Student's perception towards Information Literacy Awareness: A case study of postgraduate students of the University of Calcutta, West-Bengal, India

Amita Roy

Research fellow, Department of Library and Information science, University of Calcutta

royamita2015gmail.com

ABSTRACT

Purpose: The main concept of information literacy is how to locate information, how to evaluate information and how to use information. My subject of study intends to underpin the students' perceptions towards Information Literacy awareness among the post-graduate students of the University of Calcutta.

Design/ methodology/ approach: A survey method is used for the present study where a set of questionnaire was designed for the data collection. The questionnaire are both open ended and close ended. The objectives of this paper are to identify their information seeking behavior and search strategy of the postgraduate students of the University of Calcutta; to identify the information needs and the use of information of them, to recognize the IT skills among students, and to identify the knowledge about digital literacy of them.

Findings: Students can retrive information from different sources and use it in their educational purpose. In the part of using information, they are quite unconscious about it. 69% of users known about the terms and conditions of copyright and fair use. But only 15% users know how to use citation properly and 33% users known about plagiarism.

Limitations: This study is limited to the post graduate students of various department of the University of Calcutta.

Originality/values: This article is totally original from all aspects and manuscript have not been submitted anywhere previously.

KEYWORDS: Academic Library, university library, information literacy, digital literacy, information seeking behavior, search strategy, information need, use of information, IT skills.

INTRODUCTION

Locating 'Information' using 'Google' is effortless, but Information Literacy is more than that. It is a dynamic process of learning and teaching that is crucial for higher education settings. Students have a positive and negative effect on the gaining of information literacy. The concept of information literacy not only the identifying, locating, evaluating, sharing and using information, but also encompass the broad aspect of engendering lifelong learning, empowering students and promoting social inclusion.

The phrase 'Information Literacy' first appeared in print in a 1974 report written on behalf of the National Commission on Libraries and Information Science by Paul G. Zurkowski, who was at the time president of the Software and Information Industry Association. According to American Library Association, "Information literacy also is increasingly important in the contemporary environment of rapid technological change and proliferating information resources. Because of the escalating complexity of this environment, individuals are faced with diverse, abundant information choices--in their academic studies, in the workplace, and in their personal lives" (Information Literacy, 2015)

Review of literature

Information Literacy should embrace learning outcomes of the four dimensions of learning: cognitive, meta-cognitive, affective and social-cultural (Li, 2006). Information in any format is produced to convey a message and shared via a selected delivery method. Now a day, information literacy has become a set of courses at many institutions. It serves the library community to be able to provide information literacy through instruction in a variety of formats, including online learning and distance education. The relevant literatures are mentioned below:

INFORMATION LITERACY MODELS

There are several models for Information Literacy. PLUS model is developed by James E. Herrings in 1991 in Scotland. The key elements of the model are- Purpose, Location, Use and Self-Evaluation. Seven faces of Information Literacy Model is developed by Christine S. Bruce in the year 1997. DIALOGUE model is developed by INFOhio, the information network Ohio school in Cuyahoga Country in 1998. DIALOGUE defines as Define, Initiate, Access, Locate, Organize,, Guide, Use, Evaluate the process. The Big6 Information Literacy Model is developed by Mike Eisenberg and Bob Berkowitz in 2001. The six stages are- Task identical, Information seeking strategies, Locating and access sources, Use of information, Synthesis, Evaluation of the process (Swapna and Biradar, 2017). SCONUL working group introduced an Information Literacy model in 1999. The seven pillars define as Identify, Scope, Plan, Gather, Evaluate Manage, Presentation of Information(Bent and Stubbings,2011). EMPOWERING 8 IL Model is developed by IFLA-ALP sponsored Information Literacy workshop hosted by the National Institute of Library and Information Science, University of Colombo, Sri Lanka in 2004. The components of this model are- Identify, Explore, Select, Organize, Create, Present, Access, Apply (Wijetunge and Alahakoon, n.d.). Santharooban and Premadasa (2015) introduced a problem based learning model where they suggested that students should be trained in information literacy, which is an essential competency for self-directed learning. The model has four simple steps which are analytical locate, use and review that practically suit the current Problem Based Learning (PBL) in Sri Lanka. Every step has been defined by an array of expected IL competencies (learning outcomes), which are corresponding to the activities of PBL. Therefore, the proposed model enables students to develop the IL competencies which will be useful when engaging in problem based learning not only in higher education institutions but also at school level.

