

EMERGING ISSUES IN DIGITAL LEARNING IN INDIA. A STUDY WITH REFERENCE TO SMART CLASSROOM.

JAGDEEP SINGH ARORA* & DR. UPASNA JOSHI SETHI**

*Research Scholar(Pursuing PhD), Punjabi University, Patiala.

**Professor, Punjabi University Regional Centre, Mohali

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ABSTRACT

Over the years, technology has proved to be a big factor in improving the quality of instruction by helping in delivering better teaching learning experience. However, effective use of technology to enhance the quality of teaching is a challenging issue. Technology can be used to improve the quality of teaching in many ways. For example, it can improve the interactions between the instructor and the students, or in-group collaboration among the students. My research topic "Emerging Issues in Digital Learning in India. A Study with Reference to Smart Classroom" is divided in 4 parts for collecting data and analyzing the same. This study comprises of data collection from questionnaire and experimental study comprising of 25 Owners of private and government schools, 250 teachers from these schools, 25 employees of various companies associated with smartclass room technology in Punjab and J&K along with experimental research design to measure the impact of smart class room learning environment on academic achievement taking sample of 180 students from various schools in Punjab and J&K. This study is focused on measuring impact of smart classroom with non smartclassroom and coming up with conclusion as how impact is due to digital classroom and non digital classroom on students achievement i.e. marks. As there is random assignment of test units to both the groups, it was assumed that both the groups were equal prior to the application of treatment to the experimental group. The students were randomly allocated to both the type classroom setup i.e. with smartclass and with traditional setup without smartclass installed and the results were concluded.

Keywords: academic achievement, information and communication technology, smart class.

INTRODUCTION

The adoption of smart classrooms in India is driven by the need to improve the standard of education in the country and enable it to be on par with the global education standards. Smart classrooms charge investment for the buy of hardware and software products. End-users comprises of schools, colleges, universities, and contrasting institutions that toil professional and vocational courses. Smart classrooms consider eke out a living videos and pictures making classrooms more interactive and learning more enjoyable. In this terrain, students have facility to study materials even after perpetual piece of action hours in school. Students convenience is further highlighted by use of online libraries at their will. Competitive exams in India are further as conducted at the hand of online platforms. Smart classrooms are transforming the way education was imparted by integrating information technology in its portfolio. However, conflict to critical point along by all of unquestionable infrastructure challenges are creating issues in the accustom to feign the technology. The analysts conclude the Smart Classroom market is growing very fast in India and would be in range of around compound annual growth rate of 15.89 percent till 2019. With 1.4 million schools in our country, the addressable business is very much possible with 200000 odd private/unaided schools in the country. Even if a school takes a setup for 10 smart classrooms which would replicate into a business of around 2000000 digital classrooms demand pointing towards huge business opportunity. Along with this some of State governments in India are also changing the way the education being imparted in government schools with introduction of smart classrooms in their respective states. One such example is the tie up between Private Digital company with Government of Kashmir for 100 such schools. The smart classroom is now seen as a tool to bring global education standard in India.

Under "Government's "Digital India" Initiative Aims to Overhaul India's Education System" scheme the proposal is approved to allocate R500 crore (\$81.38 million) for digitization of the classroom in the Union Budget itself give a flip up to the overall growth prospects in India. Along with this there is potential to do business with 650 universities, both public and private where digital content and requirement of information of figure tips is immensely required and this market could be worth couple of Billion Dollars. With only 10% of penetration being done in these schools till date, the potential is huge.

REVIEW OF LITERATURE

Meyer and Rowan (1991) state, a prevailing theory of institutionalism deals with the increased complexity of internal relations and labor division due to technology use. Within this complex internal relationship of

labor division, Meyer and Rowan (1991) propose that creation and implementation of rules also plays an important role in legitimizing institutionalism. This dependence on rules has solidified the perception that a good organization runs well when more rules are implemented. A formal institution then, according to the authors, is one that is defined by wellstructured rules and that is driven by desire to increase outcomes based on the execution and following of those implemented rules.

Tyack and Cuban (1995) argue that instead, the 'real school' has been held in place because of "unexamined institutional habits and widespread cultural beliefs" (88) of those who believe in what constitutes the 'real school.' The traditional acceptance of what is a 'real school' has also played a crucial role in educational reform, as the measuring stick for success. The authors propose that the shift between the nongraded one-room country school to the graded school is an example of how a simple institutional reform became engraved in the fabric of education, and in the minds of teachers, students and parents. Once schools were divided into different grades, people began to consider "distinct grades as emblematic of a 'real school'" (Tyack & Cuban, 1995: 91).

De, (2009) study focuses use of open and free software usage called as "FOSS" can frisk a tremendous advancement in education,"

Scherer (2010) in his study focuses and stressed that "after a decade or more in providing the exceptional ways to hold students to express or learn, the focus or arrangement is required on refocusing on helping students put or read to learn.

