
COMPUTER AND INFORMATION LITERACY AWARENESS AMONG P.G .TEACHERS: A CASE STUDY

SATISH L. PADME

Asst. Librarian, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad(MH)

Abstract

A study was conducted in Dr. Babasaheb Ambedkar Marathwada University Academic Staff College; Aurangabad to know the computer literacy and Information literacy of the participant teachers (different states of India) of 83rd Orientation course .Questionnaire was used as a data collection tool. The study found More than 26.33% of the Participants are not able to use the computer and many of them do not possess the knowledge of software, hardware, storage devices etc.32.5%of the total respondents are not able to use the Internet. And the study found that the lack awareness regarding dictionaries, encyclopedias, and bibliographies etc. The majority of the participant teachers opine that the computer literacy and information literacy programmes are most needed for them .The Author suggest to University, UGC to take steps to impart computer literacy and Information literacy orientation programmes to the teachers with the help of Libraries situated in their colleges and universities. With the help of such type of programmes the teachers and libraries fulfill the student's need of information

KEYWORDS :

Dr. Babasaheb Ambedkar Marathwada University, Computer literacy, Information Literacy, Internet, UGC, Libraries

1.INTRODUCTION:

As research and teaching increasingly rely on global networks for the creation, storage, evaluate, and disseminate the knowledge. The 21st century has brought enormous change in higher education throughout the world as a result of new information and technological developments. We are outfitting our schools, libraries, and homes with electronic technologies--but are we preparing our students and teachers for the onslaught of information that is provided by these technologies? What happens when the student can get more information from the Internet than previously conveyed by a teacher or a textbook? What should a student do when faced with so many informational possibilities? Which of the information is credible and which is not?

The teacher's role must evolve from the giver of knowledge into being more of a coach or guide (Wisconsin Educational Media Association, 1993) Teachers, professors, teaching assistants, librarians, administrators, and the community must collaborate to develop ways to involve the students not only in using classroom materials but also in using resources from the broader community and the mass media.

Teachers must be prepared to "teach students to become critical thinkers, intellectually curious observers, creators, and users of information" (Lenox 1993) the goal is to prepare students early on to "learn how to learn" and carry these skills into other areas of their lives so that they can be independent

seekers and consumers of information throughout their lives. In this context university libraries needs to be dynamic take the leading role in assessing the information literacy and computer literacy competence of the teachers and plan for conducting such programmes to improve the situation one such attempt has been made by the Author and the result have been reported here.

2. REVIEW OF LITERATURE:

It was found that studies on computer and information literacy in India and other countries covered several subjects as Assessing Information Literacy among Undergraduates: A Discussion of the Literature and the University of California-Berkeley Assessment Experience ,Patricia Davitt Maughan(2001); Assessing Information Literacy: A Case Study of Primary 5 Students in Hong Kong, Samuel Kai Wah Chu(2012)

“Assessment of Information Literacy and Computer Literacy among post graduate students: A case study of Kuvempu university library users, Ramakrishnegowda K.C. and Walmiki R.H.(); Information Literacy Competency: A Study of Bioscience Students of Kuvempu University ,B S Biradar (2011) ; Assessment of Information Literacy Skills among Science Students of Andhra University ,C. Sasikala and V. Dhanraju(2011); Internet literacy skills and internet usage patterns to access e-resources by Assam university library users: an evaluative study ,Manoj Kumar Sinha(2012)

3. DEFINITION OF INFORMATION LITERACY AND COMPUTER LITERACY:

2.1 Information literacy:

American Library Association's (1989). Presidential Committee on Information Literacy, Final Report states, "To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information"

2.2 Computer literacy:

Computer literacy is defined as the knowledge and ability to use computers and technology efficiently. Computer literacy can also refer to the comfort level someone has with using computer programs and other applications that are associated with computers. Another valuable component of computer literacy knows how computers work and operate. Having basic computer skills is a significant asset in the developed.