INFORMATION SEEKING BEHAVIOR

Students use textbook, reference book, printed theses and dissertation as traditional sources of information. Internet and others electronic search tools are also used for seeking information. Google search engine is popular among students, as well as library subscribed databases are also used by students. For more relevant material, working paper or conference paper are also used by researchers (Williamson etal.,2008). Sometimes student donot understand types of information sources when they collect it from online. All online information formats appeared to be relegated to website status by the majority of students(Greer and McCann, 2018).

USE OF INFORMATION

The information creation process could result in a range of information formats and modes of delivery, so experts look beyond format when selecting resources to use. Recognizing the nature of information creation, experts look into the underlying processes of creation as well as the final product to critically evaluate the usefulness of the information. Novice learners begin to recognize the significance of the creation process, leading them to increasingly sophisticated choices when matching information products with their information needs. (ACRL, 2015). Wijetunge and Manatunge (2014) discussed the design and implementation of an Information Literacy Programme based on the Empowering 8Ws IL model, for the first year undergraduates in a Faculty of Law in Sri Lanka. They opined if the scheduling of the programme is carried out without due attention to the students' social needs, they will not reap the full benefit of the programme. It was also revealed that there should be some sort of summative assessment and incentive to participate rather than leaving the attendance and achieve to mere love for new knowledge and skills. Issa et al. (2015) investigates the IL competence of the final year undergraduate students at the University of Ilorin, Nigeria; identifying their information needs and ability to satisfy such needs, exposure to IL programmes, strategies employed and the challenges faced. The study found that majority of the respondents (86.55%) had information needs on their academic engagements like class assignments and project writing. Strategies employed in meeting their information needs revealed their limited IL skills even as they only have little exposure to available IL programmes. Thus, majority expressed dissatisfaction with their present status of information availability, accessibility and usage. Many considered difficulty in identifying their needs, cost of Internet browsing, subscription requirement, as challenges; hence their low level IL competence, constituting hindrance against the full exploration of information resources that may be available for their use. The study recommended that the University authorities should consider the teaching of IL as a course to fresh students with credits attached. According to Somaratna (2015) information Literacy instruction helps to improve the quality and the relevancy of learning of students, where academic librarians in the higher education sector all around the world, add value to the teaching and learning missions of their institutions through IL instruction. He found that over 80% of students acquired IL skills from the IL course module. It reflects the importance of this course and should be made compulsory for all the students in the faculty. Students, who participated in the IL course, have commented the course as being useful. Chisholm and Spencer(2019) examined the contribution of librarian for student learning on information literacy program. Ajadbakht (2021) investigated the librarians of United states who provide guidance to library and information science students as they learn about information literacy instruction as a part of professional development of themselves. Sommer (2021) investigated the validity evidence of the information literacy self efficacy scale among undergraduate students. Roberts (2021) conceived a qualitative study on Ph.D students as becoming scholars in a community of practice and the role of librarians in supporting of student's research and writing practices.

DIGITAL LITERACY

Information literacy and digital literacy are not competing concepts, rather both are complementary areas for students in higher education. Digital literacy concept and skills can help the fundamental needs in recent digital environment(Cordell,2013). URL literacy is a critical skill for those who use, share and cite websites and other online contents. Students must effectively use and cite information sources in order to succeed academically and learn to participate in the scholarly conversation(Greer and McCann, 2018).

Objective of the study

The objectives of the study are :

- To identify the knowledge about search strategy of information of the postgraduate students of the University of Calcutta;
- To identify the information seeking behavior of the students.
- To identify the information needs and the use of information of them.
- To recognize the IT skills among students.
- To identify the knowledge about digital literacy of students.

Design of the study

As the population of large, it has been decided to choose the frequent and heterogeneous users from total population of the student of University of Calcutta. Finally 72 male and female users of post-graduate students in multiple disciplines have been selected randomly for the survey. The survey was conducted by a structured set of questionnaire and it consisted of both open and close ended questionnaires. Two variables 'yes' and 'no' are selected mainly for collected users opinion.

In the part of concept identification of the digital literacy awareness, five different questions were given to the respondents to see whether they are able to recognize the correct answer or not. If they gave correct answer that means they are known about the concept.

