Digital Information Literacy Among Research Scholars in Sri Venkateswara University, Tirupati: A Study

D Konappa

Abstract

Digital information literacy is the ability to access, evaluate, and apply information from a variety of e-resources in appropriate contexts to construct knowledge. In the current digital age, information literacy has inevitably been influenced extensively by developments in technology with the emergence of digital information literacy. This paper describes the baseline findings of the digital curricular literacy.

Keywords: Electronic Information Resource Literacy, Information Literacy, Sri Venkateswara University

1. Introduction

Our society has been changing due to rapid development and diffusion of information and communication technology (ICT) into fields such as education, business, health, agriculture, and so on. Information users may be bewildered by a variety of digitised information. The process of identifying and selecting information has become complex. It is critical to promote information literacy (IL) in the digital age. Skills for computer use are a common prerequisite in many job applications. The Department of Education, Training, and Employment (2001a) states: To live and work in the technology-enabled world of the 21st Century, high-level skills in the use of information and communication technologies (ICT) are essential for all citizens.

By means of these objectives in mind, this survey was undertaken to study digital information literacy among researchers at Sri Venkateswara University, Tirupati, (A.P) and to set the priorities for promotion of digital information literacy among them.

2. Digital Information Literacy

Digital Information Literacy (DIL) is the ability to recognise the need for, to access, and to evaluate electronic information. The digitally literate can confidently use, manage, create, quote and share sources of digital information in an effective way. The way in which information is used, created, and distributed demonstrates an understanding and acknowledgement of the cultural, ethical, economic, legal, and social aspects of information. The digitally literate demonstrate openness, the ability to solve problem, to critically reflect, with technical capability and a willingness to collaborate and keep up to date. The following definition has been used as basis of the study for information literacy.

The ability to understand and use information in multiple formats from a wide range of sources when resented via a computer (Glister)

The digital information literate student will then able to

♦ Understand a problem and develop a set of questions that will solve the information need.

♦ Solve the problem by using search methods which allow the student access to digital information sources on the web.

♦ Evaluate the sources by making informed judgements about what is found online.

♦ Consolidate the identified resources into a broader package of information; gather from a variety of media sources, for example the web.

♦ Develop critical-thinking skills and use web tools such as search engines, listing of favourite sites, mailing lists, etc

Digital information literacy will therefore be defined as follows:

A set of digital abilities requiring individuals to recognise when digital information is needed and have the ability to locate, evaluate, organise and effectively use the needed digital information in an ethical and legal way.

3. Methodology

Questionnaire method is used to receive data on computer literacy, digital information competency, training, and orientation, the role played by the library, etc., from the respondents. Due to paucity of time questionnaires were distributed among the researchers of different departments of Sri Venkateswara University, Tirupati, A.P. Out of 90 researchers 72 (80%) returned the questionnaires.

4. Sri Venkateswara University

Sri Venkateswara University, Tirupati was established in 1954. The University has three constituent campus colleges, College of Arts, College of Sciences, College of Management studies with 58 Departments offering 71 Postgraduate Courses. Currently the university is serving 3000 students and research scholars. It has a good functional library, partly automated. It also has digital library developed under the UGC-Infonet programme.

Table 1. Distribution of Questionnaires Gender Wise

Sr. No.	Gender	No .of Questionnaires Distributed		No .of Questionnaires Received	
		No.	%	No.	%
1	Male	68	75.56	56	62.22
2	Female	22	24.44	16	17.78
	Total	90	100	72	80.00

The Table 1 shows the distribution of questionnaires to respondents. The researcher observed that 62.22% of the researchers are male and the remaining 17.78% of researchers are females.

5.   Types of E-Information Sources

The questionnaire asked about types of electronic information sources needed by the research scholars. Table 1 below illustrates the information sources.

Table 2. Types of e-information needed

Sr. No.	e-Information Sources	Yes		No	
		No.	%	No.	%
1	e-journals	56	77.78	16	22.22
2	e-articles	53	73.61	19	26.39
3	e-thesis and dissertations	46	63.89	26	36.11
4	e-databases	38	52.78	34	47.22
5	e-mail	35	48.62	37	51.39
6	e-books	31	43.06	41	56.94
7	e-news groups	21	29.17	51	70.83
8	e-subject gateways	19	26.39	53	73.61
9	e-archives	21	29.17	51	70.83

N=72

Table 2 reveals that the demand for e-journals is the greatest, i.e., 56 (77.78) out of 72 respondents indicated that they need electronic information from e-journals. Electronic articles and theses and dissertations, however, are needed by 53 (73.61%) and 46 (63.89%) research scholars respectively. The need for other sources of e-information such as databases, mailing lists, e-books, newsgroups, subject gateways, e-archives, etc. is not significant.

6.   Purpose for Using E-Resources

Table 3 (below) reveals that 67 (93.06%) respondents stated that they need e-resources to keep their research knowledge up-to-date, followed by 55 (76.39%) for research support, 51 (70.83%) for writing papers for publication, 49 (68.06%) for collecting research material, 42 (58.33%) for attending seminars/workshops, and 29 (40.28%) for carrying out projects.

