

CASE STUDY

Learning outcomes improved

Malaysia school implements SMART Board interactive whiteboards



Established in 1991 in Mantin, just south of Kuala Lumpur, Malaysia, Kolej Tuanku Ja'afar (KTJ) is an independent, coeducational secondary boarding school that seeks to provide first-class facilities and opportunities to its 550 students. In 2004, KTJ's administrators embarked on a program to add ICT to every classroom, and made SMART Board™ interactive whiteboards a significant part of their implementation, says Lim Siew Ching, the school's financial officer. He explains that KTJ purchased 11 SMART Board interactive whiteboards with plans to install one in every classroom.

Teachers and administrators believe SMART products are revolutionizing teaching and learning at KTJ, with many saying that participation has increased – particularly among lower-performing students – leading to better academic performance overall. They have discovered that the SMART Board interactive whiteboard engages students with diverse learning styles by providing a common focus for the entire class and immediate access to a wide variety of digital materials and learning resources. With teachers and students

both feeling more excited and confident in their classrooms, learning has risen to a new level at KTJ.

Because of the interactivity of SMART Board interactive whiteboards and SMART Notebook software, KTJ's teachers find it easy to facilitate and encourage students to take leadership roles in their learning. Even the most timid students now volunteer to come forward, interact and demonstrate their knowledge and abilities.

The SMART Board interactive whiteboard has also been very useful in teaching abstract concepts in physics, statistics and trigonometry, says Ang Kwi Shin, KTJ's physics teacher. "I am able to more easily explain and demonstrate abstract ideas with the SMART Board," he explains. Shin's peers have also reported that students are captivated by the visual nature of the interactive whiteboard. English teacher Sarah Clingan emphasizes how having SMART Notebook Gallery and Internet access works particularly well for students whose first language is not English. "With the SMART Board," Clingan says, "we can almost instantly access images and pictures, which I find is an excellent way to improve student understanding."

Overall, when the SMART Board interactive whiteboard is used, teachers find students better remember lessons and come away with greater understanding than when traditional teaching methods are used. KTJ's principal, Walter Jones, echoes that finding. He sums up KTJ's experiences with the product by saying, "Our teachers find the SMART Board interactive whiteboard engages students to participate during lessons, and this has led to higher academic performance amongst students in our school."

Read more case studies from around the world on [SMART's education website](#). ic

NEWS

SMART opens assembly facility in Hungary

SMART is now assembling SMART Board interactive whiteboards in Vác, Hungary, for customers in the EMEA region (Europe, Middle East and Africa). This significantly increases SMART's annual global production of SMART Board interactive whiteboards, and the facility's location within the region will improve delivery and service to EMEA countries. It will also decrease SMART's reliance on transatlantic shipping, reducing the company's carbon footprint.

SMART continues with strong sales in EMEA. According to Futuresource Consulting, the company's 2008 product category share in the region was 45.4 percent – nearly twice that of its nearest competitor. Futuresource estimates 2.3 million interactive whiteboards will be sold in EMEA over the next five years. ic

Hamburg schools buy SMART

Three hundred and fifty schools in Hamburg, Germany, will be equipped with about 2,000 SMART Board interactive whiteboards by the end of 2010, according to a recent announcement by the German Authority of Education and Sports. The decision was made after a lengthy evaluation that saw 39 Hamburg schools use SMART Board interactive whiteboards in their classrooms for two years. Frank Adameit, SMART's education manager in Germany, says the feedback from the teachers and the authority was very positive. "Everybody who had the chance to test the SMART Board, to explore it and to learn with it, loved it," says Adameit. The estimated cost of the installation is around €5.6 million.

For information on SMART products and solutions, please contact the [SMART office](#) in your region. ic

SMART Table talk



The Isobel Mair School in East Renfrewshire, Scotland, is a unique learning facility for students aged 5–18 with a wide range of special-education needs. Recently named a SMART international Showcase School, the 70-student, 55-teacher facility received a SMART Table interactive learning center in April 2009.

Initially, the teachers thought they would have to conduct a thorough explanation to the students on how the table works, but in fact, says deputy head teacher Sara Clark, “By the time we got organized and we were ready to switch the table on, the students had already started it up and were working on activities. They knew what to do intuitively.”

The initial response from students demonstrates the table will have a profound effect on the learning in Isobel Mair School, say both Clark and head teacher Mari Wallace. Many of the students have trouble communicating, are reluctant to communicate, or have a disability that makes communicating very difficult, Wallace explains. “Getting these pupils to work appropriately with one another is not easy, so the table has become a great resource for developing these communication and collaboration skills,” she says. “The SMART Table can absolutely play a role in the special-needs classroom. We would love to have one in every room. One is just not enough for our school.”

