

DIGITAL LITERACY AMONG THE USERS OF ABV- IITM, GWALIOR

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This paper aims to throw light on the digital literacy among the respondents of ABV-IIT, Gwalior. This paper covers familiarity of users with internet resources, purpose and frequency of using those resources, web-based services and its frequency of use, training literacy programme needed for enhancement, devices used for access and constraints faced while using these resources.

Keywords: Digital Literacy, ICT skills, digital skill, Information and Communication Technology, IITM, web-based services, online resources.

INTRODUCTION

In this present information age digital information expanding rapidly and users irrepealably reaching out to the digital and electronic information. With the advent of technology user's mindset and seeking behavior have been changed drastically. Rahmah (2015) stated Digital literacy is not a new strategy for a student to gain the information and knowledge needed. The capability to use the technology to allow us to right to use the materials is a key aspect of digital literacy. As a starting point, the obvious aspect of digital literacy is an internet. The internet is a no longer complementary tool but primary need in this era.

According to Wikipedia "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. While 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 to 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. Digital literacy overlaps with computer literacy, as most digital media technologies require some level of computer competency. Comments 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". Library has many e-resources/ digital resources.

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REVIEW OF LITERATURE

Pingo (2019) presents the case for privacy literacy from an information literacy perspective as a complementary mechanism to the existing approaches to protecting individuals' information privacy. The research used a constructivist paradigm, through interviewing twenty-one participants, and through online observation of SNS (social network services), and a privacy-settings walkthrough specifically on Facebook, and asking participants to track their online footprints and talk about any personal information found online.

Lipkova et al. (2019) approached used by libraries so far are based on partial, intuitive forms of assessment. In our study, we prove that the analysis of such networks can be based on a theoretically, as well as methodologically, rigorous approach. This article outlines the possibilities of using - Social Network Analysis (SNA) - in the field of library and information science (LIS). The main contribution of this study is the pilot verification of SNA in a local library in a small-town environment, in this case the town of Sedlčany located in Central Bohemia (population: 7,000). The SNA was applied using basic descriptive measures within the sociocentric approach and subsequently compared to the results of the subjective, intuitive self-assessment of the egocentric network by the library staff.

Hannes, Steffen and Rott (2018) say that Internet has become a pivotal source of information among university students. However, studies routinely show that many students lack digital information literacy skills (i.e. skills needed to find and evaluate information online). In this paper, we report results from an experimental study testing the effect of a workshop for third-year students of a German university. The workshop was designed to teach relevant information literacy skills in a computer lab. Afterwards, students were given academic search tasks and their search behavior was recorded with a tracking device. We find that, compared with the control group, workshop participants significantly increased their use of academic databases and

cited more articles from scholarly journals. On the other hand, we find no effect on the relevance of the content students found online. Teaching digital information literacy is essential and feasible, but it is no panacea for increasing the academic quality of students' work.

Mange Ram (2017) explore information literacy program in university libraries of Uttar Pradesh especially the awareness of information resources (Information Literacy) in concerned libraries. For the purpose questionnaires issued directly to the users of 300 to collect the data on user's points on the evaluation of information literacy program in these libraries. The data could be thus be collected responding from users of five State university libraries which forms 276 (92%) of response out of 300 users and through personal visit and personal interview also held with users. At the end of study, recommendations are made for improvement of the program and study concluded that there should be more awareness of information resources for information literacy in concerned universities libraries.

Anajoyce (2016) revealed in his study that majority of the students reported using electronic journal resources for various purposes. Major challenges faced in the use of e-journal resources include power outage, inadequate bandwidth, slow download speed, inability to access the resources from home, lack of training, lack of awareness, limited access to computers and difficulty in searching.

Patel and Modi (2016) examined different aspects of electronic resources and its services used by mechanical engineering students of SAL engineering and technical institute, Ahmedabad. After analysis of this paper, it is found that e-resources are most important for the information and knowledge for students.

Rahmah (2015) discusses a learning system model dedicated to deliver digital literacy education to the Indonesian citizen. Objectives of this research are increasing awareness towards digital literacy concept and preparing citizen to

be digitally literate and competent using ICT to support their learning process, doing their work more effective and efficient, and preparing Indonesian young generation to become qualified workforce competing in FTAAP 2020, furthermore international work competition. This paper delivers analysis for learning system model as a result from the initial research of research series about digital literacy education in Indonesia. Resulting model justified by sets of detailed scenario about how this model works.

