ACADEMIC ACHIEVEMENT THROUGH SMART CLASSROOM V/S TRADITIONAL CLASSROOM OF CLASS X STUDENTS

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ABSTRACT:
The application of Educational Technology has brought a numerous changes in the field of education. At the present day smart classroom is very engrossing dreams for both the learners and teachers. E-learning and Smart Classrooms motives that improving students learning ability and achievements. So that, their progress and curiosity increases in study. And also increased their interest on study and enhance their bright future. The study based on primary data and presented in quantitative method.The researcher was taken 20 students from Govt. High school in Santipur, Nadia District, West Bengal and followed stratified random sampling method. Researchers considered 10 students in each group. Group 'A' was taught in Smart classroom and group' B' through Traditional classroom. Present paper focuses on a comparatives study between achievements of students on smart classroom and traditional classroom. It found that comparatively smart classroom more improving achievement of the student than traditional classroom. And also revealed that no difference between boys and girls in their achievement through learning by smart classroom.

KEYWORDS: Traditional classroom, Smart Classroom, Academic Achievement.

1.INTRODUCTION:
Smart classroom works as an umbrella for using different technologies together. At present, in WB are 235 smart classrooms in the state and around 123 of those are run by private groups. Use of educational technology in higher education is an overgrowing. Technology has become an important part of a life. It is victoriously make practical in contriving many educational difficulties. Effectively use of technology to enhance the quality of teaching. In contemporary time period pupils were instruct by Guru's in a Gurukula system, but increase of time, technology has used in modern educational system. Uses of traditional chalk & talk teaching methods gradually reduce and this place is replaced by innovative science and technology. This new techniques of instruction have been initiated in 21st century, which is most multifaceted contribution of science, known as "Smart Classroom". Smart classroom concept was first time launched by EDUCOMP in 2004. Smart classroom are that classroom which is augmented with the technological gadgets for superior study and instruct. Now is the era of smart classrooms which makes learning interesting and attractive through the use of digital equipment like the VCD or DVD players or laptop and computer, fitted to a projector. To provide appropriate content to the students based on their understanding levels, smart classroom is very helpful for quality education.Albert Einstein told that – "I never teach my pupils, I only provide the conditions in which they can learn." In occurrence of smart classroom the learning atmosphere set up of this kind.
Neeta and Shibani (2007) on their study "Effectiveness of smart classroom over traditional classroom in terms of academic achievement of students using statistical method"

concluded that there was no significant differences between the academic achievement of T.Y. B. Sc students when no instruction given both groups, but a significant difference found in two groups when instruction to group A students were provided by traditional method and instruction by group B through smart board. Aytekin, et. al. (2012), "Saudi Secondary school teachers attitudes towards using interactive whiteboard in classrooms" on their study stated that there were opposite attitude towards using Interactive Whiteboard, but a little number of teachers used successfully the interactive whiteboard. They concluded that whiteboard always helped the teachers and improving their teaching skills. Another study by Balta Nuri (2015) and Muhanna, et.al. (2013) also agreed with this at their study. Oguz, et. Al. (2015) on their study "Teachers' attitudes toward using interactive whiteboard" concluded that a significant differences between attitudes with regard to using interactive whiteboard with respect to gender and content and no differences were found with respect to age and years of teaching experience. But another study "Interactive whiteboard factor in education: students' points of view and their problems" by Tufan (2013) founded that on the basis of gender there was no significant differences. This study also described a difference between primary school and high school student's views as regarded the uses of IWB. Prabhu, et, al. (2015) on their study "Attitude of B.Ed students towards smart classroom in Arni Taluk" founded a high correlationship between smart classroom and very high level of achievement of B.Ed students in their career. Shweta (2015), on her research work "Effectiveness of Smart class for teaching on the Achievement of Accounts of Higher Secondary school students" founded that student more achieved when they taught through smart classroom as compared to traditional class. Malik and Shanwal (2015) also concluded on their study that a significant difference between academic achievement when studied one groups through smart classroom and another traditional classroom, of class VIII students. Another study "A comparative study of traditional and smart classrooms in relation to their creativity and academic achievement" (2017) founded a significant relationship between creativity and academic achievement with smart classrooms. Jaechoon and Heniseok (2015), on their study "a study on effectiveness of Smart classrooms through interaction analysis" proved smart classrooms was more positive on education rather than traditional classroom and also concluded that smart classroom and also concluded that smart classroom was more students oriented. Dipankar (2016), "Modern Education with smart classroom", he was revealed that smart classroom was very effective for education but in India backward from using this. He also showed benefits and major disadvantages of smart classroom. He agreed that it improves teacher effectiveness, productivity and academic performance of students. Yapici and Karakoyun (2016), "High school students' attitudes towards smart board use in Biology classes" concluded on their study that smart board always helped to understanding of Biology subjects more easily. Ban and Ganaie (2016) on their study "Smart Classroom Learning Environment and Performance of First Grade students – A study" revealed that smart classroom learning positively effects on the performance of first grade student in Science. Sourav Mahato (2017), on his study "Use of Educational Technology in SidhoKanhoBirsha University" founded many department not used general educational equipments like smart board, power projector, films etc., but Education and Science Department used this technology and get more effective results. Manohari and Thangavel (2018), "A study on Scope of Smart Classrooms in the Government Schools functioning in and around Coimbatore" concluded that the scope of smart classrooms in State board school. They concluded smart classroom enhance the interest of the student, benefits and easy to understood. Smart classroom was dependence on digital device and internet and technology was main equipment.

