

## The Cheltenham Ladies' College brings pupils closer to home with wireless access solution

**The Cheltenham Ladies' College** has always combined tradition with forward thinking.

Established in 1853, the College was amongst the first girls' schools in England to offer young women a serious education, similar to that in a boys' school and today it enjoys a world-class reputation.

There are currently 840 pupils between the ages of 11 and 18 at the College and around 75% of the girls are resident pupils. The College not only prides itself on its excellent academic record, but also on turning out confident, happy and well-rounded young people.

With its historic buildings and playing fields, The Cheltenham Ladies' College may look like a bastion of traditional values, but its aim is to equip its students with everything they need to succeed in the modern world. With this in mind, the College was ahead of the curve when it decided back in 1998 to make school-wide internet access a priority.

At that time, the educational possibilities of the World Wide Web were limited, as were the available applications over the relatively narrow bandwidth. Even so, with many resident pupils living away from home for the first time, College managers could see that laptops and email access would open up a vital line of communication between girls and their families. Looking further ahead, they recognized that computers would play a growing role in education over the next decade.

"The College management could see that computing was going to really take off in education and they wanted to be near the front of that," says the Cheltenham Ladies' College's Network Manager Matthew McMahon. "The internet was emerging but it still wasn't the thing that we use now. Getting information was not very advanced but we knew what was coming and we wanted to get the infrastructure in place early."

Ultimately, the aim was to establish wireless internet access throughout the College, so pupils and staff could access the internet wherever and whenever they wanted. LANCOM Systems provided a cost-effective, flexible solution.

### The wireless way forward

With 10 boarding houses and a sports centre in addition to the main campus, a wired network would have been prohibitively difficult and expensive to implement. So the College looked for a wireless enterprise networking solution that would be easy to manage and provide enough flexibility to meet the different needs of pupils, teachers and visitors. "We wanted multiple wireless networks running on one, wireless access point," says McMahon. The College invited a selection of suppliers to demonstrate their wireless solutions, including some of the industry's biggest players. LANCOM's solution was chosen because it provided significant benefits in terms of cost savings, reliability and flexibility.





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**Quote**

"Reliability is a key issue across a big campus. We chose the access points because they were so very reliable and history has borne that out over the past 12 years."

Matthew McMahon  
Network Manager

**An evolving solution**

Today there are between 150 and 200 LANCOM wireless access points across the campus. The access points initially operated only on the 2.4GHz frequency band, but they have since been upgraded to provide additional access on the 5GHz band. This prevents interference from the growing number of enterprise networks springing up in the town around the College.



The access points are managed centrally by two LANCOM WLC-4100 controllers. These effectively implement three different networks across the same infrastructure using a system of service set identifiers (SSIDs). These assign different filters and access rights to different user groups. Each SSID defines a user profile that can be set up on the controller, which then configures all the associated access points remotely.

**Savings and benefits**

For the College, the chief benefits of opting for a LANCOM network include cost savings, reliability, easy management and good support.

McMahon estimates that opting for a wireless solution saved the college at least £100,000 in up-front wiring costs. Furthermore, LANCOM's solutions and upgrades continue to deliver significant savings: "Every time we upgrade we go out and check the market, but we're probably saving 40 or 50% by sticking with LANCOM, rather than the market leaders." It is not surprising to see such a positive response from McMahon, considering that this is already their third upgrade with LANCOM.

Reliability is also a key issue for the College, and the LANCOM solution delivers. "The really good thing from my point of view is that it does not fall over. It just sits there and works, which is brilliant," says McMahon.

Components used:

- 2 x WLAN Controller  
LANCOM WLC 4100
- 100-200 x WLAN Access Point  
LANCOM L-321agn Wireless &  
L-322agn dual Wireless

He also says that the controllers make the network extremely easy to manage: "It's almost fit-and-forget. Once you've configured a profile on the controller you just assign it to the access points – it's very easy."

And even when there are occasional issues or queries, LANCOM's experts are always there to help: "They've always supported us when we've needed it, which is thankfully pretty rare." This clearly shows that LANCOM's products are robust and simple to use, resulting in lowered numbers of support calls.

With today's students just as likely to be Skyping their families on tablets, rather than emailing them using laptops, the secure internet access provided by LANCOM continues to develop to meet the evolving needs of the College. But some things never change, and the girls continue to rely on secure internet access to help them feel closer to home.

