. The different types of literacies are: (<https://sitwe.wordpress.com/2015/12/14/types-of-literacy-or-literacies/>) Conventional Literacy (reading and writing skills), Emergent Literacy (earliest phases of literacy development), Initial Literacy, Basic Literacy, Functional Literacy, Critical, Professional, Legal, Medical, Financial, statistical, teaching, survival, business, scientific, agricultural, computer, technological, ecological, cultural, adult, information literacy, media, political, oral, visual, etc. Literacy in any area is necessary and the new area develops needs to be literate to adjust in the area.

In the advance technologies related to ICT and information the literacies needed are computer, communication, information, digital, internet, web, social media etc.

Information literacy is important for today's learners, which promotes problem solving approaches and thinking skills – asking questions and seeking answers, finding information, forming opinions, evaluating sources and making decisions fostering successful learners, effective contributors, confident individuals.

## 1.5 WHAT IS DIGITAL LITERACY?

Digital literacy refers to an individual's ability to find, evaluate, and compose clear information through writing and other mediums on various digital platforms. Digital literacy is evaluated by an individual's grammar, composition, typing skills and ability to produce writings, images, audio and designs using technology. Digital literacy initially focused on digital skills and stand-alone computers, the advent of the Internet and use of social media, has caused some of its focus to shift on mobile devices. Digital literacy does not replace traditional forms of literacy, instead building upon the skills that form the foundation of traditional forms of literacy. (Jenkins, 2009).

Digital literacy overlaps with computer literacy, as most digital media technologies require some level of computer competency. Commenters on digital literacy distinguish it from computer literacy as being a competency using computer assisted tools for medium which predate the ubiquity of personal computers. For example, computer literacy covers some areas like computer, information security, Boolean logic and numerical analysis which are important to computer literacy, but do not have a ubiquitous analog skill that predated them. ([https://en.wikipedia.org/wiki/Digital\\_literacy](https://en.wikipedia.org/wiki/Digital_literacy))

In 21<sup>st</sup> century importance of digital literacy is increasing due to use of ICT and social media tools in all sectors including LIS. Use of internet, search engines, blogs, twitter, online videos and presentations etc. all these are contributing forces to be a digital literate information professional as well as digital information user. In short, the meaning of digital literacy is to properly understand the ICT tools and techniques and use them efficiently for searching and acquiring digital information for academic and research purpose.

Digital literacy, according to the 'American Library Association', is "the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills."

(<https://study.com/academy/lesson/what-is-digital-literacy-definition-example.html>). Digital literacy encompasses a wide range of "new" technologies, even the technology everyone is using to access data/information. A digitally literate person is the one who is able to find the right tools such as internet, mobile tablets and smartphones to consume information and to share and create content for others.

Digital literacy is important in a technology-dependent world. Today user can read the news on a mobile / tablet or take books a digital e-reader. And hence need to become digitally literate to keep up with the changing situations. Finding resources at the click of a mouse is the need of the present era. Traditional print media needs skills like reading and writing but now in digital literacy needs ICT skills. (<https://study.com/academy/lesson/what-is-digital-literacy-definition-example.html>). Digital Literate person manages ICT and Network skills very well.

## **1.6 NEEDS OF LAW USERS:**

The law user needs are mainly focused on teaching, learning, research and pleading cases in the courts. The law students need mainly textbooks in law, reference books, law reports, legislations, legal periodicals, government, publications, law books, reference material, e-resources, online legal databases, abstracts, digest, newspapers, legal case studies, court decisions etc. In short law users need academic information, legal information, curriculum information, research reports, Acts etc.

A lawyer is a person who, learned the area of law to become an attorney, counsel or solicitor, licensed person to practice law in the court of law. Working as a lawyer represents the practical application of legal theory and knowledge to solve real problems or to advance the interests of those who retain lawyers for legal services. The role of a lawyer varies significantly across legal jurisdictions and therefore can be treated here in only the most general terms (Black's Law Dictionary, 2004). Fowler (2007) and Otike and Mathews, (2000),

indicated that Lawyers work primarily in the legal culture, with its extensive rules and procedures requiring the right kind of legal information. Lawyers operate in information intensive environment. Everything they do, whether providing legal advice, representing a client in court, or drafting a legal document requires information. Legal information is therefore paramount to the success of the judicial system. Okello-Obura, (1998) defines legal information as the requirement or right established by law, which resides in all electronics and written records.

### **1.7 REASON TO SELECT THE PRESENT RESEARCH TOPIC:**

The use of ICT, e-resources, digital information resources, internet and open access resources, played an important role in every subject area. Slowly the information resources in all knowledge sectors are growing either development of born digital resources or retroconversion.

Use of e - or digital information resources is increasing in all sectors of knowledge because of user needs and easy to retrieve and use e-resources. It is also necessary for the information searcher to have skills in accessing the information resources published and available in different forms at ease. There is a need to assess the digital literacy among the users of information of all sectors. There is also a need to find the information and digital literacy among the users.

Now users are more inclined towards the use of e-resources or digital resources, as more and more information is published in these forms. In many sectors information sources are available in print form but now they are migrating towards digital media. In legal information seeking lawyers are more depended on published evidences, it is therefore planned to assess the availability and use of digital information for the professional needs. The present study is based on the law users in using the information sources especially in digital or e- resources.

## **1.8 BACKGROUND OF THE RESEARCH STUDY:**

Law users are more dependent on the evidences while pleading the cases in court as well as studying the law education. The print information sources are abundantly available in the law profession, but searching information from the print resources is little difficult and hence digital information is developing in the law sciences. It is now necessary to identify the users in using digital resources and their awareness of availability. The present study is focused on identifying digital literacy among the law users, and availability of resources of law in the digital forms.

Technology use is increasing and is ever growing in legal sector. Though change is slow, it is apparent that innovation does exist within the legal sector. There is a need for creating a new way to train law students for the technology and developing digitally competent citizens.

The American Library Association's digital-literacy task force offers definition of digital literacy as: "Digital literacy is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills". Digital literacy is one component of being a digital citizen - a person who is responsible for how they utilize technology to interact with the world around them.

"Digital literacy" is one of those technology of 21<sup>st</sup> century students that supports. "The ability to use digital technology, communication tools or networks to locate, evaluate, use and create information". Digital resources literacy is "Understanding how to use web browsers, search engines, email, text, wiki, blogs, Photoshop, PowerPoint, video creation/editing software, etc. to learning. Evaluating online resources for accuracy / trustworthiness of information. There is a need to assess the digital literacy in law users. Hence the researcher has planned to study the digital literacy among the law users in the Pune city as an example.

## **1.9 STATEMENT OF PROBLEM:**

The statement of the problem fixed by the researcher is “**Digital Literacy among users in law institute libraries in Pune: a study.**”The study deals with the study of digital resources and its uses in Law sciences by law users for different purposes. The researcher will assess the digital literacy among the law users and the purpose of use.

## **1.10 OBJECTIVES:**

The objectives of the research study are:

The Digital literacy needs in law education users, necessitate the researcher to assess the digital literacy needs and access pattern. Hence researcher has selected the following objectives for the present study:

- 1 To study the growth and development of law education and law institutes.
- 2 To measure the awareness of users about facilities available in law libraries and assess its utility by them
- 3 To identify ICT tools used by users (Students and faculties) and purpose of using by law users.
- 4 To understand about the familiarity and usefulness of internet resources.
- 5 To study the purpose and frequency use of various softwares and web-based services by users.
- 6 To find the opinion of users regarding uses of web-based services.

### 1.11 HYPOTHESIS:

The hypothesis considered for this study are:

1. Law libraries have collections of books, journals and reports but they are not well equipped with digital resources.
2. Users (Students and faculty) lack knowledge and skills regarding use of digital resources.

### 1.12 SCOPE AND LIMITATION

Scope and limitation of the present research study is restricted only to the study of law colleges in the geographical region of Pune city. The institutes and law colleges are affiliated to Bar Council of India (BCI).

Since the criteria for the study is considered and fixed the researcher has isolated the following law colleges and their libraries as detailed in the table 1.1 for the survey data collection.

Table 1.1 Law Institute libraries in Pune city

<b>Name of Law Institute</b>
Abhinav Education Society's Law College, Pune
Ajeenkya DY Patil University, Pune
Bharati Vidyapeeth's New Law College
Hutatma Rajguru Shikshan Prasarak Mandal Law College, Pune
S.N.B.P. Law College, Pune
ABMSPS's Yashwantrao Chavan Law College, Pune
Balaji Law College, Pune
D. E. S. Shri Navalmal Firodia Law College
ILS Law College, Pune
Lokmanya Tilak Law College, Tilak Maharashtra Vidyapeeth, Pune
Marathwada Mitra Mandal's Shankarrao Chavan Law College, Pune
MCE Society's A.K.Khan Law College, Pune
P. E. S. Modern Law College, Pune
P.D.E.A.'s Law College, Pune
Padmashree Dr. D. Y. Patil Law College, Pune

Rajashree Shivraj Pratishthan's Maharashtra Law College
Savitribai Phule Pune University, Department of Law , Pune
Shahu Shikshan Sanstha's Rani Putalabai Women's Law College, Pune
Shri. Shivaji Maratha Society's Law College, Pune
Sinhgad Law College, Pune
Symbiosis Law School, Pune
Vidya Pratishthan's Vasantao Pawar Law College, Pune

There are 22 Law college institutes (Table 1.1) in Pune, at the time of enrolment for this research study. The population and sampling for this study is same i.e. 22 Law institute libraries in Pune City.

### **1.13 RESEARCH METHOD**

The selection of the research method depends on the nature of the topic and the problems considered for the research study. The present study is undertaken to analyse the digital literacy among the law users of Pune city. To assess the literacy status and suggest the solution for the improvement in the literacy issues in digital environment, researcher planned to undertake the research study using descriptive research. The survey method is used for data collection from the law institute libraries in Pune. The well-structured questionnaire is circulated among the libraries and collected the data. The questionnaire in the tool used for data collection.

#### **1.13.1 STRUCTURE OF QUESTIONNAIRE:**

The Questionnaire technique was used for collection of data. Two Questionnaires were designed for the present study to collect data. One questionnaire designed for the librarians of the law colleges to understand the status of availability of e-collection and internet resources made available to the users. The other for the library users. The other Questionnaire intended to collect data about the resources, services and digital literacy program organised for the assessment of digital literacy and use of the library.



The Questionnaire for the users were personally distributed and collected from them. The data related to library was personally collected from the librarians through Questionnaire. The websites and annual reports were also considered in addition to the data collected by using questionnaire. The Questionnaires designed and used for the data collection are given an Appendix I and Appendix II.

### **1.13.2 STRUCTURE OF THE LIBRARIANS QUESTIONNAIRE:**

The Questionnaire designed for the librarian was mainly focusing on the data collection about availability of information resources, services provided to users, Digital Literacy Programs (DLP) organised, and the methods and techniques used in the type of library and user education of programmes offered by their library. The broad areas covered in librarian’s questionnaire are narrated in Table 1.2.

The other Questionnaire which was designed for the users (students and faculty) to assess their digital literacy skills. The questionnaire was based on ratings. The Questionnaire included different type of questions such as multiple-choice objective question, open ended and close ended questions. The questions are briefed in Table 1.3

**Table 1.2 Components of librarian’s questionnaire**

<b>Sr.No.</b>	<b>Broad Areas covered</b>	<b>No. of Questions asked to librarians</b>
1	General information of Institute and Librarian	4
2	Information of Library	3
3	Library section	8
4	Library working hours	2
5	Library users	3

6	Library resources	1
7	Library services	4
8	Library automation	6
9	Digital Literacy Programme (DLP)	11

**Table 1.3 Components of user's questionnaire**

<b>Sr.No.</b>	<b>Broad Area's of Questions</b>	<b>No.of Questions</b>
1	Individual Information	3
2	Utilization of Library	3
3	Digital literacy	1
4	Digital Literacy Programme	1
5	Digital information	3
6	How Obtain Information?	1
7	Aware of Information resources	2
8	Aware of Library Facility	1
9	Knowledge of Law Databases	1
10	Knowledge of Information retrieval	2
11	ICT Literacy skills	1
12	Internet Literacy Skills	1
13	Ability to access E-resources	1
14	Ability to access Digital Information	1

In addition to data collected through the questionnaire observation and interview techniques are also used to cross check the data

### **1.13.3 OBSERVATION TECHNIQUE**

The observation technique was used to check the information provided by the librarian in the questionnaire was objected or not. The researcher visited libraries number of times at different working hours to observe the functioning of the libraries. Researcher has observed the resources and services provided in the library and its use by the users. Researcher has also checked the library orientation and digital literacy programmes provided by the law libraries by library professionals to the library users in using the resources and services.

### **1.13.4 DATA ANALYSIS AND PRESENTATION:**

The researcher has collected the data based on the survey and systematically analysed and presented the data using tables and graphical methods and deduced the observation to form the analysis of data. The Questionnaires received from the librarians and users were analysed, scrutinised and evaluated critically. The responses formed by the librarians and users on awareness of digital literacy and the skills required for retrieval for assessing information and ability to use information presented in systematic manner. The data analysed using Excel sheets. Analysed data is presented in the tabular form along with graphs wherever necessary. In each table the percentages to responses are presented.

### **1.13.5 STYLE MANUAL USED FOR PRESENTING CITATIONS**

The citations used for understanding concepts and supporting the statements in the study are recorded in the study to acknowledge the authors and cite them properly at the end of chapters and in the bibliography at the end. It shows from where the citation has taken and also grateful for using it. The gratitude thus reported by citing all the references properly and acknowledged cited references in the presence research study using APA style guide.

### **1.13.6 POPULATION AND SAMPLING**

There are 22 law institutes with well-developed libraries for law users in the Pune city. These institutes are managed by societies affiliated by Savitribai Phule Pune University Pune, Symbiosis Deemed International University, Tilak Maharashtra Vidyapeeth and Dr. D.Y. Patil University etc. Some institutes are conducting full time L.L.B. programmes and post graduate courses too. They have both 5 years and 3 years L.L.B. programmes. They also have L.L.M. and Ph.D. programmes. They also conduct diploma programmes in various subjects of law. This study has been considered only five years L.L.B. programmes and L.L.M. programmes. This study has not been considered for Ph.D., Diploma and three years L.L.B. courses in the study.

The random sampling method has been used for selection of sample. Researcher has been visited institutes and interacted with students and faculties who were available in the institutes during the survey. Random sampling technique is followed for selecting users from each category in each institute and on the basis of size of the sample. A list of permanent faculty was obtained from the librarian and distributed questionnaire to them. Questionnaire has been collected from the users personally by the researcher.

The total population of users (students) in law institutes were 7560. The random selection of users is considered and sample selected for the user (students) survey is 10% of population and it is 756. As per Morgan Table, for the known user sample of 7560 the sample to be selected is 367 (7000 – 8000). But researcher has considered here more sample i.e. 10% of population.

Six faculties randomly selected (Permanent) from each institutes has been selected for sampling. It was 110 faculties have been selected for distributing questionnaire.

**Table 1.4 Sample as per Morgan Table**

TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION									
N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size  
"S" is sample size.]

Krejcie, Robert V., Morgan, Daryle W., "Determining Sample Size for Research Activities", Educational and Psychological Measurement, 1970.

(Source: Krejcie, Robert V., Morgan, Daryle W., "Determining Sample Size for Research Activities", Educational and Psychological Measurement, 1970.)

(Note: There is no need of using sample size determination formula for 'known' population since the table has all the provisions one requires to arrive at the required sample size. For a population which is equal to or greater than 1,000,000, the required sample size is 384.)

Every institute has library facilities and these libraries are managed by well-trained library professionals. All 22 institutes were selected for survey and information was collected from the libraries. A questionnaire in Appendix I was prepared for the librarians to understand the present status of law libraries. A questionnaire Appendix II was prepared to understand the users of law library facility.

The first questionnaire included the questions to get information about libraries like staff, timings, collection, e-resources, library services and organization of library, services provided to users and the orientation for educating the users. The main purpose to collect the

data through this questionnaire was to know the status and activities carried out in these libraries and also the use of ICT and modernization of libraries. The population and sample for the librarians is same i.e. 22 law libraries located in Pune city. The questionnaire circulated among 22 law institute libraries out of which 18 i.e. 82% responded. (Efforts were made to collect the data from the remaining 4 law institutes. But due to various administrative problems these institutes couldn't get response from librarians. Hence the survey was analysed on the basis of the received data).

The questionnaire in Appendix 2 was designed for the user population selected which are related to users, and covers questions on various levels like students and faculty. The questionnaire was circulated among the students 756 and 110 faculties out of these 635 (84%) and 73 faculties (66%) responded. On the basis of the received data, researcher framed the charts and draws the conclusion accordingly.

#### **1.14 STRUCTURE OF THE RESEARCH STUDY:**

The complete study is presented in the following five chapters

Chapter 1: Introduction: In this chapter researcher has covered the research design and process in brief. In the introduction trends in LIS are narrated, importance of libraries, law libraries, literacy and types of literacies, digital literacy, needs of law users, reason for selecting the topic for research, background in developing concept, statement of problem, objectives, Hypothesis, research methodology, scope and limitations of the study, highlighted research study on topic, structure of the research study etc are covered. This is overall frame work.

Chapter 2: Literature Review: This chapter focused on the different heads of the literacies along with digital literacy, to understand the nature and extent of literacies and its need in the information society.

Chapter 3: Law Education: In this chapter researcher has discussed about law, law education, need of legal education, legal education in India, in ancient India, in British rule, changes in legal education,

major resources in Law Science, Law Libraries, and the Role of Law Libraries etc.

#### Chapter 4: Data Analysis and Interpretation:

This chapter is representing data analysis, the data collected from the questionnaires are analysed systematically and presented in tabular and graphical form. From the data analysis researcher has deduced some observation related to the concept. The interpretation of the responses is based on the data collected from the researchers

#### Chapter 5: Findings, Suggestions and Conclusion:

In this chapter researcher has presented finding based on observation from data analysis, suggestions which can be available and also reserved in this chapter. Testing of hypothesis and scope for further research is also discussed in this chapter. The study is suitably conducted.

#### Summary:

Present study “Digital literacy among users in law institute libraries in Pune: a study” have been concerned with the law faculty and students of law institutes. Using the survey method data is collected from the students, faculty and librarian of law institutes, using structured questionnaire separately designed for the law library users and law librarians and data is tabulated and analysed.

## REFERENCES:

- ACRL (2018) 2018 top trends in academic libraries: A review of trends and issues, affecting academic libraries in higher education. ACRL Research Planning and Review Committee. Vol. 79 (6) Accessed at <https://crln.acrl.org/index.php/crlnews/article/view/17001/18750>
- Digital Literacy. Accessed at [https://en.wikipedia.org/wiki/Digital\\_literacy](https://en.wikipedia.org/wiki/Digital_literacy)
- Fowler, S.G. (2007). Results of participant observation in the Fifth Judicial District: Customizing the county law library to meet the needs of small firm attorneys in rural Kansas. EBLIP4, May 6-9, 2007. Available at: <http://www.eblip4.unc.edu/papers/Fowler.pdf>
- Garner, B.A (2004) Black's Law Library USA: West Group.
- Jenkins, Henry (2009). Confronting the Challenges of Participatory Culture: Media Education for the 21st Century Cambridge, MA: The MIT Press.
- Law Libraries. Accessed at [https://en.wikipedia.org/wiki/Law\\_library](https://en.wikipedia.org/wiki/Law_library)
- Okello-Obura, C. (1998). Legal information sources. Master of Science in Information Science report. (Unpublished)
- Otike, J. (1997), Legal Information needs of the general public with special reference to developing countries, Library Review 46(1).
- Tuhumwire, I, Okello-Obura, C (2010) Assessment of Legal Information Needs and Access Problems of Lawyers in Uganda. Library Philosophy and Practice (e-journal). Accessed at <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1394&context=libphilprac>
- Types of Literacies. Accessed at <https://sitwe.wordpress.com/2015/12/14/types-of-literacy-or-literacies/>



- What is Digital Literacy? Accessed at <https://study.com/academy/lesson/what-is-digital-literacy-definition-example.html>
- James, R. S. and Alan, R. T. (1997). Cataloguing and classification Trends, Transformation, Teaching and Training.
- Bar Council of India Reform of Legal Education in India Retrieved from Retrieved from <http://www.barcouncilofindia.org/wpcontent/upload/2014/11/legaleducationreformrecommendationspdf>
- Greenleaf G. (2010). The Global development of free access to legal information, European Journal of Law and Technology, 1(1) Retrieved from <http://ejlt.org/article/view/17/39>
- Moily, V. (2010). Law Minister Announces Vision for Legal Education Reform: A vision statement delivered by the Law Minister Veerappa consultation for second Generation Reform in Legal Education held at the Vigyan Bhavan, The Bar council of India, New Delhi. Retrieved from <http://www.barcouncilofindia.org/law-ministers-vision-statement-for-secondgeneration-reforms-in-legal-education/>
- Pillai, K.N. Chandrasenkharan (2012). Legal Education and the Digital Era in Singh, R., Devroa, S., Rai, P. & Singh, A. (Eds.) International conference on Access to Legal information and Research in Digital Age. New Delhi, National Law University.
- Retrieved from <http://nludelhi.ac.in/download/publication/2015/august/Conference%20Proceeding%20International%20Conference%20on%20Access%20to%20Legal%20Information%20and%20Research%20in%20Digital%20Age%202012.pdf>
- Shrivastava, R. K. (2008). Law Librarianship in India with Special Reference to the Judicial Library System. International Journal of Legal Information: the Official Journal of the International Association of Law Libraries, 36(2). 275-299.

Retrieved from

<http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1139&context=ijli>

- Wong, B. and Sawatzky, K. (2014). Presented at Ontario Library Association super conference. The Hidden of Law Libraries.

Retrieved from

[https://brendawoa.files.wordpress.com/2014/02/hidden\\_world\\_paper.pdf](https://brendawoa.files.wordpress.com/2014/02/hidden_world_paper.pdf)

- Retrieved from

<https://www.collinsdictionary.com/dictionary/english/law>

- Retrieved from

<https://legal-dictionary.thefreedictionary.com/John+Austin>

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 INTRODUCTION:**

Conducting careful and thorough literature review is an essential aspect, when researcher undertakes any research study in the form of thesis. Literature review is a basic homework, which helps in writing research papers. Research literature review is conducted to formulate different concepts and fixing the title. It is a survey of past literature to find what research has been done in the past on the topic, but it also appraises, encapsulates, compares and contrasts, and correlates scholarly literature published in books, research articles, and other relevant sources that are directly related to current research. If literature review is lacking in the research study at the beginning of thesis, research writing may not be considered seriously.

### **2.2 IMPORTANCE OF LITERATURE REVIEW:**

The Literature review is an essential aspect for any research study, as it suggest researcher to select topic, research method, formulating objectives, hypothesis, strengthening the views presented in the research study or report, preparation of synopsis, finding gaps in research etc. Literature reviews are of different kinds like argumentative review (discussions), integrating review (critical analysis on topic), historical review (chronological), methodological review, systematic review, etc.

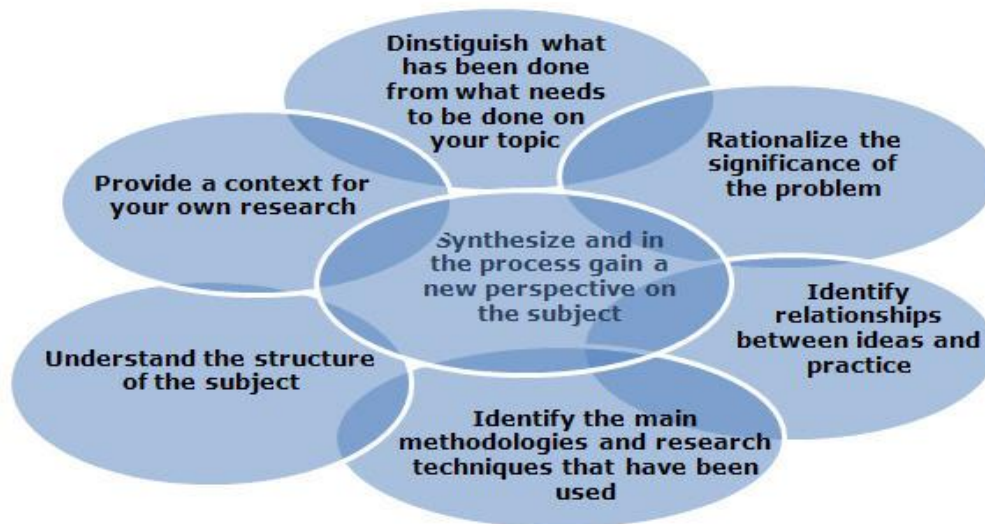
Literature review helps in:

- Reducing and avoiding plagiarism
- Avoiding duplication of concepts
- Sharpen the focus of research
- Concept building
- Gap assessment
- Understanding existing research
- Provide a synthesis of the issues, trends, and concepts surrounding research

- Gives a new interpretation of old material or combine new with old interpretations,
- Trace the intellectual progression of the field, including major debates,
- Depending on the situation, evaluate the sources and advise on the most pertinent or relevant research

Literature review thus helps in presenting research study as indicated by Hart (1998) in the following diagram.

Fig. 2.1 Literature Review benefits to researcher



(Source: Hart, C. 1998. Doing a literature review: releasing the social science research imagination. London: Sage, p 27.)

### **2.3 FACETS OF LITERATURE REVIEW:**

For conducting the present research study researcher has considered different facets related to topic and useful for the study. The following facets are considered:

- Types of Literacy
- Information Literacy
- Information Literacy Models
- Information Literacy skills
- Benefits of information Literacy

- Digital era
- Digital Divide and Digital Natives
- IL Standards
- Digital Literacy
- E-Learning

### **2.3.1 TYPES OF LITERACIES**

Different types of literacies are formulated to understand the role of it in education and research sector. According to Pietila (2017) the different literacies in education are: Digital Literacy (Use of Digital devices like smartphones, tablets, and laptops for information gathering), Media Literacy (Use of instant messaging, push notifications, wikis, online communities, blogs, or vlogs – and selecting most effective medium for communication), Visual Literacy (ability to comprehend – and to create – videos, photos, infographics, and other visuals), Data Literacy (analytics), News Literacy, game literacy, civic and ethical literacy, computational literacy, etc.

Apart from these there are many other literacies like information literacy, ICT literacy, teaching literacy, computer literacy, technological literacy, etc. Mkandawire, S. B. (2015). Centre of Teaching([https://teach.its.uiowa.edu/sites/teach.its.uiowa.edu/files/docs/docs/Types\\_of\\_Literacy\\_ed.pdf](https://teach.its.uiowa.edu/sites/teach.its.uiowa.edu/files/docs/docs/Types_of_Literacy_ed.pdf)) defined Digital literacy, as just the technical ability to operate digital devices properly; and it comprises a variety of cognitive skills that are utilized in executing tasks in digital environments, such as browsing the Internet, deciphering user interfaces, working with databases, and chatting in chat rooms.

### **2.3.2 INFORMATION LITERACY**

Brooks (2015) studied Information literacy in digital era and its benefits to librarians and users. This article / study narrated an overview of connectives theory. This theory indicated the relationship to information literacy instruction and the use of tablets and iPads/iPods etc. during delivering the instructions. Mobile devices, smart

phones and tablets are popular now a days in colleges and they have also treated as an educational tool.

Pinto (2015) surveyed the scientific production of Ibero – on American authors regarding information literacy. The main intention of the survey was to assess the information literacy for the past four decades using bibliometric analysis. They included articles from different databases like, web of science (Thomson Reuters) Scopus (Elsevier), Library and Information Science Abstracts (LISA) and Library and Information Science and Technology Abstracts (LISTA) databases. The study pointed out that information literacy is related with information science, digital literacy and school library etc.

Lyn (2006) studied the mental models of six United States and four Australian teacher-librarians. The study analysed and compared before, in-action, and after models while they were teaching two students in one-on-one sessions on the topic how to use a computer databases and information resources. The author also demonstrated the ways and extent to which stimulated recall methods, which inform the understanding of teaching with electronic computer databases, and thereby proved a useful tool, not just for researchers, but also for teachers who want to discover more about their teaching and what their students were thinking. The teaching of information retrieval from the databases developed information literacy among the users and get more recall after attaining searching skills using information literacy training.

Cordell (2013) in his communication “information literacy and digital literacy competing or complementary?” in which author studied digital literacy which relates to multiples categories of library users in different types of libraries. Before revising ACRL “standards” indicated the relationship between information literacy and digital literacy is needed or required for developing knowledge and processes.

Tibor (2011) Opined that the digital technologies are developing fast and it is necessary to get awareness of media’s importance in every

sector of knowledge. Media literacy, information literacy and digital literacy are the concept that focuses on media messages. Tibor shows the similarities and differences of these literacies. The functioning of these literacies is outlined and additional literacies are mentioned especially with the question of blurring like between media consumers and producers. Kumar (2007) has explained in the IFLA general conference and council that ideas on information literacy develop arguments, refute the opinions of others, and learn new things, truth about a topic considered for study.

Lyman (2003) stated the component of critical thinking, research-led learning and teaching, which enables to meet the challenges arising from the proliferation of information. It promotes understanding of what constitutes plagiarism. Mackey (2005) in his Paper discussed on complementary proficiencies in research and web literacy.

Garner (2005) in his communication discussed in a meeting held at UNESCO on information literacy and lifelong learning. Author has discussed on effective access to information and its use and creation of content to support economic development in different fields like, education, health, human services etc. This activity needs the use of current technologies to encompass learning, critical thinking and interpretative skills across professional boundaries, empowers individuals and communities.

Council of Australian University Librarian (CAUL) (2001) had released standard definition of IL in March 2001. An information literate person is able to understand a need for information, determine the extent of information needed, access the needed information efficiently, evaluate the information and its sources, incorporate selected information into their knowledge base, use information effectively to accomplish a purpose, understand economic, legal, social and cultural issues in the use of information, access and use information ethically and legally, classify, store, manipulate and

redraft information collected or generated and recognize information literacy as a prerequisite for lifelong learning.

Grafstein (2007) indicated that the library community gave prominence to IL as there is a need in information environment, since lot of information is available in digital and print media as well as available on internet using information technologies that facilitate to the access and dissemination of information. Bruce (2002) defined the term IL initiated early in 1970, which is now developed and recognized as a critical need in the 21<sup>st</sup> century. Bruce pointed out that information literates can better handle the information and also able to exploit information resources properly. Grassian (2004) expanded the term IL which is generated decades-long efforts of librarians to help their users learn about utilizes research tools and materials in their own libraries. IL expands its effort beyond libraries and focuses on the learner.

### **Conclusion**

Today smart phone, tablets, iPods have become used as educational tools in information and digital era. Information is connected with schools of library and information science. The e-resources are now playing important role in teaching and learning process of education. Use of databases is very common as they are main source for gathering information on subject. Information literacy and digital literacy are now essential for developing new knowledge and generating information processes. The digital technologies are developing and gaining media literacy. Due to use of ICT, digital media the user needs to become information and digital literate to handle the information needs as well as attain the lifelong learning process.

### **2.3.3 INFORMATION LITERACY INSTRUCTION (ILI)**

American Library Association (ALA) (2000) indicated that there is an information explosion and information resources are generating beyond the human control. The students have to face the challenges of using information resources effectively. Hence information literacy is an



essential aspect for the users of information and information literacy instruction helps users in developing information literate person. In the information age information searching skills are necessary among the users of information, to collect qualitative information resources by critical thinking. The information literacy instructions are reflected in the information literacy competency standards for higher education, developed by the Association of College and Research Libraries (ACRL).

Spitzer (1998) indicated that information literacy instruction includes instructional approaches related to library instruction sessions, course integrated projects, online tutorials, and stand-alone courses. Instructions given in the courses by the librarians highlight disciplined use of specific resources in subjects or courses. University of California at Berkeley Library (2002) also conducting courses and instructions for the users to handle the information sources. Breivik (1998) indicated that many libraries having academic background are turning to course-integrated instruction. This provided users with information literacy skills and instructions for information handling more effectively.

Summary: For the enhancement of IL there is a need of ILI from the libraries and librarians need to take leading role in to this issue.

#### **2.3.4 INFORMATION LITERACY MODELS**

Developing IL among the user's different scholars have proposed models for IL. Information literacy models are theoretical constructs which helps to attain information literacy propagation. Eisenberg (1998) made comparison of information literacy that has been developed through research and evaluation. The literacy standards shown many similarities among them. Eisenberg (2008) also discussed on models like Kulthaus and Ellis and several information literacy models which describe individual's strategies to search information.

- a) Kulthaus Model: The process for searching information consists of six linear steps which are selection, exploration, collection, presentation and assessment. The models also state that intermediaries which also helps to the individuals in getting information. It also shows the zone of intervention for librarians.
- b) Ellis Model: Ellis (1989) in his model suggests a nonlinear path of information search. It has the same stages as that of the Kulthaus model. The stages are dependent on the individual's specific problem and situation.
- c) SCONUL Model: Kuffalikar (2006), The Society of College National and University Libraries (SCONUL) task force on information skills was convened in 1990. SCONUL model of 7 pillars describe two fundamental blocks, the basic library skills and basic information technology skills. These are necessary for the information literate person for gathering any type of information.

Chan (2003), discussed on SCONUL seven pillars model of information literacy in 1999 this is widely used. SCONUL in UK has identified seven pillars of information literacy. They are as follows (Webber 2003).

1. Ability to understand and recognise a need for information.
2. Ability to differentiate various ways in which the information gap may be addressed.
3. Ability of build strategies for locating information.
4. Ability to locate and access information.  
Ability to compare and evaluated information sources.
5. Ability to organize, apply and communicate information to others in appropriate ways according to the situation.
6. Ability to synthesize and develop the existing information, thus contributing to the creation of new knowledge.

- d) Mckinsey Model: Donaldson (2004), has contributed to Mckinsey model. It is linked to information literacy which begins with

information need. This need arises due to a business problem, research problem, case study, or class assignment. Once the problem is identified then it needs analyzing the problem. Mckinsey calls this step the framing the problem. The model is breaking into its component elements in order to come up with an initial hypothesis to the solution.

Mckinsey model works as follows:

- Facts are always friendly
- Do not think “I have no idea”
- Do not invent some wheel
- Gather external knowledge
- Take charge of garbage and dispose it off
- Start the annual report. Take care by using knowledge.

Librarian can help students in developing the technical skills and developing their final presentations.

- e) Other Models: Many authors had suggested different models like: Sundin (2008); Li (2007); Dalglish (2000); Abbott (2003) put forth models, web-based tutorials for information literacy by these authors. Community information literacy model by Seneviratne (2004), Elliot (2005), E-learning tutorial for vocational e-literacy. Harris (2006). Vickery’s model of information transfer. Intensive information literacy model by Hearn (2005). Teaching information literacy skills by Oladokun (2006). The use of electronic information services and information literacy by Crawford (2006). IT orientation course for librarians’ model by Madhusudhan (2005). Convergent model for information literacy by Mackey and Ho (2005). Teaching information literacy a questionnaire by Kennedy (2005). Information literacy model for academic libraries by Deshpande and Shelar (2005). Digital information fluency model by IMSA (2008). Model for information literacy course development by author Loo and Chung (2006). Reflective Online Searching Skills (ROSS) model by Bruce, Edwards and Lupton (2006). Information literacy model for role of librarians by

Baradol and Gopakumar (2005). Models of information literacy training in the undergraduate curriculum by King (2007).

### **2.3.5 INFORMATION LITERACY SKILLS**

SCONUL (1999), indicated that today society is growing and information explosion is very high and made available in various forms and formats. In the ICT era information is made available at fingertips due to computer networks, databases and telecommunication systems. In this information age users have to face tremendous challenges and adequate skills are needed to retrieve information and then use it. Information needs to be understood properly. Today companies and individuals survive on information literacy skills. These skills are necessary and essential for proper information retrieval. The knowledge of finding and accessing information is needed in the information explosion. Developing appropriate searching techniques is the need among users, using communication and information technologies. Using appropriate indexing and abstracting services, citation indexes and database etc. current awareness methods for being up to date, understanding to distinguish ways in which the information gap may be addressed. Knowledge to construct strategies for locating information, confirm and recognise information need to match against resources, to arrange systematic method appropriate for the need to understand the principles of construction and generation of databases is also needed. Understanding comparing and evaluating information obtained from different sources, awareness of review process used for scholarly publishing is also needed. Retrieving information as per matching the information needs, capacity to organize information retrieved, applying and communicating information by citing bibliographic references in project reports and theses, by constructing a personal bibliographic system, by communicating effectively using appropriate medium, by understanding issues of copyright and plagiarism etc. is to be understood by the users for contributing to the creation of new knowledge.

ACRL (2000), has mentioned in their communication that the ability to understand the issues affecting accessibility of sources, to identify the accurate and complete information forming the basis for intelligent decision-making is essential. Accessing sources of information including computer-based and other technologies, use of information effectively to individually or as a group for a specific purpose, understanding the economic, legal and social issues surrounding the use of information, accessing and using information ethically and legally is the need in information explosion era.

Doyle (1994), has mentioned in his research paper that identifying nature and extent of the information is needed. Formulating questions based on the information needs. Arranging the information for practical application, integrating new information into an existing body of knowledge and using information in critical thinking and problem-solving is the need.

#### **2.4 BENEFITS OF INFORMATION LITERACY**

Dhiman (2006) and Khairah (2005), mentioned following benefits of the information literacy.

- Improving knowledge through substantive operations of knowledge creation.
- Collection of data and information and converting into knowledge.
- Proper and critical application of information and knowledge in problems solving.
- Advantage the critical thinking.
- Arranging information in personal or corporate sections.
- Developing self-directed learning.
- Appreciating lifelong learning

Hancock (1993), mentioned that information literacy is beneficial for different classes, including students, citizens and workers.

Rockman (2005), indicated that the benefits are useful for lifelong learner for achieving a high level of information literacy. Similarly,

Ercegovic (1998) indicated that ultimate benefits of information literacy is to help to close the gap between the information poor and the information rich.

## **2.5 SCOPE OF INFORMATION LITERACY**

Bawden (2001), while discussing on the scope of IL, indicated and made an attempt to clarify related concept and a multiplicity of terms, which are often used. Some of these are Visual Literacy, Media literacy, ICT literacy, computer literacy, digital literacy, network literacy and library literacy. These are basic and implicit in information literacy.

## **2.6 AIMS OF INFORMATION LITERACY**

ALA (2003), indicated the aims of IL and pointed out that IL is used for teaching students which is used to find information and students are well versed in finding information that they need throughout their life. It forms the basis for lifelong learning, as it is common to all disciplines. It helps learners to make investigations and become more self-reliant. People understand to ensure the need to learn about sources of information and how to achieve it. IL prepares students to enter the world of scholarship, by shifting focus from teaching to learning in higher education. Learning theories increases their knowledge, and reproduce new knowledge. IL develops ability to find answer to questions, research find meaning, develop ideas, analyse, evaluate, synthesize, reason, transfer, solve problems, make decisions, understand nature of information and communicate. It teaches to use technology effectively and also use information safely and responsibly and produce new knowledge. It is necessary to make the learners feel more confident and develop skills to manage information.

Ghosh (2006) in his paper published IL initiatives in India with special reference to emerging knowledge economy. It is confident in using and satisfying in carrying out information searching skills.

## **2.7 NECESSITY OF INFORMATION LITERACY**

Dhiman (2006), indicated that IL is an essential, due to information explosion, information revolution, and use of ICT. Change in information environment affect information users in several dimensions. IL is necessary to locate proper information for developing new knowledge. Jayaprakash (2005), Pointed out that information Literacy is an essential as change in libraries, broadly spreading of information, increase of users need, and multifaceted research activities and interdisciplinary research areas felt the need of IL.

Mokhtar (2008), stated that information is available in different forms, without any geographical boundaries, large quantity of information makes it difficult to find exact information. The need of authentic, validated and reliable information with quality and quantity is a serious problem and needs consideration to gain the proper skills. Large amount of information may not create informed citizens. Majority of users using IT and taking advantage of resources available. Information booth, learning resource centres etc. plays a key role in imparting information literacy to their beneficiaries to acquire compatible skills for handling printed vis-a-vis electronic sources. Skills of information literacy trained users and take a logical path in their search and develop use of application of information for generating new knowledge. Bundy (2005), indicated that IL is required to contribute citizenship, social inclusion and for making of new knowledge, personal empowerment and learning for life etc.

## **2.8 DIGITAL ERA**

Barbara (2001) in her book examines the persuasive approaches used in critical literacy in a digital era especially on use of the internet. She argues that new media technologies are accepted in theory and used in practice in the ICT era. She further studied other texts includes from periodicals, women's magazine, web sites and internet based political parody in 2000 presidential campaign. In which she discussed new media and technology and its applications. The book brings the ideas

of people through online speeches and arguments explaining the new media environment. This study plays a significant role in the development of critical literacy about writing and speech about new communication technology. Those who are interested in communication, social change, public persuasion and rhetorical criticism of new media etc. may find this book interesting and useful.

Yoram (2004), in communication, Digital literacy: A conceptual framework for survival skills in the digital era, states that digital literacy includes cognitive, motor, sociological and emotional skills. For this reading instructions from graphical displays and creating new materials from existing ones is useful. It evaluates the information studies and the rules that prevail in cyberspace. The concept of digital measures, the learners, scholars regarding effective communication in designing better user need to be oriented in digital environment. This article shows holistic approached to digital literacy.

Yoram and Yair (2004), said that digital literacy requires the knowledge to operate a digital device and suggested a model which had five major digital skills like(i) Photo visual skills which requires “reading” instructions from graphical displays. (ii) Reproduction skills creating new meaningful materials from existing ones. (iii) Branching skills – building knowledge from non-linear texts. (iv) Information skills, judging or evaluating the quality of information. (v) Socio-emotional skills, means applying cyberspace rules in online cyberspace communication. The study of scholars showed that, younger scholars performed better than the older ones with respect to photo visual and branching literacy skills and the older participants were more knowledgeable in reproduction and information literacy skills. The study also pointed and helped to lay stress on better user – centred digital environments.

Frank (2004) expounds on the Digital Literacy in which author thinks for the foundation for learning. The learner must understand to critically analyse sources of information. In print world there is



editorial board, peer reviews to validate information. In digital world the same procedure is used in many publications, but still there are challenges in using and find the authenticity of information and its validity. The learners need to be taught to be critical while using information from the digital resources and this need digital literacy. Thus, digital world helps users in using properly evaluated information. (The United Nations has reported that 130,000,000 children in the world have no teachers and classrooms. USA has developed electronic learning by a model of high educational quality to the world). In the digital world today, the transition has taken from book and library world to electronic text, television and internet. This need the users to be more digital literate and gets the skill of using national and international digital libraries and there is a need to add digital literacy education in the curriculum to enhance the quality digital information use, provided worldwide through digital resources.

David and Lyn (2002), has promoting literacy in a digital age approaches to training for information literacy. While dealing with information in diverse formats and situation David and Lyn discussed the concept related to knowledge, skills and attitudes. Two cases form scientific and multinational pharmaceutical research organizations were surveyed and studied for assessing information and digital literacy training.

Guy (2007), explained how literacy curriculum in formal and informal education contexts and tried to give “the basics” and responds to new technology demands. The paper examined and differentiates between digital literacy and traditional print literacy and showed priorities for literacy educators. Gee, Kress and Lankshear and Knobel inspired for further studies in digital literacy and find research areas and development. Authors discussed the material and textual form after studying the digital literacy critically and suggested future trends in digital communication. According to them written representation is important and digital literacy may develop distinct registers.

**Conclusion:**

In the digital era the authors of different articles in their communication indicated that the strategies used by writers to influence the people about technology. It also pointed out five major digital skills used for building meaningful material from existing ones. Cyberspace rules are used in communication. In the digital environment the younger scholars performed better than older ones. But digital literacy is need for the both generations as digital information is explored in volume. Digital literacy is the foundation for learning. Digital libraries would be able to provide education national and international level at any time and place. This is the intention of digital literacy. The studies of some researchers in formal and informal education demands use of new technology. Digital literacy develops in digital age.

**2.9 DIGITAL DIVIDE**

Kumar, Neha (2015) observed that women in the patriarchal society are not so efficient with technologies including mobile devices than male counterparts. In some part of rural India women are digitally illiterate. Cohron, Madalyn (2015) discussed on Digital Divide in the United States and mapped the multifaceted issues on the use of digital information. Author found that library is narrowing the digital divide in the use of high speed broadband accessibility and aware of digital literacy. The conversations about digital divide shifts from a divide in access to divide in skills or literacy. To reduce digital divide in America measures have taken and other parts of the world there is a need to reduce digital divide.

