

Effectiveness of Blended Learning of IX Standard Students in Social Science

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Abstract

Education develops our mind and convert intrusive mind into intellectual one. It's a high time to provide right content in the right format to the right people at right time. So the need of hour is of modified learning environment which incorporates the benefits of traditional as well as modern learning. In this globalize culture the transformation of our conventional learning has become an essential phenomenon. Thus new concept of learning arises. Blended environment is the best possible solution for meaningful learning. This learning strategy would facilitate students to create awareness by connecting them through global village. This learning process provides opportunities to students for creation and dissemination of knowledge too. The objective of present study is to compare the achievement in social science of ninth standard students using blended learning with those not using blended learning. Two groups have been made and in each group 33 students from ninth std. Total 67 students of social science stream were the sample of the present study. It was found that students using blended learning had better achievement to those who did not use blended learning. The finding of this study reveals that the ninth standard students of economics using blended learning have better knowledge exposure to their counterparts.

Key Words: Blended learning, IXth standard students, Economics

Introduction

The world of education is seeing a change the credit goes to technologies which have enough potential to bring change. These changes are not only facilitating school for collaboration but have also made teaching and learning process learners' centered. It not only surrounds our lives but is also the foundation of our society. Our generation is growing in a world where information and opportunity is just a screen touch away. Here the need is to just organize their information and synthesis it so that it can be communicated through proper path.

In this complex world rapid expansion of knowledge and scientific development has become a necessity of each. All these

elements have become a sign of development. Today's era is full of technology and digital world thus creating new challenges for teachers. As teachers are the most effective interface between the students and knowledge, hence they need to be well updated and skillful. With the advancement of technology it has become possible to modify the way of learning and presenting information to them.

Our young generation is full of new information and quest for new knowledge. Students have become techno savoir-faire. They collect information through internet and other mean. The need is to synchronize all the information and

present them in proper manner. Thus here the role of teacher changes from instructor to facilitator. Teacher provides the useful information of internet and book for teaching. Thus the combination of online material and text material proves to be beneficial for student. Information and communication technologies, which offer a mix of face to face interactive facilities that, allow individuals to learn anywhere, anytime. Moreover they offer opportunities to distribute and disseminate learning sources and research developments more effectively. In fact, over the next 10 years, world over, e-learning and use of ICT based technologies in education are projected to grow fifteen-fold, accounting for 30% of all educational provision.

Traditional teaching is basically concerned with teacher centered teaching method. In most of the traditional learning environment, students learn from the instructor led approach. Traditional learning is generally associated with desk in rows and teacher in front. The mode of teaching in this is generalized and does not focus on individual performance. As there is an individual difference, some students prefer an individualized setting. Thus a need of technology is felt in classrooms also. Newer method of teaching and learning process comprises use of technology and innovative thinking. This modern method known as blended learning. Blended learning is a mixture of traditional and online learning. It is the innovative method used in teaching and learning process to enhance the understanding level in students.

Background of the Study

Blended learning supports all the benefits of e-learning including cost reductions, time efficiency and location convenience for the learner as well as the essential one-on-one personal understanding and motivation that face to face instructions presents. (Brown, 2003; Yonge, 2014). This method of learning is student centered. Thus blended learning strategy describe a learning environment that either combines teaching methods, delivery methods, media format or mixture of all these. It also refers to the integrated learning activities such as online and face to face learning. On the above discussion we can say that blended learning is a type of learning that mixes various event-based activities, including face-to-face classrooms, live e-learning and self-paced instruction (Valiathan, 2006).

Blended learning proves to be an innovative educational solution through an effective mix of traditional method of learning and online learning. In a study by Dean and associates, research showed that providing several online options in addition to traditional classroom training actually increased what students learned. Blended learning will provide immense convenience for the learner to achieve its target by combining the face to face interaction in traditional learning and time, place and material richness provided by Web-based learning. Yilmaz & Orhan (2010) stated that the best way to solve the lack of interaction problem faced in technology-based learning is to blend traditional learning and online learning. Blended learning can be a good method to connect the learner with vast knowledge library of this global world. This approach has the facilities to meet the necessities of present age of globalization. It is a

technological innovation in the field of education that make possible to keep knowledge and information of whole world in single e-world.

