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Martin Dyer,  
Director of IT, Blundell's School

**COMPANY NAME:**

Blundell's School

**COMPANY SIZE:**

Over 800 pupils

**INDUSTRY:**

Education

**COMPANY WEBSITE:**

[www.blundells.org](http://www.blundells.org)

**GEOGRAPHIC REGION:**

Tiverton, Devon

### CASE STUDY: EDUCATION

## NETGEAR CONNECTS THE DOTS TO ENABLE WIRELESS LEARNING THROUGHOUT HISTORIC 100-ACRE DEVON SCHOOL.

### BACKGROUND

Founded in 1604, Blundell's is a co-educational independent school for over 800 full, weekly and flexi boarding and day pupils from ages 3 to 18. The school combines strong academic achievement and excellent facilities with the best pastoral care. Blundell's is situated on the outskirts of the small market town of Tiverton in Devon and occupies two adjoining sites covering some 100 acres.

### PROBLEM/OBJECTIVE

Over the last ten years, the school governors have invested heavily in IT to enable it to expand its ICT facilities available to pupils, teachers and support staff. There are currently over 600 computers connected to the school network. The facilities at Blundell's School are centred around the purpose-built Popham Centre. Within this centre are 80 networked PCs with printers, scanners and digital cameras available for those needing them. In addition to this central facility, there are seven other ICT rooms around the campus allowing whole class use of computing facilities.

The IT department at Blundell's School is pushing for the use of revolutionary technology throughout the school to meet the modern day needs of teachers and students alike. "There was the desire to see all class rooms, boarding houses and common rooms having access to the network wirelessly. However, the sheer scale of the site, coupled with the thick stone walls of many of the buildings, was proving problematic," said Martin Dyer, Director of IT, Blundell's School.

"We were increasingly experiencing a lot of connectivity issues with our legacy system. This led to us spending a lot of time having to reset our access points which could be an arduous task. Because of the scale of our site, it would often take us a 20 minute round trip to get to it, fix it and return to the office," explained Martin. "It is imperative that our network remains online, as we have a lot of boarding students that rely on it to not only undertake their studies effectively, but also to communicate with their families."

In addition to the 600 computers, laptops, fixed consoles and staff smartphones connected to the network, there are countless other devices being brought onto school grounds by the students themselves. "The number of devices needing wireless access has grown exponentially and the legacy network simply wasn't able to handle it," said Martin. "Coupled with this, it had become a sizeable use of time and resources, as students were constantly bringing their devices to the IT department to get them linked onto the network."



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Over the years, the development of Blundell's network had been organic, however Martin and his team were keen that any changes they made to the network infrastructure was flexible enough to be able to future-proof the system for years to come. "As a school, we are keen to embrace technology to enhance the learning experience for our students, but we are always having an eye to the future," said Martin. "As we are not blessed with a huge IT department, any solution we choose not only needs to be cost effective, but needs to be intuitive and easy to use to reduce management overhead."

### SOLUTION

"When looking to update our network, we asked around within our peer group of schools and put together a list of potential suppliers for an overhaul of our wireless network, one of which was NETGEAR," explained Martin. "After due diligence, we felt that not only did NETGEAR provide a very cost effective solution for us, but we were also particularly impressed by its deep reaching customer service and willingness to undertake a free site survey for us."

Martin and his team decided upon NETGEAR's WC9500 Wireless Controller. Unlike other WLAN systems that are costly, complex and cumbersome to deploy, the WC9500 high capacity wireless controller is ideal for education establishments. The NETGEAR WC9500 is designed with simplicity in management and ease of use to enable users to set up the systems in minutes.

"We wanted a solution that wasn't labour intensive so it was perfect for us," explained Martin. "We liked that the NETGEAR WC9500 had intuitive management interfaces that allows us to set up a complete wireless network so quickly."

The NETGEAR WC9500 comes with sophisticated load balancing and rate limiting, to provide fair bandwidth allocation among all clients for robust wireless connectivity. "Effective load balancing is imperative for us. As students move to a particular classroom there is always a large spike in demand for the nearest access point. Therefore, we needed a dynamic system that could seamlessly switch between access points where relevant to share the load," said Martin.

Blundell's School also installed 45 ProSAFE® WNDAP360 access points from NETGEAR as part of the deployment. These combine high-performance, dual-band performance with smartly designed management and deployment features – like flexible and easy mounting options – into one reliable, affordable, and easy-to-use package.

### RESULTS

The time savings for Martin and his team following the network upgrade has been instant. "The school supports an environment for bring your own device (BYOD), and runs a separate VLAN for the devices that the students bring in. In fact, we actively encourage students to bring their own laptops to classes once they reach year 10," said Martin. "Rather than the students having to come to us, we now automatically push a wireless config file out to all the devices at once which has become a huge time saver and been very popular with the students."

Martin has also seen an increase in teachers using devices – whether it is laptop, tablet or phone – as part of their day-to-day learning toolkit. "Updating our wireless network with NETGEAR has increased both the bandwidth and resilience of our network. We no longer have any dropouts as students and teachers are moving around the campus, so the confidence has returned."

Blundell's School is continuing to work with NETGEAR to further improve its 10GbE backbone, further reducing the chance of bottlenecks across the networks as more bandwidth intensive applications are placed onto the network. "We have plans to place all our CCTV security feeds onto the network and add a second dedicated VLAN for our students to use for online gaming on their PlayStations and XBOXs, so we need to pre-empt this," added Martin. "Our new NETGEAR wireless network allows us to expand with future network requirements without the need for costly rip and replace."