Increasing Scope of Information and Digital Literacy for Informed Citizens in the Perspective of Education

Rishabh Kumar Jain[1], Mamta Rani[2], A.N.K. Mayuri[3], Shiva Kanaujia[4]

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Abstract

In this age of information, the internet has added amazing changes to the educational and research world. This paper discusses about the role of information literacy and needfulness in academic environment. The information literacy will help to understand the relevance of information sources, products and services to the library users at present digital era. It also gives the ability to understand the information and evaluate the fact and fiction to take the right decisions for the progress of the society to change the world into a knowledge society. Libraries also play a vital role in promoting information access and fostering information literacy. Libraries contribute to increased access digitally and physically mode to knowledge by gathering and organizing resources and making them freely available. The awareness of research supported services, workshops; orientations organized by libraries are very much useful to its users.

Keywords: Information Literacy, ICT, Knowledge Society, Digital Literacy, Higher Education.

INTRODUCTION

Information literacy gives the ability to understand the information and evaluate the fact and fiction so based on the information anyone can utilize the information in its best way to achieve their social, personal, professional, educational goals. In the digital world, information literacy is a part of human rights. Information literacy majorly includes research skills, traditional literacy, critical thinking skills and computer literacy. With the advent of false news, and misleading information, the requirement of information literacy is an emerging topic of interest for all educators and librarians. "The term "Information Literacy (IL)" occurred in 1974 by Zurkowski in the US. Its widespread use started after 1989 and has gained importance worldwide over the last decade".

Information literacy will help to understand the relevance of information sources to take the right decisions for the progress of the society to change the world into a knowledge society. It is the base for learning and creates sense-making ability among the users. As a nation, India is turning towards a knowledge society, and it is necessary for research scholars, Students and educators to have information literacy skills and abilities to achieve their goals. The COVID-19 pandemic has compulsively us to stay at home and spend more time on the Internet, be it for office work, online education or to connect with friends and families. So digital literacy is becoming increasingly significant, and its role is crucial to distinguish between fact and fiction. Digital literacy can be defined as an

Author's Affiliation: [1]Professional Assistant, [2]Assistant Librarian, [4]Deputy Librarian, DR. B. R. Ambedkar Central Library, JNU, New Delhi 110067, [3]Research Scholar, Department of Library & Information Science, Sri Venkateswara University, Tirupati, Andhra Pradesh.

Coressponding Author: Rishabh Kumar Jain, Professional Assistant, DR. B. R. Ambedkar Central Library, JNU, New Delhi 110 067.

E-mail: rishabhjain965@gmail.com

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ever-expanding range of technical skills, abilities, and behaviours.

India and Knowledge Society: Few Concerns and Initiatives

In a knowledge society, knowledge becomes the factor of production and plays a crucial role in social and economic development. "In the knowledge economy, the knowledge-driven industries have much higher economic growth in volume and revenue than manufacturing and agriculture. Knowledge society also requires intellectually motivated, creative, competitive decision-makers who can enable knowledge organizations to achieve their goals." This workforce would use "information resources, services and systems judiciously, rationally and sufficiently to pursue their professional, organisational, and social goals." Information literacy competency development programmes can adjust and sharpen information resource utilization.

Every age, stage and phase of a person's life, starting from school to higher education and social to professional life, requires information literacy. "With the emergence of knowledge-based industries, the digital divide in India seems to be a bottleneck in providing information infrastructure and adequate workforce supply necessary for this sector and supporting the industry. However, the country has made substantive progress in this area. Thus, policymakers and social scientists are adopting various frameworks to address India's digital divide" to achieve overall economic growth. ICT is being used globally as a tool for "social welfare, better governance, illiteracy eradication and poverty removal. ICT is also being used to empower certain social groups, like farmers, women, students, artisans, and common citizens. In India, ICT is adopted at the grass root level through various initiatives and pilot projects" (Ghosh, Das[1]) on an experimental basis.