Need of the Research

Most of the academicians follow traditional methods in social science subjects. These present learner are adult future citizen of the nation. If they are well equipped with this approach of learning they can imply it in life-long learning process which is a better way of knowledge construction in the Era. So the need of hour is of modified learning environment which incorporates the benefits of traditional as well as modern learning. Many review literature shows that there have been many studies of online learning environment and their relationship to students' performance (Bawaneh, 2011). As, many researches (Ahmad *et al.* 2006) proved that blended learning have positive effect on academic achievement of students. Researchers observed that in many schools still follows lecture-cum-discussion method for teaching ninth standard students. Therefore, in present paper an attempt is made by the investigators to study the effectiveness of Blended learning on achievement in social science of ninth standard students.

Objectives

The main objective of the study is:

- 1) To find out the achievement mean scores of the pre-test and post-test scores of control group students.
- 2) To find out the achievement mean scores of the pre-test and post-test scores of experimental group students.
- 3) To find out and compare the means of the control and experimental group students in their gain scores.

Hypotheses

1. There is no significant difference between pre-test scores of control and experimental group Students.
2. There is no significant difference between post-test scores of control and experimental group Students.
3. There is no significant difference between control and experimental group Students in their gain scores.

Methodology

Tuckman (1972) states that the use of pre-tests in quasi experimental design will enable the experiment approximate itself to a true experimental design. Along with him, several education researchers like Best (1973), Campbell and Stanely (1963), and Lokesh Koul (1984) advocated quasi experimental Non-randomized (intact) control group pre-test design as shown in table

Non randomized (intact) Control Group Pre-test Post-test design

Group	Pre-test	Treatment	Post-test
Experimental(E)	T ₁ E	X	T ₂ E
Control(C)	T ₁ C	-	T ₂ C

In this experimental method two groups of subjects are selected. One of the equivalent groups serves as the control group in which the subjects are taught by traditional

method. The other group serves as the experimental group in which the subjects are taught using the blended learning.

In the second phase students of controlled and experimental group were exposed to traditional teaching and blended learning respectively. In the last phase achievement test was applied again as a post test. The difference of scores of post and pre-test which is termed as mean gain scores is index with which effectiveness of two methods could be compared. The total sample was consisting of 66 students of social science in IXth standard student, Sathankulam in Thoothukudi district. The students of experimental group were taught through blended learning and control group were taught through traditional method. After one month of teaching, the two groups were tested for their achievement level to find out the effectiveness of blended learning over traditional method.

Sample of the Study

The investigator selected the IX standard students from TNTDTARMPC

government aided higher secondary school, Sathankulam, Thoothukudi district, Tamilnadu for the Investigation. The investigator selected the 66 students based on their scores in the performance test. The students who had scored average were selected for this study and the homogeneity was established.

Research Tools

The present study used blended learning modules and an achievement test.

Analysis and Interpretation

To investigate the significance of difference in achievement of controlled and experimental group's t-ratio was worked out and the value is given in table below:

Null Hypothesis -1

There is no significant difference between pre-test scores of control and experimental group Students.

Table- 1

Difference between Pre-Test Scores of the Control and Experimental Group Students.

Groups	Mean	SD	t - value	Remarks
Control	24.42	3.54	1.82*	Not Significant
Experimental	26.02	3.74		

(At 0.05 level of significance the table value of 't' is 2.05)

It is inferred from the above table that there is no significant difference between Pre-test scores of control group and experimental group Students. That is, the experimental group students and control group students are more or less equal mean

scores in their pretest total. So the null hypothesis is accepted.

