

Attitude of B.Ed. Student-Teachers towards E-Learning

Dr. Santosh Kumar Behera¹, Sumit Sao², Shili Mohamed³

¹Assistant Professor, Department of Education,
Sidho-Kanho-Birsha University, Purulia, West Bengal, India,
Email: santoshbehera.skbu@gmail.com

²B.Ed. Student-Teacher, RKMMTTC under Sidho-Kanho-Birsha University,
Purulia, West Bengal, India,
Email: sumitsao759@gmail.com

³Institute of Applied Science and Technology of Sousse, Tunisia,
Email: shilimohamed3@gmail.com

Abstract- In the present study the investigators made an attempt to study the B.Ed. student-teachers attitude towards E-learning in Purulia district of West Bengal. 230 B.Ed. Student-Teachers of one Govt. Sponsored (36) and Five Self Financing / Private (194) B.Ed. Colleges (both Urban and Rural areas) affiliated to Sidho-Kanho-Birsha University in Purulia District of West Bengal were taken as representative sample of the whole population. Purposive sampling technique was adopted for selecting the B.Ed. Colleges. For selecting the student teachers stratified random sampling was adopted. 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 study revealed that the attitude of B.Ed. Student-Teachers in Purulia District of West Bengal is neither more favorable nor unfavorable towards E-learning i.e., satisfactory or average in attitude towards E-learning. The study also revealed that Male and Female, Rural and Urban, Pre-service and In-service, General and SC, General and ST, General and OBC, Govt. and Private as well as Arts and Science B.Ed. student-teachers attitude towards E-learning did not differ significantly.

Keywords- Student-Teacher, Attitude, E-learning, Education

I. INTRODUCTION

E-learning has become the latest fashion of the modern world. E-learning provides better opportunity for both teacher and students in teaching-learning process. E-learning is a new education concept by using the Internet technology, it delivers the digital content, provides a learner-orient environment for the teachers and students. The e-learning promotes the construction of life-long learning opinions and learning society [1].

E-learning plays an important role in the educational growth of any nation. It also offers opportunities for developing nations to enhance their educational development. It can also play a critical role in preparing a new generation of teachers, as well as upgrading the skills of the existing teaching force to use 21st century tools and pedagogies for learning. So it 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 [2].

E-learning refers to the use of electronic media and information and communication technologies (ICT) in education. E-learning is broadly inclusive of all forms of educational technology in learning and teaching. E-learning includes numerous types of media that deliver text, audio, animation, images, and streaming video, and includes technology application and process such as audio and video tape, satellite TV, CD-ROM, and computer based training, as well as intranet/extranet and web-based learning. Information and communication systems, whether free standing or based on either local networks or the internet in networked learning, underlay may e-learning processes.

E-learning is an abbreviation of the term electronic learning. E-learning is a term that is used to refer to computer based learning. It uses computer-based training materials, online conferencing, discussion boards, e-mail and other related methods. It is quite a broader meaning of the term E-learning. Hall (1997): E-learning is instruction that is delivered electronically, in part or wholly – via a Web browser, through the Internet or an intranet, or through multimedia platforms such as CD-ROM or DVD [3]. Allen (2003): E-learning is a structured, purposeful use of electronic system or computer in support of the learning process [4]. Laurillard (2006): E-learning can be defined as the use of any of the new technologies or applications in the service of learning and learning support [5].

From the above discussion, it is clear that proper understanding of the E-learning in which the man lives is inevitable particularly it is very much essential in student lives. Since B.Ed. student- teachers are the future / maker of the nation. Particularly, the B.Ed. student-teachers are essentially getting well acquainted with E-learning. Computer knowledge and E-learning should spread in the classroom transaction in all over the

world. Many questions are arising in the researchers mind about the student-teachers' attitude towards E-learning at secondary training 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 B.Ed. student-teachers towards E-learning, the investigators have decided to take up a systematic and objective attitudinal study of B.Ed. student- teachers towards E-learning. The investigators intend to restrict their research work to Purulia district of West Bengal.

II. STATEMENT OF THE PROBLEM

The problem for the present study may be specifically stated as below: --

“Attitude of B.Ed. Student-Teachers towards E-Learning”.

