

# Keeping the Pace in a *Changing* Environment

*Using technology to support the  
U. of British Columbia's visions*

by **Shannon Burgert**



THE UNIVERSITY OF  
BRITISH COLUMBIA

In 1999 the University of British Columbia's ITServices undertook a three-month effort to redesign business processes associated with client contact and customer service. The group came up with a number of recommendations, the top being the creation of a customer relationship manager position. Management responded quickly: Kathleen Morley was on the job the next day. Previously the Customer Support Centre coordinator, Morley fosters mutually beneficial relationships between ITServices and other university units.

ITServices' quick reaction to that and other recommendations is indicative of an environment that reacts well to change and allows the university to excel in learning technologies and creative support of student services—not to mention customer service.

## **IT Environment**

UBC is one of Canada's highest ranked universities. Located in Vancouver, it is one of 32 major research institutions that make up the Association of Pacific Rim Universities. The university supports 26,000 undergraduates, 6,400

graduate students, and more than 40,000 noncredit, certificate, and distance education learners.

Information technology services are distributed at UBC. The ITServices organization serves a central role of technology leadership and support where there is clear institutional need and no clear system owner. It is divided into Networks, Information Systems, Telestudios (broadcast media production), imPress (printing and document management), and Communications.

ITServices uses a full cost-recovery financial model, which has its pros and



UBC ITServices/Telestudios

In an interactive video classroom at the University of British Columbia, students are able to hold discussions with others from remote sites.

cons, according to Ted Dodds, associate vice president for information technology. "UBC is much more aware of the true total cost of ownership for any of its IT endeavors due to the way we're funded," he explains, noting that this helps the university better manage demands on limited resources and understand cost-benefit trade-offs.

On the other hand, Dodds isn't sure that all of the organization's services fit well into the current economic model. "We're examining whether some of our services aren't more properly categorized as part of a truly enabling IT environment, supportive of the academic mission, in much the same way as our top-quality library," he says.

## **Moving Ahead**

Trek 2000, the university's vision statement, identifies five key strategic areas: people, learning, research, community,

and internationalization. To ensure continuous progress toward its vision, UBC publishes an annual "Trek 2000 Operational Timetable" in which specific objectives are set for that year, including the people and units responsible for achieving those objectives. ITServices establishes an operational plan to address Trek goals that relate to information technology.

The 2000–2001 ITServices operational plan includes nine elements. Four of these—e-strategy, digital document management, learning technology, and university networking—correspond to various universitywide priorities. The commitment to excellence in customer service is viewed as a prerequisite for success in each of these areas. Achieving service excellence depends on building an effective contact infrastructure and focusing the staff on the customers.

"My goal is for customer service to find its way into all lines of business that ITServices offers, and that we measure ourselves qualitatively and quantitatively," says Dodds, adding, "It's more about people than technology."

Two core competencies—hardware infrastructure and operations, and software infrastructure—provide a foundation for other strategies. Maintaining these elements is crucial for adopting new projects and changing course quickly, says Dodds. And developing flexible funding models is included in the plan to support new opportunities.

The final element is a service renewal process. As ITServices continues to take on new initiatives, it is also careful to review existing operations, discontinuing or altering services where appropriate.

While Dodds ensures that IT operations are in alignment with the university's visions, he is also careful to focus

on action rather than planning. "It's important to balance the resources you invest in talking about what you're going to do while making sure you're actually doing useful things and making improvements," he says. "We can certainly plan in the short term, engaging stakeholders in the community, but we want to be able to move fast if the landscape changes."

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## New Initiatives

As part of an effort to increase the scope and scale of Web-based services, a collaborative team involving the Faculty of Applied Science, Student Services, the Library, and ITServices is developing a student Web portal. Dave Frazer, associate director of Information Systems, explains that the university plans to provide a framework that will handle a high volume of activity, encompass a complex suite of integrated services, and effectively authorize users.

While commercial portals are available, Dodds explains that UBC's will give the community access to content that it won't get elsewhere. "The key is integrating that content," he says.

A pilot of the student portal is slated for September. Although the initial target is students, the portal framework will later be used for other members of

the university community, such as faculty and staff. University constituents will be able to customize their portals and work in a seamless environment.

UBC was one of three founding universities in the Java in Administration Special Interest Group (JA-SIG), an organization that helps institutions and companies share information about administrative applications development using Java technology. This relationship was crucial in the development of UBC's portal. (For more information about JA-SIG see [www.ja-sig.org](http://www.ja-sig.org).)

ITServices is also focusing on digital document management. The process includes creating documents from electronic originals or scanning paper documents, storing and accessing, managing security and rights issues, and disseminating.

