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SMART CLASS ROOM IN INDIA AN EMERGING SPECULATION

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INTRODUCTION:

'Smart classes and 'E learning' have now become the new buzzwords among city schools as many of them are installing this technology in their class rooms. A smart class is one which has a computer with internet access installed in the room along with a screen connected to the computer which displays the information on the monitor to the entire class. The package may include a hi-tech touch board on which the teacher can write using a stylus or use it to modify or edit the images being displayed. The set-up also allows teachers to save lessons and notes on a database which can then be accessed by students online even at home.

THE HINDU REPORT ON SMART CLASS ROOM:

Who says toys have no place in the classroom? Today's students could benefit from educational electronics, according to one math teacher who has seen the results for himself.

Vamsi Krishna, a mathematics teacher at the Kendriya Vidyalayas Sangathan (KVS) in Sulur, says technologies used to promote project-based learning can enhance the student's ability to apply classroom concepts to the real world.

Mr. Krishna has returned to Sulur following a Fulbright Fellowship exchange in the U.S. at New Tech High School in Durham, N.C. Now, he is persuading his school administrators at KVS to purchase similar gizmos, the cost of which he says his school can easily shoulder.

"The classroom tools support an environment that accommodates interactive learning rather than one-way instruction," he says. "The Indian student can tell you everything about the quadratic equation and can solve it perfectly, but he does not actually know about its practical application."

Classrooms in India are already equipped with LCD screens, overhead projectors, and Power Point facilities, but technology can be used to cultivate interest and classroom discussions too.

Mr. Krishna says, with the Geometer's Sketchpad and remote-controlled SMART board software, teachers can manipulate graphs, equations, and data sets while casually sitting among their students, stimulating collaborative learning and analytical thinking.

The Sketchpad, priced at about $1000 and licensed for use by 50 students, is convenient for teaching coordinate geometry and allows students to build and study mathematical models, diagrams, and graphs. Teachers save time drawing similar examples because Sketchpad allows them to change shapes and positions simply by dragging a mouse, while keeping in tact all mathematical relationships.

Meanwhile, Mr. Krishna says the SMART board (roughly $5000) provides interactive animated word problems, among other things. For example, students visualise calculating the coverage area on Earth (a sector) provided by a certain satellite from space. Teachers can simultaneously access related reference tools all at the click of a button (or wave of a hand).

Additionally, devices such as Texas Instruments graphing calculators (the most common TI-84 Plus costs $119) can plot graphs, solve simultaneous equations, store commonly-used formulas and functions, etc. This is especially handy for students pursuing science or engineering, he says. Thus, Indian students, too, could

visually relate abstract concepts to concrete applications. But trendy technology is not enough to further academics.

Mr. Krishna says schools should, at the very least, gear themselves with interactive computer software that allow students to learn more on their own, with teachers as facilitators.

REPORT OF LUDHIANA IN TIMES OF INDIA:

With changing times, education system is no longer confined to classrooms. To keep pace, city schools too have started the concept of smart classrooms to attract the attention of students. The latest to join in was Sacred Heart Secondary School School that inaugurated digitized classrooms on Thursday.

Director Rev Father John said "It is a matter of pride to introduce children to Smart-Class, a sophisticated technology programme, which enhances teaching-learning process inside classrooms and gives pupils an edge in today's knowledge age.

Principal Sr Sobel also motivated the teachers to take full advantage of this innovative facility to make the learning process absorbing and engaging.

A student, Gurpreet Kaur, said it would be interesting to study with 3D animated modules that would not only help in better learning but also in increasing performance of the learners.

The software, Educomps smart-class, brings about a complete transformation in classrooms by replacing the lecture method with interactive white boards and use of a large repository of digital instruction materials, including 3D animated modules and videos mapped to school curriculum.

It has partnered with Eureka, Discovery and Crocodile simulations software for physics, chemistry and maths.

The new system would better teaching-learning process by enhancing the academic performance of students, increasing teacher effectiveness and productivity in class and instant assessment of learning outcomes.