The PPP (private-public partnerships) model is established across India, where corporate organizations collaborate with non-governmental organizations (NGOs).Self-help groups and local government bodies are taking initiatives for "social development and social welfare programmes out of their social outreach. Many developmental and funding agencies at the national or international level collaborate with local self-help groups, NGOs, and volunteering societies to address the digital divide in India" (Ghosh, Das[1]). The central, state or local governments take appropriate steps

in employment generation, economic growth, and information infrastructure development. NKC, a recent initiative of the GOI is a concerted approach to making India a significant economic power in the global scenario. The NKC will also provide adequate action inputs to achieve a knowledge society's goal.

Conceptual Background

Teaching faculty, "writing and topic formation research proposal composition, and drafting of human subject require compliance of applications. The librarian is responsible for teaching research methods and library literacy." (Cooney & Hiris[2]), (Hooks[3]) asserted that this model of teaching information literacy skills works because students are "immersed, through assignments and interaction with librarians and discipline faculty, in the totality of all the information competencies that make their field unique and rewarding." (Lampert[4]) described "ongoing faculty–librarian collaboration in designing and teaching a graduate-level research and writing course at SUNY Plattsburgh to help students prepare a required master's thesis." Course assessments indicate that students feel that the course has helped them to "make significant progress" on their theses.

(Cope[5]) examined a sample of key writings on IL through the lens of social power research as articulated by Scott and his differentiation between "mainstream" and "second stream" social power research. "Critical pedagogy arose out of and has been heavily informed by some of the key thinkers of the second stream tradition of social power research. The presence of second-stream concepts would suggest that information literacy theorists have considered the questions that this tradition poses and are developing a robust and critical theory of IL. Selected LIS literature on IL will be analyzed and placed into one of these categories using the method of discourse analysis." (Halkar[6]) observed that information literacy (IL) is inextricably associated with information practices and critical thinking in the information and communication technology environment. There are various "programmes taken throughout the world from 1980s to make the people information literate. Librarians, Teachers Library schools and Library Associations can play major role to promote information literacy." He discussed the concept of information literacy, its need in present scenario and its role in the 21st century.

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Information Literacy in Higher Learning Institutions

Information culture understands the role of information in our daily lives. Information literacy has massive importance to the higher education. Information explosion has increased the capacity to access and use of information. It's all due to availability of electronic resources but still it requires the skills to explore the correct information which leads to the problems solver and betterment for the knowledge society. Higher learning institutions i.e. universities and research institutions, provide user education, library orientation and bibliographic instruction programmes, Ghosh, Das[1]. In universities, a research methodology course has covered library tools and techniques for research outcomes. Universities and research institutions subscribe to various e-resources by themselves or on a consortium basis (Ghosh, Das[1]). Libraries conduct many users training programmes with resource experts to use e-resources. The Indian Medlars Centre of NIC conducts a "quarterly user-training programme on their information products and services designed for medical professionals and libraries." (Ghosh, Das[1]). These databases are "IndMed databases, medIND open access journal literature, Open MED open access archive and UNCat union catalogue databases, etc.

They also conduct orientation and refresher courses to impart information literacy competency to the learners. The Universities also conduct the orientation programme to their academics from time to time to use electronic resources. In corporate organizations and corporate R&D centres, information literacy competency is an essential trait of researchers." The researchers are being taught the latest discipline-oriented information resources available within and outside the organizations.

Access to information

Access to information is a prerequisite for information literacy because, without it, it is impossible to practice the skills of assessing, synthesizing, and utilizing information. The right of every person to "seek, receive, and transmit information and ideas, through any means and without respect to boundaries" is affirmed in Article 19 of the United Nations Universal Declaration of Human Rights (UN 1948, 2005, 2016[7,8,9]). In other words, people require access to reliable, verifiable information to make their decisions and opinions and adequately exercise their right to vote, free expression of ideas, and free assembly (Saunders[10]).

This dependence is demonstrated by the fact that every definition and conceptualization of information literacy counts access to information as one of the core competencies.

