

IBM connects Dumfries and Galloway schools to the National Grid for Learning

Overview

■ **The Challenge**

Meet the Government's target to connect every secondary school in the Dumfries and Galloway region to the National Grid for Learning by 2002 – increasing access to ICT and improving the learning experience for students

■ **The Solution**

A 'Managed Service' from IBM to implement a complete ICT infrastructure with network connectivity at each school in the area

■ **The Benefit**

Increased access to PCs and the Internet has greatly improved the students' ICT skills, while staff are better equipped to help their classes engage in learning and collaboration.

The National Grid for Learning (NGfL)

In 1999, the Government launched NGfL, a strategy to improve educational standards and streamline the underlying administration. The initiative involved the adoption of 'Managed Services' to develop the use of information and communication technology (ICT) in the UK's 32,000 schools. The Government's target was to connect all schools to the National Grid for Learning by 2002.

This target included the Dumfries and Galloway region in southwest Scotland – a relatively rural area comprising 16 secondary schools and one education centre. IBM provided a NGfL

Managed Service, which helped the Dumfries and Galloway region to meet the Government's objective as early as September 2001.

IBM NGfL Managed Service

IBM provided Dumfries and Galloway with the following Managed Service components to create a network infrastructure that is robust, reliable, flexible and secure:

- *A separate Local Area Network (LAN) for each of the 17 institutions – built using IBM Netfinity® servers*
- *DELL workstations loaded with Windows 98*
- *Every school was floodwired and provided with network points*
- *Access to the Internet from all workstations in the network*
- *Servicing and Technical Support – 3 year warranty*
- *IBM training courses in network operation and administration – at each school.*

IBM Managed Services provided staff and students with a previously unavailable facility – Internet and e-mail in every teaching area

— John Tait, Dumfries and Galloway
Education Officer

John Tait, Dumfries and Galloway Education Officer, has been involved in implementing the NGfL since 1999. John states that 'IBM Managed Services provided staff and students with a previously unavailable facility – Internet and e-mail in every teaching area.' This was the first of three targets set by the Scottish Executive.

The Executive's second objective was to increase access to PCs – the target set was a ratio of 1 machine for every 5 students, and all machines must be less than 4 years old. This meant a 100 percent increase in PCs for the region's secondary schools. To meet the Executive's requirements, IBM delivered 1000 DELL PCs – raising the total number to 2000.

And IBM supports all the machine images, including the legacy PCs, which means the old machines could quickly be brought up-to-date.

The third target to be met was an overall increase in network connectivity.

IBM provides a single point of contact for all aspects of the ICT service provided

— John Tait, Dumfries and Galloway Education Officer

A Single Point of Contact

According to John, 'Dumfries and Galloway Council selected IBM Managed Services because it provided a one-stop shop.' Otherwise, responsibility for the running of the schools ICT networks could be diffuse and problematic. For example, what if there was a problem causing the network to slow down? The wiring may have been installed by one company, and the workstations by another; the software could be from a third source, while technical support may be the responsibility of a fourth provider. 'In such a scenario it can be difficult (or impossible) to pin down the person who needs to resolve the issue,' says John. 'But IBM provides a single point of contact for all aspects of the ICT service provided.'

What's more, it is easier to forecast costs. John explains that 'a Managed Service improves budgeting because it is purchased as a whole solution rather than financing item by item and struggling to integrate different elements.' What's more, payment for the service is agreed at the outset.

In addition, to ensure the Managed Service runs glitch-free, IBM assigned a Project Manager, (Steve Bogan) to oversee the connection of the region to the the NGfL. Steven supervised the cabling and installations of the LANs and PCs for the entire region. And after implementation was complete he remained the Project Manager – the first point of contact for any non-repair issues. Steven also attended monthly meetings to discuss the course of the project and to plan future stages.

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— John Tait, Dumfries and Galloway Education Officer

Students who are not usually exposed to computers are enjoying using the new technology, and brushing up on the IT basics. And with sufficient access and support, teachers are better equipped to help their students to engage in learning.

Increasing IT skills

The £1.9 million contract for IBM to provide a Managed Service for Dumfries and Galloway Council was signed in March 2000, and the installation began in April. At that point only a few of the schools had any form of networking installed, but by July the installation was nearly complete and all schools had a full network infrastructure in place.

'Obviously the improved ICT infrastructure is great for students in IT-related classes such as business studies, computing, and craft design and technology (CDT), but the use of ICT has also been extended to deliver other areas of the curriculum with excellent results' says John.

Students who are not usually exposed to computers are enjoying using the new technology, and brushing up on the IT basics. Increased access to PCs and the Internet also gives students the opportunity to collaborate and communicate with diverse groups of fellow learners. And with sufficient access and support, teachers are better equipped to help their students to engage in learning using ICT.

There has also been a marked increase in collaboration between the area's schools – working together and using the new technology to share information, resources and local expertise.

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The Future

To further improve communication and collaboration between the secondary schools in the area, Dumfries and Galloway Council are currently building an educational Website. This will enable schools to share resources faster and stay up to date on educational developments in the region.

'And in the long term we'd like to implement a WAN (Wide Area Network) – all the schools in the area on one network, with admin carried out centrally to relieve pressure.' says John.



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