



# A STUDY OF ATTITUDE OF STUDENTS TOWARDS SMART CLASSES TEACHING IN SOCIAL SCIENCE AT THE COLLEGE LEVEL: A PILOT STUDY

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**Abstract-** Smart class is an initiative of Educomp, which is rapidly transforming the way teachers teach and students learn in colleges with innovative and meaningful use of technology. Students learn difficult and abstract curriculum concepts watching highly engaging visuals and animations. This makes learning an enjoyable experience of students while improving their overall academic performance in college. Smart class also enables teachers to assess and evaluate the learning achieved by their students in class with an innovative assessment technology smart assessment system designed by Educomp. Quality education is an essential requisite in today's competitive environment. Technology has affected us in every aspect. This paper discusses the smart classes as a modernized method of education in Indian education scenario which provides quality education to students by helping them in better concept formation, concept elaboration, improvement in reading skills and academic achievement. Technology benefitted us in every aspect of our life right from communication to education. In ancient days students were taught in a Gurukul where they were taught by the gurus. But this system was replaced by modernized culture. New methods of teaching have been introduced which is known as smart class. It uses instructional material, 3D animated modules and videos ,activity based learning. Now the students are thrilled at this concept of innovation and interactive teaching-learning process.

**Keywords:** Smart Class, Chalk &Talk, Attitude, Technology, Multimedia etc.

## 1. INTRODUCTION

It is a thing of the past when teaching and learning were restricted to classroom sessions prominent with white chalk, dusters, and blackboards .Now is the era of the use of smart classrooms which make learning fun through the use of digital equipment like the VCD or DVD player or laptops and computers fitted to a projector. Smart classes are conducted by a teacher using a viewing screen that is attached to the projector. Students will assimilate the audio-visual information that is projected on the screen and learn about the topic. With the passage of time and technological enhancement, education system has undergone various changes. Teachers started experiments to change in teaching method and methodology. The traditional blackboard approach is gradually giving way to more interactive session between the instructor and students. Dynamic progress in intonation technologies has necessitated the change in educational process, its purpose, in developing new pedagogical technologies, and to introduce more effective methods of teaching. With the recent technological developments, an Opportunity has emerged to introduce more efficient method of instruction in the classroom. Multimedia became one of the leading means of teaching today. The concept of multimedia came into existence in early 1990s. Multimedia also refers to computer media. Multimedia is the integration of multiple forms of media. This includes text, graphics, audio, video, etc. For example, a presentation involving audio and video clips would be considered a 'multimedia Presentation.'

Yadav Reena (2015) made a study on Attitude of secondary school teachers of Rewari district towards the use of information communication technology in education. The investigator found that teachers of urban area school showed more attitude towards use of ICT as compared to rural area school teachers. Private School teachers showed greater attitude towards use of ICT in education as compared to government school teacher.

Chandini (2016) investigated on Attitude of Secondary School Teachers towards the use of Computers in Education. The results showed that there is significant difference in secondary school teacher's attitude towards the use of computers in education with respect to their age. The findings have implications for the teachers to equip themselves through computers literacy training. Government has to provide infrastructure facilities for use of computers in classrooms. Thus the attitude of secondary school teachers towards the use of computers in education can be improved.



## 2. OBJECTIVES OF THE STUDY

- To find out the significant difference in the attitude between male and female college students towards the use of technology in classroom.
- To study the attitude of Smart classes (experimental group) over the traditional method (control group) of teaching of social Science among male and female college students.

## 3. HYPOTHESES

- There is no significant difference in the attitude among female students towards Smart class.
- There is no significant difference between mean scores of control group and experimental group taught by traditional method and smart class respectively on one of the social science topics.

## 4. POPULATION AND SAMPLE

Population is any groups of individuals that have one or more characteristics in common that are of interest to the researcher. All the students of colleges, Jodhpur; Rajasthan and Agra Uttar Pradesh was considered as population of the study. Sample taken from Mahila PG Mahavidyala, Jodhpur, Rajasthan, Aishwarya college, Jodhpur, Rajasthan and Symbozia Girls College Agra for a pilot study. Purposive sampling was done to select the college from which the sample was drawn. **Random sampling technique** was used to select the sample.

