# IMPACT OF SMART CLASS ROOM LEARNING ENVIRONMENT ON ACADEMIC ACHIVEMENT OF THE STUDENTS

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#### **ABSTRACT**

Before 21<sup>st</sup> century, in India the education was provided by traditional methods. The traditional method includes long-hour sitting of students to teacher monologues. More emphasis was given on theory and less importance was given to practical based education. But in 21<sup>st</sup> century, the use of science and technology has been increased. In the present scenario the expectations of the stockholders are also increased about schools. Interactive classroom are the demand of the society by which their kids can gain knowledge in short time and in interesting way also. The main objective of the study to explores the impact of smart classroom environment on academic achievement of the students. The sample consists of 60 Secondary school students especially of IX class only of Jind district of Haryana. Randomized Groups Pre-test- Post- Test Design was used by the investigators. Data were analysed with the help of Mean, S.D. and t-test. The result shows that the smart class room environment enhance the level of academic achievement of students.

KEY WORDS: Smart Class, Academic Achievement, Traditional class

#### INTRODUCTION

Education is a dynamic and continuous process. The real aim of education is the unfolding of hidden potentialities of an individual (Singh & Gupta, 2017). The importance of education has been realized by everyone in every nation. In developing nations, educational improvement is widely perceived as a vehicle for economic development and industrial modernization (Benavot 1992; Acquaye 2001; Walberg 1991). Before 21<sup>st</sup> century, in India the education was provided by traditional methods. The traditional method includes long-hour sitting of students to teacher monologues. More emphasis was given on theory and less importance was given to practical based education. But in 21<sup>st</sup> century, the use of science and technology has been increased and fluencies the field of education.

In the present scenario the expectations of the stockholders are also increased about schools. Interactive classroom are the demand of the society by which their kids can gain knowledge in short time and in interesting way also. By the concept of Smart Class it was realized that technology to become an integral part of day to day teaching and learning practices in schools. Introduction of smart classrooms does not mean to uproot the conventional ways rather it means the integration of old with new (Sharma & Anju, 2016). The

smart School is a physical school that control and management of it is based on computer and network technology and the content of its courses is electronic and its evaluation and monitoring system is intelligent. A SMART Board is an effective tool to engage students. Because the whiteboard has a large screen, all students can see it from anywhere in the classroom and it provides a space for handson activities to occur. Teachers and students can work together at the front of the room with the board and the rest of the class can still actively participate because they can see what is presented without needing to stand up or move closer.

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## GOALS OF SMART SCHOOLS

- All-round development of students (physical, mental, emotional and psychological)
  - Improving individual's promotion and abilities
- Training thinker and user of technology human resources
  - Increasing public participation

The benefits of using technology in the class rooms are broad and deep. By using Smart classroom, students are more engaged, more motivated and more excited about learning. An interactive smart class room helps the teachers to prepare dynamic multimedia lessons with hand on component. In smart class rooms learning, the student's

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audio-visual sense is targeted and this helps the students to store information fast and more effectively. There are the advantages of utilizing the time which is wasted earlier in drawing or preparing diagrams on board. Smart boards have all these information in memory and can be use presented during the time of class lectures and thus, the time saved can be used in more important things.

On the basis of above proceedings investigators have made an attempt to study the Impact of Smart Class Room Learning Environment on the Academic achievement of Secondary School Students.

## **OBJECTIVES**

The present study is based on the following objectives:

- 1. To know the smart class room environment of secondary school of Jind District of Haryana.
- 2. To study the achievement level of secondary school students before teaching through smart classroom learning environment in Biology.
- 3. To find out the difference in the impact of smart class room learning environment on academic achievement of secondary school students in biology.

## **HYPOTHESES**

The present study is based on following hypotheses:

- 1. Smart class room environment of secondary school of Jind District of Haryana is adequate.
- 2. There is no significant difference between the academic achievements of secondary school students before teaching through smart classroom learning environment in Biology.
- 3. There exists a significant impact of smart class room learning environment on academic achievement of secondary school students in Biology.

## **DELIMITATIONS**

- 1. The study was delimited to only one Secondary School of Jind District of Haryana.
- 2. The study was delimited in terms of sample size i.e. 60 secondary school students of class IX only.

# RESEARCH METHODOLOGY

The present study is experimental in nature. Randomized Groups Pre-test- Post- Test Design was used by the investigators.

# **SAMPLE**

The present study contained 60 students of Indus Public secondary school of Jind District.

## **TOOLS USED**

The investigator was used an achievement test of Biology, constructed by themselves.

## STATISTICAL TECHNIQUE

In order to make the inquiry exact, precise and scientific the collected data were analysed with the help of Mean, S.D. and t-test.