Meanwhile, Kundan Vidya Mandir has transported all its classes from Nursery to Class VIII into smart rooms. The rooms are equipped with projector, CPU and UPS, where a teacher can highlight a particular area with the help of caliberating pen. Same is the case with Satpaul School and BCM School in the city.

REPORT OF KOLKATA IN INDIAN EXPRESS:

City children are growing up to be smart learners. Putting an end to boring lessons, schools are treating them to new-age smart classrooms with LCD televisions, projectors, computers and audio-visual systems that give a whole new meaning to studying.

"We have recently introduced smart classrooms from nursery till class VIII. There is an interactive white board on which diagrams, pictures and lessons are presented through a projector. They also have a resource centre where all lessons and planning for the classes are customised to the need of children. It is much easier to complete the syllabus and students learn faster too," said Malini Bhagat of Mahadevi Birla for Girls' Higher Secondary School.

But building a smart classroom reportedly takes a lot of time and money. "We have estimated the cost to be around `30 per student, which may vary depending upon the number of kids in each class. In our school there are 40 students in every section," added Bhagat.

In Birla High School for Boys, LCD televisions are used and teachers prepare CDs for lessons, which are then shown on screen while teaching. "Teaching through television has a visual impact, which lasts longer... activities are decided. The assessment is also instant," said Mukta Nain, principal of Birla High School for Boys. She added that though smart classrooms were the need of the hour, they could never replace teaching by talking.

In South Point High School, smart classrooms have been introduced for classes II to V. "Children respond much better. The audio- visual mode is more interesting. It is used as a kind of support to classroom

teaching. Concepts have became much clearer to kids. We were taken by surprise that while discussing architecture, a child of class III told us about south Indian architecture," said the schools spokesperson, Krishna Damani, adding that children related more to descriptive teaching.
Many parents believe it is one of the best things to happen to their children.
However, there are those who differ. "I have not introduced smart classrooms because I believe that teachers will lose their creativity," said Meena Kak, principal of Lakshmipat Singhania Academy.

SMART CLASSROOMS / DIGITAL LEARNING CENTRES -THE HINDU:

'Quality of teaching', and the 'quality of the teaching staff', both of which are directly related, has always been a critical factor which ultimately will influence the 'school experience' of the child, his learning and academic performance. In many of the schools that we support we have appointed computer teachers to run our computer centres. Our own Steria staff volunteers also supplement the school teacher's effort with special classes and tutorials.
We had launched the 'smart classroom' initiative on a pilot basis in a Chennai school in 2010, where two classes had been converted to be 'smart classrooms' with the use of technology as a teaching aid. With the help of a computer and an interactive board in place of a normal blackboard, the teacher is able to use ready made teaching content for various subjects as per prescribed syllabus or is able to prepare his/her own content, modify, store, recall, revise etc as per the requirements of the class and its students. This pilot project had been a reasonable success in 2010 and it is now proposed to extend this to more classrooms in more schools. In Padma Adarsh Higher Secondary School – Vaniyanchavadi Chennai, the number of smart classrooms has been increased to six in the English medium section from this academic year ie. 2012.
In Dnyandeep Vidyalaya - Pune, Yash Memorial School – Noida and Govt. Higher Secondary School Mahabalipuram – Chennai, we have set up one Digital Learning Centre (DLC) in each school which is similar to the 'Smart Classroom' concept. The DLC is set up as a common centre of learning for all classes and will be utilised by teachers for specific subjects.
We believe that going forward, this will be an important factor in providing the 'superior school experience' to our children, which is the very basis of all our CSR programs in India.
A room with a wall screen and a projector are the only equipment in the "smart class rooms" in each of the five government schools in the city where the UT Education Department had introduced the concept in 2007. While the department has failed to implement the concept of smart classrooms in the five schools, it is now all set to expand the project to other schools. Not only this, the department has also floated a proposal for an entire smart school for which officials claim to have listed the improvisation of the existing smart class rooms. The 'smart' class rooms in Goverment Model Senior Secondary School (GMSSS) in Sector 16, 35, 33, 46 and 37, are being used only for holding seminars, since they were launched with much fanfare by the department. The department has failed to implement even the basic concept of a smart class room that expects teachers to prepare audio-visual lessons and present them before the students using a interactive board on a routine basis.
"To make these multimedia rooms functional, we have started using them for seminars. However, we are finding it difficult to cope with the shortage in power supply in the school. Due to this, we have been unable to maintain regularity in smart classroom teachings," said the Principal of one of these schools, on condition of anonymity.
"Our teachers have always been enthusiastic in teaching the students with the computer-aided tools in the smart classrooms. However, we have not been able to take up teaching with the use of audio-visual tools on a routine basis. But we are planning to make it a routine exercise now ," said another Principal.