Wong (2015) studied the digital divide challenges in Shanghai. Children in low-income families - mentioned in "The case of Shanghai". Data was collected from household survey. 796 Low-income families and 799 non low-income families with children aged 9-17 were examined. It was found that children from low – income group, who had no access to internet, reported lower scores in digital

literacy. But those children from low income group used internet access didn't show significant difference with non-low-income group. The study could not establish the relationship between internet access and improved development. However, the study suggested that lowest income strata and agricultural household should be focused for giving internet access and develop digital literacy and reduce digital divide.

### **Conclusion**

The studies showed that there was a digital divide and the main cause is users that are not digital literate, hence a need of digital literacy is an essential part in information and knowledge based society.

### **2.10 DIGITAL HUMANITIES**

Tracy (2016) assessed Digital Humanities tools and studied the librarians increasing support to digital publication and the tools used by them. This case study surveyed the use of scalar a digital humanity for publishing media – rich projects in Illinois University at Urbana, Champaign. This case study was based on a survey, interviews, and content analysis. Author also studied its functionality, successes and failures in user expectations. It consists of media upload process, image annotation and aesthetics. It also considered writing pedagogy and suggested lessons for digital literacy instruction.

Pun (2015) through their paper tried to conceptualize how digital humanities (DH) can be integrated into instructional services programs in libraries. They studied three digital projects from New York Public Library (NYPL), which revealed use the resources creatively by librarians to teach new digital literacy skills like data analysis and data management. One can learn about integrated DH projects into library instructions thus increasing the spheres of new research and teaching areas which are relevant and needed today. They helped in teaching digital skills to users. The users can develop traditional information literacy skills and digital literacy skills both together to retrieve qualitative data. Like crowd sourcing projects need to be initiated in the libraries and users get benefitted due to such projects. It also

showed that positive implications developed in the library and can aid to the scholars through new digital resources. There are some limitations in use of digital resources, but they have to be observed and solved by training. Librarians can play a creative role to fill the gaps in digital literacy awareness. Now librarians are new to these resources and they may find it challenging to understand the importance of DH projects produced in public research library. Librarians can play a critical mediator's role in bringing out digital literacy in 21<sup>st</sup> century.

## **2.11 DIGITAL NATIVES**

Long (2005) expresses the views in the study on different learning and working styles in generations on digital environment and their approaches and methodologies in library industry. Author found that young people think and process information in a different way than earlier generations. The article emphasized, that a deeper understanding into the youngsters tapping the resources is a skill. Since they are the future supports of libraries their investigation methods of researching the resources need to be understood and followed.

Can we teach (2012), the paper published in 2012 and investigates the knowledge of educational technologies of students of Australian university studying e-learning and studied on how users use the unfamiliar technologies into their learning. The findings showed that the students could use the unfamiliar technologies easily to create useful artefacts. The "digital nativesness" of students was studied from their digital literacy. The students only needed to be made aware of what the technologies developed and they were provided with the opportunity to use them. The study showed that, digital natives also taught for digital literacy.

Michael (2011), tried to define the students using web and new digital technologies in early 1990s. "Digital native" refers to the generation born after 1980 and grown up with digital technologies as internet in everyday life. They are always connected to internet and familiar with

technologies. They are supposed to digital “native” to digital life style. Deconstructing digital natives gives a balanced, research. The contributors show international development in digital literacy offering new ways to a productive path between traditional narratives which give complete acceptance or total dismissal of digital narratives.

**Conclusion:**

Studies were conducted on learning and working styles in generations on digital environment concerning library industry. The youngsters need to follow and understand the methods since they are the future supports of library. The “digital nativeness” of the student showed that digital literacy can be taught to them to enhance the use. Digital native refers to generation born after 1980 and which has grown up with internet and digital technologies and are always switched on to internet. International development takes place in digital literacy with new productive path between traditional narratives and digital narratives.

**2.12 STANDARDS**

Standards are operational development of the models. They break down by describing the nature and extent of different subcategories of information literacy characteristics.

The American Association of School Librarians (AASL) (1998) has published a position statement after they studied the steps of the information problem-solving process, showing the key elements of an information literacy curriculum. WEMA (1993).The position statement was based on information literacy: written a paper of Wisconsin Educational Media Association (WEMA). ALA (1995), in the information Literacy Standards for student learning, are mentioned in three categories which are information literacy, independent learning and social responsibility. In these three categories there are nine standards and 29 indicators to describe the content and processes, and students use these to achieve to be an information literate user.

### **2.13 INFORMATION AND COMMUNICATIONS TECHNOLOGY**

Kirschner (2003), in a special issue showed initiatives taken by ICT in training teachers and making them more digital literate. 26 cases of good practices can help and be used for both pre – service and in-service programmes for teacher training by ICT. ICT can become a competent tool for teaching. Today the use of ICT is well improved to promote educational needs in 21<sup>st</sup> Century. Lin (2000) compares computer literacy and its fluency with information technology. It discusses the usability of information technology in the society and its components of fluency and limitations for its use.

Angeligne (2010), while researching the educational technology and development found that, students use information and communication technology (ICT) which may be a matter of digital literacy and access than a generational trait. They tried to identify ICT preferences of post-secondary students (N=580) through a digital propensity index investigating communication methods internet practices and online creation of content. Author examined the age, gender and socioeconomic status as factors explaining why students used ICT. The results showed that age is a factor in ICT use. It also showed that gender gap and between socioeconomic groups in using ICT was lessening. They brought forward some implications for institutions which gave training to pre-service teachers. Curriculum developers in designing materials for giving instructional materials and educational leaders in developing ICT policy for schools.

Loveless (2006), in an ICT conference presented a paper on developing economies of India and China were presented, Ola Erstad, of Oslo university spoke on curriculum reform of Norway and digital literacy. The papers presented discussed the influence of ICT in education and its criticism. The outcome of this conference was that old methods were to be new methods in ICT needed to be found.

**Conclusion:**

From the different studies it could be drawn that the ICT is become a competent for teaching to enhance literacy. The age, gender and socioeconomic status explain why students use ICT and need of ICT policy in schools is being developed. New methods need to be found, in ICT for post-secondary students, who preferred ICT and make use of the methods in online creation of content.

**2.14 LIBRARY LITERACY**

Correia (2003), rightly pointed out that library literacy competencies are required for using library resources and services. It demands for the skills like search strategy building to locate and evaluate the most relevant information on a given topic. The users need to use right methods that would enable them to use libraries more effectively for research and development. The students are trained by library staff to be self-sufficient by learning to retrieve information that they can retrieve on their own by using resources in library.

Babu (2008), in his communication suggests that those who are library literate, these users can search texts to gain relevant information. There are several stages of developing library literacy.

- Library literacy helps users in finding a book on the shelf without assistance.
- The term called semi-library literacy, used which thinks of a person who can find books using library catalogue and on shelf and can find articles in reader's guides.
- Library literate person can follow a systematic search strategy to locate relevant information on a given topic.
- Library fluent means a person who understands patterns of communication and publication and can generalize and modify a search strategy to get information on their needs. Hence library literate persons can use the resources in better manner for any purpose.

Repanvici (2007), also indicated that along with library literacy many other literacies are also essential like:

- Tool literacy - is the ability to know and use conceptual tools.
- Resource literacy - is ability to follow the form and format, location and to access methods of information sources including e-resources.
- Social structural literacy - is ability to know how information is situated and produced socially.
- Research literacy - is understood with information technology-based tools relevant to the work of research scholars and researchers.
- Publishing literacy - is ability to format and publish research ideas electronically with textual and multimedia forms.
- Emerging technology literacy - is to adapt and understand, to evaluate and make use of continuously emerging innovations in information technology.
- Critical literacy - is an important ability to evaluate critically the intellectual, human and social strengths and weaknesses. The potentials and limits, benefits and costs of information technologies are also to be understood. Thus, along with many literacy user becomes more literate in getting desired information available anywhere in the globe.

## **2.15 LITERARY LITERACY**

Suominen (2015), conducted a study and surveyed on library trends and explained in his paper “Literacies, Hermeneutics and Literature” about the literary literacy. This paper addressed literary literacy as form of extended literacies, in the areas of literature. In general school education it is observed that literacy in reading might be useful in conducting better use of information in any work. Today, the concept of literacy has developed in areas such as media literacy, computer literacy and information literacy.



David (2009), explores the nature and development of writing systems, the relations between speech and writing, the history of social uses of writing, the reading, and the social practices. They are scholars in linguistics, literature, history, anthropology, psychology, the neuro sciences, cultured psychology and education.

## **2.16 MEDIA LITERACY**

Hume (1999), discussed on media literacy which is related to critical thinking while assessing information which is made available through television, radio, newspapers, magazines and increasingly by the internet. Hancock (2002), also highlighted on media education which seeks to increase children's critical understanding of the media which deals with how they can work, how they can produce meaning, how they are organized and how audiences make sense of them. Secker (2004), spoke about media literacy which is ability to use material in a range of different formats efficiently. Hirwade (2006), also discussed on media literacy that means ability to decode, analyse, evaluate and produce communication in a variety of forms. Correia (2003), narrated media literacy, is nothing but an ability to evaluate the information received from different mass media of information. Livingston (2005), pointed out that media literate person and everyone who has the opportunity to become media literate can decode, evaluate, analyse and produce both print and electronic media. Media literacy overlaps with concept of information literacy, as the information gathered from the sources overlap and compliment sources.

## **2.17 NETWORK LITERACY**

McClure (1993), spoke on Network literacy, which is closely related with computer literacy. Users have to be able to locate and access network. They must have the literacy skills categorised as traditional literacy computer literacy and media literacy. Author has described a network literate person can:

- Have awareness of the range of global network information resources and services.
- Knows the system by which network information is generated and made available.
- Retrieve specific types of information from the network using discovery tools.
- Use networked information by combining it with other resources.
- Make use of network information in analysing and resolving work, decision and obtaining services that will enhance his quality of life.
- Understands the role and uses of networked information in problem solving and functioning in basic activities.

## **2.18 COMPUTER LITERACY**

Hirwade (2006), indicated that computer literacy is a basic skill to operate a computer, to use software such as word processing, analyzing and manipulating data on a spread sheet. Morgan (2004), stated that computer literacy is control of one's computer, envisages ability to manage the persistent bits and bytes flooding one's electronic desktop on a regular basis. Computer literate knows what a computer can and cannot do. It includes creating and manipulating documents and data via word processing, spread sheets, databases and other software tools.

Ramakrishnegowda and Walmiki (2006), in a survey conducted, to study computer literacy in post graduate students in Kuvempu University, it was observed that information technology is used to collect information for higher education. Digital resources in libraries are a must for this purpose. It was found the socio-economic background of students such as their caste, gender, income, religion and domicile affected their use of digital resources. The study also clarified that students belonging to economically higher strata, coming from urban areas and studying science subjects were superior in internet and digital literacy, than those coming from rural areas, economically poor and studying social science and Humanities.

Stanley (2003) , studied the psychosocial barriers to computer literacy. She made certain observations in her paper “Beyond access; psychosocial barriers to computer literacy”. According to her opinion, Latinos and African Americans own and use computers less than Asians. This is because of higher cost of computers and deficiency in access in their countries, 100 low income adults were surveyed to examine their computer skills besides non-cost relations. The research showed complex relationship between ethnicity, identity and attitude towards computers. There are community technology centres that help people to overcome their resistances. However, these centres are underutilized. The researcher concludes that computer literacy is underserved not because of in accessibility of computers or connectivity but because of cultural factors.

Shaheen (1999), in his study investigated that computer literacy of academic staff and their use of electronic information sources. Shaheen Majid, Alfia Farilieyna, Abazova studied the impact from the age point of view of gender and educational background. A statistical relation was noted between computer literacy and use of electronic information study revealed that computer literature academics use electronic information sources more often. The age factor also affects the use of electronic information sources.

Collis Betty Anderson, Ron (1994), studied in 1990 computer literacy in schools and wrote about theoretical issues for international assessment. They studied the international applicability in relation to stage 2 of computers in education (COMPED) study. It was clear that functional aspects of information technology test (FITT) for computer use was motivating.

Bretz (2000), in 1998 surveyed 353 students in computer literacy course. This pedagogy differed from traditional lock-step, “monkey – see, monkey – do” approach used by many colleges and universities. The paper exposed the new approaches and the student success rate, instructor difference, student attitudes etc. There was a positive result regarding student expectations and learning outcomes.

Downing (1985) , has conducted a computer literacy workshop in 1985 at Art libraries society of North America. This was reported by Jeannetta D. The workshop was having hands on sessions which taught the basics of using microcomputer to set up acquisitions file. It stimulated the art libraries of and librarians about the use of microcomputers.

Antonio (1994), surveying the Brazilian library schools in training librarians to use computers. Antonio, Irati, Balby, Claudia Negroa studied the courses and syllabi for academic profile of instructors, availability of computers, Historical profile of computer training, analysis of job market professional profile of librarians and new technology to prepare a suitable picture.

Helen (2008), in USA, tried to develop computer literate in the competitive technological world. It shows how the children develop computer knowledge and how they are guided by adults who have computer experiences. This is a challenge faced by parents and educators. This ground-breaking book, showed how to become computer literate and also showed theories and skills which the computer users can develop for better usage of technology. The book was an outcome of studying 6 years old children who had access to computers.

Coffin et al (2015), in the paper informing and performing: a study comparing adaptive learning to traditional learning, Information science, declared that education has changed in course of time due to technology utilisation, which has increased and how it effects on learning is observed. Adaptive learning tools are technology based and they influence the interaction of learners in presentations. The study focused on the completion rates and scores of students assigned with adaptive learning exercises and compare them with the completion rates and quiz scores of students assigned objective type quizzes in university digital literacy course. Computer technology is seen as the answer to the scalability and cost of individualized instruction.

Authors stressed more on adaptive learning, as a must in higher education to work on quality, cost and access.

### **2.19 VISUAL LITERACY**

Hirwade (2006), indicated that VL is ability to recognize and understand through knowledge of basic visual elements, to understand the meaning and components and use of images. It includes the ability to think, learn, and express oneself in terms of images. Visual information is found in both professional and leisure activities. The information literate person must understand and then use visuals. These new skills are increasingly important because, an appropriate use of visual information supports the ability to think and communicate visually. The skills require the adoption of new teaching and learning strategies in some domains, ranging from art and design at basic level education, technological education, methods and tools to develop effective visual representations are also required. VL is divided into three constructs, which are visual learning, visual thinking and visual communication. Visual learning is to acquire and construct knowledge as a result of interaction with visual phenomena. Visual thinking envisages ability to organize mental images, lines, colours, textures and compositions. Visual communication means using visual symbols to express ideas and convey its meaning.

### **2.20 ICT LITERACY**

Van (2004), pointed out that ICT literacy ensures the ability, attitude, interest and individuals to appropriately in using digital technology and communication tools to evaluate information, access, manage, integrate, construct new knowledge and communicate with others in order to participate effectively in society. Garner (2005), also opined that ICT literacy needs IT and subject specialists which evolves over the time. Katz (2004), suggested that there must be an ability to understand technology, communication tools and networks to solve information problems in order to function in an information society.

Author has bridged the ideas of information literacy and technology literacy.

## **2.21 DIGITAL LITERACY**

Japan ministry of education (2003), indicated that Digital literacy means, broad range of resources that are accessible online underscores the importance of looking at each of the resources with a critical eye. It has an ability to appreciate the potential of ICT to support innovation in industrial, business and creative, processes. Learners must get confidence, and they must adopt ICT in appropriate ways. Maharana (2007), indicated that DL provides judgements online and demonstrates creativity, innovation, entrepreneurship and without it citizens can neither participate fully in society nor get the skills and knowledge necessary to live in the 21<sup>st</sup> century. European Commission (2003), also pointed out that Digital literacy requires being skilled at deciphering complex images and sounds as well as it appropriates existing knowledge.

## **2.22 CONCEPT OF DIGITAL LITERACY**

Loyd (2005), in his study, compared inexperienced and expert fire-fighters and assessed their way of using information in their practice and profession, and observed that the concept of information literacy and its practice needs to be broadened. Author interviewed twenty-five fire-fighters using semi-structured interviews to find out how they access and use information to know about their work practices and use for their profession. Participants were asked to specify the information they thought was important from their point of view for use in their practice and profession. Expert and novices were asked to give their views and opinions.

David (2001, in the article on “Information and digital literacies: a review of concepts discusses the concept of ‘information literacy’, ‘digital literacy’, ‘computer literacy’, ‘network literacy’, ‘internet literacy’ and hypertext literacy and their relationship. The researcher has observed that library; media and computer illiteracies are based on

specific skills, which lead to information literacy and digital literacy, which are based on knowledge, perceptions and attitudes.

Lankshear (2008), in his book emphasizes the plurality of digital literacy showing the advantages of understanding digital literacy. Allan (2006), studied Digital concept and tools for digital literacy development. "Digital literacy is a key factor in education, employment and other aspects of social life. it is also a means of getting knowledge of the world. The society has become e-permitted society which is becoming more and more unpredictable and uncertain in digital literacy.

DigiEulis a project, funded by EC e-learning initiative, defined digital literacy and developed a framework and tools for digital literacy development in European educational settings.

Allan Martine and Jan proposed a definition of digital literacy which focused on the processes of using digital tools to achieve individual's life objects. Online tools are being developed by teachers and learners in digital literacy progress. Evolution of these tools continues beyond the life of the project.

Colin (2008), in their book brings the international reputed authors in digital literacy together. Different concepts, policies and practices of digital literacy are discussed, and pointed how digital literacy is related to similar ideas like, information literacy, computer literacy, media literacy, functional literacy and digital competence. The first part of book present concept and policies. The second part exhibits how contributors use social practices of digital remixing blogging, online trading and social networking and the legal issues associated with digital media are also presented.

Ruth (2005), suggested from his studies that information, motivation, purpose, audience, content, techniques are key components of impact model of teaching information literacy skills. In 21<sup>st</sup> century, the author showed how librarians and educators teach students to collect and understand information in multiple computer formats for their

success. Author also shows how a teaching style to motivate assess, plan, develop goals and analysis, objectives, attitudes and different learning information literacy models, presentation methods, learning materials, teaching techniques etc can be developed.

**Conclusion:**

The concept of information literacy and its practice needs to be broadened. Various literacy concepts such as information literacy, digital literacy, computer literacy, network literacy are studied. They are based on knowledge, perceptions and attitudes. Digital literacy focuses on processes of using digital tools to achieve individual's life objects .How different learning information literacy models and learning materials and teaching techniques can be developed is studies by these researchers.

**2.23 DEVELOPMENTAL DIGITAL LITERACY**

Foley (2015), conducted survey in London School of Economics and Political Science and discussed the digital literacy considering (SADL) students as Ambassadors for Digital Literacy and designing to improve digital literacy. Author suggests and recommends skills required in searching information.

Esperanza (2007), using a case study method collected data from telecentre operators and users and explored the users limitations when using the internet. The authors used the Eshet – Alkali (2004) developed digital literacy framework. They found that telecenter users are digitally illiterate in three skills “branching ability” (ability to analyze and synthesize the retrieved information) and “information ability” (ability to assess the quality of information). Some technical barriers were discovered like internet access speed which affects the user's behaviours when searching for information. Lack of knowledge of English language is a barrier as internet sources are mostly in English. The research suggests solutions to overcome user's problems.



Burgess (2012), studied students of developmental reading courses known to be “digital literate generation” in post-secondary stage and cannot be assured to have digital literacy. In this study on digital technology – multiuser virtual environments (MUVES) provided a stage which allowed learning digital literacy. This study examined (i) digital literacy skills of developmental readers (ii) the differences digital literacies between developmental reading students who used MVUE and those who did not. (iii) The behaviours shown in digital nativeness. The experiment exhibited that the experimental group in MUVE showed higher gains in reading achievements.

Crawford (2006) studied “Information literacy in relation to internet literacy framework in England”. As a part of informative guidance in context of Scottish credit and qualification framework, they realised that imaginary process and results obtained were transparent understandable.

### **Conclusion**

Whether in England, Scotland, or any part of the world digital literacy skills needed to be developed.

### **2.24 DIGITAL LITERACY PRACTICES**

Khan (2015), presented on the basis of their practical experiences and involvement in digital literacy in educating and training for the library users to use digital tools effectively for searching required information. This study was conducted at government college university libraries Lahore. Library users have shown the library resources available in different section of GCU Libraries. They are trained for advance searching skills and taught OPAC, GCU electronic research guide, HEC Digital Library Repository, Database and Journals.

Scott (2007), in its ethnographic case study of 15-16 year olds from contrasting schools around Melbourne Australia. They thought that reframing and rethinking of relationship between home and school and

other spaces that young people use and create. They used Bakhtin's ideas about dialogic negotiation and Bourdieu's notion of habitus, suggests that texts, meanings and practices come from sources of complete life experiences. Young people's language, learning and technology can be thought of as a dialogic negotiation of a complex range of texts and practices used in schools, home and other spaces.

Bhatt (2012), in his paper on digital literacy practices and their layered multiplicity, author discussed the success in educational programmes which depends on the way learners manage digital literacy practices in their courses. It reports on multi-methods Ph.D. study examines the digital literacy practices arising when the assignments for the course.

Victoria (2009), is a renowned professor, founder dean of creative industries faculty. He has authored number of books, articles on popular culture, media, journalism and creative industries and recently television truths. This book studies digital technologies, with relevance for schools and suggests ways to develop new relevant pedagogies in relevance to social learning literacy and literate practices. We learn about analyse our own practice to carry out our small – scale research projects.

Buck (2012), written about young adults using social network sites. According to Pew internet and American life project examines important literate activity. The practices used by individuals while writing online learns to negotiate inter faces user agreements and personal data and rhetorical situations. For this the social technological and structural factors influencing the online environments impacting writing practices on these sites. This article applies Brooke's concept of "ecology of practice" to writing digital environments. It examines the digital literacy practices of one undergraduate student through his self-presentation strategies. Writing researchers and educators can understand literacy practices outside classroom and their experiences help them in social network sites.

Zac (2011), in the educators debate whether something “electronic” constitutes “digital” is it a must to have a screen or a keyboard. When literacy was being defined by teachers’ digital literacy came on the scene and was being discussed. Mostly the agreement on digital literacy was that it was one which helped the students to be successful.

**Summary:**

The library users should be trained for advance searching skills whether in youngsters, in schools or in Ph. D. Studies. The researchers and educators can understand digital practices in classrooms as well as in network sites. The studies focused on digital literacy practices on various levels, and discovered that people of all age groups need to be made proficient in digital literacy practices for developments of accessing information.

**2.25 DIMENSIONS OF DIGITAL LITERACY**

Yong (2011) in his study stated three dimensions of digital literacy on online privacy behaviours. It was the study on (i) know how of the technical aspects of the internet (ii) awareness of institutional practices (iii) understanding of current privacy policy. Data was collected from a national sample of 419 adult internet users. The analyses demonstrated predictive powers of user knowledge as shown by the 3 dimensions on privacy control behaviour. There were mixed findings in knowledge and action related to personalised information. The limitations were found as per age, gender, income and education in the sociodemographic group.

**2.26 DIGITAL LITERACY AND DIGITAL INCLUSION**

Kim (2014), shows that there is interrelation between digital literacy, digital inclusion and public policy, where individuals and communities are involved in the information society. This author’s book is the first to deal with digital literacy and digital inclusion as basic issues in information policy and libraries. It speaks on the digital literacy and digital inclusion included in many fields, analyses of the two , gives examples, case studies and perspectives which have come up by research conducted qualitative and quantitative data collection,

provides information of behaviour theory to explain issues on individual, community and political levels, gives recommendations to libraries in practical and to support literacy and inclusion for public use, provides recommendations to improve and promote digital literacy and digital inclusion.

Isto (2012) in his book presents how information services help or hinder people in being informed. It gives an overview of how to conceptualize information. It also gives a model for developing new types of library and information service. Even though new technologies have been developed, people can't find information with ease. Information seeking is concerned with increase in our earlier experiences with the unknown. Users are not aware of digital information and our action which leads to it.

### **Conclusion:**

Digital technologies have changed the meaning of being literate. Different literacies have been established on the basis of computer literacy. Taxonomy the science concerned with organism of system is used to study literacy types and classify literacies. Digital technology, digital literacy is interrelated. The different studies and books explain on this concept. Authors shows how new types of library and information service can be developed.

### **2.27 DIGITAL LITERACY TECHNICAL**

Patricia (2014), is a scholar and film maker. She describes the social networks and the kids are developing their digital literacy on the "Tube". She has presented family driven videos by her ethnographic studies. This book contributes to new media studies, communication, science and technology studies, digital anthropology and informal education.

Rachel (2009), spoke on Digital literacy for technical communication which helps in the technical communicators to study identify, and evolve their professional potential. It has 3 sections showing, how the

digital writing has changed with technical communication? What knowledge does technical communication need? In order to understand how technology has transformed there is a need to revise past theories and develop new theories. This book helps the scholars, students, and practitioners to face the changes and challenges in the new digital universe.

Stordy (2015), discuss digital technologies, which have changed the meaning of being literate. Different literacies have been established like computer literacy media literacy and internal literacy trans literacy, meta literary, multimodal literacy etc. This paper collects various concepts on these literacy types which are becoming more complex. Taxonomy of literacies, is studied with future views of Library and information science abstracts. (LISA) Education Resources Information Center (ERIC) and British Education Index were searched for papers relating to digital technologies and literacy. The results showed that 2 dimensions of literacy were identified. These dimensions were used to create literacy framework and classify literacies and literacy types (i.e. taxonomy of literacies) which were used. This article proposes taxonomy that meets the criteria of dimensions discussed above.

## **2.28 EXPERIMENTS IN DIGITAL LITERACY, (LITERACY OF 21<sup>ST</sup> CENTURY)**

Yoram (2004), pointed out that Digital literacy requires more than just the knowledge to operate a digital devices and authors suggested a model which had five major digital skills like (i) photo visual skills which requires “reading” instructions from graphical displays. (ii) Reproduction skills creating new meaningful materials from existing ones. (iii) Branching skills – building knowledge from non-linear texts. (iv) Information skills, judging or evaluating the quality of information. (v) Socio-emotional skills, means applying cyberspace rules in online cyberspace communication.

The study of scholars on these lines showed that younger scholars performed better than the older ones with respect to photo visual and branching literacy skills and the older participants were more knowledgeable in reproduction and information literacy skills.

The study also pointed and helped to lay stress on better user – centred digital environments.

Barbara (2006), mentioned that competency begins with understanding and each media has a unique environment. McLuhan's has also given an idiom "the medium is the message" "seems appropriate in the era. Newspapers, television, computers which are human inventions help us to develop our new beliefs, Baudrillard used "hyper reality" while describing something which never really existed. This hyper reality is clear from "matrix" the movie shows the world which does not exist in reality but exist only in our minds. Society as higher order of thinkers act differently and looks differently.

Aviram (2006), in the present digital environments digital literacy skills consider effective learning for effective learning in digital environments. Eshet – Alkalai (2004 – 2005) for theorization started with two strategies conservative and sceptical. The basic or conservative assumption was that digital skills are only skills. The second sceptical assumption has two hypotheses – the first is concerned with learning styles and multiple intelligences the second thinks of the difference between modern book – based and the post-modern digital cultures.

### **Conclusion:**

Different definitions of digital literacy are given through new educational techniques. Digital literacy is developed and promoted television; computers help to develop new beliefs. Digital literacies, pedagogy, have become the goal for formal education. Multimodal literacies use media to represent visual, audio, gestural and special communication along with traditional written and oral forms. Digital literacy empowers "new literacy studies" digital literacy improves the creative and critical thinking skills. The study of gender, family,

cultural background was studied. The undergraduates and graduate students were studied. It was observed that the cultural background had an effect on operational skills.

## **2.29 DIGITAL LITERACY HIGHER EDUCATION**

Ting, Yu-Liang (2015), stated that, today students are familiar with digital literacy. They are well versed with various Information and Communication Technology (ICT) tools and use them leisurely. The study by Ting, Yu-Liang shows that digital literacy is a part of school curriculum and it helps them to improve their learning autonomy. Thirty-six university students studying engineering courses of multimedia technology were interviewed and this survey showed that due to Digital Literacy, students could overcome difficulties faced by them in web exploration and learn autonomy. The qualitative and quantitative data made it clear that the teachers could use this Digital Literacy in connecting school learning with students Digital Literacy acquired outside schools.

Robin(2011), in his paper, says that a critical review of “literacies of the digital“ in schools and higher education it discussed how “digital“ and “literacy” helps us to understand teaching and learning in higher education. It clarifies the role of critical literacy to the idea of digital literacies which are transformative for pedagogy in this sector.

CILIP (2015), contributes to show students use of digital literacy in higher education in Great Brittan more effectively as they are literate. Parvathamma et/al (2013), indicated that Digital literacy among student community in management institutes in Davanagere District, Karnataka State, India, higher education institutions prepare globally competent workforce by retrieving information by gaining skills. They impart ICT skills on students is more. Students understanding ICT, due to introduction of it in curriculum for digital literacy course. In the study author considered sample of 135 students registered for 3<sup>rd</sup> semester of master of Business Administration course in six institutions of higher education in Davanagere district, Karnataka state was studied in

August 2012 through questionnaire. The findings showed that all the participants owned computer personally and their own internet connectivity, Laptop, smart phone, digital camera and I-pod are used for personal purpose. Web portals are a source of information about companies. Journals and institutional repositories are least used. Mostly E-mail and Facebook are used. The respondents are aware of online databases in 'Capitaline' and 'India Stal'. They need to sensitized to use web resources. Majority of them agree that information is available on internet. A model curriculum is framed to impart digital Literacy skills (basic D cognitive) to the participants.

**Summary:**

In higher education digital literacy plays an important role. It is a part of the curriculum and students widely use it to enhance their educational level. Be it in China or in Great Britain digital literacy helps us showing us the transformation for pedagogy in this sector. Authors suggested that digital literacy is a part of school curriculum. Teachers could connect the students with digital literacy acquired outside schools learning autonomy improves says this study.

**2.30 INFORMATION AND DIGITAL LITERACY IN SCHOOL**

Neuman (2015), surveyed two teachers and 49 students aged 5-8. A project formulated on Neuman's I-Learn model, which deals with traditional information – seeking models, which are used in processes to gain information. They concluded that the model is a useful tool to help young urban child to understand and complete research projects. It also revealed that young teachers who were helped by a school librarian to 5-6 years old kindergarten to achieve higher levels of digital literacy than 7-8 year old second grade with a experienced teacher who didn't have such a background of library, since the school library was closed down due to financial problems. The results have serious implications for urban student's education.



Pavey (2006), in their article on “school librarians and the google generation”, have discussed the impact of internet technology on the students could find the information by using the internet. They found that librarians in the organisation assisted the students to get information and manage it.

### **2.31 DIGITAL LITERACY AMONG TEACHERS**

Page, Damien. (2015), had conducted an online survey of teachers in Great Britain about their personal web use (PWU) at work. PWU is a growing phenomenon and one is becoming more internet dependent in workplace. The teacher was found to be using PWU for sending personal emails, social networking, and personal banking and for coping with work. PWU was realised to be a means of increasing productivity and developing the digital literacy of teachers. It concluded by considering the implications of findings for senior managers within organisations.

Street (2005), Surveyed the online resources and understanding the required skills for reading online resources. Author found that electronic resources are primary source for students. For school assignments internet is widely used by students. Today internet connectivity in classroom is increasing. In U.S.A.99% schools have internet connectivity. Technology has acknowledged the use of electronic and printed materials in literary and teachers should be aware of it.

Evangelina (2001), in his paper suggested views of young people who uses digital technology in social literate practice. The author argued that young people’s practices develop around their use of digital technologies flow. Kiel, Ralph (2015), in the survey at Victoria University Melbourne Australia and emphasised on digital literacy and new roles for libraries. This helped in bringing new initiatives in planning and implementation of projects in similar academic libraries.

Cowan (2003) stated in their article “Friendly and helpful and not too complicated. “That North Ayrshire Libraries in Scotland recruits’

volunteers to teach the computers to those who have no knowledge of computers. This indicated that literacy at any level is an essential concept.

John (2008), found differences between formal and informed learning in popular literacy since 19<sup>th</sup> century. They analysed three case studies in digital storytelling, flickr photo sharing and MMOG (Massively Multiplayer Online Game). Author discussed issues which raised from demand led learning which required procedural and not proportional model of knowledge, a vernacular and informal model of creativity and a “navigator” and entrepreneurial model of consumer using digital literacy and how it should be taught.

John (2010), “The use of digital literacy” is a book that is concerned with humanities research and its use in understanding the consumer led society conditions. Today every user is a publisher and so consumption needs to be thought as an action and not as behaviour and media consumption as a mode of literacy. Professionals and press ignore online social networks and participatory media and schools ban its use. But digital literacy should be underestimated.

Richard Hoggart (2009), pioneered in digital literacy and fifty years there after it brought about educational and popular cultural development. John Hartley (2011) furthered the research into digital media. This made modern journalism, novel, science and entertainment global. Hartley reassessed the historical and global, commercial and cultural dynamics and analysed the use of digital in creative industries, digital storytelling, You Tube, journalism and mediated fashion, thus encouraging the participation in evolutionary growth of knowledge. Hartley thinks that education must catch up with entertainment and for professionals to learn from popular culture. The digital literacy uses shows how teenage fads today may become scientific method tomorrow.

### **2.32 LITERACY PRACTICES IN CHILDREN**

Jackie (2005), discusses the experiences while studying children engaged in popular culture, media and digital literacy practices from their early years. Even though children are experienced with film, television, printed media, computer games, mobile phones and internet from birth, the country's national curricula do not take it into consideration. This seminal text focuses on children from birth to eight years, addressing issues such as media and identity construction, media literacy practices in the home, the changing nature of literacy in technologically advanced societies, the place of popular and media texts in children's lives and the use of such texts in the curriculum. It is a book of international expert evaluation text messages, to teletubbies and enlightening the policy – makers, educational researchers and practitioners, also creates interest in linguistic field. The contributor had empirical studies from around the world and draws the conclusions of techno – literacy practices in children.

### **2.33 WEB-ORIENTED DIGITAL LITERACY**

Eszter Hargittai (2005), in its Survey Measured Web-Oriented Digital Literacy, and from the study of digital literacy through observations and survey question, noticed that survey proxies of people observed web using skills. In general, social survey of 2000 and 2002 national data sets were administered, and were found that survey shows the digital literacy based on performance tests are measures of user's abilities. Eszter (2009), also studied people's digital literacy in a recently developed method. The participants are given items to construct a previously established digital literacy measure along with strategically developed bogus items. It was found that bogus terms scored the least, thus suggesting that mostly people do not make up their responses to these questions. Results also showed difference between familiarities of old internet related terms and new web – based concepts with new instrument for studies of user's digital literacy.

### **2.34 E-LEARNING**

Li (2006), noticed that there are more benefits in internet based e-learning system than traditional learning environments. The students can collect a lot of information from internet Websites. For this e-learning the students have to probably spend more time downloading the required learning materials, and this may discourage the students from using e-learning method. In their article” On –Demand E-learning content delivery over the internet” Li, Frederick W.B. Lau, Reynson W.H. have, suggested a method to obtain e-learning content on demand.

Allan (2006), stated that the digital tools helps the information to be generated faster. In the 21<sup>st</sup> century, there is challenge to processes of learning and teaching. By using digital tools, the professionals and educators have to change the form of learning. The traditional ways of literacy are challenged and information literacy and information technology literacy are taken as the basic for digitally involved learners. The book is in two parts. In the 1<sup>st</sup> part the contributors analyse how digital technologies have brought about change in learning and discusses the nature of new virtual and e-learning environment. In the 2<sup>nd</sup> part the contributors consider the ways in which digital illiteracies can be made available to learners in a student cantered location. This book also takes into account information technology literacy in successful retrieval of information.

Eshet (2002), is of the opinion that Digital literacy is more than using software. It means reading instructions from graphical interfaces (photo visual literacy) using digital reproduction knowledge from non-linear navigation (lateral literacy) and evaluating information (information literacy).Learner’s work quality in digital literacy measured by these measures. It suggests a framework for digital literacy in every literacy type learner’s ability to use digital literacy in educational contexts.

Hall (2014), while researching in learning technology authors discussed the difficulties faced by secondary school students who felt that they are not prepared to support their learners in using technology effectively. The digilit Leicester project and reported in paper “defining a self-evaluation digital literacy framework for secondary educators”, created holistic and integrated changes by supporting staff development and teaching support staff in digital literacy, it enables co-operative and partnership approach to be taken to pedagogic innovation. It also brings about social and ethical issues in digital literacy. They argue that shared development brings new model at implementing digital literacy aiming at transforming the provision of secondary education across a place.

Len (2006), made an attempt to help children in e-literature and enhancing digital literacy, author wrote this book. Today ICT is growing as a key resource in classroom this book intends to help teachers and students of teacher education to understand the similarities and differences of literacy experience for children with classic contemporary and narrative in book and computer formats. Their aim is to increase the students understanding of the text. Author analyses language and images used in real – life classroom learning experiences. Which narratives can be accessed electronically, how digital technology can improve literacy experiences through web-based ‘book talk’ and interaction with publishers internet sites, and computer games affect the reader or player role to understand stories or ideas and suggestions. Tools and methodologies for information society written by Rivoltella , Cesare have tried to explain the social changes brought about by digital for planning children’s programmes given for all levels and ages.

Ribble (2013), pointed difference and gap in technology knowledge and lack of leadership preparation related to digital literacy. School environments can cause serious problems, think school leaders, parents and social communities. The authors suggest strategies for educational leaders to prepare their stakeholder groups for digital future. The ways

to reduce technology misuse or abuse, educational institutions considered digital citizenship model as new tool for students, faculty and staff both on site and online.

Berger (2005), in their article Digital literacy study the significance of digital literacy in getting information and thus teaching the students from learning the skill of to be digitally literate. They should know the reading digital texts are different than reading printed texts. According to the report sponsored by the partnership for 21<sup>st</sup> century skills, information literacy is a part of learning skills.

Jermey (2005), in Computer training in Australia was studied by Jeremy and Jonathan. Their study concluded that interest in computer courses in classroom had declined due to Government and regulatory bodies' interference. It was necessary to check and satisfy the needs of the students accordingly.

### **Conclusion:**

Various studies point out that e-learning system based on internet is more beneficial than traditional learning. More information can be collected from websites. Some researchers suggest faster way of generating information by digital tools. Different books and articles were written to help children in e-literature and enhancing digital literacy. Today ICT growing and helping teachers and students in education to understand and clarify the literacy experience with narratives in books and computer formats. Thus, increasing their understanding of the text. Reading digital texts are different than reading printed texts. Information literacy is a part of learning skills.

### **2.35 E-LEARNING FOR INFORMATION LITERACY**

Hadengue (2005), pointed that students must learn to respect the author's rights. The cut and paste culture which has become widespread among the students can be addressed with the help of information literacy programmes.

### **2.36 TOOLS AND METHODOLOGIES INNOVATIONS:**

Shu-Ching (2012), in his book, which is a resource for university researchers, scientists, industry professionals, software engineers and graduate students and deals with new theories, algorithms technologies, system design and implementation in multimedia data engineering and management. It helps to handle automatic indexing tagging etc with innovations and methods.

Rivoltella (2008), indicated that in global society, which is shifting from a literacy society to digital one using advanced technologies such as internet and mobile devices. Digital media has an impact on the management and organisation of processes. The article has tried to explain the social changes brought in digital media and creates a framework within which digital literacy acts as a tool to help the younger generation to interact with digital media regarding culture. It helps scholars, educators, researchers and practitioners a technological and sociological approach in educational topics.

#### **Summary:**

Digital literacy helps the scholars, researchers and practitioners in developing technological approach in educational topics.

### **2.37 FOCUS ON LOCAL AND GLOBAL LITERACIES**

Kate (2006), in his book focuses on local and global literacies, thus joining the fields of literacy and multimodality. It is a study on media, popular culture and literacy, weblogs, global and local from different places of US, UK, South Africa, Australia and Canada.

### **2.38 PEDAGOGY**

Lankshear (2006), indicated digital literacy and digital literacies policy, pedagogy and research considerations for education digital literacy has become the goal of formal education. The author mentioned that mainstream accounts of digital literacy are flawed.

They identify some implications from the point of educational policy, pedagogy and research.

Heather (2011), reshaped communication in globalization and digitization in literacy education. In their article teaching multimodal and digital literacy in 1.2 setting : New literacies , New basics , New pedagogies expressed two purposes 1) to explain the concept of multimodal literacies which utilise visual, audio, gestural, spatial and tactile dimensions of communication in addition to traditional written and oral forms(Cope and Kalantzis,2009a).Since 1996 merged language and literacy education agendas in 1.2 teaching language arts, media literacy and cultural studies new basics have developed and they are used by all classrooms and all learners.2) it also reports innovative pedagogical approaches to multimodal literacies involving 1.2 learners. (Cope & Kalantzis, 2009a, 2009b; Kress, 2003, 2010; New London Group, 1996) and epistemologically (De Castell & Jenson, 2003; Gee, 2009, 2010; Kellner, 2004; Lankshear & Knobel, 2003, 2006).This article has two purposes: The first is to give an overview of the concept of multimodal literacies, which utilize diverse media to represent visual, audio, gestural, spatial, and tactile dimensions of communication in addition to traditional written and oral forms. They observed that children in urban areas were socialised. They had cultural boundaries which increased with communicational connectivity, complexity and convergence (Jenkins, 2004) classrooms are linguistically different.

Julian (2009), in the paper “reviewing approaches and perspectives on digital literacy” on pedagogies in international journal explores the purchase and usefulness of concept of digital literacy. It reviews three research fields in Europe and Australia by comparing and contrasting digital literacy from “top – down” and “bottom up”. Digital literacy empowers “new literacy studies”. It however shows contradictions in terms of access and power. The first part of the paper examines ideas in Australian since 1990s about need for children to become digitally literate. The second part examines the digital literacy concept has



developed during the last decade in school policy, curriculum documents and practices in Norway. The third part deals with transnational research to see digital literacy used in by children and youth out of school cultural digital practices. They propounded that “digital literacy” exposes contradictory politics of literacy education in new provocative ways. It has some exclusions and divisions.

Yoram (2009), in the study is a follow –up on the empirical study of 2002 done by Eshet and Amichai on digital literacy skills in different age groups. The study was done to find changes in digital literacy in same participants after 5 years and their performance was comparing to new matched control groups. The results showed improvement in all age groups, especially in adults with respect to photo visual and branching literacy skills. However, a drop was observed in creative and critical thinking skills. The results also showed (a) that the gap in the proficiency between younger and older people closed and (b) the gap in creating and critical thinking widened between younger and older people. Based on the comparison with matched control groups they suggested that experience and technology are responsible for lifelong changes in digital literacy skills and not age.

Marco (2011), conducted a digital literacy test on theoretical, operational and evaluation skills on 65 third year high school classes producing data on 980 students. Items included knowledge questions, situation – based questions and tasks to be performed online. The sample performed better in operational skills, poorly in evaluation skills. The study of gender, family, cultural background of the students. It was clear that cultural background had a significant effect on operational skills while gender had a definite impact on theoretical knowledge.

Bulger (2014), refers to ability to read and write using online sources. It also includes the ability to select relevant sources for the task use information for message and communicate it to audience. The study was conducted on 150 students who had 50 minutes of access to

internet and a word processor to produce research report if college students should own a laptop computer. This essay received holistic rating from 1 to 5. Questionnaires were framed to adjudge and measure the undergraduate versus graduate student's academic experience and their using of computers in unique sources citations, rather than search processes like actions, web pages, websites and links. As per their findings digital literacy depended more on academic experience than technical experience and how learners organised it.

Hall (2014), while researching in learning technology, author discussed the difficulties faced by secondary school who feel they are not prepared to support their learners in using technology effectively. The digilit Leicester project and reported in paper "defining a self-evaluation digital literacy framework for secondary educators", created holistic and integrated changes by supporting staff development and teaching support staff in digital literacy, it enables co-operative and partnership approach to be taken to pedagogic innovation. It also brings about social and ethical issues in digital literacy. They argue that shared development brings new model at implementing digital literacy aiming at transforming the provision of secondary education across a place.

Kenton (2010), discussed different definitions of digital literacy and its relationship to information literacy and describe applications of digital literacy in higher education. The academic librarians, especially in junior and community colleges help the students to increase their skills in digital literacy through new educational techniques. They can develop tools to support students with virtual words and create a course curriculum and online book discussions. Promoting the development of variety of literacy assists the librarians to show their role and flexibility in contribution to individual's success in academia.

