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## **A Survey of Digital Information Literacy of Faculty at Sambalpur University**

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### **Introduction**

Society has been transformed by the 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 digitized information. The process of identifying and selecting information has become complex. It is critical to promote information literacy (IL) in the digital age. Computers have become a necessary part of this digital society, and skills for computer use are a common prerequisite on 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. (DETE, 2001a, p.5)

With those objectives in mind, this survey was undertaken to study digital information literacy among faculty at Sambalpur University and to set the priorities for promotion of digital information literacy among them.

### **Digital Information Literacy**

Glister (1997, p. 290) defines digital literacy as, "a set of skills to access the Internet; find, manage and edit digital information; join in communications; and other wise engage with an online information and communication network. In simple terms, digital literacy is the ability to properly use and evaluate digital resources, tools and services and apply it to their life long learning process." The New Media Consortium (2005, p.2) states that digital literacy, "includes the ability to understand the power of images and sounds, to recognize and use that power, to manipulate and transform digital media, to distribute them pervasively and to easily adopt them to new forms." The most essential aspect of digital literacy is the ability to make informed judgments about what is found online, for unlike

conventional media, much digital information is unfiltered by editors and open to the contribution of all.

Digitally literate people are able to:

- Determine the extent of digital information needed;
- Access the needed digital information effectively and efficiently;
- Evaluate digital information sources and services critically;
- Incorporate selected digital information into one's knowledge base;
- Use of digital information effectively to accomplish a specific purpose; and
- Understand the economic, legal, and social issues surrounding the use of digital information access and use of this information ethically and legally.

Digital Information Literacy is a major component of information literacy. It helps users cope with information from a variety of electronic formats and provides techniques and methods of collecting digital resources. It creates awareness of issues like copyright, and intellectual property rights in an electronic environment.

### **Methodology**

A structured questionnaire seeking information on computer literacy, digital information competency, training and orientation, the role played by the library, etc., was designed and distributed among the teachers of different postgraduate departments of Sambalpur University. Out of 105 teachers, 70 (66.7%) returned the questionnaire.

## Types of Information Sources

The questionnaire asked about types of electronic information sources needed by the faculty members. Figure 1 below illustrates the information sources.

Figure 1: Types of e-information needed

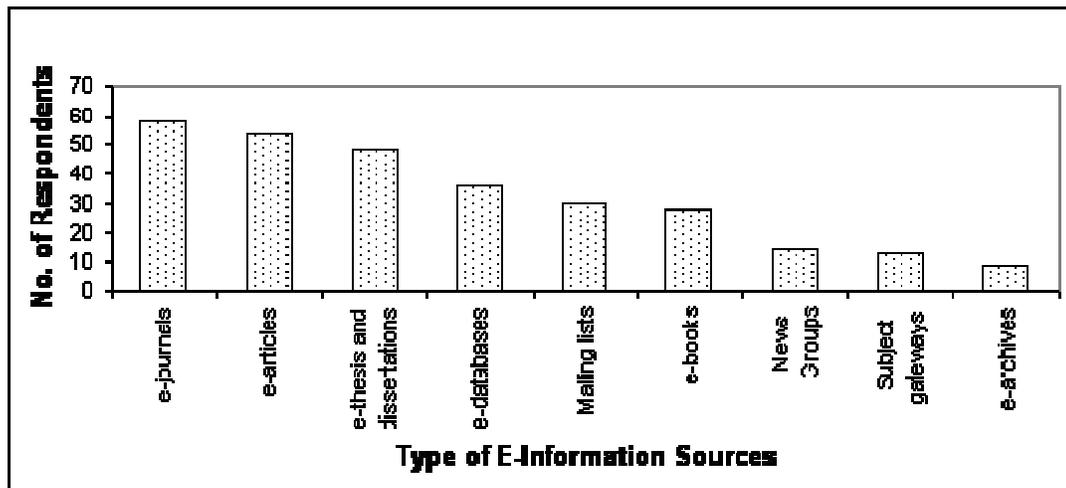
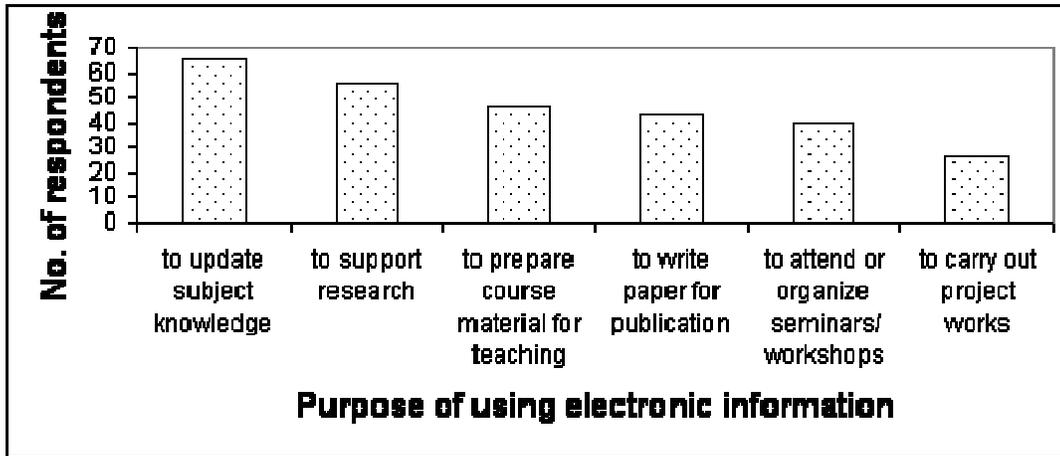