A digital repository will allow more course packs to be created and course materials to be printed on demand. The digital document management system will allow copyright information to be tracked more easily. And, says Frazer, a digital repository could be a significant component of the Web portal.

UBC has a powerful network infrastructure, and networking plans aim for increased research capabilities and allow for rapid developments in technologies. ITServices is exploring new possibilities such as wireless networking and higher-performance networks and prototyping them on campus. The university is a founding member of BCnet, an advanced network serving education, research and development, government, and industry in the province of British Columbia.

One of UBC's strengths is its support of technology in learning. But figuring out an appropriate strategy for integrating technology into curricula also remains the top challenge, says Dodds. An Academic Committee on Creative Use of Learning Technologies (ACCULT) is

working to define the university's direction with respect to teaching with technology.

Tony Bates, director of Distance Education and Technology in Continuing Studies, explains that through one-day workshops with faculty the committee is trying to determine the extent of demand for learning technologies. "We're trying to get faculty to think differently. We're asking them how they expect to teach and how they expect students to learn five years down the road," Bates says. Once the committee has a grasp of the demand, it will plan how to support it.

UBC has a strong international component to its online learning, including strategic partnerships with such schools as the Instituto Tecnológico y de Estudios Superiores de Monterrey, in Mexico, to provide distance education.

## Learning Technologies

When computer science professor Murray Goldberg was given a university grant to develop Web course tools to facilitate course preparation and enhance learning, he responded by developing WebCT, a product that was so well received that it is now commercially available. Although the product has six million student accounts at 1,350 institutions in 55 countries, some of WebCT's biggest supporters are still at home.

UBC's Division of Educational Support and Development in health sciences has used WebCT to create MEDICOL, the Medical/Dental Integrated Curriculum On-Line. MEDICOL provides students with various supplemental Internet-based resources, including learning objectives, references, graphics, and self-evaluation as well as increased opportunities for interaction among students and between students and faculty.

Several faculties within the institution are moving toward problem-based learning. Rather than lecture, faculty members

## President Martha Piper

"We're very committed to creating an optimal learning environment for our undergraduate students. This involves learning that is research-based, interdisciplinary, interactive, and international—those are the pillars of our learning environment. Information technology will play a role in every single one. So the challenge for us is to develop an IT strategy that really supports our learning environment. We don't see information technology as something in addition to what we're doing; it's an integral part of it.

"We need to ensure that we're working with society to make education affordable and accessible to people—our most important commodity—as we move into this information age. For IT, that means being more flexible and more nimble, and it means looking at the needs of the student and lifelong learning. We need to recognize that we're educating learners rather than teaching subjects, and that IT will become the vehicle for learners to continue to access education throughout their lives."



UBC ITServices/Teletudios

will break students into small groups to investigate problems and issues. With the help of technology this model is becoming more feasible for large classes, explains Ralph Matthews, chair of Arts Instructional Support and Information Technology (Arts ISIT). "As faculty resources decrease, technology has the ability to compensate," he says. Arts ISIT supports faculty as they use technology in their instruction.

The library also plays a key role because students learn how to use information resources there. As the university shifts toward more self-directed learning, students are turning to the library for help earlier in their studies. "This shift is changing the way the library provides services," says university librarian Catherine Quinlan.

Students better understand how to use the technologies if they learn within the context of their curriculum. Once they see an application used in different con-

texts, they really understand the relevance and the breadth of the resource, Quinlan explains. The library also depends on WebCT to present concrete information to students via tutorials.

Part of the process is teaching students how to look at information with a critical eye. Quinlan laughs, explaining, "We have to break students away from the idea

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—Richard Spencer

that if you find information on a computer, it must be correct, and if you find information on a computer in a library, it must really be correct!"

## Creative Support

UBC takes a student-centric point of view, notes Dodds, so it's no surprise that the university excels in providing student services. As the institution has increased its presence on the Internet, Student Services has led the way in using the Web creatively, particularly in its use of XML and Java.

Students can access course information, academic records, and financial accounts through the Web. They can register for classes and update personal information. All services are available through Java, and most are accessible in HTML versions. "We decided to deliver powerful applications over the Web when it was daring to deliver Java in that way. Some people told us it was too risky," says Richard Spencer, registrar and director of Student Services. "But it turned out that we made the right call."

The systems are all linked, notes Audrey Lindsay, associate registrar and director of Student Services. And similar features are available to staff and faculty, who can submit grades and change course descriptions online. Such services will be key components, or channels, for the UBC portal.

Spencer adds that flexibility is a primary goal. "We're delivering applications that run over many platforms, to support the widely distributed computing environment," he says. Another goal is to make the services intuitive. Says Spencer, "If we have to provide an extensive training for a new application, we consider it a failure." **E**

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