Data collection period: The data was collected since January to March,2021.

Limitation of the study: This study is limited to the post-graduate students of various departments of the University of Calcutta, India.

Data analysis

Distribution of gender of the users:

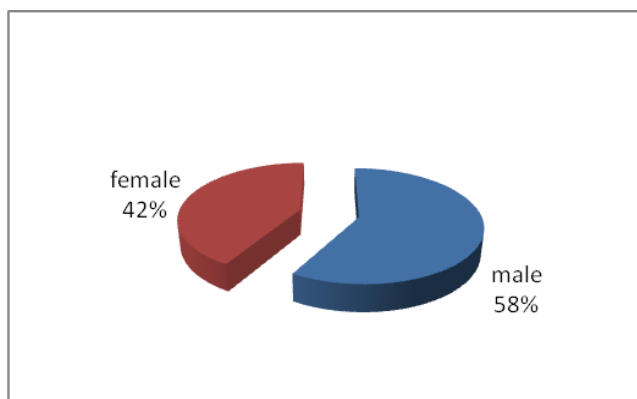Among the total respondents (72), the female respondents were 42% and male respondents were 58%.

Chart 1: Distribution of gender of the users

Current status of users in terms of subject disciplines

The post-graduate students of Jute and fibre technology, Journalism and mass communication, Polimer science, Psychology, Geology, English, Chemical Engineering, Applied science, Zoology, Plant Psychology, Geography and Library & Information science are take part of this survey**(chart 2).**
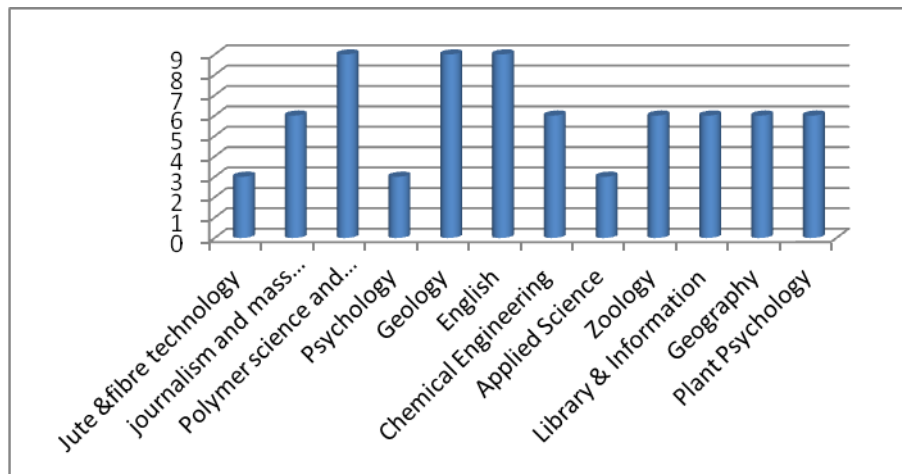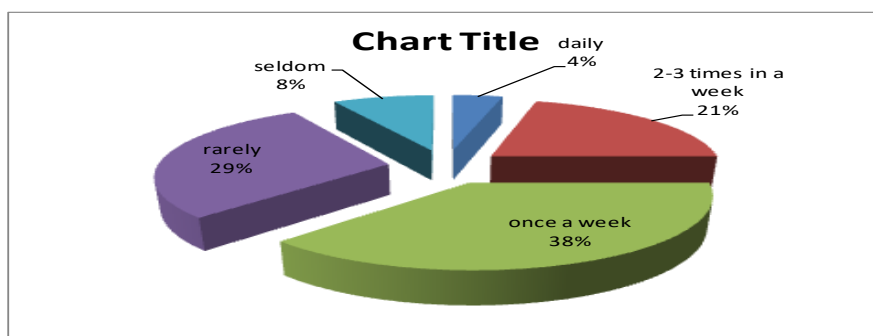

Chart 2: Current status of users in terms of subject disciplines

Users' frequency of using library

Data shows that 38% students using library once a week, 29% students visit rarely and 21% students visit library 2-3 times in a week, 8% of students use library rarely. Only 4% of students visit library daily**(chart 3).**

Table 1: Users' opinion about sources of information they consult generally

Sources of information	Count	percentage
Library database	33 students	23%
Internet	60 students	42%
Teachers/professionals	51 students	35%

Table shows that, 42% students consult internet as sources of information, where 23% and 35% students consult library database and teaching professionals respectively for obtain information.