### **2.39 COMPUTER EXPERIENCE AMONG LIBRARIANS AND ROLE OF LIBRARIANS**

Tella (2006), in the study conducted analysed the impact of self-efficacy and prior computer experience of new librarians' university libraries in Southwest Nigeria. Organizations and university libraries wanted creative employees they observed.

Ferreiro (2005), added that Literacy is not a static notion. It keeps charging from time to time and place to place. Today ICTs have made changes in producing and disseminating texts. However, the conceptual nature of literacy process remains the same. The author explored the new techniques in elementary school and came to the conclusion that librarians have made more effective use of ICTs in educational context than teachers, who are reluctant to use them. This was studied and expressed by author in their paper.

Rheingold Howard. (2012), in the article examines the role of librarians as stewards of literacy and curators of knowledge in the age of digital media. According to the author, the power of individual digital media is truly active only when the power is accompanied by the social skills that apply to networked publics. The author stresses that librarians need to know how to behave in an online community and grow a personal learning network.

Robinson (2001), pointed the role of libraries and information services in developing an "open society" thought or idea or concept developed by Karl Popper and George Soros, was studied by Robinson, Lyn, Bawden David in their article they discussed the nature of "Open society" which deals with knowledge and information, new technology (Particularly internet), digital literacy, in this connection draws conclusion of the role of libraries and librarians and suggest some general principles.

#### **Conclusion:**

The role of librarians in various universities and need for creative employees was concluded by these authors. The librarians should have

social skills that apply to networked publics. On the whole it settles the importance of librarians with skills and experience.

**CHAPTER SUMMARY:**

The literature review focused on the different heads of the literacies along with digital literacy, to understand the nature and extent of literacies and its need in the information society.

## REFERENCES:

- A Aviram, Y Eshet-Alkalai. (2006) Towards a Theory of Digital Literacy: Three Scenarios for the Next Steps, The European Journal of Open, Distance and E-Learning.
- Allan Martin, Jan Grudziecki .(2006). DigEuLit: Concepts and Tools for Digital Literacy Development, Innovation in Teaching and Learning in Information and Computer Sciences. 5(4)
- Allan Martin. Dan Madigan. (2006). Digital Literacies for Learning. Michigan. Facet Publications.
- Angelique Nasah Boaventura DaCosta Carolyn Kinsell, Soonhwa Seok. (2010).The digital literacy debate: an investigation of digital propensity and information and communication technology, Educational Technology Research and Development.58(5), 531-555.
- Antonio, Irati ,Balby, Claudia Negrao , (1994). The state of computer training in Brazilian library schools, Journal of Education for Library & Information Science, 35(2), 109 – 125.
- Barbara R. Jones, Suzanne L. Flannigan.(2006).Connecting the Digital Dots: Literacy of the 21stCentury, Educause Quarterly.
- Barbara Warnick. (2001). Critical Literacy in A Digital Era: Technology, Rhetoric, and the Public Interest. Routledge.
- Berger, Pam, (2005). Digital Literacy, Information Searcher, 16(2), 2.
- Bhatt, Ibrar. (2012). Digital Literacy Practices and Their Layered Multiplicity, Educational Media International. 49(4), 289-301.
- Bretz, Robert Johnson, Linda. (2000). An innovative pedagogy for teaching and evaluating computer literacy, Information Technology & Management , 1(4) , 283-292.

- Brooks, Andrea Wilson. (2015). Using connectivism to guide information literacy instruction with tablets. *Journal of Information Literacy*, 9 (2), 27-36.
- Buck, Amber. (2012). Examining Digital Literacy Practices on Social Network Sites, *Research in the Teaching of English*, 47 (1), 9-38.
- Bulger Monica E., Mayer Richard E. and Metzger Miriam J. (2014). Knowledge and Processes That Predict Proficiency in Digital Literacy, Reading and Writing: An Interdisciplinary Journal. 27(9), 1567-1583.
- Burgess Melissa L, Price Debra P. and Caverly David C. (2012). Digital Literacies in Multiuser Virtual Environments among College-Level Developmental Readers, *Journal of College Reading and Learning*, 43(1), 13-30.
- Center of Teaching. Types of Literacy. Accessed at [https://teach.its.uiowa.edu/sites/teach.its.uiowa.edu/files/docs/docs/Types\\_of\\_Literacy\\_ed.pdf](https://teach.its.uiowa.edu/sites/teach.its.uiowa.edu/files/docs/docs/Types_of_Literacy_ed.pdf)
- Cohron, Madalyn. (2015). The Continuing Digital Divide in the United States, *Serials Librarian*, 69 (1), 77 – 86.
- Colin Lankshear, Michele Knobel. (2008). *Digital Literacies: Concepts, Policies and Practices*, Peter Lang.
- Collis, Betty, Anderson, Ron. (1994). Computer literacy for the 1990s: theoretical issues for an international assessment, *computers in the Schools*, 11(2), 55 – 74.
- *Computers & Education*. (2012). Can we teach digital natives digital literacy. 59 (3), 1065–1078.
- Cordell, Rosanne Marie. (2013). Information Literacy and Digital Literacy: Competing or Complementary? *Communications in Information Literacy*. 7 (2), 177-183.
- Cowan, Paul. (2003), Friendly and Helpful and not too complicated, *Information Scotland*, 1(5), 12 – 13.

- Crawford, John Irving, Christine. (2006). Information literacy, the link between second and tertiary education: project origins and current developments, *ALISS Quarterly*, 2(1), 8-12.
- David Bawden, Lyn Robinson.(2002).Promoting literacy in a digital age: approaches to training for information literacy, *Learned Publishing*. 15(4), 297–301.
- David Bawden. (2001), Information and digital literacies: a review of concepts. *Journal of documentation*, 57(2), 218-259.
- David R. Olson, Nancy Torrance. (2009). *The Cambridge Handbook of Literacy*, Cambridge University Press.
- Downing, Jeannette D., (1985). Computer Literacy Workshop, *Art Documentation: Bulletin of the Art Libraries Society of North America*. 4(2), 42 – 44.
- Eshet, Yoram. (2002).Digital Literacy: A New Terminology Framework and Its Application to the Design of Meaningful Technology-Based Learning Environments, World Conference on Educational Media and Technology in Denver, USA.
- Eshet-Alkalai, Yoram. (2004). Digital literacy: A conceptual framework for survival skills in the digital era, *Journal of Educational Multimedia and Hypermedia*. 13(1), 93.
- Esperanza Huerta, Rodrigo Sandoval Almazán (2007). Digital literacy: Problems faced by telecenter users in Mexico, *Information Technology for Development*. 13(3).
- Eszter Hargittai. (2005). Survey Measures of Web-Oriented Digital Literacy, *Sage Journal Publication*.23 (3), 371-379.
- Eszter Hargittai. (2009). An Update on Survey Measures of Web-Oriented Digital Literacy, *Social Science Computer Review*. 27(1), 130-137.
- Evangeline S. Pianfetti. (2001). Focus on Research: Teachers and Technology: Digital Literacy through Professional Development, *Language Arts*. 78(3), 255-262.

- Ferreiro, Emilla. (2005). Librarians and Basic Education Teachers in the Context of Digital Literacy, *IFLA Journal*, 31(1), 35-44.
- Foley, Geraldine. (2015). Working with students to develop digital literacies. *ALISS Quarterly*, 11(1), 19-21.
- Frank B. Withrow. (2004). *Literacy in the Digital Age: Reading, Writing, Viewing, and Computing*. Michigan. Scarecrow Education.
- Guy Merchant. (2007). Writing the future in the digital age, *Literacy*. 41(3), 118–128.
- Hall Marion, Nix Ingrid and Baker Kristy. (2013). Student Experiences and Perceptions of Digital Literacy Skills Development: Engaging Learners by Design? *Electronic Journal of e-Learning*. 11(3), 207-225.
- Hall Richard, Atkins Lucy and Fraser Josie. (2014). Defining a Self-Evaluation Digital Literacy Framework for Secondary Educators: The DigiLit Leicester Project, *Research in Learning Technology*. 22.
- Hart, C. (1998). *Doing a literature review: releasing the social science research imagination*. London: Sage, p 27.
- Hartley, John. (2011). *Digital futures for cultural and media studies*. Wiley-Blackwell.
- Heather Lotherington, Jennifer Jenson. (2011). Teaching Multimodal and Digital Literacy in L2 Settings: New Literacies, New Basics, New Pedagogies, *Annual Review of Applied Linguistics*. 31, 226-246.
- Helen Mele Robinson. (2008). *Emergent Computer Literacy: A Developmental Perspective*. Routledge.
- Hoggart Richard. (2009). *The uses of Literacy: aspects of working-class life*. Penguin Books.
- <http://eprints.qut.edu.au/18013/> Accessed on 8 August 2015.



- Isto Huvila. (2012). *Information Services and Digital Literacy: In Search of the Boundaries of Knowing*. New Delhi. Chandos Publishing.
- Jackie Marsh. (2005). *Popular Culture, New Media and Digital Literacy in Early Childhood*, Psychology Press.
- Jerney, Jonathan. (2005). Computer training in Australia, *Online Currents*, 20(9), 2- 10.
- John Hartley et/al. (2008). The Uses of Multimedia: Three Digital Literacy Case Studies, *Media International Australia*. 128(1), 59-72.
- John Hartley. (2010). *The Uses of Digital Literacy*, Transaction Publishers.
- Julian Sefton-Green, Helen Nixon , Ola Erstad. (2009). *Reviewing Approaches and Perspectives on Digital Literacy*, *Pedagogies: An International Journal*.4 (2).
- Kate Pahl, Jennifer Rowsell. (2006). *Travel Notes from the New Literacy Studies: Instances of Practice*, *Multilingual Matters*.
- Kenton Jeffrey, Blummer Barbara. (2010). *Promoting Digital Literacy Skills: Examples from the Literature and Implications for Academic Librarians, Community & Junior College Libraries*.16 (2), 84-99.
- Khan, Shakeel Ahmad, Waheed, Abdul. ( 2015 ).*Digital Literacy Practices for Library Users at Government College University Libraries, Lahore*. *Pakistan Library & Information Science Journal*, 46 (4), 50-54.
- Kiel, Ralph, O'Neil, Frances, Gallagher, Adrian, Mohammad, Cindy. (2015). *The library in the research culture of the university: A case study of Victoria University Library*, *IFLA Journal*, 41 (1), 40-52.
- Kim M. Thompson. et /al, (2014). *Digital Literacy and Digital Inclusion: information Policy and the Public Library*. Lanhm. Rowman & Littlefield Publishers.

- Kirschner, Paul, Davis, Niki (2003). Pedagogic Benchmarks for Information and Communications Technology in Teacher Education , *Technology, Pedagogy & Education*, 12(1), 125-147.
- Kumar, Neha. (2015). The gender-technology divide or perceptions of non-use? , *First Monday*, 20(11), 5.
- Lankshear Colin J., Knobel Michele.(2008).*Digital literacies: concepts, policies and practices*. Peter Lang Publishing.
- Lankshear Colin, Knobel Michele. (2006).*Digital literacy and digital literacies: policy, pedagogy and research considerations for education*, *Nordic Journal of Digital Literacy*.1 (1), 12-24.
- Len,Unsworth. (2006). *E-literature for Children: Enhancing Digital Literacy Learning*, Taylor & Francis.
- Li, Frederick W. B.,Lau, Rynson W. H. (2006). On-Demand E-Learning Content Delivery Over the Internet, *International Journal of Distance Education Technologies*, 4(1) , 46-55.
- Lin, Herbert, (2000). Fluency with Information Technology, *Government Information Quarterly*, 17(1), 69 – 76.
- Lloyd, Annemaree. (2005). Information literacy: Different contexts, different concepts, different truths?, *Journal of Librarianship & Information Science*, 37(7), 82-88.
- Long, Sarah Ann.(2005). What’s new in libraries? Digital natives: if you aren’t one, get to know one, *New Library World*, 106(3/4), p187-189.
- Lyn Henderson, Julie I. Tallman. (2006). *Stimulated Recall and Mental Models: Tools for Teaching and Learning Computer Information Literacy*. Michigan. Scarecrow Press.
- Marco Gui , Gianluca Argentin.(2011).*Digital skills of internet natives: Different forms of digital literacy in a random sample of northern Italian high school students*, *New Media & Society*.13 (6).
- Michael Thomas. (2011). *Deconstructing Digital Natives: Young People, Technology, and the New Literacies*, Taylor & Francis.

- Mkandawire, S B (2015) Types of literacy or Literacies. Accessed at <https://sitwe.wordpress.com/2015/12/14/types-of-literacy-or-literacies/>
- Neuman, Delia Grant, Allen Lee, VeraTecce DeCarlo, Mary Jean. (2015). Information and Digital Literacy in a High-Poverty Urban School: An I-LEARN Project, *School Libraries Worldwide* , 21 (1), 38-53.
- Page, Damien. (2015). Teachers' personal web use at work, *Behaviour & Information Technology*, 34(5), 443 – 453.
- Patricia G Lange. (2014). *Kids on YouTube: Technical Identities and Digital Literacies*. Walnut Creek. Left Coast Press.
- Pavey, Sarah . (2006). School Librarians and the google generation, *ALISS Quarterly*, 2(1), 3-7.
- Pietila, N (2017) The top 10 literacies in Education Today. Accessed at <https://www.skyward.com/discover/blog/skyward-blogs/skyward-executive-blog/march-2017/the-top-10-literacies-in-education-today>
- Pinto, María, Isabel Escalona, M., Pulgarín, Antonio, Uribe-Tirado, Alejandro. (2015). The scientific production of Ibero-American authors on information literacy (1985-2013), *sScientometrics* , 102 (2), 1555-1576.
- Pun, Raymond. (2015). Conceptualizing the integration of digital humanities in instructional services, *Library Hi Tech*, 33 (1), 134-142.
- Rachel Spilka. (2009). *Digital Literacy for Technical Communication: 21st Century Theory and Practice*. Routledge.
- Ramakrishnegowda, K. C. ,Walmiki, R. H. (2006). Socio – economic background and computer literacy of postgraduate students of Kuvempu University: a study of its implications to library services, *SRELS Journal of Information Management*, 43 (3), 271-282.

- Randolph, J.J. 2009. A guide to writing the dissertation literature review. *Practical Assessment, Research & Evaluation*. 14 (13): 1-13.
- Ribble Mike, Miller Teresa Northern. (2013). Educational Leadership in an Online World: Connecting Students to Technology Responsibly, Safely, and Ethically, *Journal of Asynchronous Learning Networks*. 17(1), 137-145.
- Rivoltella, Pier Cesare. (2008). *Digital Literacy: Tools and Methodologies for Information Society: Tools and Methodologies for Information Society*, IGI Global.
- Robin Goodfellow. (2011). Literacy, literacies and the digital in higher education, *Teaching in Higher Education*. 16 (1).
- Robinson, Lyn, Bawden, David. (2001). Libraries and open society: Popper, Soros and digital information, *Aslib Proceedings*, 53(5), 167-178.
- Ruth V. Small. (2005). *Designing Digital Literacy Programs with IM-PACT: Information Motivation, Purpose, Audience, Content, and Technique*. Neal-Schuman Publishers.
- Scott Bulfin, Sue North. (2007). *Negotiating Digital Literacy Practices Across School and Home: Case Studies of Young People in Australia*, *Language and Education*. 21(3).
- Shaheen Majid, Alfia Fanilieva Abazova. (1999). Computer literacy and use of electronic information sources by academics, *Asian Libraries*, 8(4), 100 – 111.
- Shu-Ching Chen. Mei-Ling Shyu. (2012). *Methods and Innovations for Multimedia Database Content Management*. USA. Information Science Reference.
- Stanley, Laura D. (2003). Beyond Access: Psychosocial Barriers to Computer Literacy, *Information Society*, 19(5), 407 – 416.
- Street, Chris. (2005). Tech Talk for Social Studies Teachers, *Social Studies*, 96(6), 271-273.
- Suominen, Vesa ,Tuomi, Pirjo. (2015). Literacies, Hermeneutics, and Literature, *Library Trends*, 63 (3), 615 -628.

- Tella, Adeyinka, Ayeni, C. O. (2006). The Impact of Self-Efficacy and Prior Computer Experience on the Creativity of New Librarians in Selected Universities Libraries in Southwest Nigeria, *Library Philosophy & Practice*, 8(2), 1-12.
- Tibor Koltay. (2011). The media and the literacies: media literacy, information literacy, digital literacy, *Media Culture Society*.
- Ting, Yu-Liang.( 2015). Tapping into students' digital literacy and designing negotiated learning to promote learner autonomy, *Internet and Higher Education*, 26, 25 – 32.
- Tracy, Daniel G. (2016). Assessing Digital Humanities Tools: Use of Scalar at a Research University, *Portal: Libraries & the Academy*, 16 (1), 163-189.
- Victoria Carrington, Muriel Robinson. (2009). *Digital Literacies: Social Learning and Classroom Practices*, Sage Publication.
- Wong, Yu CheungHo, Kit Mui, Chen, Honglin, Gu, Donghui, Zeng, Qun. (2015). Digital Divide Challenges of Children in Low-Income Families: The Case of Shanghai, *Journal of Technology in Human Services*, 33 (1), 53-71.
- Yong Jin Park. (2011).Digital Literacy and Privacy Behavior Online, *Communication Research*.
- Yoram Eshet Alkali, Yair Amichai-Hamburger.( 2004). Experiments in Digital Literacy, *Cyber Psychology & Behavior*. 7(4), 421-429.
- Yoram Eshet-Alkalai , Eran Chajut. (2009).Changes Over Time in Digital Literacy, *Cyber Psychology & Behavior*. 12(6). 713-715.
- Zac Chase, Diana Laufenberg.(2011). Embracing the Squishiness of Digital Literacy, *Journal of Adolescent & Adult Literacy*.54 (7), 535–537.

## CHAPTER 3

### LAW EDUCATION AND DIGITAL LITERACY

#### 3.1 INTRODUCTION:

The basic role of a law education is to provide essential skills, legal knowledge, developing competence, and providing motivation for engaging with the moral dimensions of professional life. Legal or Law education and research is extremely important, because it helps in shaping the quality of the rule of law. Legal education gives exposure to a wide range of legal subjects – procedure, contracts, torts, criminal law, evidence, constitutional law, corporate law, property law, administrative law, jurisdiction, labour law, commercial law etc. These are essential for the intelligent practice of law for the practicing and to future lawyers. Law education also offers law students a supervised, rigorous and disciplined opportunity to learn practical legal skills through clinics, externships and trial practice and negotiation courses. This helps a superior way for young lawyers to gain skills in the law profession. In a nutshell, legal education is a form of human science that offers beyond techniques, skills and competences the basic philosophies, ideologies, critiques, and instrumentalities all addressed to the creation and maintenance of society. (UGC 1990) Legal education is a broad term encompassing different branches for delivery of professional knowledge useful for practicing in courts at different levels.

The main aim and purpose of the law education is to generate a professional lawyer who argues before the courts after attaining the courses of law. Law education develops the skills like learning law for practice, cross checking of witness, and also ability to remember the client communication. Thus law education is necessary to plead the cases in any type of courts and on any disputes.

Digital literacy refers to an individual's ability to find, evaluate, and compose clear information through writing and other medium on

various digital platforms. Digital literacy overlaps with computer literacy, as most digital media technologies require some level of computer competency. ([https://en.wikipedia.org/wiki/Digital\\_literacy](https://en.wikipedia.org/wiki/Digital_literacy)). Few examples of digital literacies are: Understanding use of web browsers, search engines, email, text, wiki, blogs, Photoshop, PowerPoint, video creation/editing software, etc. The characteristics of digital literacy are: Creativity, creative thinking, construct knowledge, Innovation, and develop innovative products and processes using technology, Digital Citizenship, understand cultural and societal issues related to technology.

### **3.1.1 MEANING OF LAW**

Generally, Law can be defined as terms and conditions used by the states to disciplines the citizens in it. Many definitions are stated by the scholars in the field of law. Few of the definitions of the law are:

“The law is a system of rules that a society or government develops in order to deal with crime, business agreements, and social relationships.”  
(Collins dictionary)

"A Law in its literal meaning may be said to be a rule laid down for the guidance of an intelligent being by an intelligent being having power over him." (John Austin)

### **3.2 LAW EDUCATION**

The Acquisition of Knowledge is the mission of research, the transmission of knowledge is mission of teaching and application of knowledge is the mission of public service. Education is a process by which the country standards elevated and develops knowledge of society in any area including legal system. Law education is very necessary as it teaches and involves the person to understand the difference between laws and acts, which come into existence. It is most essential thing in today's society.

The law education builds lawyers and professionals who are responsible for the development of social economical and national development.

Kulshreshtha (1999) has given importance to law profession and law education due to which development of both national and economic has taken place today. Most of the universities have the law education institutes affiliated to them. “Legal education India conference” highlighted legal education in India which was organised by law teachers who participated and discussed various problem faced in legal education.

Legal research is a process of identifying and retrieving information necessary to support legal decision making. Begins with analysis of facts of a problem and concludes with the application and communication of the result of investigation. ([http://emwikipedia.org/wiki/legal\\_research](http://emwikipedia.org/wiki/legal_research)). Law Education system brings out improvements and additions in existing laws, and it aims at bringing some new law which is necessary to deal with existing, new situations. The Professors, the researcher, the law students using the library for teaching and learning as well as research and reference purpose. Libraries serve the needs of the users.

Researcher has undertaken this study on the theme Digital Literacy among law users to understand their needs and status of use of digital literacy and to improve the research quality in law. Similarly, the study revealed number of problems that they faced while collecting information and assessing to it due to want of Literacy. Hence researcher undertaken this study to help the law professionals in performing legal research in digital era.

### **3.2.1 NEED OF LEGAL EDUCATION**

Every citizen whether rich or poor has fundamental rights as per article three of the Constitution of India. The challenge is for the legal and legal professionals which are trained persons to use the freedom granted by the constitution and show the proper way. Considering this the responsibility



of law education system is very high to protect the society's happiness. The judiciary and the judicial review help us to maintained this brotherhood and teach us to take care of ourselves and others as per the Constitutions of India. The British had made the law for their benefit of the society and community. Law helps in the socio-economic development of the nation and so it is the most essential thing required to change from time to time as per the changing situation in the country. The acts like banning child marriage, Sati and other such laws have developed. Today the domestic violence act and different amendments and changes in various acts have come up to suit the present situation. Hence the need of the law education system is essential.

### **3.2.2 LEGAL EDUCATION IN INDIA**

The development and role of law education is very important as India is one of the largest democracy in the world. Legal education has undergone metamorphic changes to reach the present form. Legal education helps law professionals and students to play different roles in the society and to engage themselves in various law practices. The function of legal education is to produce good law professionals who helps in developing the society and beneficial to our society and country. Law professionals have the ability to analyse, evaluate socio-economic factors by supporting a legal control. Law professionals need to have a research skill to carry out the function (Pillai 2003). The future law professionals have to be aware of the laws made by the union and government. The legal education can't be only for "top of the pyramid law graduates but must be kept with minimum standard for all law students. Irrespective of the law school they graduate from. "(Bar Council of India, 2014). The national law school indicated that India have institutions that can deliver an affordable and world class legal education. The second intention of reforms works to focus on three pillars expansion, inclusion and excellence (Moily 2010).

There is huge information available in the area of Law in print and in new form and formats which has changed the process of research carried out by law professionals, students, researchers. Information technology and digital media has strengthened the collection of many law libraries by procuring various resources from to print to e-resources, online databases etc. It is the digital information which is available at one click and also can be used by a researcher and librarians to assist him in making available the information over the network. (Pillai 2012). The legal researchers are using World Wide Web (WWW), for the information sources which makes user comfortable in using resources for different purposes. The law professional need to be well worsed with laws of other country along with their own country laws and for this internet and web resources are very much useful. WWW is a good resource of gathering information in all sectors.

### **3.2.3 LEGAL EDUCATION IN ANCIENT INDIA**

Law initially was known as Dharma and an ancient law books were known as Dharma Sutras. The Vedas were considered as the earliest sources of laws and justice. The king is the chief judge according to white Yajurveda. The Vedas are to be more secret and they governed the Hindu society and the social value in the society. ‘Manu Smriti’ was the code which prescribed the right and duties of the individuals in the society. There were local courts in villages headed by the head man who dissolves the dispute at village level. There were appellate court at the district level and the next appeal was with the king’s court.

### **3.2.4 LEGAL EDUCATION DURING BRITISH RULE**

The present legal system has its origin in 1774 with the establishment of Supreme Court in Calcutta. In 1855 formal education came into existence with the establishment of government Elphistone College.(Benjamin 2007) High courts were established in 1861 under high courts act and three types of council appeared or allowed to appear on behalf of client. They were Barristers, Solicitors and Vakils. There after more high courts were

established due to increase in litigation issues in India. Legal education was introduced as subject for teaching in Madras, Calcutta and Bombay universities.

The legal practitioner's act 1879 empowered the high court to maintain the role of lawyers and admitted practice in high courts and subordinate courts. Leadership examinations were conducted by high courts which allowed only the qualified persons to represent clients in litigations in the courts. University of Bombay and Madras were the first to confirmed law degree to eligible persons to practice as Vakils after their completion of internship with senior lawyers having ten years standing after passing the examination conducting by the high court.

The Barristers enjoyed more privileges than the Vakils and this created dissatisfaction in the Vakils. This gave rights to the demand creating All India Bar for practising lawyers in the country. The India Bar Committee was constituted under the chairmanship of Sir Edward Chamier in 1923. (Benjamin 2007) India Bar Council Act was enacted in 1926 based on this committee's recommendation. The act helped formation of Bar Councils in high courts trying to dissolve the problem between the Vakils and Pleaders.

### **3.2.5 LEGAL EDUCATION IN INDEPENDENT INDIA**

The government of India appointed All India Bar Committee in 1951 under the chairmanship of justice R. S. Dass of Supreme Court. The committee made certain suggestions like:

- (i) Each state should form a Bar Council which should enrolled, suspend or formed lawyers as per the conditions laid.
- (ii) It suggested that pleader ship examine should be dispensed with
- (iii) Non-law graduate should be enrolled worked in legal profession.

Advocates act was passed in 1961 for the creation of All India Bar Council and separate Bar Council for each state. Minimum standards for lawyers to enter in practice in courts of law were prescribed. Accordingly, three-year Law Course was started in 1967 in all universities in India.

Before the independence of India and immediately after independence the people who wanted to practice legal profession went to England and got enrolled in English Bar as Barristers. Those who couldn't afford it took a law degree from any university in India and passed the provincial or State Bar Council examinations to be enrolled as an advocate there in provincial or state high court. The law courses offered by the university worked of two years duration with a university exam at the end of the year. (Benjamin 2007)

After getting the degree one has to undergo one year's internship with a practising advocate and there after appear for examinations conducted by the State Bar Council. The academic art was controlled by the universities and the law professional by the Bar Council.

The Bar Council of India prescribed the standards of the legal education as per the advocate's act 1961 and also restructured the course of law. The three years LL.B. course was introduced in 1967 and followed by all universities. The apprenticeship of one year and bar examination was replaced by including practical training in the syllabus of LL.B. course. The BCI has been making different changes in the syllabus by adding new subjects and giving importance to professionals and practical training.

The BCI introduced new five-year LL.B. course in 1982. It began with the establishment of national law school of India, Bangalore in 1986. However, their academic activities began from 1<sup>st</sup> July 1988. New education system was started from with a different model followed in common Law countries.

Table No. 3.1 National Law Universities in India

<b>Sr.No.</b>	<b>National Law University in India</b>	<b>Establishment Year</b>
1	National Law School of India University, Bangalore	1986
2	National Law University, Bhopal	1997
3	NALSAR University of Law, Hyderabad	1998
4	The West Bengal National University of Juridical Sciences, Kolkata	1999
5	National Law University, Jodhpur	1999
6	Gujarat National Law University, Gandhinagar	2003
7	Hidayatullah National Law University, Raipur	2003
8	National University of Advanced Legal Studies, Kochi	2005
9	Ram ManoharLohia National Law University, Lucknow	2006
10	Rajiv Gandhi National University of Law, Patiala	2006
11	Chanakya National Law University, Patna	2006
12	National Law University, Delhi	2008
13	National Law University , Dwarka	2008
14	DamodaramSanjivayya National Law University, Vishakapatnam	2009
15	National Law University, Cuttack Orissa	2009
16	National Law University and Judicial Academy, Assam	2009
17	National University of Study and Research in law,Ranchi	2010
18	National Law University and Judicial Academy, Guwahati	2011
19	Tamil Nadu National Law School, Tirruchirappalli	2012
20	Maharashtra National Law University, Mumbai	2014
21	Maharashtra National Law University, Nagpur	2016
22	Himachal Pradesh National Law University, Shimla	2016

The five-year course was started with a view to bring about social consciousness and to have a progress of new society based on new concept of law. This five-year course is in two parts, in the first two years pre-law

subjects are covered and in the next three years law subjects are taught. This course brought importance to the legal profession by making it full time in 2000 law schools revolution begun. National Law School like Nalssar, NLU-J, NNIU-B were established. All these law schools flourished as per Moilly (2010), there are 913 law colleges in India as on May 2010.

The legal learning has changed over a period. The National Law Schools and Global Law Schools World Wide have improvised new ways and methods for improving legal learning. International moots, summer schools and exchange programmes which have become new trends in legal education exposed the students to change and new trends in law.

There has always been a dispute whether legal education is technical or intellectual. Many respected people have spoken of law library as a laboratory formerly legal education was a degree course having three years education, since 1987 it has changed. The Bar Council of India and law commission has suggested and later the law course has changed. The first national law school was established NLU. Then other universities followed the five years law course. Now it has become five years course, where in the students get law degrees such as B.A.LL.B. honour, B.SC.LL.B. honour, B.Com. LL.B., BBA. LL.B. honour. After three years they get the bachelor degree in Arts, Commerce, Business administration and thereafter two years they get the LLB degree. After the establishment of National Law School since 2000 remains changed has taken place. (Moilly 2010)

In the year of 2010 India had 913 law institutes. Today they are more than 1000. The BCI has to take keen interest in these institutes. The state government has to take interest in these law institutes. The legal education has to be maintained with the certain level.

### 3.3 CHANGES IN LEGAL EDUCATION

Legal education has a high rank in education system. The rise in this sector is necessary. Legal education should be disciplined and should help the nation in developing. Globalization is beneficial for legal education, international corporate need lawyers who are legally and culturally sound. Legal education must make the lawyers and students think seriously about global needs, must be able to think seriously and write efficiently and honestly for clients and represent them properly. Techniques like ICT are important from this point of line.

To improve legal education, different committees have to set up. Like Legal education Committee established in 1949 to promote legal education and University Education Committee (1948-1949). The Bar Council, made some recommendation in 1954 in the 14<sup>th</sup> Legal report showed the state of law prevalent and suggested some improvements. There after – Indian Law Institute, Delhi was constituted in 1956 for researching in law. It is registered. It has an autonomous existence. The library of India law Institute is one of the best Libraries. It has more than 75000 titles, 270 journals membership. It is independent and has full scope for educational liberty. It has gained status on 29<sup>th</sup> October 2004 as Abhimat University.

National knowledge Commission was established in 2005 for promoting knowledge. J. Jagannathrao and others handed the issue of promoting law and legal education in the following manners.

1. The present position of legal education and future schemes required efforts and policy.
2. Subjects in law
3. Governance
4. To establish minimum four independent research centres with central. Government has given fund for it.
5. Economic, entry, basic and establishment.

The legal system is based on old and traditional methods. Today the BAR Council of India is constantly trying to improve its level. Our society is law abiding and heads the knowledge of law. Constitution is essential for its welfare. Lot of changes are taking place in legal education currently. The experts in legal profession are also striving to achieve the welfare of our nation. Lawyers, Barristers, Solicitors have a great respect everywhere. Today there are more than 1000 law colleges, 21 law Universities. In these universities and colleges students go for summer training courses, exchange programmes and internships.

### **3.4 LAW RESEARCH IN DIGITAL AGE**

The 21<sup>st</sup> Century is called as “Knowledge Century Era”. It is considered the era of internet and World Wide Web (WWW). This has changed the process of information generation and dissemination, e.g. the international trade and the World Trade Organisation (WTO), the internationalization and human rights issues, the growth of international courts and tribunals required lawyers, governments, businesses, societies, organizations to undertake legal research. (Greenleaf 2012). Legal research plays important role today. The law libraries required sufficient electronic resources and good number of print collection to satisfy user research needs.

### **3.5 MAJOR RESOURCES IN LAW SCIENCE:**

In law libraries there is progression and development in the collection regularly. In law libraries there is collection and development of law literature.

It is necessary to keep regularly the information of upto date in legal matters. The librarians have to keep an update of information in law. Loss leaf is a resource, which has twelve issues and which provides information. These leaflets are collected as important resources. The librarians have to maintain both national and international resources. The English law is available in Halsbury Law of England, Common Wealth



Report, Law Commissions, Forms and Precedents Reports. The collection of appeal is very important and collected in reasonable price is challenge. Many law publishers have databases in connection with law. These databases are very important. They have lot of useful information, which can be obtained from them. The databases are selected as per their use and for the development of collection.

For the development of collection, the law library has to follow the following collection management. (Srivastave 2009)

Collection of Law Libraries consist of different law literature sources useful for students, faculty, researchers, lawyers, planners, judiciary, and even common man

- The law libraries, maintain reports and articles pertaining to different law subjects.
- Judicial judgements
- Reports of law commissions
- Agreements, orders, rules, regulations, administrative rules etc.
- Syllabus pertaining to degrees, reference books, professional publication

The information sources of law libraries can be divided in to:

1. Primary Resources
2. Secondary Resources
3. Tertiary Resources

### **Primary Resources**

- Constitution of India, constitution of various nations
- Law Rules, Regulations, Orders of States and Centres
- Legislation Debate : workings of Loksabha and Rajyasabha
- Legislative assembly and Legislative Council
- Gazettes' of Centre and States

- Judgements of various Courts  
Supreme Court Judgements  
High Court Judgements
- Judicial Tribunals and Commissions
- Judicial Law Journals
- Various thesis and research paper from different law institutes
- Government Publications

The centre and states published some reports. The published reports of committees and commissions. These reports are very helpful in research. Their reference in research is very important.

#### **Secondary Resources:**

- International agreements and treaties
- Legislative and administrative tribunals rules
- Governmental department's rules and booklet.
- Textbooks or books and reference books

#### **Tertiary Resources**

- Citations of decisions on special subjects

#### **Development of Collection**

In law discipline, resources play an important role in pleading cases in different courts. Evidences and case studies are more useful for the lawyers. Following are some of the collection of the significant national and international commercial databases available and consulted in law, which are in digital form.

- **LexisNexis Academic Universe:** it provides legal information from more than 900 law journals and more than 300 legal newspapers, U.S. Supreme Court decisions from 1790 to present, Patents from 1971 onwards, All Federal laws from 1988 to the present etc. A very prominent resource in law sector.

- **Westlaw:**

It consists judgments of U.K. from 1865, U.S. (Federal and State) from 1658, European Union from 1952, Australia from 1903, Hongkong from 1905 and Canada from 1825 and covers over 1000 journals and law reviews. It also provides statutes and news.

- **Heinonline:**

It has more than 70 million pages of legal history accessible online. It contains 1500 law and law related periodicals. Besides it have huge collection of journals, it also contains entire congressional record bound volumes, legal classics from 16<sup>th</sup> to 20<sup>th</sup> centuries, the UN and League of Nations treaty series, all US Treaties act.

- **Lexis India:**

It consists primary and secondary content. Primary content includes, law journals – Madras Law Journal (Civil) (case law and journal article), Madras Law Journal (Criminal) (case Law). It provides case laws from Supreme Court of India since 1950 till date and from 10 High Courts.

- **Westlaw India:**

Along with India case laws it also includes case law materials from UK, US, EU and other Commonwealth jurisdictions. It contains Supreme Court case laws from 1950 till date. It contains over 330,000 full text decisions from 20 high courts. It also provides access to over 70,000 decisions delivered by various Tribunals.

- **Manupatra:**

Since 2001 Manupatra has been the one of the most preferred legal database in India. It contains full text judgements of Supreme Court of India from 1950 till date. It also contains case laws of 21<sup>st</sup> high courts on all subjects, orders of Tribunals and commissions, bare acts, US Supreme Court Cases (1754 till date), forms on 30 subjects of law, draft Agreements and Deeds etc.

- **Legalpundits:**

It contains judgements of Supreme Court of India since 1950, decisions of 21 High Courts, Tribunals, Notifications, Circulars, Bare Acts, Forms, Legal Queries or Opinions etc.

- **SCC Online:**

It provides Supreme Court Cases since 1969 to present. In addition, case notes, judgements and orders since 1950 till 1969 are also available. It also contains case laws of 21 High Courts, Tribunals and Commissions (TDSAT, CCI, IPAB and CIC). Further, it has international materials viz. English Law – Law Reports since 1865, weekly Law Reports since 1953, Human Treaties and Conventions, Constitutional Courts of South Africa, West African Court of Appeal and Legal Articles.

- **Madras law journals (case's the decisions of Supreme Court of laws) (criminal):**

It has the judgement and journals of India since 1950 till today and 10 high courts judgements.

- **E-Jurics:**

It is an electronic collection of laws in India. It has 2, 50,000 Supreme Court complete judgments and also the decision of High Courts and tribunals in law. In this database there is information in law, Sales Tax and concerning law.

- **Ind Law:**

It is the part of scheme since 1991. It has primary and secondary sources in this database to help law professionals, students, lawyers etc. it also has United Kingdom is represented laws.

- **World :**

It is the World Bank e-library portal. It has financial and social welfare reports and also provides documents.

- **J-store:**

J-store is a new magazine. It is serialized since 2 years. From this you can get a lot of historical information.

- **Corporate Law Advisor (CLA):**

It is an important e-library. It provides information since 1950 about case laws, head notes, law procedures, analysis and review from ministry, departmental report and gives up to date knowledge of laws.

- **EBSCO:**

This is an international database it gives renowned information of law magazines. Lawyers' professors, professional law librarians and students find it as an excellent resource. There are more than 1,100 information and journals different journals, which take reviews and laws. It has year book, BAR Association publications, international university, public detailed contents, summary of books, state studies, legal records in thousands are available in laws.

- **Taxmann:**

Taxmann is an India database. It publishes corporate laws. It has the corporate analysis in law. It is almost online database in Indian rules and laws. It has T.D.S. return filling, IT returns. ETDS (take it from online).

Even if the National Law Schools are subscribing most of these International and National databases but many law colleges are not able to subscribe the same due to high subscription prices of these resources.

However, there are free online legal resources available on the web. Some of such significant free resources are:

- Legal Information Institute of India (LII of India) (<http://liiofindia.org/>)
- The Judgment Information System (JUDIS) (<http://judis.nic.in/>)
- Indian Legal Information Institute (Indlii) (<http://indlii.org/>)
- Indian Kanoon (<http://www.indiankanoon.org/>)
- World Legal Information Institute (WorldLII) (<http://www.woeldlii.org/>)
- Australasian Legal Information Institute (AustLII) (<http://www.austlii.edu.au/>)

- Findlaw (<http://www.findlaw.com/>)
- LexisNexis Communities  
(<http://www.lexisone.com/lx1/caselaw/freecaselaw?action=FCLDisplayCaseSearchForm&l1loc=L1ED&tcode=PORTAL>)
- American Bar Association  
(<http://www.americanbar.org/groups/departmentsoffices/legaltechnologyresources/resources/freejournalsearch.html>)
- Open Access Law : Adopting Journals  
(<http://sciencecommons.org/projects/publishing/oalawjournals/>)

These resources definitely help the legal researchers to search for acts, statutes, commentaries, case laws quickly. It saves space and the users have access to multiple information. Many users can use it from different places at the same time having many access points for searching.

The law library professionals need to be efficient and savvy for providing information of online and offline databases.

### **3.6 LAW LIBRARIES**

Law libraries have important job and facilities of providing information needed in law education and research, and its management and distribution. Libraries have responsibility of handling this properly and efficiently. Libraries can satisfy the needs for scholarships, research, social service etc. Legal professionals, law students and researchers have no time to follow rules and search legal information.

The libraries and librarians help them to locate and retrieve information. The librarian are well versed with ICT and digital literacy, therefore they can help them to achieve the desired knowledge, quickly and efficiently. It is necessary to develop digital literacy and conduct seminars, workshops training to students, legal professionals and researchers to learn the use of Database. It is also essential to include this in the academic syllabus.

### 3.6.1 THE ROLE OF LAW LIBRARIES

The law library should have a structure, should be framed as per the needs of students, faculties, judges and legal professionals. Librarianship is a challenging profession. (Dollenny 1963). Law library is an important unit in judicial process. The users of law library are very critical. As per the necessity and their use of law library is developed. Srivastava R. (2008) has given this specification about the legal institute's law library. The types of law libraries are indicated in Table 3.2.

Table 3.2 Types of Law Library and their Users

<b>Types of Library</b>	<b>Users</b>
Law Library in colleges	Law students, Professors, researchers
Judicial Libraries (attached to court)	Judges, Law experts, Assistants of High court or Supreme court
Law Libraries in Government Office	Public servants, officers
Legislative or Council libraries	MLAs
BAR Association Libraries	Lawyers of that BAR or Legal Practitioners
Professional Libraries	Professional Lawyer
Research Libraries	Researchers
Libraries of Judicial Academies and training institution	Judges and civil servants

Wong and Swatzy (2014) observed that there is not much discussion about the organization of law libraries. The Librarians are accidentally engaged

in law library. Wong and Swatzy (2014) have expressed their views in the following manners.

- Big firms have law libraries. Here most of the clients are law students and professionals. Here printed and electronics reading materials are available. Computers are placed on each lawyers table. Since license is expensive, it may not be possible to give this facility everywhere.
- Remote access may be provided. ICT is used. Librarians or library staffs sometimes help the people to search for information and retrieve it.
- The law students, lawyers etc. must be taught the skills of digital literacy in the absence of librarian or library staff, so too senior researchers have less time to do research.

### **3.6.2 LIBRARIES IN LAW COLLEGES**

In law colleges there are libraries established for academic purpose for teaching and learning. Common public needs permission to make use of these libraries. The users are professors, students, researchers. The library needs to be kept in proper condition, up to date and always must be in such a condition that the legal policies must be guarded.

**There are number of Law College libraries like**

- Bangalore University Law Library
- Government Law College, Mumbai
- Mumbai University Law Library
- Kashmir University Law Library
- Madras Law College Library
- Delhi University Law Library

Delhi University has the best law library. It has around 2 lakhs books. It is public aided. It is better than past libraries.

In all the High Court there are law libraries which have a lot of legal material so to the Supreme Court more than 3 lakhs books. This is the biggest library. Calcutta High Court, Karnataka High Court also have very big libraries.



Every BAR Association has its own library e.g. Delhi, Bombay, Madras. The members of these associations work in these libraries. Those institutes have legal research department have their own libraries. It is necessary to have one's own library, where in research work is done like Indian Law Institute, New Delhi., ILI (2017) there are more than 50 thousand books. They also have documents reports etc. In this library they have index to Indian Legal periodicals and also information centre. This library has a journal of India Law Institute. It has published magazines and many books. So too it has very rare collection and publications. The librarians are skilled and trained to work in legal libraries. They have possessed M.L.I.Sc. and M. Phil. Degrees. The BAR Council has laid down different standards for libraries and they should be observed and followed by all libraries.

### **3.6.3 LEGAL LIBRARIES**

These libraries are useful for the society. Regional institutions are on the rise. The legal information required for ordinary common people are kept in these libraries and increased. The members are improving the libraries. Books are being added and many schemes are circulated.

### **3.6.4 LIBRARIES IN COURTS**

Libraries are made available to regional and legal staff. Legal students, experienced lawyers and judges make use of these libraries. Political people and also common ordinary people use libraries. Libraries are run for keeping records and rules of law.

### **3.6.5 PUBLIC LIBRARIES**

Some libraries have legal sections for the benefit of common users. They are used for historical research, especially Municipal information studies etc. They are good for research in old information.

### **3.6.6 JAIL LIBRARIES**

These libraries have books concerning useful knowledge, giving fiction and legal information collection. This is for the entertainment and knowledge of jail inmates.

### **3.7 ROLE OF LAW LIBRARIES**

Law is based on information on the situation and circumstances and the current trends. This is so because the information needs to be tackled with the view to get the correct values circulated. Information need to be developed in depth with a view to provide proper knowledge to the users and not to create a competitive atmosphere.

