Stewards Pool Kei College
Next-generation Teaching embraced, supported by H3C Unified Network Solution

"Embracing the educational possibilities offered by IT has always been at the heart of the college's ethos, but with over 1000 students and a 5,900 square metre site, we were concerned that the implementation might be disruptive to our everyday activities," said Peter Yuen, Principal of Stewards Pool Kei College. "We needn't have worried. The H3C team were there to guide us every step of the way, performing the upgrade in a streamlined way that caused no disruption at all. Our new network is faster, more reliable and offers more comprehensive coverage than ever before, and we're delighted to have continued support from H3C."

The school believes that harnessing IT in teaching plays a key role in fostering the international awareness on which it prides itself. In a globalised, interconnected era, the use of digital communications is becoming ever more ubiquitous and, in order to strengthen its IT resources for its online educational platform and daily teaching activities, SPKC turned to H3C to deliver a high performance, high bandwidth 10GE wired and wireless network solution.

The Solution
H3C invested the time to develop a clear understanding of SPKC's requirements. The college wanted a unified wired and wireless network solution that provided enhanced network performance, security and manageability.

H3C deployed its 10G multi-service S7506E core switch in the server room to provide at least 5 x 10GE fibre connections from core to the stack of GE edge switches (S5120-52C-EI), which were installed in each floor's wiring closets. The S7506E core switch is a carrier-class device that offers 99.999 per cent reliability. In addition to providing high-performance, IPv4/IPv6 services, it also delivers at least 1.6 Tbps of backplane capacity, 768Gbps of switching capacity and 492Mpps of throughput. Thanks to dual main control units and a passive backplane, the solution guarantees high network reliability.

The GE edge switches on each floor are interconnected by H3C's flagship Intelligent Resilient Framework 2 (IRF2) technology. The 2 x 10GE aggregated link, which is connected to the S7506E core switch provides extremely high bandwidth with strong network redundancy.

Stewards Pool Kei College (SPKC) is an English language school in Shatin that operates under the Hong Kong Government's Direct Subsidy Scheme. It promotes a global perspective, aiming to educate students to be the leaders and 'stewards' of the future.
To provide IEEE 802.11n wireless connectivity, an S7500E wireless controller card is plugged into the S7506E, utilising the 48Gbps backplane bus transmission and guaranteeing 300Mbps transmit rate by a WA2620-AGN FIT access point, which is six times faster than traditional 802.11a/b/g access points. This ensures wider and more reliable wireless coverage together with Quality of Service (QoS).

The WA2620-AGN FIT access points are connected and powered by H3C PoE switches. The WA2620 features six built-in antennae, and supports IEEE802.11a/b/g/n protocols. The wireless solution greatly enhances radio frequency signal management, user mobility and authentication so that stable and secure wireless coverage is available throughout the school.

The quality of teaching and student learning are the school’s highest priorities. H3C provides the reliable network solution for the school to better carry out these goals along with its Intelligent Management Centre (iMC), which brings the control of both the wired and wireless networks on to a single and easy-to-use software platform. The iMC shows the network topology and status of all network devices, while at the same time supporting panel management, fault management, performance monitoring, software version management, configuration file management, access user management and user authentication.

**Why H3C?**

H3C’s technical expertise, professionalism and comprehensive pre- and post-sales support convinced the school that they could deliver on its objectives.

The college chose H3C based on the vendor’s strong track record for implementing cutting-edge networking solutions in schools. SPKC also recognised the advantages of the user-friendly and efficient iMC network management platform. The solution will be able to accommodate increased network demands as the school grows and develops its IT further over time.

**The Benefits**

The new solution means that SPKC can now approach the future confidently, with a reliable, secure, high performance network capable of meeting the escalating bandwidth needs of modern e-class materials and multi-media learning and e-discussion platforms.

The wireless network allows the school to authenticate students’ log-ins and provide them with secure access to internet learning resources anytime, anywhere. In effect, the solution enhances the school’s ability to cater efficiently to the needs of students who range in ages and abilities.

Thanks to iRF2 technology, the advanced S7506E core switch, which sits at the heart of the solution, can be configured as a virtualised network, allowing for smooth and seamless network expansion in the future.

H3C’s (iMC) network management platform reduces both network administrator hours and operating costs significantly, freeing up resources that the school can now redirect towards its core educational objectives.