Table 2: Knowledge about search strategy

Table 2.a. Search strategy through OPAC

Search strategy through OPAC	Respondents	Percentage
By title	18	25%
By publisher	9	8%
By subject	39	54%
By author	6	13%

.

Table shows that, 54% of students like to search by subject, 25% students pefer to search by title, 8% of students search by publisher, 13% students search by auther in OPAC.

Table 2.b. Familiar with retrieval system:

Familiar with Retrieval system	Respondents	Percentage
Boolean operators	15	21%
Meta searching	3	4%
Phrase searching	15	21%
Wildcard/Truncations	0	0%
Keyword searching	39	54%

Table shows that, 54% students prefer to use keyword searching, followed by boolean operators(21%), phrase searching(21%) and meta searching(4%).

Table 3 a. Information seeking behavior among students

Users' opinion of familiarity with information sources	count	percentage
Reference sources	9	12%
Internet	24	33%
Institutional repositories	12	17%
Book	27	38%

This table shows that, majority of post graduate student familiar with books (38%), 33% students familiar with internet, 17% familiar with institutional repositories and 12% student go for reference sources for seeking information

Table 3.b.

Preference of finding information using internet	count	percentage
E-book	12	19%
E-journal	14	23%
Search Engines	8	13%

Subject gateways/Portals	8	13%
Institutional repositories	4	6%
Blogs	5	8%
Wikipedia	11	18%

Table shows that, 19% students prefer e-book, 13% students prefer search engine, 13% are with subject gateways/portals, 18 % students go for Wikipedia, 8% prefer blogs and 6% prefer institutional repositories as information sources.

Table 4. The factors that motivate users information needs or the use of information

Attribute	count	percentage
To update knowledge	54	39%
To support research	27	20%
To prepare course material for classroom learning	36	26%
To write paper for seminar/workshop	21	15%

Table shows that, 39% students visit library to update their knowledge, where 26%, 20% and 15% students visit library to prepare course material, to support research and to write paper for seminar /workshop respectively.
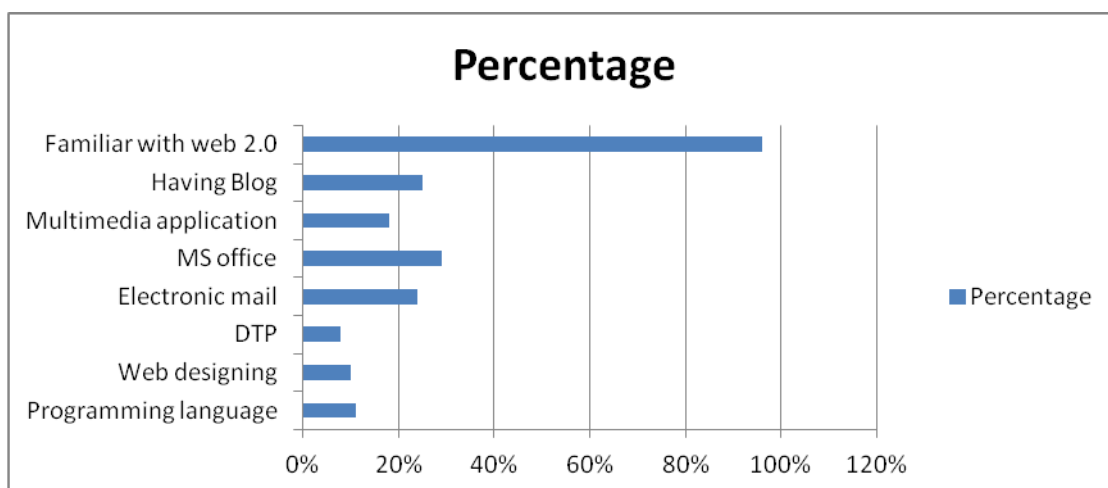
Chart 4. Knowledge about users' IT skills

Table shows that, 29% students known about MS Office, where students are quite knowledgeable in E- mail(24%), multimedia application(18%), programming language(11%), web designing (10%) and DTP(8%), 25% of students able to create and update their own blog, 96% of students are familiar with web 2.0 sites

Table 5

	Awareness on digital literacy	Known	Unknown
a	Knowledge about citations and referencing	12(15%)	60(85%)
b	Knowledge about copyright and fair use	69(96%)	3(4%)
c	Knowledge about plagiarism	46(33%)	39(54%)

Table shows that, 69% of students known about the terms and conditions of copyright and fair use. But only 15% students know how to use citation properly and 33% students are known about plagiarism.

