Information Literacy Skills of CBSE School Students from Tamil Nadu, India

S. Muthukumar[1*] and S. Srinivasa Ragavan[2]
[1&2]Department of Library and Information Science, Bharathidasan University, Tiruchirappalli, Tamil Nadu, India
*Corresponding Author
E-Mail: abmkumarmdu@gmail.com

Abstract - **We examined the information literacy skills in Central Board of Secondary Education (CBSE) in higher secondary school students of were conducted. This study demonstrates and elaborates to analyze information literacy search skill among the school students, to know the purpose of visiting the library, to identify areas of information literacy skills among the students and their search strategies and to students' ability to locate useful information. The sampling was taken in eight schools in three different districts of Tamil Nadu State. A total of 305 students were surveyed in four Kendriya Vidyalaya (KV) and four CBSE Affiliate Private Schools. Our study highlights that information literacy skills are found in both schools; though more information skills are having CBSE affiliated private school schools rather than Kendriya Vidyalaya School.**
Keywords: **Information Literacy Skills, CBSE, Higher Secondary School, School Students**

I. INTRODUCTION

To be information literate, a person must be able to recognise when information is needed and have the ability to locate, evaluate, and use effectively the needed information. Information literate people are those who have learned how to learn (ALA 1989). To be information literate is to be able to find, read, analyse, interpret and apply information with critical discrimination to build and communicate knowledge. Information literacy is a living literacy, a literacy needed for even basic operation in "wired" societies today; a literacy needed for every aspect of curriculum learning. (Gawith, 2000) IL standards have been defined by many researchers in different ways which collectively covered skills and knowledge that enable individuals to recognise their information needs, to locate, evaluate and use needed information while filtering out the unwanted information, and to some extent, to evaluate one's own information seeking process and the consequent final information products (Wilson 1981); (Kuhlthau 1993; Eisenberg & Berkowitz 1996; Eisenberg 2008; ACRL 2000). It provides access to information resources in a wide range of formats and gives the students opportunities to develop the skills to find and use those (Brown, 1999). The importance of adequate IL skills has been linked to academic performance as well as in the work place (Majid *et al.,* 2011). Though IL skills were always considered vital in the learning process, availability of an enormous amount of digital information through multiple platforms has further increased its importance (Blummer & Kenton 2014; Chan *et*

al., 2014; Yeh *et al.,* 2014). This paper is aimed at presents the preliminary findings of some aspects of a survey investigating the of information literacy skills of CBSE school students from Tamil Nadu, India.

II. LITERATURE REVIEW

Some studies have found that students require the skill and experience necessary to build efficient and sophisticated search strategies, as well as to assess the retrieved resources (Burton & Chadwick, 2000; Jackson & Hansen, 2006; Julien & Barker, 2009; Lorenzen, 2001; Merchant & Hepworth, 2002; Rehman & Alfaresi, 2009). Studies measuring the effect of information literacy programs also point to a connection between information literacy on one hand and students' performance and academic success on the other (Bowles-Terry, 2012; Cameron *et al.,* 2007; Gross & Latham, 2007; Wong & Cmor, 2011; Scharf *et al.,* 2007).

III. OBJECTIVES OF THE STUDY

The objectives of the present study were to
1. To know the purpose of visiting the library.
2. To identify areas of information literacy skills among the students and their search strategies.
3. To students ability to locate useful information.

IV. METHODOLOGY

In order to address the research questions, a survey was conducted in higher secondary-school students. The sampling was taken in eight schools in three different districts of Tamil Nadu State. A total of 305 students were surveyed in four Kendriya Vidyalaya (KV) and four CBSE Affiliate Private Schools. The KV schools are Kendriya Vidyalaya (No.1), Kendriya Vidyalaya (No.2) Madurai, Kendriya Vidyalaya Sivagangai, and Kendriya Vidyalaya Dharmapuri. The CP schools are Adhyapana School CBSE Madruai, Pandugudi Sri Lakshmi NarayanaVidyalaya CBSE Madruai, Chellappan Vidya Mandir CBSE Karaikudi, and Sri Vijay Vidhya CBSE Dharmapuri, under 3 districts of Tamil Nadu. The questionnaire is divided into two major sections. The section 1 dealt with demographic profiles about gender, parent qualification, Use frequency of various libraries etc. The section 2 comprised of 7 questions on information literacy skills.