Figure 2 reveals that the demand for e-journals is the greatest, i.e., 58 (82.86%) out of 70 respondents indicated that they need electronic information from e-journals. Electronic articles and theses and dissertations, however, are needed by 54 (77.14%) and 48 (68.57%) faculty members respectively. The need for other sources of e-information such as databases, mailing lists, e-books, newsgroups, subject gateways, e-archives, etc. is not significant.

### Purpose for Using E-Resources

Figure 2 below reveals that 65 (92.8%) respondents stated that they need e-resources to keep their knowledge up-to-date, followed by 56 (80%) for research support, 46 (65.72%) for preparing course materials, 43 (61.43%) for writing papers for publication, 40 (57.14%) for seminar/workshop, and 26(37.14%) for carrying out projects.

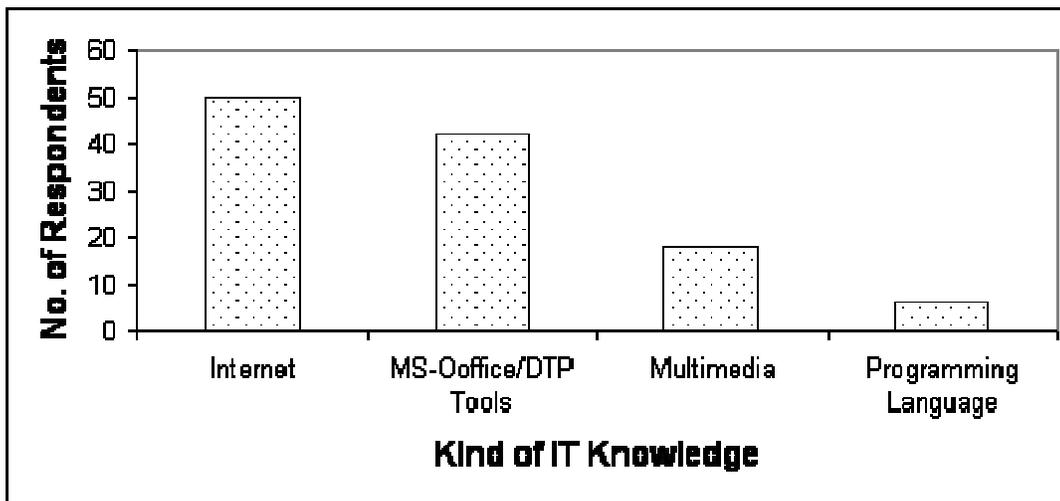
Figure 2: Purpose for using electronic information



### IT Skills of Faculty Members

Most respondents (50, i.e., 71.43%) have knowledge of Internet applications. A significant number (42, 60%), however have working knowledge of MS-Office or other DTP tools, followed by 18 (25.72%) in multimedia, but only 6 (8.57%) in programming language applications. A majority of the faculty who responded have acquired knowledge of Internet applications, but knowledge in other areas is less widespread.

Figure 3: IT skill of the faculty members



## Use of Internet Search Tools

The pattern of use of search tools by faculty is depicted in Figure 4 below.

