

Effect of Conventional Teaching and ICT based Teaching in Relation to Learning

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(Received 21 August 2015 – Accepted & Published 1 September 2015)



Abstract

Objective: To find out the effect of conventional teaching and ICT based teaching in the development of understanding and learning capabilities of students.

Methodology: A comparison was conducted between the 40 students studying in C.C.P.G. College, Hewara. The investigator randomly classified the subjects in to two equal groups Group- A (Control Group) and Group B (ICT Based Teaching Group) and the age of the subjects was ranged from 22 – 25 years. Training was administered to the Experimental Group B while Control Group A did not undergo any special training programme except their regular classes. A pre test was conducted for both the groups before the teaching programme of eight weeks and a post test was also conducted after the training programme. ICT Based Teaching Questionnaire (ITMQ) was used as the tool for the collection of data for the present comparison. The data was analyzed by using dependent t – ratio and the level of significance was set at 0.05.

Results: The results of the study showed a statistical significant difference between Group A and Group B in respect to understanding and learning capabilities of school students due to the use of ICT based teaching.

Conclusion: Use of ICT based teaching develops a good understanding and learning capabilities of school students.

Keywords: Conventional Teaching and ICT based Teaching.

INTRODUCTION

ICTs have become within a very short time, one of the basic building blocks of modern society. Many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education, alongside reading, writing and numeracy. However, there appears to be a misconception that ICTs generally refers to ‘computers and computing related activities’. This is fortunately not the case, although computers and their application play a significant role in modern information management, other technologies and/or systems also comprise of the phenomenon that is commonly regarded as ICTs .Pelgrum and Law (2003) state that near the end of the 1980s, the term ‘computers’ was replaced by ‘IT’ (information technology) signifying a shift of focus from computing technology to the capacity to store and retrieve information. This was followed by the introduction of the term ‘ICT’ (information and communication technology) around 1992, when e-mail started to become available to the general public (Pelgrum, W.J., Law, N., 2003). According to a United Nations report (1999) ICTs cover Internet service provision, telecommunications equipment and services, information technology equipment and services, media and broadcasting, libraries and documentation centres, commercial information providers, network-based information services, and other related information and communication activities. According to UNESCO (2002) information and communication technology (ICT) may be regarded as the combination of ‘Informatics technology’ with other related technology, specifically communication technology.

The various kinds of ICT products available and having relevance to education, such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, interactive radio counselling, interactive voice response system, audiocassettes and CD ROMs etc have been used in education for different purposes.

METHODOLOGY

For the purpose of the present study the investigator randomly selected 40 students studying in C.C.P.G. College, Hewara. The investigator randomly classified the subjects in to two equal groups Group- A (Control Group) and Group B (ICT Based Teaching Group) and the age of the subjects was ranged from 22 – 25 years. A training programme (with the ample use of various kinds of ICT products available and having relevance to education, such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, interactive radio counselling, interactive voice response system, audiocassettes and CD ROMs etc.) was administered to the Experimental Group B while Control Group A did not underwent any special training programme except their regular classes. A pre test was conducted for both the groups before the teaching programme of eight weeks and a post test was also conducted after the training programme. A standard questionnaire i.e. Traditional Teaching Methods Questionnaire (TTMQ) and ICT Based Teaching Questionnaire (ITMQ) were used as the tool for the collection of data for the present comparison. The data was analyzed by using dependent t – ratio and the level of significance was set at 0.05.

Variables selected and criterion measure:

VARIABLE	CRITERION MEASURE
ICT Based Teaching	ICT Based Teaching Method Questionnaire (ICTBTQ) constructed by Dr. Arun Kumar

RESULT AND DISCUSSION

The following table illustrates the statistical result of the difference between pre and post test of Control Group:

Computation of Dependent t – Ratio for the Pre and Post Test of Control Group

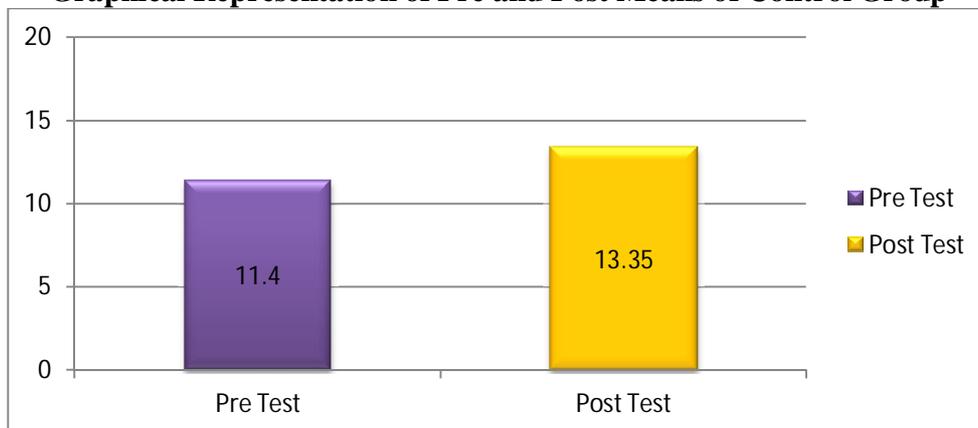
Test	Mean	M. D.	Std. Dev.	t - ratio
Pre	11.5	0.3	2.56	1.30
Post	11.8		2.06	

* Significant at 0.05 level

Tab. t_{0.05} (19) 2.093

The above table shows the means of Pre Test and Post Test i.e. 11.5 and 11.8. The mean difference between Pre Test and Post Test is 1.30, while the standard deviation is 2.56 and 2.06. The obtained t – ratio 1.30 is lesser than the table t – ratio 2.093 at 0.05 level of the degrees of freedom 19.

Graphical Representation of Pre and Post Means of Control Group



Computation of Dependent t – Ratio for the Pre and Post Test of Experimental Group

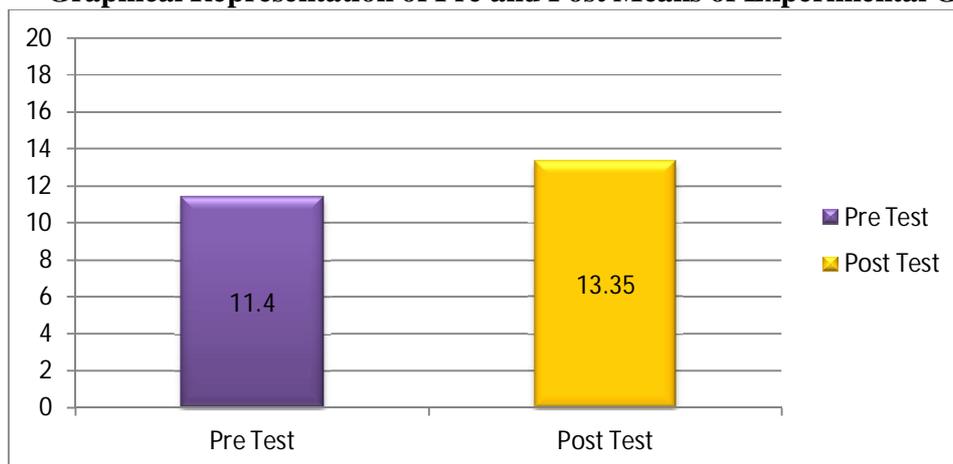
Test	Mean	M. D.	Std. Dev.	t - ratio
Pre	11.4	1.95	1.84	8.30
Post	13.35		1.53	

* Significant at 0.05 level

Tab. $t_{0.05} (18) 2.093$

The above table shows the means of Pre Test and Post Test i.e. 11.4 and 13.35. The mean difference between Pre Test and Post Test is 1.95, while the standard deviation is 1.84 and 1.53. The obtained t – ratio 8.30 is greater than the table t – ratio 2.093 at 0.05 level of the degrees of freedom 19.

Graphical Representation of Pre and Post Means of Experimental Group



The statistical finding shows that there is no improvement in the understanding and learning capabilities of students of the control group, while there is a significant improvement of

understanding and learning capabilities of students of experimental group. The appearance of this kind of research may be due to the fact that the conventional teaching methods are often not accepted by the students because of the technological advancement of the students. Today's generation has more magnetism towards the use of technology in the different fields of their daily life including education.

CONCLUSION

The result of the present study shows that the ICT based teaching methods have the more impact on the learning of students than the conventional teaching methods. From the above, we can make out that the Information and communication technology has made many innovations in the field of teaching and also made a drastic change from the old paradigm of teaching and learning.

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