Bhatt and Rana (2011) studied many aspects of e-resources used among engineering academics of Rajasthan. Paper reveals that academic staff were using many types of e-resources and also using the latest sources of information like e-groups, virtual conferences. It has been observed in the study that their academic/professional competency improved as well as teaching methodology also involved the use of e-resource and the student ability was also affected in a positive manner. Some problems were also explored in using e-resources. It is found in the study that the majority of users were quite satisfied with using e-resources.

Karisiddappa (2005) has explored the concept and characteristic of information literacy. Author has also deliberated upon the origin and growing importance of information literacy and had suggested that it should be included not only in library and information science curriculum but also in all curriculums from school education to higher education. He suggests that information literacy is a tool for capability building.

OBJECTIVES OF THE STUDY

The main objectives of the study are delineated below

1. To know the familiarity of using internet resources.
2. To study and find out the purpose and frequency of using web based services.

3. To analyze the digital literacy programme and training needed by the respondents.
4. To find out the devices used for accessing internet for research and work.
5. To identify the constraints and limitations faced while using digital resources by the respondents.

RESEARCH METHODOLOGY

The methodology used for this paper is structured questionnaire for gathering data from the students and faculty members of Atal Bihari Vajpayee - Indian Institute of Information technology and Management. Questionnaire were distributed among 180 users (As, I have taken sample more than 10 % i.e.16. 65% for sampling research as total population is 1081). I received back 157 filled questionnaires out of 180, which is a good response.

ANALYSIS OF DATA

Questionnaires have been distributed among total 180 respondents (i.e. 65 to Graduate students, 65 to Post Graduate students, 25 to Ph.D. Scholars, and 25 to Faculty & Staff members). Out of 180 questionnaires 157 filled in questionnaires were received and was further analyzed as per shown in Table 1.

Table 1: Distribution of Questionnaire to Respondents

Category	Total Population	Questionnaire Distributed	Questionnaire Received
Graduation	450	65	59
Post Graduation	550	65	56
Ph.D. Scholar	41	25	22
Faculty & staff	40	25	20
Total	1081	180	157

Familiarity with Internet Resources

The respondents were asked to tick familiarity with internet resources and tools such as search engine, gateway, web portal, open Access e-book/ e-journal. The responses received are tabulated in the Table 2. It is clearly revealed from the table 2 that users are techno friendly. In graduation 96.43% respondents are familiar with search engine and web OPAC,

more than 80% respondents are familiar with gateways, meta search engine, online databases, web portal & Digital library Archives.

As per data shown in table 2 more than 90% of respondents of Post Graduation are familiar with internet resources & tools exception has been notified in the case of open access e-books/ e-journal (i.e. 88.14%). Similarly, more than 90%

Table 2: Familiarity with Internet Resources

Internet Search Tools	Graduation	Post Graduation	Ph.D. Scholar	Faculty & Staff
Search engine	54 (96.43%)	58 (98.31%)	22 (100%)	18 (90.00%)
Gateways	48 (85.71%)	56 (94.92%)	22 (100%)	17 (85.00%)
Web Portal	45 (80.36%)	55 (93.22%)	19 (86.36%)	17 (85.00%)
Open Access e-books/ e-journal	44 (78.57%)	52 (88.14%)	20 (90.91%)	18 (90.00%)
Digital Library / Archives	45 (80.36%)	55 (93.22%)	21 (95.45%)	19 (95.00%)
Meta Search engines	47 (83.93%)	54 (91.53%)	19 (86.36%)	18 (90.00%)
Online Databases	47 (83.93%)	56 (94.92%)	20 (90.91%)	19 (95.00%)
Web OPAC	52 (92.86%)	58 (98.31%)	21 (95.45%)	20 (100%)

Table 3: Purpose of Using Internet Based Services

Purpose of Using Internet based services	Graduation	Post Graduation	Ph.D. Scholar	Faculty & Staff
Study	50 (89.29%)	57 (96.61%)	22 (100%)	18 (90.00%)
Research Work	31 (55.36%)	56 (94.92%)	22 (100%)	17 (85.00%)
Networking with Friends	48 (85.71%)	57 (96.61%)	17 (77.27%)	20 (100%)
Personal Work	43 (76.79%)	52 (88.14%)	19 (86.36%)	16 (80.00%)
Professional Activities	45 (80.36%)	46 (77.97%)	21 (95.45%)	20 (100%)

accounted in all options except web portal and meta search engine in case of Ph.D. scholars, whereas in the case of teachers and faculty the least percentage have been recorded for gateway and web portal.

