

**ASL and H3C lay foundations for Escola São Paulo's digital learning drive  
Advanced infrastructure and complete wireless network help realize teaching  
transformation**



*(L to R) Adam Iao, Deputy General Manager of ASL Macau; Manel Machado, Director of Academic Technology of Escola São Paulo; Dr. Alejandro Salcedo Garcia, Principal of Escola São Paulo; Fr. Jose A. L. Legido, Chief Administrator of Escola São Paulo; Henry Lam, Senior Sales Manager of H3C HK & Macau*

In 2010, Escola São Paulo in Macau began to realize a vision of students and staff immersed in a dynamic digital learning environment enabled by high speed networks and full wireless capabilities which were installed by key IT partners ASL and applying wired and wireless network Solution from H3C Technologies Co., Ltd (H3C).

In this digital learning environment, the intention was to integrate state-of-the-art technologies into a comprehensive system designed to work for the entire school community at all grade levels and all subjects. Students would be able to bring tablet PCs during lessons instead of books, while the learning could be taken anywhere around the school via Wi-Fi networks.

“When the project is completed, it will be Asia’s largest implementation of a digital learning environment with a 1 to 1 tablet PC to student ratio for over 2000 students,” said Manel

Machado, Director of Academic Technology of Escola São Paulo. “This project is part of a 15 year vision to transform traditional teaching methods into a more interactive model that leverages technologies to help overcome modern teaching challenges.”

### **More attentive**

The school comprises kindergarten, primary and secondary level teaching, with a total of about 3000 students and 200 teachers. The initial “Classroom 2012” project was initiated in September 2011 when a pilot was launched involving at first three classes, six teachers and 120 students in total.

So far the results have been positive, “The pilot classrooms are buzzing with student enthusiasm and involvement,” said Manel. But he admitted it is too early to assess the possible impact on student grades. “However in the five months since we have implemented this technology infusion we are already seeing a rise in interactive learning and collaboration among students,” he added.

Underpinning this digital learning system are key technology building blocks which enable complete connectivity and information flow which are critical to the success of the new environment.

These technology foundations were implemented by CSA Automated (Macau) Limited (ASL Macau), a subsidiary of a listed company in Hong Kong—Automated Systems Holdings Limited, which is also the school’s local partner for ongoing IT supports and system maintenance. ASL installed a comprehensive network infrastructure with technologies from IT solutions expert H3C, who provide all networking products installed in this project.

A recognized networking leader, H3C, devised a new IT network for this project comprising of nearly 200 wireless access points placed in classrooms, corridors and other areas while its IMC (Intelligent Management Centre) is used to help manage the wired and wireless network in one single management platform.

### **Key partnership**

With such a far-reaching vision and extensive technology overhaul, it was clear that the school required significant expertise to help implement such a project. The scale and breadth of the project meant that the school turned to ASL and its experienced team to help coordinate with different technology providers and oversee a thorough implementation process for all the key technology pieces.

“Our school needed industry experts particularly in the area of networking infrastructure and H3C offered the best quality of products at a high performance to cost ratio, while we also needed a trusted local partner like ASL ready with one-stop IT services to help us solve any problems that may arise,” said Manel.

ASL’s role during this project was to provide design, build, implementation of all network infrastructure and system integration and ongoing maintenance that support the digital learning project. Also the complexity of the systems being deployed required ASL’s extensive experience and wide skills and resources to ensure project success. According to Adam lao, Macau Deputy General Manager of ASL, “The infrastructure deployed by ASL and H3C is critical to enabling the new learning platforms that the Escola Sao Paulo has.

### **Technology depth**

Given the importance of the communications capabilities in enabling students and staff to have reliable and seamless access to school resources, the school clearly had to put in place a network with high reliability and performance.

“When we knew Escola São Paulo wanted to improve their learning environment, we were determined to be a partner in this vision and not simply be a technology provider,” said Henry Lam, Hong Kong-Macau senior sales-manager at H3C.

The depth of technology expertise enabled ASL and H3C to complete the network and key systems within a very short time frame of two months and deliver the ideal platform for the school to launch its digital learning transformation. H3C’s world-class networking technology combined with ASL’s project deployment capabilities has guaranteed a solid foundation for the school to build a highly advanced teaching environment for today and for many years to come.

The second phase of Escola São Paulo’s digital learning portal project will involve 15 classes with around 550-600 students, after which the rest of the school from Primary 4 through Secondary Form 6 is expected to join in, Manel revealed.

Manel also addressed that such change in the learning system is critical as more technology gives students greater sources of information. “Students require multiple and global perspectives in their learning and technologies like wireless networks and interactive pedagogical teaching methods will enable that to happen,” he added.