III. RELATED WORKS

D.W. Sanders & A.I. Morrison-Shelter [6] examined student attitudes with regards to the web-enabled learning components in a general biology course for undergraduate. The results showed a positive effect on student learning, problem-solving skills, and critical thinking skills. Behera, S.K. [7] found that the attitude of college teachers of Purulia District of West Bengal is neither more favourable nor unfavorable towards e-learning, i.e. satisfactory or average in attitude towards e-learning. Bhuvaneswari, A.S and Padmanaban T. [8] have conducted a study on ‘Attitude of senior secondary students towards e-learning’, Objective of the study: To study the senior secondary students’ attitude towards e-learning. Finding of the Study: There is no significant difference among students’ attitude towards e-learning. Prabu Suresh P. & Ramesh R. [9] have conducted a study on ‘Attitude of the B.Ed., Students towards E-Learning in Tiruchengode Town’. The findings were: The B.Ed. students show highly favourable attitude towards e-learning. There is no significant difference in the attitude towards e-learning between the male and female, Rural and Urban (colleges and residences), English and Tamil medium, Arts and Science, hostellers and day scholars, nuclear and joint family, married and unmarried, under graduate and post graduate B.Ed., students. The reference [10] found that the attitude of Higher Secondary School teachers of Purulia District of West Bengal, India is neither more favourable nor unfavorable towards e-learning, i.e. satisfactory or average in attitude towards e-learning. Pradhan, Basant Kumar [11] has conducted a study on ‘A Study on B.Ed. Student-Teachers Attitude towards E-Learning in Classroom Instruction’.

The review of the studies mentioned above revealed that a small number of the study was undertaken on the attitude of B.Ed. student-Teachers towards E-learning in India. So, the researchers chose to study - “Attitude of B.Ed. Student-Teachers towards E-learning”.

IV. NEED AND SIGNIFICANCE

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 [7]. As per NCTE new regulation, 2014 there are so many practicums in the secondary teacher training level in India. Student-Teachers of B.Ed. will practice / learn ICT skill so that they can able to utilize the ICT in the classroom transaction. E-learning is very much helpful for B.Ed. student- teachers in making their practicum and various activities. Everything and everyone is getting online. And those who are not doing so are missing out on the immense power of these modern age wonder. Indeed not, as is evident from the advent of e-learning. E-learning is a vital asset for all students in the new knowledge. The trend of using e-learning as learning and technology tools is now rapidly expanding into education although learning environments are popular; there is minimal research on student-teachers’ attitude in secondary level towards e-learning.

Therefore, the researchers feel that particularly the B.Ed. student-teachers opinions or their attitudes can never be ignored, rather those should be reviewed or re-explored time to time, and it is this feeling that has urged these investigators to take up the present study on a particular region of West Bengal. It is expected that, this study, through small, will be able to make some significant contributions in the field of education.

V. DELIMITATIONS

The delimitations of the present study are as follows:

(A) Geographical Area:

The investigation was delimited to only Purulia district of West Bengal.

(B) Level of Education:

(i) The study was restricted to the student-teachers in B.Ed. colleges of the said district.

(ii) The B.Ed. student-teachers in regular mode (Academic Session: 2015-17) of Govt. Sponsored and Private / Self-financing B.Ed. training colleges affiliated to Sidho-Kanho-Birsha University in Purulia district were considered as the subjects of the present study.

(C) Type of Study:

This study was conducted only at surface level. It was not an ‘in-depth’ study. Attempt to know the subject’s attitude by administering an attitude scale constructed by the researchers. No inter-state comparison was done. Only intra- district comparison between the male and female, General and SC, General and ST, General and OBC, rural and urban, Pre and In service, Govt. Sponsored and Private colleges, Arts and Science student-teachers were done.

