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Title: "Status and impact of implementation of Smart-class on achievement in schools of Delhi: A Study"
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Abstract
The Information and communication technology in the form of interactive technologies have entered a big way in the realm of education. The most talked about Interactive White Boards have already entered thousands of classrooms across country. It therefore becomes pertinent to explore full potential of Interactive White Boards and assess the level of optimum utilization of this so called 'Kids' Magnet' in classroom setting. In short the study tries to find out the current status of smart classes in schools of Delhi and the impact of SMART classes on achievement of the students.

The study was delimited to the area of South and South West Delhi only, achievement in the study was delimited to the science achievement of Class VI only, achievement test developed by the researcher was delimited to first six chapters of Class VI science textbook and the concept of Smart Classes in the study was delimited to just one aspect i.e. Interactive White Board (IWB) only.

Descriptive Research methodology using survey questionnaires was majorly used in this study. Researcher had developed the research design using the concept of Research Onion Design presented by Saunders et al (2003). Researcher used both quantitative and qualitative approach of research in the course of completing the current research. SPSS was used to calculate all the statistics used in the study. Descriptive analyses of variables under study was done along with 'significant' and 'non-significant' findings of independent 't' test. Further, Pearson's correlation 'r' was also calculated to check the relationship between science teaching and science achievement.

All the 16 schools where ICT integration has happened at different levels were selected and finalized. Out these 16 schools 8 were those which had IWB Classrooms while the other 8 were the ones not using the IWB classrooms. 400 teachers, students and Stakeholders were selected and finalized in stage 2 and further 400 respondents were selected through random sampling method for the Achievement test across sixteen schools.

Researcher developed Questionnaires for Principal, IT In-charge, Teachers, Parents and Students. **Observation Schedule I**: Researcher used the observational schedule for conducting the observation of science teaching in both types of classroom; those with Interactive White Boards and the ones without Interactive White Boards of science teaching classes of class VI. **Observation Schedule II**: The Second Observation tool was developed and used by the Researcher to gauge the Optimum utilisation of Smart Classes in schools. This was administered in schools where teachers were using IWB to teach students.

MAJOR FINDINGS
For IWB's status and its understanding among principals the dimension 'Availability of Key/ Supportive features/facilities', 'Actual use', 'trained personnel', 'maintenance and availability of peripherals', 'maintenance of required records', 'Principal's perception about

IWB' & 'Contribution of IWB in school's vision' dimensions showed higher scoring. Only one dimension in Principal tool 'Services, Tools and features currently in use' scored low on yes response. For IWB's status and its implementation in classroom from It in-charge, the findings showed significantly higher rating on all the dimensions.

For IWB's status and its effective utilization in science teaching in class VI, teachers' results indicated higher range in most of the dimensions. There was a big fall in the dimension of 'Further exposure for teachers/ Opportunities for Training and Development'. This further reflects the need for opportunities for training and development which will give further exposure to teachers.

The parents' opinion and awareness regarding IWB project showed that for the dimension 'Parent's opinion regarding IWB's impact on children's learning, health and behaviour', and 'Perception about IWB Project' scored higher on yes. The scores on the dimension of 'Awareness about IWB Project' got higher on the responses of no category, which stresses the need for schools to build stronger relationship with parents in order to generate more awareness about latest developments in school.

IWB's status and its role as a learning aid among students from students showed positive reaction to the dimension of 'IWB and student's interest', 'IWB roles in conceptual understanding', 'IWB and diversity in learning', 'IWB and appropriate facilities', while for the dimension 'Actual usage of IWB by students' they responded that students are getting very few opportunities to work on the board.

The results of the class VI students' achievement in science subject between IWB and non-IWB schools showed that the students achievement was much higher (M=37.04, SD=9.284) of IWB using schools as compared to the students of non IWB schools (M=33.15, SD=9.256) in science subject of class VI.

DIFFERENCES IN CLASS VI SCIENCE TEACHING BETWEEN SCHOOLS HAVING SMART CLASSES AND SCHOOLS HAVING NON-SMART CLASSES: There was no significant difference in scores of IWB and non IWB classes of science teaching of class VI students on dimensions 'Attitude while teaching in classroom', 'scientific approach to teach science', 'Content knowledge', and 'knowledge of teaching method' but there was a significant difference on 5^{th} dimension 'skills of teaching science' which reveals that teachers using smart classes possess greater skills of teaching science than the other group.

Organisations will have to move on the path of digital transformation or face Digital Darwinism as there is continuous demand for innovation. There is need to have a well thought of plan which keeps pedagogical, technical and socio economic factors in to account and a comprehensive implementation that addresses the range of human, organizational and technical variables in order to achieve the desired long-term embedding of technology across the curriculum where use of technology might become a norm rather than an exception.