AN INVESTIGATION INTO THE ATTITUDE OF COLLEGE TEACHERS TOWARDS E- LEARNING IN PURULIA DISTRICT OF WEST BENGAL, INDIA

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ABSTRACT

Today we are living in an Information and Communication Technology (ICT) era. All over the world, there is a trend to use ICT in the teaching-learning process. The teacher and learner must gain access to technology for improving learning outcomes. ICT is a new paradigm of the teaching-learning process widely accepted as a necessary tool for attainment of developmental goals. Particularly higher education plays an important role for achieving MDGs.

In the process of education teacher plays vital role for promoting quality education. In order to development of teacher's professional efficiency, gaining update knowledge and promoting quality education Electronic Learning is very much necessary in the present knowledge and information explosion age. E- Learning is widely accepted and it can be rich and as valuable as the classroom teaching. E-Learning is more useful in educational research.

In the circumstance, E-Learning (EL) plays an important role for creating awareness among the teachers. In the present study the investigator made an attempt to study the attitude of college teachers towards E-learning in Purulia district of West Bengal. One hundred teachers (both male and female) teaching in Arts and Science streams were taken as representative sample of the whole population. An attitude scale was used for collecting the data. The means of both groups were tested for significance of difference by using 't' test. The differences in the groups were statistically significant and the attitude of College teachers was more favourable towards E-Learning.

Keywords: Attitude, learning, electronic and electronic learning.

INTRODUCTION

Science and technology play an important role in the new millennium. Tremendous explosion of knowledge in science and technology has changed the life style of people. Without science and technology we can not go forward.

Now a day's science and technology is as essential as our basic needs. Today's technology leads the way to productivity and the internet has become the vehicle of choice for markets and educational institutions. E-learning is the changing trend in education. The modern technologies particularly the internet made education no longer limited to the four walls of the class room. E-learning comprises all forms of electronically supported learning and teaching.

The information and communication systems, whether networked or not serve as specific media to implement the learning process. The term will still most likely be utilized to reference out-of classroom and in-classroom educational experiences via technology, even as advances continue in regard to devices and curriculum. E-learning may include the use of web-based teaching materials and hypermedia in general, multimedia CD-ROMs, websites, discussion boards, collaborative software, e-mail, blogs, wikes, test chat, computer aided assessment, educational animation, simulations, games, learning management software, electronic voting systems and more, with possibly a combination of different methods being used.

E-learning is naturally suited to distance learning and flexible learning, but can also be used in conjunction with face to face teaching, in which case the term blended learning is commonly used. E-learning is a means of education that incorporates self-motivation, communication, efficiency, and technology. Because there is limited social interaction, students most keep themselves motivated.

E-learning is a flexible term used to describing a means of teaching through technology. E-learning refers to the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance (Rosenberg, 2001; Wentling et al., 2000). In general, E-learning is the expression broadly used to describe *"instructional content or learning experience delivered or enabled by electronic technologies"* (Ong and Wang, 2004). Broadly, we can define it as *"the use of the Internet, intranets / extranets, audio and videotape, satellite broadcast, interactive TV, and CD-ROM, not only for content delivery, but also for interaction among participants"*. Elliott Masie defines "E-learning as the experience dimension of E-learning, which includes such factors as engagement, curiosity, simulation and practice". E-learning can be defined as the use of any of the new technologies or applications in the service of learning or learning support (Laurillard, 2006). E-learning has to keep the people it's designed for in mind. How do we learn? How do we acquire and retain skills and information to help us develop? Only when we address individual learning styles can be "e" in E-learning factor in then the technical side the electronic delivery can be adapted to the learner. Therefore, proper understanding of the E-learning in which the man lives is inevitable. Since the college level is the crucial stage of the present educational system in our country, it needs special attention. Therefore, the necessity of getting the teachers well acquainted with E-learning in college stage can never be minimized. Computer knowledge and E-learning should spread all over the world. It is found that there are different reasonable opinions in this regards. But we cannot come to a conclusion about all the college teachers' attitude towards E-learning from several comments or discussions with a handful of teachers only.

Many questions are arising in the researcher's mind about the teachers' attitude towards E-learning at college level. Still now it is very important and sensitive issue.

It is an urgent need for developing certain strategies which can improve their knowledge, attitude and skills on E-learning. Therefore, in order to know the attitude of college teachers towards E-learning, the investigator has decided to take up a systematic and objective attitudinal study of college teachers towards E-learning. The investigator intends to restrict his research work to Purulia district of West Bengal.

STATEMENT OF THE PROBLEM

The problem for the present study may be specifically stated as below: -"An Investigation into the Attitude of College Teachers towards E- Learning in Purulia District of West Bengal".

