

# CASE STUDY ST MARY'S CHURCH OF ENGLAND ACADEMY - MILDENHALL



### **Summary**

St Mary's Academy is a Church of England primary School located in Mildenhall, Suffolk. It has around 420 pupils ranging between 4-11 years in age. The Academy has undergone major redevelopment in order to support more pupils and a new learning zone, comprising state of the art teaching equipment and several new play areas, which were opened in October 2011. The redevelopment project also involved building 2 new ICT suites, one for general purpose use and another to provide key stage 2 pupils with special research facilities to support their learning. Both suites were officially opened in June 2012.

#### The Issues

Primary Schools have historically received less funding than their secondary counterparts and this has particularly affected the provision of ICT.

Until recently St Mary's School was under pressure to achieve Government's ICT targets using insufficient and outdated equipment. Individual computers were taking 5-10 minutes to boot up at the start of a lesson. In addition they were not compatible with the latest teaching materials such as the interactive games and videos that are available on the Internet. Such issues were presenting teaching staff with numerous challenges including; latency problems, incompatibility of software, PCs operating at different speeds and problems maintaining the equipment. The School's ICT network was also slow and out of date and there was no reliable backup strategy in place.

Suffolk County Council are in the process of introducing measures to move from a 3-tier to a 2-tier system as part of an attempt to improve results. There has also been a drive to reduce costs and School budgets have been cut. St Mary's Academy is one of many Schools to be affected by this and has had to significantly increase its overall pupil-intake and consequently its ICT capacity and provide the updated facilities on a very limited budget.

## **The Opportunity**

As part of the Council's restructuring programme, St Mary's Academy was given funding to extend the School's premises. The project involved building a new learning zone for year 5 and 6 age groups, redeveloping the playground and extending its ICT facilities to support more users.

Colin Holmes, the School's ICT Manager, began investigating the possibility of running a virtualized network because of the cost savings involved, simplified management and the rapid deployment of the latest technologies, He explained:

"Schools have niche requirements compared to commercial organisations in terms of large numbers of users all logging onto the system at the same time. The time to-teach criteria (i.e. from switching on to being ready for use) must be completed in a few seconds in order to prevent children from going off-task and to maximise lesson time."—Colin Holmes, ICT Manager, St Mary's Academy



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Colin Holmes compiled a detailed tender document that defined the School's exact requirements and specific criteria that had to be met. The Academy wanted a 'Green' solution as well as equipment to support their vision for ICT. This included the requirement for the terminals to be low power-consumption devices while still being able to deliver streamed video and handle graphics like conventional PCs. The monitors also had to withstand the rigours of primary education with 'hard glass' TFT screens. With this specification he approached three major virtualization providers, Citrix, Ericom and NComputing and the latter was selected as the preferred supplier.

NComputing put the School in contact with its premier partner, breathe technology, who prepared a comprehensive and cost-effective proposal for the installation project, demonstrating the equipment with the client's software, streaming movies to the terminal and the provision of specialist hard glass monitors along with a comprehensive support package.

#### **Challenges**

In order to ensure the virtualisation worked efficiently, a reliable high speed network and a robust network infrastructure was required. Breathe technology overhauled the School's ICT network and updated a number of switches to ensure the network was capable of supporting large numbers of users as well as providing fast connections to the Internet to facilitate live video streaming.

#### The Project

- Designing, commissioning, installing and testing a new virtualization system
- Installing new virtualization servers
- Assisting with building the School domain security and storage systems.
- Installing and commissioning two new ICT suites
- Updating and improving existing network infrastructure to enable PCs to operate at 1GB.
- Implementing dynamic real time back up facilities using SonicWall technology

The ability to support graphics and streaming video was an important factor to the School and, to date, NComputing is the only vendor that provides built-in graphic capabilities as standard. Breathe carried out a number of live video streaming tests in an OWL environment to make sure that there were no streaming or latency-related issues and the School was satisfied with the results.

## **Development of VClient**

St Mary's Academy had a large number of legacy machines it wanted to redeploy in order to maximise its overall return on investment.

Breathe technology has enabled the School to redeploy a number of older HP desktop devices by working in partnership with NComputing to implement its innovative VClient software, technology that enables Schools to bring outdated equipment into a modern ICT environment cost effectively. St Mary's Academy has been trialling this new software on behalf of the vendor and it is NComputing's first VClient installation in the UK. The School has purchased 30 licenses to date.

#### **Managed Services Facilities**

By implementing a managed service contract for maintenance and support, the School is able make optimal use of its limited ICT funding. In addition Colin Holmes and the School management team



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have the assurance that all maintenance and support requirements are covered under the managed service contract and that there are no hidden costs.

Other benefits of the solution include:

- Improved security
- Improved management of IT resources
- Automated backup facilities giving the assurance that valuable data is not lost
- Achieving government sustainability targets

## **Future opportunities**

In the future St Mary's Academy is planning to implement an offsite backup facility in conjunction with another local primary School to further optimise its ICT investment. It is also planning to extend the VClient project by redeploying old laptops in order bring them into a modern ICT environment.

#### **Client testimonial**

"I am very impressed with breathe technology's in-depth understanding of ICT in relation to an academic environment. Schools have different requirements to commercial organisations and their technicians were keen to install a system that operated in the way the School wanted. As Schools tend to be a little rough on ICT I needed to make sure we installed specialist hard glass monitors from the start because of their life expectancy, Breathe researched the different options and were able to satisfy our requirements and supply and install the equipment at a reasonable price.

Their support department is very proactive and always respond to my queries quickly. If they cannot resolve an issue straight away they come back with realistic timescales that they are always able to achieve". Colin Holmes, ICT Manager, St Mary's Academy

#### **About Breathe Technology**

Breathe technology is a successful systems integrator that has been designing, installing and commissioning highly resilient, purpose-built ICT networks for public and private sector organisations since 2003. They also provide an extensive range of managed services, enabling Schools and colleges to effectively manage their ICT resource and assets.