V. HYPOTHESIS

The result of this study is tested by chi-square analysis. Chi-square analysis test is used to study the relationship between Kendriya Vidyalaya School and CBSE Affiliated private school by assessing the information literacy skill.

VI. RESULTS

TABLE I DEMOGRAPHIC INFORMATION OF HIGHER SECONDARY SCHOOL STUDENTS

Demographic Variables	No. of students		Total
School type	KV	CP	
Total	178	127	305
Gender			
Male	98	73	171
Female	80	54	134
Total	178	127	305
Groups			
Bio-Maths	94	53	147
Computer science	34	25	59
Commerce	33	38	71
Pure Science	17	11	28
Total	178	127	305
Parent Education Qualification			
Primary	9	14	23
Secondary	23	21	44
Higher secondary	38	30	68
Degree	105	59	164
Doctorate	2	-	2
Illiterate	1	3	4
Total	178	127	305

In eight schools, 171 boys and 134 girls were participated. The sum of 305 students, 147 students from Bio-maths subject, 59 students of computer science, 71 students of commerce and 28 students of pure science. Among all groups in higher secondary course, the majority of students (147) are studying in Bio-maths groups. To know the literacy of parents, the following detail was asked. In both government and private sectors, the most of the parents are literally educated and they qualified as degree level (Table I).

TABLE II LIBRARY VISIT OF RESPONDENTS (% IS GIVEN IN PARENTHESIS)

Library visit	Schools		Total (%)
	KV School No. of students	CP School No. of students	
Yes	171 (96)	119 (94)	290 (95)
No	7 (4)	8 (6)	15 (5)
Total	178	127	305
Different types of library visit			
School library	161 (90.5)	118 (93)	279 (91.5)
Public library	17 (9.5)	9 (7)	26 (8.5)
Total	178	127	305

TABLE III INFORMATION LITERACY SKILL OF HIGHER SECONDARY SCHOOL STUDENTS (% IS GIVEN IN PARENTHESIS)

S. No.	Information literacy skill	Schools		Total (%)
		KV School No. of students	CP school No. of students	
1	**Preferred source of the information**			
	Books	33 (21.5)	22 (17.5)	60 (19.5)
	Encyclopedia	11 (6)	7 (5.5)	18 (6)
	Newspapers	14 (8)	9 (7)	23 (7.5)
	Magazine/Journal	19 (10.5)	16 (12.5)	35 (11.5)
	Websites	96 (54)	73 (57.5)	169 (55.5)
	Total	178	127	305
2	**Finding place respondents**			
	School library	55 (31)	38 (30)	93 (30.5)
	Public library	8 (4.5)	5 (4)	13 (4)
	Class room	23 (13)	16 (12)	39 (13)
	Internet café	79 (44)	53 (42)	132 (43.5)
	Home	13 (7.5)	15 (12)	28 (9)
	Total	178	127	305
3	**Approach to collect the information**			
	Library staff	23 (13)	12 (9.5)	35 (11.5)
	Friends	74 (41.5)	60 (47)	134 (44)
	Teachers	33 (18.5)	22 (17.5)	55 (18)
	Parents	48 (27)	33 (26)	81 (26.5)
	Total	178	127	305
4	**Pattern search of using Library catalogue**			
	Keyword	31 (17.5)	23 (18)	54 (17.5)
	Subject	34 (19)	26 (20.5)	60 (19.5)
	Author	7 (4)	11 (8.5)	18 (6)
	Title	106 (59.5)	67 (52.5)	173 (56.5)
	Call number	-	-	-
	Total	178	127	305
5	**Preferred Search engine**			
	Google	173 (97)	119 (94)	292 (96)
	Yahoo	5 (3)	8 (6)	13 (4)
	Dogpile	-	-	-
	MSN	-	-	-
	Redif	-	-	-
	Altavista	-	-	-
	Total	178	127	305
6	**Storage format**			
	Photocopy	12 (6.5)	6 (5)	18 (6)
	Printing	9 (5)	4 (3)	13 (4)
	Pen drive	125 (70)	94 (74)	219 (72)
	CD-Rom	3 (1.5)	2 (1.5)	5 (1.5)
	Note book	29 (16)	21 (16.5)	50 (16.5)
	Total	178	127	305
7	**File format to organize information**			
	Ms-word	97 (55.5)	81 (64)	178 (59)
	Off line database	13 (7.5)	6 (5)	19 (6)
	MS Power point	23 (13)	14 (11)	37 (12)
	Note pad	45 (25)	26 (20)	71 (23)
	Total	178	127	305

From table II More than 95% of students are regularly visiting library in both KV and CP. In the connection above while it is found that most of the respondents (91.5%) are visiting their school library than public libraries.

