Coleg Gwent transforms student learning experience
Using Citrix to better support students

One of Wales’ largest further and higher education colleges uses Citrix to improve the learning experience and to better support students

Education is evolving and technology is at the centre of transforming students’ learning experience. With 24,000 students and five campus locations, Coleg Gwent combined its technology strategy with a new, blended learning teaching strategy, to change the way its students learn.

“We wanted to move away from the traditional model of dedicated IT labs and old-fashioned classrooms with fixed furniture, a whiteboard and everybody facing the front,” explains ICT Infrastructure Manager, Evan Smith. “By making technology more integral to all learning environments, we can have multi-purpose learning spaces that enable different ways of teaching and learning - role play, group discussions, online research or class presentations, etc.”

The challenge the college faced was, as Smith says, “how to deliver desktop services to 4,000 devices as seamlessly as possible. We wanted students to simply turn devices on, log in and get access to their desktop. It wasn’t about virtualization, it was about the best solution to deliver services to the classroom.”

After evaluating alternative models, the college team chose Citrix and worked with Citrix Gold Solution Advisor Eurotech to deploy Citrix Virtual Apps and Desktops in a hybrid solution across the cloud and on-premises. It deployed a Citrix/Nutanix platform in its two data centres and used Citrix Cloud services to manage the solution. Coleg Gwent also purchased Citrix ADC to provide remote access and load balancing capabilities. With a Wi-Fi upgrade across campuses, the college purchased robust Lenovo netbook devices for students and teachers.

Rapid redeployment to support students during COVID-19
Coleg Gwent was 90% of the way through the rollout, when the coronavirus lockdown was announced in Wales.

“What can we do? That was the big question,” Smith says, “and we quickly realised we already had what was needed to support students and staff to work remotely. Students and staff use Microsoft Office 365.
“Students can access assignments and learning materials through the learning management platform Canvas, so the priority was to enable college staff to be effective so that they could support students who were working from home. With Citrix, we were in a good position from day one.”

The college serves a wide region that includes some economically depressed areas. Students may find it difficult to work effectively from home and it was important that teachers and other staff were available to provide all the support required.

The IT team quickly redeployed its on-campus devices to staff (where necessary), testing a remote solution on critical functions like finance and payroll. Smith and his team ran remote training sessions for staff using Microsoft Teams.

“When the lockdown happened, staff simply logged in from home, accessing their Citrix desktop from a web link,” Smith explains. “Performance was excellent, much better than the VPN solution that we had previously used. We had over 1,000 users working remotely within a few days.

“The critical thing was that staff could be instantly effective,” he continues. “They could concentrate on what they do, supporting students at a difficult time. From a college perspective, that was a big win.”

As the lockdown period continued, the college, along with many other organisations, saw a sharp increase in phishing and other cyberattacks. However, using Citrix Virtual Apps and Desktops gave the college peace of mind. As Smith says, “the big thing is that data never leaves the college network. That means that payroll, for example, can run from an employee’s home as easily and securely as if staff were in the office.

“In fact, we’re more secure now than we would be if we were all on site. With no learners or public on site, there’s less risk of unlocked terminals being accessed, and our remote network traffic all goes through Citrix, which we can monitor with Citrix management and analytics tools.”

Departments that used resource-hungry applications (for example the real estate department’s use of CAD), used a full Citrix virtual desktop with dedicated computing resources.

The ability to have all staff working effectively from home meant that the students could still attend college for necessary practical assessments (such as bricklaying). With few other people onsite, the college could easily meet the social-distancing requirements for having people together on campus.

Making the IT department more effective

“Citrix gives us the ability to manage a large number of devices across college campuses, or working remotely from home, and still be an agile, effective department,” Smith says.

Even during the COVID-19 lockdown period, the team could keep other critical projects running. It has delivered upgrades to the college telephone and email systems and has kept delivery of a new college campus on track.

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Evan Smith
ICT Infrastructure Manager
Coleg Gwent
“Citrix enabled us to respond quickly and relatively easily to the COVID-19 pandemic, so that the college could continue to function and support its students remotely. Now, everybody in the college knows about Citrix. It’s had a very positive response.”

Coleg Gwent has been quick to recognise the efforts of its IT department. At the end of year college awards, the department – more usually unsung heroes – won both the Above and Beyond Award and the special Principal’s Award.

And the team is already looking ahead.

“Citrix helps us to future-proof our teaching,” Smith says. “We can easily adopt new ways of working and learning. We’re also looking at how we can better support students from economically depressed areas, or those who have additional home or work responsibilities. Citrix gives us the tools to respond to different situations and opportunities.”

He concludes, “If we didn’t already have Citrix, we would definitely have had to invest in it to achieve our goals.”