CASE STUDY: EDUCATION
ST PETER’S SCHOOL PUTS MOBILITY AT THE HEART OF ITS IT STRATEGY WITH WIRELESS TECHNOLOGY FROM NETGEAR.

BACKGROUND
St Peter’s School is a coeducational secondary academy in Cambridgeshire which employs 140 staff and has over 1,000 pupils aged 11 to 18 year olds. As part of the schools commitment to helping its students achieve their full potential, the use of technology to aid teaching and learning has become of great importance, underpinning many of the schools current and future initiatives. However, in order to realise its vision, the school needed to upgrade its network infrastructure to support its strategies.

PROBLEM/OBJECTIVE
The prevalence of mobile and personal devices has forever changed the way that teachers teach and students interact and learn, but St Peter’s found itself falling behind the curve due to an ageing wired network infrastructure supported by a few, unreliable, unsecure wireless hotspots.

With ambitions to become a truly mobile education establishment, St Peter’s needed a solution that could bring greater mobility to both teachers and students. Teachers wanted the freedom to use learning aids on the network whilst away from their PCs, while students also had expectations of using their own devices at school to complement their studying – particularly at sixth form stage.

As such, the school wanted to embrace BYOD and offer students and staff the ability to use their own devices in school in a safe, managed environment. It also wanted to use more cloud-based and collaborative platforms in the future, such as Office 365 so needed an up-to-date infrastructure to facilitate this.

However, with strict budgets and a vast campus to bring into the 21st century, ICT director of operations for the school, Jonathan Bowers, had a tough task to WiFi-enable the entire campus and ensure the security of all devices using the network. The age and composition of the campus buildings also added another level of complexity, with a mixture of 60 year old, thick brick wall buildings and steel structures all affecting signal access and installation.

We now have confidence in allowing staff and students to use their own devices without compromising security and can realise the existing mobile assets we have within the school.

Jonathan Bowers,
ICT director of operations, St Peter’s School
After analysing a number of different wireless providers and their solutions, Jonathan Bowers turned to wireless networking specialist NETGEAR to provide the reliable, cost-effective and secure infrastructure the school needed. Unlike other providers, NETGEAR undertook a thorough site survey of the school to be able to pin point exactly what was needed and where access points should be placed. This vital, physical review of the campus and its buildings ensured that maximum wireless coverage could be achieved no matter where you are and that there are no black spots.

Through reseller, Network Technologies, installation of the NETGEAR wireless solution happened seamlessly in February 2014 and took just two weeks to get up and running, with staff and students benefiting upon their return from the half term break.

To ensure total wireless coverage and a safe and easy to manage environment, the team installed:

- 2 x NETGEAR ProSAFE WC7520 wireless controllers
- 74 x NETGEAR ProSAFE WNDAP360 dual band wireless-N access points
- 1 x NETGEAR ProSAFE GS728TP stackable smart switch with PoE
- 6 x WC7510L 10 WAP UG licenses

Due to the layout and building materials used on the campus, 74 access points were needed to ensure wireless access across the whole site, all of which can be centrally managed through two wireless controllers, guaranteeing reliable coverage and no unplanned downtime.

In the first six months since the network upgrade, St Peter’s noticed a dramatic change in the role of technology within the classroom and beyond. The wireless network has no black spots, providing teachers and support staff with the freedom to use mobile technology to provide better teaching and support for students, regardless of where they are on the campus. For example, PE teachers are now able to take the register on a mobile device whilst in the gym, or the sports hall, improving accuracy and saving valuable time. Similarly teachers are no longer chained to their desks when conducting a lesson or if they need to access the network in a different location within the school. This has improved efficiencies significantly and made lessons more interactive and engaging for students and teachers alike.

Students have also benefited hugely from the technology with an increase in sixth form students using their own devices to access learning aids and ensure they can work uninterrupted in a secure environment.

Some of the most exciting initiatives are still to come, with the WiFi network paving the way for a dedicated “technology hub” for the schools top performers to enable them to not only reach but exceed their potential through the use of technology to interact, learn and collaborate with others. In the near future, student support managers will be equipped with mobile devices to help them deal with situations as they happen, whether in the corridor, classroom or beyond. This will mean they can have immediate access to student records and the ability to record a conversation, send an email to a parent, record positive behaviour or issue a detention in real-time to improve efficiencies and productivity.

The school is now ideally placed to adapt and react to the evolving role of technology within the education sector, and provide the best possible environment and tools for their staff and students to grow and achieve their potential.