



Cisco Collaboration Architecture helps Bucks New University create new ways to learn, teach, and grow.

EXECUTIVE SUMMARY

Customer Name: Buckinghamshire New University

Industry: Higher Education

Location: UK

Number of employees: 600 staff and 9000 students

Challenge

- Deliver cohesive, information and communications (ICT)-enabled vision for improving academic excellence and introducing new ways of learning

Solution

- Cisco Collaboration Architecture, enabling anytime, anywhere access to people, tools, and information
- Cisco voice and Unified Communications applications, introducing new voice, mobility, interactive conferencing, and multimedia capabilities

Results

- Building services around learners, and unburdening lecturers to teach
- Enriching education, and making it more accessible to increasingly mobile students
- Saving time, cost, and energy to reinvest at the front line

Challenge

Universities in England are used to doing more with less. Under the Browne Review¹, they are having to come to terms with funding reforms on a large scale. These wide-ranging changes propose a shift in England's higher education system, away from one largely funded by the taxpayer to one that is mainly financed privately by graduates from their future earnings. The move is expected to present universities with a new set of balance sheet challenges, as budget cuts and fee increases put pressure on demand for courses, and academic results and student relationships take on even greater importance.

One forward-thinking institution is in good shape to make this transition, having decided several years ago to develop a cohesive, technology-enabled vision and lay the foundations for a radical new business model.

"It's no longer simply about gaining incremental economies of scale, or trimming out bits of inefficiency and waste," says Trevor Nicholls, pro vice chancellor at Buckinghamshire New University. "Most universities have been doing that for sometime. What we're talking about here is completely rethinking and transforming the way education is delivered in the future."

Buckinghamshire New University (BNU) is home to 600 staff and 9000 students, of whom two-thirds are over the age of 21. Its academic structure is built around two faculties: Design, Media and Management; and Society and Health. These faculties are subdivided into a number of different schools.

BNU set out to improve student experience and support, while sharpening its competitive edge through the early adoption of IT best practice and industry-leading solutions. Top priorities included finding new ways to tighten cost control and grow income from international recruitment, research activities, and commercial partnerships. As well as making better use of educational resources, the university also wanted to address other campus-wide issues, such as space management, carbon reduction, and safety and security.

This multifaceted strategy was underpinned by one common theme: creating a highly connected and collaborative environment that would enrich teaching and learning.



¹. Also known as the [Independent Review of Higher Education Funding and Student Finance](#)

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Trevor Nicholls
Pro Vice Chancellor
Buckinghamshire New University

Solution

To help realize its vision, BNU chose a solution based on the [Cisco® Collaboration Architecture](#). Building on the existing Cisco Borderless Network Architecture (routing, switching, and security components), this approach allowed BNU to develop an investment plan that helped ensure interoperability with its campus network and existing assets, while introducing new capabilities for providing:

- Highly secure and reliable access to people, information, and tools anytime, anyplace
- Consistent user experience on any device
- Delivery of any content type: video, voice, and data for immersive interaction

As part of an 18-month project, the university implemented the Cisco architecture and consolidated from three to two campuses: High Wycombe – a set of eight buildings that make up the main campus, halls of residence, and student village; and Uxbridge – a brand new site, which includes seminar rooms, research and skills labs, and a learning resource centre.

“Using Cisco’s architectural approach, we’ve effectively created classrooms without walls by embedding mobility services and collaborative applications deep into the campus fabric,” says Jamie Bateman, head of IT, Buckinghamshire New University.

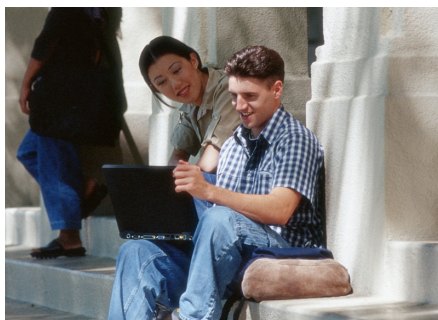
The introduction of a Cisco wireless infrastructure has provided faculty staff and students, whether they are at High Wycombe or Uxbridge, with a single platform from which they can instantly access information and learning tools. The solution, comprising centrally managed Cisco wireless controllers and over 180 wireless access points, provides a highly consistent and secure roaming experience.

Building on this wireless foundation, BNU has created new opportunities to collaborate with a suite of integrated [Cisco Collaboration applications](#).

