



**“STUDENTS ATTITUDE TOWARD E-LEARNING IN HIGHER  
EDUCATION: A STUDY AT RASHTRASANT TUKADOJI MAHARAJ  
NAGPUR UNIVERSITY, NAGPUR, AFFILIATED COLLEGE OF EAST  
NAGPUR.”**

**Shashikant G. Rokade**  
Head Dept. of Library  
Sevadal Mahila Mahavidyalaya & Research Academy, Nagpur.

**ABSTRACT :**

Students are increasingly expected to use electronic resources while at college. Studies were undertaken to determine the level of use of this type of resource, how students feel about various issues surrounding e-learning resources and whether attitudes change dependent upon subject studied. Total 336 students across the east Nagpur college of RTM Nagpur University has completed the questionnaires to determine level of use of various e-learning; ways in which they felt e-learning resources had hindered or improved their academic career; if they perceived themselves capable of using the resources; would the standard of their work suffer without the use of these resources; and the various methods employed to acquire the skills necessary to use the sources. 316 students were questioned as part of student category, investigating the Impact on their own level of attitude, supplemented by 20 research scholar, questioned as part of research fellow category, investigating the Impact on their research level of attitude, using the same methodology.

**Key words:** E-learning, student attitude, higher education, research level of attitude.

**INTRODUCTION:**

E-learning has been integrated in the curriculum of most of the university by different faculties. In recent years several steps have been taken to integrate e-learning with the academic work. Academic libraries apply appropriate communication technologies in support of e-learning and e-research by providing seamless access to electronic resources and services. Electronic resources include online catalogues, databases, multimedia, online journals, digital repositories, electronic books, electronic archives and online /electronic services.





Educators must go beyond computer literacy to achieve technological competence is successful integration of technology into the classroom is to occur. Lowther, *et al.* (1998) emphasizes that the technological competence also requires a transition from using the computer as an instructional delivery system to one of using the computer as a learning tool. Shu-Sheng Liaw, *et al.* (2007) found that the trend of using e-learning as e-learning and/or teaching tool is now rapidly expanding into education. E-learning is the new wave in learning strategy. Through innovative use of modern technology, e-learning not only revolutionizes education and makes it more accessible, it also brings formidable challenges for instructors and learners. As per Mahdizadeh, *et al.* (2007) E-learning environments increasingly serve as important infrastructural features of universities that enable teachers to provide students with different representations of knowledge and to enhance interaction between teachers and students, amongst student themselves.

### **Need for the Study**

Education in the digital world of today can actually make that meaningful shift by ensuring that if students do not learn the way they are taught, they can be taught the way they learn. This pedagogical shift, when integrated into educational software and appropriate technology, can make learning exciting and enjoyable while securing successful learning outcomes in shorter time frames. While colleges and universities globally lend to use asynchronous or delayed technologies with an instructor as the basis of e-learning and thereby include tools like online discussion forums, electronic books, online exams and grading, online mentoring, web-linked, etc. As the 11<sup>th</sup> plan approach paper states: The 11th plan provides an opportunity to restructure policies to achieve a new vision of growth that will be much more broad based and inclusive, bringing about a faster reduction in poverty and helping bridge the





divides that are currently the focus of so much attention. While it recognizes that Information and Communication Technology (ICT) has a great potential for enhancing learning levels and improving quality of education.

Modern day learning environments are characterized by their place and time independence, their integrated presentation and communication facilities, and their opportunities for re-use of learning technologies in the form of learning objects. Many researchers claim that technology push will enhance the quality of education. In fact, Clark (1994) argues that the question whether media or technology will ever influence learning remains open to debate. A well-defendable viewpoint lies not in the media or technology used, because only positive attitudes toward that media or technology can improve the quality of learning or teaching. Thus, understanding users' attitudes toward learning technology, including instructors' and learners' attitudes, enables us to make learning more effective, efficient, and appealing. Gefen and Straub (1997) asserts that among the various theoretical models developed to examine users' intentions of using computer and communication technology, perceived usefulness is a key to influence behavioral intentions. Technology offers tremendous opportunities for increasing the effectiveness and efficiency of education in the future. Students, faculty, staff and administrators now use technology extensively in their daily activities and have become reasonably technologically literate. The trend of using e-learning, as learning and teaching tool is now rapidly expanding into education. Many educators and researchers had high hopes for e-learning, believing that, it would provide more access to information and communication and would ultimately lead to a new revolution in education. Several studies have been conducted to examine