Purpose of Using Internet Based Services

In order to assess the purpose of using internet-based services respondents were asked to point out their needs as depicted and tabulated in Table 3. A great majority of students of Graduation, Post Graduation and Ph.D. uses internet-based services for their study. Similarly, massive majority of post graduation, Ph.D. and faculty members have shown their interest in research work, networking with friends, personal work and professional activities.

Web based Services

It is clearly revealed in Table 4 that 100% of respondents of all category are using email. Similarly, 100% of respondents of Ph.D. & faculty members

recorded that they are using social networking sites also. At same time more than 90% of respondents of post graduation, Ph.D. and faculty members are using web-based services for e-learning and audio video sharing except Ph.D. scholars.

Frequency of Using Web based Services tools and Resources

It is been clearly depicted from Table 5 that 100% respondents of graduation, Post Graduation and Ph.D. are using web-based services, tools and resources every day. At the same time 85% of faculty are using web-based resources every day and 15% notified using the resources – times in a week.

Need of Digital Literacy Programme

The responses were tabulated in the Table 6 reveals that majority of respondents in Graduation needs digital literacy programme in information content

Table 4: Web based Services

Web based Services	Graduation	Post Graduation	Ph. D. Scholar	Faculty & Staff
E-mail Service	56 (100%)	59 (100%)	22 (100%)	20 (100%)
Social Networking Sites	54 (96.43%)	57 (96.61%)	22 (100%)	20 (100%)
E-learning & webpage creation Software	49 (87.50%)	55 (93.22%)	20 (90.91%)	18 (90.00%)
Audio & Video Sharing Sites	53 (94.64%)	58 (98.31%)	19 (86.36%)	18 (90.00%)

Table 5: Frequency of Using Web based Services tools and Resources

Category	Everyday	2-3 times in a week	Once in a week	As & when required	Rarely
Graduation	56 (100%)	-	-	-	-
Post Graduation	59 (100%)	-	-	-	-
Ph. D Scholar	22 (100%)	-	-	-	-
Faculty & Staff	17 (85.00%)	3 (15.00%)	-	-	-

briefing, in Post Graduation 37.29% and faculty same time Ph.D. scholars needed digital literacy with 40% needed digital literacy programme in training both in online resource sharing (with filtering junk information while searching, at the 27.27%) and filtering junk information (with 40%).

Table 6: Need of Digital Literacy Programme

Digital Literacy Programme	Graduation	Post Graduation	Ph. D. Scholar	Faculty & Staff
Information Retrieval Training	10 (17.86%)	8 (13.56%)	-	-
Information Content briefing	20 (35.71%)	12 (20.34%)	5 (22.73%)	5 (25.00%)
Institutional Repository Accessing/ Browsing	8 (14.29%)	8 (13.56%)	5 (22.73%)	5 (25.00%)
Online Resources searching skills	6 (10.71%)	9 (15.25%)	6 (27.27%)	2 (10.00%)
Filtering Junk information while Searching	12 (21.43%)	22 (37.29%)	6 (27.27%)	8 (40.00%)

Table 7: Devices used for Internet Access for work and research

Devices	Graduation	Post Graduation	Ph. D. Scholar	Faculty & Staff
Smartphone	7 (12.50%)	5 (8.47%)	-	2 (10.00%)
Laptop	42 (75.00%)	50 (84.75%)	19 (86.36%)	18 (90.00%)
Desktop	2 (3.57%)	3 (5.08%)	3 (13.64%)	-
Notepad	2 (3.57%)	-	-	-
i-pad	3 (5.36%)	1 (1.69%)	-	-

Table 8: Constraints While Using Digital Resources

Constraints	Graduation	Post Graduation	Ph. D. Scholar	Faculty & Staff
Slow Access Speed	45 (80.36%)	47 (79.66%)	15 (68.18%)	15 (75.00%)
No Computer Lab	-	-	-	-
Frequent Power failure	-	-	-	-
Lack of IT knowledge	-	-	-	-
Limited Working Hour of Library	-	-	-	-
Unavailability of Digital Resources in Library	-	-	-	-
Copyright Issues	11 (19.64%)	12 (20.34%)	7 (31.82%)	5 (25.00%)

Devices used for Internet Access

As per responses pointed in the questionnaire tabulated in Table 7 that majority of respondents in all users prefers Laptop for accessing internet for work and their research related activity. Very few numbers of respondents are using other devices.