The Director Public Instructions (Schools), Sandeep Hans, however, said the department was working towards following the Union Human Resource ministry's guidelines. "We are trying to comply with MHRD's guidelines on making use of ICT in teaching in our schools".

"While identifying the challenges and key requirements for successful development of a smart school in Sector 53, we are working on a plan to improve the smart classrooms in the five schools," Hans added.

DAYS OF CHALK AND TALK OVER, SMART CLASSROOMS MARK NEW WAY OF LEARNING IN CITY SCHOOLS:

Sitting in a class to understand the human digestive system, Samir Sharma, a Delhi school student, could see the food moving through the food pipe and the action of enzymes on the food. "I understood, and remember everything," he said. Sharma, 14, was attending a science class at school.

Gone are the days of chalk-and-talk method of teaching. With an influx of technology into classrooms, teaching has undergone a sea change. From traditional lectures, classrooms have shifted to technologically driven interactive sessions.

This is the advent of smart classes, which allow teachers to use electronic resources such as graphics, animation, 3-D images and video clips to supplement teaching. A concept of western countries, smart classes have now made inroads in Delhi schools.

Ashutosh Batta, principal, Bloom Public School, Vasant Kunj, said smart classrooms are especially beneficial to slow learners. "When a child sees things, he remembers more. Smart classes are thus better."

There are, however, voices are dissent too.

D K Bedi, principal, Apeejay School, Pitampura said: "Making learning sessions interactive depends on the teacher. Technology as an aid to learning is welcome but it should not obscure the objective of education."

Jyoti Bose, Principal, Springdales, Dhaula Kuan, is of the view that technology is given more emphasis nowadays than books. "With the advent of smart classes, the human touch between a teacher and a student is lost."

The smart assessment system (SAS) is another added benefit. "Multiple-choice questions are flashed on the screen and students can press a button on the remote in their hands to record their answers. This can prove helpful in the formative assessment of a child under the new grading system devised by the CBSE.

INTERACTIVE WHITE BOARD (IWB) INDIAN EXPRESS:

Converting existing class rooms into Digital classroom by just installing IWB at very reasonable cost with existing infrastructure

- Used in Classrooms, conference halls, PG centers, CBSE Schools. Engineering/Medical Colleges.

1. Makes interactive sessions.
2. Control any computer application.
3. Write in digital ink over applications, Web pages or even moving video.
4. Save all your work to a single Notebook file, in PDF/ Word /any other format
5. Convert handwriting to text.

Easy to use, Clean & Dust free class rooms, interactive communicating effect

Used for -

1. Education, Training
2. Product exhibition, Business conference
3. Video communication, News broadcast
4. Securities evaluation, military command
5. Entertainment, medical consultation, engineering design, competition tactics analysis, weather analysis, etc.

CONCLUSION:

Educationists wonder whether e-learning is what defines good quality education. "Some of our schools come up with good results. If students can be taught using a blackboard and books, why should there be complete reliance on e-learning and smart classrooms. Speaking about the dangers of relying on technological tools excessively, it is said, "Technology often becomes an end in itself and that is a big danger. We tend to get mesmerised by technology and forget that the child and his/her education are really central to the whole process," . It may further be added, "We're sure smart classes are useful but we believe that much is lost with the flick-of-a-button kind of method of generating information. There's a difference between information and knowledge, and learning and wisdom. The likes of Newton, Einstein and Beethoven managed quite well without smart classes."

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