NEED AND IMPORTANCE OF STUDY

With millions of dollars being put into the business of Smart-classroom and with ever increasing the size of this industry, there is definitive requirement to understand the consumer of these technologies in a better way. Although few studies have been done on global scale but still need to be tried and tested in Indian setup. This study will have some inputs to identify the problems in the area under discussion.

STATEMENT OF PROBLEM

Technology has an appeal to many involved in education. Even the simplest uses of technology in and out of the classroom, have dramatically changed how information is gathered, processed, and transmitted; changing in its path the concept and idea of what a school really is. The market on the other hand is evolving day by day and its putting lot of pressure on the consumer buying decision. It's been observed that customers/owners of the premises who are purchasing these costly educational products land up in a very precarious position because the obligation they have to bear while signing the long term contracts with the education solution companies. There is gap being identified in form mismatch of product being taken by the owners of the institutions premises and also miss selling of product by the companies to their owners of the institute.

OBJECTIVES OF STUDY

1. To study the impact of mode of teaching and grade of student on marks.
2. To study the marketing and selling practices employed by Smart classroom provider companies.

HYPOTHESIS

Ho1: There is no significant difference in the buying behavior of owners of Private and other schools with regard to smart-classroom deployment in their respective institutions.

Ho2 : There is no significant difference between the academic achievement who got and who did not get instructions in smart-classroom learning environment.

RESEARCH METHODOLOGY

1.1 Research Design

The study will use the descriptive research design in particular and also experimental research for specific objectives. The objective such as effect of smart-classroom on learning environment will be studied using experimental research design for establishing cause and effect relationship. The study will employ a quantitative approach for data collection and analysis method.

Post-test Only Design – This type of design has two randomly assigned groups: an experimental group and a control group. Neither group is pretested before the implementation of the treatment.

RESULTS, DISCUSSIONS & FINDINGS**Table 1****Descriptive Statistics**

Dependent Variable: Marks

Mode		Mean	Std. Deviation	N
Normal	7th class	9.5814	2.28069	43
	8th Class	9.2895	1.69112	38
	Total	9.4444	2.01866	81
Digital	7th class	9.4545	1.53190	44
	8th Class	13.9268	1.05807	41
	Total	11.6118	2.60537	85
Total	7th class	9.5172	1.92814	87
	8th Class	11.6962	2.71442	79
	Total	10.5542	2.57142	166

Above descriptive analysis shown the importance of digital class (Independent Variable) on dependent variable (Marks). In case of class 7th (Science) the impact of using digital class is minimal but when we compare the 8th class results (Normal Mode of teaching) with digital class than the variation in mean score is 13.92 Vs 9.28 which clearly shows that the impact is high on marks with use of digital class when students move to higher classes.

Table 2**Tests of Between-Subjects Effects**

Dependent Variable: Marks

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	621.042 ^a	3	207.014	71.358	.000	.569
Intercept	18463.836	1	18463.836	6364.531	.000	.975
Mode	210.413	1	210.413	72.530	.000	.309
Class	180.738	1	180.738	62.301	.000	.278
Mode * Class	234.749	1	234.749	80.918	.000	.333
Error	469.970	162	2.901			
Total	19582.000	166				
Corrected Total	1091.012	165				

a. R Squared = .569 (Adjusted R Squared = .561)

As per the above joint effect which is .309 (Partial ETA Squared) its approx. 31% impact of mode(Normal + Digital) on the student outcome i.e. dependent variable Marks. It's a significant relation here which means are not same and its not by random and we can say with 95% confidence level as per matrix above. When we talk about class feature(ie. Whether class impact on marks) impact is .278 which appox 28% which is significant which says that students are more sincere towards getting good marks as their grade increases.

RECOMMENDATION/SUGGESTIONS

Based on the finding and conclusions of the study the following recommendations are put forward.

1. Smart class room learning help to increase the learning abilities.
2. Smart class may use as a experimental learning tool to teaching students.
3. The curriculum should be framed keeping in view the application of smart classes of teaching.
4. This strategy helps the learner to move at his own pace as it helps the learners to

provide individual attention.

5. Although students generally work together in small groups in hands on English classes, there are times when all class discussions

CONCLUSION

On the basis of analysis and interpretation of data, the following conclusion can be drawn. There exists a significant difference in the effect of smart class room learning environment on performance of seventh and eighth grade students in science and social studies. The results shows that the students taught through smart class have scored better than when do not taught through smart class . The reasons of performing well by students taught through smart class are:

- Smart class learning helped to develop cognitive dimension.
- Smart class learning helped to develop power of communication among the students.
- Smart class leaning encounter a range of situations, audiences and activities designed to develop competence, accuracy

LIMITATIONS

- 1.Sample size can enlarged to more concrete results.
- 2.A similar study can be carried on middle level, secondary level, senior secondary level students.
- 3.Comparison can be made between boys and girls.
- 4.The same study can be conducted on other subjects also.
- 5.The effectiveness of the methods can be seen by giving a longer duration of teaching.

SCOPE OF FURTHER RESEARCH

Various other aspects can be further researched like other extraneous variables which may play role in impact of technology on students' academic achievement.

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