4. IMPORTANCE OF INFORMATION LITERACY AND COMPUTER LITERACY IN HIGHER EDUCATION

4.1 Solution to the data smog:

Now we are living in information age wherein the information resources are proliferating and individual are faced with diverse and abundant information resources in their studies, in their workplace and in their lives. Information is available through libraries, mass media, manufactures and service providers, and the Internet. It refers to the idea that too much information can create a barrier in our lives called the data smog. Information literacy is the solution to Data Smog. It allows us to cope by giving us the skills to know when we need information and where to locate it effectively and efficiently. It includes the technological skills needed to use the modern library as a gateway to information. It enables us to analyze and evaluate the information we find, thus giving us confidence in using that information to make a decision or create a product.

4.2 Supporting users to achieve a range of skills & self directed learning

Information the field of education in general and higher education in particular, there has been a shift toward building teachers-center learning environment, where teachers are more responsible and autonomous in their learning. It is about optimizing teachers selling and learning by actively supporting teachers to achieve a range of skills, which enable them to understand and appropriateness of a variety of information sources, access them efficiently, evaluate the information and use them effectively. Information literacy extends learning beyond formal classroom settings and supports individuals in self directed learning in all arenas of life. (Ramakrishnegowda & Walmiki R.H, 2004)

5. ESTABLISHMENT OF ASC IN DR.B.A.M UNIVERSITY, AURANGBAD:

All the Commissions and Committees on higher education have emphasized the development of academic staff college as an important alternative for educational transformation. New methods of teaching and educational technology along with the development in Information Technology have made the job of a teacher both exact and demanding in pursuance of the Programme of Action of NPE (1986), the UGC set up Academic Staff Colleges in the Country for enhancing the professional competence of the teachers in higher education. The Executive Council (presently Management Council) at its meeting held on 31-12 1987 accepted the ASC scheme sponsored by UGC at this University as per Govt. resolution bearing No.UGC/1487-719/UNI-3/Caell dated 8th July, 1987. Accordingly, the UGC established the ASC in DR Babasaheb Ambedkar Marathwada University in October, 1987. The Academic Staff College in this University organizes specially designed Orientation Courses with the objectives of improving the teachers understanding about social problems and seeking appropriate solutions, inculcating teaching skill, equipping them with professional management skill, and developing them into vibrant and integrated personalities.. (Dr.B.A.M.U, 2010)

6. OBJECTIVE**The objectives of the study are**

- 1.To examine the teachers capability to use computers
- 2.To know the teachers capability to use the Internet
- 3.To know the teachers capability to specify electronic information sources to solve specific information problems for fulfill the students information need
- 4.To know the need of teachers about information literacy and computer literacy programmes in making them self-learners and life-long learners.

7. SCOPE AND LIMITATIONS:

The present work is delimited to the Dr. Babasaheb Ambedkar Marathwada University Academic Staff College; Aurangabad to know the computer literacy and Information literacy of the participant teachers of 83rd Orientation course only. The study highlights the extent of Internet awareness, Internet Literacy for accessing to e-resources and the suggestions put forwarded by the respondents for the improvement of the existing ICT infrastructure in Assam University campus and need for organizing users' awareness programme for optimum usage of e-resources by the Assam University community

8. METHODOLOGY:

The survey method was adopted for the present study and a questionnaire was used as a data collection tool. The majority of the questions were objective type designed keeping the objective of the study in view. The questionnaire was distributed to all the participant teachers. In total 57 (coming from 22 different faculties) teachers were included for the questionnaires were distributed among the teachers and asked of fill-up the same by allowing sufficient time. Assistance to clear the doubts, if any with regard to the question was extended by the Author (library professional staff).

10. DATA ANALYSIS AND INTERPRITATION

The data collected were carefully analyzed and processed. The analysis of collected data has been tabulated and in the present paper results have been shown in the tabular and graphical format.

10.1. TEACHERS CAPABILITY TO USE COMPUTER

In order to use the information available in electronic form the teachers are expected to be computer literate which includes skill to operate computers, knowledge of hardware, software, and storage devices. The questions were realized to examine the computer literacy of the teachers and the

data is given in Table 1.