#### **3.7.1 LAW LIBRARY IS A SPECIAL KIND OF LIBRARY**

Though the librarians are well educated and efficient, a special skill can be borne by them in law libraries of law institutes. The librarians in law institutes have to perform special role while performing their duties, with efficient and skillful qualities. They can provide special assistance to the users of library. The law students, the faculty members, the law professionals can be aided by such librarians. The librarians play an important role in the process of providing the necessary information in law to the users of library.

#### **3.7.2 TRAINING GIVEN FOR REFERENCE SEARCH**

James and Alan (1997) have used their own way of expressing the citations. The references given in law have to be delving with specifically the new law students who are busy in legal writing, legal articles, and documents unaware of the way giving references. They also do not know how to find case laws and how to give references and citations. The librarians can help these students to understand and find the case laws and further to give citations. The libraries have a peculiar arrangement which the librarians are well informed. Hence librarians can guide and direct the students of law, researchers and professionals to find the required information with no loss of time and energy.

### **3.7.3 LIBRARIANS AWARENESS TOWARDS NEW RESOURCES IN LAW**

Today many subject databases are available and they are also available online and offline. In the law libraries it is necessary to train the student to locate the information from databases. The librarians must be alert in getting information of resources developed in the area at different levels like social, national, international levels, where in law information is published. They must keep information of the professional publications, newspapers, new laws and the different working styles in different governmental offices. Today this has become an important aspect for the libraries to be well informed and well versed with the current situations and current trends. This only help librarians to orient the users of the library. If librarians are fully aware of the subject resources then only it is possible to develop information and digital literacy among the users.

### **3.7.4 VALUABLE SERVICES FROM LIBRARIES**

The law libraries are supporting to users (students, faculty, researchers, practioners etc.) in providing required information by different library services using collection and open resources. Librarians have to develop the CAS, SDI and on demand bibliography and indexing. The library has to collect the qualitative information sources both in print and e-resources. The proper need-based collections help users to get information for courts, debates, elocutions etc., to practice in court and also in teaching and learning. The researchers can write articles and theses using the collection and services from the libraries. They get the necessary information from the libraries through services.

The law libraries have to provide regular services to users for keeping them aware of the current knowledge in the Law sector.

- The law libraries lend law books, journals, magazines.
- They also search for legal articles and reports.
- The law libraries also maintain important paper cuttings pertaining to law and legal professions.

- They also perform the legal search through online and offline and internet.
- They prepare the list and catalogues.
- Paper clipping are provided.
- The libraries also have the awareness services.
- Research through internet.
- Awareness of different resources available in different medium.
- Providing information through printed and digital medium.
- They provide the services by traditional ways.
- Along with all these they have some special duties as law libraries.

### **3.7.5 USE OF LIBRARY BY LAW STUDENTS AND RESEARCHERS (USERS)**

As per the new syllabus prescribed by UGC, the law students, who desire to participate in Moot Courts and debates, make use of library collection for information necessary for their projects and assignments in addition to learning. They can participate in national and international level Moots and debates. They can exhibit their skills in presentations and elocutions because of the information they receive from the library. The users can also become good lawyers because of the information available in the library and services provided by libraries. The library users need the current trends in law, rules, regulations, ordinances, which come up from time to time. The latest judgement passed in the law courts, High courts, Supreme Courts are available to them from the libraries. ICT and digital literacy efficiencies help law users to scan and retrieve the information from the libraries and resources available globally using internet. For getting e-resources easily there is a need to develop awareness of resources available in the area of Law. The law students, researcher, faculties need to be trained in ICT and digital information literacy.

Now in the ICT era law students, professors, researchers have knowledge of using ICT, hardware and software. They need the awareness of

resources available in their area. The librarians help them from time to time to get knowledge of the working of ICT and digital literacy through orienting users.

### **3.7.6 CHALLENGES AMONG LAW USERS**

The law libraries face the challenge of training the students and users in digital literacy and ICT. The users need to learn the use of digital resources and information retrieval techniques for searching print as well as digital data. Users need to be trained for this information retrieval from the huge volume of information generated in Law sector. The librarian's main role is to direct and guide the students for gathering proper, pinpointed information efficiently without spending more time, energy and money. The librarians are in a position to guide the students to get the information quickly and in a well – organised form.

### **3.8 DIGITAL LITERACY: A NEED OF THE TIME**

In all the sectors of knowledge information explosion is very high. The information generated in print and digital media also. It is now very difficult to track information generated in the print resources as compared to digital media publications. The indexing and abstracting services are now generating databases and these are very useful for getting pinpointed information on any topic due to many access points available for the searcher.

For legal professional need of the latest and current as well as retrospective information in the legal field is preferred. Awareness of the resources, searching techniques, is the need of the present situation and circumstances in this profession. The law students, professors and lawyers constantly need the awareness of the new judgements which are being passed in High Courts and Supreme Courts. The judgements passed internationally must be known to the lawyers, law students and researchers. Such type of information is quickly available using digital resources like databases, e-resources, open access documents, internet resources etc. using mobiles, e-mails, and internet. For this purpose,

digital literacy is very important and training to users is also necessary. Orientation to users is the need of time to all users including Law and librarians arrange training to all law library users including students, faculties, legal researchers, lawyers etc.

Recently due to technological and publication transformation Libraries and librarians are well equipped with digital information sources and ICT infrastructure. Some lectures and workshops need to be conducted by law institutes to make the law users and citizens of India aware of the law resources and its effective use. (Matheson 1988)

### **3.9 AWARENESS OF LAWS AND LIBRARIAN'S ROLE**

The citizens need to have basic knowledge of the Constitution and provisions there in to help them to know the rights given to them by the constitutions. They must know that the fundamental rights are given by the constitution in chapter three. If these fundamental rights are infringed by the government or administrative authorities. They can approach the court to enforce their rights. This can only happen when they come to know about their rights and the writs which can help them to get their rights enforced. There are number of institutes which hold regular workshop and seminars to give information to the citizens of India.

Many skits and dramas are presented explaining the rights of women and children, about the domestic violence and about the land ownerships. Various book exhibitions in law speaking about the rights of people are also held. The librarians are also entrusted with duty of helping the users of library with the information available digitally.

The educational law libraries are different from other libraries. The researchers are dependent on the skills of digital literacy to be aware the knowledge required. The librarians can provide sufficient and necessary information by which the users can access the needed information. The librarians need to provide more information digitally to the users. They also need to explain the users how to express themselves. They must know

from where to opt for required knowledge there after they must know how to make use of the knowledge obtained digitally. Further they must know the references from where they have availed of their knowledge and how they have been able to use for their presentations. The librarians can help them in the endeavour. Since the libraries and librarians are fully equipped with the digital resources. The librarians and library staff have full knowledge of the digital information. They have the experience of the working in ICT and they can bring about the required results.

### **3.10 LITERACY**

“Literacy” for a long time has been thought of as source of enlightenment and modernity for governing, taming people and making them docile. Since 1960’s literacy has been a central issue of numerous governmental and international policies. Literacy has been linked to economic prosperity and growth. An economic competition between the nations and states. The concepts of literacy and basic assumptions have undergone a change during the recent decade. There is a terminological change from basic literacy to new literacy like media literacy, information literacy, digital literacy, computer literacy, electronic literacy, network literacy, hardware literacy, internet literacy etc. There is also workplace literacy, which is due to socio-economic and cultural technological changes in the country. After World War II the employability was born. UNESCO has also promoted literacy by measuring illiteracy in 1950’s.

Basic literacy skills were used in the changing society. The functionality of literacy since 1960’s was observed to prepare people not only by citizenship but also for productive work and consumerism (Levine 1986).

The fresh literacy movements and research traditions have challenged the views on literacy. There has been a socio-cultural impact, in human and social sciences in early 1970’s. It thought as the interaction between people and their social practices. Recent developments in the theory of

literacy have emphasised the multiplicities of literacies. Multiple literacies are needed as there are different ways of reading and writing diverse multimodal texts. It leads to the continuously developing digital technology people use in collaborations. In the digital age creative production of text and information are needed in these new literacy machines. The new literacies allow writers to be more creative.

### **3.11 EDUCATION AND LIBRARIES:**

Educations in all areas are improving today. There is a well-developed education system to manage the changes. Education system is supported by library which provides information to users and libraries worked thought of as store house of information. But due to information explosion the libraries can no longer keep the available information in a specified subject area. The use of ICT supports end user in getting seamless information access to anyone at anyplace at any time. The libraries are shifting towards automated, electronic, digital and virtual as well as networked libraries.

The internet has made the job of library and information professionals more challenging.

The library users are today concerned more with searching information in the digital era and hence they need orientation from libraries in order to make information searches powerful. The new technologies provide direct access to information but proper skills are required to collect proper information. Today gathering of information has become more complex. The reference service and the awareness of services, selective dissemination services are not enough, but need advanced information searching services using technologies. The present users need advanced services using e-resources, databases etc. in the form of electronic clipping services (ECS), alerts, digests, e-CAS, SDI etc.



### **3.12 USER NEEDS NOW LINKED TO INFORMATION**

The present era is an information era , ICT era, digital era, internet era etc. and resources available are voluminous in digital form available either free or on payment. Libraries are agencies to share the resources among the knowledge society. The role of librarian is very prominent in electronic era.

The use of ICT, information is linked to e-publications and internet resources. Information is called as commodity, as it has an economic value. Information is the base for development of information and knowledge society. The libraries are now acquiring e-resources more as compared to paring, due to many advantages. Now information overload and information explosion are very high and beyond the control. Users have to assess to information themselves but unless user understands digital literacy, technological literacy, information searching literacies, they are unable to collect the proper and useful information available globally. Hence multi literacy training is required for all the information handlers and users.

### **3.13 DIGITAL SOCIETY**

Today in the information and knowledge society all over the world, is depending on ICT and different technologies, using digital tools and always facing digital interventions. Everywhere personal computer (PC), mobile phones and tablets are used in the society. The PC is also widely used at work and at home. There is electronic and digital revolution in present age. In 1990's these were superseded by "Information society and "Knowledge revolution". Bill Gates in 1995 claimed "The information revolution is just beginning". It has been brought new social form due to technological changes and its use in practice. Most inventions are rooted in social order. The purpose of the people, government and business has

been to improve the technology. Society is not static but very dynamic and need quick information for various purposes.

Bauman (2005) calls “liquid modernity” in which individuals fall back upon short-term satisfaction, temporarily goals and acquisition of objects and consumption services. Society is being transformed from “solid” to “liquid” phases of modernity, where social forms mailed faster than new ones and which can be cast. In today’s society individual identity has become the fundamental social act. Even the family has become more atomized and short-term.

In the globalised society free market economy has become transformed into a supranational order in which the elite no longer belong to anyone country. The digital technology has become more important in global society. Digital technology is thus, means and symptom for social change. It has brought about the geneses and maintenance of “postmodern” technology. The technology has brought about economic and political changes. The digital tools enabled the individual to present himself to the risk of the society by creating and broadcasting services, developing blogs or personal websites, sending e-mails, texting, contributing to online etc. Gaining literacy in digital is essential which the individual can retain a hold on his life in the era of increasing uncertainty.

### **3.14 NATIONAL DIGITAL LITERACY MISSION (NDLM)**

The National Digital Literacy Mission (NDLM) scheme has been formulated on the basis of Prime Minister’s Vision on “Digital India” in 2015. His vision advises that one person in every family has to be digitally literate. The scheme NDLM try to formulate and hope to give Information Technology (IT) training to 52.5 lakh persons including, Anganwadi and Accredited Social Health Activists (ASHA) workers and authorised ration dealers in all the States. The non IT literate citizens to be trained to IT so that they can actively participate in the development

process and increased their lively hood. In the first phase, ten lakhs beneficiaries would be trained under this scheme. Nine lakhs beneficiaries would support fee in the government. The rest 100,000 will be trained by society and civil partners.

The NDLM programmed was to encouraged

- Entrepreneurship and to bring uniform digital literacy
- To improve socio-economic area in the rural region
- Tools for information were to be developed

The main aim and focus were to develop critical thinking initiatives in young people by developing digital literacy skills. It is also implacable for women empowerment and NDLM was to develop knowledge centre. This is the indication that Govt. is after the training society to become ICT, Digital literate so as to develop quality in education sector.

Similarly, many projects like e-learning concepts in higher education are introduced; more e-courseware is developed to support e- learning projects in higher education. Open universities and distance education facilities have developed their course ware in digital form. SWAYAM, e-PG Pathshala etc. are developing digital knowledge bases and these can be accessed free of charge to needy person.

Thus, Digital literacy is very essential in the knowledge-based society. Awareness of digital literacy is very essential due to internet and networked society.

### **3.15 REVIEW OF LITERACIES ALONG WITH DIGITAL**

Different literacies are identified and found originating to pre-digital period. The overview is briefed as;

### **3.15.1 COMPUTER, INFORMATION AND ICT LITERACY**

Since late 1960's access and use to computers was identified and becomes a need in the later period, to hold voluminous information which can be accessed and retrieved whenever required. The computer literacy has passed through phases like: the mastery phase (up to the mid 1980's), the application phase (Mid 1980's to late 1990's) and the reflective phase (late 1990's on). (Martine 2003)

In the mastery phase the computer is seen as a powerful tool and emphasis is placed more on gaining special knowledge and skill to use and become master in it. The computer basic consist and helps users in using computers for different works and similarly developing programme to run on computers. In addition to this expert have learnt input on social and economic effects of computers and these were also studied.

The application phase began towards the end of 1980's and had the appearance of simple graphical user interfaces and easy to use mass market applications. This initiated the use of computers to mass usage for different activities. In this phase the computer was seen as a tool used and applied in education, work, leisure and home also.

The focus was on the software of literacy activity and definitions of computer or ICT literacy. This was accompanied by appearance of mass certifications schemes focusing on basic of levels of ICT competence.

The reflective phase was that ICT could be a vehicle through which student centre pedagogies along with innovators would be realised. There was awareness that more critical evaluative and reflective approach was needed for using ICT more effectively. In this reflective level specific skills, generic skills or meta-skills are evident in the definition formulated by the OECD-ILO PISA project. ICT literacy is the interest, attitude and ability of individuals to appropriately use digital technology

and communication tools to access, manage, integrate and evaluate information, construct new knowledge, and communicate with others in order to participate effectively in society”. (Van Joolingen 2004)

US National Research Council (NRC, 1999) report proposed the term “fluency to suggest the greater intellectual challenge. The report states that “Generally computer literacy has acquired skills connotation, implying competency with few of today’s computer applications, such as word processing and e-mail etc. Literacy is too modest a goal in the presence of rapid change, because it lacks the necessary staying power. As the technology changes by leaps and bounds, existing skills become antiquated and there is no migration path to new skills. A better solution is for the individual to plan to adapt to changes in the technology. (NRC, 1999) ICT literacy can’t be defined as mastery of technical skills. The report defines ICT literacy as follows: ICT literacy using digital technology, communications tools and networks to access, manage, integrate and create information in order to function in a knowledge society. (ETS, 2002)

It is observed that the earlier phase remain subordinate to these phases as these literacy consist became more complex multilevel as they develop.

### **3.16 CONCEPTS OF DIGITAL LITERACY**

The concept of digital literacy was defined by Paul Gilster (1997), who tried to define it as the replacement to refer to the Television, telephone and newspapers by new technologies available to the people to adopt web. Jewitt (2006), suggested that the concept of literacy is divided into different types of literacies such as visual, emotional, intellectual and digital, which adapts to the continuous new technologies. Digital literacy has evolved through the years and has been used to explain technological skills such as internet, online, electronic, computerised skills. Fulton (1997) suggested that technology is a combination of information skills

and literacy. Communication skills and literacy and the skills to function in technology environment. This concept has become an acceptable because having skills to used and take advantage of computer and the internet are requirement for getting admission in different educational programmes and to gain access to labour market (Brynin, 2006; Korupp and Szydluk, 2005; Van Dijk and Hacker, 2003).

Computer and internet skills are very important today. Digital literacy includes the following types of literacy photo visual literacy, reproduction literacy, information literacy, socio-emotional literacy.

Photo visual literacy refers to an intuiting and association thinking. It helps to understand visual messages easily and so plays an important role. This type of learning is based on synchronised, stimulation of the learner through multimedia. The reproduction literacy is the ability to interpret the meaning of the independent pieces of information.

Information literacy includes cognitive skills used to evaluate in an educated and effective member.

The socio-emotional literacy is the main resourceful kind of digital literacy. “Those who are socio-emotional educated are ready to provide data and knowledge with others, capable of information evaluation and abstract thinking and are able to collaboratively construct knowledge”.(Eshet Alkalai 2004 and 2002).

The emergence and development of the ideas of “Digital Literacy” relates to other literacies of information. Its’ terminology is very confused the idea of digital literacy finds its place among information literacy, computer literacy, ICT literacy, e-literacy, network literacy and media literacy.

‘To participate and take advantage, citizens must be digitally literate - equipped with the skills to benefit from and participate in the Information

Society. This includes both the ability to use new ICT tools and the media literacy skills and tools to handle the flood of images, text and audio-visual content that constantly pour across the global networks.’ (Europe's Information Society Thematic Portal, 2007, <http://digeulit.ec>)

It is evident from the above definition that digital literacy and ICT literacy are considered to be one and the same thing. Evidence of the UK government’s low-level basic skills definition of ‘digital literacy’ can be found in the pronouncement within the Race Online 2012 manifesto: ‘Digital literacy is a great enabler of social mobility. It is a way for those who have had bad experiences of institutions to re-engage in learning. And it can break down feelings of social isolation. It is a powerful weapon in the fight against poverty. (<http://raceonline2012.org>)

### **3.16.1 ORIGINS**

There was a lot of literature and practical experienced experts in the information literacy and computer literacy. Later developments accord both these terms were equivalent to ICT literacy. They originated from sets of specific skills and competencies needed for handling information in computer form. In 1980 the term computer literacy was used. In 1990 information literacy gained popularity even today computer literacy is used to describe skill set used commonly by software package. Information literacy has broadened the meaning and is accepted as multifaceted concept. The information literacy concept has promoted the academic library community. It helped to understand and encompass the evolution of information. It grew to encompass the used of printed resources and helped in library literacy and media literacy (Bawden 2001). In 1989 the American Library Association (ALA) place forth six stage model for information literacy. This had a great influence on the six aspects, which are as follows.

- Recognising need for information to identifying what information is needed.
- Finding the information
- Evaluating the information
- Organising the information
- Using the information
- This influences the present-day information literacy.

In addition to this following seven aspects distinguishes on origin of IL.

- Recognised information need
- Distinguished ways of addressing gap.
- Locate and access
- Compare and evaluate
- Organised apply and communicate
- Synthesis and create
- The information literacy goes beyond the skills-based computer literacy model as it includes the softer scales such as evaluation of information and recognition of information need. It is a model used for planning training courses in information literacy and in academic libraries. It also forms the basis for interactive tutorials.

During the 1990's an alternative view point came up (Bruce 1994, 1997) and gave the following characteristics of information literacy of person.

1. Information literacy (literate) person is one who acquires independent self-directed learning to uses of information process.
2. Uses information technologies and systems
3. Has internalised values promoting information used
4. Has knowledge of the world information

Approaches to information critically has a personal information styles as per Shapiro and Hughes (1996), who focused on the kind of computer



literacy and described the seven components, they mainly discussed on tool literacy using hardware and software tools and resource literacy understanding forms of information resource an access to it.

Many scholars and researcher have studied these concepts and focused on internet literacy. It seems that Gilster's digital literacy is to be located among these proposals. Gilster wrote with examples of search engines, databases and mailing list works well with examples and social media, social networking sites and weblogs.

### **3.16.2 NEW LOOK DIGITAL OR TECHNOLOGICAL FLUENCY**

Some scholars refer to digital literacy in terms of digital fluency. Jewitt (2006), thinks that concept of literacy 'like the acquisition of asset of skills 'should be replaced as a dynamic processed through which students used multimodal signs and designed new meanings.

The concept of digital literacy contains preparation narrated to information and communication technologies (ICTs) that are needed in daily life. The concept contains abilities, referred to as the information society. Tucket (1989) things the basic conditions for the use of technological infrastructures and is based on general knowledge about computer skills to use them and confidence of using it.

Some scholars like Bunz, Curry and Voon (2007) disagree that literacy is a static concept while fluency involved in change. They defend Computer-Email-Web (CEW) fluency as the digital factor that may be developed not only by skill development but on anxiety rate reduction. It is necessary to develop the fluency is unknown technology or the basis of characteristics technology.

According to the different reviews of conceptualisation of digital literacy different skills to deled with computer, network connection and information and digital fluency. It is assumed that people have to be

digital literate in order future lines of research to achieve proper degree of digital fluency.

### **3.17 UNDERSTANDING DIGITAL LITERACY**

The term digital literacy links together, relevant literacies based on computer, ICT competencies and skills focused on softer skills of information and evaluation and knowledge assembly. Digital literacy is a framework for integrating various other literacies and skill set. It is difficult to suggest that one specific model of digital literacy will be appropriate for all people or for one person over their life time. The generally agreed four components of digital literacy are:

- i. Underpinnings
  - Literacy per se
  - Computer literacy / ICT literacy
- ii. Background knowledge
  - The world of information
  - Nature of information resources
- iii. Central competencies
  - Reading and understanding
  - Non digital formats to creating and communicating digital information
  - Evaluation of information
  - Knowledge assembly
  - Information literacy
  - Media literacy
- iv. Attitudes and perspectives
  - Independent learning
  - Moral / social literacy

Underpinning gives the basic skill sets which are needed to achieve digital literacy. The background knowledge complements them by giving

necessary understanding of the way in which digital and non-digital information is created and communicated and of the various forms of resources which result from it. Information literacy implies computer in actively finding and using information in “Pull mode” while media literacy implies and ability to deal with information format. “Push” at the user. Finally the attitudes and perspective reflect the idea that the ultimate purpose of digital literacy is to help each person what is necessary for their particular situation. “Moral/Social literacy “reflects the need for an understanding for sensible and correct behaviour in the digital environment. It may have issue of privacy and security.

### **3.18 END USER**

Today’s generation is technologically competent, digitally literate and information savvy and they have the confidence that the information behaviour and the ability of million students to apply relevance test to the information they find. They have the legal and ethical understanding of copyright and intellectual property as well as the critical thinking skills that underlie in information literacy (Rogers and Swan 2004).

Plagiarism has become a major issue, stated in Wiki-pedia 2007. Plagiarism is the practice of training other original authorships as once own without adequate acknowledgement. There is a lot of research which focuses on the use of electronic, information sources by scholars, researchers and faculty. (Herman, 2001, Tenopir, 2003) Information seeking behaviour by public at large is dominated by quarries about news events, pop-culture and the search engine are used for it.

The different terminologies are used in digital environment based on use of technologies.

### **3.19 DIGITAL DIVIDE**

There is a digital generation gap which represents with digital natives and digital immigrants using different languages, for some users' computers are not technologies but they are part of life i.e. Digital Natives. Digital immigrants reflect their experience of pre-digital life by describing it as digital to differentiate electronic and traditional version. The digital immigrants today the dominate teachers, professors and employers and the linguistics incompatibilities increases the potential for misunderstanding and communication. (Gartner 2007, Oblinger 2003)

From the available literature it is shown that learning styles are another example of generation gap. Digital natives like instant information, prefer graphics, animation, video to text and for these more important is using technologies than simply knowing and learning. Digital immigrants handle knowledge logically and systematically.

Electronic learning is also known as learning and it is used for providing material for distance learner. As a part of information literacy, it has an important aspect in learning and workplace the concept of knowledge management in harnessing information is shared among employees and used for the benefits of companies and organization to facilitate information handling. However, business leaders and technology transfer specialist consider information handling in terms of ICT competency rather than in terms of being information literate.

### **3.20 INFORMATION SAVVY TO INFORMATION LITERACY**

There is an interdependence between digital literacy and information literacy. The process of finding information in digital environments requires different skills than those needed to judge its quality and value, information savvy is digitally literate enough to use a web browser and mouse to navigate through internet, and search information and locates information through navigation. Information savviness is about creating

information as well as finding it. Being streetwise means exercising cautions in posting personal information on Facebook, Skype etc.

The quality of information that can be retrieved from the internet is vast. It represents only the proportion that is accessible by search engine and identify by web-crawlers. The agents visit websites and index documents from title work or tagged data and also find links to identify related documents. However the indexing procedure is far from exhaustive. Thus those who rely on Google or Yahoo to find information lack to find relevant information. The internet and its search engine allow us readily available and easily contents. If the information savvy users are confident in their ability to use the internet to locate information. The information seeking behaviour can be encouraged and an analytical skill can support their learning process. The next generation students and information society learnt independently and seek advice from pierce rather than librarians. Attaining information literacy is lifelong learning. Lifelong learning is essential in the work place. The ability to determent the needed information and to locate it this distinguishes the information wise from the merely savvy people. The gap between the objectives is on that librarians struggle or strives to feel by encouraging users to think critically about what they find. Library staffs have influence on information seeking behaviour by acting as intermediaries and educating and advising the users to get best results from library catalogues literature searching etc. In the present era there is a need to become information literate so academicians, information needed community can access to information using advanced facilities and information sources, analyse, synthesis, repackage as per needs and then use it for the development of new knowledge.

### **3.21 FUTURE OF INFORMATION LITERACY**

The information seeking behaviour reflects changing the learning styles and access to information which is chaotique at times. Professional

librarians are trying to be actively involved in promoting information literacy at all levels. The information seeking behaviour has transformed, and the information seeker must get the desired information for the carrying out tasks. The goal of developing information literate population to participate in creation of new knowledge is a necessity with the economic, social, legal and ethical issues of seeking and handling information.

The librarians by and large are trained and ready to teach IL. But there is a problem which rises about pedagogy (methods of teaching) in the quest to information literacy in educational process. There is a need to develop collaborations between librarians, academics, administrators and learning technologies to integrate programmes and establish pedagogically sound assessment techniques. Information literacy needs to be guided by learning theory between bibliographic information and teaching practice.

There is need for successful outcomes of information literacy programmes to develop information literate society for lifelong learning and qualitative research. The policy makers and educational strategies must be the convince of deficiencies of being nearly information savvy. The goal of attaining information wisdom through digital and information literacy must be set at educational level. The information seeking behaviour must be influenced by information literate individuals and benefit get due benefits from information literacy.

In future there is a need to acquire different literacies related to information literacy, like digital, internet, networked literacies etc.

### 3.22 THE CONCEPTUALIZATION AND BARRIERS TO DIGITAL LITERACY

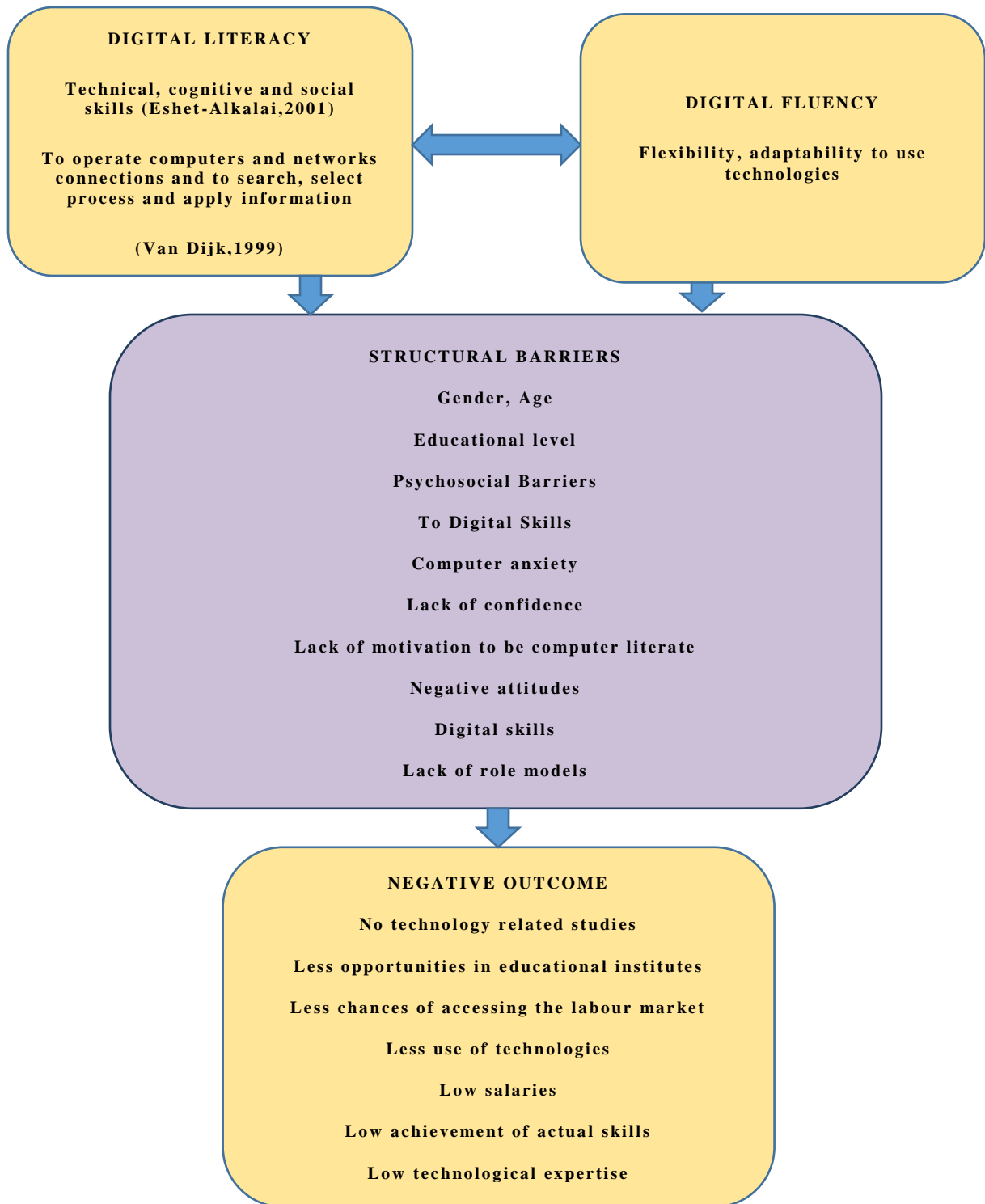


Fig. 3.1 Conceptualization and Barriers to Digital Literacy

From the above figure it is evident that despite of the efforts to define digital literacy. There is an absence of empirical research that analyses the real impact of the acquisition of the digital literacy with positive attitude towards computer. Future research to be undertaken to analyse more technologically and digitally fluent people. The prospective research should work to formulate an employ a unique global concept of digital or technological literacy and to study what exactly digitally literate means and to account for it.

### **3.23 DIGITAL LITERACY SKILLS**

Libraries and all the professionals related with any sector, today desired to acquire knowledge and skills in information and communication technology (ICT). Libraries are now centring on information technology in all sectors like educational institutions, law, medicine, engineering etc. The librarians in these institutions need to achieve a level of ICT skills as well as many other skills like digital. Development in ICT have made changes in each and every field like computer, information, communication, internet, multimedia revolution. The changes can be seen all over the world in every field of knowledge including the field of library. Every library grows in terms of reading material, equipment, space, staff, readers etc. The scenario is changing rapidly in the library from print media to web media. From ownership of documents to access to documents/ information, and there is a change in the needs and interests of the readers and hence role of library and information professionals also changed. The library professional has to perform various tasks in technological environment. The ICT skills acquired and possessed by the librarians in all the fields and type of libraries helps them in managing LIS sector prominently.

Shiholo and Ocholla (2003) studied the changing trends and pointed out that training need to informational professionals in Kenia and suggested that regular review needs to be done of such professionals in the



university libraries in Kenia. Various studies have shown that library automation software, web awareness and online facility are made available in all sectors and now including law institute libraries, and it also showed that majority of libraries and librarians are convergent with operating systems like windows, UNIX and LINUX etc.

The means and methods of acquiring the knowledge in ICT skills by library professionals was done through self-study, training at work places, training by suppliers and also by attending information technology programmes and workshops. The constraints and restrictions for acquiring ICT skills were due to overload of work and the facilities like fast and accurate information retrieval from the stored information.

### **3.24 DIGITAL LITERACY IN HIGHER EDUCATION**

The development of digital literacy has been slow in comparison to information communication technology (ICT) and this is an issue in higher education sector (Duder Stadck and Womack, 2004). It has become very clear that only technology is not enough in developing digital information skills and the attitude must also be considered for acquiring advanced skills. Digital literate people are skilled and they perform economically educationally and globally (Ministry of economic development 2008) very well using ICT. These technologies are important for learning and the mastery of such tools are also important.

Digital technology is not a new; a complete generation has grown up with these technologies (Prensky, 2001). It was found that students from most of countries had ready access to computers at schools. But it was found that the students, who mostly used computers at home, develop their technical skills. As a result ICT related competencies grew. Hence digital literacy skills are largely dependent of opportunities of learning.

However, some optical and support factors influencing the development of digital literacy in staff and students in education systems needs to be tackle. The major obstacle to students becoming more proficient in digital

literacy is the issue of access. Dewey in 1933, about 80 years before stated digital learning environment dependence on experience, engagement activity of personal skills and learning collaboratively. This is an area which needs knowledge about literacy and integration of several specific forms of literacy for better utility in all the sectors.

Digital information fluency (DIF) is the ability to find, evaluate and used digital information effectively, efficiently and ethnically. DIF includes internet searching skills which starts from understanding digital information from print, as well knowing the use of tools for finding digital information and strengthens the digital information environment which is the need of present era.

### **3.25 DIGITAL LITERACY MODELS**

There are almost thirteen theoretical based models which are relevant to the digital information literacy. They are mainly related to information literacy, information fluency etc. They are considered to be relevant to users in digital context using the digital literacy as a tool to seek information. Some of the well-known models are focused below.

The U.K. based models are designed for practical use in schools.

These models are developed keeping international focus and they have been tested also. From the available literature it is understood that the relevant digital information models are based on two possible definitions of development, process models and developmental models.

The individual goes through the process in finding understanding and validating the information which he is seeking. This can be called as process models. The individual acquires the necessary skills for finding understanding and validating information this may be called as developmental models. An individual should become information literate and should map out the ideal developmental models through the use of the process model of information seeking. The focus is on the developmental models.

### **3.25.1 ONE DIMENSIONAL LINEAR MODEL.**

Process model described the problem for finding information. There are around 40 models which describes the stages that people undertake to use digital information effectively. These process models are similar in structure to linear process through which the person should travelled.

### **3.25.2 THE DIGITAL INFORMATION FLUENCY MODEL (DIF)**

Digital Information Fluency is the ability to find and evaluate and use digital information effectively. It deals with knowing how digital information is different from print information. Having the skills to use specialised tools for finding digital information and developing it.

### **3.25.3 DEVELOPMENTAL MODELS**

The developmental models have the aim to map the steps through which a student's goes through and becomes more digitally literate. There are few developmental models than process models. They are categorised in two dimensional and multidimensional models.

### **3.25.4 MAKING A USEFUL MODEL**

Any model in digital literacy for learning can be integrating contemporary literacy into standard classroom instructional which must be simple and expressed in ¾ sentences. There is a need for detailed literacy skills. Which can be used by professionals and educators in their instructional planning. The nature of extend of media literacy which individuals need and developed depends on the purposes for which they used the media. Different social groups developed different forms of media literacy.

## **3.26 CONCLUSION**

There is a need for a proper model, which is flexible adoptable and applicable to all sectors and settings are needed for proper and useful in the digital literacy programs.

## **3.27 POTENTIAL SOLUTIONS**

John Dewey criticised the school system in 1933 and expressed that learning through experience engagement of activities of personal relevance and learning collaboratively can be achieved by internet activities. The benefits of collaborating learning were established several decades ago. The use of Internet technology has made it a reality.

### **3.27.1 DIGITAL LITERACY IN LAW LIBRARIES:**

According to Fedrick D. Donellee “The law library is truly a vital factor in the administration of justice, an institution of extra ordinary social significance in a free society. Inspiring others is the ambition of men and women of vision who devote their talents to the creation and perpetuation of law libraries whose benefit reach out far and beyond the personal interest of the original creators.”

Legal research needs the use of books, pamphlets, periodicals and documentary materials. Knowledge of previous findings in similar cases is required by legal researchers. Use of library is a tool for the legal researcher. Hence users should know how to use the libraries and organise the collections with knowledge of basic bibliographic and reference materials.

The general procedure of maintaining libraries is the same in all libraries. They all have a system of subject classification, a card catalogue and certain bibliographic and reference material. The researcher must know how to test the required material from the book kept in the library. Users need to have knowledge of book and reading material. How to use the library catalogue and also know how to use classification system in the library.

In Law sciences also more use of e-resources, databases, internet, web tools, social media and different types of media are used. Hence it is essential for the law science users also to be information and digitally literate user so that instant messages can be delivered.

**Summary:**

The library professional need to concentrate on network based services and digital library services in order to enhance their skills.

- (i) The librarians need to be encouraged for upgrading their ICT skills.
- (ii) The library schools must change their curricula and focused on ICT such as digitalisation and digital libraries must be done.
- (iii) The top management also needs to support for adaption of technologies and literacies needed.

The library information is globally being affected by pace of ICT development. The librarians with appropriate ICT skills and technological expertise have ample opportunities in future. Most of the opportunities are outside traditional settings for example as Cybrarians website, co-ordinators, webmaster, database consultants, digital literacy managers information literacy coach, corporate officers, etc.

## REFERENCES:

- Attewell P. (2001). Comment: the first and the second digital divides, *Sociology of education*. 74(3), 252-259.
- Babsu, B. R., Vinayagamoorthy, P., & Gopalakrishnan, S. (2007). ICT Skills among Librarians in Engineering Educational Institutions in Tamil Nadu. *DESIDOC Journal of Library & Information Technology*, 27(6), 55-64. doi:10.14429/djlit.27.6.145. Retrieved from <https://publications.drdo.gov.in/ojs/index.php/djlit/article/view/145>
- Bar Council of India (2014) Reform of Legal Education in India Retrieved from Retrieved from <http://www.barcouncilofindia.org/wpcontent/upload/2014/11/legaleducationreformrecommendationspdf>
- Bawden, D. (2001). Information and digital literacies : a review of concepts, *Journal of documentation*, 57(2), 218-259.
- Belshaw, Douglas, AJ (2012) What is 'digital literacy' ? A Pragmatic investigation., Durham theses,
- Benjamin, Joanna (2007). *Financial Law*, Oxford University Press, UK.
- Bruce, C. (1994). Portrait of an information literate person, *HERDSA News*, 16(3), 9-11.
- Bruce, C. (1997). *The seven faces of information literacy*, Auslib Press, Adelaide.
- Brynin M. (2006). Gender equity through computerisation, *European sociological review*. 22(2), 111-123.
- Bunz U., Curry C. And Voon W. (2007). Perceived versus actual computer-email-web fluency, *Computers in human behaviour*. 23, 2321-2344.

- Digital Literacies-Concepts, Policies and Practices 2008. Retrieved from <https://www.scribd.com/document/62885614/Digital-Literacies-Concepts-Policies-and-Practices-2008>
- Digital Literacy. Accessed at [https://en.wikipedia.org/wiki/Digital\\_literacy](https://en.wikipedia.org/wiki/Digital_literacy).
- Dimaggio P., Hargittai E. (2001). From the digital divide to digital inequality: studying internet use as penetration increases. Princeton University centre for arts and cultural policy studies, Working paper series number 15.
- Durham University. Available at Durham E-Theses Online: <http://etheses.dur.ac.uk/3446/>
- Eshet Y. (2002). Digital literacy: a new terminology framework and its application to the design of meaningful technology-based learning environments. In proceedings of world conference on Educational Multimedia, Hypermedia and Telecommunications 2002 .493-498.
- Eshet-Alkalai Y. (2004). Digital literacy: a conceptual framework for survival skills in the digital era, Journal of educational multimedia and hypermedia. 13(1), 93-106.
- ETS (2002). Digital transformation: a framework for ICT literacy, Educational Testing Service, New Jersey.
- Fulton K. (1997). Learning in a digital age: insights into the issues. A publication of the Milken exchange on information technology: Milken Family Foundation.
- Gartner (2007). Digital natives hit the workplace: from students to employees. Gartner symposium, ITxpo , Barcelona 20-23. Available at <http://agendabuilder.gartner.com/spr8/webpages/sessiondetails>, accessed on 30 August 2015

- Greenleaf G (2010). The Global development of free access to legal information, *European Journal of Law and Technology*, 1(1) Retrieved from <http://ejlt.org/article/view/17/39>
- Hargittai E. (2002). Second-level digital divide: differences in people's online skills, *First Monday*. 1-20. Available at [http://www.firstmonday.org/issues/issue7\\_4/hargittai/](http://www.firstmonday.org/issues/issue7_4/hargittai/)
- Hargittai E. (2005). Survey measures of web-oriented digital literacy, *Social science Computer Review*. 23(3), 371-379.
- Herman, E. (2001). End users in academia: meeting the information needs of university researchers in an electronics age, Part2, *Aslib Proceedings*, 533(10), 431-457.
- James, R. S. and Alan, R. T. (1997). *Cataloguing and classification Trends, Transformation, Teaching and Training*.
- Jewitt, C. (2006). *Technology, literacy and learning, A multimodal approach*. Routledge. New Jersey.
- Korupp S.E., Szydlik M. (2005). Causes and trends of the digital divide. *European sociological review*. 21(4), 409-422.
- Kulasheshta, V. D. (1999) *English legal history*, Eastern Book Co., Lucknow, India.
- Martine, A., Rader, H. (eds.) (2003). *Information and IT literacy: enabling learning in the 21st century*. Facet Publishing, London, 3-23.
- Moily, V. (2010). Law Minister Announces Vision for Legal Education Reform: A vision statement delivered by the Law Minister Veerappa consultation for second Generation Reform in Legal Education held at the Vigyan Bhavan, The Bar council of India, New Delhi. Retrieved from <http://www.barcouncilofindia.org/law-ministers-vision-statement-for-secondgeneration-reforms-in-legal-education/>



- NRC (1999). Being fluent with information technology, Committee on information technology literacy, National research council. National Academies Press, Washington.
- Oblinger, D. (2003). Boomers, Genxers and Millenials : understanding the new students. Educause review, 38. <http://www.educause.edu/ir/library/pdf/erm0342.pdf> accessed on 15 August 2015.
- Pillai, K.N. Chandrasenkharan (2012). Legal Education and the Digital Era in Singh, R., Devroa, S., Rai, P. & Singh, A. (Eds.) International conference on Access to Legal information and Research in Digital Age. New Delhi, National Law University. Retrieved from [http://nludelhi.ac.in/download/publication/2015/august/Conference%20Proceeding international%20Conference%20on%20Access%20to%20Legal%20Information%20and%20Research%20in%20Digital%20Age%202012.pdf](http://nludelhi.ac.in/download/publication/2015/august/Conference%20Proceeding%20international%20Conference%20on%20Access%20to%20Legal%20Information%20and%20Research%20in%20Digital%20Age%202012.pdf)
- Retrieved from <https://www.collinsdictionary.com/dictionary/english/law>
- Retrieved from <https://legal-dictionary.thefreedictionary.com/John+Austin>
- Rogers, D., Swan, K. (2004). Self regulated learning and the internet, Teachers College Record, 106(9), 1804-1824.
- Sáinz, M., Castaño, C., & Artal, M. (2008, April). Review of the concept “digital literacy” and its implications on the study of the gender digital divide. Retrieved from [https://www.uoc.edu/in3/dt/eng/sainz\\_castano\\_artal.pdf](https://www.uoc.edu/in3/dt/eng/sainz_castano_artal.pdf)
- Shiholo Benson Misco , Ocholla Dennis N. (2003). Chaniging trends in training needs for information professionals in Kenya, Library and information Science Research. 13(1). Available at <http://libres.curtin.edu.au/libres13n1/index.htm>.

