A Descriptive Study of Awareness of Educational Technology in B. Ed. Trainees of Thiruvalluvar University, Tamilnadu

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This article aims to stress the relevance and desirability of introducing technology in the field of education in India. The understanding behind such a use of technology in what is called 'the learning process' is that technology being a product of the human mind would enhance teaching skills and add to the available repertoire of knowledge resources.

INTRODUCTION

Education is a continuous, complex, dynamic and life-long process. Now-a-days technology occupies a prominent place in the teaching-learning process. The purpose of Educational Technology is to improve the effectiveness of teaching-learning process in formal or informal setting and to utilize scientific principles to that end. Educational Technology can be defined as the development, application and evaluation of system, techniques and teaching aids to improve the process of learning. It will help the teachers to teach well as well as the learners to learn well. In this context, every teacher should be aware of Educational Technology. Since today's trainees are the teachers of tomorrow, therefore the investigators have conducted a descriptive study to measure the "Awareness of Educational Technology among the B. Ed. Trainees of Thiruvalluvar University, Tamilnadu".

OBJECTIVES

The following are the objectives of the present study:

1. To find out whether the B. Ed. Trainees of Thiruvalluvar University have adequate awareness of Educational Technology or not.

2. To find out whether the chosen B. Ed. trainees differ in their awareness of Educational Technology with respect to their gender (Male or Female) or not.

3. To find out whether the chosen B. Ed. Trainees differ in their awareness of Educational Technology with respect to their Educational qualifications (UG/ PG) or not.

4. To find out whether the chosen B. Ed. Trainees differ in their awareness of Educational Technology with respect to their subject of study (Arts/ Science) or not.

5. To find out whether the chosen B. Ed. Trainees differ in their awareness of Educational Technology with respect to locality of the institution (Rural/ Urban) or not.

DELIMITATION OF THE STUDY

1. This study was limited to four B. Ed. Colleges in rural and urban areas of Thiruvalluvar University jurisdiction.
2. In this, the awareness of Educational Technology among B. Ed. Trainees only was measured.
3. Teaching being a complex phenomenon involving a variety of variables, the study had limited itself to a few selected variables such as gender, Educational Qualification, Subject of Study and locality of the institution.

THIRUVALLUVAR UNIVERSITY

This is one of the universities recently established in Tamilnadu. It serves the people of Thiruvannamalai, Vellore, Cuddalore and Villupuram districts. Under its jurisdiction there are 58 B. Ed. colleges and around 6000 teachers Trainees are educated every year under the programme run for them.

HYPOTHESES OF THE STUDY

The hypotheses of the present study were formulated as follows:

1. B. Ed. Trainees of Thiruvalluvar University do not have adequate Educational Technology awareness.
2. There is no significant difference between the Educational Technology awareness of chosen B. Ed. Trainees with respect to their gender.
3. There is no significant difference between the Educational Technology awareness of chosen B. Ed. Trainees with respect to their Educational Qualification.
4. There is no significant difference between the Educational Technology awareness of chosen B. Ed. Trainees with respect to their subject of study.

5. There is no significant difference between the Educational Technology awareness of chosen B. Ed. Trainees with respect to locality of the institution.

VARIABLES SLECTED FOR THE STUDY

Institutional Variables:

1. Gender (Male/ Female)
2. Educational Qualification (UG/ PG)
3. Group (Science/ Arts)

METHODOLOGY

The investigation followed the "survey" method for the present study. The Tool, in the form of a questionnaire, developed by the investigators, was distributed to the Trainees of four B. Ed. Colleges under Thiruvalluvar University Jurisdiction. The Trainees were requested to respond to all questions in the questionnaire. The data thus collected were put into appropriate statistical analysis.

TOOL – BTETAT

In this investigation, a questionnaire developed by the investigators was used to seek information from the B. Ed. Trainees of Thiruvalluvar University regarding Educational Technology awareness. The details of the questionnaire are as follows:

"BTETAT" can be expanded as "B. Ed. Trainees' Educational Technology awareness Tool". This tool covers all relevant aspects of Educational Technology in teaching-learning processes such as teaching methods and techniques, and hardware and software. It was designed in Tamil as well as in English. The trainees had to tick "YES" or "NO". It carried 17 questions in software, 18 questions in hardware and 15 questions in teaching methods and techniques. In total, it had 50 items. There were 34 positive and 16 negative statements. Based on the answer chosen by the Trainees in each case, score was given with respect to the present survey by considering the positive or negative nature of the particular item.

