A COMPARATIVE STUDY OF EFFECTIVENESS OF ONLINE LEARNING AND TRADITIONAL FACE TO FACE LEARNING AT SECONDARY LEVEL

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Abstract

Technology is revolutionizing education today. The present study was undertaken to compare the effectiveness of online learning and traditional face to face learning at secondary school level.The sample of the study included total 80 students of class IX randomly selected from of D.A.V. Senior Secondary School of Yamuna Nagar on the basis of locality, parental occupational background and parental income. Two group pretest posttest research design was used to conduct this study. Results from the analysis of data reveled that students having rural background of both groups were not differ significantly in pre-test and it was also found that students having rural

background of online group have scored higher mean than students of traditional group with respect to their post-test.

Keywords: *Creativity, VII Standard Pupils, Activity Based Program (ABP)*

INTRODUCTION

We are living in a technological era(Dey etal.,2005) where computer is the prototype for most activity (Purushotham,2009).In this era computer has reached beyond our imagination and expectations (Rajsekar&Vaiyapuri, 2005). The use of computers has been so widespread that no field has been left unaffected by it. We find that almost every work is now being done by the aid of computers. The field of education is not an exception. Educational processes too have been influenced by computers and technology intervention.

In the present time there are super-fast changes taking place in all walks of life (Saxena, 2005) and revolutionary changes are also being seen in the field of education due to inclusion of technology in education. It has emerged as one of the most important aspects of human life (Saxena, et. al., 2009).Computers are being used in every sector of education i.e. teaching, research and extension. If the students have positive attitude towards technology, then there may be opportunity for them to be stimulated in acquiring informationaboutcomputers. Internet can be used effectively to teach the students because it can provide information on any topic within no time. One can access the information from any part of the world in fractions of second (Saxena&Aggarwal, 2010).

During last decade, Science and Technology has changed the face of world (Dey, etal.2005).Due to this revolution, new information can be accessed from any part of the world with the help of information communication technology. The arrival of World Wide Web (WWW) has increased the demand for distance education and, concepts like online learning or e- learning have emerged, as a result (Tayebinik&Puteh, 2012). Learning has now become synonymous with electronic learning using the internet. This type of learning is successful for higher studies. Technology based learning

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means thatall educational material is prepared by using technology. Now learning material is easily available on the web and students can easily download them with the help of internet.

The traditional methods of teaching and learning are rapidly losing credibility and are being replaced by modern and effective methods which have their own strengths and weaknessesfor the effective use of technology in the classroom.Students and teachers can use technology to enhance learning through research, communication and productivity strategies and tools (Intel,2003).The growth of e-learning (EL) has come under increasing scrutinisation even though traditional face to face (F2F) lecturing has often failed to engage students in the learning process (Alavi 1994).

Today, internet is being widely used in every sector of life. The use of technology in education is one of the main challenges for education policy makers (Zalzadeh, 2006).Now Traditional methods are proving to be less useful for the learners.New technologies like internet, ICT provide better opportunities of learning to the individual. In this fast changing environment, administrators and decision makers have to be careful in inculcating this change in an effective manner. They have to decide what aspects of technology have to be incorporated and what aspects of traditional teaching have to be done away with. A comparison of the two methods is thus required. Therefore, the present inquiry has been done for comparing the effectiveness of online learning and traditional face to face learning.

OBJECTIVES OF THE STUDY:

The present study is based on the following objectives:

➢ To compare the effectiveness of Online Learning and traditional face to face learning with reference to teaching Democratic Politics to secondary level students.

➢ To study the effectiveness of Online Learning and traditional face to face learning with reference to teaching Democratic Politics to rural background secondary level students.

➢ To study the effectiveness of Online Learning and traditional face to face learning with reference to teaching Democratic Politics to urban background secondary level students.

HYPOTHESES:

To carry out the present study, the following null hypotheses were formulated:

➢ There exists no significant difference between the scores of secondary level students while teaching theDemocratic Politics through Online Learning method and traditional face to face learning method.

➢ There is no significant difference between the scores of secondary level rural background students while teaching the Democratic Politics through Online Learning method and traditional face to face learning method.

➢ There is no significant difference between the scores of secondary level urban students while teaching the Democratic Politics through Online Learning method and traditional face to face learning method.