- Shrivastava, R. K. (2008). Law Librarianship in India with Special Reference to the Judicial Library System. *International Journal of Legal Information: the Official Journal of the International Association of Law Libraries*, 36(2). 275-299. Retrieved from <http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1139&context=ijli>
- Tenopir, C. (2003). Use and users of electronic library resources: an overview and analysis of recent research studies, Council on library and information resources, Washington. Available at <http://www.clir.org/pubs/abstract/pub120abst.html>
- Tuckett H.W. (1989). Computer literacy, information literacy and the role of the instruction librarian in coping with information literacy: bibliographic instruction for the information age. Ann arbour MI: Pieran Press.
- UGC (1990) Report of the curriculum development in Law, New Delhi, p 12
- Van Dijk J V, Hacker K. (2003). The digital divide as a complex and dynamic phenomenon, *The information Society*. 19, 315-326.
- Van Joolingen, W. (2004). The PISA framework for assessment of ICT literacy. *Available at* [www.ictliteracy.info/inf/pdf/PISA%20framework.ppt](http://www.ictliteracy.info/inf/pdf/PISA%20framework.ppt).
- Wong, B. and Sawatzky, K. (2014). Presented at Ontario Library Association super conference. The Hidden of Law Libraries. Retrieved from [https://brendawoa.files.wordpress.com/2014/02/hidden\\_world\\_paper.pdf](https://brendawoa.files.wordpress.com/2014/02/hidden_world_paper.pdf)

## **CHAPTER 4**

### **DATA ANALYSIS AND INTERPRETATION**

#### **4.1 INTRODUCTION:**

This chapter is representing data analysis, the data collected from the questionnaires are analysed systematically and presented in tabular and graphical form. From the data analysis researcher has deduced some observation related to the concept. The interpretation of the responses is based on the data collected from the researchers. Researcher has framed out two questionnaires one for the librarians to assess the status of the law libraries in terms of collection and services provided to the users. Another questionnaire was designed for the law users like students and faculty who are using services of libraries and to assess their status of digital literacy awareness and based on the data suitable inferences can be deduced to understand the level of digital literacy of the users.

#### **4.2 SURVEY OF LAW LIBRARIES IN PUNE**

There are 22 law institutes in the Pune city. Among them few institutes are conducting full time L.L.B. programmes and post graduate courses as well (both 5 years and 3 years L.L.B. programmes). They conduct L.L.M. and Ph.D. programmes, and also conduct diploma programmes in subject of law. Every institute has library facilities and these libraries are managed by library trained qualified professionals. All these institutes were selected for survey and information was collected about the libraries. A questionnaire Appendix I was prepared for the librarians to understand the present status of law libraries.

The questionnaire prepared for librarians to assess the status and practices, services provided to the users by law libraries in Pune city. At present there are 22 law institute libraries in Pune city and these are selected for the survey. Structured questionnaire was prepared and circulated among all the law institute libraries in Pune city. Out of 22 Law institute Libraries/Librarians to whom questionnaire was circulated as a population of the study, 18 law libraries/librarians responded to the survey and remaining could not send the data in spite of reminders due to administrative difficulties. The response to survey is 81.81 (18 out of 22). From the data collected the status of existing practices followed in the law libraries as well the status of library automation, acquisition of e-resources, use of internet, the

efforts made by them to achieve the economic collection development for the effective use along with this it was evident how the librarians are making effective use of available resources and providing services to users. All this could be analysed from the data to assess the efforts made towards enhancing digital literacy in law science users from libraries.

#### **4.3 POPULATION AND SAMPLING FOR SURVEY OF USERS**

There are 22 law institutes with well-developed libraries for law users in the Pune city. These institutes are managed by societies affiliated to Savitribai Phule Pune University Pune, Symbiosis International Deemed University, Tilak Maharashtra Vidyapeeth and Dr. D.Y. Patil University etc. Some institutes are conducting full time L.L.B. programmes and post graduate courses too. They have both 5 years and 3 years L.L.B. programmes. They also have L.L.M. and Ph.D. programmes. They also conduct diploma programmes in various subjects of law. This study considered only five years L.L.B. programmes and L.L.M. programmes. This study has not been considered for Ph.D., Diploma and three years L.L.B. courses in the study.

The random sampling method has used for selection of sample. Researcher has been visited institutes and interacted with students and faculties who were available in the institutes during the survey. Random sampling technique is followed for selecting users from each category in each institute and on the basis of size of the sample. A list of permanent faculty was obtained from the librarian and distributed questionnaire to them. Questionnaire has been collected from the users personally by the researcher.

The total population of users (students) in law institutes were 7560.

The random selection of users is considered and sample selected for the user (students) survey is 10% of population and it is 756. This is more than the sample size fixed by Morgan table as discussed in chapter one. As per Morgan Table for known population of 7560 i.e. roundly 8000. The sample size need to take is 367. Hence, selected 756 (10%) students for the study. Total population of teaching faculty is almost 132 in all senior and permanent.

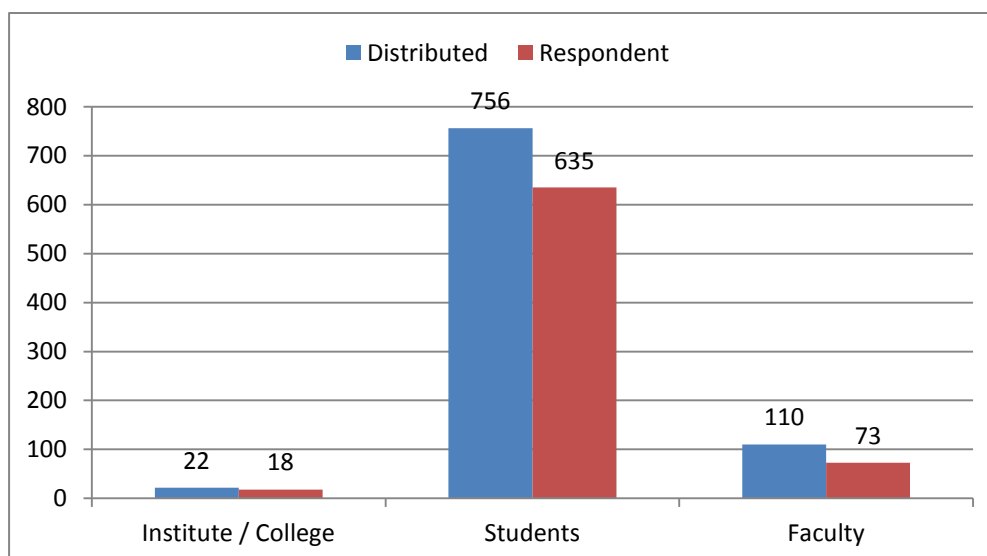
Six faculties from each institutes has been selected as randomly from 22 institutes around 132 faculties have been selected for distributing questionnaire.

A questionnaire in Appendix II is prepared to understand the use of law library facility by users like students and faculty as well as law professionals who visit libraries for consultation. The questionnaire Appendix II for the users was given to 756 students and 132 faculties including. From this sample 635 (83.99%) students and 73 (55.30%) faculties responded as indicated in Table 4.1. On the basis of the data received, researcher analysed the data and interpreted and framed the charts and drawn the observations.

**Table 4.1 User Population for Survey**

	<b>Distributed</b>	<b>Respondent</b>	<b>%</b>
Institute / College	22	18	<b>81.81</b>
Students	756	635	<b>83.99</b>
Faculty	132	73	<b>55.30</b>

The student's response to the survey is almost 83.99 (635 out of 756) and response of the faculty for this survey is 55.30.



**Fig. 4.1 User Population for Survey**

Table 4.1 is a brief summary of the survey of law libraries and law users in nutshell

#### 4.4 DATA ANALYSIS: LAW LIBRARIES

The data collected from the 18 Law Institute Libraries are analysed in this part.

##### 4.4.1 GROWTH OF LAW INSTITUTES

**Table 4.2 Growth of Law Institutes in Pune under survey**

<b>Establishment Year</b>	<b>No. of Institutes</b>
1900 - 2000	4
2001 - 2010	14
2011 - 2015	0
<b>Total</b>	<b>18</b>

1. Out of the total 18 law institutes 4 (22%) law institutes were established during the year 1900 to 2000.
2. Out of the total 18 law institutes 14 (78%) law institutes were established in the year 2001 to 2010.

##### **Observation:**

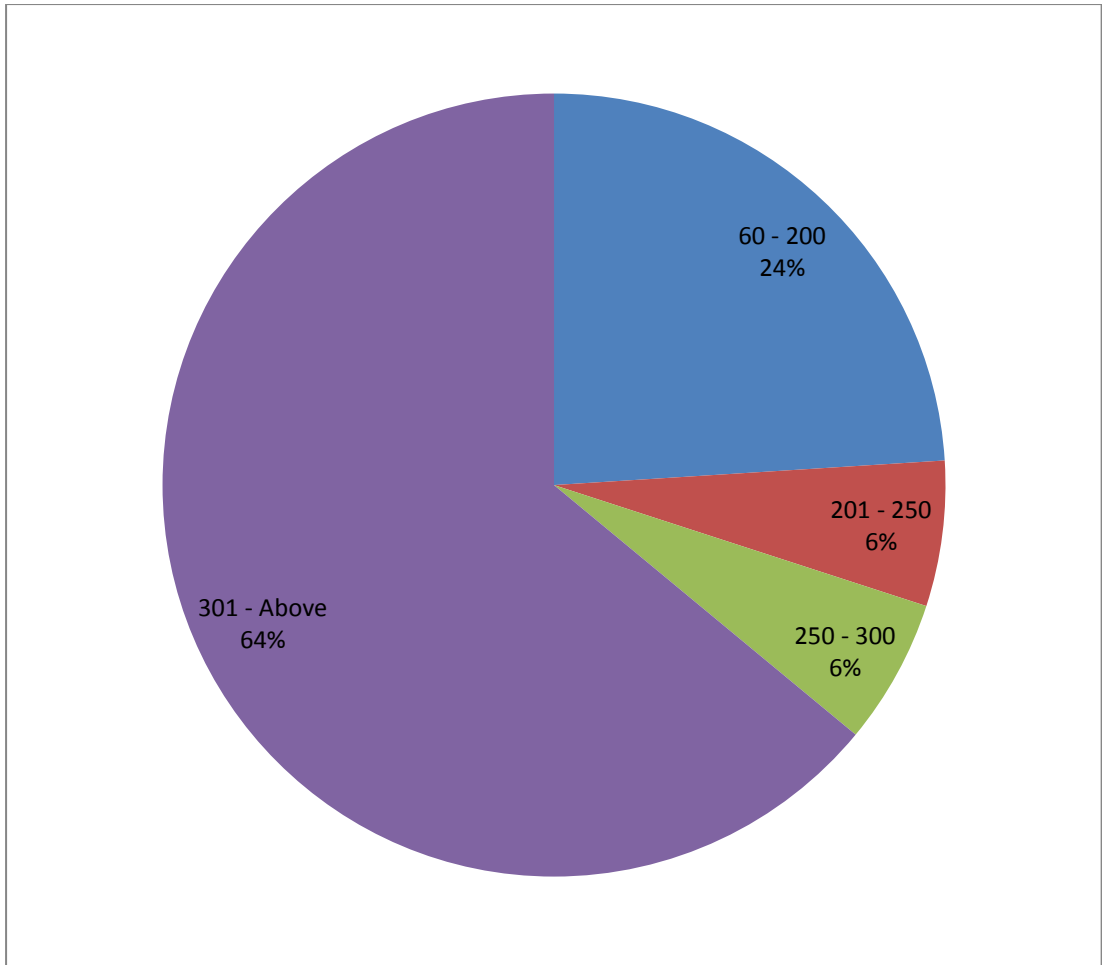
It is observed from the table 4.2 that in Pune city the growth of Law institutes is initiated from 1900 onwards and till the year 2015 (At the time of registration of the candidate for research) there are almost 22 law institutes established. (Till end of 2018 there are 25 law Institutes in Pune).

The maximum growth (78%) is reported during the period 2001 to 2010. Prior to 2001 the growth was very slow as well as after 2010 the growth is negligible and no law institute is established between 2011 to 2015

##### 4.4.2 USERS OF LIBRARY

**Table 4.3 Users of Library**

<b>Library Users</b>	<b>Respondent</b>	<b>%</b>
60 – 200	5	27
201 – 250	1	6
250 – 300	1	6
301 – Above	11	61
Total	18	100



**Fig. 4.2 Users of Library**

1. Out of the total 18 law libraries 5 (27%) librarians responded that 60-200 users have membership of library.
2. Out of the total 18 law libraries 1(6%) librarians responded 201-250 & 250-300 users have membership of library.
3. Out of the total 18 law libraries 11(61%) librarians responded that more than 301 users are member of their library.

**Observation:**

It is observed that nearly more than 67% users are using the library facilities from nearly 12 law institutes. Whereas 33% users are using libraries from 6 law institutes. The use of law libraries is more and reason is that the collection of law libraries is not available elsewhere.

#### 4.4.3 DAILY VISITORS OF LIBRARY

Table 4.4 Daily Visitors of Library

Visitors	Respondent	%
50 – 100	11	61
101 – 200	4	22
201 – 300	1	6
301 – 400	2	11
401 – Above	0	0
<b>Total</b>	<b>18</b>	<b>100</b>

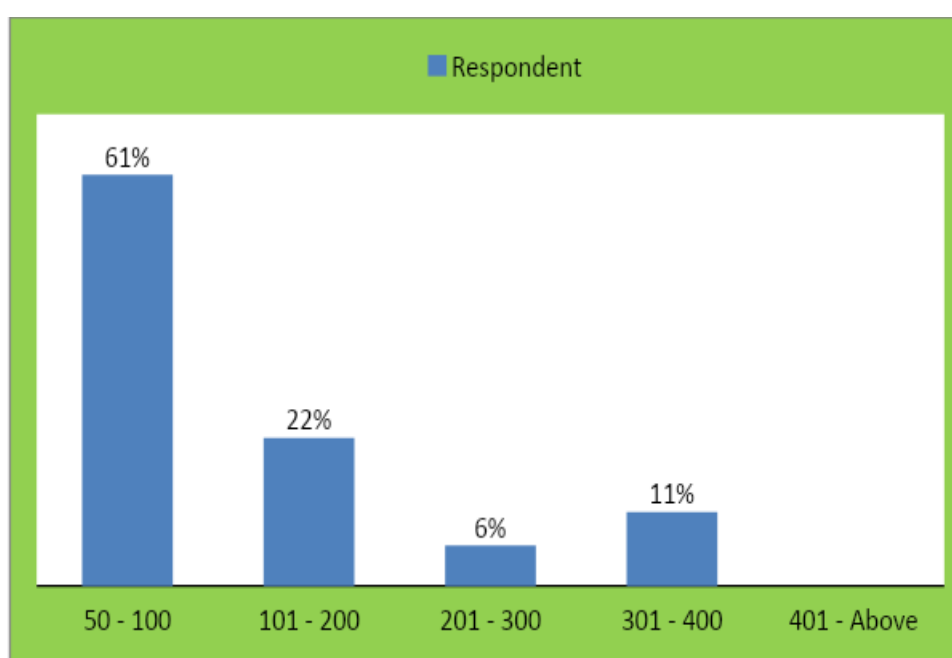


Fig. 4.3 Daily Visitors of Library

1. Out of the total 18 law libraries 11 (61%) librarians responded that 50-100 visitors are visited daily.
2. Out of the total 18 law libraries 4(22%) librarians told that 101-200 visitors are visited daily.
3. Out of the total 18 law libraries 1(6%) librarians quoted that 201-300 visitor are visited daily.
4. Out of the total 18 law libraries 2(11%) librarians responded that 301-400 visitors are visited daily to the library.



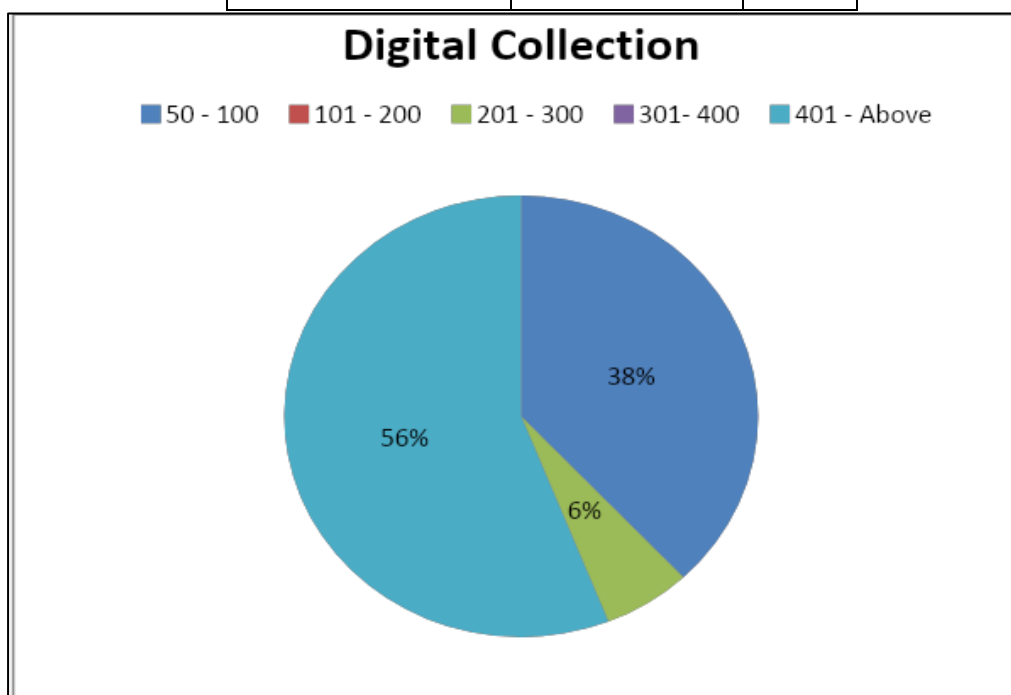
**Observation:**

83% (15 institutes) users are daily visiting to the law library for the consultation of resources. This indicate the importance of library collection to the law users

**4.4.4 AVAILABILITY OF DIGITAL MATERIALS**

**Table 4.5 Availability of Digital Materials**

Collection	Respondent	%
50 - 100	7	38
101 - 200	0	0
201 - 300	1	6
301- 400	0	0
401 - Above	10	56
Total	18	100



**Fig. 4.4 Availability of Digital Materials**

1. Out of the total 18 law libraries 7 (38%) libraries have 50-100 digital materials
2. Out of the total 18 law libraries 1 (6%) libraries have 201-300 digital materials
3. Out of the total 18 law libraries 10 (56%) libraries have above 401 digital m

**Observation:**

It is observed that all the law libraries have print collection, but now in e-collection development it is necessary to understand the acquisition status in terms of e-resources in law libraries.

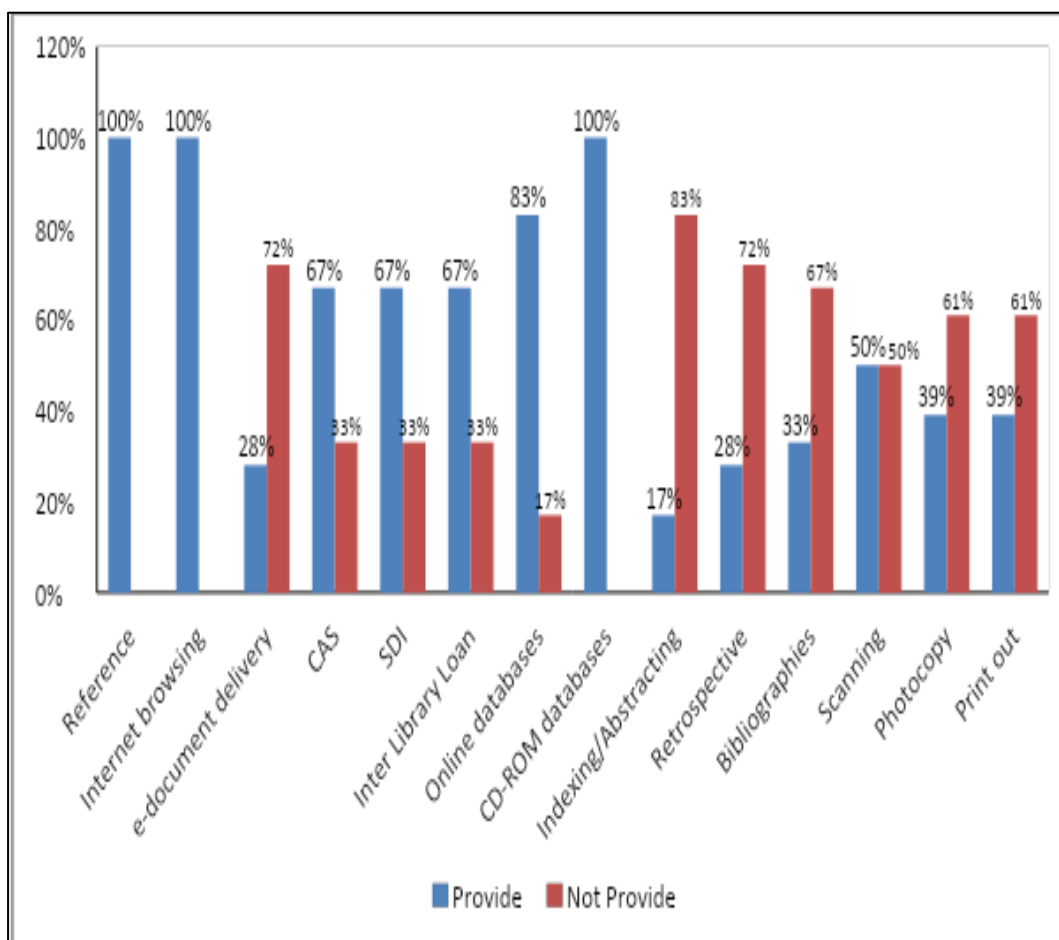
It is observed that all the institutes are acquiring to e-resources. But only 56% libraries have given more weightage for e-resource collection so far and remaining are just increasing their e-collection slowly.

**4.4.5 LIBRARY SERVICES****Table 4.6 Library Services**

<b>Library Services</b>	<b>Provide</b>	<b>%</b>	<b>Not Provide</b>	<b>%</b>
Reference	18	100	0	0
Internet browsing	18	100	0	0
e-document delivery	5	28	13	72
CAS	12	67	6	33
SDI	12	67	6	33
Inter Library Loan	12	67	6	33
Online databases	15	83	3	17
CD-ROM databases	18	100	0	0
Indexing/Abstracting	3	17	15	83
Retrospective	5	28	13	72
Bibliographies	6	33	12	67
Scanning	9	50	9	50
Photocopy	7	39	11	61
Print out	7	39	11	61

1. Out of the total 18 (100%) law libraries provided services of reference, internet browsing and CD-ROM databases.
2. Out of the total 18 law libraries 15 (83%) law libraries provided online databases.
3. Out of the total 18 law libraries 12 (67%) law libraries provided services of CAS, SDI, ILL to their users.

4. Out of the total 18 law libraries 9 (50%) law libraries provided facility of documents scanning.
5. Out of the total 18 law libraries 7 (39%) law libraries provided facility of photocopy, print out.
6. Out of the total 18 law libraries 6 (33%) law libraries provided bibliography service.
7. Out of the total 18 law libraries 5 (28%) law libraries provided e-document delivery and retrospective facilities to their users.



**Fig. 4.5 Library Services**

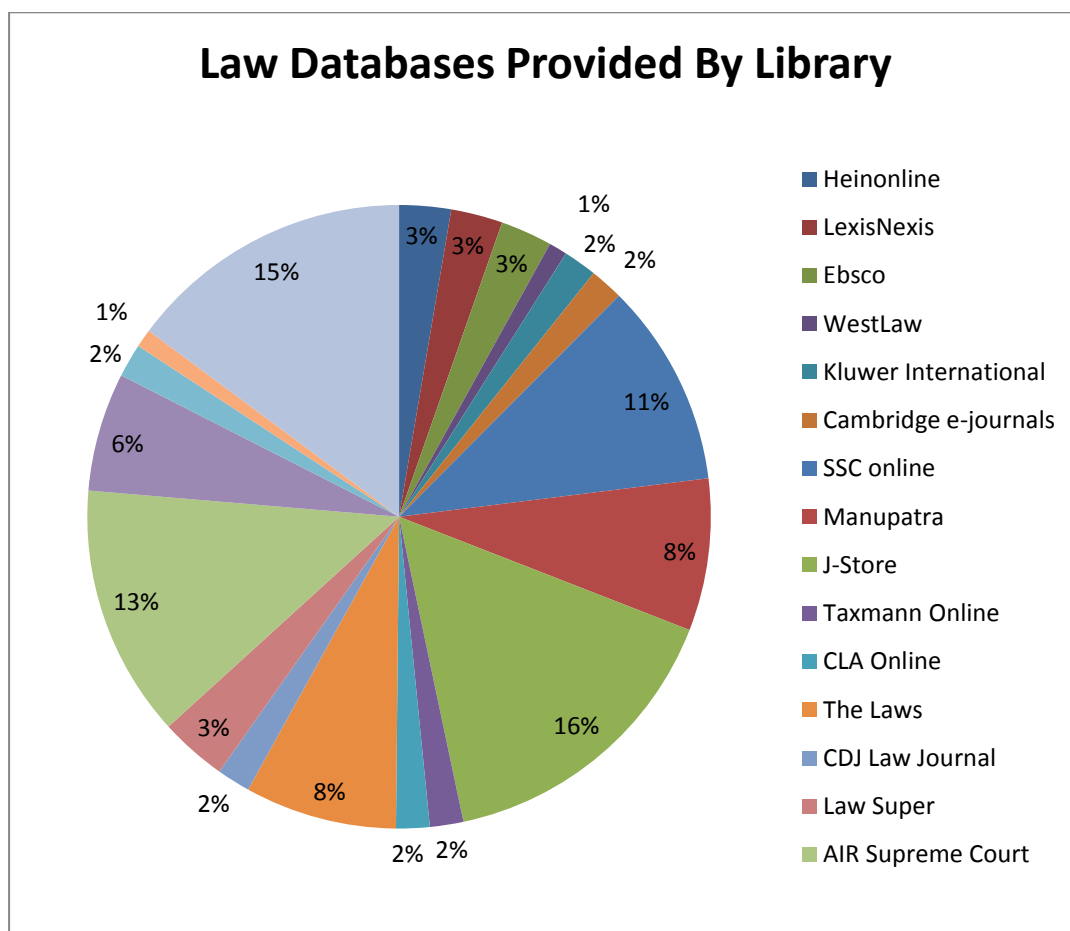
**Observation:**

It is observed from the data that library services provided by law libraries are as detailed in the table 5.6 and most of the libraries are providing reference service, internet browsing and CD-ROM database, CAS, SDI, ILL, at large scale

**4.4.6 LAW DATABASES****Table 4.7 Law Databases**

<b>Law databases</b>	<b>Provide</b>	<b>%</b>	<b>Not Provide</b>	<b>%</b>
Heinonline	3	17	15	83
LexisNexis	3	17	15	83
Ebsco	3	17	15	83
WestLaw	1	6	17	94
Kluwer International	2	11	16	89
Cambridge e-journals	2	11	16	89
SSC online	12	67	6	33
Manupatra	9	50	9	50
J-Store	18	100	0	0
Taxmann Online	2	11	16	89
CLA Online	2	11	16	89
The Laws	9	50	9	50
CDJ Law Journal	2	11	16	89
Law Super	4	22	14	78
AIR Supreme Court	15	83	3	17
AIR High Court	7	39	11	61
AIR Privy	2	11	16	89
AIR Web World	1	6	17	94
N-List	17	94	1	6

**Fig. 4.6 Law Databases**



1. Out of the total 18 (100%) law libraries have been subscribed J-stor for their users.
2. Out of the total 18 law libraries 17 (94%) law libraries have been subscribed N-List.
3. Out of the total 18 law libraries 15(83%) law libraries have been subscribed AIR Supreme Court database.
4. Out of the total 18 law libraries 12(67%) law libraries have been subscribed SCC online.
5. Out of the total 18 law libraries 9 (50%) law libraries have been subscribed The Law & Manupatra ,
6. Out of the total 18 law libraries 7(39%) law libraries have been subscribed AIR High Court.
7. Out of the total 18 law libraries 4(22%) law libraries have been subscribed Law Super.

8. Out of the total 18 law libraries 3(17%) law libraries have been subscribed Heinonline, Ebsco, & LexisNexis.
9. Out of the total 18 law libraries 2(11%) law libraries have been subscribed Kluwer International, Cambridge e-journals, Taxmann Online, CLA Online, CDJ Law Journal, AIR Privy.
10. Out of the total 18 law libraries 1(6%) law libraries have been subscribed Kluwer International, AIR Web World.

**Observation:**

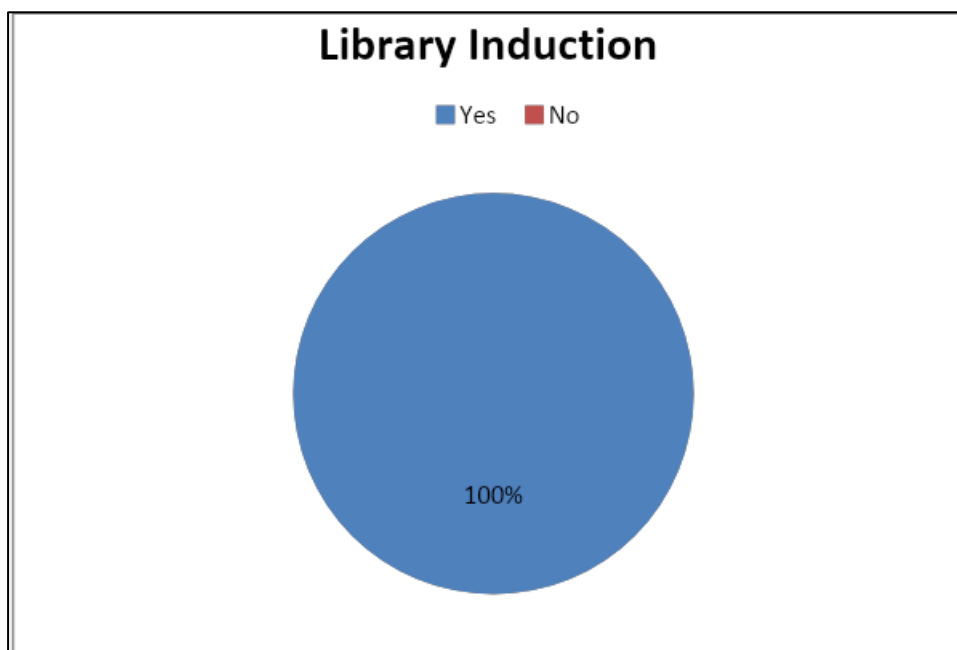
SSC online (67%), AIR Supreme Court (83%), N-List (94%) and JSTOR (100%) are the major databases subscribed by the law libraries in Pune city. The remaining resources and databases though available but due to lack of literacy they are not used properly.

**4.4.7 LIBRARY INDUCTION**

**Table 4.8 Library Induction**

Library induction	Respondent	%
Yes	18	100
No	0	0
Total	18	100

**Fig. 4.7 Library Induction**



1. Out of the total 18 (100%) law libraries responded that library induction took place in their library.

**Observation:**

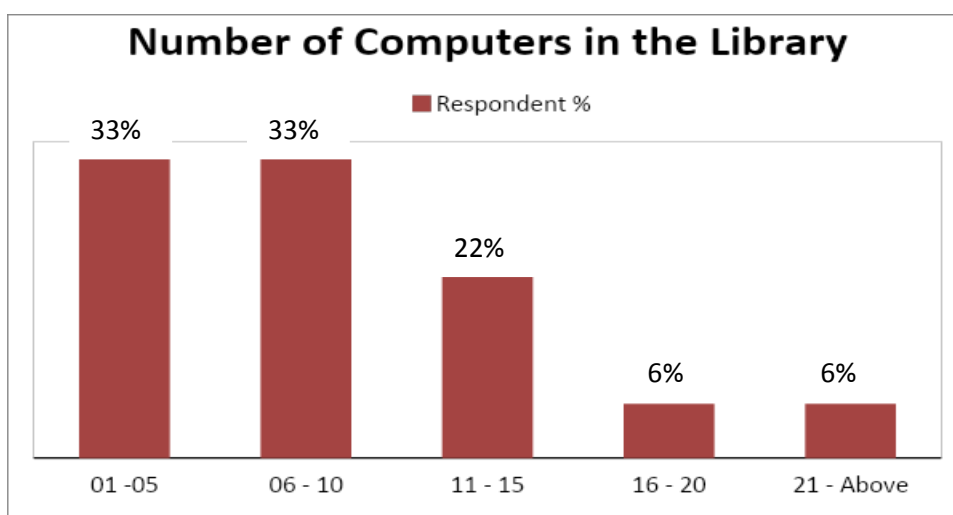
The librarians are arranging library induction programs to the users for the effective use of resources and awareness of IL and Digital Literacy among the users.

**4.4.8 INFRASTRUCTURE AVAILABILITY IN LIBRARIES**

**Table 4.9 Availability of Infrastructure in Library**

No. Of Computers	Respondent	%
01 -05	6	33
06 - 10	6	33
11 - 15	4	22
16 - 20	1	6
21 - Above	1	6
<b>Total</b>	<b>18</b>	<b>100</b>

**Fig.4.8 Availability of Infrastructure in Library**



1. Out of the total 18 law libraries 6(33%) libraries have 1-5 computers for user of law library.
2. Out of the total 18 law libraries 6(33%) libraries have 6-10 computers.

3. Out of the total 18 law libraries 4(22%) libraries have 11-15 computers.
4. Out of the total 18 law libraries 1(6%) library has 16-20 computers.
5. Out of the total 18 law libraries 1(6%) library has above 21 computers for users.

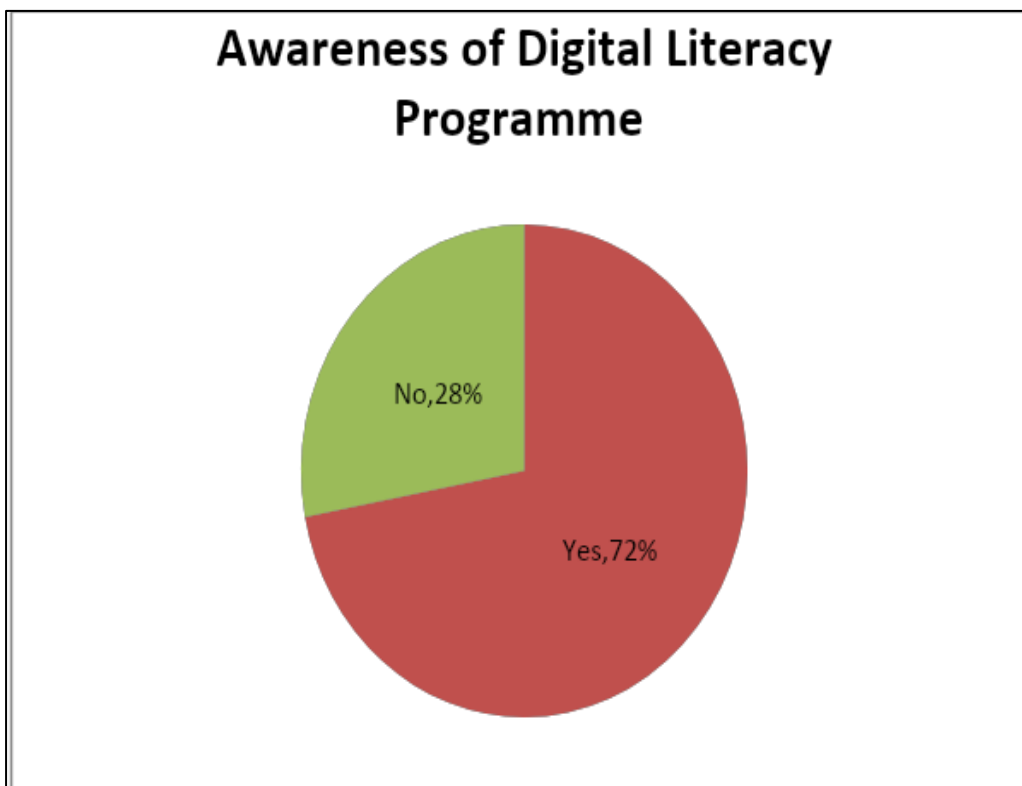
**Observation:**

It is observed that 34% institute libraries have more than 12 computers in library for users. 66% institute libraries have less than 10 computers.

**4.4.9 DIGITAL LITERACY PROGRAMME (DLP)**

**Table 4.10 Organising Digital Literacy Programme**

Digital Literacy	Respondent	%
Yes	13	72
No	5	28
<b>Total</b>	<b>18</b>	<b>100</b>



**Fig. 4.9 Organising Digital Literacy Programme**



1. Out of the total 18 law libraries 13(72%) librarians were aware of DLP.
2. Out of the total 18 law libraries 5(28%) were not aware of DLP.

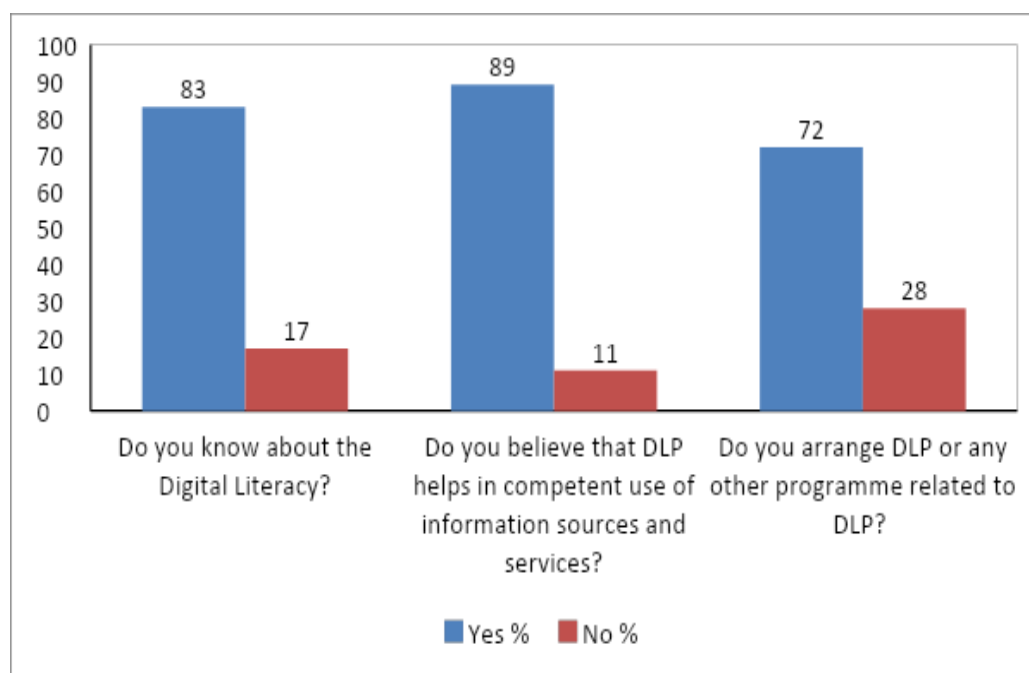
**Observation:**

72% Libraries are organising digital Literacy programs in the institutes for the users.

**4.4.10 ABOUT DIGITAL LITERACY PROGRAMME**

**Table 4.11 About Digital Literacy Programme**

Related DLP	Options				
	Yes	%	No	%	Total
Do you know about the Digital Literacy?	15	83	3	17	100
Do you believe that DLP helps in competent use of information sources and services?	16	89	2	11	100
Do you arrange DLP or any other programme related to DLP?	13	72	5	28	100



**Fig. 4.10 Digital Literacy Programme**

1. Out of the total 18 law libraries 15(83%) librarian knew about digital literacy.
2. Out of the total 18 law libraries 16(89%) librarian were of the opinion that DLP helps in competent use of information sources & services.

3. Out of the total 18 law libraries 13 (72%) librarians were arranged DLP or any other programme related to DLP.

**Observation:**

Librarians of Law colleges are aware of digital literacy (83%) and they are also organising DLP (72%) for developing users' awareness of digital literacy as well as information literacy. The librarians are of the opinion that the organisation of DLP for users has improved their awareness of digital and information literacy (89%).

**SUMMARY OF THE FINDINGS: (LIBRARIANS INFERENCES)**

The overall conclusion about the law institute libraries are very prominent, there are in all 25 Law Institutes in Pune region and initiated the growth from 1900 onwards till 2101 and later very less establishment of law colleges. All the law colleges have well developed libraries. The law libraries though attached to college or university libraries but in addition they are also developed in courts (different levels like high court). The law libraries are have well organised collection and limited to law area and hence these can also be called a special libraries, as well as academic libraries when attached to academic developments. The law libraries are treasure of text books, reference collection and professional collections. Law libraries have now developing e-resource collection since these are available in the law sector in the form of open resources, internet resources, databases, e-documents etc.

Law Librarians are fully aware of different literacies useful for development of libraries and providing services to them. Librarians are providing different information services using local and global collection. The information literacy programmes and orientation programs are also organised by the librarians. It is true that no library is fully sufficient and have all the published literature under one roof, but librarians need to assist users and rain them to search for the better collection of resources from libraries as well as available at international level either free or charge basis. The status of Law libraries is comparatively good.

#### **4.5 DATA ANALYSIS: LAW LIBRARY USERS (STUDENTS AND FACULTIES)**

The survey of student and faculty users was conducted to assess the user needs, demands and expectations from the libraries associated to legal institutes. The survey was conducted to find out how many users are aware in use of available technology, ICT and digital literacy and how many of them could make use of it comfortably while searching information either print or digital. The average intake capacity of BAR Council norms at 60 per class. Hence the total strength for five years is 300 in one institute. The random sampling method has used for selection of sample. Researcher has been visited institutes and interacted with students and faculties who were available in the institutes during the survey. Random sampling technique is followed for selecting users from each category in each institute and on the basis of size of the sample. A list of permanent faculty was obtained from the librarian and distributed questionnaire to them. Questionnaire has been collected from the users personally by the researcher.

The total population of users (students) in law institutes were 7560.

The random selection of users is considered and sample selected for the user (students) survey is 10% of population and it is 756.

Six faculties from each institutes has been selected for sampling. It was 132 faculties have been selected for distributing questionnaire.

Hence, 34 students were selected from each legal institute on the basis of available students in library / institute at the time of library visit of researcher. Thus the sample selected from the user population was 756 students. The number of faculties varied from institute to institute. It is surveyed around 6 faculties from each institute i.e. total 132 faculties. Questionnaire was circulated to them. The response was 635 students (83.99) and 73 faculties (55.30%).

**Table 4.12 Law Library Users**

<b>Users</b>	<b>Distributed</b>	<b>Respondent</b>	<b>%</b>
Students	756	635	<b>83.994709</b>
Faculty	132	73	<b>55.303030</b>

#### 4.5.1 UTILIZATION OF LIBRARY RESOURCES BY USERS

The questionnaire covers questions to get the desired data on the user's frequency to visit library, time spent in library, purpose of library visit, knowledge of digital library, attendance and use of library induction programs, digital literacy program, intention to use digital information etc. The questions were analysed and identified the status of the legal institute utilization of libraries. They basically covered the aspects of organization of library, services provided, modernization of library, resource sharing, use of advanced technology, use of electronic or digital information resources and qualitative library. The analysis of the data collected through questions is analysed systematically and presented below.

#### 4.5.2 FREQUENCY OF LIBRARY VISIT

Depicts the frequency of library visit made by the respondents of the legal institutes. Table No. 4.13 shows that frequency of visit to the library by the respondents from students and faculties. The survey studied the frequency of visit on daily, monthly and occasionally basis. It is noted from table No. 4.13 that

1. Out of the 635 students 356 (56%) visited on daily basis.
2. Out of the 73 faculties 29 (40%) visited on daily basis.
3. Out of the 635 students 120 (19%) visited on weekly basis.
4. Out of the 73 faculties 16 (22%) made use of library on weekly basis.
5. Out of the 635 students 82 (13%) visited on monthly basis.
6. Out of the 73 faculties 17 (23%) visited to the law library on monthly basis.
7. Out of the 635 UGs 77 (12%) visited on occasional basis.
8. Out of the 73 faculties 11 (15%) visited to the law library on occasional basis.

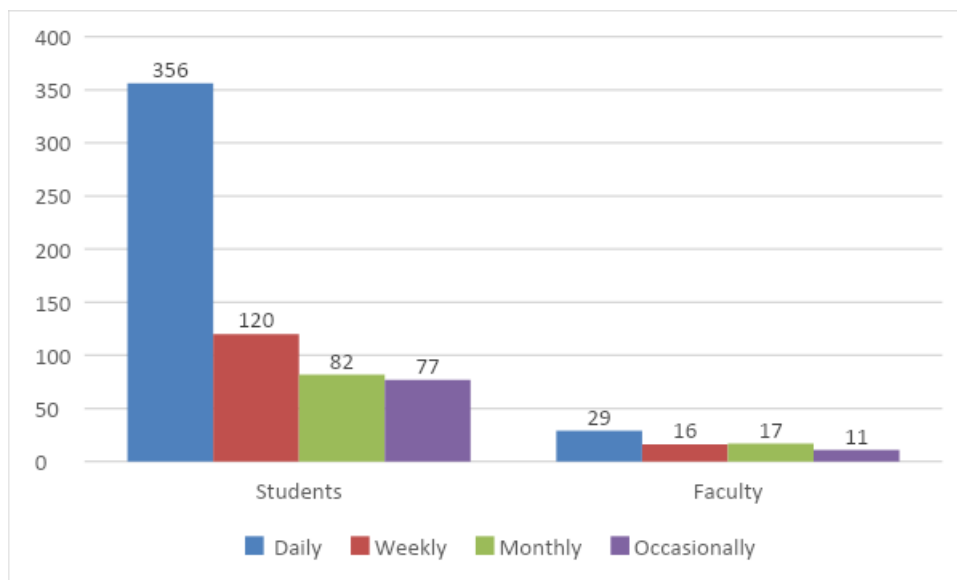
**Table. 4.13 Frequency of Library Visit**

	Students		Faculty	
	R	%	R	%
Daily	356	56	29	40
Weekly	120	19	16	22
Monthly	82	13	17	23
Occasionally	77	12	11	15
<b>Total</b>	<b>635</b>		<b>73</b>	

(R= Respondent)

## Conclusion:

The main users of law libraries are students and faculty. They are using libraries as per the needs daily, weekly or sometimes monthly. On an average 56% students visits to library for different purposes. On an average 40% faculties take benefits of libraries.



