#### CELEBRATING THE STARS OF BCIT

On November 21, 178 BCIT executive, faculty, and staff celebrated the 2007 retirees and staff service and recognition recipients at the Annual Staff Service and Retirement Gala Dinner. The event, held at the Executive Hotel & Conference Centre in Burnaby, paid tribute to years of dedication, commitment, and excellence on behalf of the BCIT community.

The formal yet intimate gathering was emceed by Mark Angelo, program head of BCIT's Fish, Wildlife, and Recreation program—and joining him was Dr. Verna Magee-Shepherd, BCIT acting president, Richard Swift, chair of the BCIT Board of Governors, senior executives, as well as representatives from each school and service area.

A total of 52 retirees were honoured throughout the evening. In addition, 88 staff were recognized for their decades of service to the institute—20, 25, 30, 35, and 40-year milestones.

BCIT would like to extend a warm congratulations and a heartfelt thank you to: Janet Wadsworth, associate dean's office, Broadcast and Media Communications, David Kenyon, faculty, Prosthetics and Orthotics, and Tom Nowak, Basic Health Sciences and most recently Special Faculty Project, for their 40 years of dedicated service to BCIT.

To commemorate the 40 year milestone, BCIT had a gold pin with a diamond inset designed.

Special thanks to Michelle Traynor for coordinating the event, Scott McAlpine for taking the photos, and all the volunteers that assisted in making the event a memorable occasion for everyone.









MOMENTS WITH ATTENDEES OF THE ANNUAL STAFF SERVICE AND RETIREMENT GALA

#### publishing information

The BCIT *Update* is published throughout the chool year by the Marketing and Communications epartment

Submissions are welcome, and should be forwarded to the editor by *Update* deadlines. While every effort will be made to accommodate all submissions please note that inclusion depends on the amount of space available. To ensure your story is included, book your space with the editor.

Feb. 1 for Feb. 26 issue

*Update* is available on the web by going to bcit.ca/update.

*Update* is produced on InDesign CS2 publishing software and printed on recycled paper.

#### Editor

Kelly Angelo 604.432.8306 Kelly\_Angelo@bcit.ca

#### Design, layout, and prepress

604.432.8207

Mirabelle\_Rohatgi@bcit.ca

oy Little 504.451.7072 oy Little@bcit.ca

listair Boakes

Christen Crossle

Paul Razzell

<u> Aichelle Tra</u>ynor

<mark>Photographer</mark> Scott McAlpin

British Columbia Institute of Technology

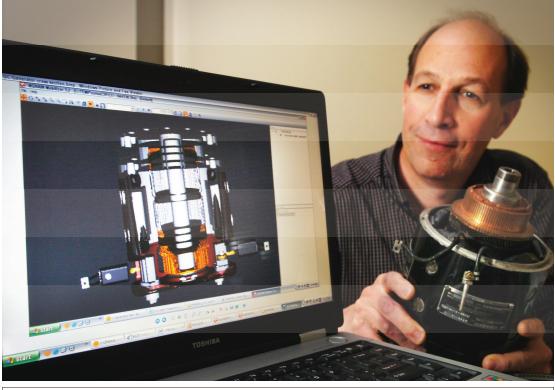
# UPDATE

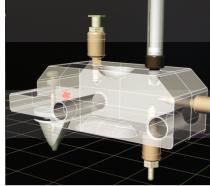
**SPECIAL EDITION LEARNING AND TECHNOLOGY SERVICES**  **DECEMBER 18 | 2007** 

**VOLUME 15 ISSUE 4** 

The mission of BCIT is to build pathways for career success in the global marketplace through teaching excellence and applied

education and research.







### TRAINING WITH NGRAIN BEGINS

Trades and technology instructors rely heavily on real objects and equipment as instructional aids. However, in cases where equipment is expensive, infrequently available, or can be damaged by incorrect assembly/disassembly procedures, virtual models and simulations may be effective enhancements.

Aerospace and Motive Power instructors have started using 3D models in NGRAIN, a powerful 3D visualization and modeling application that helps students understand and maintain complex equipment in a virtual environment. The models have, in some cases, been donated by NGRAIN Corporation, while others are being created by graphic artists within the Learning

and Teaching Centre (LTC). The models are then imported into the NGRAIN interface where students can interact with the parts, view them from any angle, and even practice procedures.

BCIT announced a strategic partnership with BC-based NGRAIN Corporation last April. The partnership is part of the TEK Initiative, through which innovative technologies are integrated into learning and teaching. The partnership got off to a flying start as a TEK Initiative catalytic project with NGRAIN was started, providing BCIT with software and 3D models valued at more than two million dollars.