Table 1: Teachers' Capability to Use Computer

N=57

Teachers have capability to Use the Computer	Teachers do not have capability to Use the Computer	Teachers not responded
40 (70.17%)	15 (26.33%)	2 (3.50 %)

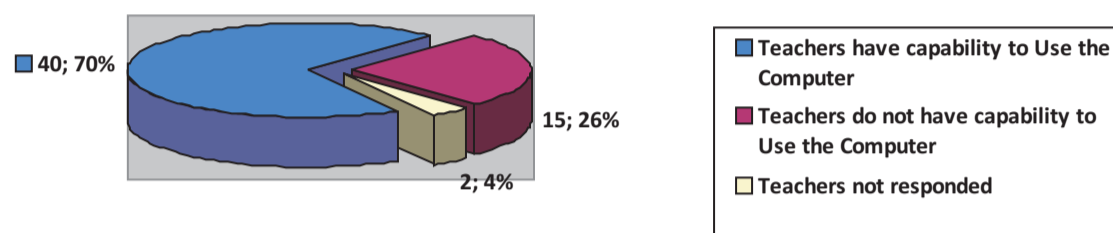


Figure 1: Teachers' Capability to Use Computer

Table 1 reveals that 70.17 %of the teachers know to operate computers.26.33 % of the teachers do not know computer operation, and 3.50% of the teachers have not responded to the question.

In order to know the familiarly of some popular aspects of the IT environment few questions were raised and the data is presented in Table 2.

Table 2: Teachers' Knowledge of Computer

N=40

Computer Related questions	No. of teachers possess knowledge	No. of teachers do not possess knowledge
1. What is 'bit' and 'byte'	29 (72.5%)	11 (27.5%)
2. Full form of CD-ROM	28 (70%)	12 (30%)
3. Hardware part of computer	31 (77.5%)	09 (22.5%)
4. Software of Computer	23 (57.5%)	17 (42.5%)
5. Full form of CPU	33 (82.5%)	07 (17.5%)

Table 2 reveals that among the teachers, who indicated that they know how to operate computer are unaware of the software (42.5%), hardware (22.5%) 'Bit'& 'byte' meaning (27.5%) and (17.5%) of the respondents do not know the Full form of CPU and (30%) of CD-ROM

10.2. TEACHERS CAPABILITY TO USE INTERNET

The Internet is the network of networks, has been considered as a powerful sources of information and if facilitates the navigators with maximum in available throughout the world. The teachers should know how to use the Internet for various purposes what are the different searching tools use for finding information, information about use the boolean operators including for finding the latest information needed for their studies, for communication with teachers and friends. For finding information regarding higher education, job opportunities etc. however, the use of Internet. Hence, in order to know the teachers competence in using Internet. A question was asked to those teachers who have said that they are competent to use the computer and the reposes in tabulated and presented information Table. 3

Table 3: Teachers' Capability to Use the Internet N=40

Teachers have capability to Use the Internet	Teachers do not have capability to Use the Internet
27(67.5%)	13 (32.5%)

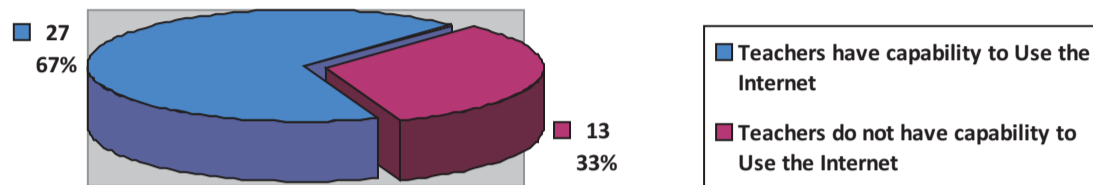


Figure no. 3: Teachers' Capability to Use the Internet

The data presented in table no. 3 clearly indicates the fact that the majority (67.5%) of the respondent's posses the competence to use the Internet and (32.5%) of them have indicated that they are not competent to use the Internet. In order to cross-check the ability of the respondents who have indicated that they are competent to use the Internet. Few more questions were asked and the responses tare preened information table 4.