Figure 4: The use of Internet search tools

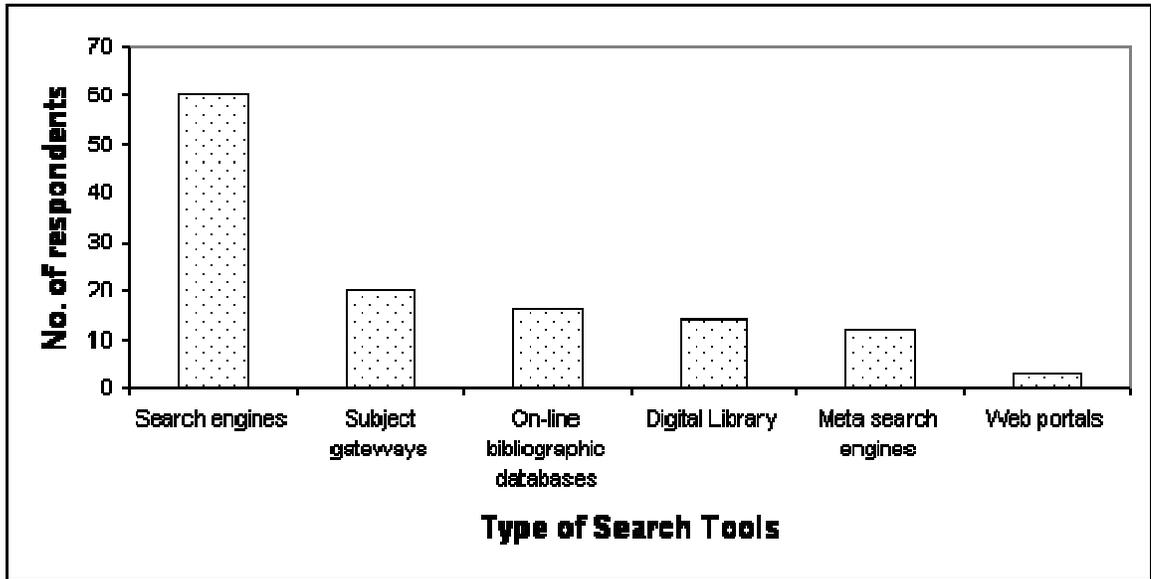
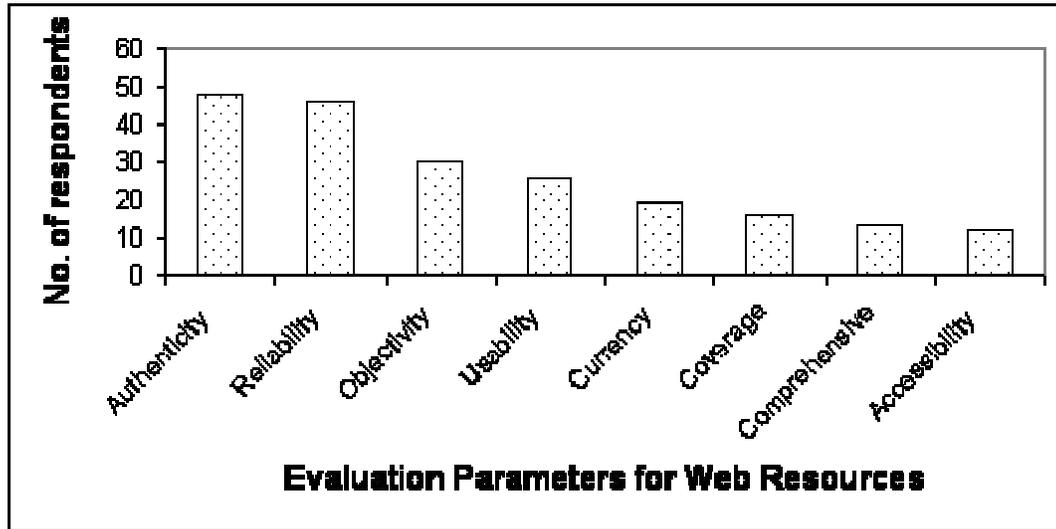


Figure 4 discloses that 60 (85.71%) teachers use search engines for searching the Internet. All other search tools are used only by a small group of faculty. Only 20 (28.57%) use subject gateways, 16 (22.86%) use online bibliographic databases, and 14 (20%) use digital libraries.

## Evaluation of Web Resources by Faculty Members

Sixty (85.72%) of the faculty evaluate the information they obtain from the Internet in some way. The respondents consider "Authenticity" and "Reliability" the most important criteria for evaluation.

Figure 6: Evaluation of web resources by the faculty members



## Findings

- 98.57% of faculty members who responded to the survey expressed their need for electronic information in addition to traditional print sources;
- 58 (82.86%) respondents indicated that they use e-journals. However, e-articles, e-thesis and dissertations and e-databases are used by more than 50% of the faculty. Other forms of e-information such as e-book, subject gateways, e-archives are less popular among the teaching community;
- A majority of faculty use e-information in order to update their knowledge in their respective subject area. More than 60% use e-resources for the purpose of research support, preparation of course materials, and preparation of scholarly articles for publication;
- Time spend browsing and using e-information not significant. Only 20 (28.57%) browse daily but a majority use the Internet for browsing twice a week;
- 58 (82.86%) call themselves computer literate.
- 60% had no formal computer training.
- A majority of the university faculty members have Internet knowledge.

