

# Case Study

Industry: Education

## Jeff Joseph Technology College

Project: Award-winning wireless technology

Major challenge: Campus-wide network



### The award.

Black Box Network Services and the Jeff Joseph Technology College won the U.K.'s prestigious Network Industry Award 2002 in the Most Innovative Use of Technology category.

### The plan.

The Jeff Joseph Technology College in Sale, Manchester, England has the enviable reputation as a leader with its innovative use of new technologies in education. The college wanted to install a networking system, but since computer terminal access points and space were at a premium, the college was looking for alternative ways to optimize computer space and resources. Wireless technology proved to be the ideal solution.

The college decided to design and build a wireless LAN in two phases. The first phase provides free-roaming, secure access for teachers and pupils using laptops and PDAs. A wireless network gives users a greater choice about where they work and study. It also maintains secure access while providing this freedom and flexibility.

The second phase of the project is to extend the network beyond the college to become a Wireless Internet Service Provider (WISP), providing Internet access and learning resources for the local community.

### Project details.

Black Box Network Services was invited by the college to conduct a site visit and feasibility study for the project.

Black Box also worked closely with the college to determine the number and optimum locations of the wireless devices required. To provide full wireless access across the entire school campus, Black Box Network Services installed 41 wireless access points.

Security is not an issue as the wireless network is covered by using specific access protocols and firewalls to prevent unwanted intrusion. Hacking into the network is impossible, thanks to a technique called frequency hopping. This ensures that the network is robust and resistant to interference.

### The components.

Black Box Network Services provided:

- Consultation and regular site visits
- Technical expertise and advice
- System design and installation
- Post-installation support
- Planning and design services for the WISP service.

*"Winning this award with Black Box is very exciting for us. It is a real demonstration of the determination shown by the college to make the best possible use of extraordinary technologies that only a few years ago, we could not even have imagined. We hope what we have learned from the wireless projects will be used as a blueprint for others to follow."*

*David Walmsley, Headmaster, Jeff Joseph Technology College, England*



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