

A Study on the Effectiveness and Attitude for Smart Class

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Abstract

Smart Class - the latest technology in Education, which is doing the rounds all over, is growing rapidly in India, much more swiftly than in the rest of the world. However, there has always been a debate over the fact that is it really effective in terms of results, or can it be a permanent replacement for the traditional Chalk and Talk, which has been teaching the students since a long time now. The point also is, that is Smart Class really needed?

This research seeks to put down the effectiveness of Smart Class when pitched against the traditional Chalk and Talk, and the attitude, which its main and direct stakeholders, i.e., the teachers, students and parents, have towards Smart Class, exclusively in the city of Ahmedabad.

Keywords – Smart Class, Chalk and Talk, Education

INTRODUCTION

After U.S.A and China, Indian government's expenditure on education is 3rd largest. Traditional schooling methods in India emphasize more on rote learning and memorization, instead of encouraging independent or creative thinking. From an early age, there is a strong focus on examinations, which make the atmosphere competitive at schools (Pandey, 2012).

The word SMART stands for Specified, Measurable, Achievable, Relevant and Time Restricted. Smart Class is a digital initiative of Educomp, launched in the early 2004, which is rapidly transforming the way teachers teach and students learn in schools with innovative and meaningful use of technology. The Smart Board interactive white board uses DVIT technology to detect and respond to touch interactions on the interactive whiteboard surface. Learning becomes an enjoyable experience for students, improving their overall academic performance in school. Some of the advantages of traditional teaching include teacher-student interaction and instant feedback, which online components are not able to provide. (School, 2008)

Among the Indian private schools some of the most reputed schools in India such as the DPS R. K. Puram, Bal Bharati School, Pitampura in Delhi and Padma Seshadri Group of schools in Chennai were amongst the first to adopt the programme.

LITERATURE REVIEW

A research conducted by Pearson et al. concluded that a wide range of digital tools enhance reading comprehension and vocabulary development by providing students access to word pronunciation, word meaning, contextual information, and comprehension scaffolds to guide an individual's reading. Thus, a strong research base supports the conclusion that

technology can enhance all aspects of literacy development (O'Hara, 2010).

A study on 'the future of higher education: how technology can shape learning' done by the Economist Intelligence Unit states that technological innovation may change the way the teachers teach and the students learn. For all its benefits technology is still a disruptive innovation and an expensive one as well. The professors prone to teach in one way may loath to invest their time and learn new methods and may also lack the budget for needed support. The major findings are that technology has, had and will continue to have a major impact on higher education. The respondents feel that technology in higher education is responding to the needs of globalization. (Unit, 2008)

A research paper on **Interactive White Boards** conducted in Turkey, talks about its effectiveness in school settings with relation to the general perception and teacher's perception principally. It is a teacher-centric research wherein IWB's relation and teacher perceptions towards it were amongst the primary research questions of this research. The study also deployed a "Chi-Square" test, to see if there was any relationship between teachers' IWB usage and their perception. It was found that there was moderate correlation between both, the usage of IWB by teachers and their perception, and the duration of usage of IWB and their perceptions. This research regarded these variables as important and key factors for effective use of technology. The paper concluded that, if the students are to improve their learning through technology, then the teachers would have to develop their

technological skills and positive approaches through training and constant practice (Johnson, 2012).

OBJECTIVES AND RESEARCH METHODOLOGY

The primary objective of our research was “To assess and study Smart Class as a technology against the traditional method of Chalk and Talk, and analyze its effectiveness amongst students”; the second objective for the study was “To study the attitude of students, teachers and parents towards Smart Class”.

The scope of our research was limited to the CBSE schools having Smart Class in the city of Ahmedabad. For the experiment the scope was limited to the subjects of Chemistry and Geography in the CBSE schools having Smart Class.

