Pupils at Carterhatch are on the move with help from D-Link

Carterhatch Junior School

"The major benefit of the D-Link managed network, according to Warner, is that there's no disconnect as you move around the school - you are constantly connected."

When Carterhatch Junior School decided to move its IT provision from static, wired Windows-based PCs to wireless mobile devices including iPads and iPod touches, the set-up of a functional wireless network was an essential prerequisite.

After trialling the new wireless kit, the impact on the children of this motivational way of learning was instantly recognised and the school's decision to introduce a managed network from D-Link. Today, the tablets and MacBooks are now moved round the school on a trolley to where they are needed, pupils' learning experience is richer and their performance improving, while teachers are able to plan lessons more easily.

About Carterhatch Junior School

Carterhatch Junior School is a larger than average-sized junior in Enfield, North London, attended by nearly 400 7-11 year-olds. The majority of pupils are from ethnic minority backgrounds and a large number do not speak English as a first language. The school also provides special resources for its above average population of disabled, special needs and pupils from disadvantaged backgrounds.

The latest Ofsted inspection commended Carterhatch's efforts to provide special resources for its disadvantaged communities and the school is particularly keen to provide a stimulating IT environment, including the introduction of mobile devices to realise this. A previous inspection had noted IT provision as an area for improvement and following the appointment of a new head teacher in 2011, extra budget was made available to address this requirement.

IT technician Daniel Warner says: "Our previous head teacher had different priorities but when Ofsted came in a little after our new head had arrived and said that one of the things to be addressed was IT, the focus shifted. I was given more funding and could do more."

Changing IT provision over to mobile was already underway at Carterhatch, with the school moving from Windows-based PCs to iPads, iPod touches and MacBooks. Previously, everything was hard-wired, a set-up which was not only considered old-fashioned, but also made it difficult to get all the children in front of a computer.

Warner says the potential to provide greater mobility was attractive: "When I started working here I thought the school's IT was a bit outdated. Both pupils and teachers can do a lot more and have a lot more freedom if they have access to the internet and the network while moving around the school. If it's a sunny day children can even go outside and still have access. Also, more users can get online. Previously, we had a problem where we didn't have enough space for each child to be sitting down at a computer. Whereas now they are not limited to the number of ports they can plug into."

A strong wireless infrastructure was required to support the shift to mobile devices right across the school. The school did have one wireless router previously, which had been set up to help staff who needed access to Wi-Fi for lesson planning. "It was primarily for the staff to use their own laptops rather than having to use the PCs that were plugged in."

The move to mobile was also designed to free up the old IT suite – an important consideration as the school is expanding rapidly.
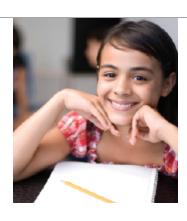
Solution

Carterhatch Junior School began its research by talking to other schools in the area, and was particularly impressed by the progress made by Bowes Primary School. "They'd redone all their IT, and they'd gone down the Apple route with mobile devices," says Warner. "The IT there had been commended by everyone in the Borough so we went and had a look at their facilities and it worked brilliantly from the Wi-Fi right through to the laptops, so we thought that it would be a good model for us."

The next stage was to run an unofficial trial with the new technology to ensure it would work in the school environment. Carterhatch loaned 10 MacBook Pros from Enfield's City Learning Centre and brought them into the school to see what the reaction of the children would be.

Warner says: "We put one year group into a beta test, if you will, to see how the new system would work and the children seemed a lot more engaged; they enjoyed themselves a lot more. Plus, with regards to IT, they seemed to progress a lot quicker and of course, they could do a lot more with the latest devices."

With the order decided for the new mobile devices, the next thing that needed tackling was the wireless network: "The network was probably the most important thing. You can buy the latest kit, but if your infrastructure's not strong there are going to be issues, so as we wanted to expand quickly we needed a good network to cater for so many children at once."

With Warner having previously set up the wireless router, the school did consider implementing the network itself but the appeal of a managed network from D-Link was high. "We did go down the route of thinking it would be cheaper if I set the routers up myself. But, I was an advocate of a managed controller – it does make it a lot simpler. If there's an issue you can find out where it is straight away. It's just a lot simpler, more easily managed and for the little bit of extra money it was definitely worth it."

Benefit

Carterhatch had one company cabling the 21 access points where they were needed around the school, while provided the access points, wireless controller, mobile equipment and configured the network. The technical side was up and running in a few hours, which surprised even Warner. "It did surprise me how it easy it was - it's brilliant really. The installation was six months ago now and we haven't had any problems at all."

"There's been less interruption in lessons. Beforehand the network was very slow and therefore loading web pages was slow. Now with the new kit the laptops are really fast, the network's fast, and there's no waiting around for a page to load. Both pupils and teachers are a lot less frustrated in class."

"Pupils seem to do a lot more learning by themselves. They had to be guided with the old computers. Now because it's so much quicker once they've seen it they want to move on quickly, so they tend to do a lot more of their own work."

In terms of the set-up, there's a trolley with 30 MacBooks, and a case that houses 16 iPads, with four more available separately. According to the timetable, they are placed outside the class as needed. Pupils just take a MacBook, switch it on and they're up and running.

The teachers are more productive too. "Their previous computers were very old and they were having to spend extra time finishing things and then going to the printer to print them off. Now they can finish something off in their room and click print from their MacBook as they're now all connected to the network." Proof, if needed, of the flexibility and robustness of the D-Link solution.

D-Link ®

Building Networks for People