



Videoconferencing lets UBC meet med school expansion mandate

Overview

The Business Challenge

Reflecting the British Columbia government's goals of increasing the number of practicing physicians in the province and placing more physicians in underserved areas, UBC's medical school needed to graduate significantly more medical students, without building new schools or incurring excessive costs.

The Solution

UBC employed a videoconferencing solution to create a distributed medical education model, placing students in Victoria, Prince George, Vancouver and now Kelowna.

The Benefit

UBC doubled the number of graduates from 128 to 256, expanding to Prince George and Victoria in 2004, then expanding again in 2011 to 288 students with the addition of Kelowna. The videoconferencing service is now used by other student, faculty, research and healthcare groups, and a range of new interactive learning initiatives are in the works.

Seeking a cost-effective, educationally viable remote learning model

Although the University of British Columbia (UBC) houses the only medical school in British Columbia, it had no idea how much a 2000 physician strike in Prince George in protest of physician shortages in rural areas would affect its graduation requirements, or how much pressure it would put on operational structures. As the doctors' job action raised public hackles and revealed gaps in the provincial healthcare system, the government decided to not only increase the number of practicing physicians in the province, but to make more physicians available to currently underserved areas.

"Fast forward a few years, and fulfilling that mandate, of course, devolved in part to the provincial medical school," says Anthony Knezevic, UBC's Senior Manager for Collaboration Technology. "Building new med schools was prohibitively expensive, so expanding UBC's program via a distributed education model was the best way to graduate more doctors locally, increasing the chance they might be persuaded to continue working in the province." With the plan to expand in place, UBC doubled the number of graduates from 128 to 256, expanding to Prince George and Victoria, then expanding again in 2011 to 288 students with the addition of Kelowna.

Of course, setting up a distributed medical education model isn't as simple as making materials available remotely. To meet certain accreditation requirements, the education experience had to deliver maximum access to instructors and as much interactive experience as possible, and videoconferencing offered the best solution.





“One Friday evening, a technician stayed until 10 p.m. to work through an upgrade issue. You don’t often see that level of commitment.”

Anthony Knezevic,
Senior Manager for Collaboration Technology, UBC

Solution Components

- Videoconferencing

Instructors adapt, students respond, UBC’s medical program grows

Using dual screens, hi-definition cameras and built-in microphones in the classrooms, students ask questions and teachers respond directly and in real time. There’s also full functionality to review notes and see lectures again. “It took some time to get things where we wanted them,” Knezevic reflects. “There was an adaptation factor with instructors around the process and technology. And we spent a lot of time working on developing our faculty’s skills to teach students that are distributed throughout the province.”

Due to performance issues with our initial service provider, an RFP was opened to search for a provider who could meet current and future needs. UBC found in Allstream a provider that not only delivered a comprehensive, highly competitive bid but has continued to back it up with “stellar” service levels. “One Friday evening, a technician stayed until 10 p.m. to work through an upgrade issue,” Knezevic notes. “You don’t often see that level of commitment.”

Network performance, availability and service make infrastructure hum

UBC chose a videoconferencing solution because it was the best way to train and graduate more doctors, but the success of that technology depends on the network that enables it and the service that supports it. “We wanted five 9s for sure,” says Knezevic, referring to a 99.999% availability standard that ensures continuous network access and high performance. “We record sessions, but students often don’t have the makeup time. It’s pretty important that lectures happen as scheduled, and that’s been the case.” The infrastructure is complex, but with a technician always available to simplify and remedy critical issues – and scheduled support calls every two weeks – students are reaping the benefits.



Using dual screens, hi-definition cameras and built-in microphones in the classrooms, students ask questions and teachers respond directly and in real time.

“Ultimately, we would like to service the needs of the majority of the province’s more than 12,000 physicians, plus our undergraduate population, postgraduate residents and programs, as well as other health professions programs. We have to grow within our means, though, and Allstream’s help with network planning and expansion is key in that regard.”

Anthony Knezevic,
Senior Manager for Collaboration
Technology, UBC

With the right service and support backbone, UBC is ready for the long haul

The university can now accommodate 288 medical students plus postgraduate groups, with up to 35 to 40 sites connecting at a time and 15 classroom sessions happening per day. “Ultimately, we would like to service the needs of the majority of the province’s more than 12,000 physicians, plus our undergraduate population, postgraduate residents and programs and other health professions programs. It’s important that the broader medical community has access to the system, since government funds are invested,” Knezevic notes. “We have to grow within our means, though, and Allstream’s help with planning and expansion is key in that regard. Our relationship with them has been relatively short, but very rich in terms of their expertise in helping us with future solutions.”

Even now, UBC is using the system for more than classroom sessions. Internal meetings take place via videoconference, and the university is seeing up to 30% yearly growth in non-curriculum usage, such as independent lectures and research by health professionals. Knezevic is clearly enthusiastic: “We’re also developing interactivity with health authorities in the area of telehealth and remote diagnostics. All sorts of applications and synergies are emerging. Continuing education for physicians comes to mind. Also pharmacists, nurses, therapists, administrators – people want to use this system, but we need to expand carefully and make full use of the planning and support structures we have in place.”

UBC is taking the broad view on videoconferencing in education. It’s looking to offer the service to other faculties and is willing to speak with other universities considering similar initiatives, or that have implemented less successful platforms. He concludes, “Videoconferencing has certainly differentiated our medical program. We continue to rank among the top medical programs in Canada, but with the ability for students to attend and learn in different ways, enrolment has increased. We’re very excited for the future.”



Videoconferencing session in progress at UBC

About UBC

The University of British Columbia is home to the only Faculty of Medicine in British Columbia. It provides innovative educational and research programs in the areas of health and life sciences through an integrated and province-wide delivery model. Founded in 1950 with a graduating class of 60 students, it now has more than 3,400 students and learners at the undergraduate, graduate and post-graduate levels and provides teaching to several thousand additional students from other disciplines at UBC.

About Allstream

Allstream is the only national communications provider working exclusively with business customers. Our focus is helping you simplify IT operations to improve productivity, maximize performance and manage costs. Our IP solutions are delivered on a fully managed, fully secure national network and backed by our industry-leading commitment to customer service: The Allstream Service Guarantee. Driven by the expertise of our 2,500 employees across Canada, we operate a 30,000 km fibre-optic network combining advanced IP connectivity, digital switching, Ethernet-featured services, and the latest security technologies. Our portfolio includes the highest-capacity voice, data and Internet connections, unified communications, and managed services, all flexibly designed for the needs of large, mid-market and small businesses. We can help you compete more profitably by converging voice and data over a single, reliable, end-to-end infrastructure that delivers exceptional quality of service between metropolitan centres.

Call us today at

1 855 299-7050

or visit/follow us at
allstream.com