## 5. TOOLS USED

Selection of the suitable instruments or tools is of vital importance for the collection of data in any research Work. Different tools are used for collection of data and for various kinds of information. One may use one or more of tools according to the purpose of the study. For the present investigation, the investigator used the following tools:

### 5.1 OPINIONNAIRE-Attitude Scale towards the Use of Smart Class

The investigator could not find any appropriate standardized tool for the present Study thus in the absence of the standardized tool an opinionative was used for collecting data which was constructed by the investigator along with the experts advise and suggestions.

### 5.2 QUESTIONNAIRE-Social Science Achievement Test

The social science achievement test was prepared by the researchers according to the Smart class project. The Social Science achievement test consisted of 20 open-ended questions on concepts related to one of the topic of the course. The opinions of specialists was asked in order to determine which concepts were to be asked on the test; after the experts views the inner validity of the achievement test was achieved.

## 6. PROCEDURE OF DATA COLLECTION

At first the researcher attained permission from the head of the institute. After attained permission the sample was divided into two groups at both planeside the controlled group and the experimental group. The controlled group was taught with traditional method of teaching and the experimental group was taught using smart classes on one of the topic of social Science related to the course. The raw scores were obtained further used for the analysis of the study.

## 7. PROCEDURE OF ANALYSIS OF DATA

In the light of the objectives of the study the investigator employed t- test for the analysis of data. The investigator calculated the mean, standard deviation, standard error of mean values, standard error of difference between mean and finally the t –test was computed.

### 7.1 Analysis of Hypothesis-1

There is no significant difference in the attitude of male and female students towards Smart class.

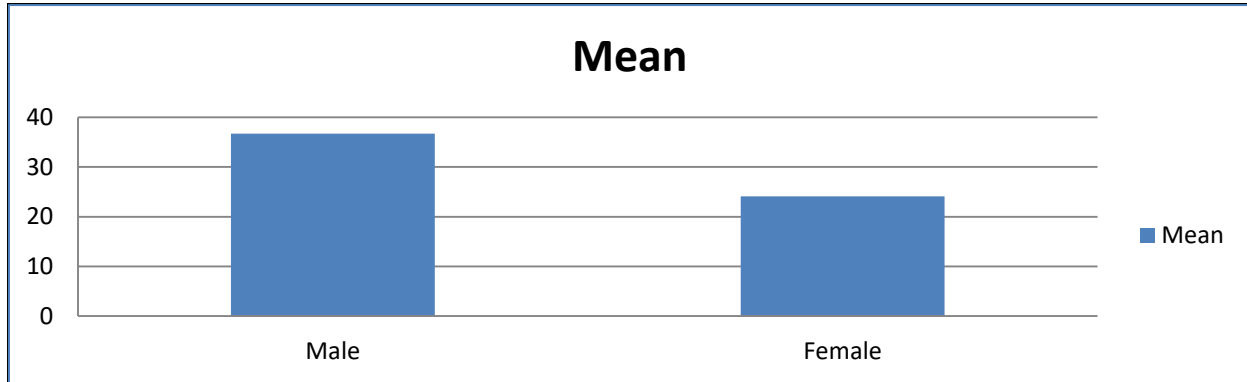
**Table-7.1Significance of Difference between the Mean Scores and S.D of Attitude of Male and Female Students towards Smart Class**

Groups	Number	Mean	S.D.	t-ratio
Male	50	36.67	2.83	3.00
Female	50	24.12	2.60	

\* Significant at .01 level

Table 7.1 shows that calculated value was 3.00, which is greater than table value (2.750) at .01 level of significance. Therefore, it is significant at .01 levels.

It indicates that there exists significant difference in the attitude of male and female students towards Smart class. Hence, **hypothesis No. 1** i.e. there is no significant difference in the attitude of male and female students towards Smart class is **rejected**. Thus, it can be concluded that there is a significant difference in the attitude of male and female students towards Smart classes.



**Fig. 7.1** Histogram showing mean difference in the attitude of male and female students towards smart classes

## 7.2 Analysis Of Hypothesis-2

There is no significant difference between mean scores of control group and experimental group taught by traditional method and Smart class respectively on one of the social Science topics.