- 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.

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

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

### **Recommendations**

- The Post-Graduate departments of the university should teach faculty how to search/browse for e-information, evaluate its validity, and to make judicious use of it;

- The central library of the university should start a digital information literacy programme to educate the faculty members;

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

- Faculty should network with those who are already using e-information to make use of their knowledge and skill;

### **Conclusion**

There is an educational imbalance between the rapidly developing technologies and information available to the users. Educating people to use information technologies is becoming an important educational objective for the teaching and research community. Universities should take a lead role in spreading knowledge of digital information resources.

### **References**

Aggarwak, Y.P. *Statistical Methods: Concepts, Application, and Computation*. 1986; Sterling Publishers Private Limited; New Delhi ; p. 240.

American Library Association Presidential Committee on Information Literacy. 1989. Chicago ; p. 89.

Anita, K. L. Information Literacy in the Electronic Age. 1990. *Research Strategies*; vol 8(1) ; Canada ; pp. 22-27.

Bainton, B. et al. Information Literacy and Academic Libraries: the SCONUL approach (UK/Ireland). 2001. *67th IFLA Council and General Conference*. Aug 16-25; p. 312.

Bawden, C.D. Information and Digital Literacies: A Review of Concepts. 2001 *Journal of Documentation*; Chicago ; pp. 22-33.

Berivik, P. S. and Senn, J.A. Information Literacy: Educating Children for the 21st century. 1994. *Scholastic Journal*; New York; p. 3.

Bundy, A. Information Literacy framework: Principles, Standards, and Practices. 2004. *New Zealand Journal for Information Literacy*; p. 240.

Campbell, S. Defining Information Literacy in the 21 st Century. 2004. 70th IFLA General Conference and Council ; 22-27 August; Argentina ; p. 234. Available at <http://www.ifla.org/iv/ifla7/prog04.htm>

Curzon, S.C. *Information Competence in the CSU: A Report*. 1995; Chicago; p. 324.

Garfield, E. 1977. An Information Society? In *Essays of an Information Scientist*; Philadelphia: ISI Press; p. 52.

Ghosh, B.N. *Scientific Method and Social Research*. 1992. Sterling Publishers Private Limited; New Delhi ; p. 51-52.

Glister, P. *Digital Literacy*. 1997. New York: Wiley; p.67.

Goode, W. J. *Methods in Social Research*. 1989. McGraw Hill Book Company; Auckland; p. 56.

Gupta, S., and Singh, S.P. Role of LIS Professionals in the Advancement of Information Literacy. 2005. *SIS*; 27-25 January; Visakhapatnam ; pp. 673-679.

James, W. M. Rethinking Information Literacy. 2002. *Library Quarterly*; vol 72(2) ; pp. 1-26.

Kothari, C. R. *Research Methodology: Methods and Techniques*. 1985. 2nd ed; Wishwa Prakashan; New Delhi ; p. 300-330.

Koul, L. *Methodology of Educational Research*. 1984. 3rd ed.; Vikash Publishing House Pvt. Ltd.; New Delhi ; p. 109-110.

Lenox, M. F., & Walker, M. I. Information Literacy in the Educational Process. 2003. *The Educational Forum*; vol. 57(2); pp. 312-324.

Rajgoli, I. U. Information Literacy in Digital Information Environment. 2005. *SIS*; 27-25 January; Visakhapatnam ; pp. 700-709.

Raju, K. A., & Takalker, A. Warn Agar Wired Village Project: A Case Study. 1999. *Journal of Rural Development*; vol. 8 (2); New Delhi ; pp. 285-291.

Silicon India. E- States in India. 2001. Available at <http://www.siliconindia.com>

Smith, A. G. Testing the Surf: Criteria for Evaluating Internet Information Resources. 2005. *The Public Access Computer Systems Review*; vol8(3); Available at <http://www.info.lib.up.edu/pr/v8/n3/smith8n.html>

Sugathri, D. K. Information Literacy and Its Need: A Case Study of Students Of Andhra Univ. ; *SIS*; 27-25 January; Visakhapatnam ; pp 309-315.

Tella, R. Best Practices to Promote Information Literacy in the Digital Era: Case of Cord. 2005; *SIS*; 27-25 January; Visakhapatnam ; p.681-690.

Vijaya, K. K. Library and Information Services on the Internet. 2005. *SIS*; 27-25 January; Visakhapatnam ; p. 191.

Zhanng Y. The Impact of Internet-Based Electronic Resources On Formal Scholarly Communication In The Science: A Citation Analysis. *Journal of Information Science*; vol. 24(4); pp. 241-254.