Information Literacy Programmes for LIS Professionals

For educators and librarians, the academic staff colleges established in universities frequently offer orientation/refresher courses to help them improve their skills to identify and access information in a changing environment. The libraries and information centers of many departments offer employee orientation programs to help them learn how to access information. The national documentation centers, such as the National Institution of Science Communication and Information Resources (NISCAIR) (formerly DOC) and the National Social Science Documentation Centre (NASSDOC) were "important in assisting the nation's LIS professionals in acquiring the skills necessary for information access. School librarians regularly participate in orientation programs and refresher courses offered by organizations" like the National Council of Education Research and Training (NCERT) and the State Council of Education Research Council (SCERT) (Ghosh, Das[1]). Librarians can help people improve their cognitive or intellectual access to information and information literacy by offering educational sessions and personal consultations and creating online research tutorials and guides.

Combining Many Roles of Libraries

Libraries have a part to play in promoting information access and fostering information literacy. Some libraries even loan out mobile hotspots and handheld gadgets to give patrons access to the internet at home. Libraries can help generate social capital and hence promote social access to information by serving as community hubs where various people can mingle and connect. Increased community involvement and trust levels proved highly associated with library use across several social capital variables (Johnson[11]). Libraries contribute to increased physical access to knowledge by gathering and organizing resources and making them freely available. The technology required to access digital content is also made available through libraries. For example, the following tables and data reflects the various steps taken by Dr. B. R. Ambedkar Central Library, Jawaharlal Nehru University, New Delhi in context

with digital literacy, information provisions and educational perspectives.

Personal Data and Literacy

It is not possible for even an intelligent user to figure out who all have access to his or her data because the data containing personal information is included in data packages that are sold to various other parties by data brokers. Now, along with digital skills and internet access, the capacity to safeguard one's personal information and minimize one's "digital footprints" should be recognized as a crucial component of digital equality. Data and data analytics tools are now only accessible to those with advanced computational abilities and data mining

Table 1: Digital Literacy Program 2020.

S.No	Topic	Year
1	Orientation Program On Library E-Resources and Services	03rd-4th Feb 04, 2020
2	National Workshop on Scholarly Publishing, MOOCs and OERs in Education and Research	13th Feb 2020
3	Workshop on facilitating theses writing with AuthorCafe.com	19th February, 2020
4	User Awareness Program on Reference Management and other editing tools for Research using JAWS on	29th February, 2020
5	Workshop on Writing for Publishing: Articles for Peer-reviewed Journals	4th March 2020
6	Three Day Workshop on Research Support Tools & Services for Research Scholars	16th -18th March, 2020
7	Webinar on IEEE Initiative during Covid-19	15th May,2020
8	Webinar on Shodh-Shuddhi Web-based plagiarism detection software URKUND	30th May, 2020
9	Webinar on CHECK FOR PLAG anti-Plagiarism software tool for Regional Languages	30th May, 2020
10	E-Workshop on "Publishing Ethics and Research Methodology	12th–14th August, 2020
11	Webinar on 'SciFidner-n: Less search, more research'	11th September, 2020
12	e- Workshop on Research Support Services and Publication Ethics	23rd-25th September, 2020
13	e-Workshop on Publishing Ethics	15th October, 2020
14	Two-Day e-Workshop on Research Methodology and Publication Ethics	23rd-24th October 2020
15	e- Workshop on Research Support Services and Publication Ethics	5th-6th November, 2020.
16	e-Workshop on Publishing Research	17th December, 2020

Table 1 shows that in the year of 2020 library organized many workshop, webinar, orientation programme on different topics for promoting information access and fostering information literacy.

Table 2: Digital Literacy Program 2021

S.No	Topic	Year
1	e- Workshop on Research Methodology	11th–12th January, 2021
2	e-Library Orientation Programme	20th– 21st January, 2021
3	National "Webinar on Gathering Knowledge: exploring e-books during Covid-19"	28th January, 2021
4	Two-Day National Webinar on Research Methodology and Publication Ethics	4th– 5th February, 2021
5	Library e-Orientation Program	23rd- 24th February, 2021