RELIABILITY AND VALIDITY OF THE TOOL – BTETAT

To test the validity of the developed tool BTETAT, the test-retest technique was followed and correlation co-efficient was calculated for which the

value assumed was 0. 71. The correlation co-efficient value indicates that the tool is reliable. For establishing the face validity of the tool, the investigators consulted experts and got the jury opinion. Addition, deletion and jumbling of the items were included in the tool based on the jury opinion and expert comments. This was supposed to ensure the face validity of the developed tool BTETAT.

SAMPLE

The study was confined to 300 B. Ed. Trainees of four B. Ed. Colleges under Thiruvalluvar University jurisdiction. Out of the four B. Ed. Colleges, two are in rural and the remaining two are in urban area. The four chosen colleges were C. S. Jain College of Education, Thethampet, D. A. V. College of Education, Srimushnam, Blessy College of Education, Cuddalore and O. P. R. Memorial College of Education, Cuddalore. The samples selected for the present study are shown in Table-1.

ADMINISTRATION OF THE TOOL – BTETAT

"B. Ed. Trainees' Educational Technology Awareness Tool (BTETAT)" is a self-administering tool. The purpose of the tool was explained to the Trainees. It was assured that their replies would be kept confidential. The Trainees were requested to read the instructions carefully and clarify doubts if any. It was emphasized that no item should be omitted. There was no time limit for answering the questionnaire. The answered questionnaires were collected after two days.

TABLE 1: DETAILS OF SAMPLE

Variables	Category	Number	Total
Gender	Male	160	
	Female	140	300
Educational	U. G.	144	
Qualification	P. G	156	300
Subject of	Science	167	
Study	Arts	133	300
Locality of	Rural	151	
Education	Urban	149	300

In the total sample, 53.40% were male Trainees and 46.60% were Female trainees. Further, 48% of the sample were with the Post Graduate Qualification and 52% with Under Graduate degrees. While considering the Subject of Study, 55.60% of the trainees were from the Science discipline and 44.40% were from the Arts discipline. In the total sample, 50.40% were studying in the Rural B. Ed. colleges and 49.60% were studying in Urban B. Ed. colleges.

STATISTICAL TECHNIQUES APPLIED

Statistical techniques serve the fundamental purpose of the descriptive and inferential analysis. The following statistical techniques were used in this study:

1. Mean. Standard Deviation.
2. "t" test for determining the significance of difference between the means of two groups.

DATA ANALYSIS AND INTERPRETATION

Hypothesis 1: B. Ed. Trainees of Thiruvalluvar University do not have adequate Educational Technology awareness.

TABLE 2: RANGE, MEAN AND STANDARD DEVIATION OF EDUCATIONAL TECHNOLOGY AWARENESS OF CHOSEN B. ED. TRAINEES.

Score	N	Mean	S.D	Minimum	Maximum
	300	38.94	7.057	25	50

Table 2 shows the mean and standard deviation of Educational Technology awareness of B. Ed. Trainees of Thiruvalluvar University. The mean of Educational Technology awareness here is 38.94. The score varies from 25 to 50. The percentage of Educational Technology awareness score, obtained by B. Ed. Trainees is 81.50. Since it is more than 50%, we concluded that B. Ed. Trainees of Thiruvalluvar Unversity have adequate Educational Technology awareness.

Hypothesis 2: There is no significant difference between the mean scores of Educational Technology awareness of chosen B. Ed. Trainees with respect to gender.

TABLE 3: MEAN, S.D. AND "t" VALUE OF EDUCATIONAL TECHNOLOGY AWARENESS AMONG CHOSEN B. ED. TRAINEES WITH RESPECT TO THEIR GENDER.

Gender	N	Mean	S. D	"t"	Level of Significance
Male	160	49.14	7.07		Not Significant
Female	140	48.51	7.07	0.515	

Table 3 shows that the calculated 't' value 0.515 is less than table value 1.98 for df=298 at 0.05 level of significance. Hence the null hypothesis is accepted. It is concluded that there is no significant difference in the mean scores of Educational Technology awareness among B. Ed. Trainees of Thiruvalluvar University with respect to their gender.

Hypothesis 3: There is no significant difference in the mean scores of Educational Technology awareness among B. Ed. Trainees with respect to Educational qualification.

TABLE 4: MEAN, S.D. AND "t" VALUE OF EDUCATIONAL TECHNOLOGY AWARENESS OF B. ED. TRAINEES WITH RESPECT TO THEIR EDUCATIONAL QUALIFICATION.

Educational Qualification	N	Mean	S. D.	"t"	Level of Significance
UG	144	48.49	7.79	0.759	Not Significant

Hypothesis 4: There is no significant difference between the mean scores of Educational Technology awareness of chosen B. Ed. Trainees with respect to the group of their subject.

