

CISCO IP COMMUNICATIONS MAKES TEACHING AND LEARNING RICHER AT VENERABLE BEDE SECONDARY SCHOOL

The use of Cisco IP network and telephony technology at the newly formed Venerable Bede Secondary School has eased the burden of administration for teachers and made education richer and more interesting for students.

Cisco is the market leader

The Venerable Bede School in Sunderland, North East England, is a Church of England school and is jointly funded by the Church and the Local Education Authority. Open in 2002, the school serves male and female students. Currently there are 600 students and 60 staff. This is will rise to 800 by September 2005 and 1000 in the following year.



At Venerable Bede the aim was to make technology as simple as possible for the teachers and students and to ensure it supports learning. The school particularly wanted to utilise IP Communications applications such as IP telephony (IPT) and video on demand to help improve education. "Cisco is really the only vendor that has got IPT right. We looked at other manufacturers, but they just weren't as good or reliable as Cisco. Our main aim was to ensure that everything we did was as simple as possible for the teachers, so we needed a solution that performed well, but one that was stable and reliable and Cisco is the market leader," says Andrew Common, network manager, Venerable Bede School.

EXECUTIVE SUMMARY

CUSTOMER NAME

- The Venerable Bede Church of England (Aided) Secondary School

INDUSTRY

- Education

BUSINESS CHALLENGE

- Help teachers focus on teaching and education, not administration
- Improve and enhance the learning experience for students
- Make technology simple and easy to use

NETWORK SOLUTION

- Cisco IP converged voice, video and data network supporting IP Communications applications (IP telephony, voice mail), live IP TV and video-on-demand.

BUSINESS VALUE

- Makes teaching and learning richer and more interesting for teachers and students
- Provides classrooms with instant access to teaching material
- Reduces burden of administration on teachers
- Improves communication between student, teachers and the school

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Cisco underpins education and administration

The converged voice, video and data network backbone at Venerable Bede is based upon Cisco technology. It supports over 400 PCs - expected to reach 600 by 2006. Most teaching departments have a computer suite of 30 PCs; classrooms have up to six PCs and an interactive white board linked to the network. Currently, teachers have laptops, but the school will create a pool of laptops for students, particularly for those who might not have access to a PC at home. By September 2005, the school will develop remote access to the school network so that staff and students can send work to and from home.

The network supports the school's management application for information like student records, timetables and contact information. Everyone at the school, including students, has their own login area for emails and storing files. CallManager provides the IPT solution with over 100 Cisco IP handsets in total with two handsets in each classroom. Voice mail is provided by Cisco Unity.

Cisco's education business partner, SkyNet Systems, designed, installed and provides on-going support for the Cisco IP Communications solution at Venerable Bede. Cisco wireless technology will be deployed across the school shortly.

Simpler to access teaching and learning material

"The purpose of technology at Venerable Bede is to make teaching and learning effective and this is what the Cisco solution is helping us do," says Common. "From providing a stable network environment to enabling staff to do their job more effectively, Cisco technology ensures that teachers and students have the materials and information they need to teach and learn at their fingertips."

The school uses a lot of multimedia in the classroom and one of the key application for the network is video. The school is building a video library of educational videos and aims to have over 500 titles covering all curriculum subjects. These can be accessed via an intranet from anywhere in the school and broadcast to PCs or onto the interactive white boards. Usually, a TV and teaching videos were wheeled into classrooms and if a video is being used by one class no one else can use it. Now, live broadcast TV and video-on-demand can be streamed to every PC and white board simultaneously. "The speed and ease of access to video content that Cisco provides has made such a difference to using teaching videos," says Common.

The Cisco network has also made administration a lot simpler for teachers. There are forms for everything that happens in a school such as reports or

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Network Manager
The Venerable Bede School

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punishment forms. Teachers can access these from any PC, at any time and more storage hardware. Because of the silo structure in the former system, it had been impossible for one department to share storage capacity with another then send to the appropriate person immediately. Normally, these would be paper forms held in the staff room or office, which teachers would have to get, fill in and then place in a pigeon hole.

Turns learning into fun

Cisco technology is also helping the students learn more effectively. Common says, "Today, kids are into IT and with Cisco we've been able to bring IT into teaching so that they don't see learning as work, but rather as fun. For example, we have interactive programmes that integrate teaching with games like football so the students can play and learn at the same time."

If students are studying World War I, they can access traditional text information, but augment this with video clips, audio recordings and interactive maps to make the subject interesting and provide a greater understanding of the issues.

Another way that technology improves learning is an online science application, using the Cisco network, where students set up experiments by clicking and selecting the components - Bunsen burner, heating flask and chemicals - on a PC or via the interactive white board. Not only is this safer for the students, it also reduces the cost of buying expensive equipment. The interactive white boards are used like traditional blackboards during a lesson. However, notes or information on the boards can be recorded and saved as files which the students can access, for instance, when they are doing their homework.

One way in which the school plans to integrate the Cisco IP Communications technology with other systems is to replace the traditional morning paper register. The IP handsets will be linked to the school's management application which has details of every student. When a teacher logs onto the handset on their desk each morning, their class list is displayed on the IP phone screen. By default each student is present so that the teacher only needs to register those who are absent or late by selecting options on the IP phone screen. This information is fed back to the management system automatically, so that parents can be alerted and attendance monitored.

The Cisco IP Communications solution also makes teachers much more accessible. Because of Cisco's extension portability, every teacher has their own personal extension number. The Cisco extension mobility application allows teachers to log onto any IP phone in the school so they can be contacted wherever they happen to be teaching.

There are a series of plasma screens around the school - linked to the Cisco network - which display morning notices and when staff and students log on to network, they have an interactive desktop which also displays daily notices and links to other information.



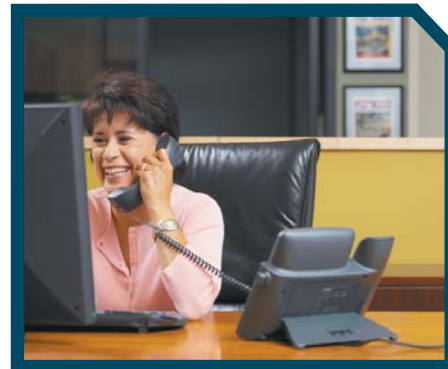
Cisco helps change learning from work to fun

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The school is using the Cisco network to pool together information, teaching material and teaching experience into an intranet so that best practice can be shared across departments. This means teachers do not need to reproduce the same or similar forms or lesson plans and teaching innovation by one teacher or department can be shared with others.

Venerable Bede is using the Cisco technology for some more advanced applications. It is testing an iris scanning system for school meals. The system scans each student or member staff and their meal is deducted from their account with the school. The system not only removes the need to carry money, it also reduces embarrassment for those students whose meals are subsidised. Students allergic to certain foods can be prevented from given the food inadvertently because the information is included in the personal account. The school has already deployed a finger-pint scanning system for taking out library books and a music library system using a touch screen display to access and sample music.

"Today, teachers simply don't have time to go back and forth to the staffroom or fill in paper-based forms. The capability of Cisco technology to bring information to teachers where they need it instantly and provide an infrastructure that takes away a lot of time-consuming administration is a huge benefit which teachers really appreciate," says Common.



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