## **DATA ANALYSIS**

Table-1: Comparison of Achievement Level of Secondary School Students before Teaching through Smart Classroom Environment (Pre-test)

Group	N	Mean	S.D.	't' Value (df 58)
Control Group	30	10.1	1.84	1.42 ns
Experimental Group	30	10.7	1.35	

Table-1, reveals that the mean score of pre- test of control group and experimental group are 10.1 and 10.7 with S.D. 1.84 and 1.35 respectively. The t- value came out to be 1.42 which is not significant at any level of significance. Thus, the hypothesis 1 "There exit no significant difference between the academic achievement of secondary school students before teaching through smart classroom learning environment in Biology" is accepted.

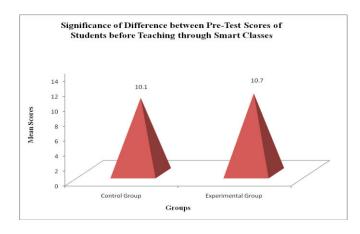


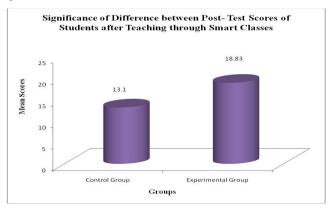
Table-2: Comparison of Achievement Level of Secondary School Students after Teaching through Smart Classroom Environment (Post-test)

Group	N	Mean	S.D.	't' Value ➤ (df 58)
Control Group	30	13.1	2.42	
(Teaching through				10.79**
Conventional				
Method)				
Experimental Group	30	18.83	1.61	]
(Teaching through				
Smart Classroom				
Learning				
Environment)				

## \*\* Significant at .01 level of Significance

Table-2, depicts that the calculated t value of secondary school students who got and who did not get instruction in smart classroom learning environment according to their pre-test and post-test is 10.79, which is found to be significant at .01 level of significance. Therefore, it can be interpreted that there exist a significant difference in the effect of teaching through smart classes on academic achievement of experimental group secondary school students in Biology. Chachra (2015) also supported the same finding. Bano (2016) also revealed that smart classroom learning positively affects the performance of students in English. Thus, the second hypothesis that "there is no significant impact of smart classroom learning environment on academic achievement of secondary school students in Biology" is fully rejected.

Thus, the hypothesis 2 "There exit no significant impact of smart class room learning environment on academic achievement of secondary school students in Biology" is rejected.



## MAIN FINDINGS

1. The first null hypothesis that "there exit no significant difference between the academic achievement of secondary school students before teaching through smart classroom learning environment in Biology" is fully accepted. The finding of the same hypothesis is as follows:

The pre- test mean scores of control group and experimental group were almost similar. The t- ratio came out to be 1.42 which is not significant at any level of significance.

2. The second hypothesis that "there exit no significant impact of smart class room learning environment on academic achievement of secondary school students in Biology" is rejected. The finding of the same hypothesis is as follows:

The calculated t value of secondary school students who got and who did not get instruction in smart classroom learning environment according to their pre-test and post-test was 10.79, which is found to be significant at 0.01level of significance. It means a significant difference in the effect of teaching through smart classes on academic achievement of experimental group secondary school students in Biology.

## **EDUCATIONAL IMPLICATIONS**

Today is the age of science and technology. Almost everything has undergone teaching learning programmes have also been effected by it. The classroom has to have a different shape in times to come. It is to be just like a laboratory where different hardware such as projector, tape recorder, recorder player, overhead projector, epidiascope, computer etc. is lying. Different type of software are also available to improve the process of teaching learning.

Now the classrooms have totally changed, a shy and inhibited learner in the educational system has become a more active and social student in modern classroom. This has become possible only the use of new techniques and innovations in the classroom. Normal classrooms have turned into SMART CLASSROOMS. In absence of hardware and software, the classrooms will be considered traditional ones. Surely the classroom in the 21<sup>st</sup> century has to be modern from every angle.

- > The smart classroom should be used in the schools to make aware of the optimum use of technology in their studies.
- ➤ The curriculum in the whole academic activities should be connected to the Smart Class.
- ➤ The teacher should be proper use of Smart Class to clarify the topic.
- ➤ The projects, seminars and home assignment, all these should be given by taking digital learning into account.
- New concepts and up to date information should be given to students through the Smart class.
- ➤ All schools must have smart Class and each individual must be given a chance to use the Smart Class.
- ➤ The guidance of teacher must be there with student while using smart class, so that they do not get distracted from the right path.

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- ➤ Seminars, conferences and workshops should be organized to provide the teachers with the update knowledge of using technology (smart class) in the classroom so that they in turn able to motivate their students for their success of academic achievement.
- > Students should be given the proper instruction related to topic before using smart class and they should be about the benefits of using the smart class.
- > Smart classroom learning help to increase the learning abilities.

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