The possible sources of books, encyclopedias, newspapers, magazine/journals and websites for collecting the information for the given. Among these sources, the most of the students (55.5%) are preferred for website sources. The majority of students in both KV and CP have chosen (43.5%) internet cafe than the school library, class room, home and public libraries. For collecting the information in the particular, the assistance of friends has an important role. The search pattern study (56.5%) highlights by using the search engine study shows that respondents (96%) have preferred to collect the information with the help of Google search engine. The collected information stored in pen drives (72%) than the other available sources. The information is organized in the form of MS word selected by majority of students (59%) than the offline database, Ms Power point and notepad (Table III).

TABLE IV INFORMATION LITERACY SKILL VS KENDRIYA VIDYALAYA & CBSE AFFILIATED PRIVATE SCHOOL

Information literacy skill	Schools	Chi-Square value	df	P value
Preferred source information	KV	0.470	4	0.976
	CP	0.703	4	0.950
Find place respondents	KV	0.843	4	0.932
	CP	1.196	4	0.878
Approach to collect the information	KV	0.575	3	0.905
	CP	0.821	3	0.844
Pattern search of using library catalogue	KV	69.081	3	0.714
	CP	2.031	3	0.565
Preferred to search engine	KV	0.869	5	0.350
	CP	1.878	5	0.275
Storage format of Information	KV	0.584	4	0.964
	CP	0.801	4	0.938
Preferred file format to organize information	KV	1.234	3	0.744
	CP	1.702	3	0.636

Hypothesis of information literacy skill by chi-square analysis reveals that seven skills of search of using library catalogue, preferred search engine and preferred file format to organize information are significant. Hence it can be said that there is significant difference of information literacy between KV and CP schools. Over all CP school students are having more IL skills rather than KV (Table IV).

VII. DISCUSSION

The study found that the library visit analysis shows that more than 80% of students are regularly visiting library in both KV and CP. This finding contrasts to the report of (Majid *et al*., 2016) that only 20% of students visiting the libraries. The present study shows the higher percentage of students are visiting libraries and it could be several possible reasons for sufficient internet facilities and computers available, photocopies, book resources and furnished room of library. This observation indicates that the websites have the best sources for collecting the information. According to (Hall 2000), the fact that the web has the ability to provide up-to-the-minute information and, secondly, this information can be obtained from around the world, made it a reliable source for news information. Thus, the news websites are highly patronized by students.

It is found that internet café is chosen by the majority of respondents (43.5%). It can be seen that friends are collecting more useful (44%) than the other persons. In most of the respondents (56.5) search in the title of the library catalogue. This result revealed that regardless of user's IT backgrounds of the functionality, expectations of library catalogue remained the same, which is to facilitate easier access to the collection. (Elahe *et al*., 2008). It is found that the majority of respondents (96%) have preferred to collect the information with the help of Google search engine. The majority of students search through Google's popularity was also expressed in many comments about the service, such as: "Google is very straight forward. Google is the main information finding tool for all sources of information for school and home (i.e., for academic and for personal information seeking) (Burns, 2008). It can be seen that students have chosen pen drives (72%) for their storage of information. The higher percentage (59%) of respondents is preferred to organize their data in MS-word.

VIII. CONCLUSION

The present study revealed that the library catalogue is an important in library system, because this system has helped to the users in their information seeking. Google search engine is preferable search engines than others to update knowledge of the student. It would also be useful to ensure each school has a librarian could oversee ongoing information literacy skill development across the curriculum. Our study highlights that information literacy skills are found in both schools, though more information skills are having CBSE Affiliated Private Schools rather than Kendriya Vidyalaya School.

REFERENCES

[1] Association of College and Research Libraries. (2000). *Information literacy standards for higher education*. Chicago, IL: American Library Association (ALA). Retrieved from: http://www.ala.org/ala/acrl/acrlstandards/standards.pdf

[2] American Library Association (1989). *Presidential Committee on Information Literacy*. American Library Association. Chicago, Retrieved from: www.ala.org/acrl/nili/ilit1st.html.