FINDINGS

The basic concept of information literacy is how to locate information, how to evaluate information and how to use information. According to this survey, it has been observed in the part of locating information, 42% students consult internet as sources of information, where 23% and 35% students consult library database and teaching professionals respectively for obtain information **(Table 1)**. According to the search by OPAC, 54% of students like to search by subject, 25% students refer to search by title, 8% of students search by publisher, 13% students search by auther **(Table 2.a)**. In the case of advanced searching, 54% students prefer to use keyword searching, followed by boolean operators (21%), phrase searching(21%) and meta searching(4%). They are unknown about the term 'wildcard/truncations', while they are use it randomly **(Table 2.b)**

According to the information seeking behavior, majority of post graduate student familiar with books (38%), 33% students familiar with internet, 17% familiar with institutional repositories and 12% student go for reference sources for seeking information **(Table 3.a).** To find information using internet, majority of students prefer e-journal as information sources, 19% students prefer e-book, 13% students prefer search engine , 13% are with subject gateways/portals, 18 % students go for Wikipedia, 8% prefer blogs and 6% prefer institutional repositories as information sources**(Table 3.b)**.

Students can retrieve information from different sources and use it in their educational purpose. In the part of using information, it has been found that, 39% students visit library to update their knowledge, where 26%, 20% and 15% students visit library to prepare course material, to support research and to write paper for seminar /workshop respectively**(Table 4)**. But they are quite unconscious about cite a document properly.

Information technology skills and transferable skills are equally important (Martzoukou and Elliott (2016) in the digital era. The IT skills of students are quite advanced. Data reveals that 29% students known about MS Office, where students are quite knowledgeable in E- mail(24%), multimedia application(18%), programming language(11%), web designing (10%) and DTP(8%), 25% of students able to create and update their own blog, 96% of students are familiar with web 2.0 sites(**Chart 4).** So it is the basic needs to find out the awareness of digital literacy among student. It is found that 69% of students known about the terms and conditions of copyright and fair use. But only 15% students know how to use citation properly and 33% students are known about plagiarism **(Table 5)**.

CONCLUSION

This study reveals the perception of information literacy awareness as well as digital awareness among the students of University of Calcutta. In India, there were no such guidelines, policies, models framework, standards implementing IL in Higher Education. Digital world shaped a knowledge based society surrounded by high-tech global economy, which make use of influence how a non-profit service oriented organization i.e. library operate a proficient and convenient way. The author suggest that web based information literacy training would be a continuous process to achieve the goal of information literacy and digital literacy. Librarians and educators must deliberate collaboratively to ensure information literacy among students as so they survive in this advanced information age.

REFERENCES

[1] Azadbakht, E. S. (2021). The Many Faces of Instruction: An Exploration of Academic Librarians' Teaching Personas. *Communications in Information Literacy*, 15 (1), 57–74. https://doi.org/10.15760/comminfolit.2021.15.1.3. Available at

https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1485&context=comminfolit (Retrieved on July2, 2021)

[2] Bent,M. and Stubbings,R. (2011). The SCONUL seven pillars of information literacy:core model. *SCONUL*. Available at

https://www.researchgate.net/publication/259341007_The_SCONUL_Seven_Pillars_of_Information_Literacy_Core_model (Accessed on June 2,2021)

[3] Chisholm, A., & Spencer, B. (2019). Through the Looking Glass: Viewing First-Year Composition Through the Lens of Information Literacy. Communications in Information Literacy, 13 (1), 43-60. https://doi.org/10.15760/comminfolit.2019.13.1.4. Available at

https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1295&context=comminfolit (Accessed on June 3, 2021)

[4] Cordell, R. M. (2013). Information Literacy and Digital Literacy: Competing or Complementary?. Communications in Information Literacy, 7 (2), 177-183. https://doi.org/10.15760/ comminfolit.2013.7.2.150. Available at https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1097&context=comminfolit (Accessed on July 2, 2021)

[5] Framework for Information Literacy for Higher Education. American Library Association, February 9, 2015. Available at http://www.ala.org/acrl/standards/ilframework (Accessed January 16, 2021).

