

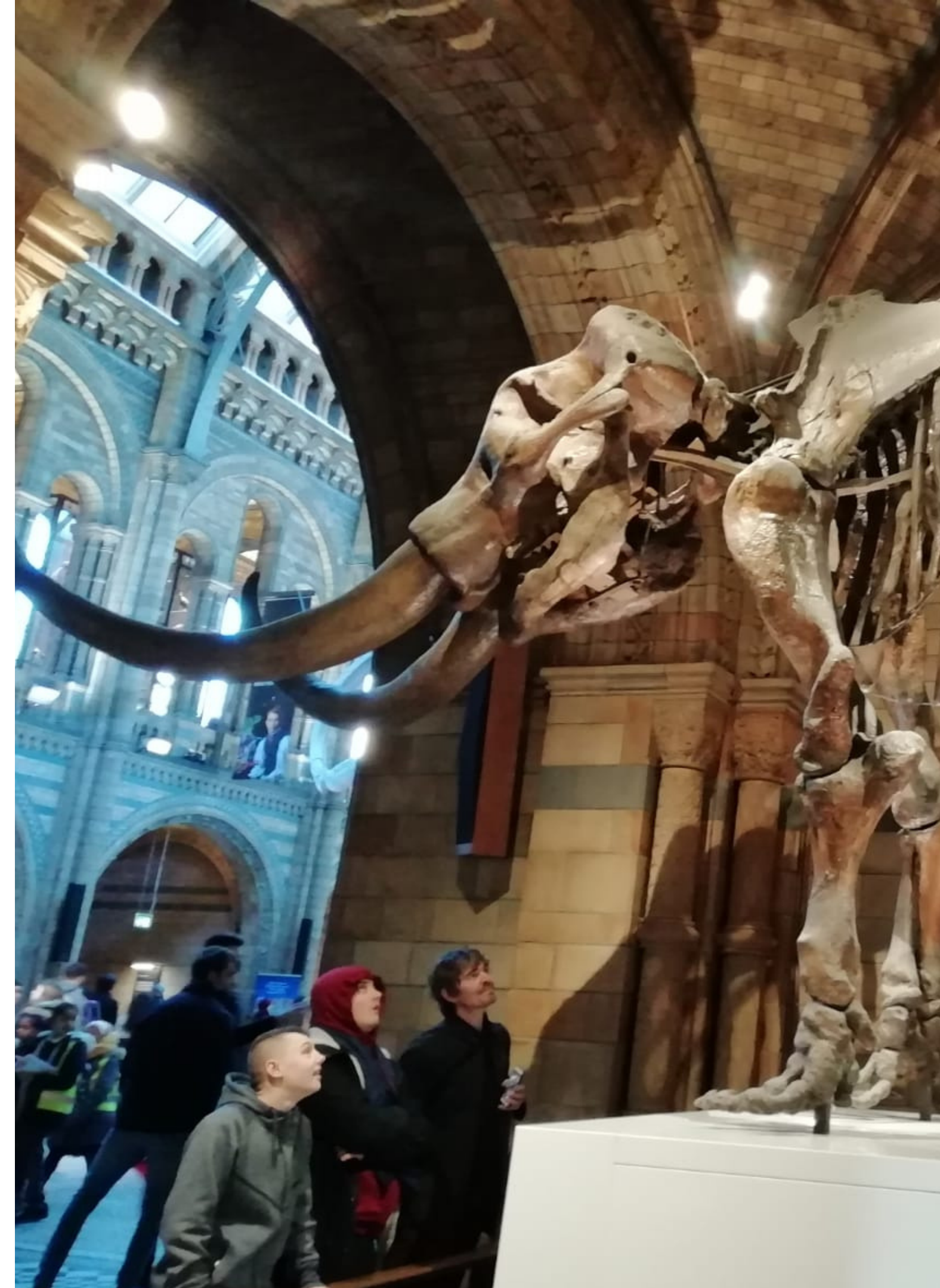


Woodfield School Transforms Education Delivery With Omada WiFi

School Implements Own Indoor and
Outdoor Business-Class
Wireless Network

Every Child Matters

Woodfield School provides pupils with social, emotional and mental health needs with a supportive environment to learn and grow. The Educational Team are ambitious for their pupils and encourage them to achieve at their own level. The Stoneleigh Road site caters for 64 pupils across Key Stage 1 and 2. Split into 8 classes of 8 pupils, each class is supported by its own Teacher and Teaching Assistant. All teaching staff work in close partnership with the Intervention Team and behavior mentor to encourage, support and motivate each child to reach their full potential.



Personalised Learning

Like all learning environments, connectivity and WiFi are essential to the school. Wireless, in particular, is a vital feature for the teacher's toolbox. At Woodfield School, each child is provided with an iPad, indispensable when delivering an enriched curriculum and facilitating individual learning styles. WiFi also forms part of each child's bespoke behaviour management plan where, amongst other things, good behaviour is rewarded with games on the iPad.



