

College improves student access to ICT with Novus installed Learning Platform

The additional investment being made by Central Government in our schools offers a great opportunity for those establishments wishing to provide a rich and varied learning experience.

ICT offers the potential to deliver this goal, helped over the last few years by advances in technology and price reductions. Many schools have now taken advantage of these factors and have achieved high student to computer ratio as well as investing in large numbers of other technology solutions, such as electronic whiteboards.

Beyond this simple measure of ICT penetration, the more forward thinking schools are looking at innovative solutions that expand the use of ICT past the traditional and into areas that improve access for everyone.

Improved facilities

A good case in point is that of Edensor Technology College (ETC), located in Stoke-on-Trent. ETC became a Technology College in 2004, making it the first of its type in the city. Grasping the opportunity that this presented, the school's management and governors were keen to use the new status to improve both facilities and standards.

Richard Pickard, Deputy Headteacher explains:

"We wanted to use the additional funding our new status offered to ensure that we could provide the best ICT facilities to our students. Now our computer resources are the best in the City, boasting interactive whiteboards and projectors in 100% of our classrooms, a growing number of laptops for student use and over 300 networked computers."

This significant investment was only the start of ETC's ambitious plans. They wanted to provide equality of access to ICT resources, but realised that the traditional approach of using personal computers was costly and needed continual reinvestment to keep the functionality and usability up to date.

Viewpoint

"At Edensor Technology College we have made great strides in improving our facilities. Our aim is to prepare our students for the technological expectations of modern industry, to promote achievement, the desire for a higher education and a thirst for success. To help achieve this we are using a Novus installed Learning Platform to significantly expand the school day well beyond normal opening hours. This enables students at home to access their files and relevant software applications at any time of day or night."

Richard Pickard, Deputy Headteacher Edensor Technology College.



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Case Study

Multi Level Benefits

Edensor Technology College realised that to achieve their aims they would need to look at alternatives to the traditional approach and quickly surmised that a Thin Client based Learning Platform was the way forward.

The platform would deliver the secure and fast access to applications and data that ETC wanted to provide for its pupils, but at a much lower cost than traditional methods. Importantly, it would do this without compromising security or manageability and would also offer:

- Easier management of systems
- Improved reliability of information
- Increased security of information
- Dramatically lower IT costs

The Learning Platform includes hardware, services and software that work with both thin-clients and PCs, as well as wireless devices and other systems.

High performance and cost effective solution

Early in 2006, ETC issued a tender for a 100 user thin-client solution and after a rigorous evaluation process, chose Cheshire based Novus Networks to implement the solution. Novus has many years experience of delivering application delivery solutions, based on thin-client computing, that provide real benefits.

They based their Learning Platform solution on the award winning Citrix Presentation Server technology. The Learning Platform makes it easy to give all users across the school, including those based locally and remotely, fast, simple and secure access to all the applications and data they require.

With its centralised management model, the Learning Platform enables the implementation and deployment of applications much more quickly than if they had to be installed and configured on each computer. It offers:

Best performance - high-performance access to full application functionality, even over Web and wireless connections

Strong security - applications and data are kept on the server behind the firewall, instead of exposed on the desktop. The small amount of data travelling between server and client is encrypted

Flexible Access – in an emergency, Presentation Server makes it easy for users at home, or in a temporary location, to connect via the Web to a backup server and access the applications they need to continue working.

Lowest cost - IT staff can centrally manage applications, support and train remote users and monitor and report on the entire system

To deliver the solution within the school, Novus installed 30 thin-clients and Citrix Access Gateway for secure remote access. Richard Pickard commented on the reasons behind this solution:

“The Citrix element of the Learning Platform gave us flexibility of access. The 100 user Citrix licence was a much more cost-effective way of providing concurrent access to our applications than had previously been the case. Importantly, it also allowed us to open up our network to 24 hour access.

The Learning Platform thin-client devices were also an important part of the overall strategy, as not only are they cheaper to purchase than the standard PC's they replaced, but they will last in excess of five years without any loss in performance.”

Improving student access to ICT resources

When staff were made aware that they could securely access applications and data from home via the school's Web site, they were soon taking advantage of this in the evening. This information was then shared with students and soon over 50 users were regularly logging on every evening.

Now that students could log in from home, via a Broadband Internet connection, they could easily and quickly access their secure user space and all saved work. This allowed them to use any programme that was installed on the school network to complete their homework, without needing to purchase it for home use.

With the platform in place and proving to be popular with both staff and students, ETC management decided to move onto the next phase to use it to improve access for all students, not just those that already had a PC and Broadband connection at home.

Richard Pickard explained:

“We had carried out a survey and discovered that 49% of our students had a computer at home and Broadband Internet access. This meant that although half of our students could take advantage of the platform we had invested in – half couldn't. We wanted to be in a position where every student could access our network from home, regardless of financial circumstances.

As a result, we successfully bid for funding from Advantage West Midlands via the North Staffordshire Regeneration Zone and obtained £57,000 to provide thin-client computers directly into student homes. ETC would provide the infrastructure while the parents would need to provide the Broadband connection.”

This funding was sufficient to provide thin-client devices to 100 households of year 7 students and was implemented at the end of 2006.

Integrated portal

Following on from the success of this project, a further grant was obtained for £190,000 that will enable the remaining year groups to be covered. To support the increased number of users that would want to utilise the network, Novus carried out an upgrade to the existing Citrix infrastructure.

They reconfigured the setup and installed a Citrix platform capable of supporting up to 700 concurrent users. The server farm is maintained on Blade servers that provide easier management and lower costs than traditional servers.

Novus are now working closely on the next phase of the project that will involve integrating application delivery into Microsoft SharePoint 2007 to offer users a portal to gain access to all their data, applications and other content. This will include the innovative VLE developed by ETC called “What's It”.

Richard Pickard concluded:

“The new integrated portal will enable us to make homework solely accessible via the L: drive – so there will be no excuses for it not being handed in!”

The development of this infrastructure within ETC has generated a tremendous amount of interest, particularly from other schools in the area. As a result, Novus are now working with 7 other secondary schools in the Stoke-on-Trent area that are well on their way to securing similar funding.

The Government initiative “Computers for Pupils” will provide significant funding, across the country, to give equality of access for those who can least afford it. The Learning Platform is an ideal way for schools to provide a low-cost solution that will give students access to a computer at home and achieve this goal.