attitudes means towards e-learning in the West and other parts of the world. But in the Indian context research in this direction were very few. According to Murahari and Kumar, (2008) E-learning in India, is still at an experimental stage. Woolworth (1938) opines that attitudes means, the affective by-product of an individual's experience, have their bases in his inner urges, acquired habits and the environmental influences by which he is surrounded. In other words, attitude result from personal desires and group stimulation. They act as causes as well as results of behavior. They are personal and are associated with the feeling tones connected with the individual's experiences. Attitudes grow and develop, as do other mental and emotional behavior patterns, in terms of an individual's reactions to his environment. Attitude is a set or disposition (readiness, inclination, tendency) to act toward an object according to its characteristics so far as we are acquainted with them. Measuring attitude and efforts to improve attitude towards technology is very much essential to effect any change through technology. This necessitated the researcher to study the attitude of students' of Higher Education towards E-learning.

### **Definition of Terms :**

#### **Electronic learning or e-learning**

Electronic learning or e-learning is an all-encompassing term generally used to refer to computer enhanced learning, although it is often extended to include the use of mobile technologies such as PDAs and MP3 players. It may include the use of web-based teaching materials and hypermedia in general, multimedia CD-ROMs or web sites, discussion boards, collaborative software, e-mail, blogs, wi-fis, text chat, computer aided assessment, educational animation, simulations, games, learning management software, with possibly a combination of different





methods being used. Along with the term e-learning technology and educational technology, the term is generally used to refer to the utilization of technology with learning in a much broader sense than the computer-based training or computer aided instruction of the 1980s. It is also broader than the terms Online Learning or Online Education which generally refer to purely web-based learning. In cases where mobile technologies are used, the term E-learning has become more common.

### **E-Learning :**

E-learning is the computer and network-enabled transfer of skills and knowledge. E-learning applications and processes include Web-based learning, Computer-based learning, Virtual Education opportunities and Digital collaboration. Content is delivered via the Internet, intranet/extranet, audio or video tape, satellite TV and CD-ROM. It can be self-paced or instructor-led and includes media in the form of text, image, animation, streaming video and audio.

The growth of e-learning is directly related to the increasing access to information and communications technology, as well its decreasing cost. The capacity of information and communications technology to support multimedia resource-based learning and teaching is also relevant to the growing interest in e-learning. Growing numbers of students are increasingly using information and communications technology to support their teaching.

### **Advantages of E-Learning :**

The following are the advantages of e-learning.

- Lower costs, Time saving, Flexibility, Faster response
- Greater effectiveness, Better Competitiveness
- E-learning complements the process and can help reach out the masses.





- E-learning lies in its ability to cover distances.
- The consistency that e-learning provides, e-learning is self-paced and learning is done at the learners place.
- Learning resources can be easily developed using a variety of standard packages.
- One can make use of and link into other resources available on the internet.
- Online delivery is cheap as there are no printing or distribution costs.
- It is easy to track learner activity and progress.
- Electronic learning where the student can access the study modules through web, irrespective of the location, time, etc.
- It is interactive and can serve as a substitute for a classroom teaching environment.

#### **Disadvantages of E-Learning :**

The following are the disadvantages

- Many people find it discouraging, especially at first.
- The student and tutor need reliable access to a computer and internet.
- The student and tutor need basic information technology skills.
- Training is required for both tutor and student.
- The development of high-quality learning materials is time-consuming and expensive.
- Online tutoring can be more time-consuming than face to face tutoring.
- Learning is a social process and many people enjoy face-to-face interactions.
- The use of the large virtual learning environments is expensive and may demand additional equipment and specialized staff.





- Some learning environments require state of the art computers and the most up to date browser.
- Blended solutions can be expensive as they may involve the development of expensive online learning resources and providing technology based support as well as face- to-face support.

### **Higher Education :**

Education is a very important role in our lives. There is a rapidly growing demand for a higher education in the world today. Most people seek higher education to improve their job prospects and social status. Some others are goes for self-improvement, development of character and for the sake of knowledge. Higher education imparts education and knowledge in one specific field such as sciences, social science, medicine, history and others. Higher education helps people to see world in a rational ways for the benefit of all. Educated people get wider vision to perceive the facts of the life. The advent of new and advanced information and communication technologies can very well be applied in the context of Higher Education. The Higher Education learners are in need of enriched content, interaction with the faculty and if possible with fellow learners. This could be achieved by the new communication technologies.

