Case Study

DfE Connect the Classroom Programme

Client:
Client: St Teresa of Lisieux Catholic Primary School

Technology Partners:
Department of Education, Everything ICT

Project Date
December 2021 – February 2022

St Teresa is a two-form entry Catholic primary school situated in Norris Green in Liverpool. The building was constructed in around 1930 with an ageing wired and wireless network. With a mission statement of Love, Learn and Grow Together, providing an inspiring and memorable learning experience, empowering our children to value their own and others' learning, the school are committed to investment into their buildings, and many areas have been refurbished over the years.

The school have a large number of devices including iPads, Chromebooks, and Windows laptops, but wireless connectivity has been a challenge for some time as budget constraints have restricted the school's ability to carry out a wide-scale refresh of this vital element of their estate.

In 2021/22, the Department of Education (DfE) launched a Connect the Classroom programme of funding that aims to help schools by providing an enterprise-grade wireless and switch networking solution, bringing their core network infrastructure in line with 21st century expectations. So far, this has provided new high-end wireless solutions to 1100 schools across England.

The Challenge

The Challenge: Poor connection speeds and bandwidth coupled with limited budget to improve

Like most schools, St Teresas had invested well in ICT within the budget constraints they have had and have a mixed estate of devices and front-of-class technologies.

The school's network had been refreshed some 7 years ago, which, at the time, was suitable for their needs. However, the pace of accelerated device procurement and usage had meant the network was struggling with the all-too common issues in schools where multiple classroom devices attempt to log on at the same time. of the schools and Trust had coped with Google's tools, but had struggled with external incompatibilities and inconsistent licencing had led to sporadic success when engaging with other systems.

The broadband provision was adequate but fed into slow, out-of-date network infrastructure which had contributed, along with the other factors mentioned, to some staff 'giving up' on ICT. As part of the strategic plan, Computeam had been working for some time with the school on planning for the upgrades needed within the budget available.

As a trusted supplier to the DfE, as soon as Computeam heard of the scheme and the eligibility criteria on this phase, we immediately contacted the school and introduced them to one of the DfE framework providers, Everything ICT, to ensure they obtained the funding.

The Solution

The solution: Fully managed Aruba/HpE network with upgraded LAN cabling

Once it had been established that the school was eligible, the Computeam account manager, Rebecca Williams, and one of Computeam technical consultants, carried out a detailed appraisal of the entire infrastructure at the school, including the existing cabling, data cabinets size and locations, as well as carrying out a heatmap of the school to enable us to design and produce costs for a future-proof infrastructure suitable for the next 10 years.

Computeam submitted the proposal to Everything ICT and funding was approved by the DfE for a capital project of £64,871.14.

The solution was designed and configured with speed and resiliency in mind. With much more data-hungry devices active in today's environment, high speed and

resilient hardware is vital to ensure that users are provided sufficient connectivity and the best possible user experience.

Computeam supplied, installed, and configured five enterprise-standard Aruba 2930M PoE+ Layer 3 switches with advanced security and network management features for the schools' core and edge network.

The edge network switches serve thirty-two high-performance dual radio 4x4 802.11ax Aruba AP-515 series wireless access points, with a maximum data rate of up to 4.8Gbps.

In addition, this series of access point offers Multi-User MIMO technology to allow a larger capacity of connections at one time compared to its predecessors, ideal for high density environments such as schools. All Aruba hardware was deployed via Aruba

Central Cloud, to allow for on-going unified management and to provide a single pane of glass to oversee every aspect of school's Aruba wireless and wired devices.

All wireless access points were installed in the required locations throughout the building, connected via dual Cat6A cables to provide high-speed connectivity and redundancy to each wireless access point from the newly installed and configured Aruba switches. In addition to this, OM4 fibre cables were installed between network cabinet locations to allow speeds of up to 10 gigabytes per second. With both 10-gigabite compliant switches and sufficient connections between cabinets, we were able to provide the school's network with a 10-gigabit backbone, as well as replacing three network cabinet locations in the process to house the new equipment.

The Result

Every area of the school now has seamless access to a high speed, reliable wireless infrastructure with a peace of mind 10-year warranty. The connection frustrations experienced in the past by staff and pupils are now becoming a distant memory and the school is well placed to roll out further technology solutions and devices.

With this enterprise grade solution in place, the school can rest assured knowing that its staff and students will receive the best user experience and help them to reach their teaching and learning objectives.

This is certainly a project that Computeam were proud to be involved in and are confident that it will serve a positive purpose at the school for many years to come.

The investment from the DfE is targeted and well planned; there is a dedicated team

within the department who ensure best value and the best outcomes for their schools.

By partnering up with Computeam and Everything ICT on this project, the school is ensured a seamless application process, a well-designed network, fully costed, installed and signed-off without the school having to become embroiled in the mass of paperwork sometimes associated with trying to run these types of procurement themselves.

With over 20 years of experience working in the Ed-Tech sector, Computeam have worked extensively with the DfE on new builds, platform provisioning, school refurbishments and more recently the SRP scheme and are delighted to have been part of this successful programme.

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Client Comment

We have partnered with Computeam for our managed services for several years now and had been planning to try and upgrade our network using our own budget, and we were delighted when our account manager, Rebecca, made us aware of the DfE scheme.

Rebecca introduced us to the team at Everything ICT who really helped guide us through the whole process from application, through the implementation, right up to requesting the funding, which was paid to us upon completion.

Computeam proved to us that, despite some delays due to the global supply chain, they are the right partner for us having completed the works to a very high standard, and we are simply delighted with the end result. We have experienced a better connection in areas where our old Wi-Fi struggled due to the number of mobile devices we now have in school. A network we don't have to worry about for years to come.

Computeam's support has be impeccable throughout this process and beyond, and I cannot thank them enough.
Carol McMullen - Business Manager

Our Statement

The Connect the Classroom funding is, in my opinion, one of the most forward-thinking initiatives to enable technological advancement in schools made by the DfE. It's not a headline-grabbing scheme, unlike the devices for home learning scheme, as networks are often hidden and certainly not seen as an exciting showcase in a school, BUT without a solid, stable, and super-fast infrastructure none of the more "exciting" devices can be used effectively for teaching and learning.

I was delighted that St Teresa's benefited from the funding for this investment and that the connection frustrations that might have otherwise held back technology adoption are now a thing of the past (for the next ten years at least!)

It's fantastic to see the DfE have now extended the scheme with a further £150m available, and we look forward to seeing the difference St Terresa have seen in more of our client schools over the next couple of years.
Cris Cadby, Chief Commercial Officer

Key Lessons
This project showed us that:

- Working with partners who understand the processes needed to be adhered to fulfil the DfE criteria is key
- A quality proposal and design coupled with the correct Vendor choice is vital to ensure compliance of standards
- Use of a DfE Framework increases the chance of a successful application and reduces the burden upon the school's own staff trying to collate compliant quotes and proposals
- Detailed project planning within the school was critical to a successful deployment

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