# A COMPARATIVE STUDY OF EDUCATIONAL TECHNOLOGY AMONGST TEACHER TRAINEES

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## INTRODUCTION

Educational technology has unfolded vast vistas of knowledge to the students as well as teachers in varied subjects and 'the tools of educational technology. Like audio-visuals, computer and the Internet have made accessibility of knowledge at hand at an unprecedented speed. In other words, it has been instrumental in revolutionizing the methods of teaching, with replacement of old and outmoded teaching techniques by new teaching methods, which are user-friendlier and make the complicated subject-matter of science and technology easily comprehensible. Those who have adopted educational technology – both teachers as well as students – are reaping the benefits accruing from it and those still lag behind and are relying on stereotyped old techniques of teaching, are bereft of its benefits.

Harnessing of educational technology tools, particularly the use of computer and the internet in teaching is a phenomenon of recent origin and as such the gamut of issues involved in the use of educational technology in the classroom is still being studied by the academicians as well as educationists and neither of them have arrived at final results in this regard. However, there prevails unanimity of views among the academicians as well as the educationists about the positive role and the necessity of using educational technology with more frequency in the educational institutions in India. Keeping in view immense significance of educational technology in teaching and the growing it is paying in facilitating increased comprehension capabilities of the students as well as the keen interest being evinced by the teachers in it, it is gaining wider acceptability as well recognition from the teachers who prefer to discard outmoded teaching techniques and prefer usage of educational technology to improve the understanding of the students about their subjects, particularly science and technology.

# **OBJECTIVES OF THE STUDY**

The proposed study will serve the following objectives:

a) to analyze the paradigm shift in India's education policy in the aftermath of the application of educational technologies.

It is in this context that the proposed study makes a humble endeavour to answer these

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and other related questions. Hence the present investigator has selected this topic.

The present researcher has selected this topic as the focal point of his field research: A comparative study of perception, knowledge and awareness of educational technology amongst teacher trainees.

- b) to appraise the role of teachers in enhancing pupil's understanding and comprehension capacities with the help of educational technology;
- c) to ascertain the pitfalls in the existing educational policy that impede the adoption of educational technology;
- d) To examine whether educational technology will envisage qualitative change in India's educational system.

# **REVIEW OF RELATED LITERATUR**

Prior to embarking on any new area of academic research, it is always advisable to rummage through the available literature to ascertain as to what extent serious academic research has been done on the designated subject and what areas have remained unexplored. This helps in enabling the prospective researcher to identify his exact field of research. It is with this objective in mind that the present investigator rummaged through the available literature on education and technology and selected some works for review, because it is physically impossible to scan through the plethora of literature on education and educational technology. Therefore, a random selection of representative works in the form of books, articles and UNESCO reports was made and their brief review is presented.

Ainley (2003) provides education and training facilities presently available in the schools of England in the United Kingdom (U.K.) the author delves deep into the existing system of imparting teaching in England and suggests remedial actions for its improvement. It is useful for background information. Bajpai and Leehman (1998) in their jointly authored book provide useful insights into the application of educational technology in imparting teaching in schools. It is useful for understanding the utility of applying educational technology in imparting teaching.

Bale (2003) takes into account array of problems confronting the field of education, with specific emphasis on class strategies to be pursued in imparting teaching. A useful study of the application of internet by the teachers is provided by Becker (2000). The author lays emphasis on the increased need for the teachers to make use of the internet so that they can keep update with the latest developments in education and impart the same to their pupils. Benson (1995) presents a brief but informative background note on the application of educational technology in schools. In another article Benson (1992) deals with alternative structure, context and approaches to education technology. It is useful piece of information in understanding the utility of educational technology in imparting teaching.

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# **RESEARCH METHODOLOGY**

Keeping in view the overall cohesive unity of research and the requirements of the study, the present research study was designed so as to provide necessary directions towards sampling, data collection, administration of tools evaluation and formulation of the findings accordingly. The investigation was undertaken with a view to study the comparative application of educational technology by the teachers in the two senior secondary schools in Delhi.