VI. OBJECTIVES OF THE STUDY

1. To ascertain the attitude of B.Ed. College Student-Teachers in Purulia district of West Bengal towards E-learning.
2. To find out the difference between Male and Female B.Ed. College Student- Teachers in respect of their attitude towards E-Learning.
3. To find out the difference between Rural and Urban B.Ed. College Student- Teachers in respect of their attitude towards E-Learning.
4. To find out the difference between Pre-service and In-service B.Ed. College Student- Teachers in respect of their attitude towards E-Learning.
5. To find out the difference between General and SC B.Ed. College Student- Teachers in respect of their attitude towards E-Learning.
6. To find out the difference between General and ST B.Ed. College Student- Teachers in respect of their attitude towards E-Learning.
7. To find out the difference between General and OBC B.Ed. College Student- Teachers in respect of their attitude towards E-Learning.
8. To find out the difference between Govt. Sponsored and Private B.Ed. College Student- Teachers in respect of their attitude towards E-Learning.
9. To find out the difference between Arts and Science B.Ed. College Student-Teachers in respect of their attitude towards E-Learning.

VII. HYPOTHESES OF THE STUDY

H₁: There will have more favourable attitude of B.Ed. College Student-Teachers in Purulia district of West Bengal towards E-learning.

H₂: There is significant difference between Male and Female B.Ed. College Student-Teachers in respect of their attitude towards E-Learning.

H₃: There is significant difference between Rural and Urban B.Ed. College Student-Teachers in respect of their attitude towards E-Learning.

H₄: There is significant difference between Pre-service and In-service B.Ed. College Student-Teachers in respect of their attitude towards E-Learning.

H₅: There is significant difference between General and SC B.Ed. College Student-Teachers in respect of their attitude towards E-Learning.

H₆: There is significant difference between General and ST B.Ed. College Student-Teachers in respect of their attitude towards E-Learning.

H₇: There is significant difference between General and OBC B.Ed. College Student-Teachers in respect of their attitude towards E-Learning.

H₈: There is significant difference between Govt. Sponsored and Private B.Ed. College Student-Teachers in respect of their attitude towards E-Learning.

H₉: There is significant difference between Arts and Science B.Ed. College Student-Teachers in respect of their attitude towards E-Learning.

VIII. METHODOLOGY

The present study is based on survey method, particularly, the normative survey method.

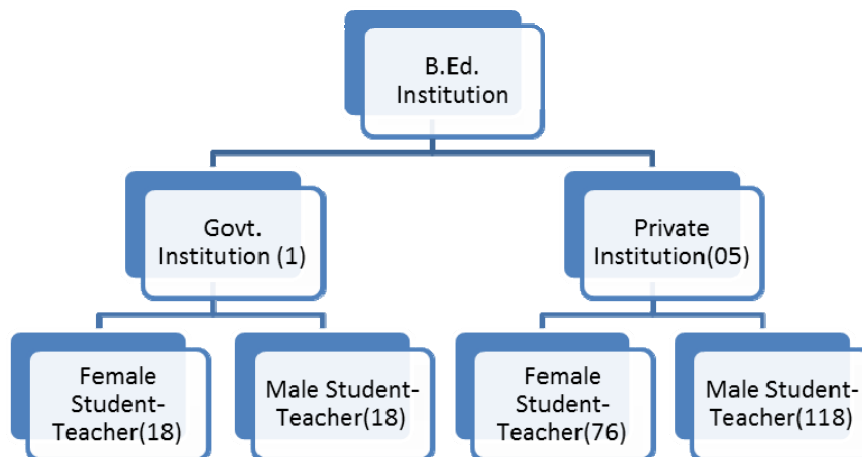
Population

The B.Ed. College Student-Teachers of Purulia district of West Bengal comprised the population of this study.

Sample and Sampling Procedure

230 Student-Teachers of one Govt. Sponsored (36) and Five Self Financing / Private (194) B.Ed. Colleges (both Urban and Rural areas) affiliated to Sidho-Kanho-Birsha University in Purulia District of West Bengal were taken as representative sample of the whole population. Purposive sampling technique was adopted for

selecting the B.Ed. Colleges. For selecting the student-teachers stratified random sampling was adopted. The detailed category wise breakup of the samples is as follows:



- 136 Male and 94 Female B.Ed. student-Teachers = 230
- 224 Pre-Service and 6 In-service student-Teachers = 230
- 96 General, 42 SC, 12 ST and 80 OBC B.Ed. student-Teachers = 230

Tool Used

An Attitude Scale (Likert Type) was used for knowing the attitude of B.Ed. College Student-Teachers towards E-learning.