Currently, BCIT is pursuing several NGRAIN software-related projects. Firstly, BCIT is

continued on page 2

ABOVE: LAWRENCE PARISOTTO, DIRECTOR OF MEDIA AND TECHNOLOGY SERVICES DEMONSTRATES NGRAIN TECHNOLOGY. (PHOTOGRAPH BY IAN LINDSAY/THE VANCOUVER SUN.)

## contents

Inited Way thank you	
ave the Date	2
pecial Edition:	
earning and Technology Services	3–6
lew to BCIT	7
ord ASSET Grads	7
D Day 2008	7
taff Service and Retirement Gala	8

#### A BIG UNITED WAY THANK YOU



JESSIE TAYLOR, CUSTOM SERVICE REP WITHIN STUDENT INFORMATION AND ENROLMENT SERVICES PARTICIPATES IN THE UNITED WAY LIVE AND SILENT AUCTION

The numbers are finally in! Through the 2007 BCIT United Way Campaign, the institute raised an impressive \$90,824.97. Activities such as the Bocce Tournament, the Live and Silent Auction, the Library Bake and Book Sale, and the School of Construction and the Environment's Pancake Breakfast all contributed to the great success of the campaign.

BCIT's United Way Campaign team would like to extend a big thank you to the entire

BCIT community, as well as its sponsors: the President's Office: BCIT's Schools of Business, Manufacturing and Industrial Processes, Transportation, and Construction and the **Environment:** the Learning and Teaching Centre: Learner Services; Marketing and Communications: Recreation Services; Student Employment Services; the Bookstore: the TNT Store:

Professor Mugs: the Student Association: and Safety and Security.

The United Way of Canada is the national organization that acts as a voice for its members within the Canadian voluntary sector and internationally, and provides leadership, programs, and services to its members. Their mission: to improve lives and build community by engaging individuals and mobilizing collective action.



> Remote Lab continued from page 1

studying ways in which NGRAIN graphics and knowledge objects may enhance education. If they prove to be effective, NGRAIN's rich, interactive media will be more broadly integrated into the curriculum. In addition, a landing-gear training module is being delivered to the Aerospace Technology Campus (ATC), which involves NGRAIN models and simulation technologies from CAE, a Canadian aviation engineering

BCIT will continue to collaborate with NGRAIN Corporation to integrate 3D models into the curriculum. For further information on NGRAIN, please contact Lawrence Parisotto at 604.451.7111.



A 3-D MODEL IN THE NGRAIN VIEWER CAN BE ASSEMBLED, DISASSEMBLED, ROTATED, AND VIEWED IN CROSS-SECTION — ALL IN REAL TIME

#### SAVE THE DATE!

WINTER GRADUATING **AWARDS** 

Feb. 21, 5-6 pm

Willingdon Conference Centre Contact: Michelle\_Traynor@bcit.ca

WINTER CONVOCATION **CEREMONY** 

Feb. 21, 7-9 pm

Willingdon Conference Centre Michelle\_Traynor@bcit.ca

BCIT'S ALL-STAFF PROFESSIONAL DEVELOPMENT DAY

Feb. 27, 8-4:30 pm

Contact: pdday@bcit.ca bcit.ca/pdday

**OPEN HOUSE 2008** 

Apr. 11 & 12, 9-4:30 pm

Contact: Janeen\_Alliston@bcit.ca

#### CARLA RIEGER, KEYNOTE SPEAKER, EXPERT ON THE ARTISTRY OF CHANGE

Brigitte Ahmed, faculty, School of Health

**NEW TO BCIT** 

Flemming Andersen, instructor, Carpentry John Dolan, instructor, Plumbing

Trevor Emery, assistant instructor, ABET

Dairn Greentree, instructor, Plumbing

Stephen Makonin, research assistant, Technology Centre

Sundeep Purewal, faculty, School of Health Sciences

Gregory Rouvroye, instructor, Motive Power -Heavy Equipment Group

Gary Shalansky, instructor, Power Engineering John Square-Briggs, instructor, Plumbing

Alan Stewart, research assistant, Technology Centre

Amy Tan, administrator contract accounting, **Financial Services** 

**Peter Weckworth,** intermediate systems analyst, Information Technology Services

#### ON THE MOVE. PROMOTIONS. DEPARTMENT CHANGES

Valerie Murray, faculty, School of Health Sciences

John O'Donnell, archibus systems administrator, Administrative Services

Tina San, customer service representative, Bookstore

Theresa Shaughnessy. faculty. School of Health

#### FOURTH ROUND OF GRADS FINISH FORD OF CANADA'S ASSET PROGRAM



THE 2007 GRADUATES OF BCIT'S FORD ASSET PROGRAM.

Ten new technicians received diplomas on November 22, courtesy of the Ford Motor Company of Canada, sponsor of BCIT's ASSET

ASSET—Automotive Student Service Educational Training—is a program that paves the way for students to enter the automotive field as certified Ford technicians, or to follow one of two degree paths: a Bachelor of Technology in Technology Management at BCIT. or a Bachelor of Science. Automotive Engineering Technology from Ferris State University in Michigan.