For more information on the SMART Table, visit [SMART's website](#). **ic**

Making a difference for students with cerebral palsy

Engagement and motivation increased with SMART Board interactive whiteboards



Using an interactive whiteboard

to present learning activities has a positive effect on the engagement, motivation and enjoyment levels of students with cerebral palsy (CP), concludes the recent research report, *Interactive Whiteboards for Motivated Learning*. The study, which extended over five months in 2008, was conducted at Amapolas School – a special-education facility in Santiago, Chile, for students with physical and communication difficulties. Of the school's 140 students, the study involved 32 from ages 6 to 21. Instructors conducted weekly classroom sessions using the SMART Board interactive whiteboard for learning activities, adding play and collaboration to the regular curriculum.

The goals of the study were to identify effective teaching strategies to help fully develop the potential of children with CP. Researchers from the Pontifical Catholic University of Chile – Ricardo Rosas, Claudia Perez-Salas and Polin Olguin – wanted to increase student motivation, enjoyment and engagement. Much international educational research shows that interactive whiteboards positively affect the engagement levels of students without disabilities, so Rosas and his colleagues sought to determine if these benefits could be duplicated with the Amapolas students.

The results, they say, are encouraging, indicating that interactive whiteboards have a

definite place in the classrooms of students with CP. Students demonstrated a greater degree of attention, motivation and enjoyment of activities during lessons that incorporated a SMART Board interactive whiteboard, compared to lessons without one. These determinations were made after interviews with instructors and students, direct observations of classes and analysis of video captured during enhanced lessons.

Specific findings included the following:

- The touch sensitivity of the SMART Board interactive whiteboard facilitated accessibility for all students, regardless of their motor skills
- Interactive, curriculum-based activities were easily individualized by instructors
- The SMART Board interactive whiteboard facilitated the use of additional hardware and software, adding instructional versatility
- Students' movement challenges and physical impairments did not prevent them from using the interactive whiteboard independently

The researchers concluded that creating and generating interactive activities positively impacts the education of students with motor disabilities.

You can find more information in Spanish on the [Pontifical Catholic University website](#). **ic**

Innovation from SMART



SMART's new easy-to-use classroom technology products are designed to reach the next generation of learners and create extraordinary learning environments.

The [SMART Board 685ix interactive whiteboard system](#) is the world's first integrated system to combine an ultra-short-throw projector and a widescreen interactive whiteboard. Expect 20 percent more workspace and virtually no shadows, glare or distracting projector light.

The [SMART Board SBD600 series interactive whiteboard](#) is the newest member in the family of interactive whiteboards. It enables two users to touch or write on the board simultaneously when using SMART Notebook software. Students and teachers can collaborate while using their fingers or a pen to brainstorm, solve problems, explore ideas and engage with lesson materials.

[SMART Response LE](#) is an interactive response system for children in early education or with special needs. The handheld remotes have large, colorful buttons and LCD screens with easy-to-understand icons. Teachers can get instant feedback by asking simple multiple-choice, true-or-false and yes-or-no questions.

[SMART Notebook Math](#) extends the capabilities of SMART Notebook collaborative learning software for middle and high school math teachers. It has the digital tools needed for creating, recognizing and graphing key mathematical concepts. One of these tools is a handwriting recognition function that recognizes individual math symbols – and identifies and solves equations. Try the [SMART Notebook Math beta](#) today.

SMART is the first interactive whiteboard company to create Web-based collaborative learning software. **SMART Notebook Express** lets users share SMART Notebook files and content with anyone, anywhere, anytime on a computer, interactive whiteboard or interactive display. With no need for software installation or user logon, SMART Notebook Express allows universal access for any user to open, view and make basic edits to SMART Notebook files online. These files can be shared with students, colleagues and even parents who may not have SMART Notebook installed on their computers. Watch [SMART's website](#) this September for more information on the beta version of SMART Notebook Express. [ic](#)

SMART at eLearning Africa



SMART was a gold-level sponsor

of eLearning Africa, held in the Republic of Senegal in May. The conference focused on development, education and training, and promoting access and enhanced educational opportunities in Africa. It called for an increase in the availability of suitable resources, imaginative solutions and sound planning. In total, over 1,300 participants from 85 countries took part. The conference's overall mission is to bring together people engaged in education and the implementation of learning technologies in schools, universities and corporate training.