### **OBJECTIVES :**

This study aimed to answer the following questions:-

- What were the students' attitudes toward using the information technologies, in particular, the Internet in their learning tasks?
- What were the relationships between students' basic skills and knowledge in the Internet obtained through these generic courses and their attitudes toward using the Internet for learning?





- Did the learning environment in RTM Nagpur University affiliated colleges of East Nagpur have a positive impact on the students' perceptions of using the Internet as a learning tool?

### **METHODOLOGY :**

The present study there will be use to measure students' attitude towards e-learning and to discover the influencing factors so as to have a relevant result for the future initiatives of educational institutions that plan to adopt an e-learning systems. Determining students' attitude towards e-learning represents an important stage in predicting the adoption of certain behaviors.

This research was conducted through a structured questionnaire developed through exploratory research. After overseeing the literature review and choosing the analysis models, the questionnaire based on objectives: analyzing of technical abilities and measuring students' attitude towards e-learning. The discussion and observation methods are also be used for analysis of the relevant data to supplement the data evaluate through questionnaire to enhance its reliability. The investigator is made personal visit to the colleges.

### **ANALYSIS AND INTERPRETATION OF DATA :**

The analysis and interpretation of data is based on the data collected on the basis of the questionnaire circulated among different user group of the East Nagpur colleges of the RTM Nagpur University, Nagpur. The data presented below in various tables indicate the responses received on the various aspects of the present study.





### SAMPLE SURVEY :

A total of 352 questionnaires were distributed to the students and research scholars and 336 questionnaires duly filled were received with a response rate of 95.45 per cent.

**Table-1: Sample survey**

Sr. No.	Category of Users	No. of Questionnaire Distributed	No. of Response Received	Percentage (%)
1	Students	327	316	96.63
2	Research Scholar	25	20	80.00
	<b>Total</b>	<b>352</b>	<b>336</b>	<b>95.45</b>

### Frequency of Using e-learning Resources and Services

A question was raised to know the frequency of using the e-learning resources and services to the users. Table-2 indicates that majority (66.36%) of users using the e-learning resources and services daily followed by twice in a week (28.57%).

**Table-2: Frequency of using e-learning resources and services**

Sr. No.	Frequency	Response	Percentage (%)
1	Daily	223	66.36
2	Twice in a week	96	28.57
3	Once in a week	17	5.05
4	Bi-monthly	--	--
5	Occasionally	--	--

### Place of Accessing e-learning Resources and Services

Another question was asked to find out the place where they are accessing e-learning resources and services.





**Table-3 Place of accessing e-learning resources and services**

Sr. No.	Place	Response	Percentage (%)
1	Library	128	38.09
2	Department/Office	35	10.41
3	Central Computer Lab.	131	38.98
4	Private Centers	19	5.65
5	At home	23	6.84

From the above table it is clear that most (38.98%) of the respondents indicated that they access e-learning resources and services in the Central computer Lab. Followed by (38.09%) in the Library and (10.41%) of the users accessing these resources through their Department.

#### **Purpose of using e-learning Resources and Services**

With regard to purpose of using the e-learning resources and services it is found that 55.05% of the users are using e-learning resources and services for study purpose and 18.75% of them for research purpose followed by 15.77% for personal work.

**Table-4: Purpose of using e-learning Resources and Services**

Sr. No.	Purpose	Response	Percentage (%)
1	Personal Work	53	15.77
2	Teaching	09	2.67
3	Study	185	55.05
4	Research	63	18.75
5	Entertainment	26	7.73

#### **Source of Locating Information Resources**

The users were asked to know the sources of locating information resources. The table 5 indicates the response of the users.





**Table-5: Source of locating information resources**

Sr. No.	Source	Response	Percentage (%)
1	Library website	76	22.61
2	Online catalog	119	35.41
3	Databases	37	11.01
4	e-books	18	5.35
5	e-journals	65	19.34
6	Online reference works	21	6.25

The above table reveals that On-line catalogue is the most (35.41%) used source for locating the information resources. The Library website (22.61%) stands as the second priority source followed by e-journal (19.34%) and databases (11.01%).