Constraints While Using Digital resources

It is observed in the Table 8 that the majority of respondents identified slow access speed as major constraint while using digital resources and few respondents also pointed copyright issues as the constraint.

CONCLUSION

Libraries all over the world have been faced with the evolving technological advancement, globalization, and digitization of information. These have led to library automation, digital and virtual libraries. The acquisition digital literacy skills by librarians have been discovered to enhance individual service delivery and career progression. For librarians to fulfil their primary aim of meeting the information needs of users and the institutions, the librarians must be empowered with all necessary digital literacy skills to accomplish their mission.

Digital Information literacy is the set of skills and knowledge that allows people to find, evaluate and use of information that they need, Information technology skills are the basic skills to be acquired in the use of information. In the era of lifelong learning Digital information literacy is relevant for all age group citizens. Digital Information literacy is considered to be the standard for acquiring higher education. Library and information skills, internet skills and computer skills are now integrated into Digital information literacy skills. During the past few decades literacy form also undergone substantial changes, though effective interaction with information in this virtual world based on designing of user-oriented environments. The transition of text to digital screen the point of framework stated in

this paper that digital skill is needed to apply in the real life for seeking information. Student's needs orientation programme to enhance the technology skills as digital literacy is ongoing & vicious learning process.

REFERENCES

- [1] Anajoyce, S.K. (2016). Use of electronic journal resources by postgraduate students at the University of Dar es Salaam. *Library Review*, 65 (6/7), 445-460. <https://doi.org/10.1108/LR-11-2015-0108>.
- [2] Bhatt, S., & Rana, M. S. (2011). E-information usage among engineering academics in India with special reference to Rajasthan State. *Library Hi Tech*, 29 (3), 496-511.
- [3] Hannes, W., Steffen, H., & Karin, J. R. (2018). Can digital information literacy among undergraduates be improved? Evidence from an experimental study. *Teaching in Higher Education*, 23 (8), 909-926.
- [4] Karisiddappa, C. R. (2005). Literacy Concepts in the LIS: Information Literacy and capability Building. *International workshop on Democratization of Information: Focus on Libraries*.
- [5] Lipkova H., Diviak T., Jarolimkova A., Drobikova B., Landova H. (2019). Assessing Libraries' Community Roles, Proof of Concept. In Kurbanoglu S. et al. (Eds), *Information Literacy in Everyday Life*. ECIL 2018. Communications in Computer and Information Science, vol 989. Springer, Cham.
- [6] Mange Ram (2017). Awareness with the Use of Information Resources (Information

- Literacy) in University Libraries of UP: AN Evaluative Study. 2nd International Conference on ‘Conjugative Management, Library Information Science, Social Science and Technology for Virtual World (ICCLIST’17)’ organized by Modern Rohini Education Society, New Delhi on 15-01-2017, 107-111. ISBN: 978-1-63535-633-5
- [7] Patel, M. B., & Modi, A. M. (2016). An in-depth study of use of e-Resources by the students of Mechanical Engineering Department of SAL Engineering and Technical Institute”, Ahmedabad. *International Journal of Information Dissemination and Technology*, 6 (4), 237-241.
- [8] Pingo Z., Narayan B. (2019). Privacy Literacy and the Everyday Use of Social Technologies. In Kurbanoglu S. et al. (Eds), *Information Literacy in Everyday Life. ECIL 2018*. Communications in Computer and Information Science, vol 989. Springer, Cham
- [9] Rahmah, A. (2015). Digital Literacy Learning System for Indonesian Citizen. *Procedia Computer Science*, 72, 94-101. doi: 10.1016/j.procs.2015.12.109.