**Table-7.2** Showing Significance of difference between the Mean scores and S.D of Controlled Group and Experimental Group taught by Traditional Method and Smart class respectively on one of the Science topics

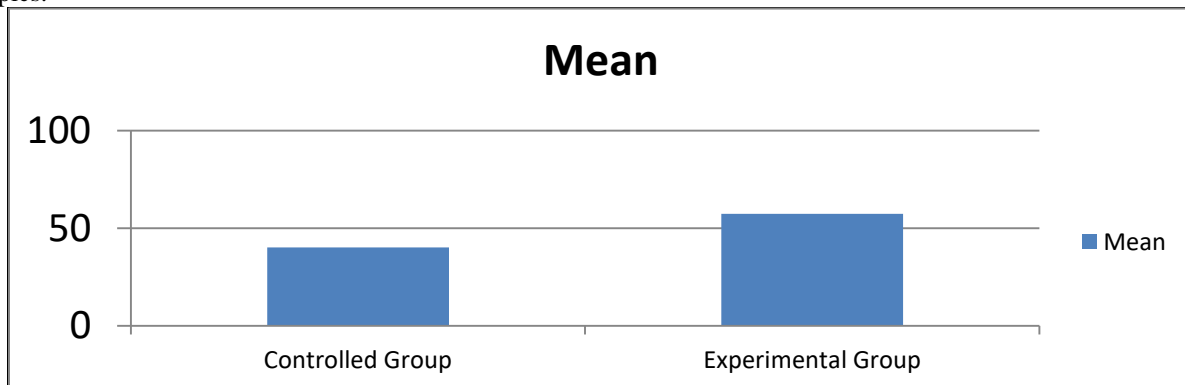
Variables	Number	Mean	S.D.	t-ratio
Controlled group	50	40.16	4.53	7.24
Experimental group	50	57.33	4.83	

Significant at .01 level

The t-ratio calculated in Table.2 was found to be 7.24 and the needed values to be significant at .01 level is 2.750 and at .05 level 2.042. so, the calculated t-ratio value is greater than the table value at .01 level of significance. Therefore, it is significant at .01 level.

It indicates that there exists significant difference between controlled group and experimental group. The mean score of experimental group (57.33) is greater than the mean score of controlled group (40.16).

Hence, **hypothesis No.2** i.e. there is no significant difference between mean scores of controlled group and experimental group taught by traditional method and Smart class respectively on one of the Science topics stands **rejected**. Thus, it can be concluded that there is a significant difference between mean scores of controlled group and experimental group taught by traditional method and Smart class respectively on one of the social Science topics.



**Fig. 7.2** Histogram showing Significant Difference between Mean scores of controlled group and Experimental group taught by Traditional Method and Smart class respectively on one of the Social Science Topic



## CONCLUSION

**From Table 7.1:** It can be concluded that there is a significant difference in the attitude of male and female students towards Smart class.

**From Table 7.2:** It can be concluded that there is a significant difference between mean scores of controlled group and experimental group taught by traditional method and Smart class respectively on one of the social Science topics.

In the light of analysis and interpretation, the investigator arrived at the following conclusions:

The Male and Female students differ significantly in their attitude regarding the usage of technology in classroom. The controlled and experimental group differs significantly in their attitude towards the usage of technology in classroom.

### Suggestion for Further Studies

- Similar study may be done on a large sample.
- Similar study can also be conducted on learners of other Institutions.
- A comparative study may also be carried out between different institutions.
- A comparative study may also be carried out between Secondary Institutions and Higher Secondary Institutions.
- A comparative study may also be carried out for different subjects of teaching using smart class.

### Educational Implications

- The present study has implications for administrators, principals and headmasters of the educational institutions that they can take necessary initiatives for developing willingness of the teachers to the use of technology in classroom.
- It will also benefit the content designer to design appropriate content.
- It will also help the institutional heads to plan and conduct some training courses for students and teachers providing specific emphasis on technology.
- The findings have implications for research scholars that they can conduct further research work related to the topic.
- The present study has implications for the teachers, to refine their attitude so that right kind of gap between programmes and desirable outcomes can be taken out.

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