#### **Extent of Satisfaction about Electronic Resources and Services**

The respondents were asked to express the extent of satisfaction that they derive in using the electronic resources and services.

**Table-6: Extent of satisfaction about electronic resources and services**

Sr. No.	Source	Dissatisfied	Satisfied	Very satisfied
1	Full text databases	109 (32.44)	197 (58.63)	30 (8.92)
2	e-journals	124 (36.90)	189 (56.25)	23 (6.84)
3	e-books	176 (52.38)	113 (33.63)	47 (13.98)
4	Websites	09 (2.67)	279 (83.03)	48 (14.28)
5	Online catalog	61 (18.15)	257 (76.48)	18 (5.35)
6	Online databases	77 (22.91)	281 (83.63)	22 (6.54)
7	Ask a Librarian	07 (2.08)	316 (94.04)	13 (3.86)
8	Discussion groups	163 (48.51)	139 (41.36)	34 (10.11)





**Note:- In the present table given parenthesis percentages is based on the actual total respondent of the study.**

From the above table it is clear that majority of users are just satisfied with the full text databases (58.63%), e-journals (56.25%), Websites (83.03%), Online catalog (76.48%), Online databases (83.63%). The users have expressed their dissatisfaction with regard to electronic books (52.38%), and Discussion groups (48.51%).

### **Opinion about Internet based Information Resources**

From the table-7, it is found that 57.44% of users are opined that the internet based information resources are good and 37.79% of them opined that the internet based information resources are poor.

**Table-7: Opinion about Internet based information resources.**

<b>Sr. No.</b>	<b>Opinion</b>	<b>Response</b>	<b>Percentage (%)</b>
1	Excellent	--	--
2	Very Good	16	4.76
3	Good	193	57.44
4	Poor	127	37.79

### **Use of Search Engine**

The users were asked to know about the use of search engine. From the following table it is evident that Google remains the most used search engine by 58.63% of users followed by Yahoo 31.54%.

**Table-8: Use of Search engine**

<b>Sr. No.</b>	<b>Search Engine</b>	<b>Response</b>	<b>Percentage (%)</b>
1	Google	197	58.63
2	Yahoo	106	31.54
3	Altavista	--	--
4	Lycos	--	--
5	MSN	33	9.82





### USE OF INTERNET SERVICE :

Another question was asked to find out the use of internet services. Naturally as with any other studies conducted earlier that e-mail is the most used (100%) service for communication of information in the internet followed by FTP (15.77%) and Telnet (5.35%).

**Table-9: Use of Internet services**

Sr. No.	Internet services	Response	Percentage (%)
1	E-mail	336	100
2	FTP	53	15.77
3	Telnet	18	05.35
4	News Groups	--	--
5	Gopher	--	--
6	Listserv	09	02.67

### Problems faced by the Users

The following table shows that the problems faced by the users in using the electronic resources and services.

**Table-10: Problems faced by the users**

Sr. No.	Problems faced by the users	Response	Percentage (%)
1	Lack of knowledge in using computer	14	04.16
2	Lack of assistance from the staff	52	15.47
3	Difficulty in using the search engine and Search strategy	98	29.16
4	Too much availability of Information	39	11.60
5	Lack of computer in the Net Lab. Or Library	133	39.58

From the above table it is clear that most 39.58% of the users have expressed that they are facing the problem of shortage of computer in the Net Lab or library. The 29.16% of users indicates that they have faced difficulty in using search engine and search strategy and 15.47% of them





felt the lack of assistance from the staff followed by the problems of too much availability of information 11.60%.

### **Findings**

- Majority of users using the e-resources and services from their department.
- The majority of users are using the e-resources and services for the purpose of study and research.
- Online catalog and electronic journals are the most used source for locating the information.
- Majority of users are just satisfied with most of the electronic resources like full text databases, e-journals, online catalog and others.
- Google is the most popular search engine and electronic mail is the most used internet service used by all users.
- The users are facing the problem of adequate number of computers in making use of e-resources and services effectively and efficiently in the Lab.

### **Suggestions :**

- The awareness about the use of electronic resources and services should be increased especially among the students in order to have optimum utilization of the resources.
- There should be proper assistance in the use of e-resources and services by the staff from time to time.
- The computer Lab. should provide sufficient number of computers to the users for optimum use of e-resources.