Research Methodology

Research Design	Descriptive Research
Research Approach	Quantitative Research
Sampling Unit	Questionnaires (Students, Teachers and Parents) Interviews (Experienced academicians in School education) Experiment (Students of 9 th Standard studying in a Smart Clas school)
Sampling Size	Questionnaires (Students - 250, Teachers- 50 and Parents- 150) Interviews (4 experienced academicians)

Sampling Method	Questionnaires (Stratified Random Sampling and Convenience Sampling) Interviews (Convenience Sampling and Snowball Sampling)
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FINDINGS

The prime findings of the research were:

- ❖ Subjects which involve graphs and diagrammatic presentations are better off when taught via Smart Class as it enhances the visual and conceptual clarity of the students.
- ❖ Subjects like English and Maths are least effective when taught via Smart Class.
- ❖ Smart Class impacts both students and teachers and ideally it should be a mix of programme and traditional methods.
- ❖ Smart Class has lead to the deterioration in the writing skilss of students.
- ❖ In the initial stages, there is a high degree of acceptance for Smart Class from students, whereas many teachers still find it difficult to teach through Smart Class.
- ❖ Smart Class is still not an influencing factor, as the parents still go for schools with high repute, no matter how they teach.
- ❖ Teachers are not satisfied with the working of Smart Class as they feel it leaves several topics untouched. Technical problems add to their dissatisfaction.
- ❖ Although the schools were equipped with Smart Class, some of the teachers didn't use it effectively.
- ❖ Teachers prefer to teach their students with the combination of both Smart Class and Chalk and Talk. They feel

that Smart Class provides lively experience, better content, in-depth explanation but they may face some technical errors in using Smart Class. On the other hand, they prefer Chalk and Talk method as it facilitates easy doubt solving, saves times and has less technical errors.

- ❖ Teachers see Smart Class as a symbol of pride.

RECOMMENDATIONS

Recommendations for Vendors

1. Make the Smart Class content more flexible and interactive for equal teacher-student involvement.
2. Teacher training programs should be rigorous and after sales services should be given considerable importance.
3. Vendors should back the installation with proper demonstration for ideal working of Smart Class programs.
4. The vendors should extend to the new phase of technological development, where the concept of Smart Class is extended to the use of iPads and other things.

Recommendations for Schools

1. Rigorous in house training should be provided to teachers as its more effective and provides supervision for better results.
2. Teachers shouldn't be entirely dependant on Smart Class and that they should be able to trigger class interaction to improve results through Smart Class.
3. They should conduct a similar type of experiment on various subjects and deploy Smart Class for effective subjects to ensure optimal use of Smart Classes for appropriate subjects.

4. The school should focus on implementing and installing Smart Class with all the required equipments. Schools can also have fee hikes for ensuring better after-sales service from vendors and timely updation of content and equipment.

CONCLUSION

Technology has its set of benefits and shortfalls. With the help of this research we are able to identify various pros and cons of the emerging new technology of Smart Class in the field of education. There are various benefits of having Smart Class; it helps the students in increasing their conceptual clarity especially in the subjects that require practical application and visual understanding, as well as helps the students in easy learning and memorizing. But this technology also has certain disadvantages. It is observed that use of Smart Class had lead to deterioration in the writing skills of students and their thinking abilities; it is also difficult for some teachers to adopt and use new technology; and sometimes the content available on the Smart Class in either incomplete, inadequate or not up to date. It has also resulted into reduction in the teacher's involvement in the class, and the recognition a student gets. But the future of Smart Class is still to mature.

The SWOT analysis of Smart Class as technology:

- ❖ Strengths: Smart Class serves helps the students in increasing their understanding through visual and graphical representation; it also motivates students to think and interact; it also suffices the purpose of overall personality grooming of a student. Students are becoming more and more techno savvy, so they are able to connect to new technology more easily, and

thus Smart Class makes their study activity more fun.

❖ *Weaknesses:* Installing Smart Class involves huge initial and recurring financial cost and inflated fees for parents. Not all teachers are comfortable to use the new technology; Smart Class also reduces the reading requirement for teachers and sometimes, proper training is not provided to teachers for Smart Class. Besides, there is a lack of proper after sales services and up to date information or content on Smart Class.

❖ *Opportunities:* Smart Class, as a technology can be made more useful by providing proper and fruitful training to the teachers. Government can provide more incentives so that the technology can be installed at a subsidized rate. Besides, increase in the number of market players would result in lesser cost and better content and service delivery.

❖ *Threats:* New technological innovations will pose a threat of obsoleting Smart Class, and among other better and cost effective technologies, tablets also pose a serious threat to Smart Class.

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