**Fig. 4.11 Frequency of Library Visit**

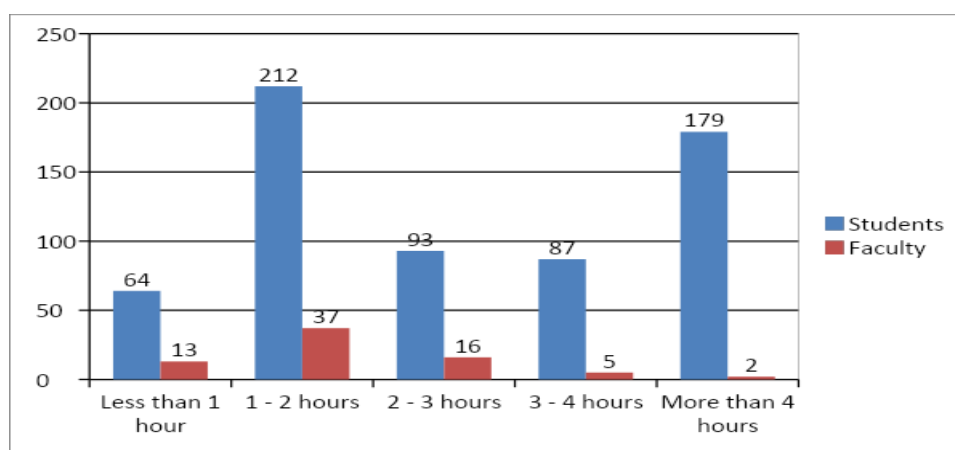
### 4.5.3 TIME SPENT IN LIBRARY BY USERS

1. Out of the total 635 students 64 (10%) was spent less than one hour.
2. Out of the total 73 faculties 13(18%) was spent less than one hour.
3. Out of the total 635 students 212 (33%) were spent 1 to 2 hours.
4. Out of the total 73 faculties 37 (50%) were spent 1 to 2 hours.
5. Out of the total 635 students 93 (15%) were spent 2 to 3 hours.
6. Out of the total 73 faculties 16 (22%) were spent 2 to 3 hours.
7. Out of the total 635 students 87 (14%) were spent 4 to 5 hours.
8. Out of the total 73 faculties 5 (7%) were spent 4 to 5 hours.
9. As many as 179 (28%) students and 2 (3%) faculties used the library more than 4 hours.
10. In all 635 students and 73 Faculties spent time in Library.

**Table No. 4.14 Time Spent in Library by Users**

Time Spent in Library	Students		Faculty	
	R	%	R	%
Less than 1 hour	64	10	13	18
1 - 2 hours	212	33	37	50
2 - 3 hours	93	15	16	22
3 - 4 hours	87	14	5	7
More than 4 hours	179	28	2	3
<b>Total</b>	<b>635</b>		<b>73</b>	

(R=Respondent)



**Fig. 4.12 Time Spent in Library**

**Conclusion:**

It is observed from Table 4.14 that 212 (33%) law library users spent around 1 to 2 hours' time in library for consulting reference sources informed during the tutorials. Overall 50% time is spent by all the users in libraries.

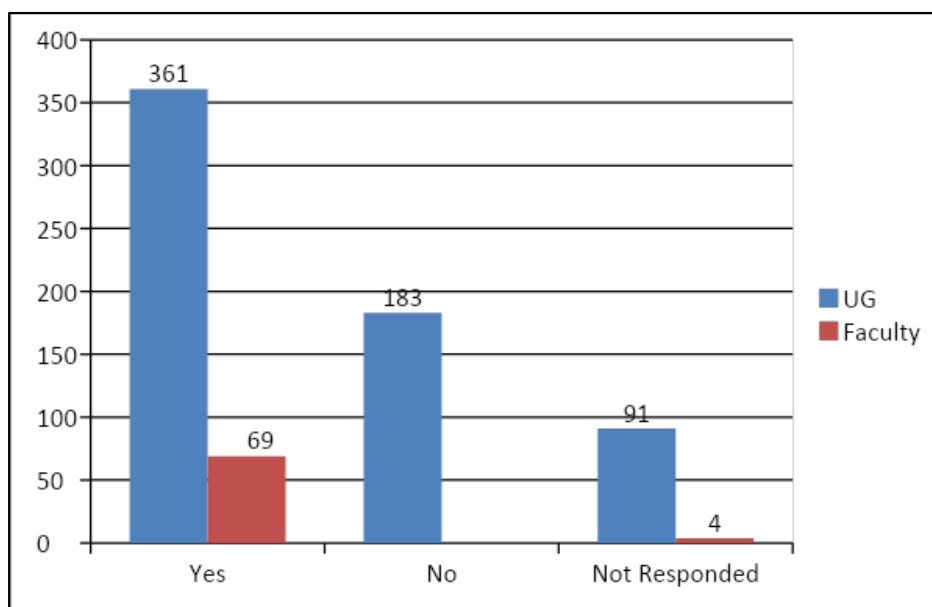
**4.5.4 KNOWLEDGE OF DIGITAL LITERACY AMONG USERS**

1. Out of the total 635 students 361 (57%) responded positively said that they had knowledge of digital literacy.
2. Out of the total 635 students 183 (29%) had no knowledge.
3. Out of the total 635 students 91 (14%) didn't respond.
4. Out of the total 73 faculties 69 (94%) faculties had the knowledge of digital literacy.
5. Out of the total 73 faculties 4 (6%) faculties didn't respond.

**Table 4.15 Knowledge of Digital Literacy among Users**

Options	Students		Faculty	
	R	%	R	%
Yes	361	57	69	94
No	183	29	0	0
Not Responded	91	14	4	6
<b>Total</b>	<b>635</b>		<b>73</b>	

(R=Respondent)



**Fig. 4.13 Knowledge of Digital Literacy**

**Conclusion:**

It is observed from Table 4.15 that most of 361 (57%) students and 69 (94%) faculties had knowledge about digital literacy.

**4.5.5 ATTENDANCES TO DIGITAL LITERACY PROGRAM (DLP)**

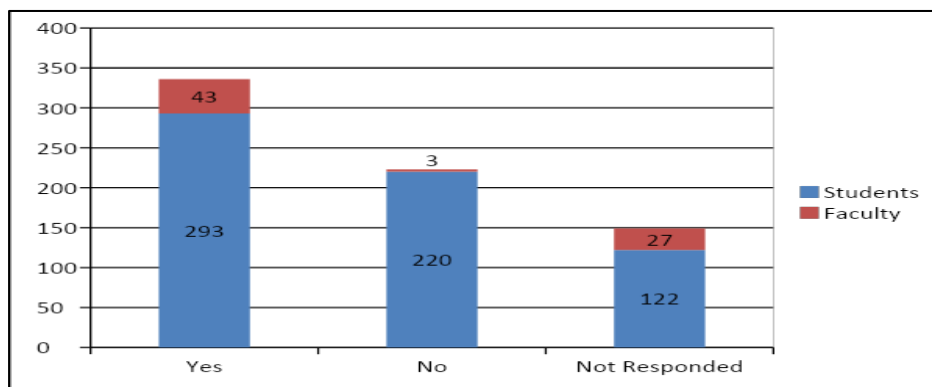
It is noted from table No. 4.16 that the attendance to digital literacy programme.

1. Out of the total 635 students 293 (46%) had attended the digital literacy program.
2. Out of the total 635 students 220 (35%) had not attended digital literacy program.
3. Out of the total 635 students 122 (19%) didn't respond to this question.
4. Out of the total 73 faculties 43 (59%) had attended the digital literacy programme.
5. Out of the total 73 faculties 3(4%) hadn't attended the digital literacy programme.
6. Out of the total 73 faculties 27 (37%) didn't respond.

**Table 4.16 Attendance to Digital Literacy Program**

Options	Students		Faculty	
	R	%	R	%
Yes	293	46	43	59
No	220	35	3	4
Not Responded	122	19	27	37
<b>Total</b>	<b>635</b>		<b>73</b>	

(R=Respondent)



**Fig. 4.14 Attendance to Library Induction / Digital Literacy Programme**

**Conclusion:** It is observed from Table 4.16 that 293 (46%) users had attended the DLP.

#### 4.5.6 PURPOSE OF USING DIGITAL INFORMATION

1. Out of the total 635 students we have been found that 126 (20%) students used digital information for assignment.
2. Out of the total 635 students 128 (21%) used for project work.
3. Out of the total 635 students 77 (12%) used for writing research papers.
4. Out of the total 635 students 53(8%) used for research.
5. Out of the total 635 students 104 (16%) used for moot court competition.
6. Out of the total 635 students 91 (14%) used case study.
7. Out of the total 635 students 56 (9%) used for general knowledge.
8. Out of the total 73 users 17 (23%) faculties used for writing research papers.
9. Out of the total 635 students 14 (20%) used for research.
10. Out of the total 73 users 3 (4%) used for general knowledge.
11. Out of the total 73 users 39 (53%) faculties made use with the intention to teach.

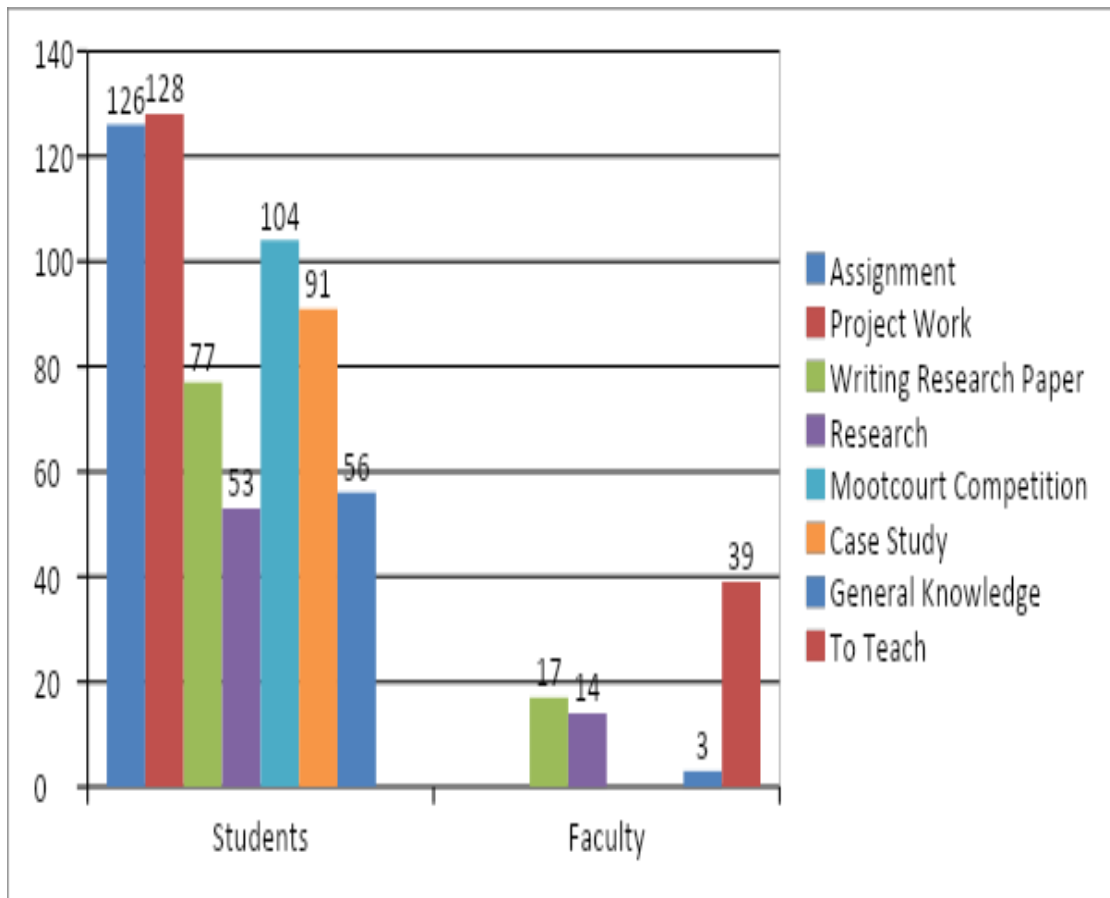


**Table 4.17 Purpose to Use Digital Information**

Intention	Students		Faculty	
	R	%	R	%
Assignment	126	20	0	0
Project Work	128	21	0	0
Writing Research Paper	77	12	17	23
Research	53	8	14	20
Mootcourt Competition	104	16	0	0
Case Study	91	14	0	0
General Knowledge	56	9	3	4
To Teach	0	0	39	53
<b>Total</b>	<b>635</b>		<b>73</b>	

(R=Respondent)

**Fig. 4.15 Purpose to Use Digital Information**



**Observation:** It is noted from table 4.17 that the law users are using different types of resources consisting of Text books, reference books, judgements issued by different courts, evidence records etc. on regular basis. The student users use these resources for preparing exams, for writing assignments, project works, research purpose, etc. Faculty mostly use for the teaching purposes as well as moot courts, and case studies etc.

#### 4.5.7 SOURCE OF REQUIRED INFORMATION

It is shown from table 4.18 and Fig. No. 4.17 that elaborates the users using the library and collecting knowledge from various sources.

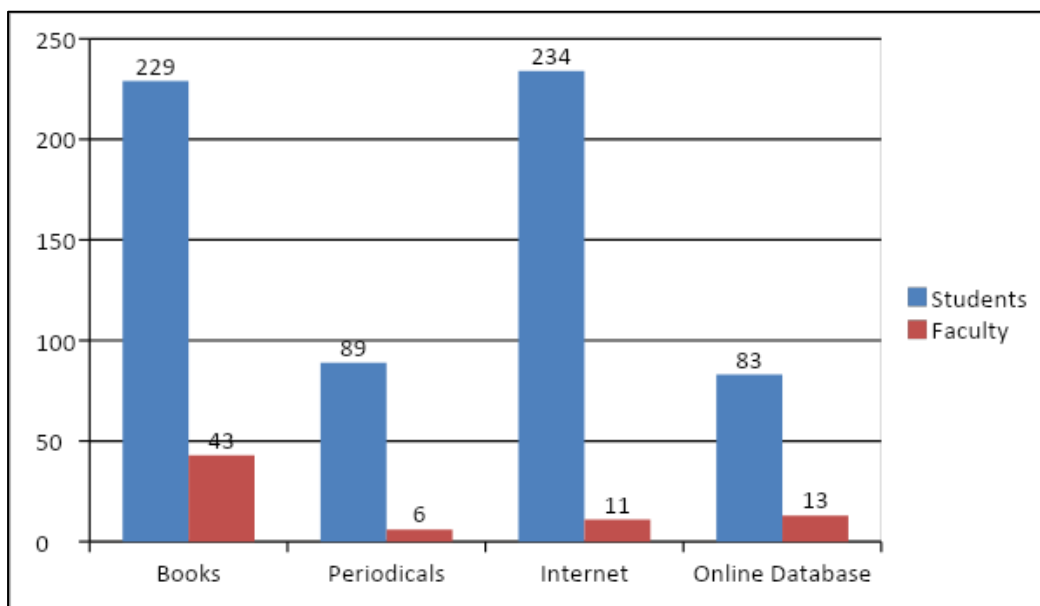
1. Out of the total 635 students 229 (36%) used books as sources to collect the required information,
2. Out of the total 635 students 89 (14%) used periodicals.
3. Out of the total 635 students 234 (37%) used internet.
4. Out of the total 635 students 83 (13%) used online database.
5. Out of the total 73 faculties 43 (59%) used books as sources to collect the required information,
6. Out of the total 73 faculties 6 (8%) used periodicals.
7. Out of the total 73 faculties 11 (15%) used internet.
8. Out of the total 73 faculties 13 (18%) used online database.

**Table 4.18 Source of Required Information**

Sources	Students		Faculty	
	R	%	R	%
Books	229	36	43	59
Periodicals	89	14	6	8
Internet	234	37	11	15
Online Database	83	13	13	18
Total	<b>635</b>		<b>73</b>	

**(R=Respondent)**

**Fig. 4.16 Source of Required Information**



**Observation:**

Most of students collect required information through books and internet sources as they have to appear for the exams and hence, they use curricular supporting books. The students mostly collect information from internet and secondly from the reference books, since they have to prepare cases, Projects, assignments etc. As far as faculty is concerned, they mostly used the books, reference books, case studies, to collect information and sometimes they collected information from online database.

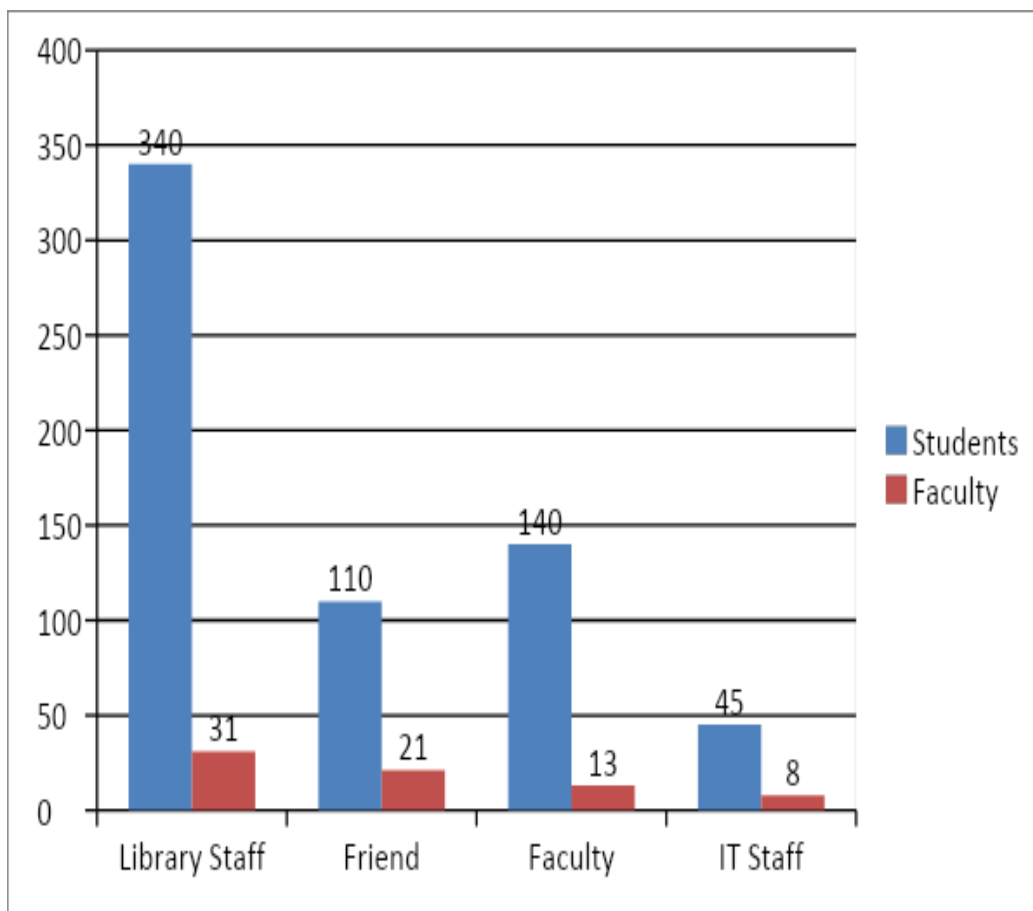
**4.5.8 CONSULTING TO RESOURCE PERSONS**

**Table 4.19 Consulting to Resources Person**

Resource Person	Students		Faculty	
	R	%	R	%
Library Staff	340	54	31	42
Friend	110	17	21	29
Faculty	140	22	13	18
IT Staff	45	7	8	11
<b>Total</b>	<b>635</b>		<b>73</b>	

(R=Respondent)

**Fig 4.17 Consulting to Resource Person**



It is shown from table No. 4.19 that the question regarding consultation of resource person the respondents responded in the following manner.

1. Out of the total 635 students 340 (54%) consulted library staff mostly.
2. Out of the total 635 students 110 (17%) consulted friend.
3. Out of the total 635 students 140 (22%) consulted faculty.
4. Out of the total 635 students 45 (7%) consulted staff.
5. Out of the total 73 faculties 31(42%) consulted library staff.
6. Out of the total 73 faculties 21 (29%) consulted friend.
7. Out of the total 73 faculties 13 (18%) consulted other faculty.
8. Out of the total 73 faculties 8 (11%) consulted IT staff.

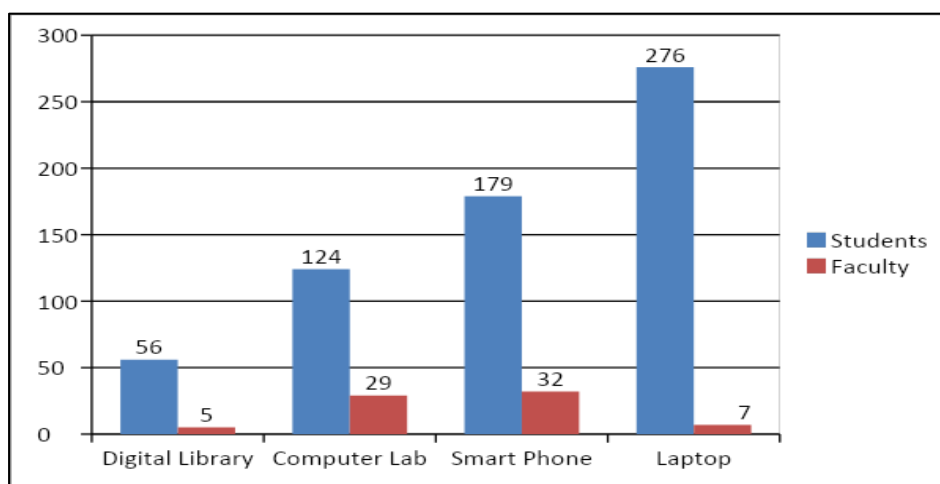
**Observation:** It can be observed that students mostly consulted library staff regarding the collection of information and consulting to the faculties. The faculties also mostly consulting to library staff.

#### 4.5.9 ACCESS DIGITAL INFORMATION

**Table 4.20 Access Digital Information**

Digital Sources	Students		Faculty	
	R	%	R	%
Digital Library	56	9	5	7
Computer Lab	124	20	29	40
Smart Phone	179	28	32	44
Laptop	276	43	7	9
<b>Total</b>	<b>635</b>		<b>73</b>	

(R=Respondent)



**Fig. 4.18 Access Digital Information**

It is noted from table. 4.20 that as far as the access to digital information by digital sources is concerned, it is found that

1. Out of the total 635 students 56 (9%) used digital library.
2. Out of the total 635 students 124 (20%) used computer lab.
3. Out of the total 635 students 179 (28%) used Smart Phone.
4. Out of the total 635 students 276 (43%) used Laptop.
5. Out of the total 73 faculties 5 (7%) used digital library.
6. Out of the total 73 faculties 29 (40%) used computer lab.
7. Out of the total 73 faculties 32(44%) used Smart Phone.
8. Out of the total 73 faculties 7 (10%) used Laptop.

**Observation:**

The students mostly use Laptops for accessing to digital sources, secondly, they also use Smart Phones. The faculties too use Smart Phones and secondly made use of computer lab.

**4.5.10 USE OF INFORMATION SOURCES FOR PREFERENCE PURPOSE**

It is noted from table No. 4.21 and Fig. No. 4.20 that responding to the preference of use of information sources.

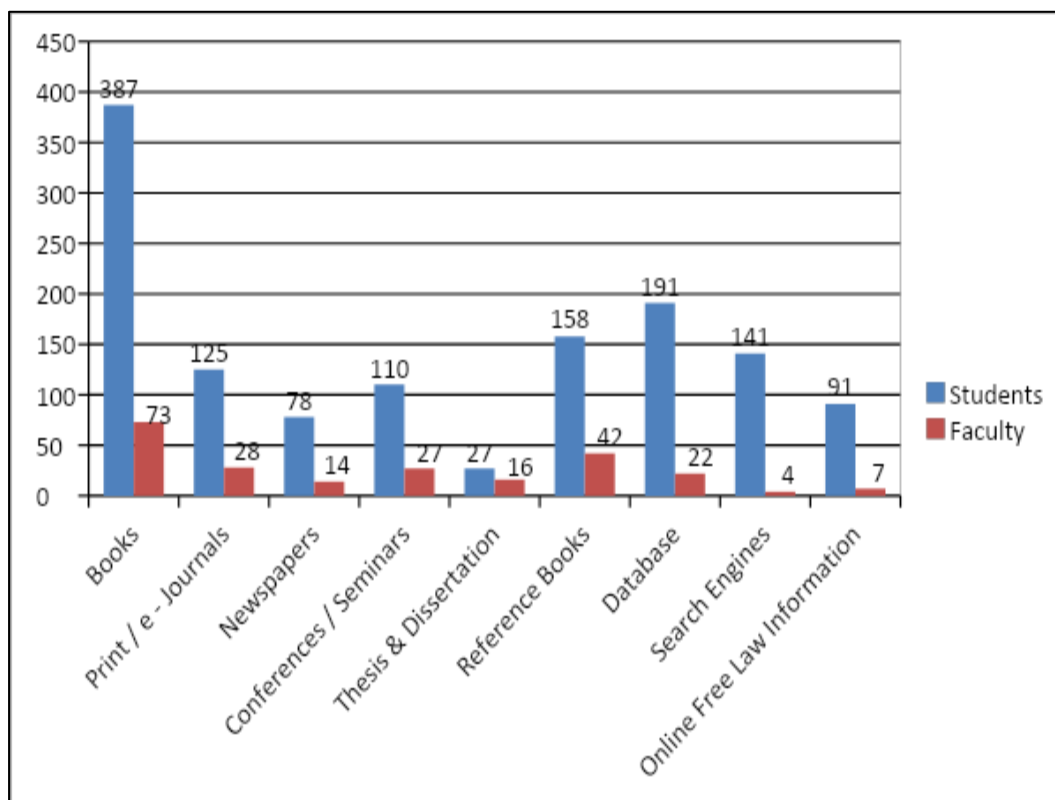
1. Out of the total 635 students 387 (29%) used books.
2. Out of the total 635 students 125 (10%) used print or e-journals.
3. Out of the total 635 students 78 (6%) used newspapers.
4. Out of the total 635 students 110 (8%) used conference and seminar proceedings.
5. Out of the total 635 students 27 (2%) preferred thesis and dissertation.
6. Out of the total 635 students 158 (12%) preferred reference books.
7. Out of the total 635 students 191 (15%) used database.
8. Out of the total 635 students 141 (11%) used search engine.
9. Out of the total 635 students 91 (7%) used online free law information.
10. Out of the total 73 faculties 73 (31%) preferred books.
11. Out of the total 73 faculties 28(12%) preferred print or e-journal.
12. Out of the total 73 faculties 14(6%) made use of newspapers.
13. Out of the total 73 faculties 27(12%) used conference and seminar proceedings.
14. Out of the total 73 faculties 16(7%) used thesis and dissertation for research work.
15. Out of the total 73 faculties 42(18%) used as reference books.
16. Out of the total 73 faculties 22(9%) preferred database.
17. Out of the total 73 faculties 4(2%) preferred search engine.
18. Out of the total 73 faculties 7 (3%) preferred online free law information.

**Table 4.21 Use of Information Sources for Preference Purpose**

Information Sources	Students		Faculty	
	R	%	R	%
Books	387	29	73	31
Print / e - Journals	125	10	28	12
Newspapers	78	6	14	6
Conferences / Seminars	110	8	27	12
Thesis & Dissertation	27	2	16	7
Reference Books	158	12	42	18
Database	191	15	22	9
Search Engines	141	11	4	2
Online Free Law Information	91	7	7	3

(R=Respondent)

**Fig 4.19 Use of Information Sources for Preference Purpose**



**Observation:**The Law users are preferring more to print resources since more resources are available in this form i.e. books and reference sources. But now in digital era users are using Law databases, Internet resources using internet, etc.

#### **4.5.11 AWARENESS OF SERVICES PROVIDED BY LIBRARIES**

1. Out of the total 635 students 635 (100%) and 73 (10%) were aware of book circulation.
2. Out of the total 635 students 480 (75%) were aware of reference.
3. Out of the total 635 students 72 (11%) were aware of CAS.
4. Out of the total 635 students 52 (8%) were aware of SDI.
5. Out of the total 635 students 53 (8%) were known ILL.
6. Out of the total 635 students 207 (33%) were used online database.
7. Out of the total 635 students 125 (20%) were aware of retrospective.
8. Out of the total 635 students 166 (26%) were aware of internet facility.
9. Out of the total 635 students 483 (76%) were known facility of CD Writer facility.
10. Out of the total 635 students 74 (12%) were known of document scanner facility.
11. Out of the total 635 students 80 (13%) were used facility of wifi.

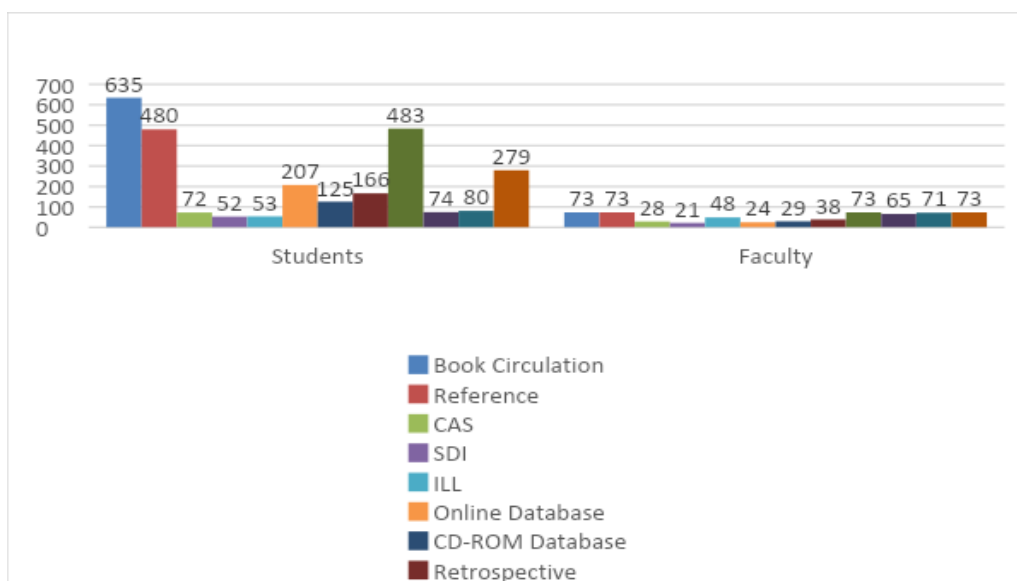
**Table 4.22 Awareness of Services Provided by Libraries**

Services	Students		Faculty	
	R	%	R	%
Book Circulation	635	100	73	100
Reference	480	75	73	100
CAS	72	11	28	38
SDI	52	8	21	29
ILL	53	8	48	66
Online Database	207	33	24	33
CD-ROM Database	125	20	29	40
Retrospective	166	26	38	52
Internet	483	76	73	100
CD- Writer	74	12	65	89
Document Scanner	80	13	71	97
WI-FI	279	44	73	100

**(R=Respondent)**



**Fig. 4.20 Awareness of Services Provided By Library**



**Observation:**

It is noticed that most of the users (students) are aware of library facilities made available for the users. Since the collection is of special type users take benefit of the collection by consulting and referencing it. Users are mostly utilizing the facilities of circulation, online and offline databases searching, referencing work at the time of moot courts, they also understand the importance of library services and avail the facilities like CAS, SDI, and Internet etc. The faculty is also availing all the activities but more stress is on ILL, document scanning etc in addition to CAS, SDI etc. which are useful for teaching and learning.

**4.5.12 FREQUENTLY USED LAW DATABASES**

1. Out of the total 635 students 168 (27%) were used frequently law database of Heinonline.
2. Out of the total 635 students 210 (33%) and were used frequently law database of Lexis Nexis.
3. Out of the total 635 students 165 (25%) were used frequently law database of EBSCO.
4. Out of the total 635 students 217 (34%) were used frequently law database of Cambridge.
5. Out of the total 635 students 252 (40%) were used frequently law database of Oxford.

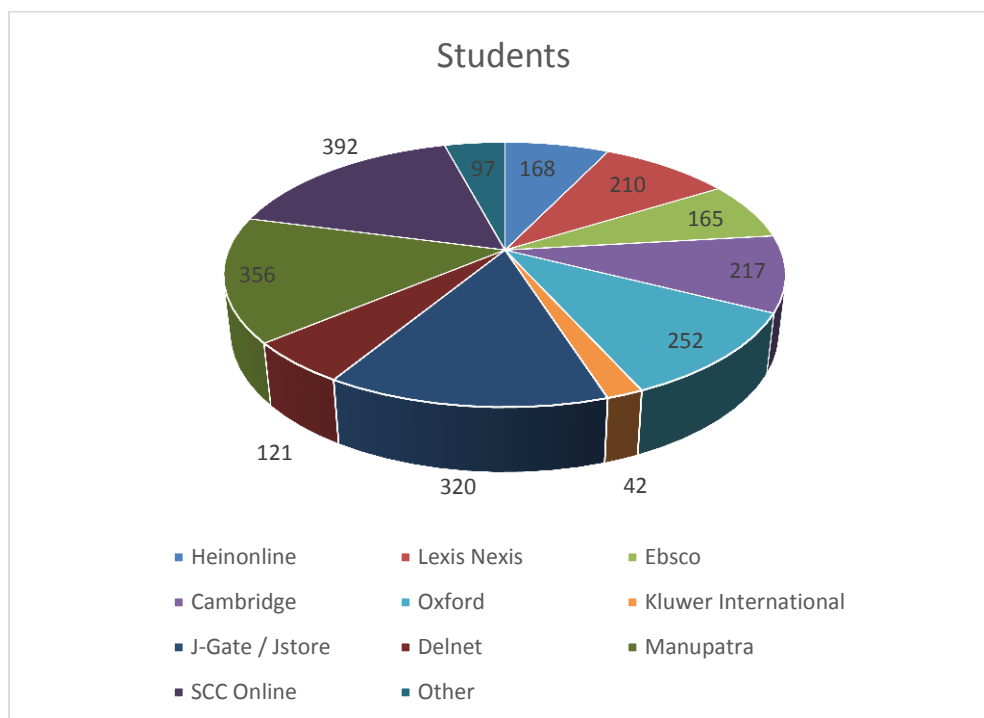
6. Out of the total 635 students 42 (7%) were used frequently law database of Kluwer International.
7. Out of the total 635 students 320 (50%) were used frequently law database of J-Gate / Jstore.
8. Out of the total 635 students 121 (19%) were used frequently law database of Delnet.
9. Out of the total 635 students 356 (56%) were used frequently law database of Manupatra.
10. Out of the total 635 students 392 (62%) were used frequently law database of SCC Online.
11. Out of the total 635 students 97 (15%) were used frequently law database of other.
12. Out of the total 73 faculties 51 (70%) were used frequently law database of Heinonline.
13. Out of the total 73 faculties 73 (100%) and were used frequently law database of Lexis Nexis.
14. Out of the total 73 faculties 52 (71%) were used frequently law database of EBSCO.
15. Out of the total 73 faculties 48 (66%) were used frequently law database of Cambridge.
16. Out of the total 73 faculties 61 (84%) were used frequently law database of Oxford.
17. Out of the total 73 faculties 18 (25%) were used frequently law database of Kluwer International.
18. Out of the total 73 faculties 70 (96%) were used frequently law database of J-Gate / Jstore.
19. Out of the total 73 faculties 24 (33%) were used frequently law database of Delnet.
20. Out of the total 73 faculties 72 (99%) were used frequently law database of Manupatra.
21. Out of the total 73 faculties 73 (100%) were used frequently law database of SCC Online.
22. Out of the total 73 faculties 9 (12%) were used frequently law database of other.

**Table 4.23 Frequently Used Law Databases**

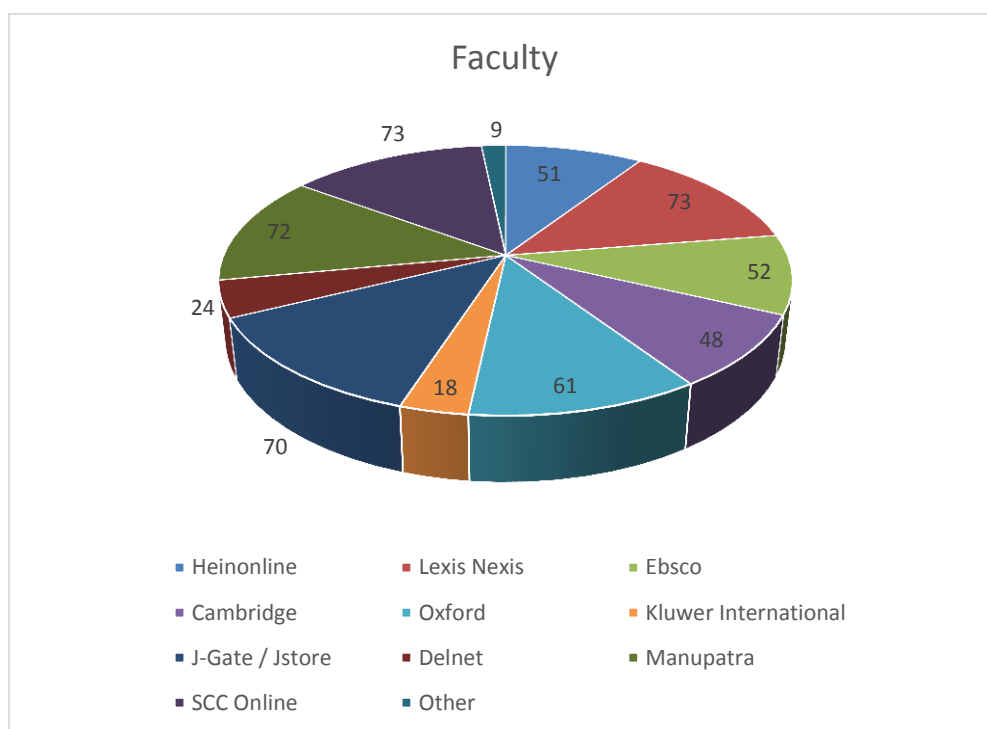
Databases	Students		Faculty	
	R	%	R	%
Heinonline	168	27	51	70
Lexis Nexis	210	33	73	100
Ebsco	165	25	52	71
Cambridge	217	34	48	66
Oxford	252	40	61	84
Kluwer International	42	7	18	25
J-Gate / Jstore	320	50	70	96
Delnet	121	19	24	33
Manupatra	356	56	72	99
SCC Online	392	62	73	100
Other	97	15	9	12

(R=Respondent)

**Fig. 4. 21 Frequently Used Law Databases (Students)**



**Fig. 4. 21.1 Frequently Used Law Databases (Faculty)**



**Observation:** It is indicated from the data collected that law science users are using e-resources also along with print resources, slowly users are migrating towards use of databases as many databases are now available as well as subscribed by institutes. The major databases used by users are Heinonline, Kluwar International, SSC Online, Manupatra, JGATE/JSTORE and Oxford etc. Other resources are also used but these are more preferred databases.

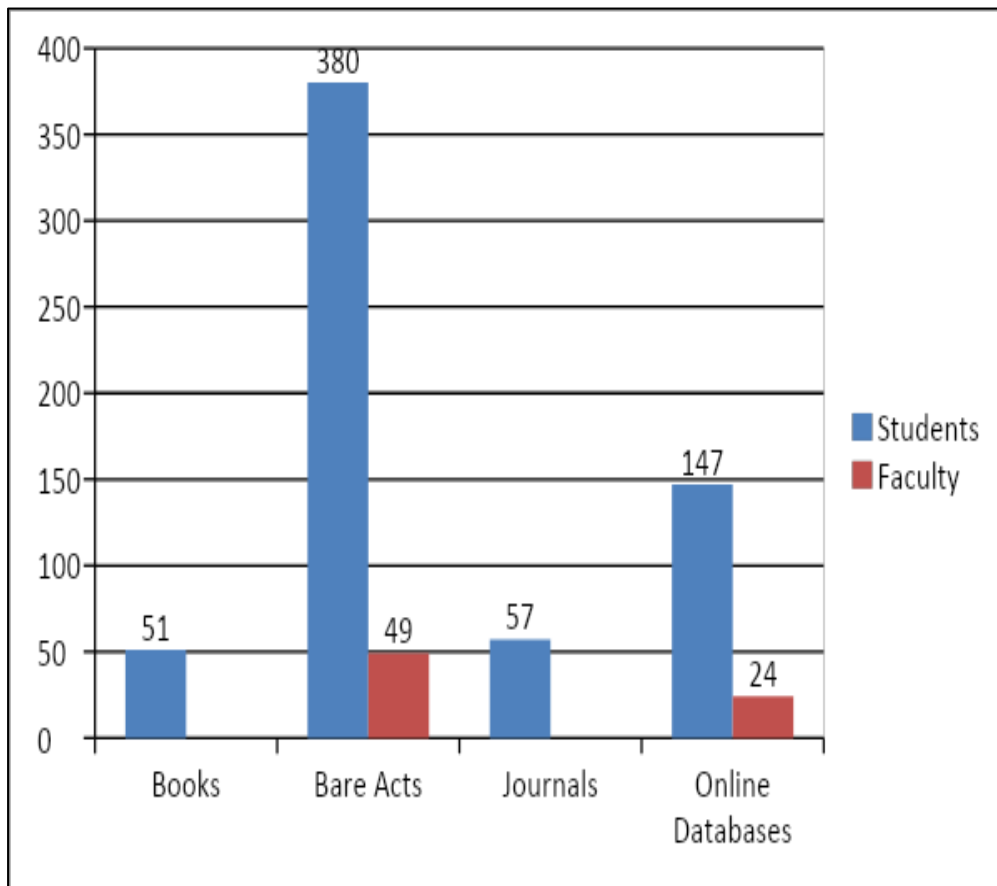
#### **4.5.13 AWARENESS OF CURRENT INFORMATION SOURCES FOR INFORMATION ON ENACTED LAWS**

1. Out of the total 635 students 51 (8%) were chosen book.
2. Out of the total 635 students 380 (60%) were chosen bare act.
3. Out of the total 635 students 57 (9%) were chosen journal.
4. Out of the total 635 students 147 (23%) were chosen online database.
5. Out of the total 73 faculties 49 (67%) were chosen bare act.
6. Out of the total 73 faculties 24 (33%) were chosen online database.

**Table 4.24 Awareness of Current Information Sources for Information on Enacted Laws**

e-Databases	Students		Faculty	
	R	%	R	%
Books	51	8	0	0
Bare Acts	380	60	49	67
Journals	57	9	0	0
Online Databases	147	23	24	33
<b>Total</b>	<b>635</b>		<b>73</b>	

(R= Respondent)



**Fig. 4.22 Awareness of Current Information Sources for Information on Enacted Laws**

**Observation:** It is observed that most of the users that for getting current information on Enacted acts users are using mostly Books, Bar Acts, Law Journals, Reference sources, online databases etc.