"At Ford, we are committed to being leaders in our industry, and that includes providing the best possible after-sales service to our valued

customers," says John Cannataro, service training instructor for Ford Motor Company of Canada Ltd. "Ford of Canada and its dealers value this relationship which is why the skills acquired in the ASSET program are so important to customer satisfaction and our long-term business objectives.'

Canada is in the middle of an automotive service technician shortage, the scope of which has never been seen before. The aging and retiring work force is leaving a profound gap of skilled technicians. The ASSET program is Ford's contribution to

attract young people to the profession. Of the 200,000 technicians currently employed in the industry in Canada, more than half are over the age of 40, and less than eight percent are under 25.

Students dedicate 48 weeks of in-class training at BCIT coupled with 32 weeks of on-the-job experience at participating Ford and Ford-Lincoln dealerships throughout the province in order to finish their two-year diplomas. Along with the diploma, each graduate received a Melton Leather Pro Tech/ ASSET jacket courtesy of Ford, a certificate of recognition, and after six months at the Ford dealership, they'll receive a cheque for \$1,000 courtesy of Ford Motor Company of Canada.

#### CARLA RIEGER TO KEYNOTE BCIT'S ALL-STAFF PD DEVELOPMENT DAY



Save the Date! Wednesday, February 27 is BCIT's all-staff PD Day, held at the Burnaby Campus. Don't miss the morning plenary, which promises to be both informative and entertaining. Renowned keynote Carla Rieger will present the "The Artistry of Change: **Activating Your Creative Capacity to Thrive** Under Pressure.'

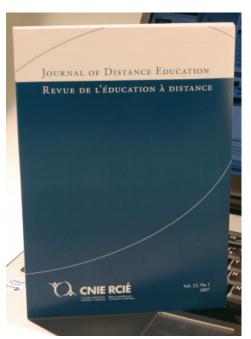
Professional Development Day is a day when you can clear your schedule and devote your time to improving yourself, your classes, your work, or your use of technology. Choose from more than 70 sessions held throughout the day on teaching and learning, wellness, technology, and workplace development.

Returning to PD Day this year is Hidden Passions, showcasing the art, crafts and talents of BCIT faculty and staff, in Town Square D. Visit bcit.ca/pdday for more information throughout January and February.



BCIT Update | December 18, 2007

# JOURNAL OF DISTANCE EDUCATION PUBLISHED BY LTC



YOU CAN READ THE JOURNAL OF DISTANCE EDUCATION ONLINE AT IOFDE, CA.

The first issue of *The Journal of Distance Education* was published from its new home in the Learning and Teaching Centre (LTC) in October. The Canadian Network for Innovation in Education invited BCIT and Dr. Mark Bullen to take over the editorship of the prestigious journal last year.

The peer-reviewed journal publishes scholarly articles and research papers that focus on issues relating to distance education. *The Journal of Distance Education* is an open access journal available in print or online at jofde.ca. For more information, contact Dr. Mark Bullen at 604.454.2280 or ide@bcit.ca.

#### LTC RESEARCH AGENDA

If technology really does change everything, we need to understand how and why.

Researchers at the Learning and Teaching Centre (LTC) are studying the impact of learning technologies and what factors affect the adoption of innovations in teaching and learning. Two years ago, the LTC's mandate was broadened to include applied educational research, and we are now implementing a research agenda that focuses on the diffusion of educational innovation

Two research projects have been initiated in support of this agenda. "Faculty Development in Educational Technologies: Steps Towards the Diffusion of Innovation" examines the role played by faculty development initiatives in the adoption of educational innovations by instructors at BCIT. This research project is being led by Dr. Valia Spiliotopoulos with support from Kathy Siedlaczek, both instructional development consultants with the LTC.

In the second study, "The Digital Learner," researchers are studying the way in which BCIT students use learning technologies and whether they fit the *net*  generation profile—people who are so immersed in the networked world that has changed the way they think, learn, and behave. Findings from this study will help BCIT make decisions about what learning technologies to invest in, how to design courses so that technologies are used appropriately to support learning, and what types of instructor training are needed.

In the first phase of the research, interviews were conducted with samples of students and faculty. This data will be analyzed and a questionnaire will be administered to BCIT students to understand how they use and think about technology.

"The Digital Learner" is being conducted in conjunction with the research of doctoral student Adnan Qayuum from Concordia University. The BCIT team is led by Dr. Mark Bullen, associate dean of the Learning and Teaching Centre, Dr. Karen Belfer, dean of the Centre for Instructional Development at Vancouver Community College, and Terry Fuller and Tannis Morgan from the Learning and Teaching Centre.