[6] Greer, K., & McCann, S. (2018). Everything Online is a Website: Information Format Confusion in Student Citation Behaviors. Communications in Information Literacy, 12 (2), 150-165. https://doi.org/10.15760/comminfolit.2018.12.2.6 (Accessed on July 8, 2021)

[7] Information Literacy Competency Standards for Higher Education. American Library Association. Available at http://www.ala.org/ala/cite (Accessed January 16, 2021)

[8] Information Literacy Standards for Science and Engineering/Technology. American Library Association, July 24, 2006. Available at http://www.ala.org/acrl/standards/infolitscitech (Accessed March 13, 2019)Document ID: b65e0fb0-5ded-a6d4-2d06-d3cb068960af

[9] Issa, A. O.(2015). An assessment of the information literacy competence of undergraduate students at the University of Ilorin, Kwara State, Nigeria. *Annals of Library and Information Studies*, Vol. 62, June 2015, pp. 68-76. Available at http://nopr.niscair.res.in/handle/123456789/31962 (accessed on January 15, 2021)

[10] Li, Sandy & Kong, Siu-cheung & Lok Lee, Fong & Henri, James. (2006). Capacity Building for Lifelong Learning: A Study of Practitioners ' Perceptions on Information Literacy Framework. *Informatics in Education*, 5(2),231-244.

[11] Martzoukou, K., & Elliott, J. (2016). The Development of Digital Literacy and Inclusion Skills of Public Librarians. Communications in Information Literacy, 10 (1), 99-115. https://doi.org/10.15760/ comminfolit.2016.10.1.17. Available at

 https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1035&context=comminfolit (Accessed on June 28, 2021)

[12] Media and information Literacy. UNESCO, 2017. Available at

http://www.unesco.org/new/en/doha/communication-information/media-and-information-literacy/ (accessed on January 16,2021)

[13] Somaratna, S.D.(2015). A credit based information literacy course module for science undergraduates: an assessment. *Annals of Library and Information Studies* ,Vol. 60, March 2015, pp. 19-26. Available at http://nopr.niscair.res.in/handle/123456789/31612 (accessed on January 4, 2021)

[14] Wijetunge, P. and Manatunge, K. (2014). Empowering 8R in practice: information literacy programme for law undergraduates revisited. *Annals of Library and Information Studies*, Vol. 61, March 2014, pp. 24-32, available at http://nopr.niscair.res.in/handle/123456789/27752 (Accessed on January 8, 2021)

[15] Roberts, L. (2021). "This Is Just What We Do": PhD Students on Becoming Scholars in a Community of Practice. Communications in Information Literacy, 15 (1), 75–94. https://doi.org/10.15760/ comminfolit.2021.15.1.4. Available at

https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1415&context=comminfolit (Accessed on June 30, 2021)

[16] Sommer, M., Kohnen, A. M., Ritzhaupt, A. D., & Hampton, J. (2021). Investigation of the Validity Evidence of the Information Literacy Self-Efficacy Scale (ILSES) Among Undergraduate Students. Communications in Information Literacy, 15 (1), 1–23. https://doi.org/10.15760/comminfolit.2021.15.1.1. (Accessed on June 30, 2021)

[17] Swapna,G. and Biradar, B.S.(2017). Information literacy model for higher education institutions in India. International journal of Digital library services, vol.7(3). Available at

http://www.ijodls.in/uploads/3/6/0/3/3603729/4ijodls3717.pdf (Accessed on June 6,2021)

[18] Wijetunge,P. and Alahakoon, U.P.(n.d.). Empowering 8: the Information Literacy model developed in Sri Lanka to underpin changing education paradigms of Sri Lanka. *Sri Lanka Journal of Librarianship & Information Management volume 1, No. 1* pp.31-41. Available at

 https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.418.779&rep=rep1&type=pdf (Accessed on July 7, 2021)

[19] Williamson, K., Bernath, V., Wright, S., & Sullivan, J. (2008). Research Students in the Electronic Age: Impacts of Changing Information Behavior on Information Literacy Needs. Communications in Information Literacy, 1 (2), 47-63. https://doi.org/10.15760/comminfolit.2008.1.2.9 (Accessed on July 8, 2021)

_____