#### 4.5.14 AWARENESS OF USING LIBRARY

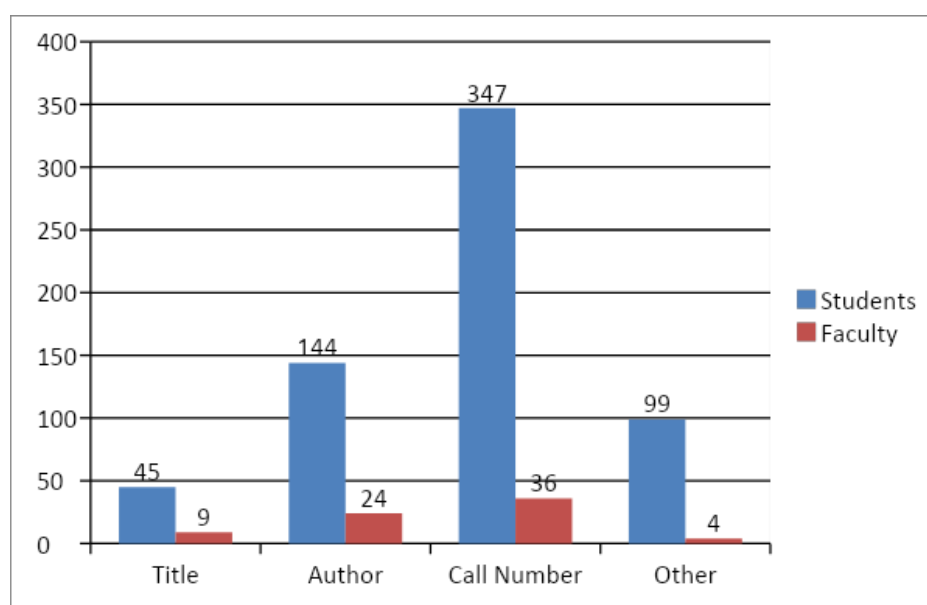
1. Out of the total 635 students 45 (7%) have been search book by title.
2. Out of the total 635 students 144 (24%) searched book by author.
3. Out of the total 635 students 347 (55%) searched book by call number.
4. Out of the total 635 students 99 (15%) searched book by other option.
5. Out of the total 73 faculties 9 (12%) have been search book by title.
6. Out of the total 73 faculties 24 (33%) searched book by author.
7. Out of the total 73 faculties 36 (49%) searched book by call number.
8. Out of the total 73 faculties 4 (6%) searched book by other option.

**Table 4.25 Awareness of Using Library**

Options	Students		Faculty	
	R	%	R	%
Title	45	7	9	12
Author	144	24	24	33
Call Number	347	55	36	49
Other	99	15	4	6
<b>Total</b>	<b>635</b>		<b>73</b>	

(R=Respondent)

**Fig. 4.23 Awareness of Using Library**



### Observation:

It is observed that most of the students uses library and aware of the services and facilities whereas faculty is using libraries mostly for the consultation when necessary for the purpose of teaching and referencing. However, orientation is necessary for the students at the entry level for using catalogues, classification system and organisation of collection, reference activities, valuable collection etc. Both students and faculty consult librarian to get proper assistance for locating material.

### 4.5.15 SOURCES USED FOR FINDING ANALOGOUS ARTICLES

From Table No. 4.26 and chart No. 4.25 shows that

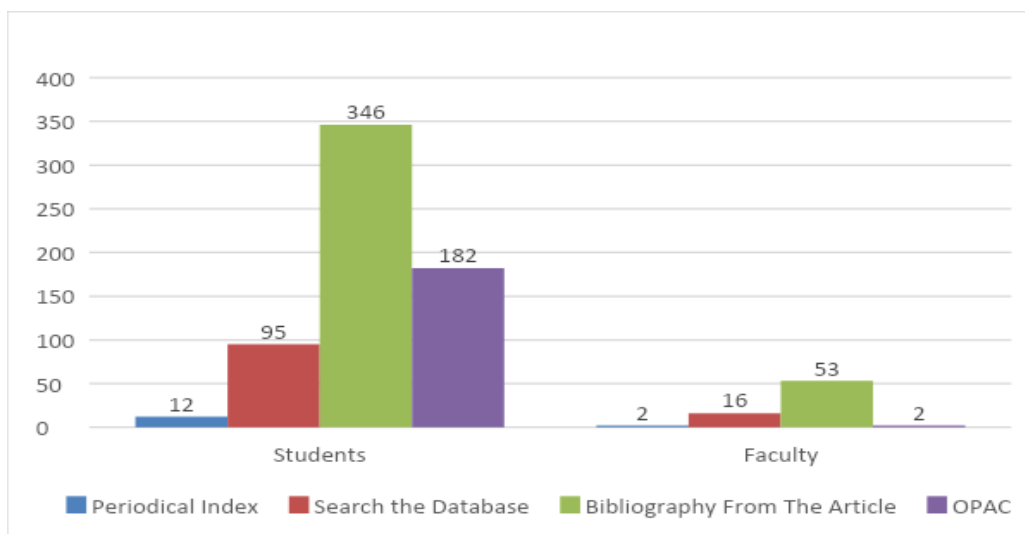
1. Out of the 635 students 12 (2%) have been search analogous articles by periodical index.
2. Out of the 635 students 95 (15%) have been search analogous articles by browsed on database.
3. Out of the 635 students 346 (54%) have been search analogous articles by used bibliography from the article.
4. Out of the 635 students 182 (29%) have been search analogous articles by OPAC.
5. Out of the 73 faculties 2 (2%) have been search analogous articles by periodical index.
6. Out of the 73 faculties 16 (22%) have been search analogous articles by browsed on database.
7. Out of the 73 faculties 53 (74%) have been search analogous articles by used bibliography from the article.
8. Out of the 73 faculties 2 (2%) have been search analogous articles by OPAC.

**Table 4.26 Sources Used for Finding Analogous Articles**

Efficient Sources	Students		Faculty	
	R	%	R	%
Periodical Index	12	2	2	2
Search the Database	95	15	16	22
Bibliography From The Article	346	54	53	74
OPAC	182	29	2	2
<b>Total</b>	<b>635</b>		<b>73</b>	

(R=Respondent)

**Fig. 4.24 Sources Used for Finding Analogous Articles**



**Observation:**

It is noticed that all the users are preferring to search analogous article by using bibliographies, abstracting and indexing journals in law, law databases etc.

**4.5.16 ACCESSING ICT LITERACY SKILLS AMONG LAW USERS**

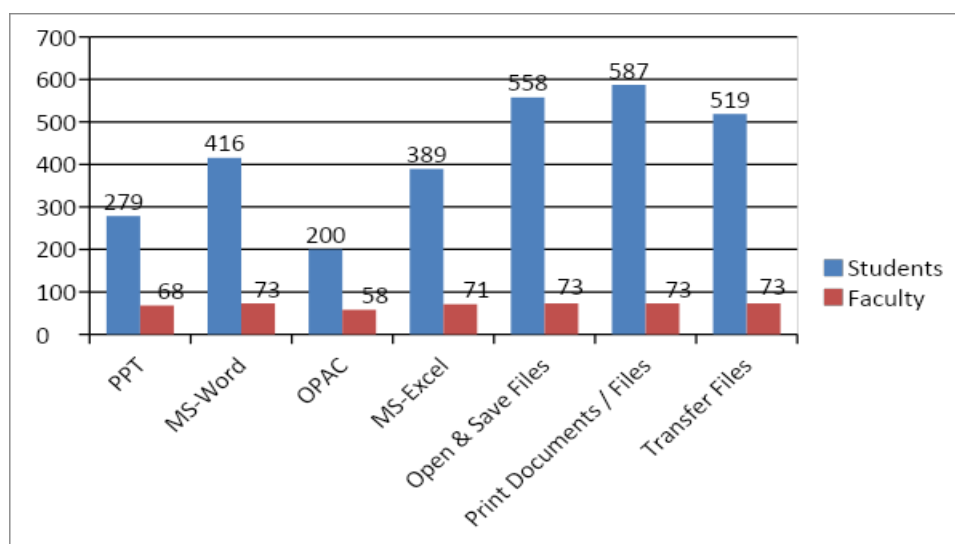
1. Out of the 635 students 279 (44%) judged their ability to ICT literacy skills in this manner in PPT.
2. Out of the 635 students 416 (66%) were able to use MS-Word.
3. Out of the 635 students 200 (32%) have ability to use OPAC.
4. Out of the 635 students 389 (61%) were knowledge about MS- Excel.
5. Out of the 635 students 558 (88%) can open and save files.
6. Out of the 635 students 587 (92%) can print documents or files.
7. Out of the 635 students 519 (82%) were able to transfer files.
8. Out of the 73 faculties 68 (93%) judged their ability to ICT literacy skills in this manner in PPT.
9. Out of the 73 faculties 73 (100%) were able to use MS-Word.
10. Out of the 73 faculties 58 (80%) have ability to use OPAC.
11. Out of the 73 faculties 71 (97%) were knowledge about MS- Excel.
12. Out of the 73 faculties 73 (100%) can open and save files.
13. Out of the 73 faculties 73 (100%) can print documents or files.
14. Out of the 73 faculties 73 (100%) were able to transfer files.



**Table. 4.27 Accessing ICT Literacy Skills among Law Users**

ICT Literacy Skills	Students		Faculty	
	R	%	R	%
PPT	279	9	68	14
MS-Word	416	14	73	15
OPAC	200	7	58	12
MS-Excel	389	13	71	14
Open & Save Files	558	19	73	15
Print Documents / Files	587	20	73	15
Transfer Files	519	18	73	15

**(R=Respondent)**



**Fig. 4.25 Accessing ICT Literacy Skills among Law Users**

**Observation:** Mostly all the faculties are more literate in ICT skill than students.

#### **4.5.17 AWARENESS OF DIGITAL LITERACY PROGRAM FOR USERS**

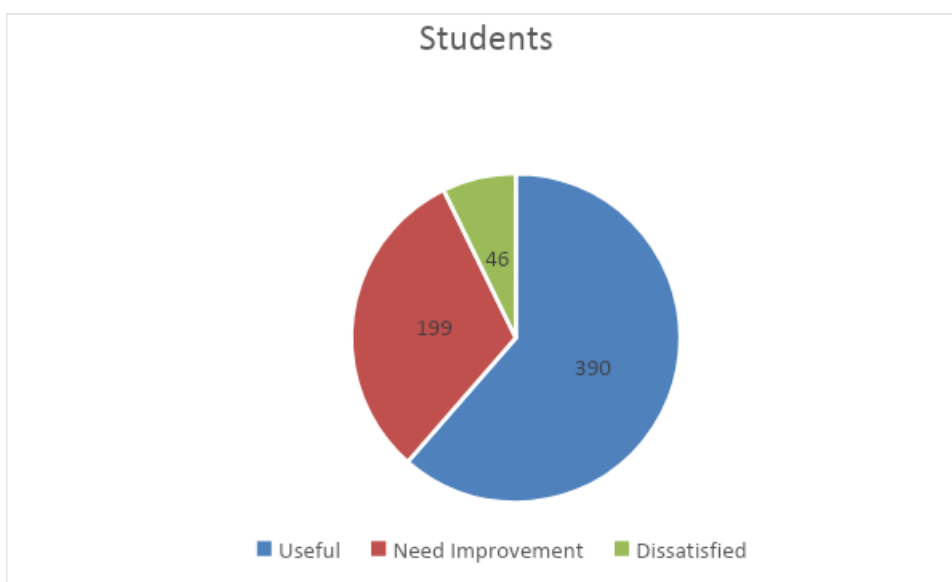
1. Out of the 635 students 390 (61%) were given useful input for provision of library induction or digital literacy programme for use of e-resources.
2. Out of the 635 students 199 (31%) were thought need improvement.
3. Out of the 635 students 46 (7%) were dissatisfied on DLP.
4. Out of the 73 faculties 54 (74%) were replied useful input for provision of library induction or digital literacy programme for use of e-resources.
5. Out of the 73 faculties 18 (25%) thought need improvement.
6. Out of the 73 faculties only 1(1%) were dissatisfied on DLP.

**Table 4.28 Awareness of Digital Literacy Program for Users**

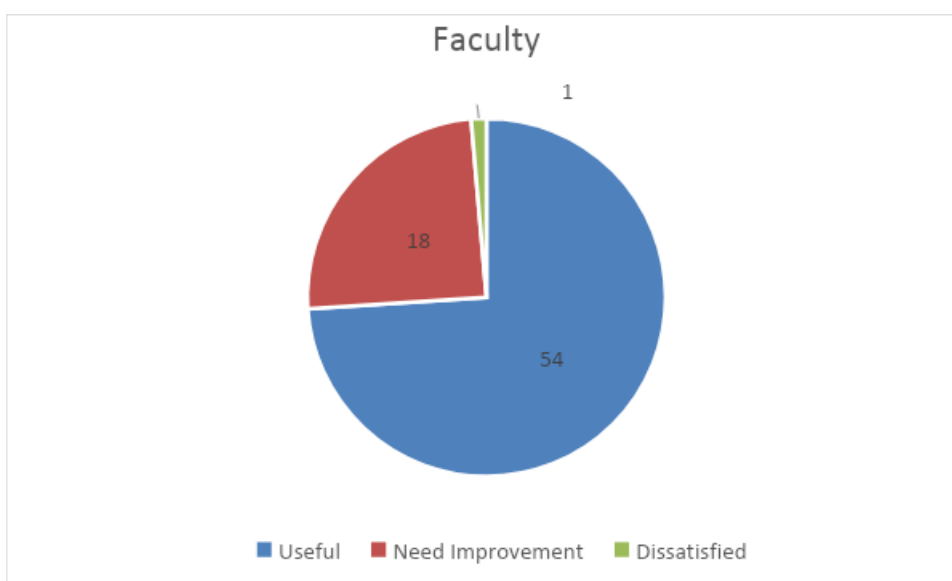
Options	Students		Faculty	
	Respondent	%	Respondent	%
Useful	390	62	54	74
Need Improvement	199	31	18	25
Dissatisfied	46	7	1	1
<b>Total</b>	<b>635</b>		<b>73</b>	

(R= Respondent)

**Fig 4.26 Awareness of Digital Literacy Program for Users (Students)**



**Fig 4.26.1 Awareness of Digital Literacy Program for Users (Faculties)**



### Observation:

It is noticed that most of the law libraries are arranging orientation programs covering IL and DLP contents in it and the feedback from the users indicated that 64% users are happy but remaining 40% need improving in the contents of the programs for better use of Information sources and technologies.

#### 4.5.18 ASSESSING INTERNET LITERACY SKILLS

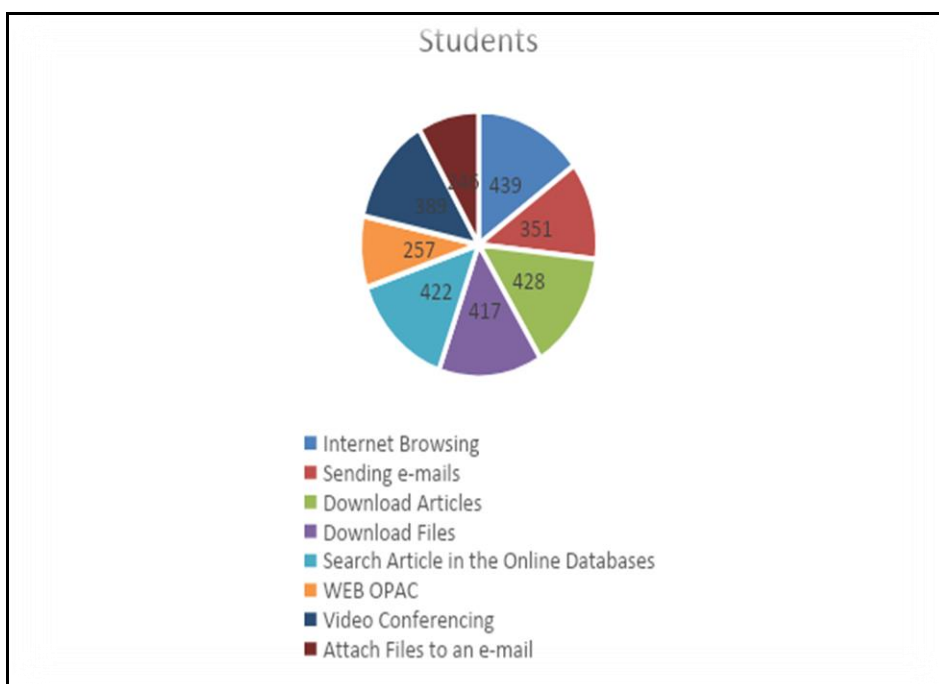
1. Out of the 635 students 439 (69%) have internet browsing skills.
2. Out of the 635 students 351(55%) had knowledge to send emails.
3. Out of the 635 students 428 (67%) have been downloaded articles.
4. Out of the 635 students 417(66%) have been downloaded files.
5. Out of the 635 students 422 (67%) had skill to search articles in the online database.
6. Out of the 635 students 257 (41%) browsed WEBOPAC.
7. Out of the 635 students 389 (61%) have skill of video conferencing.
8. Out of the students 246 (39%) knew to attach files to an e-mail.
9. Out of the 73 faculties 73 (100%) have internet browsing skills.
10. Out of the 73 faculties 73 (100%) faculties had knowledge to send emails.
11. Out of the 73 faculties 73 (100%) have been downloaded articles.
12. Out of the 73 faculties 73 (100%) have been downloaded files.
13. Out of the 73 faculties 73 (100%) had skill to search articles in the online database.
14. Out of the 73 faculties 64 (81%) browsed WEBOPAC.
15. Out of the 73 faculties 73 (100%) knew skill of video conferencing.
16. Out of the 73 faculties 73 (100%) can attach files to an e-mail.

**Table 4.29 Assessing Internet Literacy Skills**

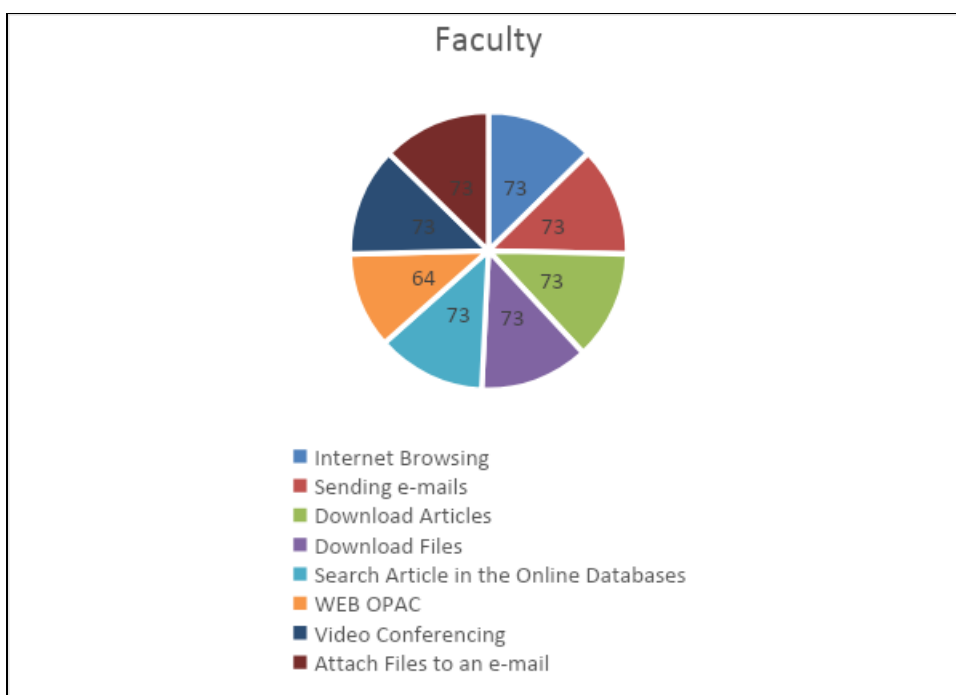
Internet Literacy Skills	Students		Faculty	
	R	%	R	%
Internet Browsing	439	69	73	100
Sending e-mails	351	55	73	100
Download Articles	428	67	73	100
Download Files	417	66	73	100
Search Article in the Online Databases	422	67	73	100
WEB OPAC	257	41	64	88
Video Conferencing	389	61	73	100
Attach Files to an e-mail	246	39	73	100

(R= Respondent)

**Fig. 4. 27 Assessing Internet Literacy Skills (Students)**



**Fig. 4. 27.1 Assessing Internet Literacy Skills (Faculties)**



**Observation:** It is observed that most of users are internet literate. 69% users can browse on internet, 55%, users can send e-mails, and 67% users can download articles and search article in the online databases from the remote places. Similarly, they are using few search engines which are very popular and generally known to all.

#### 4.5.19 ACCESSING INFORMATION RETRIEVAL SKILLS FROM E-RESOURCE.

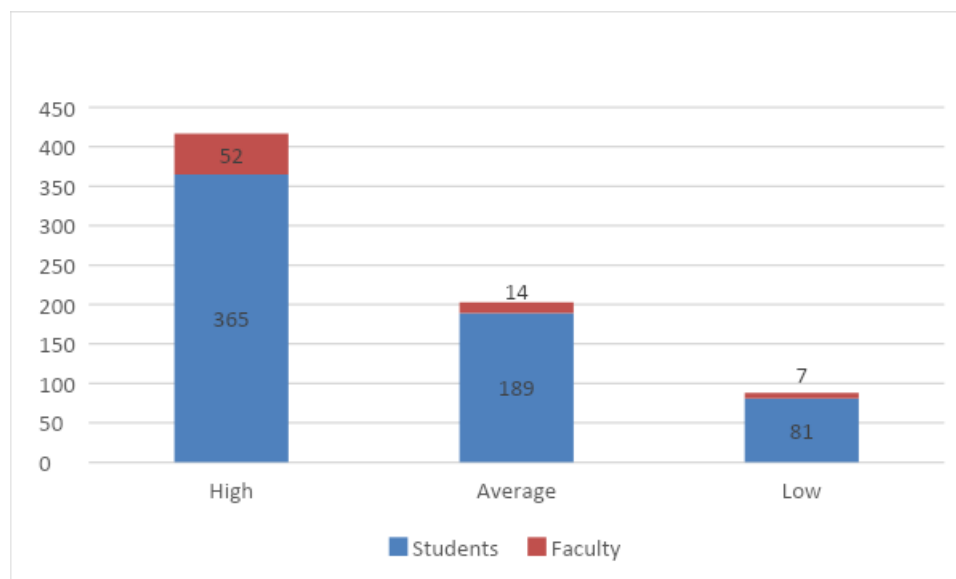
1. Out of the 635 students 365 (57%) had high ability to access correct information.
2. Out of the 635 students 189 (30%) had average ability.
3. Out of the 635 students 81 (13%) had low ability.
4. Out of the 73 faculties 52 (71%) had high ability to access correct information.
5. Out of the 73 faculties 14 (19%) had average ability.
6. Out of the 73 faculties 7 (10%) had low ability.

**Table 4.30 Accessing Information Retrieval Skills from E-Resource**

Ability	Students		Faculty	
	R	%	R	%
High	365	57	52	71
Average	189	30	14	19
Low	81	13	7	10
<b>Total</b>	<b>635</b>		<b>73</b>	

(R= Respondent)

**Fig. 4.28 Accessing Information Retrieval Skills from E-Resource**



**Observation:** It is clear that mostly all the groups (57%) have the ability to access information from e-resources. But 43% users still have weakness in accessing to e-resources due to lack of information retrieval skills among them.

#### 4.5.20 ACCESSING SKILLS OF DIGITAL INFORMATION USAGE

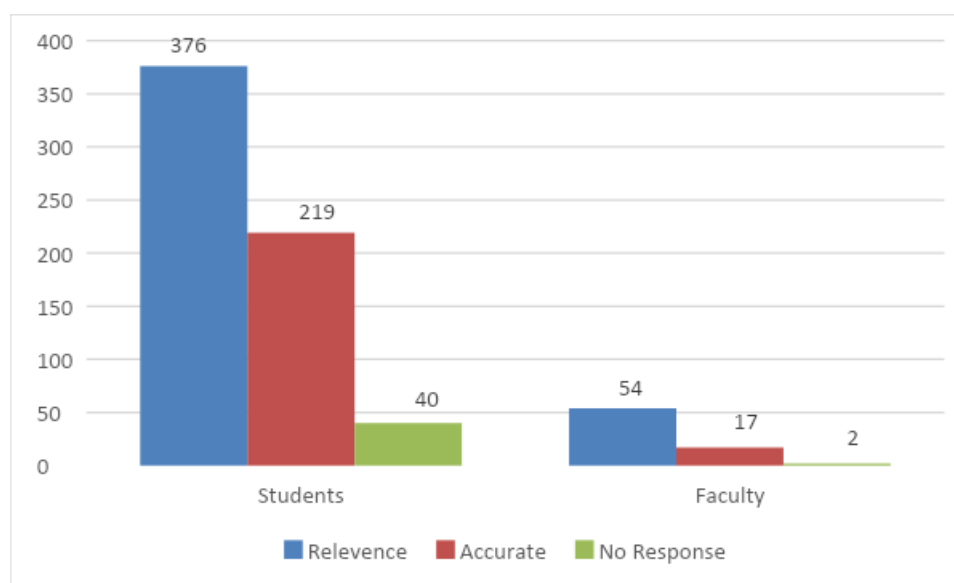
1. Out of the 635 students 376 (59%) thought that digital information was relevant in different criteria.
2. Out of the 635 students 219 (35%) thought that digital information was accurate.
3. Out of the 635 students 40 (6%) didn't answer this question.
4. Out of the 73 faculties 54 (74%) faculties thought that digital information was relevant in different criteria.
5. Out of the 73 faculties 17 (23%) faculties thought that digital information was accurate.
6. Out of the 73 faculties 2 (3%) faculties didn't answer this question.

**Table 4.31 Accessing Skills of Digital Information Usage**

Ability	Students		Faculty	
	R	%	R	%
Relevance	376	59	54	74
Accurate	219	35	17	23
No Response	40	6	2	3
<b>Total</b>	<b>635</b>		<b>73</b>	

(R=Respondent)

**Fig. 4.29 Accessing Skills of Digital Information Usage**



**Observation:** Most of the respondents in all categories can access information using different criteria's but faculty is more prominent than law students. 59% students are in a position to get relevant information out of which 35% information is useful. The remaining users need more training in managing use of digital information. This clearly indicates that Digital literacy orientation to all may enhance the use.

#### 4.5.21 NEED TRAINING FOR DIGITAL LITERACY

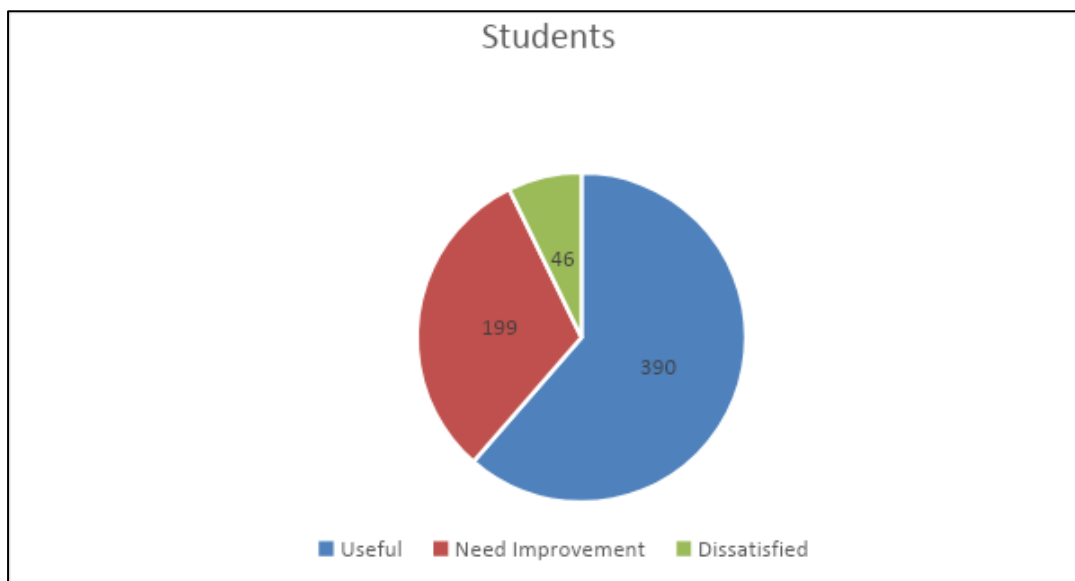
1. Out of the 635 students 168 (26%) needed training for browsing specific article in the law database.
2. Out of the 635 students 284 (45%) required training to search cases in the online database.
3. Out of the 635 students 172 (27%) UGs insisted demonstration to use OPAC.
4. Out of the 635 students 84 (13%) asked for training on online database.
5. Out of the 73 faculties 27 (37%) needed training for browsing specific article in the law database.
6. Out of the 73 faculties 41 (56%) required training to search cases in the online database.
7. Out of the 73 faculties 18 (25%) insisted demonstration to use OPAC.
8. Out of the 73 faculties 6 (8%) asked for training on online database

**Table 4.32 Need Training for Digital Literacy**

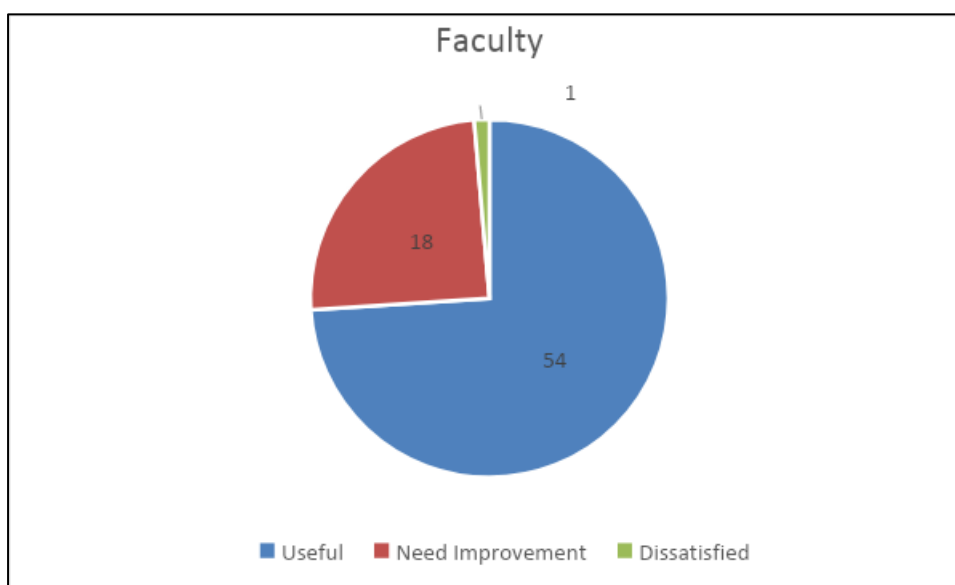
Options	Students		Faculty	
	R	%	R	%
Useful	390	62	54	74
Need Improvement	199	31	18	25
Dissatisfied	46	7	1	1
<b>Total</b>	<b>635</b>		<b>73</b>	

**(R= Respondent)**

**Fig. 4.30 Need Training for Digital Literacy (Students)**



**Fig. 4.30.1 Need Training for Digital Literacy (Faculty)**



**Observation:**

Though all types of users are using e-resources and internet resources, databases searching but all types of users are in need of advanced training to enhance rate of usage of resources and pinpointed information.

**SUMMARY: (USERS' INFERENCES)**

From the survey it is very clear that Law users (students and faculty including visiting) are the main users of libraries and in the changing scenario in libraries



users need more awareness of using IL and Digital Literacy. The law users are using all the print resources as well as databases and e-resources, internet based open resources etc. for learning and teaching, research, and referencing. The users are slowly migrating towards use of digital technologies and ICT use in searching and finding information from the online databases. However, it is noticed that all the users have up to 50% proficiency in using e-resources, internet, databases etc., in spite of librarians providing them orientation. The users are also of the opinion that they need advanced training which makes them perfect in digital literacy and information literacy as well as information retrieval.

## CHAPTER 5

### FINDINGS, SUGGESTIONS AND CONCLUSION

#### 5.1 INTRODUCTION:

Present study “Digital literacy among users in law institute libraries in Pune: a study” have been concerned with the law faculty and students of law institutes. Using the survey method data is collected from the students, faculty and librarian of law institutes, using structured questionnaire separately designed for the law library users and law librarians and data is tabulated and analysed. A statistical technique like Chi-square has been used in the data analysis. This chapter presents the findings deduced from the observations (Chapter 4) and major findings are presented here in this chapter. Based on the findings few workable suggestions are presented and the study is concluded with stating scope for future researchers and testing hypothesis. Finally concluded the study with brief note.

#### 5.2 FINDINGS BASED ON LITERATURE REVIEW:

1. There are different types of literacies like Digital Literacy (Use of Digital devices like smartphones, tablets, and laptops for information gathering), Media Literacy (Use of instant messaging, push notifications, wikis, online communities, blogs, or vlogs – and selecting most effective medium for communication), Visual Literacy (ability to comprehend – and to create – videos, photos, infographics, and other visuals), Data Literacy (analytics), News Literacy, game literacy, civic and ethical literacy, computational literacy, etc. Apart from these there are many other literacies like information literacy, ICT literacy, teaching literacy, computer literacy, technological literacy, etc. (Mkandawire, S B (2015).
2. Koltay, T (2011) Opined that the digital technologies are developing fast and it is necessary to get awareness of media’s importance in every sector of knowledge. Media literacy,

information literacy and digital literacy are the concept that focus on media messages.

3. Garner (2005) has discussed on effective access to information and its use and creation of content to support economic development in different fields like, education, health, human services etc. This activity needs the use of current technologies to encompass learning, critical thinking and interpretative skills
4. Barbara (2001) in her book examines the persuasive approaches used in critical literacy in a digital era especially on use of the internet, and critical literacy deals about writing and speech about new communication technology.
5. An informative literate person is able to understand a need for information, determining the extent of information needed, access the needed information efficiently, evaluate the information and its sources, incorporate selected information into their knowledge base, use information effectively to accomplish a purpose, understand economic, legal, social and cultural issues in the use of information, access and use information ethically and legally, classify, store, manipulate and redraft information collected or generated and recognize information literacy as a prerequisite for lifelong learning. CAUL (2001)
6. Alkali, Y. E., & Amichai-Hamburger (2004), states that digital literacy includes cognitive, motor, sociological and emotional skills. For this reading instructions from graphical displays and creating new materials from existing ones is useful.
7. Alkali, Y. E., & Amichai-Hamburger (2004), said that digital literacy requires the knowledge to operate a digital device and suggested a model which had five major digital skills like, photo visual skills, reproduction skills, branching skills, information skills, and socio-emotional skills.
8. The digital divide situation is arising in which digital natives (New technology users) and digital immigrants (traditional users, learning) are parts of it

9. Tracy (2016), assessed Digital Humanities tools and studied the librarians increasing support to digital publication and the tools used by them, It consists of media upload process, image annotation and aesthetics. It also considered writing pedagogy and suggested lessons for digital literacy instruction.
10. Correia (2003), rightly pointed out that library literacy competencies are required for using library resources and services. It demands for the skills like search strategy building to locate and evaluate the most relevant information on a given topic.
11. In summary many authors and professional writers have suggested that there is a need to acquire many literacies for the users of any sector in the present era like Information literacy, Digital literacy, ICT Literacy, Library literacy, media literacy, internet literacy, network literacy, visual literacy, Information retrieval skills, Tool literacy, technological literacy, communication literacy etc. for effective lifelong learners.

### **5.3 FINDINGS BASED ON LIBRARIANS SURVEY:**

1. There are 22 law Institutes in Pune city and all the law institutes have well developed libraries and collection.
2. Almost all the law institutes are managing Undergraduate, Post graduate Law courses, and few institutes are also managing Ph.D. and Diploma courses in the law related branches.
3. All the libraries are managed properly by qualified librarians and library staff is employed to manage the law libraries.
4. It is observed that in Pune city the growth of Law institutes is initiated from 1900 onwards and till the year 2015 there are almost 22 law institutes established. The maximum growth (78%) in law institutes is reported during the period 2001 to 2010. Prior to 2001 the growth was very slow as well as after 2010 the growth is negligible.

5. It is observed that more than 67% users are using the library facilities from law institutes. The use of law libraries is more because the collection of law libraries is not available elsewhere.
6. 83% (15 institutes) users are daily visiting to the law library for the consultation of resources. This indicate the importance of library collection to the law users.
7. It is observed that all the institutes are acquiring to e-resources. But only 56% libraries have given more weightage for e-resource collection so far and remaining are just increasing their e-collection slowly.
8. It is observed from the data that library services provided by law libraries are as detailed in the table 4.6 and most of the libraries are providing reference service, internet browsing and CD-ROM database, CAS, SDI, ILL, at large scale.
9. SSC online (67%), AIR Supreme Court (83%), N-List (94%) and JSTOR (100%) are the major databases subscribed by the law libraries in Pune city. The remaining resources and databases though available but due to lack of literacy they are not used properly.
10. The librarians are arranging library induction programs to the users for the effective use of resources and awareness of IL and Digital Literacy among the users.
11. It is observed that 34% institute libraries have more than 12 computers in library for users. 66% institute libraries have less than 10 computers.
12. 72% Libraries are organising digital Literacy programs in the institutes for the users.
13. Librarians of Law colleges are aware of digital literacy (83%) and they are also organising DLP (72%) for developing users' awareness of digital literacy as well as information literacy. The librarian is of the opinion that the organisation of DLP for users has improved their awareness of digital and information literacy (89%).

#### **5.4 FINDINGS BASED ON LAW USERS**

1. On an average intake capacity of BAR Council norms is 60 per class.
2. The main users of law libraries are students and faculty. They are using libraries as per the needs daily, weekly or sometimes monthly. On an average 56% students visits library for different purposes. On an average 40% faculties take benefits of libraries.
3. It is observed from Table 4.14 that 212 (33%) law library users spent around 1to 2 hours' time in library for consulting reference sources informed during the tutorials. Overall 50% time is spend by all the users in libraries.
4. It is observed from Table 4.15 that most of 361 (57%) students and 69 (94%) faculties had knowledge about digital literacy.
5. It is observed from Table 4.16that 293 (46%) users had attended the DLP.
6. It is noted from table 4.17 that the law users are using different types of resources consisting of Text books, reference books, judgements issued by different courts, evidence records etc. on regular basis.
7. The student users use these resources for preparing exams, for writing assignments, project works, research purpose, etc. Faculty mostly use for the teaching purposes as well as moot courts, and case studies etc.
8. Most of students collect required information through books and internet sources as they have to appear for the exams and hence, they use curricular supporting books. The students mostly collect information from internet and secondly from the reference books, since they have to prepare cases, Projects, assignments etc. As far as faculty is concerned, they mostly used the books, reference books, case studies, to collect information and sometimes they collected information from online database.

9. It can be observed that students mostly consulted library staff regarding the collection of information and consulting to the faculties. The faculties also mostly consulting to library staff.
10. The students mostly use Laptops for accessing to digital sources, secondly, they also use Smart Phones. The faculties too use Smart Phones and secondly made use of computer lab.
11. The Law users are preferring more to print resources since more resources are available in this form i.e. books and reference sources. But now in digital era users are using Law databases, Internet resources using internet, etc.
12. It is noticed that most of the users (students) are aware of library facilities made available for the users. Since the collection is of special type users takes benefit of the collection by consulting and referencing it. Users are mostly utilizing the facilities of circulation, online and offline databases searching, referencing work at the time of moot courts, they also understand the importance of library services and avail the facilities like CAS, SDI, and Internet etc. The faculty is also availing all the activities but more stress is on ILL, document scanning etc. in addition to CAS, SDI etc. which are useful for teaching and learning.
13. It is indicated form the data collected that law users are using e-resources also along with print resources, slowly users are migrating towards use of databases as many databases are now available as well as subscribed by institutes. The major databases used by users are Heinonline, Kluwar International, SSC Online, Manupatra, JGATE/JSTORE and Oxford etc. Other resources are also used but these are more preferred databases.
14. It is observed that most of the users that for getting current information on Enacted acts users are using mostly Books, Bar Acts, Law Journals, Reference sources, online databases etc.
15. It is observed that most of the students uses library and aware of the services and facilities whereas faculty is using libraries mostly for the consultation when necessary for the purpose of

teaching and referencing. However, orientation is necessary for the students at the entry level for using catalogues, classification system and organisation of collection, reference activities, valuable collection etc. Both students and faculty consult librarian to get proper assistance for locating material.

16. It is noticed that all the users are preferring to search analogous article by using bibliographies, abstracting and indexing journals in law, law databases etc.
17. Mostly all the faculties are more literate in ICT skill than students.
18. It is noticed that most of the law libraries are arranging orientation programs covering IL and DLP contents in it and the feedback from the users indicated that 64% users are happy but remaining 40% need improving in the contents of the programs for better use of Information sources and technologies.
19. It is observed that most of users are internet literate. 69% users can browse on internet, 55%, users can send e-mails, and 67% users can download articles and search article in the online databases from the remote places. Similarly, they are using few search engines which are very popular and generally known to all.
20. It is clear that mostly all the groups (57%) have the ability to access information from e-resources. But 43% users still have weakness in accessing to e-resources due to lack of information retrieval skills among them.
21. Most of the respondents in all categories can access information using different criteria's but faculty is more prominent than law students. 59% students are in a position to get relevant information out of which 35% information is useful. The remaining users need more training in managing use of digital information. This clearly indicates that Digital literacy orientation to all may enhance the use.
22. Though all types of users are using e-resources and internet resources, databases searching but all types of users are in need



of advanced training to enhance rate of usage of resources and pinpointed information.

### **5.5 FINDINGS BASED ON LAW LIBRARIANS INTERVIEWS**

Researchers interviewed few prominent librarians from the field to get their views on digital literacy, using open ended question session with Librarians and get ideas for future campaign to undertake for DLP in library.

1. Library has to conduct lectures on e-library, digital literacy etc. more frequently.
2. Library as a research centre develop and organise, automation, infrastructure, computers and internet for the users. Librarians change their traditional view towards the library by implementing digital literacy.
3. Broadcast media and information tools to change practices and accepted this change. Information literacy, library literacy is essential to such activities.
4. Library has to play more important role in digital literacy in future. Digital literacy should be part of formal curriculum.
5. Making awareness among students and faculty members to use the resources as much as possible.

### **5.6 FINDINGS BASED ON LAW LIBRARY USER'S VIEWS ON DIGITAL LITERACY**

Researcher interviewed few Law users who regularly visits libraries, to get their views on digital literacy, using open ended question session with them, and get ideas for future campaign to undertake for DLP in library. The users' views are:

1. Digital Literacy Programme is very helpful for Law Library users.
2. Digital literacy programme is very essential for each college staff and students. This gives knowledge and current knowledge through it and training for searching and retrieving data.

3. It is really very useful as students are newly connected with digital gadgets hence it has to be conducted for them to get more information on electronic gadget rather than books.

#### **5.7 SUGGETIONS:**

1. In education sector all the users need different literacies to become best information handler, even the same need in all sectors where information, media, publications are playing major roles.
2. In the training or orientation programs the online demonstrations or classroom lectures different literacy skills to be developed among the users like Information literacy, Digital literacy, ICT Literacy, Library literacy, media literacy, internet literacy, network literacy, visual literacy, Information retrieval skills, Tool literacy, technological literacy, communication literacy etc. for effective lifelong learners.
3. Librarians and the media persons are the best coach for training users in different literacies
4. There is a need to include literacy course in syllabi of all the education disciplines as this is a common factor to all. This helps users in performing qualitative research, and lifelong learning skills among the researchers, students, faculty, scholars and even layman also.
5. In the law college libraries mostly print collection is visible. There is also a need to develop e-resources and required infrastructure for the use of different technologies in libraries.
6. Librarians need to transform orientation program contents to Digital Literacy Programs in which all the literacies are practically covered providing hands-on sessions
7. All the law librarians in Pune city has to develop human network along with library networks and support ILL and DDS systems.
8. Resource sharing projects need to be developed among the law libraries to fulfil the needs of the users.

9. User needs to be assessed at regular intervals, by way of conducting surveys, discussions with faculty and student forums.
10. Law Libraries has to develop library services using ICT and digital resources like alert, digest, ask librarian, 24/7 access, outreach services in the profession etc.
11. Online searching services may be helpful to the law professionals and librarians have to provide these services even on payment basis for lawyers and researchers etc.
12. Librarians and media professionals need to develop information literacy and digital literacy among the users and professionals
13. The databases acquired in the law libraries need to be explored by way of using to the maximum and for this purpose librarians have to organise hands-on sessions and train users in searching information qualitatively
14. All the law librarians have to develop union catalogues of collection for developing resource sharing more effectively
15. All the law librarian have to generate subject guides for the users

### **5.8 BEST PRACTICES TO ENHANCE DIGITAL LITERACY:**

Digital literacy is essential now a days due to use of ICT and media, and the orientation is necessary for the users as well as new library professionals entering newly in the profession. The literacies attached to handle information and using information by users is to be aware of these. However, Digital literacy cannot be taught through traditional means. It needs expertise in handling information literacy, digital literacy, computer literacy, information retrieval literacy and also skills required. The information literacy can be taught by the librarians and information specialists but for digital literacies hands on sessions and online learning training is required for both library staff and users. In the information literacy and e-resource generation, use of ICT etc. required in the real world using and skill sets are to be developed among the users.