NEED AND SIGNIFICANCE OF THE STUDY

In the last decades, the global economy has been to what so called "knowledge - based economy " where knowledge is created, acquired, disseminated, and utilized more efficiently and effectively by enterprises, organizations, individuals and communities for greater socio-economic development and global competitiveness. The new knowledge economy puts a premium on intellectual capital making lifelong education more important than ever. How ever, the education constrains (whether time, money etc) are be coming more present. Accordingly, E-learning is a vital asset for all employees in the new knowledge economy.

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 a learning and technology tool is now rapidly expanding into education although E-learning environments are popular; there is minimal research on teacher's attitudes towards E-learning environments. 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. E-learning environments increasingly serve as important infrastructural features of colleges/universities that enable teachers to provide students with different representations of knowledge and to enhance interaction between teachers and students and amongst students themselves. Education is one of the most important inputs that influence the all round development of any nation - economic, physical, social, cultural, ethical and spiritual. Teachers are essential players in promoting quality education and no education reform is likely to succeed without the active participation and ownership of teachers. Teachers have to develop appropriate competencies to be able to create a learning environment in which he/she designs and enhance the learning experiences. He/She must be able to incorporate E-learning with the traditional learning and competent enough in Web Based Teaching.

Therefore, the researcher feels that particularly the college's teacher's opinions or their attitudes can never be ignored, rather those should be reviewed or re-explored time to time, it is this feeling that has urged this investigator to take up the present study on a particular region of Purulia district of West Bengal. It is expected that this study, will be able to make some significant contributions in the field of education.

SCOPE OF THE STUDY

This type of study may be conducted in different ways and at different levels, such as:

- A comparative survey of the attitude of college teachers of different states of India towards E-learning may be conducted.
- A comparative survey of the attitude of college teachers of different parts/districts of West Bengal towards E-learning may be undertaken.
- The attitude of the college teachers belonging to different socio-economic status may be investigated.
- 4. The attitude of the college teachers belonging to rural and urban areas of a single state or of all the states of India towards E-learning may be compared.
- 'In-depth' attitudinal studies may be conducted in order to know real attitude of the college teachers towards E-learning.

DELIMITATIONS OF THE STUDY

- **Geographical Area:** The investigation was delimited to only Purulia district of West Bengal.
- **Level of Education:**
  - The study was restricted to the Teachers teaching in the colleges (under Sidho-Kanho-Birsha University) of the said district.
  - Among the college teachers only the Arts and Science streams Teachers of general Colleges were considered as the subjects of the present study.
- **Type of Study**

This study was conducted only at surface level. It was not an 'in-depth' study.

Attempts to know the subject's attitude by administering an attitude scale constructed by the researcher himself.

No inter state comparison was done. Only intra- district comparison between the male-teachers and female-teachers or between General and SC/ST teachers or rural and urban teachers or Arts and Science teachers were done.

OBJECTIVES OF THE STUDY

- To ascertain the attitude of college teachers of Purulia district of West Bengal towards E-learning.
- To compare the attitude of male- and female- teachers teaching in the colleges of Purulia district towards E-learning.
- To compare the attitude of rural and urban college teachers of Purulia district of West Bengal towards E-learning.
- To compare the attitude of General and SC / ST college teachers of Purulia district towards E-learning.
- To compare the attitude of Arts and Science college teachers of Purulia district towards E-learning.

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HYPOTHESES OF THE STUDY

- ➤ **H_1: The college teachers will have more favourable attitude towards E-learning in Purulia district of West Bengal.**
- ➤ **H_2: There will be significant difference between the attitudes of male-and female-teachers in the colleges of Purulia district of West Bengal towards E-learning.**
- ➤ **H_3: There will be significant difference between the attitudes of rural college teachers and urban college teachers of Purulia district of West Bengal towards E-learning.**
- ➤ **H_4: There will be significant difference between the attitude of General and SC / ST college teachers of Purulia district towards E-learning.**
- ➤ **H_5:- There will be significant difference between the attitude of Arts and Sciences college teachers towards E-learning.**

POPULATION OF THE STUDY

The college teachers (under Sidho-Kanho-Birsha University) of Purulia district of West Bengal comprised the population of this study.

Sample and Sampling Procedure

20 Teachers of one rural college (Kashipur Michael Madhusudan Mahavidyalaya) and 60 Teachers of two urban colleges (J. K. College and Raghunathpur College) of Purulia district of West Bengal were taken as representative sample for the whole population. Stratified random sampling technique was followed for selecting the colleges. There are a number of college teachers in each college. Only Arts and Science teachers were selected following purposive sampling technique.

Tool Used

An Attitude Scale (Likert Type) was used for knowing the attitude of the college teachers towards E-learning.

Statistical Technique

't' test was used to analyze the collected data and verify the hypotheses.

RESULTS AND DISCUSSION

Table: 1
To ascertain the attitude of college teachers in
Purulia district of West Bengal towards E-learning.

