



George Watson's College

Location

Edinburgh – Scotland

Number of students

2,300



GEORGE
WATSON'S
— COLLEGE —

A study in success

George Watson's College campus transformation

George Watson's College is a leading independent day school that provides learning and teaching from Nursery through to S6. Located in Edinburgh, Watson's 52-acre campus is home to over 2,300 pupils and offers a broad and varied range of academic and extracurricular activities.

The challenge – a system that supports the whole college

“In many ways, the School is more like a college or small university in terms of its physical size and the number of people we cater for,” said IT Director Kevin Holmes.

IT consultant Chris McMorris, is part of Kevin’s IT Services team, and with an IT department made up of just seven, the pair manage all technology and communications systems across a sprawling site.

The campus consists of 30 separate buildings, a large and diverse user base and multiple devices including:

- Over 2,300 pupils
- 450 staff
- 2,500 parents, carers and grandparents
- 600 iPads
- 300 Macbooks
- 450 other laptops
- 850 end-user and mobile devices
- BYOD for older pupils

A complete solution

While the IT team is small, its ambitions for the college are large. Chris and Kevin started putting their aims into action in 2013 with a complete LAN refresh using Cisco technology.

“We wanted to make a lot of changes that our previous LAN would not have been able to support,” said Chris McMorris. ‘For example, we were keen to install a new communications suite with phone system, together with high speed Wi-Fi.”

“Once we had decided on a complete system overhaul with replacement switches and cabling, we mapped out our requirements and decided we wanted to act quickly.” Kevin continued.

“For us, there was clear water between Cisco and its competitors in terms of both technology and the ability to integrate effectively with existing systems. And having already experienced the impressive levels of support Cisco provided during our LAN transformation, we were confident that the result would be a robust, solid infrastructure that would support the whole School.”

The benefits

More flexible learning and teaching

The new infrastructure has helped create an exciting and adaptable yet secure learning and teaching environment:

- Half of all the School’s primary aged pupils now use iPads, which has transformed how lessons can now be delivered and how these children are able to learn.
- As well as using iPads in lessons, secure BYOD for senior school students has proved both valuable and popular – as well as being very unusual in a school environment.
- Remote access to resources across the college combined with the ability to support personalised learning – flipped, blended and remote – is encouraging students to be more engaged in their work and to work independently.
- Staff can stay connected to the in-house curriculum, so that everyone knows what is happening and where – and where they need to be.
- Superior internet connection: prior to the installation, bandwidth issues meant that internet use was limited; for example, the college was unable to offer access to YouTube. Now, staff and pupils can access any appropriate internet resources.

Better communication

- The ability to share information digitally with pupils and staff throughout the School has greatly improved communication across the campus.
- The college’s large parent and carer community is also benefiting from more regular updates and better access to information.
- Thanks to Cisco, it has been possible to manage and communicate with a large volume of people and devices across the college’s physical and virtual campus and beyond.

Zero downtime

One of the most important benefits since the completion of the network cabling has been network stability and reliability.

Keeping systems and processes up and running is vital; any interruption to a lesson or inability to access online resources can be disruptive to classes, impacting on students' ability to learn – and their teachers' ability to teach. Downtime can also have a detrimental effect on other areas of operations, parent/care communication – and the reputation of the School.

“Prior to the implementation, we would generally receive around five calls per day relating to various network issues. However, in the last three years, we have not received a single call, which is not only a vast improvement but is very reassuring to staff and parents.”

Supporting business processes

The LAN has also enabled the School to make changes to how it runs its business processes and systems.

Security assured

Understandably, for any environment containing children and young people, security and confidentiality are always top of mind. And with education targeted by malware attacks more than any other sector, it is essential that any school community is secure and that sensitive student information remains confidential.

The IT team was however, determined to ensure that security would not encroach on digital activities.

Kevin said: “It’s important that our all pupils benefit from technology and that older students can enjoy the freedom of BYOD. This meant we could not compromise when choosing our security systems. Cisco’s security suite has given us full visibility and accountability across the School, so that we know

exactly what each device is doing and what it is connecting to, for full traceability. YouTube and iTunes usage monitoring is just one example of how we are protecting our young users whilst offering them freedom to go online.”

Additionally, all wireless connectivity occurs through one single place, giving the team full control over Wi-Fi use and the ability to set policies for its appropriate use.

Advance planning – the key to success

The implementation has been so successful that the team say that they would not have changed a thing, even if they had the opportunity to start all over again.

They do however have one vital piece of advice.

“We spent nine months thinking about exactly what we wanted to achieve and weighing up all available options,” said Chris.

“The planning process took a lot of time and effort – and this thorough preparation was the key to our success.”

For any organisation embarking on a similar digital transformation, Chris and Kevin recommend the following:

- Take the time to consider carefully exactly what you need to achieve – and in what order you need to achieve it
- Think about the timescales in which you’d ideally like to complete the project
- Assess whether this vision is realistic, and consider whether your approach will derive the desired benefits
- Think about how the changes you make will affect other people in the organisation and how you can minimise any disruption
- Develop a detailed roadmap of your planned implementation.

“...thanks to Cisco’s products and support, we have in place a solid IT foundation that will allow us to take any direction we choose in the future.”

Chris McMorris

IT Consultant

Team spirit

Working with a vendor that understands the sector and its specific requirements is another factor that contributed to the success of the project.

“We could not have asked for a better contact than Cisco’s Executive Sponsor John Martin, who has supported and advised throughout the design process,” said Kevin.

“In fact, Cisco has acted more like a partner rather than a vendor, advising and guiding us throughout this complex journey. This has been hugely valuable to our small team.”

The future

In spite of this success however, for George Watson’s College, the journey continues.

‘There is still more to achieve in terms of refining our solution, but we would not be where we are today without John and the team, and for now, thanks to Cisco’s products and support, we have in place a solid IT foundation that will allow us to take any direction we choose in the future,’ says Chris.

Cisco has offered the double reassurance of value and value for money, and the reliability of its products mean that any Cisco implementation proposed by the IT team is always approved by the School board; no mean feat for a charitable organisation where every penny spent is accountable.

As Kevin sums it up: ‘The new infrastructure never causes me any sleepless nights – it does exactly what we want it to do and has never let us down.’

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Kevin Holmes

IT Director