[3] Blummer, B., & Kenton, J. M. (2014). Reducing patron information overload in academic libraries. *College & Undergraduate Libraries 21*(2), 115-135. Retrieved from: http://dx.doi.org/10.1080/10691316.2014.906786

[4] Bowles-Terry, M. (2012). Library instruction and academic success: a mixed methods assessment of a library instruction program. *Evidence Based Library and Information Practice*, *7*(1), 82–95.

[5] Brown, C. M. (1999). Information literacy of physical science graduate students in the information age. *College & Research Libraries, 60*(5), 426–38.

[6] Burns, E. (2008). Retrieved from http://searchenginewatch.com.

[7] Burton, V. T., & Chadwick, S. A. (2000). Investigating the practices of student researchers: patterns of use and criteria for use of internet and library sources. *Computers and Composition*, *17*(3), 309–328.

[8] Cameron, L., Wise, S.L., & Lottridge, S.M. (2007). The development and validation of the information literacy test. *College & Research Libraries, 68*(3), 229–237.

[9] Chen, L.C., Chen, Y.H., & Ma, W.I. (2014). Effects of integrated information literacy on science learning and problem-solving among seventh-grade students. *Malaysian Journal of Library and Information Science 19*(2), 35-51.

[10] Eisenberg, M. B., & Johnson, D. (1996). *Computer skills for information problem-solving: Learning and teaching technology in context*. Syracuse, New York, ERIC Clearing house on Information and Technology.

[11] Eisenberg, M. (2008). Information literacy: Essential skills for the information age. *DESIDOC Journal of Library & Information Technology*, *28*(2), 39-47. Retrieved from: http://bit.ly/UHB9Pr

[12] Elahe K. Z., Gheorghita, G., & Sherry Y.C. (2008). User perceptions of online public library catalog. *International Journal Information Management*, *28*(6), 492-502.

[13] Gawith, G. (2000). Information Literacy: Theory and Practice. *Good Teacher*, *3*(3) 4–5.

[14] Gross, M., & Latham, D. (2007). Attaining information literacy: an investigation of the relationship between skill level, self-estimates of skill, and library anxiety. *Library & Information Science Research*, *29*(3), 332–353. doi:10.1016/j.lisr.2007.04.012.

[15] Hall, A. S., & Parsons, J. (2001). Internet addiction: College student case study using best practices in cognitive behavior therapy. *Journal of Mental Health Counselling, 23*(4), 312-327.

[16] Jackson, L., & Hansen, J. (2006). Creating collaborative partnerships: building the framework. *Reference Services Review*, *34*(4), 575–588.

[17] Kuhlthau, C. (1993). *Seeking meaning: a process approach to library and information services*. Greenwich CT, Ablex.

[18] Lorenzen, M. (2001). The land of confusion?: high school students and their use of the World Wide Web for research. *Research Strategies*, *18*, 151–163.

[19] Majid, S., Foo, S., Luyt, B., Zhang, X., Theng, Y.L., Chang, Y.K., & Mokhtar, I. A.(2011). Adopting evidence-based practice in clinical decision-making: perceptions, knowledge and barriers. *Journal of the Medical Library Association*, *99*, 229-236.

[20] Majid, S., Chang, Y. K., & Foo, F. (2016). Auditing information literacy skills of secondary school students in Singapore. *Journal of Information Literacy*, *10*(1), 44-66.

[21] Rehman, S.U., & Alfaresi, S. (2009). Information literacy skills among female students in Kuwaiti high schools. *Library Review*, *58*(8), 607–616.

[22] Wilson, T.D. (1981). On user studies and information needs. *Journal of Documentation*, *37*, 3-15

[23] Wong, S. H. R., & Cmor, D. (2011). Measuring association between library instruction and graduation GPA. *College & Research Libraries*, *72*(5), 464–473.

[24] Yeh, Y., Hsu, Y., Chuang, F. & Hwang, F. (2014). Middle-school students' online information problem-solving behaviors on the information retrieval interface. *Australasian Journal of Educational Technology, 30*(2), 245-260. Retrieved from: http://dx.doi.org/10.14742/ajet.478