Table 4: Teachers' Knowledge of the Internet

N=27

Internet Related Questions	Teachers possess the Knowledge	Teachers do not possess the Knowledge
1.Applications of Internet	12 (44.45 %)	15 (55.55%)
2.E-mail	21 (77.78 %)	6 (22.22%)
3.Expanded form of URL	13 (48.15 %)	14 (51.85%)
4.Search engine	16 (59.26 %)	11 (40.74 %)

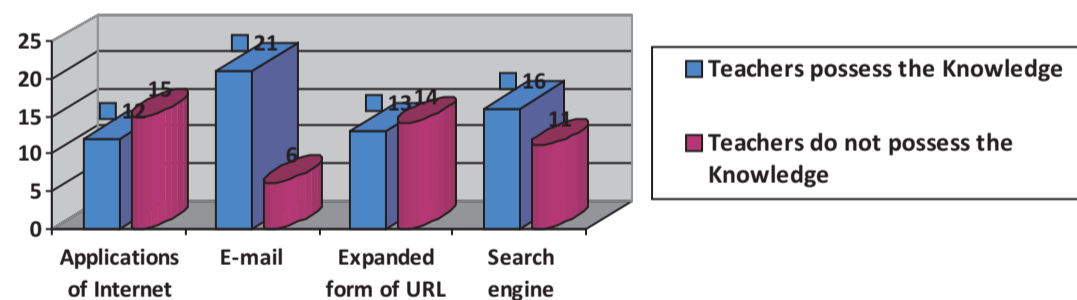


Chart no.4: Teachers' Knowledge of the Internet

The glance at the data presents in Table 4 reveals that among the 27 respondents, who have indicated they are competent to use the Internet 55.55% of them do not know the applications of the Internet. And 40.74% of them think that E-mail means a system of sending letters through courier service.

The majority 51.85% of this category of respondents do not know the expanded form of URL And 40.74%of them do not know the search engines helps users locate the websites containing useful information and references to such information This actually shows the ignorance of even those respondents who have said they are competent to use the Internet.

10.3. TEACHERS CAPABILITY TO IDENTIFY DIFFERENT E-RESOURCES OF INFORMATION

There are variety of information sources available in the market .it may be available in traditional or in electronic form which contain lot of information on different kind of subjects. The teachers are expected to be aware of wide rang of information sources and use the appropriate one's to solve a specific information problems of students. In the present study a series of specific information problems were given with several alternative answers. The teachers were asked to tick the best sources of information to find specific information among different sources in order to determine their ability to use the appropriate source of information to solve specific information problem. The data is presented in Table 5.

Table 5: Teachers' Capability to Identify Specific E-Resources of Information
N=27

Information Source	No. of teachers able to specify specific resources	No. of teachers not able to specify specific resource
1.Dictionarys	10 (37%)	17(63%)
2.Encyclopedia	13 (48.14%)	14(51.86%)
3.Bibliography	8 (29.62%)	19(70.38%)
4.Journals	19 (70.37%)	8(29.63%)
5.Directories	16 (59.25%)	11(40.75%)