#### Sample

The study undertaken was confined only to the teachers of senior secondary schools, one Government-run senior secondary school and the other public senior secondary school, both affiliated to the Central Board of Secondary Education (CBSE). Only the teachers imparting education to secondary and senior secondary students were selected for the sample. Other teachers did not form the part of the sample. The two schools from Delhi were purposely selected with very potent claims and reasons for the present study.

Delhi is accorded importance because the investigator belongs to Delhi and received his education right up to higher level in many educational institutions of the capital. Being quite familiar with the schools in the area, the investigator could expect full cooperation in and proper facilities to collect data from the staff of the schools in the chosen area. All this accounts for the particular weightage given to the selection of the sample from Delhi.

As a first step in the selection of the sample, the lists of higher secondary schools - private (recognized), semi-government and government, existing in the State of Delhi were obtained from the Zonal Education Officers at respective places. Out of these lists, 20 schools were selected for the preliminary scrutiny through stratified random sampling technique. Priority was accorded to the schools where both male and female teachers were teaching the secondary and senior secondary classes. After preliminary scrutiny, the focus was zeroed on five schools - two private (recognized) and three government schools. However, of these five schools, three schools - one private (recognized) and two government schools were located in far of places and this factor could contribute to creating impediments in the process of data collection. Hence, these three schools were eliminated and final choice fell on Sarvodya Bal Vidyalya Senior Secondary School, Krishna Nagar, Delhi-110051 and D. A. V. Senior Secondary Public School, Dayanand Vihar, Delhi-i 10092.

Both these schools are affiliated to the CBSE and have been showing good academic performance in their respective domains. The Sarvodya Bal Government Senior Secondary School, located at Krishna Nagar has two shifts - morning shift for girls only and the afternoon shift for boys only. The strategic point in selecting this school was to have both male as well as female teachers for sample and they were available under one roof D.A.V.

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Senior Secondary School at Dayanand Vihar has both male and female teachers on its roll.

It is important and interesting to point out here that factors like caste, religion, marital status, and home/environmental conditions, which generally affect individual's job tastes or their testable traits were not controlled. This was done owing to the fact that subjects selected through the random technique balance the impact of these factors.

# **RESULT AND DISCUSSION**

Education is the gradual process of acquiring knowledge by learning and instruction. Being a preparation for life, which is a result of a good upbringing especially knowledge of correct social behaviour, education encompasses teaching and learning specific skills, and also something less tangible but more profound like the imparting of knowledge, good judgment and wisdom. Education has, as one of its fundamental goals, to pass on and impart ethical and cultural values from generation to generation. It also serves as link between the present and the past and a being a repository of knowledge based on experience, education becomes handy for dealing with problems facing the society and promoting socio-economic and cultural development.

Education is a *sine qua non* for individual growth and social development. A nation's greatness is measured by the quality of education it imparts to its youth. Almost all countries lay emphasis on investing more and more on education so that they are in a position to meet the growing demands of economic growth and technological development in order to keep pace with the rest of the world. Laying emphasis on allocating more funds for education of country's youth acquires top priority in the scheme of things particularly in the developing countries, which are aspiring to reduce their dependence on the developed world and attain self-sufficiency in economic development. Undoubtedly, education has come to acquire added significance in the present era characterized by the processes of globalization, flow of private investments, humans and goods across borders.

System of education is as ancient as the human race, though there have been changes in its meaning, content as well as objectives over the millennia in accordance with the exigencies and requirements of time and space. Education is generally construed in terms of 'bringing up or leading out or making manifest the latent potentialities of the child. Viewed in a broader perspective, education alludes to any act or experience, which wields a formative effect on an individual's personality. Such a broad view of education is likely to encompass all of life's experiences. Technically speaking, education entails the process through which society, as represented by its various institutions, resolutely bequeaths its cultural heritage from one generation to another along with accumulated values, knowledge and skills.

Education is usually perceived as analogous to learning, as the acquired experience of any kind- intellectual, emotional or sensor motor. As the product of experience, education is

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the process of transmitting experience of the race in the form of knowledge, skills and attitude to the other members of the community. According to John Dewey: "Education is that reconstruction or reorganization of experience, which increases ability to direct the course of subsequent experiences." It is a life long process. Apart from school, there are other societal agencies like home, religion, press, radio, library, cinema, television etc., which play role in imparting education to the child. However, among these institutions, the school commands greater influence.

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