

Overview

Organisation: Dunshaughlin Community College

Country/Region: Ireland

Industry: Second level and adult education

Customer Profile

Dunshaughlin Community College is a 1,000 pupil school with 77 teachers in Co Meath. It offers the full range of Leaving Certificate programmes to its pupils as well as a selection of adult education classes to the wider community.

Business Situation

Dunshaughlin Community College wanted to implement leading edge education-based technologies to enable it to make best use of its resources. This is in line with the school's mission statement - Putting Vision into Practice.

Solution Description

The school has received a range of supports from Microsoft including the right to install and use numerous software products. Its network is based around the Microsoft Windows Server family of products which enables Dunshaughlin to provide a range of innovative information services that have streamlined the running of the school for all partners; staff, students and parents. The software and services have been provided free of charge under Microsoft Ireland's Partner Schools Programme.

Benefits

- More effective teaching and learning
- Improved collaboration between all partners including staff, parents and pupils
- Streamlining of administration tasks in line with best practice
- Better application of resources e.g. reduced use of printing and photocopying
- Improved staff collaboration in development and sharing of teaching and learning resources

Microsoft Software

Microsoft Windows Server 2003
Microsoft Exchange Server 2003
Microsoft SharePoint Portal Server
Microsoft Class Server

Dunshaughlin Community School provides a vision for the school of the future

Dunshaughlin Community School has wholeheartedly embraced the use of technology through Microsoft's Partners in Learning (PiL) programme (www.microsoft.com/ireland/education).

The use of software from other vendors in tandem with the Microsoft platform has made the delivery of education more efficient and allows teachers to be more effective in all their school roles. It has established portals, accessible from inside and outside the school over the Internet, to improve collaboration between parents, teachers and pupils.

Every classroom in the 1,000 pupil school is equipped with at least one PC and a data projector and the teachers have embraced the technology in numerous creative ways. In total the school has over 200 PCs connected to the network, wireless connectivity through the school, and three dedicated computer rooms as well as a work room for teachers. The college shares the services of a full-time technician with two other schools to support its infrastructure. Every student and member of staff has a unique email address and students get access to PCs at least once a week. In addition 97 per cent of first year students have a PC at home.

“Our use of Microsoft Windows Server 2003 and related technologies makes all of this possible. We are pursuing excellence in the use of this technology in a school environment to improve administration and enhance the learning experience.”

”This whole project is about applying technologies and finding what’s best practice in their use. Each teacher writes an evaluation of their use of technology - what has worked best and what has not worked - and using SharePoint they can share this experience with other teachers.”

Seamus Ryan
Principal
Dunshaughlin Community College

Enhanced teaching & learning

The first thing a teacher does at the start of the day is access their email – any issues relating to student welfare such as a student winning a prize, bereavement of a relative etc. are notified to teachers through this medium.

The attendance roll is called morning and evening on the PC by accessing the attendance feature of a specialised school management package called Facility. Through this system teachers have access to all student details, attendance records, timetables, school reports, conduct records and state exam results.

Dunshaughlin has also implemented Microsoft Class Server, one element of the Learning Gateway suite. This student portal allows teachers to provide class notes, tests and additional learning materials over the internet. Students can return work via the portal and certain types of tests can be corrected automatically and results available to students in seconds.

One of the major advantages of Class Server is that personalized content can be provided to each pupil. As a result work can be tailored according to the capabilities of the student, without their classmates being aware of it. This is particularly revolutionary for weaker students who don’t have to feel stigmatized that they are getting special attention from the teacher. Students have responded well to the use of Class Server – they like the idea of doing their work online and once they have completed the work they don’t have to worry about losing it or remembering to bring it in to school. In time it could help alleviate the problem of heavy school bags.

Parents are also able to access a portal populated with information pulled from Facility to see how their children are faring.

Timetables, attendance, school calendar, reports and exam results can all be accessed by parents who have access to an Internet connection. In a bid to provide access for more parents and students outside school, the college has teamed up with Smart Telecom to provide free broadband to all pupils living in the area. This is provided via wireless technology from a base station antenna located at the school. In addition thanks to Dunshughlin’s Campus Agreement with Microsoft, copies of Microsoft Office are made available to students to install on their home PCs. This ensures a parity of software between the home and school environment.

Class Server has also been applied to the way that Physical Education is delivered in the school. The new PE curriculum means that in addition to taking physical activity students have to learn theory about things like diet, nutrition and personal health. By using Class Server the PE teacher can assign learning materials and work sheets to the students in advance of the class which they can work through on their own. As a result time is not lost during the actual class which could be spent doing physical activity.

