

## SMART Story

# Rajkiya Pratibha Vikas Vidyalaya Surajmal Vihar

## Difficult concepts become lucid and engaging with SMART



*English Teacher, Snehlata Gupta, demonstrating how SMART Board<sup>®</sup> interactive whiteboards are effectively utilized in language classes*

Rajkiya Pratibha Vikas Vidyalayas (RPVVs) are a chain of schools run by the Directorate of Education, Government of Delhi. The schools provide education from VI to XII standard. SMART Technologies began their association with RPVV, Surajmal Vihar in October 2011 with the installation of SMART Board 280 interactive whiteboard in the school's Computer Aided Learning (CAL) lab. The school was one of the ten RPVVs that SMART has collaborated with as part of its efforts to make quality educational tools accessible to students from all sections of the society. The education consulting team of SMART Technologies worked closely with the teachers to train them on the use of various tools and features related with the SMART Board interactive whiteboards. Teachers were also taught to develop multimedia lessons for their respective subjects. "We were overwhelmed by the level of enthusiasm exhibited by the teachers," says Swati Ganguly, SMART Technologies' education consultant who managed the teacher training program for the school. "Most of these teachers had not been exposed to any kind of digital educational tools before yet their receptiveness for technology adoption was phenomenal. The teachers were eager to learn how they could best utilize these tools to make teaching a more engaging experience for their students."



***School staff and students of RPVV with Linda Thomas, Vice President, Products and Sanjiv Pande,  
Managing Director, India and South Asia, SMART Technologies***

Teachers have divided various concepts of their respective subjects into two categories

- Concepts which are a problem area for students- comprises grammar, chemical equations, etc.
- Concepts which are difficult to explain or require visual representation- includes Trigonometry, Geography, Physics, etc.

Teachers make use of the common CAL room to teach these concepts to the students as per a fixed schedule thereby ensuring that all subject teachers are able to use the interactive whiteboards for their lessons.

Introducing interactive whiteboard in the classroom has opened immense possibilities for the teachers of the school. They now have access to a wide range of teaching tools including graphs, maps, diagrams, videos, pictures, etc. at a mere touch of a button. Teachers also download innovative lesson activities from the SMART Exchange™ website which serves as a repository of quality multimedia lessons developed by educators from across the world. Use of innovative instructional tools like photographs and videos infuse life into the classroom lessons making them interesting and engaging for the students. Though it has been only four months since the school started using the SMART Board interactive

whiteboards, teachers have already started noticing a considerable impact on students' engagement in the classroom.

"Teaching Physics using the interactive whiteboard helps make abstract concepts like kinetics and thermodynamics lucid and comprehensible for the students," says Lakshmi Ravi who teaches the subject to XI and XII standard students. "With the aid of videos and diagrams I can easily make students understand complicated concepts. I could also share the lesson modules with the students on a pen drive at the end of the class. Thus, they don't need to jot down notes during the class which ensures that I have their undivided attention when the lesson is in progress."

Snehlata Gupta, who teaches English to XI- XII standards concurs, "English being a second language, most of the students find the grammatical structures very difficult to comprehend. Thus, keeping them interested in the subject used to be a challenge earlier. However, with the aid of SMART Boards I have developed some interesting grammar games for the students which they enjoy participating in. Now students have started looking forward to the days when I conduct quizzes in the class. "

Over the past 15 years numerous studies have been conducted resulting in documented evidence confirming that the use of interactive whiteboards, combined with appropriate pedagogy, can increase student engagement, motivation and participation. Research has established that learners are better able to retain concepts when all their senses are engaged. Integrating sounds and visuals like graphs, maps, videos and images bring the course content alive for students - making it easier for them to grasp concepts and retain the information for a longer period of time. Visual aids also make learning an interesting and interactive activity for the students.

Technology adoption has helped the school combat the issue of high student absenteeism- a reality in most government schools. Since the majority of the students come from economically depressed areas, they often are required to contribute towards family earnings by taking up odd jobs and therefore end up missing classes on work days. As a result they often fall behind in the class and eventually lose interest in studies. However, with the introduction of SMART Board interactive whiteboards many teachers have started saving critical lessons on a pen drive which they share with students at the end of the class ensuring that even students who have not been able to attend all classes don't miss out on important concepts.

Technology in classrooms has also been playing a pivotal role in bridging the disparity between the educational standards in government and elite schools. The SMART Exchange website has made quality educational content from across the world accessible to teachers at no extra cost. In addition, the school has also managed to bring down its stationery costs as they don't need to allocate additional funds for maps, charts and graphs which are all available through SMART Notebook™ collaborative learning software – available with all SMART education products. Such materials can also be imported from a website and displayed on the interactive whiteboard.

Renu Sabharwal, Principal, Rajkiya Pratibha Vikas Vidyalaya, Surajmal Vihar, elaborates, “We have some very bright and hardworking students in our batch. However, owing to limited resources we are unable to nurture them to their optimum potential. Technology has somewhat leveled the playing field between government and elite schools by making quality educational resources available to everyone and not just for the limited few. Equipped with advanced educational tools our teachers have successfully been able to improve the educational standards in the class. The workshops for teachers conducted by SMART Technologies from time-to-time have also helped them in honing their skills in step with the evolving educational needs of the country.”

Encouraged by the teacher's feedback and student's increased enthusiasm for learning post installation of SMART Boards, SMART Technologies has installed two more interactive whiteboards in the school. SMART would also be conducting a second round of training for the teachers of the school to help them upgrade their technology skills. The school re-opens in June post the summer break and both teachers and students can't contain their excitement to start the new academic session in the technologically enabled classrooms.

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