TABLE 5: MEAN AND S.D. AND "t" VALUE OF EDUCATIONAL TECHNOLOGY AWARENESS OF CHOSEN B. ED. TRAINEES WITH RESPECT TO THEIR SUBJECT OF STUDY.

Group	N	Mean	S.D.	"t"	Level of Significance
Science	167	49.64	6.68	1.774	Not Significant
Arts	133	47.55	7.64		

Table 5 shows that the calculated 't' value 1.774 is less than the table value 1.98 for df=298 at 0.05 level of significance. Hence the null hypothesis is accepted. It is concluded that there is no significant difference in the mean

scores of Educational Technology awareness among B. Ed. Trainees of Thiruvalluvar University with respect to the group of their subject.

Hypothesis 5: There is no significant difference between the mean scores of Educational Technology awareness of chosen B. Ed. Trainees with respect to locality of the institution.

TABLE 6: MEAN, S.D. AND "t" VALUE OF EDUCATIONAL TECHNOLOGY AWARENESS OF CHOSEN B. ED. TRAINEES WITH RESPECT TO LOCALITY OF THE INSTITUTION.

Locality	N	Mean	S.D.	"t"	Level of Significance
Rural	151	46.75	7.60	3.091	Significant at 0.01 level
Urban	149	50.23	6.41		

Table 6 shows the calculated 't' value 3.091 is greater than table value 2.60 for df=298 at 0.01 level of significance. Hence the null hypothesis is rejected. It is concluded that there is a significant difference in the mean scores of Educational Technology awareness among B. Ed. Trainees of Thiruvalluvar University with respect to locality of institution. The mean score of urban Trainees is more than that of rural Trainees. This shows that the urban Trainees have more awareness than the rural Trainees.

FINDINGS OF THE PRESENT STUDY

1. B. Ed. Trainees of Thiruvalluvar University have adequate Educational Technology Awareness.
2. There is no significant difference between the awareness of Educational Technology among B. Ed. Trainees of Thiruvalluvar University with respect to gender.
3. There is no significant difference between the awareness of Educational Technology among chosen B. Ed. Trainees with respect to Educational qualification.
4. There is no significant difference between the awareness of Educational Technology among chosen B. Ed. Trainees with respect to the group of their subject.
5. There is significant difference between the awareness of Educational Technology among chosen B. Ed. Trainees with respect to locality of the institution. The urban Trainees have more awareness of Educational Technology than the rural Trainees.

CONCLUSION

The present study shows that the B. Ed. Trainees of Thiruvalluvar

University, Tamilnadu have adequate awareness of Educational Technology. They can use Educational Technology in their classes and make the teaching-learning process more effective and efficient. Urban trainees are having more awareness. By this, the efficiency of education and effectiveness of instruction will be improved overall.

REFRENCES

1. Antony Gracious F. L. & Vimal Eshwary. T (2007). *Mental Health Awareness among the College Students*. New Horizons in Educational Research, July-Dec. 2007 p.28-31.

2. Gershom Jebaraj, P & Mohanasundaram, K. (2008) *Effectiveness of e-Content in Teaching of Physics at Tertiary Level*. Paper published in Journal of Educational Research and Extension, Vol. 45 (1), January-March 2008, ISSN:0973-6190, p. 1-8.

3. Gershom Jebaraj, P & Mohanasundaram, K. (2007). *Role of e-Learning in Enriching Teacher Education.* Paper presented in the DTERT-National Seminar on "*Quality Concerns in Elementary Education*" held at SRM University, Chennai on 10th and 11th September 2007.

4. Karpaga Kumaravel R. (1999), Readings in Educational Technology, Suri Publication, Coimbatore.

5. Kothari, C.R. (1994), Research Methodology: Methods and Techniques, Willey Eastern Limited, New Delhi.

6. Mangal S.K. (1995), "Fundamentals of Educational Technology", Prakash Brothers Educational Publishers, Ludhiana.

7. Satya Pal Ruhela (1999), "Essentials of Educational Technology", Indian Publishers, Distributors, New Delhi.

8. Mohanasundaram, K. & Gershom Jebaraj, P (2007). *Integrating Mobile Phone Technology in Teaching-Learning Process at Higher Education Level*. Paper published in University News, Vol. (45), Number 46, November 12-18, 2007, ISSN: 0566-2257, p 8-12, 15.

9. Mohanasundaram, K. & Charles Williams, R. (2005). *Information and Communication Technology in Education.* Grace Publishers, Tiruchirappalli.

10. Thiyagu, K. & Saroja Jaculine (2008) *Excellence in Mathematics Through Web-based Instruction.* New Horizons in Educational Research, January-June 2008, p. 13-19.

11. www.tvuniv.in, *Affiliated B. Ed. Colleges*, Data retrieved on 05.08.08.