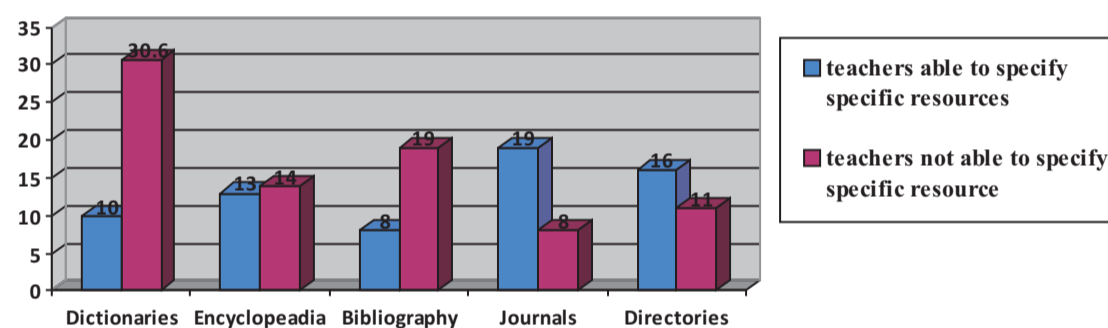


Chart no 5: Teachers' Capability to Identify Specific E-Resources of Information

The data presented in table 5 reveals that the majority of the respondents could specify specific resources for the information problems related to journals (70.37%) ,Directories (59.25%). On the contrary, it is highly disturbing to not that large number of the respondents could not specify specific resources for the information problems related to Dictionarys (63%), Encyclopedias (51.86%) and Bibliography (70.38%).

10.4. SEARCHING CAPABILITY OF E-JOURNALS AND E-BOOKS FULLTEXT DATABASES(FREE OR PAYABLE)

There are variety of information databases available in the market .it may be available in electronic form which contain lot of e-journals and e-books. The teachers are expected to be aware of at least two or more wide range of information source databases which may be available in free and payable form and use the appropriate one's to solve specific information problems of students are given in Table no.5

Table no. 6. Searching Capability of E-books and E-journals databases
N=27

searching capability of E-books and E-journals in free or payable databases	Do not having Capability of searching E-books and E-journals in free or payable databases
10 (37.04%)	17(62.96%)

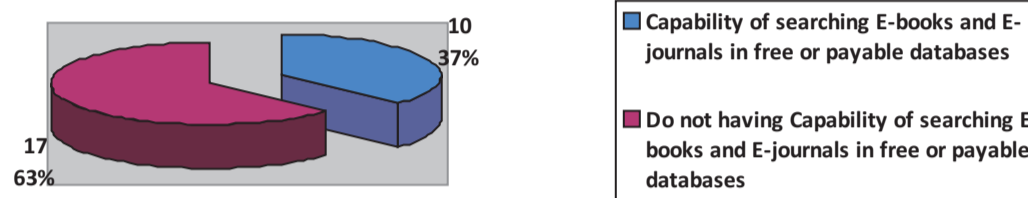


Chart no.6. Searching Capability of E-books and E-journals databases

Analysis of data in Table No.5 reveals that the Majority 62.96% of the teachers not having the knowledge of databases of e-journals and e-books available on Internet and only 37.04% teachers having the knowledge of some databases available free and payable form on the internet and most important fact is that maximum of the teachers are belongs to science faculty.

10.5. NEED OF INFORMATION LITERACY AND COMPUTER LITERACY PROGRAMMES FOR TEACHERS.

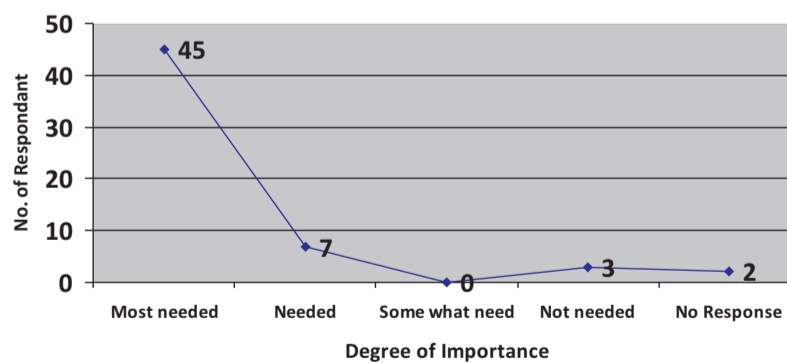
In order to elicit the teacher's opinion about the need of information literacy and computer literacy programmes in the Orientation course for the development of skills regarding how to use computer, how to search information sources on computer, how to search proper information and their sources and knowledge of information databases on internet in the University Library, the teachers were asked to indicate the degree of importance of such a Programme and the results are given in Table 6.