METHODOLOGY:

Keeping in view the need, adequacy and representativeness of the sample, simple random sampling technique was used. Two group pretest posttest research design was used to conduct this study. In the first phase of sample selection, a list of all the schools situated in Yamuna Nagar District of Haryana State, who are offering at least secondary level of education were procured from the office of the DEO, Yamuna Nagar. On the basis of this list the researchers were conducted a survey to find out various schools where the facilities for online learning are available. In the second phase of sample selection a list of such schools where the facilities for online learning are available is prepared and from this list, one school was selected by using lottery method of random sampling technique. In the third phase of sample selection, keeping in view the need of adequacy and proper representation of sex, locality, parental occupational background, parental income, total 80 students of class IX were selected randomly from of D.A.V.Sr.Sec.School of Yamuna Nagar.These students were using computers in their studies frequently

DATA ANALYSIS:

The data were analyzed with the help of mean, SD and't' test.

Table-1

Test of Significance of Difference between the Pre-Test and Post-Test Mean Scores of Secondary Level Students on Online and Traditional Face to Face Mode of Instruction

Pre-test					
Group	N	Mean	SD	't' value	Level of Significance
Traditional	40	14.35	2.914	.183	(n.s.)
Online	40	14.48	3.178		
Not Significant					
Post-test					
Group	N	Mean	SD	't' value	Level of Significance
Traditional	40	14.35	28.95	6.635	0.01
Online	40	14.48	34.05		

Anperusal of table-1, depicts that secondary level students of both groups do not differ significantly with respect to their pre-test. They have scored almost same mean scores.The table further depicts that there exists highly significant difference between mean scores of secondary level students in post-test. The finding ofJhang et.al (2007) contradicted this finding.

Table-2

Test of Significance of Difference between the Pre-Test and Post-Test Mean Scores of Rural Background Secondary Level Students on Online and Traditional Face to Face Mode of Instruction

Pre-test					
Group	N	Mean	SD	't' value	Level of Significance
Traditional	15	14.25	2.893	.022	n.s
Online	16	14.23	3.179		
Post-test					
Group	N	Mean	SD	't' value	Level of Significance
Traditional	24	28.79	2.843	6.683	0.01
Online	16	34.35	3.019		

It is clearly evident from the analysis of table-2, thatthe students having rural background of both groups were not differ significantly in pre-test and it was also found that students having rural background of online group were scored higher mean value than their counter part students of traditional group with respect to their post-test. Similar results were also found by Taylor, et.al. (2003).

Table-3

Test of Significance of Difference between the Pre-Test and Post-Test Mean Scores of Urban Background Secondary Level Students on Online and Traditional Face to Face Mode of Instruction

Pre-test					
Group	**N**	**Mean**	**SD**	**'t' value**	**Level of Significance**
Traditional	25	14.68	3.105	.336	n.s.
Online	26	14.38	3.163		
Post-test					
Group	**N**	**Mean**	**SD**	**'t' value**	**Level of Significance**
Traditional	25	28.76	3.897	5.653	0.01
Online	26	34.19	2.192		

The data presented in table-3, shows that urban background secondary level students of both the groups do not differ significantly in pre-test whereasa significant difference was found between urban secondary level students of both the groups with respect to their post-test. The probable cause for this situation may be that the students, who have scored better mean value, may have better opportunity to use online learning

FINDINGS:

The findings of the study are summarized in brief as follows:

1. When the mean scores of pre-test and post-test of secondary level students of both groups i.e. Traditional andOnline were compared, it was found that the students of both groups do not differ significantly in pre-test but on the other hand it was also found that there exists highly significant difference between students of both groups in post-test while teaching theDemocratic Politics through Online Learning method and traditional face to face learning method.Therefore the first null hypothesis stands partially accepted and partially rejected.

2. The null hypotheses of no significant difference between the scores of rural background secondary level student while teaching through Online Learning method and traditional face to face learning method is partially accepted and partially rejected. The findings comes from this hypothesis reveals that there exists no significant difference between students of both groups in pre-test whereas the rural background students of online group were highly significant in post-test as compared to traditional group.

3. When the mean scores of pre-test and post-test of urban background secondary level

students were compared, no significant difference was found between the students of both groups in pre-test whereas it was also found that students of urban background of online group have scored higher mean value in post-test as compared to the students of traditional group.

CONCLUSION:

The present inquiry has compared the effectiveness of online learning and traditional face to face learning at secondary level. It has brought out some of the very important results concerning the use of e-learning in modern education. Technology is becoming significantly common in today's fast-paced society.It has become a way of life.

Therefore, teachers, teacher-educators, administrators and policy makers have to make sustained efforts to create an effective mixture of education and technology. This will enable the teacher to supplement his teaching with technology and also sustain the faith of students in traditional class room teaching. It is said that face-to-face interaction is the best type of communication. Hence, due care must be taken in implementing e-learning at various levels of education so that the teachers do not lose their credibility.

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