The use of SharePoint has also reduced the need for printing and photocopying materials in all subject areas. Teachers can make class notes and handouts available online which can be downloaded to a PC from anywhere in the school using the wireless network.

Staff can collaborate in the preparation of subject plans, teaching resources, exam questions and answers etc., using SharePoint. When created these resources can be shared and stored for later re-use in SharePoint. Each subject has its own area on the network which can be accessed from the classroom.

A number of the maths teachers in the schools are also integrating the use of Tablet PCs in their lessons. Tablet PCs are similar to a laptop but have a screen which you can write on directly. When used in conjunction with a data projector it is the same as writing on the board. The teacher is able to maintain eye contact with the pupils while writing mathematical formulae on the Tablet PC which in turn can be projected onto a screen for all students to see. If there are any questions at the end of the class a previous screen can quickly be pulled back up for discussion.

Laptops with wireless connections are also being used innovatively for the completion of course work for both the Leaving Certificate Vocational and Applied programme. Some students are using Tablet PCs and Microsoft One Note, which allows text to be input on-screen using a stylus in the students own handwriting, to complete course work.

Reducing cost and increasing efficiency

All 77 teachers in the school have embraced the use of technology and are making use of it in a variety of ways. They can now prepare lessons at home or in the dedicated work room and save the content to their own online folder from where it can be accessed in any classroom. All teachers have received IC3 (Internet and Computing Core Certification) training as well as specific training on the use of PowerPoint and other relevant software to deliver content in class. Many teachers are also enrolled in the Microsoft Innovative Teachers Programme (www.microsoft.com/ireland/education or www.teachnet.ie). Currently the emphasis is on different subject departments delivering training specific to the needs of their teachers and that subject.

Rather than having printers located at various locations around the school, all PCs can access a central networked printer at a shared services

hub in the school. As all students and teachers have an account through Active Directory it is possible to track who is printing what. Each student is given a certain amount of credit at the beginning of each year and once they have exhausted this they can purchase additional credit. Principal Seamus Ryan estimates that two years ago the school printed about one million pages during the academic year – by using centralised printing, supported by the deployment of Active Directory, he believes he can reduce this by between 30-40 percent

Developing the school community through digital communications

According to Principal Seamus Ryan it is a challenge in a 1,000 pupil school with 96 staff to create a sense of community around the core values of the school.

“In our experience this technology can help in that regard,” says Ryan. “Students and teachers with similar interests can interact and collaborate in new and innovative ways, both in school and at home, and thus enhance the total school experience.”

Dunshaughlin’s website (www.duncc.ie) is the public face of its own internal portals which are designed to improve the flow of information between students, teachers and parents. The content on the website and portals is overseen by a team of 16 teachers who ensure that new features and content are added on an ongoing basis.

All students and teachers have their own unique email address and they can access their mail remotely using a web mail feature on the site. Because of Dunshaughlin Community School’s use of the Microsoft .Net platform it is possible to see what other students and teachers are logged on at any time and then to communicate with them using instant messaging or email.

For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234 in the United States or (905) 568-9641 in Canada. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to:

www.microsoft.com

For more information about About Dunshaughlin Community College visit:

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Future Plans

The new school term has seen Dunshaughlin Community School further develop the possibilities of another Microsoft product –SharePoint Portal Server. Collaborative workspaces are being created for each subject area where teachers and pupils will be able to interact and share information according to their user rights defined in Active Directory. It will become a repository for a wide range of educational materials such as useful links, shared documents, past papers, exam solutions and general announcements. Whenever any additional content is added to the portal the members of that group are automatically informed via email.

Administrative and policy groups within the school will also use it to share documents and the subject based groups will also be opened up to teachers in other VECs in the county. As a European School which provides teaching on European curricula for the children of European Commission staff, SharePoint is proving invaluable in supporting the college's distance learning initiatives.

As Seamus Ryan puts it: "Teachers don't have to re-invent the wheel every year with this technology. They will be able to collaborate, share ideas more efficiently and re-use teaching resources – as a result they will be able to work smarter not harder." Looking further to the future the school would hope to introduce electronic textbooks that students would be able to access through Class Server. This would deliver a range of benefits, not least that more students would cycle and walk to school because they would no longer have to bring heavy schoolbags with them.

Microsoft Windows Server System

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Software and Services

• Products

- Microsoft Exchange 5.5 Server
- Microsoft Exchange Server 2003
- Microsoft Systems Management Server 2.0

- Microsoft Windows NT Server 4.0
- Microsoft Windows Server 2003 Enterprise Edition

• Technologies

- Microsoft Active Directory

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