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6	Five-Day e-Workshop on Research Methodology and Publishing Ethics	10th-14th March, 2021
7	User Awareness Training Webinar	23rd April, 2021
8	e-Workshop on Qualitative Research Methodology and Anti-plagiarism software	25th May, 2021
9	E-Workshop on Literature Review and Use of NVIVO software for Research Scholars.	30th June, 2021
10	User Awareness Training Program	16th July, 2021
11	e-Library Orientation Programme	28th July, 2021
12	National Workshop (virtual) on Research Methodology and Publication Ethics	12th -14th August , 2021
13	National Workshop (virtual) on Research Support Tools and Publication Ethics	15th-16th September, 2021
14	User Awareness Workshop on Web of Science and Endnote	29th October, 2021.
15	Five Day National e-Workshop on Research Methodology and Publication Ethics	22nd- 26th November, 2021

Table 2 explained that in the year of 2021 library conducted workshop, webinar, orientation programme on research methodology, publication ethics, literature review, Anti-plagiarism software, etc. for digital literacy.

Table3: Digital Literacy Program 2022

S.No	Topic	Year
1	e-Library Orientation Programme	18th–19th January, 2022
2	National Seminar on Ensuring Mental Health and Well-being	9th February, 2022
3	Five Day National Virtual Workshop on Research Methods, Tools and Plagiarism Detection Software	21st-25th February, 2022
4	An orientation cum training session on SCC Online Database	16th March, 2022
5	E-Orientation Programme	27th–28th April, 2022
6	e-Workshop on Research and Publishing Ethics	25th–29th July, 2022
7	Library Orientation programme	6th-7th October, 2022

Table 3 discusses that in the year of 2022 library digitally conducted workshop, webinar, orientation programme on mental health, research methods, tools, online database, publishing ethics, plagiarism detection software, etc.

knowledge, meaning that most of the world's most potent firms having access to large amounts of data include Google, Facebook, and Amazon (Micheli et al.[12]; Kennedy, Elgesem & Miguel[13]). Nowadays, there are many online platforms where users are asked to share their confidential information, such as their name, address, and account information. Users, without knowing the consequences, share all their information which is then used in unfair means such as data mining and tracking the consumer through consumer tracking and various other means.

Stressing on the above topic, many researchers have advised to boom digital literacy among people so that they can get an idea of what all this means and can remain safe from it (Gray et al.[14]; Iordache et al.[15]). The concept of this digital literacy usually consists of three main aspects: knowledge, competencies, and competence in which information refers to "an understanding of the to-be-had virtual tools, competencies to the sensible abilities" so that one can apply them in practical life as well. The concept of digital literacy is now being practiced in most of the EU countries. They have made it a part of primary education so that all citizens can get basic digital knowledge and remain safe from all these activities.

DISCUSSION

Recent work in critical data studies has made tremendous progress in identifying the drawbacks of datafication, including surveillance capitalism and dataveillance, data colonialism, data mining, digital footprints and traces, anxiety induced by datafication, or the power that algorithms and automatic decision-making wield. This is still a work in progress since we constantly deal with emerging technology, new goods, and systems.

Educators who are creating their data proficient ability:

- Interact in educated skepticism when assessing data and its sources

- Address conventional sources of expertise and publishing venues

- Reflect severely on their personal facts behaviors and the way they could replicate and perpetuate the fame quo.

- Address conventional developments of authority

- Esteem data and sources from diverse perspectives

- Recognize the effect of the channel bubble/echo chamber and effectively look for out diverse sources of information

- Are enabled to work for alter in data structures (Saunders10).

Inquire about work has begun as numerous analysts create new strategies and hone that point to assist clients as citizens ensure their privacy and exploring ways to handle the information to benefit clients more than it does presently. There have to be discovered arrangements for the issues of datafication. As datafication certainty continues, it ought to be inquired what kind of information society takes care of all citizens' prosperity and reasonably treats citizens. How a datafied organization may end up a welfare information society?

CONCLUSION

In a welfare information society, the rights and prosperity of citizens are fortified through instruction. By expanding the level of computerized and information foundation education, the user/citizen knows her rights and is competent of utilizing them. Numerous nations have, as of now, made endeavors to move forward with advanced education in tutoring, but instruction on computerized education, particularly information framework education, ought to reach those who have not picked up this kind of instruction or whose information is obsolete.

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