In the past, isolated private branch exchange (PBX) systems made it difficult to transfer calls, or to leave messages between campuses. Now one unified system allows staff to manage all their communications from one screen. Even voicemails left on a person’s Cisco IP phone are automatically forwarded as an email to his or her PC. The result is faster response times to student or staff enquiries.

As calls between the two sites travel across the campus network, rather than the public switched telephone network, BNU also saves significant money on its telephone bill. Using Cisco Contact Center Express, the system has also been designed to help manage internal IT help desk enquiries and calls from the outside world. This is particularly challenging during the seasonal peaks. For BNU, like most universities, these peaks tend to coincide with enrolment programmes that generate over 25,000 calls every year from new students. “We have all the functionality of a contact centre without any of the overheads, says Bateman. “We can use skills-based routing to streamline enquiries, or push a few buttons on our Cisco IP phones, look up contact details in the corporate directory, and simply transfer calls.”

Injecting rich, interactive multimedia into campus life is another important part of this holistic IT approach. Challenged by physical space limitations at the Uxbridge site, BNU implemented [Cisco WebEx™](#), initially as an alternative to face-to-face lectures. The web-conferencing solution allows students and lecturers to join meetings from any computer with an Internet connection, as well as from most smart phones. Calls are free for participants, whether they phone in, or choose the callback option. Core material previously delivered in lectures is recorded in the meeting room. Students are then able to access this at a time and place convenient to them.



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Jamie Bateman
Head of IT
Buckinghamshire New University



To help extend video everywhere, the university also invested in the [Cisco Digital Media Suite](#) (DMS). The webcasting and video-sharing application is enabling the integration of Bucks TV, a YouTube-style TV channel, with the University’s new website. Linking to 15 plasma screens, the system can also be used to showcase student video projects, deliver targeted content for new arrivals, and display emergency information updates to assist with incident management.

Results

Although High Wycombe and Uxbridge may be 21 miles apart, these physical barriers of distance and time have been replaced by one unified platform for connected learning.

Students have greater flexibility and control over their own studies. It is easier for them to get online to upload and download information and materials, or share problems and learning outcomes. They can also use their mobile devices to store lectures, or to work outside of the classroom, for example, to conduct experiments, while still retaining the ability to research or access course notes.

As well as boosting the University’s virtual learning environment, web and video conferencing have added an extra dimension to the lecturer–student relationship. “We’re able to record bite-size sessions that the students can easily digest and play back to reflect and consolidate their thoughts,” says Sharon Cohen, principal lecturer, Buckinghamshire New University. “This really helps to cement learning.” Some of these sessions are mandatory for students to view i.e. Health and Safety, and the VLE provides an audit trail that students have accessed them.

In recognition of these achievements, BNU was ranked number one in *The Halifax–Times Higher Education Quality of Life Index*, designed to measure the quality of life of academic staff at 121 higher education institutions in the United Kingdom.

Although savings was never the primary motivation, the move to unified communications could reduce the University’s monthly site to site phone bill by as much as 30%. In addition, Cisco Unified Workspace Licensing lets the university pay for Cisco Unified Communications applications and services on a per-user basis. The use of WebEx also enables the university to reduce travel costs and carbon footprint without the need to tie up cash as part of an upfront capital investment.

“It is very important to the executive team that we drive forward using IT as one of the enablers to create a different university,” says Derek Godfrey, deputy vice chancellor for Buckinghamshire New University. “To do this, we have moved from a traditional supplier relationship to one where Cisco is engaged as a strategic partner throughout the university.”

Next Steps

BNU is looking at ways to make its Cisco Collaboration Architecture and Voice and Unified Communications applications work even harder. Current plans include introducing instant messaging and click-to-dial applications. BNU is also looking to expand the use of WebEx and video conferencing to help boost revenues from international students, support peer-to-peer learning, and share academic best practices with other institutions. Other possibilities include leveraging the architecture’s capabilities to empower home workers in the future.



For More Information

To find out more about Cisco Collaboration Architecture, go to:

www.cisco.com/en/US/netsol/ns1007/architecture.html

To find out more about Cisco voice and Unified Communications solutions, go to:

www.cisco.com/en/US/products/sw/voicesw/index.html

To find out more about Buckinghamshire New University, go to: bucks.ac.uk/

Product List

Voice and Unified Communications

- Cisco Unified Workplace Licensing
- Cisco Unified Communications Manager
- Cisco Unified Mobility
- Cisco Unified IP Phones
- Cisco Unified Workspace Licensing
- Cisco WebEx
- Cisco Digital Media Suite



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