Statistical Technique

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

IX. RESULTS AND DISCUSSION

Testing of H₁

There will have more favourable attitude of B.Ed. College Student-Teachers of Purulia district of West Bengal towards E-learning.

Category	N	Mean	S.D
B.Ed. Student- Teachers	230	107.57	12.41

Through the help of cut-off point H₁ was verified. Here Cut-off Point is $M \pm 1\sigma$. It means, Mean=107.57, and $\sigma=12.41$. Hence $M + 1 \sigma$ is $107.57 + 1 \times 12.41 = 119.98$. And $M - 1 \sigma = 107.57 - 1 \times 12.41 = 95.16$. Most of B.Ed. Student-Teachers (164 in number) i.e., 71.30 % were lies between 95.16-119.98 scores. Hence, it can be said that the attitude of B.Ed. Student-Teachers towards E-learning in Purulia District of West Bengal is Moderate / Average.

Table-1: The attitude of B.Ed. Student-Teachers in Purulia District of West Bengal towards E-learning.

Scores	Frequency	Percentage	Levels of Attitude
Above-119.98	35	15.22 %	Favaourble
Between-95.16-119.98	164	71.30 %	Moderate / Average
Below-95.16	31	13.48 %	Unfavourable
TOTAL	230	100 %	

Table-2: Showing significant differences between variables

Groups		N	Mean	SD	Σ^2	S _{ED}	df	t	Remark
Gender	Male	136	107.83	12.87	22521.11	1.66	228	0.38	@
	Female	94	107.20	11.69	12851.16				
Location	Rural	144	107.23	12.54	21405.44	1.69	228	0.54	@
	Urban	86	108.15	12.73	13943.03				
Types of Training	Pre-Service	224	107.57	12.48	34900.86	5.15	228	0.02	@
	In-Service	06	107.67	09.07	493.33				
Caste	General	96	108.10	11.85	13486.96	2.16	136	1.25	@
	SC	42	110.81	10.96	5044.48				
Caste	General	96	108.10	11.85	13486.96	3.62	106	1.27	@
	ST	12	103.5	10.51	1325				
Caste	General	96	108.10	11.85	13486.96	1.92	174	1.17	@
	OBC	80	105.85	13.53	14634.2				
Type of Colleges	Govt. Sponsored	36	108.03	13.66	6720.97	2.26	228	0.24	@
	Private	194	107.49	12.16	28664.48				
Stream	Arts	200	107.1	12.05	29028	2.43	228	1.49	@
	Science	30	110.73	14.17	6021.87				

@ Not Significant

Testing of H₂

From the table-2, it is found that the calculated 't' value ('t'= 0.38) is less than the table value at both 0.01 and 0.05 level of significance (1.65 at 0.01 & 1.97 at 0.05 level of significance). Therefore, the result is not significant. Hence, the H₀₂ is accepted and the researcher's H₂ is rejected; that is to say that, there is no significant difference between Male and Female B.Ed. College Student-Teachers in respect of their attitude towards E-Learning. It may be due to the fact that both male and female student-teachers gave equal importance to e-learning.

Testing of H₃

From the table-2, it is found that the calculated 't' value ('t'=0.54) is less than the table value at both 0.01 and 0.05 level of significance (1.65 at 0.01 & 1.97 at 0.05 level of significance). Hence, the H₀₃ is accepted and the researcher's H₃ is rejected; that is to say that, there is no significant difference between Rural and Urban B.Ed. college student- teachers in respect of their attitude towards E-Learning. Thus, it may conclude that region difference in student- teachers is not a factor for differentiation of their attitude towards e-learning.

Testing of H₄

From the table-2, it is found that the calculated 't' value ($t=0.02$) is less than the table value at both 0.01 and 0.05 level of significance (1.65 at 0.01 & 1.97 at 0.05 level of significance). Hence, the H_{04} is accepted and the researcher's H_4 is rejected; that is to say that, there is no significant difference between Pre-service and In-service B.Ed. College Student- Teachers in respect of their attitude towards E-Learning.