Category	N	Mean	S.D
Teachers	80	115.81	11.66

Through the help of cut-off point we verify the H_1. Here Cut-off Point is M $\pm$ 1σ. It means, Mean=115.81, N=80 and σ=11.66. Hence M +1 σ is 115.81+ 1 x 11.66= 127.47. And M -1 σ=115.81 - 11.66=104.15. Most of college teachers (55 in number) i.e., 68.75 % of teachers were lies between 104.15 to 127.47 scores. Hence, it can be said that the attitude of college teachers of Purulia district of West Bengal is neither more favourable nor unfavourable towards E-learning i.e., satisfactory or average in attitude towards E-learning.

Table: 2
Showing significant difference between attitude of male-and female-teachers
in the colleges of Purulia district of West Bengal towards E-learning

Group	N	Mean	S.D.	Σd^2	SE_D	df	t	Critical Value of t at 0.05 level	Remark
Attitude of male-teachers teaching in colleges	50	117.94	11.48	6595.09	2.57	78	2.21	1.99	Significant at 0.05 level
Attitude of female-teachers teaching in colleges	30	112.26	11.07	3673.16					

The Table: 2 shows, the Mean-Attitude Score of Male-teachers being greater than that of Female-teachers.

Hence, it can be said that the attitude of Male-teachers towards E-learning is more favourable than that of Female-teachers.

It may be due to the fact that the Male-teachers have realized more the importance of E-learning for quality education and their professional efficiency/development. Male teachers feel that use of E-learning provides a better learning experience.

Table: 3
Showing significant difference between attitude of
rural and urban college teachers towards E-learning

Group	N	Mean	S.D.	Σd^2	SE_D	df	t	Critical Value of t at 0.05 level	Remark
Attitude of teachers teaching in Rural colleges	20	113	11.14	2482	3.09	78	1.26	1.99	Not Significant at 0.05 level
Attitude of teachers teaching in Urban colleges	60	116.9	11.64	8122.6					

From Table: 3, it was found that, there is no significant difference between the attitudes of teachers teaching in Rural and Urban Colleges towards E-learning.

So it may conclude that difference in location or area is not a factor for differentiation of teacher's attitude towards E-learning.

Table: 4
Showing significant difference between attitude of
General and SC/ST college teachers towards E-learning

Group	N	Mean	S.D.	Σd^2	SE_D	df	t	Critical Value of t at 0.05 level	Remark
Attitude of General teachers teaching in colleges	65	115.66	11.87	9156.5	3.33	78	0.65	1.99	Not Significant at 0.05 level
Attitude of SC/ST teachers teaching in colleges	15	113.5	10.42	1629.25					

The Table: 4 shows that there is no significant difference between the attitudes of General and SC/ST Teachers teaching in colleges towards E-learning. It may seem to be that, both General and SC/ST teachers feel that E-learning acquaints them with all sphere of life specially educational sphere and they are more conscious about their professional efficiency/development. Thus it may conclude that caste difference in college Teachers is not a factor for differentiation of their attitude towards E-learning.

Table: 5
Showing significant difference between attitude of
Arts and Science streams college teachers towards E-learning

Group	N	Mean	S.D.	Σd^2	SE_D	df	t	Critical Value of t at 0.05 level	Remark
Attitude of college Teachers in Arts stream	55	112.45	9.42	4879	2.62	78	4.10	1.99	Significant at 0.05 level
Attitude of college Teachers in Science stream	25	123.2	12.70	4032.36					

Table: 5 shows that, the obtained value of 't' 4.10 is much more greater than 1.99. Hence, Ho₅ is rejected. It concludes that there is significant difference between the attitude of college Teachers in Arts stream and college Teachers in Science stream of Purulia district towards E-learning. The mean attitude score of college Teachers in Science stream being greater than that of college Teachers in Arts stream. Hence, the attitude of college Teachers in Science stream towards E-learning is more favourable than that of college Teachers in Arts stream.

So, it may conclude that subject/course difference is one of the factors for differentiation of teacher's attitude towards E-learning.

EDUCATIONAL IMPLICATIONS

> It is a humble attempt in this direction to assess the level of knowledge and attitude of teachers towards E-learning.
> This study contributes a new teaching-learning in the form of assessing the level of knowledge and attitude towards E-learning in the classroom instruction.
> This study is very much essential for the development of teacher's interest, attitude, knowledge, motivation towards E-learning.
> This study is very much essential for development of professional efficiency and quality education of college teachers.
> The need of the day is to make teachers realize their capabilities and improve upon capabilities to help solve the problems of their life through E-learning.
> Special efforts should be made in order to develop E-learning awareness among the Arts stream teachers.
> Special efforts should be made in order to develop E-learning awareness among the Female teachers.
> This study will be of immense use for the educational administrators, which will throw light upon the attitude of teachers' of Higher Education towards E-learning.

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