Null Hypothesis - 2

There is no significant difference between post-test scores of control and experimental group Students.

Table - 2

Difference between Post-Test Scores of the Control and Experimental Group Students

Groups	Mean	SD	t - value	Remarks
Control	26.52	3.74		

Experimental	32.42	4.64	3.96*	Significant
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(At 5% level of significance the table value of 't' is 2.05)

It is inferred from the above table that there is significant difference between Post-test scores of control group Students and experimental group Students. That is, the experimental group Students is better than the control group Students in their

gain scores. So the null hypothesis is rejected.

Null Hypothesis -3

There is no significant difference between control and experimental group Students in their gain scores.

Table - 3

Difference between Control and Experimental Group Students in Their Gain Scores

Groups	Mean	SD	t - value	Remarks
Control	24.42	4.54	7.82*	Significant
Experimental	34.02	5.74		

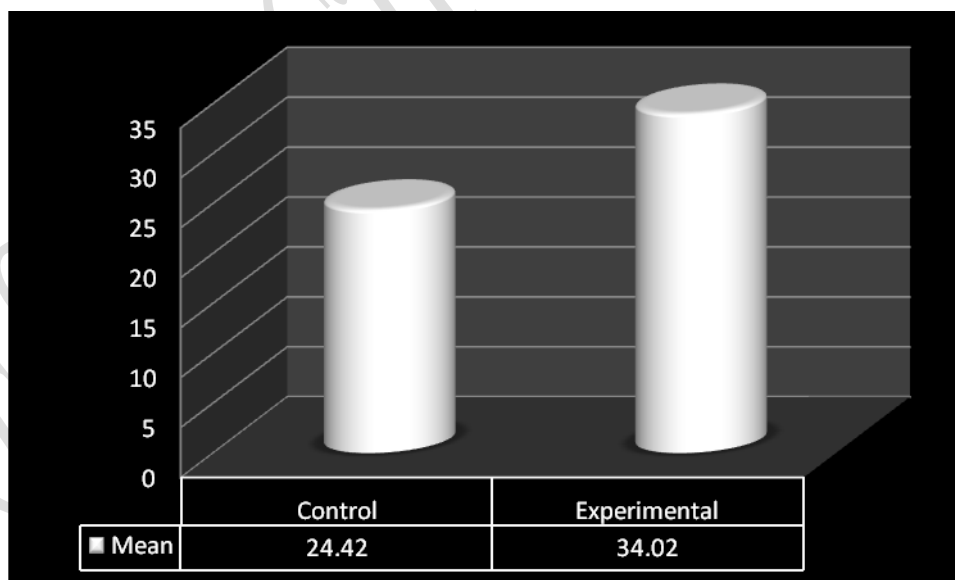
(At 5% level of significance the table value of 't' is 2.05)

It is inferred from the above table that there is a significant difference between control and experimental group Students in their gain scores. That is, the experimental

group Students is better than the control group Students in their gain scores. So the null hypothesis is rejected.

Figure - 1

Mean Values of Controlled and Experimental Group Students



Educational Implications

- The inference of the present study is that it would develop higher order of cognitive ability as well as 'out of box' thinking.

- It also gives importance of global knowledge and promote the students for self-regulating the learning process.
- It would help in learning process of all the age group around the world.

It observed that blended learning method student gets the opportunity to use their maximum sense organs to perceive the content. Students also have a space to get information through various sources to enrich their content. The idea of learning by doing is follow in this practice results in positive effect on their performance. Researchers also observed that students are taking interest in teaching –learning process.

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Conclusion

It is concluded from the results of the present study that the blended learning approaches can be used as a remarkable method for the development of the knowledge and better understanding of the economics to instruct ninth standard students. Students who learn through blended learning have more enrich information and comprehension about social science they have develop competency to learn social science outside the classroom. It is an innovative method which is helpful for lifelong learning students beyond the boundaries of classroom.

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