Testing of H₅

From the table-2, it is found that the calculated 't' value ($t=1.25$) is less than the table value at both 0.01 and 0.05 level of significance (1.66 at 0.01 & 1.98 at 0.05 level of significance). Therefore, the result is not significant and it is indicated that, the difference between the two groups is not significant at 0.01 level and 0.05 level. Hence, the H_{05} is accepted and the researcher's H_5 is rejected; that is to say that, there is no significant difference between General and SC B.Ed. Student- teachers in respect of their attitude towards E-Learning.

Testing of H₆

From the table-2, it is found that the calculated 't' value ($t=1.27$) is less than the table value at both 0.01 and 0.05 level of significance (1.66 at 0.01 & 1.98 at 0.05 level of significance). Therefore, the result is not significant. Hence, the H_{06} is accepted and the researcher's H_6 is rejected; that is to say that, there is no significant difference between General and ST B.Ed. College Student- Teachers in respect of their attitude towards E-Learning.

Testing of H₇

From the table-2, it is found that the calculated 't' value ($t=1.17$) is less than the table value at both 0.01 and 0.05 level of significance (1.65 at 0.01 & 1.97 at 0.05 level of significance). It is indicated that, the difference between the two groups is not significant at 0.01 level and 0.05 level. Hence, the H_{07} is accepted and the researcher's H_7 is rejected; that is to say that, there is no significant difference between General and OBC B.Ed. College Student- Teachers in respect of their attitude towards E-Learning.

Testing of H₈

From the table-2, it is found that the calculated 't' value ($t=0.24$) is less than the table value at both 0.01 and 0.05 level of significance (1.65 at 0.01 & 1.97 at 0.05 level of significance). It is indicated that, the difference between the two groups is not significant at 0.01 level and 0.05 level. Hence, the H_{08} is accepted and the researcher's H_8 is rejected; that is to say that, there is no significant difference between Govt. Sponsored and Private B.Ed. college student- teachers in respect of their attitude towards E-Learning.

Testing of H₉

From the table-2, it is found that the calculated 't' value ($t=1.49$) is less than the table value at both 0.01 and 0.05 level of significance (1.65 at 0.01 & 1.97 at 0.05 level of significance). Therefore, the result is not significant and it is indicated that, the difference between the two groups is not significant at 0.01 level and 0.05 level. Hence, the H_{09} is accepted and the researcher's H_9 is rejected; that is to say that, there is no significant difference between Arts and Science B.Ed. College Student-Teacher in respect of their attitude towards E-Learning.

X. LIMITATIONS

1. The present study was conducted only at surface level. It was not an extensive and "indepth" study.
2. This study was conducted on the Student-Teachers of Regular mode of Two-Year B.Ed. Programme [2015-17 Academic sessions (II Semester)].
3. This study was conducted only in a particular district (Purulia) of West Bengal.
4. Attitude of the student-teachers were measured only through administration of an attitude scale constructed by the investigators.

XI. EDUCATIONAL IMPLICATIONS

1. It is a humble attempt in this direction to assess the level of knowledge and attitude of student-teachers towards E-learning.
2. 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.
3. This study is very much essential for the development of student-teachers interest, attitude, knowledge, motivation towards E-learning.
4. This study is very much essential for development of professional efficiency and quality education of school teachers.
5. 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.

6. Special efforts should be made in order to develop E-learning awareness among the B.Ed. student-teachers.
7. This study will be of immense use for the educational administrators, which will throw light upon the attitude of student- teachers' of all level of education.

X. CONCLUSION

E-learning brings a considerable alter in the method of spreading knowledge to improve the quality in teacher education and will make teachers of global standard. E-learning is very much beneficial to education, corporations and to all types of teachers/learners. It is the effective learning process created by combining digitally delivered content with learning support and service.

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AUTHOR PROFILE



Dr. Santosh Kumar Behera, Assistant Professor, Dept. of Education, Sidho-Kanho-Birsha University, Purulia, West Bengal, INDIA. He is the Editor-in-Chief, EDUQUEST, An International Refereed Journal in Education (Print). His research interests include Educational Technology, E-learning and Mobile- Learning.



Sumit Sao, B.Ed. Student-Teacher, RMMTT College, Purulia, West Bengal, India. His research interests include Educational Technology, Teacher Education.



Shili Mohamed, he obtained his Magister diploma in 2015 in the computer science department, Sousse University. Mr Shili is interested to mobile commerce, artificial intelligence, and M-learning techniques.