Paul Gilster (1977) is the author of 'Digital Literacy', in which he described Digital Literacy as “the usage and comprehension of information in the digital age”. Gilster firmly believed that digital literacy is an essential life skill which should be taught in all areas of education, including the corporate training sector. But teaching technical skills can be tricky in traditional online training environments, as it lacks one crucial component: first-hand experience. Fortunately, online training gives the power to put technical skills into action and promote digital literacy.

For managing digital literacy and developing skills among the users, Librarians can perform few steps like:

1. Transform the orientation / training course structure which takes care of practical sessions
2. The practical session must take care of all the literacies related to libraries and information handling
3. The different literacies in the present era in which expertise to be developed are: Digital, media, Visual, Data Literacy, News Literacy, game literacy, civic and ethical literacy, computational literacy, information literacy, ICT literacy, teaching literacy, computer literacy, technological literacy, etc.
4. Encourage users for developing self-learning practices and learner must use online tools to solve general issues.
5. Librarians have to develop subject guides and online resource guides (which contains all the useful resources freely available as well as subscribed)
6. E-learning guides, tutorials, virtual information tours librarians have to develop.
7. Plan for the preparation of online manual which covers step by step learning process for users
8. Develop e-learning contents to develop literacies among users
9. Introduce different skills sets in the training program which helps user to enhance their capacity in managing basic required

skills in information handling like computer skills, media skills, content evaluation skills,

10. Digital Literacy need to be included in the LIS curriculum as well as at graduation level courses, so lifelong learners get benefit out this literacy
11. Acquire digital proficiency to manage digital technologies for accessing, organising, sharing, and communicating information effectively and efficiently
12. Finding out information needs of users, and accordingly selection of relevant resources
13. Information searching skills need to be acquired for appropriate and relevant data / information collection from the different locations, by developing well defined search strategy
14. Attain the skills of evaluation of information collected critically for the reuse of information effectively, define the criteria for evaluation of information, both print and electronic
15. Respect to IPR, use of information while publishing information ethically and legally abiding the IPR
16. Appropriate, efficient and effective use of technologies to communicate information clearly and coherently.
17. Participation in online discussions, contributing using web tools, social media, open forums etc.
18. Digital Literacy in summery can be: ability to search and evaluate information, use digital media effectively, use of social media, information networks, navigation of internet and navigate global treasure of information, safety of data and system.

Librarians have to organise the orientation programs considering these aspects which helps in increasing the digital literacy among the users.

## **5.9 TESTING OF HYPOTHESIS:**

The researcher has considered following hypotheses for this research study

1. Law libraries have collections of books, journals and reports but they are not well equipped with digital resources.

**Testing:** This hypothesis is proved true since the collection of Law Libraries are mostly having collection in print form, slowly the libraries are acquiring digital resources in collection but still there is a need to enhance by providing budget.

2. Users (Students and faculty) also lack knowledge and skills for use in digital resources.

**Testing:** This hypothesis is also proved positive as all the law users are having some knowledge in accessing the information from the free sources using internet, but they are not acquiring information pin pointedly from the online database searching, the information retrieval skills to be acquired for efficient data collection.

#### **5.10 SCOPE FOR FURTHER RESEARCH:**

The researcher would like to suggest the following topics for the further research for the fellow professionals

1. Assessment of digital literacy skills among the medical professionals in the state of Maharashtra
2. Assessment of digital literacy skills of engineering science professionals in state of Maharashtra
3. Survey of digital literacy among the university science departments in Maharashtra

#### **CONCLUSION:**

Today smart phone, tablets, iPods have become used as educational tools in information and digital era. Information is connected with schools of library and information science. The e-resources are now playing important role in teaching and learning process of education. Use of databases is very common as they are main source for gathering information on subject. Information literacy and digital literacy are now essential for developing new knowledge and generating information

processes. The digital technologies are developing and gaining media literacy. Due to use of ICT, digital media the user needs to become information and digital literate to handle the information needs as well as attain the lifelong learning process.

Digital literacy is developed and promoted to develop new beliefs. Digital literacies, pedagogy, have become the goal for formal education. Multimodal literacies use media to represent visual, audio, gestural and special communication along with traditional written and oral forms. Digital literacy empowers “new literacy studies” digital literacy improves the creative and critical thinking skills. Both librarians and students in the ICT era need to develop all sorts of literacies to handle information properly.

#### **REFERENCES:**

- Glister, P (1977). Digital Literacy. Wiley, New York
- Pappas, C (2017). 7 tips for promoting digital literacy and skills in e-learning. Accessed at <https://elearningindustry.com/tips-promote-digital-literacy-tech-skills-elearning>

## REFERENCES:

- AAviram, Y Eshet-Alkalai. (2006) Towards a Theory of Digital Literacy: Three Scenarios for the Next Steps, *The European Journal of Open, Distance and E-Learning*.
- ACRL (2018) 2018 top trends in academic libraries: A review of trends and issues, affecting academic libraries in higher education. ACRL Research Planning and Review Committee. Vol. 79 (6) Accessed at <https://crln.acrl.org/index.php/crlnews/article/view/17001/18750>
- Allan Martin, Jan Grudziecki .(2006). *DigEuLit: Concepts and Tools for Digital Literacy Development*, Innovation in Teaching and Learning in Information and Computer Sciences. 5(4)
- Allan Martin. Dan Madigan. (2006). *Digital Literacies for Learning*. Michigan. Facet Publications.
- Angelique NasahBoaventura DaCosta Carolyn Kinsell, Soonhwa Seok. (2010).The digital literacy debate: an investigation of digital propensity and information and communication technology,*Educational Technology Research and Development*.58(5),531-555.
- Antonio, Irati ,Balby, Claudia Negrao , (1994). The state of computer training in Brazilian library schools, *Journal of Education for Library & Information Science*, 35(2), 109 – 125.
- Attewell P. (2001). Comment: the first and the second digital divides, *Sociology of education*. 74(3), 252-259.
- Babu, B. R., Vinayagamorthy, P., &Gopalakrishnan, S. (2007). ICT Skills among Librarians in Engineering Educational Institutions in Tamil Nadu. *DESIDOC Journal of Library & Information Technology*, 27(6), 55-64. doi:10.14429/djlit.27.6.145. Retrieved from <https://publications.drdo.gov.in/ojs/index.php/djlit/article/view/145>
- Bar Council of India (2014) *Reform of Legal Education in India* Retrieved from Retrieved from <http://www.barcouncilofindia.org/wpcontent/upload/2014/11/legaeducationreformrecommendationspdf>
- Bar Council of India *Reform of Legal Education in India* Retrieved from Retrieved from <http://www.barcouncilofindia.org/wpcontent/>



- Barbara R. Jones, Suzanne L. Flannigan. (2006). Connecting the Digital Dots: Literacy of the 21st Century, *Educause Quarterly*.
- Barbara Warnick. (2001). *Critical Literacy in A Digital Era: Technology, Rhetoric, and the Public Interest*. Routledge.
- Bawden, D. (2001). Information and digital literacies : a review of concepts, *Journal of documentation*, 57(2), 218-259.
- Belshaw, Douglas, AJ (2012) What is 'digital literacy' ? A Pragmatic investigation., Durham theses,
- Benjamin, Joanna (2007). *Financial Law*, Oxford University Press, UK.
- Berger, Pam, (2005). Digital Literacy, *Information Searcher*, 16(2), 2.
- Bhatt, Ibrar. (2012). Digital Literacy Practices and Their Layered Multiplicity, *Educational Media International*. 49(4), 289-301.
- Bretz, Robert Johnson, Linda. (2000). An innovative pedagogy for teaching and evaluating computer literacy, *Information Technology & Management* , 1(4) , 283-292.
- Brooks, Andrea Wilson. (2015). Using connectivism to guide information literacy instruction with tablets. *Journal of Information Literacy*, 9 (2), 27-36.
- Bruce, C. (1994). Portrait of an information literate person, *HERDSA News*, 16(3), 9-11.
- Bruce, C. (1997). *The seven faces of information literacy*, Auslib Press, Adelaide.
- Brynin M. (2006). Gender equity through computerisation, *European sociological review*. 22(2), 111-123.
- Buck, Amber. (2012). Examining Digital Literacy Practices on Social Network Sites, *Research in the Teaching of English*, 47 (1), 9-38.
- Bulger Monica E., Mayer Richard E. and Metzger Miriam J. (2014). Knowledge and Processes That Predict Proficiency in Digital Literacy, *Reading and Writing: An Interdisciplinary Journal*. 27(9), 1567-1583.
- Bunz U., Curry C. And Voon W. (2007). Perceived versus actual computer-email-web fluency, *Computers in human behaviour*. 23, 2321-2344.
- Burgess Melissa L, Price Debra P. and Caverly David C. (2012). Digital Literacies in Multiuser Virtual Environments among College-Level

Developmental Readers, *Journal of College Reading and Learning*, 43(1), 13-30.

- Center of Teaching. Types of Literacy. Accessed at [https://teach.its.uiowa.edu/sites/teach.its.uiowa.edu/files/docs/docs/Types\\_of\\_Literacy\\_ed.pdf](https://teach.its.uiowa.edu/sites/teach.its.uiowa.edu/files/docs/docs/Types_of_Literacy_ed.pdf)
- Cohron, Madalyn. (2015). The Continuing Digital Divide in the United States, *Serials Librarian*, 69 (1), 77 – 86.
- Colin Lankshear, Michele Knobel. (2008). *Digital Literacies: Concepts, Policies and Practices*, Peter Lang.
- Collis, Betty, Anderson, Ron. (1994). Computer literacy for the 1990s: theoretical issues for an international assessment, *computers in the Schools*, 11(2), 55 – 74.
- *Computers & Education*. (2012). Can we teach digital natives digital literacy. 59(3), 1065–1078.
- Cordell, Rosanne Marie. (2013). Information Literacy and Digital Literacy: Competing or Complementary? *Communications in Information Literacy*. 7 (2), 177-183.
- Cowan, Paul. (2003), Friendly and Helpful and not too complicated, *Information Scotland*, 1(5), 12 – 13.
- Crawford, John Irving, Christine. (2006). Information literacy, the link between second and tertiary education: project origins and current developments, *ALISS Quarterly*, 2(1), 8-12.
- David Bawden, Lyn Robinson. (2002). Promoting literacy in a digital age: approaches to training for information literacy, *Learned Publishing*. 15(4), 297–301.
- David Bawden. (2001) ,Information and digital literacies: a review of concepts. *Journal of documentation*, 57(2), 218-259.
- David R. Olson, Nancy Torrance. (2009). *The Cambridge Handbook of Literacy*, Cambridge University Press.
- *Digital Literacies-Concepts, Policies and Practices 2008*. Retrieved from <https://www.scribd.com/document/62885614/Digital-Literacies-Concepts-Policies-and-Practices-2008>
- Digital Literacy. Accessed at [https://en.wikipedia.org/wiki/Digital\\_literacy](https://en.wikipedia.org/wiki/Digital_literacy)
- Digital Literacy. Accessed at [https://en.wikipedia.org/wiki/Digital\\_literacy](https://en.wikipedia.org/wiki/Digital_literacy).

- Dimaggio P., Hargittai E. (2001). From the digital divide to digital inequality: studying internet use as penetration increases. Princeton University centre for arts and cultural policy studies, Working paper series number 15.
- Downing, Jeannette D., (1985). Computer Literacy Workshop, Art Documentation: Bulletin of the Art Libraries Society of North America.4(2), 42 – 44.
- Durham University. Available at Durham E-Theses Online: <http://etheses.dur.ac.uk/3446/>
- Eshet Y. (2002). Digital literacy: a new terminology framework and its application to the design of meaningful technology-based learning environments. In proceedings of world conference on Educational Multimedia, Hypermedia and Telecommunications 2002 .493-498.
- Eshet, Yoram. (2002). Digital Literacy: A New Terminology Framework and Its Application to the Design of Meaningful Technology-Based Learning Environments, World Conference on Educational Media and Technology in Denver, USA.
- Eshet-Alkalai Y. (2004). Digital literacy: a conceptual framework for survival skills in the digital era, Journal of educational multimedia and hypermedia. 13(1), 93-106.
- Eshet-Alkalai, Yoram. (2004). Digital literacy: A conceptual framework for survival skills in the digital era, Journal of Educational Multimedia and Hypermedia. 13(1), 93.
- Esperanza Huerta, Rodrigo Sandoval Almazán. (2007). Digital literacy: Problems faced by telecenter users in Mexico, Information Technology for Development. 13(3).
- EszterHargittai. (2005). Survey Measures of Web-Oriented Digital Literacy, Sage Journal Publication.23 (3), 371-379.
- EszterHargittai. (2009). An Update on Survey Measures of Web-Oriented Digital Literacy, *Social Science Computer Review*.27(1), 130-137.
- ETS (2002). Digital transformation : a framework for ICT literacy, Educational Testing Service, New Jersey.

- Evangeline S. Pianfetti. (2001). Focus on Research: Teachers and Technology: Digital Literacy through Professional Development, *Language Arts*. 78(3), 255-262.
- Ferreiro, Emilla. (2005). Librarians and Basic Education Teachers in the Context of **Digital Literacy**, *IFLA Journal*, 31(1), 35-44.
- Foley, Geraldine. (2015). Working with students to develop digital literacies. *ALISS Quarterly*, 11(1), 19-21.
- Fowler, S.G. (2007). Results of participant observation in the Fifth Judicial District: Customizing the county law library to meet the needs of small firm attorneys in rural Kansas. *EBLIP4*, May 6-9, 2007. Available at: <http://www.eblip4.unc.edu/papers/Fowler.pdf>
- Frank B. Withrow. (2004). *Literacy in the Digital Age: Reading, Writing, Viewing, and Computing*. Michigan. Scarecrow Education.
- Fulton K. (1997). *Learning in a digital age: insights into the issues*. A publication of the Milken exchange on information technology: Milken Family Foundation.
- Garner, B.A (2004) *Black's Law Library USA*: West Group.
- Gartner (2007). Digital natives hit the workplace: from students to employees. Gartner symposium, IT xpo , Barcelona 20-23. Available at <http://agendabuilder.gartner.com/spr8/webpages/sessiondetails>, accessed on 30 August 2015
- Glister, P (1977). *Digital Literacy*. Wiley, New York
- Greenleaf G (2010). The Global development of free access to legal information, *European Journal of Law and Technology*, 1(1) Retrieved from <http://ejlt.org/article/view/17/39>
- Greenleaf G (2010). The Global development of free access to legal information, *European Journal of Law and Technology*, 1(1) Retrieved from <http://ejlt.org/article/view/17/39>
- Guy Merchant. (2007). Writing the future in the digital age, *Literacy*. 41(3) ,118–128.
- Hall Marion, Nix Ingrid and Baker Kristy. (2013). Student Experiences and Perceptions of Digital Literacy Skills Development: Engaging Learners by Design? *Electronic Journal of e-Learning*. 11(3), 207-225.

- Hall Richard, Atkins Lucy and Fraser Josie. (2014). Defining a Self-Evaluation Digital Literacy Framework for Secondary Educators: The DigiLit Leicester Project, *Research in Learning Technology*. 22.
- Hargittai E. (2002). Second-level digital divide: differences in people's online skills, *First Monday*. 1-20. Available at [http://www.firstmonday.org/issues/issue7\\_4/hargittai/](http://www.firstmonday.org/issues/issue7_4/hargittai/)
- Hargittai E. (2005). Survey measures of web-oriented digital literacy, *Social science Computer Review*. 23(3), 371-379.
- Hart, C. (1998). *Doing a literature review: releasing the social science research imagination*. London: Sage, p 27.
- Hartley, John.(2011).*Digital futures for cultural and media studies*.Wiley-Blackwell.
- Heather Lotherington, Jennifer Jenson. (2011).Teaching Multimodal and Digital Literacy in L2 Settings: New Literacies, New Basics, New Pedagogies,Annual Review of Applied Linguistics. 31,226-246.
- Helen Mele Robinson. (2008). *Emergent Computer Literacy: A Developmental Perspective*. Routledge.
- Herman, E. (2001). End users in academia: meeting the information needs of university researchers in an electronics age, Part2, *Aslib Proceedings*, 533(10), 431-457.
- HoggartRechard. (2009). *The uses of Literacy: aspects of working –class life*. Penguin Books.
- <http://eprints.qut.edu.au/18013/>Accessed on 8 August 2015.
- IstoHuvila. (2012). *Information Services and Digital Literacy: In Search of the Boundaries of Knowing*. New Delhi. Chandos Publishing.
- Jackie Marsh. (2005). *Popular Culture, New Media and Digital Literacy in Early Childhood*, Psychology Press.
- James, R. S. and Alan, R. T. (1997). *Cataloguing and classification Trends,Transformation, Teaching and Training*.
- James, R. S. and Alan, R. T. (1997). *Cataloguing and classification Trends, Transformation, Teaching and Training*.
- Jenkins, Henry (2009). *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century* Cambridge, MA: The MIT Press.

- Jerney, Jonathan. (2005). Computer training in Australia, *Online Currents*, 20(9), 2- 10.
- Jewitt, C. (2006). *Technology, literacy and learning, A multimodal approach*. Routledge. New Jersey.
- John Hartley et/al. (2008). The Uses of Multimedia: Three Digital Literacy Case Studies, *Media International Australia*. 128(1), 59-72.
- John Hartley. (2010). *The Uses of Digital Literacy*, Transaction Publishers.
- Julian Sefton-Green, Helen Nixon , Ola Erstad. (2009). *Reviewing Approaches and Perspectives on Digital Literacy, Pedagogies: An International Journal*.4 (2).
- Kate Pahl, Jennifer Rowsell. (2006). *Travel Notes from the New Literacy Studies: Instances of Practice, Multilingual Matters*.
- Kenton Jeffrey, Blummer Barbara. (2010). *Promoting Digital Literacy Skills: Examples from the Literature and Implications for Academic Librarians, Community & Junior College Libraries*.16 (2), 84-99.
- Khan, Shakeel Ahmad, Waheed, Abdul. ( 2015 ). *Digital Literacy Practices for Library Users at Government College University Libraries, Lahore*. *Pakistan Library & Information Science Journal*, 46 (4), 50-54.
- Kiel, Ralph, O'Neil, Frances, Gallagher, Adrian, Mohammad, Cindy. (2015). *The library in the research culture of the university: A case study of Victoria University Library*, *IFLA Journal*, 41 (1), 40-52.
- Kim M. Thompson. et/al, (2014). *Digital Literacy and Digital Inclusion: information Policy and the Public Library*. Lanhm. Rowman& Littlefield Publishers.
- Kirschner, Paul Davis, Niki (2003). *Pedagogic Benchmarks for Information and Communications Technology in Teacher Education* , *Technology, Pedagogy & Education*, 12(1), 125-147.
- Korupp S.E., Szydlik M. (2005). *Causes and trends of the digital divide*. *European sociological review*. 21(4), 409-422.
- Kulasheshta, V. D. (1999) *English legal history*, Eastern Book Co., Lucknow, India.
- Kumar, Neha. (2015). *The gender-technology divide or perceptions of non-use?* , *First Monday*, 20(11), 5.

- Lankshear Colin J., Knobel Michele.(2008).Digital literacies: concepts, policies and practices. Peter Lang Publishing.
- LankshearColin,Knobel Michele. (2006).Digital literacy and digital literacies: policy, pedagogy and research considerations for education, Nordic Journal of Digital Literacy.1 (1), 12-24.
- Law Libraries. Accessed at [https://en.wikipedia.org/wiki /Law\\_library](https://en.wikipedia.org/wiki/Law_library)
- Len,Unsworth.(2006). E-literature for Children: Enhancing Digital Literacy Learning, Taylor & Francis.
- Li, Frederick W. B.,Lau, Rynson W. H. (2006). On-Demand E-Learning Content Delivery Over the Internet, International Journal of Distance Education Technologies, 4(1) , 46-55.
- Lin, Herbert, (2000). Fluency with Information Technology, Government Information Quarterly, 17(1), 69 – 76.
- Lloyd, Annemaree. (2005). Information literacy: Different contexts, different concepts, different truths?,Journal of Librarianship & Information Science, 37(7), 82-88.
- Long, Sarah Ann.(2005). What’s new in libraries? Digital natives: if you aren’t one, get to know one, New Library World, 106(3/4), p187-189.
- Lyn Henderson, Julie I. Tallman. (2006). Stimulated Recall and Mental Models: Tools for Teaching and Learning Computer Information Literacy. Michigan.Scarecrow Press.
- Marco Gui , GianlucaArgentin.(2011).Digital skills of internet natives: Different forms of digital literacy in a random sample of northern Italian high school students,*New Media & Society*.13 (6).
- Martine, A., Rader, H. (eds.) (2003). Information and IT literacy: enabling learning in the 21st century. Facet Publishing, London, 3-23.
- Michael Thomas. (2011). Deconstructing Digital Natives: Young People, Technology, and the New Literacies, Taylor & Francis.
- Mkandawire, S B (2015) Types of literacy or Literacies. Accessed at <https://sitwe.wordpress.com/2015/12/14/types-of-literacy-or-literacies/>
- Moily, V. (2010). Law Minister Announces Vision for Legal Education Reform: A vision statement delivered by the Law Minister Veerappa consultation for second Generation Reform in Legal Education held at the VigyanBhavan,The Bar council of India, New Delhi. Retrieved from

<http://www.barcouncilofindia.org/law-ministers-vision-statement-for-secondgeneration-reforms-in-legal-education/>

- Moily, V. (2010). Law Minister Announces Vision for Legal Education Reform: A vision statement delivered by the Law Minister Veerappa consultation for second Generation Reform in Legal Education held at the VigyanBhavan, The Bar council of India, New Delhi. Retrieved from <http://www.barcouncilofindia.org/law-ministers-vision-statement-for-secondgeneration-reforms-in-legal-education/>
- Neuman, DeliaGrant, AllenLee, VeraTecceDeCarlo, Mary Jean. (2015). Information and DigitalLiteracy in a High-Poverty Urban School: An I-LEARN Project,School Libraries Worldwide , 21 (1), 38-53.
- NRC (1999). Being fluent with information technology, Committee on information technology literacy, National research council. National Academies Press, Washington.
- Oblinger, D. (2003). Boomers, Genxers and Millenials : understanding the new students. Educause review, 38. <http://www.educause.edu/ir/library/pdf/erm0342.pdf> accessed on 15 August 2015.
- Okello-Obura, C. (1998). Legal information sources. Master of Science in Information Science report. (Unpublished)
- Otike, J. (1997), Legal Information needs of the general public with special reference to developing countries, Library Review 46(1).
- Page, Damien. (2015).Teachers’ personal web use at work, Behaviour & Information Technology, 34(5), 443 – 453.
- Pappas, C (2017). 7 tips for promoting digital literacy and skills in e-learning. Accessed at <https://elearningindustry.com/tips-promote-digital-literacy-tech-skills-elearning>
- Patricia G Lange. (2014).Kids on YouTube: Technical Identities and Digital Literacies. Walnut Creek. Left Coast Press.
- Pavey, Sarah . (2006). School Librarians and the google generation, ALISS Quarterly, 2(1), 3-7.
- Pietila, N (2017) The top 10 literacies in Education Today. Accessed at <https://www.skyward.com/discover/blog/skyward-blogs/skyward-executive-blog/march-2017/the-top-10-literacies-in-education-today>



- Pillai, K.N. Chandrasenkharan (2012). Legal Education and the Digital Era in Singh, R., Devroa, S., Rai, P. & Singh, A. (Eds.) International conference on Access to Legal information and Research in Digital Age. New Delhi, National Law University.
- Pillai, K.N. Chandrasenkharan (2012). Legal Education and the Digital Era in Singh, R., Devroa, S., Rai, P. & Singh, A. (Eds.) International conference on Access to Legal information and Research in Digital Age. New Delhi, National Law University. Retrieved from <http://nludelhi.ac.in/download/publication/2015/august/Conference%20Proceedinginternational%20Conference%20on%20Access%20to%20Legal%20Infomration%20and%20Research%20in%20Digital%20Age%202012.pdf>
- Pinto, María, Isabel Escalona, M., Pulgarín, Antonio, Uribe-Tirado, Alejandro. (2015). The scientific production of Ibero-American authors on information literacy (1985-2013), *Scientometrics* , 102 (2), 1555-1576.
- Pun, Raymond. (2015). Conceptualizing the integration of digital humanities in instructional services, *Library Hi Tech*, 33 (1), 134-142.
- Rachel Spilka. (2009). *Digital Literacy for Technical Communication: 21st Century Theory and Practice*. Routledge.
- Ramakrishnegowda, K. C. ,Walmiki, R. H. (2006). Socio – economic background and computer literacy of postgraduate students of kuvempu University: a study of its implications to library services, *SRELS Journal of Information Management*, 43 (3), 271-282.
- Randolph, J.J. 2009. A guide to writing the dissertation literature review. *Practical Assessment, Research & Evaluation*. 14 (13): 1-13.
- Retrieved from <https://www.collinsdictionary.com/dictionary/english/law>
- Retrieved from [http://nludelhi.ac.in/download/publication/2015 august/Conference%20ProceedingInternational%20Conference%20on%20Access%20to%20Legal%20Infomration%20and%20Research%20in%20Digital%20Age%202012.pdf](http://nludelhi.ac.in/download/publication/2015%20august/Conference%20ProceedingInternational%20Conference%20on%20Access%20to%20Legal%20Infomration%20and%20Research%20in%20Digital%20Age%202012.pdf)
- Retrieved from <https://legal-dictionary.thefreedictionary.com/John+Austin>
- Retrieved from <https://legal-dictionary.thefreedictionary.com/John+Austin>
- Retrieved from <https://www.collinsdictionary.com/dictionary/english/law>

- Ribble Mike, Miller Teresa Northern. (2013). Educational Leadership in an Online World: Connecting Students to Technology Responsibly, Safely, and Ethically, *Journal of Asynchronous Learning Networks*. 17(1), 137-145.
- Rivoltella, Pier Cesare. (2008). *Digital Literacy: Tools and Methodologies for Information Society: Tools and Methodologies for Information Society*, IGI Global.
- Robin Good fellow.(2011).Literacy, literacies and the digital in higher education, *Teaching in Higher Education*.16 (1).
- Robinson, Lyn, Bawden, David. (2001). Libraries and open society: Popper, Soros and digital information, *Aslib Proceedings*, 53(5) , 167-178.
- Rogers, D., Swan, K. (2004). Self regulated learning and the internet, *Teachers College Record*, 106(9), 1804-1824.
- Ruth V. Small.(2005). *Designing Digital Literacy Programs with IM-PACT: Information Motivation, Purpose, Audience, Content, and Technique*. Neal-Schuman Publishers.
- Sáinz, M., Castaño, C., &Artal, M. (2008, April). Review of the concept “digital literacy” and its implications on the study of the gender digital divide. Retrieved from [https://www.uoc.edu/in3/dt/eng/sainz\\_castano\\_artal.pdf](https://www.uoc.edu/in3/dt/eng/sainz_castano_artal.pdf)
- Scott Bulfin, Sue North. (2007). *Negotiating Digital Literacy Practices Across School and Home: Case Studies of Young People in Australia*, *Language and Education*. 21(3).
- Shaheen Majid, AlfiyaFaniIievnaAbazova. (1999). Computer literacy and use of electronic information sources by academics, *Asian Libraries*, 8(4), 100 – 111.
- Shiholo Benson Misco ,Ocholla Dennis N. (2003). Changing trends in training needs for information professionals in Kenya, *Library and information Science Research*. 13(1). Available at <http://libres.curtin.edu.au/libres13n1/index.htm>.
- Shrivastava, R. K. (2008). Law Librarianship in India with Special Reference to the Judicial Library System. *International Journal of Legal Information: the Official Journal of the International Association of Law Libraries*, 36(2). 275-299. Retrieved from

<http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1139&context=ijli>

- Shrivastave, R. K. (2008). Law Librarianship in India with Special Reference to the Judicial Library System. *International Journal of Legal Information: the Official Journal of the International Association of Law Libraries*, 36(2), 275-299. Retrieved from <http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1139&context=ijli>
- Shu-Ching Chen. Mei-Ling Shyu. (2012). *Methods and Innovations for Multimedia Database Content Management*. USA. Information Science Reference.
- Stanley, Laura D. (2003). Beyond Access: Psychosocial Barriers to Computer Literacy, *Information Society*, 19(5), 407 – 416.
- Street, Chris. (2005). Tech Talk for Social Studies Teachers, *Social Studies*, 96(6), 271-273.
- Suominen, Vesa ,Tuomi, Pirjo. (2015). Literacies, Hermeneutics, and Literature, *Library Trends*, 63 (3), 615 -628.
- Tella, Adeyinka, Ayeni, C. O. (2006). The Impact of Self-Efficacy and Prior Computer Experience on the Creativity of New Librarians in Selected Universities Libraries in Southwest Nigeria, *Library Philosophy & Practice*, 8(2), 1-12.
- Tenopir, C. (2003). Use and users of electronic library resources: an overview and analysis of recent research studies, *Council on library and information resources*, Washington. Available at <http://www.clir.org/pubs/abstract/pub120abst.html>
- TiborKoltay. (2011). The media and the literacies: media literacy, information literacy, digital literacy, *Media Culture Society*.
- Ting, Yu-Liang.( 2015). Tapping into students' digital literacy and designing negotiated learning to promote learner autonomy ,*Internet and Higher Education*, 26, 25 – 32.
- Tracy, Daniel G. (2016). Assessing Digital Humanities Tools: Use of Scalar at a Research University, *Portal: Libraries & the Academy*, 16 (1), 163-189.

- Tuckett H.W. (1989). Computer literacy, information literacy and the role of the instruction librarian in coping with information literacy: bibliographic instruction for the information age. Ann arbour MI: Pieran Press.
- Tuhumwire, I, Okello-Obura, C (2010) Assessment of Legal Information Needs and Access Problems of Lawyers in Uganda. Library Philosophy and Practice (e-journal). Accessed at <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1394&context=libphilprac>
- Types of Literacies. Accessed at <https://sitwe.wordpress.com/2015/12/14/types-of-literacy-or-literacies/>
- UGC (1990) Report of the curriculum development in Law, New Delhi, p 12
- upload/2014/11/legaeducationreformrecommendationspdf
- Van Dijk J V, Hacker K. (2003). The digital divide as a complex and dynamic phenomenon, The information Society. 19, 315-326.
- Van Joolingen, W. (2004). The PISA framework for assessment of ICT literacy. Available at [www.ictliteracy.info/inf/PISA% 20framework.ppt](http://www.ictliteracy.info/inf/PISA%20framework.ppt).
- Victoria Carrington, Muriel Robinson. (2009). Digital Literacies: Social Learning and Classroom Practices, Sage Publication.
- What is Digital Literacy? Accessed at <https://study.com/academy/lesson/what-is-digital-literacy-definition-example.html>
- Wong, B. and Sawatzky, K. (2014). Presented at Ontario Library Association super conference. The Hidden of Law Libraries. Retrieved from [https://brendawoa.files.wordpress.com/2014/02/hidden\\_world\\_paper.pdf](https://brendawoa.files.wordpress.com/2014/02/hidden_world_paper.pdf)
- Wong, B. and Sawatzky, K. (2014). Presented at Ontario Library Association super conference. The Hidden of Law Libraries. Retrieved from [https://brendawoa.files.wordpress.com /2014/02/ hidden\\_world\\_paper.pdf](https://brendawoa.files.wordpress.com/2014/02/hidden_world_paper.pdf)
- Wong, Yu CheungHo, Kit Mui, Chen, Honglin, Gu, Donghui, Zeng, Qun. (2015). Digital Divide Challenges of Children in Low-Income Families: The Case of Shanghai, Journal of Technology in Human Services, 33 (1), 53-71.
- Yong Jin Park. (2011).Digital Literacy and Privacy BehaviorOnline,Communication Research.
- YoramEshet Alkali, YairAmichai-Hamburger.( 2004). Experiments in Digital Literacy, Cyber Psychology &Behavior. 7(4), 421-429.

- YoramEshet-Alkalai ,EranChajut. (2009).Changes Over Time in Digital Literacy, *Cyber Psychology &Behavior*. 12(6). 713-715.
- Zac Chase,Diana Laufenberg.(2011). Embracing the Squishiness of Digital Literacy, *Journal of Adolescent & Adult Literacy*.54 (7), 535–537.

## APPENDIX I

### QUESTIONNAIRE FOR LIBRARIANS

#### TOPIC: DIGITAL LITERACY AMONG USERS IN LAW INSTITUTE LIBRARIES IN PUNE: A STUDY

#### 1. General information

- i. Name of the Institute:
- ii. Year of establishment of the Institute:
- iii. Name of the Librarian:
- iv. Education qualification:

#### 2. Information of Library

- i. Does the Institute have a separate library building? Yes / No  
If yes, when was it built? \_\_\_\_\_
- ii. Total area of the library:
- iii. Do you have separate reading rooms for the users? Yes / No

#### 3. Search in Library

- i. Acquisition Section Yes / No
- ii. Circulation Section Yes / No
- iii. Periodical Section Yes / No
- iv. Reference Section Yes / No
- v. Computer Section Yes / No
- vi. Digital Library Yes / No
- vii. Binding Section Yes / No
- viii. Any other sections? Please specify  
\_\_\_\_\_

#### 4. Working Hours of the Library

- i. The Library works from \_\_\_\_\_ am to \_\_\_\_\_ pm on working days. From \_\_\_\_\_ am to \_\_\_\_\_ pm on holidays.
- ii. Is there a lunch break for the library? Yes / No

#### 5. Users of Library

- i. Total No. of users: \_\_\_\_\_
- ii. The Library is used by students / professors / research students / staff. Please mark( ✓).
- iii. No. of daily visitors: \_\_\_\_\_

**6. Library Resources :**

Please specify total no. of printed and digital resources of the Library (Till 2015)

- i. Text Books \_\_\_\_\_
- ii. Reference Books \_\_\_\_\_
- iii. Periodicals
  - Current Periodicals \_\_\_\_\_
  - Bound Volumes \_\_\_\_\_
- iv. CDs/ DVDs \_\_\_\_\_
- v. Audio Cassettes \_\_\_\_\_
- vi. Video Cassettes \_\_\_\_\_
- vii. Thesis / Dissertations \_\_\_\_\_
- viii. e-Journals \_\_\_\_\_
- ix. e-Books \_\_\_\_\_
- x. Databases \_\_\_\_\_
- xi. Any other materials (please specify) \_\_\_\_\_

**7. Services Provided by Library :**

▪ Which of the following services do you provide to the users? Please mark ( ✓ )

- i. Reference [ ] [ ]
- ii. Internet browsing [ ] [ ]
- iii. e-document delivery [ ] [ ]
- iv. Current Awareness Service [ ] [ ]
- v. Selective Dissemination of Information [ ] [ ]
- vi. Inter Library Loan [ ] [ ]
- vii. Online databases [ ] [ ]
- viii. CD-ROM databases [ ] [ ]
- ix. Indexing/Abstracting [ ] [ ]
- x. Retrospective [ ] [ ]
- xi. Bibliographies [ ] [ ]
- xii. Scanning [ ] [ ]
- xiii. Any other, services if provided please specify

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▪ Do you allow the users to use the following Law databases? Please mark( ✓ )

- i. Heinonline [ ] [ ]
- ii. LexisNexis [ ] [ ]
- iii. Ebsco [ ] [ ]
- iv. WestLaw [ ] [ ]
- v. Kluwer International [ ] [ ]
- vi. Cambridge e-journals [ ] [ ]

- vii. SSC online [ ]
- viii. Manupatra [ ]
- ix. Any other databases, available please specify:

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- Do you organize Library induction to users? Yes / No
- Do you provide training to users for library resources and electronic databases? Yes / No

**8. Library automation:**

- i. Does your library completed automation? Yes / No
- ii. Which operating system do you use? \_\_\_\_\_
- iii. Which software package do you use?  
Specify the name \_\_\_\_\_
- iv. Total No. of computers available in the library \_\_\_\_\_
- v. Total No. of computers available for library users  
\_\_\_\_\_
- vi. Total No. of printers available in the library \_\_\_\_\_

**9. Digital Literacy Programme (DLP)**

- i. Do you know about the Digital Literacy? Yes / No
- ii. What is Digital Literacy? Please specify

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It is ability to use ICT tools and internet to access Yes / No

Do you want to clarify term in your words, if so please specify

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- iii. Do you believe that Library induction / Digital Literacy Programme helps in competent use of information sources and services?  
Yes / No
- iv. Do you arrange Digital Literacy Programme (DLP) or any other programme related to DLP? Yes/ No

If no, please proceed to question 15.

- v. If yes, what is the frequency of the Digital Literacy Programme?  
\_\_\_\_\_



**10. How do you conduct the Digital Literacy Programme?** Please mark ( ✓ )

- i. Through Library website [ ]
- ii. Through Institute website [ ]
- iii. Through Institute portal [ ]
- iv. Through In Library Induction session [ ]
- v. Through any other programme, please specify [ ]

**11. Who undertakes the Digital Literacy Programme?**

Please mark (✓)

- i. Librarian [ ]
  - ii. Library staff [ ]
  - iii. Visiting Professionals [ ]
  - iv. IT department [ ]
  - v. Representatives / agents [ ]
  - vi. Any other personnel [ ]
- 

**12. Who are beneficiary of Digital Literacy Programme?** Please mark ( ✓ )

- i. Students [ ]
- ii. Law Professionals [ ]
- iii. Faculty [ ]
- iv. Administrative staff [ ]
- v. Any other members [ ]

**13. Which system is used for increasing Digital Literacy Programme?** Please mark ( ✓ )

- i. Library induction programme [ ]
- ii. Lectures/ demonstrations [ ]
- iii. Seminars/workshops [ ]
- iv. Any other programme, please specify:  
\_\_\_\_\_

**14. What are the barriers that affect the useful performance of Digital Literacy Programme?** Please mark ( ✓ )

- i. Lack of internet / wifi connection [ ]
- ii. ICT education [ ]
- iii. Untrained Library staff [ ]
- iv. Technical difficulty [ ]
- v. Any other barriers, please specify  
\_\_\_\_\_

- 15. What is the future campaign you wish to undertake for Digital Literacy Programme in library? Please write a few lines about it.**
- 

Date:

Signature

**APPENDIX II**  
**QUESTIONNAIRE FOR LIBRARY USERS**

**TOPIC: DIGITAL LITERACY AMONG USERS IN LAW  
INSTITUTE LIBRARIES IN PUNE: A STUDY**

**Individual Information**

Name: \_\_\_\_\_

UG Student \_\_\_\_\_ PG Student \_\_\_\_\_ Faculty \_\_\_\_\_

Name of the Institute: - \_\_\_\_\_

**Use of Library**

1. How frequently do you visit the library? Please mark ( ✓ )
  - i. Daily [ ]
  - ii. Weekly [ ]
  - iii. Monthly [ ]
  - iv. Occasionally [ ]
  
2. How much time do you spend in the library? Please specify
  - Hours Per Day \_\_\_\_\_
  - Hours Per Week \_\_\_\_\_
  - Hours Per Month \_\_\_\_\_
  
3. Why do you visit the library? Rate the following according to your preference (1 to 4).
  - i. Borrowing books [ ]
  - ii. To refer reference books [ ]
  - iii. Access internet [ ]
  - iv. To use databases [ ]
  
4. Do you know Digital literacy? Yes/ No
  
5. Have you attended Library induction / Digital Literacy Programme organised by your library? Yes/ No
  
6. What is the intention to use Digital information? Please mark (✓) for all applicable to you.
  - i. Assignment [ ]
  - ii. For teaching [ ]
  - iii. Project work [ ]
  - iv. Writing research papers [ ]
  - v. Research [ ]
  - vi. Moot court competition [ ]
  - vii. Case study [ ]
  - viii. General knowledge [ ]

7. From where do you obtain the required information? Rate the following according to your preference (1 to 4).
- i. Books [ ]
  - ii. Periodicals [ ]
  - iii. Internet [ ]
  - iv. Online databases [ ]
8. Whose helps you to collect the required digital information? Rate the following according to your preference (1 to 4).
- i. Library staff [ ]
  - ii. Friends [ ]
  - iii. Faculty [ ]
  - iv. IT staff [ ]
9. How do you access the necessary digital information? Rate the following according to your preference (1 to 4).
- i. By Digital Library [ ]
  - ii. By computer lab [ ]
  - iii. By using smart phones [ ]
  - iv. By using laptop/ PC [ ]
10. Which information sources do you use regularly? Rate the following according to your preference (1 to 9).
- i. Books [ ]
  - ii. Print / electronic journals [ ]
  - iii. Newspapers [ ]
  - iv. Conferences/ Seminars [ ]
  - v. Thesis & Dissertations [ ]
  - vi. Reference books [ ]
  - vii. Databases [ ]
  - viii. Search engines [ ]
  - ix. Online free law information [ ]
11. Do you know the facilities provided by your Library?  
If know, Please ( ✓ ) all the applicable activities.
- i. Book Circulation [ ]
  - ii. Reference [ ]
  - iii. Current Awareness Service [ ]
  - iv. Selective Dissemination of Information [ ]
  - v. Inter Library Loan [ ]
  - vi. Online databases [ ]
  - vii. CD-ROM databases [ ]
  - viii. Retrospective [ ]
  - ix. Internet browsing [ ]
  - x. CD-Writer [ ]
  - xi. Documents scanner [ ]
  - xii. Wifi [ ]

12. Which online Law databases do you use regularly? Please ( ✓ )  
(You can (✓) more than one of the following online law databases.)
- i. Heinonline [ ]
  - ii. LexisNexis [ ]
  - iii. EBSCO [ ]
  - iv. Cambridge [ ]
  - v. Oxford [ ]
  - vi. Kluwer International [ ]
  - vii. JGATE/ Jstore [ ]
  - viii. DELNET [ ]

Any other online law database, please specify \_\_\_\_\_

For questions 13 – 17,

13. Which of the following information sources do you use to obtain information on enacted laws or amendments? Please ( ✓ ) anyone option
- i. Book [ ]
  - ii. Bare act [ ]
  - iii. Journal [ ]
  - iv. Online database [ ]

14. How do you find the book in the library? Please ( ✓ ) (You can (✓) more than one of the following options.)
- i. Title [ ]
  - ii. Author [ ]
  - iii. Call number [ ]
  - iv. Any other, please specify \_\_\_\_\_

15. If you come across a good article pertaining to your subject matter, which other efficient source would you use for finding analogous articles? Please ( ✓ ) anyone option below.
- i. Periodical Index [ ]
  - ii. Search the database [ ]
  - iii. Bibliography from the article [ ]
  - iv. OPAC [ ]

16. How would you judge your ICT Literacy skills? Rate the following according to your preference (1 to 7).
- i. Make a Power Point Presentation [ ]
  - ii. Using word [ ]
  - iii. Search in OPAC [ ]
  - iv. Using excel [ ]
  - v. Open & save files [ ]
  - vi. Print document / file [ ]
  - vii. Transfer files [ ]

17. How would you judge your Internet Literacy skills? Rate the following according to your preference (1 to 9).
- i. Internet browsing [ ]
  - ii. Sending e-mails [ ]
  - iii. Download articles from internet [ ]

- iv. Download files from internet [ ]
- v. Search the article in the online database [ ]
- vi. Web OPAC [ ]
- vii. Video conferencing [ ]
- viii. Attach files to an email [ ]

18. Judge your ability to access the correct information in e- resources. Please ( ✓ ) anyone option.

- i. High [ ]
- ii. Average [ ]
- iii. Low [ ]

19. Judge your ability to access the Digital information in different criteria. Please ( ✓ ) anyone option.

- i. Relevance [ ]
- ii. Accurate [ ]

20. Give your input regarding the present Library Induction / Digital Literacy Programme provided by the library for the use of e-resources. Please ( ✓ ) anyone option.

- i. Useful [ ]
- ii. Need improvement [ ]
- iii. Dissatisfied [ ]

21. Do you need training / demonstration for following facilities? Please ( ✓ ) Yes/No

	Yes	No
i. Browsing specific article in the databases	[ ]	[ ]
ii. Searching cases in the online database	[ ]	[ ]
iii. Using OPAC	[ ]	[ ]
iv. Online databases	[ ]	[ ]

22. Do you know the merits and demerits of ICT tools and web based services? (Yes / No )

If yes please explain \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

23. Express your views on Digital Literacy Programme?

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Thank You