Table 7: Teachers' Opinion about the Need of Information Literacy and Computer Literacy Programmes

N=57

Degree of Importance	No. of Respondents
1. Most needed	45 (79%)
2. Needed	7 (12.28%)
3. Some what need	0 (0%)
4. Not needed	3 (5.26%)
5. No Response	2 (3.5%)

CHART NO.7:NEED OF INFORMATION LITERACY AND COMPUTER LITERACY PROGRAMMES FOR TEACHERS.



Analysis of data in Table no. 6 reveals that the majority 79% of the teachers feel that information literacy and computer literacy programmes are 'Most needed' 12.28% of them opine that such programmes are needed 0% consider 'somewhat needed' and only 5.26% Think that it is 'not important' for them. And 3.5% of the teachers have not responded to the question.

11. FINDING

The findings of the present study have been summarized in the following section.

Majority of the total respondents (26.33%) do not know how to operate computer.

Majority of those who have indicated that they know how to operate computer indeed do not know the basic concepts like hardware, software, programming languages, storage devise etc.

Among those who indicated that they ability to use the computers, 32.5% of them do not have the capability to use the Internet.

Nearly half of the total respondents, among those who indicated that they know the use of Internet, do not know the application of the Internet. Also more than half Internet users do not know about expanded form of URL

The majority of the respondents are not aware of the Electronic information source like Directories, Encyclopedias, dictionaries, and Bibliographies etc. many of them do not posses the ability to indicate the appropriate information sources to solve the specific problem

79% of the respondents opine that information literacy and computer literacy programmes in the Library are 'most needed' and they are enthusiastic to undergo such programmes to become self-learners and life long learners.

12. SUGGESTIONS:

In the present study author finding that the information literacy and computer literacy rate of the majority of the teachers are very low. In 21st century we have need to improve our knowledge with the awareness of computer and information literacy. In order to improve the situation and make the teachers and student sustainable in the growing higher education system the following suggestions put forth.

1. The UGC, University has to take the steps to impart information and computer literacy programmes among teachers and students engaged in higher education .college and university librarians have to take a leading role in teaching the teachers and students with basic skills of information literacy and computer literacy with organizing different orientation courses. Due to this teacher have increase ability to give the right information to the right student at right time.

2. Librarian and other library staff have needed to learn new technology and implement those in libraries and information centers and orient to the all type of users like teachers and students regarding different search strategies and available databases of e-books and e-journals.

13. CONCLUSION

Now we are living in information age and information and communication technologies are the basic tools used in Higher education for more effective learning .ICT have became necessities in order to stay abreast in the current globalizes knowledge-based economy. It is often perceived that ICT literacy automatically equates to information literacy. Now in information age Teachers have responsibility to give the effective, accurate, evaluated, reliable and skillful education to the students. Teachers must be prepared to "teach students to become critical thinkers, intellectually curious observers, creators, and users of information because today's education system is totally changed from teacher centered learning to the student centered learning. But due to barriers of information, teachers have created disturbance in their information understanding, evaluating and presenting thereby they do not have the capability to present their knowledge effectively. Especially in "arts" field teacher face the problems of computer literacy and information literacy.

UGC & Universities play important roles to impart information and computer literacy programmes but they want to improve their policies ex. If UGC imparting such kind of programmes in teachers orientation effectively with the help of Libraries, then teachers will make literate about e-resources and their accessibility and make able to present it effectively. The survey results support

information literacy that collaboration of library and academic staff, the time of need integration of information literacy training into the curriculum and linking it with the assessment process ensures successful outcomes.

REFERENCES:

- 1.American Library Association Presidential Committee on Information Literacy. 1989. Final Report. Washington, DC
- 2.<http://www.Bamu.net> accessed date:4-8-2010
- 3.Lenox, Mary F.; Walker, Michael L. 1993. "Information Literacy in the Educational Process". The Educational Forum, Vol. 57, spring.
- 4.Ramakrishnegowda K.C. and Walmiki R.H. "Assessment of Information Literacy and Computer Literacy among post graduate students: A case study of Kuvempu university library users SRELS Journal of Information Management, vol.41 (4), December.
- 5.Wisconsin Educational Media Association. 1993. Information Literacy: A Position Paper on Information Problem Solving. Madison, WI. ED 376817