Table 3: Purpose for using e-Resources

Sr. No.	Using e-Resources	Yes		No	
		No.	%	No.	%
1	To update research knowledge	67	93.06	05	06.94
2	To support research work	55	76.39	17	23.61
3	To collect research material	49	68.06	23	31.94
4	To write article for publication	51	70.83	21	29.17
5	To attend seminars/workshops	42	58.33	30	41.67
6	To carry out project works	29	40.28	43	59.72

N=72

7. IT Skills of Research Scholars

The table given below shows that only 62 (86.11%) of the respondents have knowledge of Internet applications. A significant number 51 (70.83%), however have working knowledge of MS-Office or other DTP tools, followed by 27 (37.50%) in multimedia, but only 9 (12.50%) in programming language applications. A majority of the researchers who responded have acquired knowledge of Internet applications, but knowledge in other areas is less widespread.

Table 4: IT skill of the Research Scholars

Sr. No.	IT Skills	Yes		No	
		No.	%	No.	%
1	Internet	62	86.11	10	13.89
2	MS-Office/Desktop publishing	51	70.83	21	29.17
3	Multimedia	27	37.50	45	62.50
4	Programming Language	09	12.50	63	87.50

N=72

8. Use of Internet Search Tools

The pattern of use of search tools by research scholars are presented in Table 5.

Table 5: The use of Internet Search Tools

Sr. No.	Internet Search Tools	Yes		No	
		No.	%	No.	%
1	Search engines	63	87.50	09	12.50
2	Subject gateways	24	33.33	48	66.67
3	On-line databases	22	30.56	50	69.44
4	Digital Library	19	26.39	53	73.61
5	Meta search engines	17	23.61	55	76.31
6	Web portals	05	06.94	67	93.06

N=72

Table 5 discloses that 63 (87.50%) researchers use search engines for searching the Internet. All other search tools are used only by a small group of researchers. Only 24 (33.33%) respondents use subject gateways, 22 (30.56%) use online bibliographic databases, and 19 (26.39%) use digital libraries.

9.   Evaluation of Web Resources by Research Scholars

The author identified in this study that 62 (82.11%) of the researchers evaluate the information they obtain from the internet in some way. The 55 (76.39%) respondents consider "Authenticity", and 52 (72.22%) consider "Reliability" the most important criteria for evaluation.

Table 6. Evaluation of web resources by the Research Scholars

Sr. No.	Evaluation of Web Resources	Yes		No	
		No.	%	No.	%
1	Reliability	52	72.22	20	27.78
2	Authenticity	55	76.39	17	23.61
3	Accessibility	13	18.06	59	81.94
4	Objectivity	33	45.83	39	54.17
5	Money	23	31.94	49	68.06
6	Usability	29	40.28	43	59.72
7	Comprehensive	18	25.00	54	75.00
8	Exposure	21	29.17	51	70.83

N=72

10. Findings

1. An 80% of the research scholars who responded to the survey expressed their need for electronic information in addition to traditional print sources;

2. Most of the respondents 56 (77.78%) indicated that they use e-journals. However, e-articles, e-thesis and dissertations and e-databases are used by more than 50% of the researchers. Other forms of e-information such as e-books, subject gateways, e-archives are less popular among the research community;

3. A majority of research scholars use e-information in order to update their knowledge in their respective subject area. More than 70% use e-resources for the purpose of research support, collection of research materials, and preparation of scholarly articles for publication;

4. To spending time for browsing and using e-information not significant. Only 24 (33.33%) browse daily but a majority use the Internet for browsing twice a week;

5. A majority of the university research scholars (86.11%) have Internet knowledge;

6. Search engines are most frequently used for browsing and searching on the web. Other tools such as subject gateways, bibliographic databases, digital libraries, etc., are used much less;

7. Authenticity and reliability are the most important parameters for evaluation of online information and

8. All respondents expressed the wish that the library would take initiative in promoting information literacy at the university level.

11. Recommendations

1. The insistence of scholars to conduct their own searches despite difficulties encountered can be dealt with through a user education program tailored to the needs of each discipline.

2. This program should involve the usage of secondary sources such as indices, abstracts, and databases. Such searches should be a cooperative effort between the librarian and the scholar so that both sides can contribute their own expertise to the salutation of the problem.

3. The university library should start a digital information literacy programme to educate the research scholars.

4. The university administration should develop the necessary infrastructure for the promotion of e-information.

5. Research scholars should network with those who are already using e-information to make use of their knowledge and skill.

6. Librarians running such program should gain the necessary expertise prior to undertaking such a project. Since in our country electronic search devices are of recent origin, a small pilot program prior to launching a full user education program is recommended.

12. Conclusion

It this study an attempt has been made to know the level of Digital Information Literacy (DIL) among research scholars of Sri Venkateswara University, Tirupati. A lot has to be done in this regard and this paper is just an initial attempt. Basing on the data collected it can be concluded that the information users are to be trained to acquire DIL competence. Researchers' use of information technologies is becoming an important educational objective. Universities should take a lead role in spreading knowledge of digital information resources.

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About Author

Dr. D. Konappa, Librarian, VKK Institute of Technology, Anantapuram, Andhra Pradesh.
E-mail: konappad@gmail.com