Yvonne Biggins, SMART's manager of education business development for EMEA, presented a plenary session at the fourth eLearning Africa conference. Her session, *21st-Century Teaching and Learning*, touched on the latest developments in education technology solutions and the role technology-enabled classrooms can play in learning and instruction. [ic](#)

SMART CEO presents at symposium in Rome

Nancy Knowlton, SMART CEO, presented the roundtable plenary session *A Vision for the Future* in Rome at the first ICT Education Networks international symposium in June. The SMART-sponsored event was jointly organized by European Schoolnet, the U.S.-based Consortium for School Networking, [Education.au](#), and ANSAS, the Italian agency for innovation in education. Represented were thirty countries from six continents. Christian Lortz, SMART's product manager for EMEA, also conducted a session on creating compelling learning environments.

The conference sought a vision for a common future for education and set an agenda for cooperation among participating networks. The event addressed key topics such as the nature of ICT in learning and the role international education networks can play by sharing knowledge, expertise and experience. [ic](#)

Zurich International School

SMART's first international Showcase School



SMART recently named Zurich International School (ZIS) as its first Showcase School outside North America. ZIS is committed to demonstrating the benefits of using SMART education solutions to create an engaging technology-enabled environment, and it will act as a host site for Europe-based educators interested in learning how SMART's products and services can improve teaching and learning.

"With SMART Board interactive whiteboards, we are able to bring technology into most of our classrooms, integrating it into the kids' everyday life," says Will Kirkwood, ZIS's IT coordinator. "The boards, together with SMART software, allow students to interact with lesson content while allowing teachers to integrate a range of different resources into their lessons." Kirkwood also cites the technical and professional development support offered by SMART as key reasons for the school's standardization on SMART products and services.

The 1,300 ZIS students have a technology-rich and highly interactive learning environment, with 99 SMART Board interactive whiteboards located in classrooms throughout their five campuses. SMART software, such as SMART Notebook and SMART Sync, is also used to individualize and differentiate learning. The software, Kirkwood explains, helps ZIS teachers create engaging lessons while guiding and monitoring student learning.

"By using SMART products, teachers have been able to provide instruction meeting a broader range of learning styles. As an international school, ZIS has a student population that comes from many different education systems, so with SMART products, the students are not only more engaged by the content, but their individual learning styles are also catered to," says Kirkwood.

To find out more about SMART Showcase Schools, or to arrange a visit to ZIS or one of the other four recently named international Showcase Schools, visit [SMART's education website](#). ic

Encouraging interactivity in Peru school

With two new SMART interactive classrooms, the parents, staff and administration of Santa Rosa del Cuzco School in Cuzco, Peru, are improving the quality of education for their 600 students. The two classrooms are equipped with SMART Board interactive whiteboards, AirLiner™ wireless slates, laptops and projectors. Additionally, the learning of the Santa Rosa students is enhanced by digital cameras, camcorders, Internet access and computers. Santa Rosa School has long been regarded as a pioneer in the implementation of ICT in the Cuzco region. The administration, staff and parents' association believe these new interactive classrooms will encourage students' development. To that end, the administration is also focusing on training to help and encourage teachers to make the best use of interactive classrooms. To learn more about transforming your schools into centers of interactive learning, visit [SMART's website](#). ic

SMART Notebook lesson contest in China



A SMART Notebook lesson contest, organized by SMART's Shanghai office, was held in cooperation with the National Education Technology Institute in Chengdu City, Sichuan Province, China.

Invitations to submit videos featuring SMART Notebook lessons were sent to the 800 schools in China that have registered their SMART Board interactive whiteboards on SMART's website. From the entries submitted, 120 were selected for a final round of competition. The winners were Li Muting of the Taiwanese Businessmen's Dongguan School in Dongguan City, Guangdong Province, and Jiang Tian of the Sino-Canada School in Beijing. Both won laptops, and their schools were each awarded a SMART Board interactive whiteboard.

The SMART Notebook lesson entries are posted on [www.smartboard.cn](#) for other teachers to download and use.

SMART donated 100 SMART Board interactive whiteboards to schools in Sichuan Province after the 2008 earthquake. The excellent quality of the contest entries from these schools demonstrate the positive effect SMART products are having on the students' education. ic

SMART Technologies

Corporate headquarters | Phone 1.403.245.0333 | Fax 1.403.228.2500
[www.smarttech.com](#) | [www.education.smarttech.com](#) | [www.smarterkids.org](#)

© 2009 SMART Technologies ULC. All rights reserved. SMART Board, AirLiner, the SMART logo, all SMART taglines and smarttech are trademarks or registered trademarks of SMART Technologies ULC in the U.S. and/or other countries. All other third-party product and company names are for identification purposes only and may be trademarks of their respective owners. Printed in Canada 07/2009. 11735-09.