2.OBJECTIVES OF THE STUDY:

i. To find out the differences of academic achievement in class X students learning through Smart Classroom and Traditional Classroom.

ii. To find out the difference between students' attitude scores with respect to Gender.

3. HYPOTHESIS OF THE STUDY:

The researchers framed the following hypothesis of the study-

i. There will be no significant difference between pre-test score of achievement in Group A students and Group B students.

ii. There will be no significant difference between post-test score of achievement in Group A students and Group B students.

iii. There will be no significant difference between students' attitude scores with respect to Gender.

4. METHODS AND MATERIALS:

The study was conducted by adopting survey method and quantitative analysis.

4.1. Variable:

Smart Classroom, Traditional Classroom, Gender were independent variable and academic achievement was dependent variable.

4.2. Sample:

20 students of X class (both boys and girls) from Higher Secondary School in Santipur, District Nadia, West Bengal were taken as sample. Stratified random sampling technique was used for choosing the samples. Students were distributed randomly into 2 groups; in each group 10 students existed. Group A was experimental group which taught through smart classroom and another Group B was control group which taught through traditional classroom.

4.3. Procedure of Data Collection:

Two tests was supervised here i.e. pre-test and post-test. Pre- test was supervised without any instruction. But the post test that was conducted into instruction but the other conditions was remained constant as previous, for Group-A traditional classroom and for Group-B smart classroom in learning. For pre-test and post-test were used same test item, same total marks, same total no of question and same duration of time.

5. RESULTS AND ANALYSIS:

Table 1: Statistical Analysis of Difference of Mean Score (t-test) of pre-test scores of Academic Achievement of class 'x' students in Group-A and Group-B

Group	Total students	Mean	S.D.	t-value
Group-A	10	12.4	1.71	.422
Group-B	10	11.8	1.54	

The calculated value is less than the table value (2.10). Therefore the value is not significant and null hypothesis is accepted at 0.05% levels. So, the researchers concluded that there is no difference of pre-test scores of Academic Achievement of class 'x' students in Group-A and Group-B.

Table 2: Statistical Analysis of Difference of Mean Score (t-test) of pre-test scores of Academic Achievement of class 'x' students in Group-A and Group-B

Group	Total students	Mean	S.D.	t-value
Group-A	10	16.5	1.95	2.68*
Group-B	10	12	1.63	

*Significant at 0.05% Levels of Confidence

The calculated value is more than the table value (2.10). Therefore the value is significant and null hypothesis is rejected at 0.05% levels. So, the researchers concluded that there is a difference of post-test scores of Academic Achievement of class 'x' students in Group-A and Group-B.

Table 3: Statistical Analysis of Difference of Mean Score (t-test) of Boys and Girls taught through smart classroom

Gender	Total students	Mean	S.D.	t-value
Boys	5	16.2	2.58	.65
Girls	5	16.8	1.30	

The calculated value is less than the table value (2.10). Therefore the value is not significant and null hypothesis is accepted at 0.05% levels. So, the researchers concluded that there is no difference of Boys and Girls taught through smart classroom.

6. CONCLUSION:

When researchers followed no instructions (table 1) for both two groups there has no significant difference in academic achievements of class x students. But, when the instruction changed (table 2) for two groups and they are taught in different classrooms then, significant change in results. The results revealed that smart classroom is more effective for students' academic achievements in compare of traditional classroom. Researchers also concluded that no difference between students' attitude scores with respect to Gender. Calculation from Table 3 shown boys and girls almost same scored when they were taught through smart classroom. A smart classroom expanded the engrossment of the students in their studies. In future smart classroom will be including in education system everywhere for more benefits and furthermore research work on this topic.

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