Fit for Purpose

Before Covid struck, the school was struggling with poor WiFi performance and coverage. The existing collection of wireless access points provided download speeds that topped out at 30Mbps and just 9Mbps for uploads. Mr Richards, High-Level Teaching Assistant and David Barrett the schools IT Manager were tasked with finding a solution to the school's connectivity issues. A network site survey confirmed their suspicions that the existing infrastructure was old and no longer fit for purpose. Aware that the building had asbestos in the ceilings, they had to find a solution to overhaul network performance without disturbing the structure.





Digital Learning Aids

Poor WiFi had a massive impact on the school. Teachers were reluctant to plan lessons that involved rich media, in case the WiFi failed and had massive repercussions on pupil behaviour. "There's a huge selection of fantastic interactive learning resources online. These digital tools really help to reinforce learning, but teachers were reluctant to rely on it in case the WiFi played up. The behaviour backlash when technology failed was too disruptive, so many teachers would simply avoid it," remarked Mr Richards.

Rewarded with WiFi

For pupils, WiFi is an integral part of their reward system, earning time on specially selected games via the iPad. Poor WiFi coverage meant they would have to 'hunt the WiFi' to access their rewards. Not only did this cause conflict, but it also caused health and safety hazards when pupils congregated in the stairwell, which tended to have the strongest signal. "Game time is closely monitored because it's a critical piece in the behaviour management jigsaw. This means the children perceive it as extremely valuable, and any interruption is seen as highly unfair and results in poor behaviour," observed Mr Richards

*Children would have to
"hunt for WiFi"*



Power Over Ethernet

After researching the market, Mr Richards interest was piqued by the TP-Link Omada range. Firstly, the access points are powered by PoE[1], so they can be fixed anywhere without having to disturb the ceiling with new electrical supplies. Secondly, and critically for a school on a tight budget, there is no annual license fee, therefore slashing the total cost of ownership. During testing, it became clear that the Omada range would revolutionise the School's WiFi. Download speeds jumped from a maximum of 30Mbps to a steady and stable 300Mbps. "Installation and manageability were also critical factors in the decision making process as we would be doing the installation ourselves. The Omada range has a great selection of indoor and outdoor access points that work together to provide a seamless network, all managed from the Omada app," commented Mr Richards.

[1]Power over Ethernet.

Annual Wellbeing Outing

Ironically, Woodfield School can thank COVID for its new high-speed infrastructure. In normal times, the school has an annual wellbeing fun day for 20 staff and 64 pupils at the local theme park. Unable to hold the event in 2020, the money raised was put towards new infrastructure. "We felt that 10 times better WiFi is the gift that keeps on giving, both in terms of mental wellbeing and enriching the learning experience," said Mr Richards.





Self Install

During lockdown Mr Richards and Mr Barrett installed 14 EAP225[2] to cover the school buildings and EAP225-Outdoor[3] to provide WiFi coverage in the forest school classroom within the grounds. The whole school is benefiting from the improved wireless coverage, speed and stability. Where the teaching staff were apprehensive about using technology within the lesson because it was temperamental, they are now using iPads as part of each lesson. The Omada installation has given them the confidence to integrate iPad time into lesson planning because they trust the infrastructure will work first time and enrich the children's learning.

[2] AC1350 Wireless MU-MIMO Gigabit Ceiling Mount Access Point

[3] AC1200 Wireless MU-MIMO Gigabit Indoor/Outdoor Access Point

Seamless WiFi

There has also been a marked improvement in pupil behaviour because they can access their games without wasting valuable game time searching for a strong enough WiFi signal. Neils has integrated a Mobile Device Management solution so apps can be rolled out across the network almost instantly where it previously took 10 minutes to push out a single app. "We're really excited for the run-up to Christmas this year. Last year we invested in VR headsets and a Santa's Grotto game which of course relies on WiFi. Let's just say there were some disappointed children last year when the game failed. This year, they may not be able to visit Santas Grotto in real life, but we can bring it to life the classroom for them," remarked Mr Richards.





This is the first time I've set up a business-class network. I was surprised at how straightforward it was to implement. The Omada app was really straightforward to use. I can see instantly if there's an issue on the network and exactly where it is, so it can be fixed there and then.

Mr Richards, High-Level Teaching Assistant

Seamless Solution

Behind the scenes, teachers are also benefiting from better WiFi during staff and planning meetings. All the teaching staff use WiFi during these sessions for screen mirroring where members of staff may be quarantining or shielding, so they can fully participate in the meetings.

To maximise performance and security, Mr Richards set up a separate SSID for staff and an additional Guest Network for visitors. In line with best practice, the guest network requires visitors to log back in after 2 hours to ensure there are no rogue devices on the network.