## **CONCLUSION :**

The recent development in information technology changed the world scenario. With the application of information and communication technology, particularly the Internet, there has been a shift in the use from traditional print resources to electronic resources. Since the number of information resources available in electronic form is growing every day, the libraries started subscribing to electronic resources considering their advantages over print Medias. The IT resources and services are attracting users in today's networked environment.

Electronic documents offer possibilities for expanding access as well as changing learning behavior and academic research trends. Content can always be accessible, regardless of time or place to be read on PCs. Electronic resources helps academicians and students by providing wide range of reference they needed worldwide, without wasting time and resources and also aims at encouraging better use of information resources available on Internet in the digitized form. There is a specific role for library professional or other e-learning teaching faculty to play in matching the user with correct information source. Library professional or e-learning faculty with their expertise knowledge and techniques of where to look up and how to find out the information for given query and help the users in their search for information by extending personal help and assistance. Thus, there is an urgent need for intensive practical training with modern technologies.

## **REFERENCES :**

1. Deborah, L. Lowther, Tempa, Bassoppo-moyo and Gary, R. Morrison. (1998), "Moving from Computer Literate to Technology Competent: The next educational reform", *Computers in Human Behaviour*, **14**(1), 93-109.





2. Deepak, K., Srivastava. (2005), "e-learning: A New way of Education", *University News*, **43**(26), 12-15.
3. Edwards, A. L. (1960), *Experimental Designs in Psychological Research*, New York:
4. Gefen, D., Straub, D. W. (1997), "Gender differences in the perception and use of e-mail: An extension to the technology acceptance model", *MIS Quarterly*, **21**(4), 391-399.
5. Hamdan Mubarak Al-Khashab. (2007), "Attitudes towards e-learning: An Empirical Study in Kuwait", *Dissertation*, Masters of Business Administration (MBA) of the Maastricht School of Management (MSM), Maastricht, the Netherlands.
6. Henry Holt and Co. Gefen, D., Straub, D. W. (1997), "Gender differences in the perception and use of e-mail: An extension to the technology acceptance model", *MIS Quarterly*, **21**(4), 389-400.
7. <http://en.wikipedia.org/wiki/E-learning> (accessed on 23/09/2012).
8. Janet, Lobo and Bhandi, M K E – Learning Indian Scenario & It's Impact On Library And Information Science Professionals published at 4th International Convention Caliber-2006, Gulbarga, 2-4 February, 2006.
9. Kayte O'Neill, Gurmak Singh and John O'Donoghue. (2004), "Implementing eLearning Programmes for Higher Education: A Review of the Literature", *Journal of Information Technology Education*, **3**, 313-323.
10. Liaw, S. S., and Huang, H. M. (2003), "An investigation of users attitudes toward search engines as an information retrieval tool", *Computers in Human Behavior*, **19**(6), 751-765.
11. Mahdizadah, H., Harm, Biemans and Martin Mulder. (2007), "Determining factors of the use of e-learning environments by University teachers", *Computers and Education*, **51**(1), 142-154.
12. Murahari B., Kumar V.V. (2008), "New Technologies for Teaching and Learning in the Information Age", *University News*, **46**(40), 1-8.





13. Norah Jones and John O'Shea. (2004), "Challenging hierarchies: The impact of e-learning", *Higher Education*, **48**(3), 379–395.
14. Pei-Chen Sun., Ray J. Tsai., Glenn Finger., Yueh-Yang Chen and Downing Yeh. (2007), "What drives a successful e-Learning? An empirical investigation of the critical factors influencing learner satisfaction", *Computers & Education*, **50**(4), 1183-1202.
15. Sen, Saswati. Academic Libraries in e-Teaching and e-Learning, ICAL 2009 – Vision And Roles of The Future Academic Libraries, New Delhi.
16. Shu-Sheng Liaw, Hsiu-Mei Huang and Gwo-Dong Chen. (2007), "Surveying instructor and learner's attitude towards e-learning", *Computers & Education*, **49**(4), 1066–1080.
17. Szajna, B. (1996), "Empirical evaluation of the revised technology acceptance model", *Management & Science*, **42**(1), 85–92.
18. Taylor, S. and Todd, P. A. (1995), "Understanding information technology usage: A test of competing models", *Information Systems Research*, **6**(2), 144–176.
19. Woodworth, R.S. (1938), *Experimental Psychology*, New York: Holt and Co.

