

CASE STUDY



UNITED
KINGDOM



PRIMARY
EDUCATION

ARUBA CENTRAL POWERS MODERN LEARNING ENVIRONMENT FOR 1,500 STUDENTS AT UNIVERSITY COLLEGE SCHOOL

UCS
HAMPSTEAD



Establish a seamless wired and wireless network experience across four locations, with uncompromising security and centralised management.



Education is changing at pace. A digital transformation that was already underway has been accelerated through disruption caused by the Covid-19 pandemic. Expectations from students, parents, governors and teachers have never been greater. None more so than in the fee-paying private sector.

“The fundamental basis of a positive digital experience is going to be the wired and wireless infrastructure,” explains Nik Cragg, head of IT at the University College School in London. “If we get that right, everything should fall into place.”

A COHERENT NETWORK VISION TO SUPPORT MODERN LEARNING

University College School (UCS) caters for students aged four to 18 years. It operates across four sites in and around Hampstead, north London. The school includes Victorian architecture, modern event spaces, sports fields and offices. There must be wireless access throughout.

The network vision, says Cragg, was to go beyond access points and switches: “It needed to be something bigger, more coherent. We wanted a solution partner that could offer a suite of applications – in the words of Gartner, a ‘completeness of vision’.”

UCS wanted to blanket the school with secure high-performance wireless connectivity and to do so in a manner that would be simple to manage.

“Cyber security is a hugely important issue for us – and for all independent schools. Our previous approach to network access management was not robust enough,”



REQUIREMENTS

- Centrally manage and secure high-performance connectivity across four locations
- Secure tiered network access for a range of different users
- Protect student, staff and school data
- Reduce management strain through central monitoring and remote diagnostics

SOLUTION

- AP-315 & 515 Unified Access Points
- Aruba 2930F Campus Access Switching
- Central Cloud Management Platform
- ClearPass Policy Manager
- User Experience Insight Sensors

OUTCOMES

- Ensures campus-wide, policy-based network access
- Allows the use of digital teaching applications
- Enables IT to adopt a strategic focus on innovation, rather than operational tactics
- Strengthens network access with a zero-trust security approach and complete visibility

Cragg explains. “Security is now at the top of my priority list.”

ORCHESTRATING AND INTEGRATING A NEW APPROACH TO SECURITY

UCS’s comprehensive unified wired and wireless architecture is built around Unified AP-335 and AP-345 unified access points and Aruba 2930M Campus Access Switches. Single pane of glass, cloud-based and data-centric management and supervision is delivered through Aruba Central, an AI-enabled management platform delivering software-defined control and connectivity and onboarding services. Policy-based, zero-trust security orchestration, NAC and ‘bring-your-own-device’ (BYOD), as well as integration with third-party security platforms such as firewalls, are assured via Aruba ClearPass Policy Manager.



“We’re a school and don’t have a large IT team. Aruba Central is key to efficient network management.”

NIK CRAGG

Head of IT, University College School

“One of the reasons we chose Aruba was due to the fact that we want to work with vendors that understand security, that provide security products and are capable of integrating with other security platforms,” Cragg explains. “ClearPass is both a building block and an orchestrator of our no-compromise approach to security.”

ClearPass enables UCS to apply consistent network access policies and security controls. This means the school can manage different, tiered access for students and staff, parents and visitors, even based on the type of device they may be using to connect. UCS provides a managed network to an on-site sports facility used by the general public and is able to confidently segment its network for public and private use. Network access is now clearly defined, whether it is a sixth-form student doing a video call from class, a visiting contract worker or a parent watching Netflix while waiting to collect a child from rugby practice.

To constantly monitor user connectivity quality and facilitate seamless troubleshooting for IT, Aruba User Experience Insight (UXI) sensors have been deployed around the school.



Delivering a smooth, stress-free experience for users

The solution was deployed and operational by March 2020. Days later, with Covid-19 gripping the UK, UCS closed its classrooms and instructed pupils and staff to work from home. Students returned to complete a full autumn term.

“Clearly things have yet to return to normal but I am confident the network has been fully tested,” says Cragg. “We’ve had full classrooms, 25 students all streaming Zoom and all working off Chromebooks. The junior school has enabled BYOD. We’re fully using a range of SaaS applications. If there have been issues, none has been to do with the network infrastructure.”

For users, Cragg continues, it is delivering a smooth, stress-free experience: “The in-school experience is much like your at-home Wi-Fi experience. You switch on your device and it connects.”

Encouraging the creative, accountable use of new technology

Aruba Central allows Cragg to remotely manage the network, including all 150 access points. Network health, access and usage is visible from a single pane of glass.

“We’re a school and don’t have a large IT team. Aruba Central is key to efficient management,” he says.

This saving is time that can be spent working alongside students and teachers to better understand requirements. Cragg says there will always be work to do in coaxing the less tech-savvy, or reining in restless early adopters.

“When it comes to the use of new technology we don’t want to stifle creativity, but we do want to develop standards, establish consistency and drive accountability.”

Elevating IT to a strategic level

The true impact of the Aruba Edge Services Platform (ESP), Cragg says, is that it has helped elevate the role of UCS IT: “It enables us to take the role of curator. That should be the job of every IT director. I don’t want to be concerned with the mechanics of the hardware, of wiring, or archaic on-premise infrastructure. I don’t want to deal with that level of detail.”



“The business needs us to lead on strategy, to help get best value from our investments and to help create the most effective learning environment.”

The school is considering appointing an IT instructor to help coach staff on how best to use technology. It is also looking to include more ICT components in the wider curriculum, learning from its own experiences and sharing best practices to the new generation.

“Our role is to curate simple, powerful, secure technology,” Cragg concludes. “Teachers don’t think twice about their subject material. I want them to have the same confidence in technology.”

