Birkenhead Sixth Form College: Opening up remote access to the college network brings wider benefits to all

Summary

Birkenhead Sixth Form College implemented a virtual network to open up remote access to the college network for its students, staff and governors. In particular, for childcare students on work placements, this has meant 24/7 secure access to their work and resources, and the ability to make timely updates to their work evidence logs. The impact is better continuity of learning and a dramatic increase in the hand-in rate for work. For the staff, governors and college as a whole, the benefits of anytime-access to the network are more than were envisaged at the outset; not only is it saving them valuable time and eliminating the need for large print runs, it is expected to bring cost-savings to the College in the long term.

About Birkenhead Sixth Form College

Birkenhead Sixth Form College is a specialist Sixth Form college and offers courses including A-levels, BTECs, CACHE (Specialist UK Awarding Body for Childcare) qualifications and GCSEs for 16-19 year-olds on the Wirral. It also offers daytime and evening adult education, and Pre-Degree courses.

The college students come from a diverse social background. Although the Wirral has some affluent areas, it also has regions that are deprived.

The challenge

The initial idea was to enable CACHE (Childcare) students at Birkenhead to record their placement work whilst they were within their placement nurseries. These students were typically in their placements for two or three days per week and at
times were not able to enter sufficient detail into their paper-based evidence portfolios to satisfy the exam board requirements. This was due to the time which elapsed between the event and its recording. Birkenhead Sixth Form College, together with King George V Sixth Form College in Southport, were successful in obtaining a grant through The Mobile Learning Network (MoLeNET). The original idea was that the CACHE students at Birkenhead would use mobile phones, provided by the College, to keep a log of their work placement. But it was recognised that the phones were not appropriate for this use. For example, the screen size restricted the amount of text that could be recorded.

As a result, the College realised it needed to change the focus of the project from a technology-driven programme to focussing on the needs of the students.

The project hit a major snag in October 2009 when a story hit the national headlines about child abuse at a nursery in Plymouth. Prior to this the nurseries used for the placements had been encouraging about the use of technology and the majority had agreed to allow students access to their wireless networks. However, this changed the relationship completely and the use of mobile devices was disallowed within the placement nurseries.

Rather than abandon the project, the team again decided to review the focus of the project and chose to implement virtual desktops to give everyone remote access to the College's network. Providing remote access to the network would give everyone 24/7 access to the College's Moodle VLE (virtual learning environment) and email system. Essentially, for the students on work placements, access to the VLE would mean anytime-access to their work and resources, and a secure place to log evidence of their work placements.

**The activity**

The College installed three virtualised servers running VMware and VM Webspace. Wireless hot-spots were created around the College with the wifi points carefully positioned to avoid data black-spots. Wyse thin clients, providing secure access to the college network, were installed in several locations, including in the Learning Curve and the Digi Curve, the open access library and computer workspaces for students.
Wyse thin clients are compact, energy efficient and productive desktops with all the
dynamic user-experience of a PC — without the day-to-day complexities and risks
associated with one. They have no moving parts. Their service lives are extended
beyond those of comparable PCs and the noise from fans and hard drives is
eliminated. Their low power consumption means low-heat output enabling
comfortable working environments with a reduced dependence on costly carbon-
heavy air conditioning.
Members of the senior management team (SMT) have been equipped with iPod Touch devices to enable them to access email and confidential files from wherever they are. The budget for the new equipment was around £60,000.

To facilitate this additional use of technology, the College elected to install an industry-standard 100MB connection which provides the ability to expand the capacity in the future. Currently, they have the license for 100 virtual log-ons.

The outcomes

Activity is logged and the College is recording 500+ remote connections per week. It expects to increase this in the next academic year.

All students and staff can now access their own work and files anywhere and anytime, even on low specification computers due to all the processing taking place on the servers. The system is so powerful that it is even possible to run Adobe Photoshop on an iPhone! When users log in to the virtual system they access one of the 100 virtual discs, which provide all the applications normally available inside the College. It also means that students can access software they otherwise may not be able to afford and, because all students are accessing the same version of the software, it eliminates compatibility issues. A student can be working on
something in class and then easily continue at home. There are no more lost or broken USB memory sticks.

The SMT are also finding the access invaluable. The Principal is able to access emails even when out of the College via her iPhone. If there are any issues in the College it is possible to let the SMT or duty manager know about these quickly. Staff can even access electronic reports about those involved to find out about any existing issues.

Emma Russell, Assistant Principal explains: "The iPod Touch is used to help deal with student issues immediately as you can be messaged anywhere. You can look up reports on the student involved on your way to deal with the issue. It's also invaluable as a diary, it means I can manage my time more effectively."

The impact

There have been many more advantages than were foreseen with the new system. The need for a change in focus probably was a blessing in disguise as it widened the whole scope of the project.

- The 900 PCs available for the 1,200 students have been increased at no extra cost due to the students using their own devices.

- The College expects that replacement costs will also be lowered as more students choose to use their own devices meaning there is less wear and tear on the College's IT resources.

- The College now has industry-standard facilities.

- All virus protection is looked after by the central servers so there are no external threats. Colin Hawksworth, Computer Services Manager explains: "As long as the core system is secure it's OK for people to access it. Putting up firewalls and blocking sites is putting up barriers to learning."

- All applications installed on the College network are available to all students.

- There is better continuity of learning.

- The hand-in rate for work has improved dramatically.

- Staff can access their files at home so they can pick up work at any time.

- Registers can be taken on a range of devices including mobile phones (the IT staff enable device access to ensure security).

- The College's Moodle VLE (virtual learning environment) has changed from being a mere repository to a two-way communication process as students use it to submit work. Mal Blackburne, Learning Manager tells us: "More staff use
submission through Moodle or email, it's growing, as it date stamps it's proof of hitting deadlines. It also means I can't lose it and they can't lose it. We can also use TurnItIn to check for plagiarism when work is submitted like this.

- All content that is accessed on the web via the remote desktop goes through the College's firewall.
- Governors are able to access documents through their logins, reducing large print runs.
- As confidential files are electronic, the access is better regulated and there is a lower chance of unauthorised access than with hard copies.

And what do the students think?

Helen Harman and Matthew Douglas, Computing, Business, Psychology and ICT Students say:

"Accessing your files at home is really good because you don't have to remember your memory stick. You often get work and then forget you haven't taken it home, now you can just log on to get it."

"The main benefit to me is that I have lost my memory stick twice since I started here, and it's a pain trying to get all the files back or re-do work. Also its been useful as I don't have a lot of software on my laptop at home, so being able to use the software that's in College while I'm at home is really good for homework as I need all that software for computing."

Mal Blackburne says: "A virtual network may be a big investment but it will save you money in the long term. For us, delivery is secure, encrypted and guaranteed as it's all in-house."

Useful links

Jisc RSC Northwest
Birkenhead Sixth Form College
Wyse website

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