For more information on the LTC research agenda, visit bcit.ca/ltc/committee.

# EXTENDING THE CLASSROOM

What if you could attend your BCIT classes without leaving your home town? How about gathering a group of clinical instructors together from around BC for a meeting? Thought about the impact of having a guest lecturer from a noted specialty in your field—who lives in Montreal?

Videoconferencing can make these things happen. Recently, a group of sonography students completed their BCIT studies via videoconference from the Kelowna General Hospital. BCNET's high speed network, combined with a fibre optic linked directly to the hospital, enabled the students to participate fully with their Burnaby cohort.

Dori Kaplun, the clinical coordinator of BCIT's Medical Radiography Technology program, recently hosted a meeting of clinical instructors. Five attended remotely, joining 12 who were at BCIT.

Dori was pleased with the results: "Normally those who couldn't attend in person sent their feedback by telephone or email, but didn't really feel like they took part in the decision-making process. This time it was different; everyone felt involved and the meeting was very successful."

Ultimately, the goal of enabling technology, such as videoconferencing, is to be transparent to the user.

As Bruce Denis of Audio Visual services says, "When a student enters either the remote or BCIT classroom and chats unselfconsciously before class with another student a thousand kilometres away, the barriers have broken down." And the instructor might add: "Let the learning begin."

For more information, or assistance setting up a videoconference, please contact AV services at 604.432.8780 or avservices@bcit.ca.



#### MESSAGE FROM THE VICE PRESIDENT



CHRIS GOLDING, VICE PRESIDENT, LEARNING AND TECHNOLOGY SERVICES.

I recently attended an Educause conference in Seattle. Educause is the premier professional organization for those who provide technology services within the education sector. I spent my entire time at the conference talking education with colleagues from the likes of Stanford, University of Pennsylvania, and McGill. We share many of the same opportunities and challenges. Not only that, but BCIT can be proud of its accomplishments in comparison to even the most prestigious academic institutions.

What Educause does so well is harmonize the agendas of the academic and technical sectors. To some extent it mirrors the Learning and Technology Services portfolio that I so proudly lead here at BCIT. Under this portfolio, we have joined the Learning and Teaching Centre (LTC) and Information Technology Services (ITS). This alignment, in turn, mirrors the integration of technology into the lives of our students.

A recent Educause survey of 27,000 students, *The Study of Undergraduate Students and Information Technology* (2007), demonstrates this growing synergy between learning, living, and technology. For example:

- > over 99.9 percent of students use email every day
- 98.6 percent write documents for course work each week
   83 percent use a course management

- each week
  > 81.6 perce
  Facebook)
  - > 81.6 percent use social networks (e.g., Facebook) every day

system (e.g., WebCT) several times

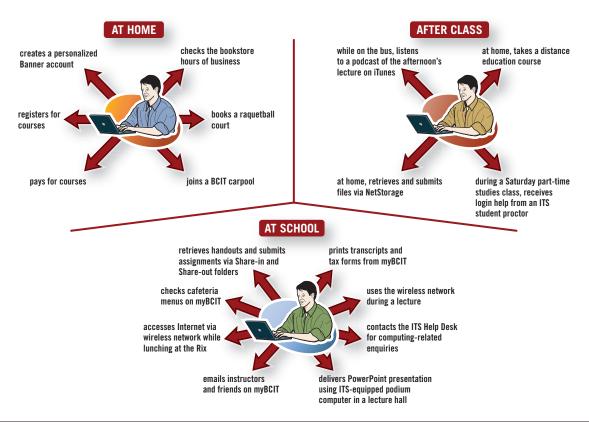
> 86.4 percent shop online every month.

The point here is that our students are changing. They don't think of laptops or cell phones as technology but as the tools of daily life. BCIT therefore is expected to reflect this lifestyle in its delivery of education and services. If we want to lead however, we need to go farther, ensuring that our curriculum is designed to maximize what we know about adult learning theory, instructional design, learning environments, and the creative use of educational and information technology. The way in which we use technology can strengthen our unique mandate within the province.

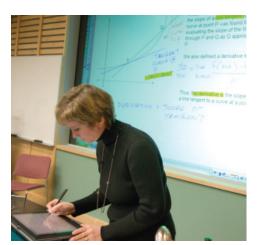
The LTC and ITS are eager to assist. I invite you to discover or re-discover our services through this special edition of *Update* and encourage you to contact us with your educational and technical needs and aspirations.

—Chris Golding, vice president, Learning and Technology Services.

## WHILE MOST STUDENTS TAKE INFORMATION TECHNOLOGY SERVICES FOR GRANTED, ITS PLAYS A PART IN JUST ABOUT EVERY ASPECT OF THEIR LIVES.



#### GETTING SMART WITH SMART CLASSROOMS



INCREASING INTERACTIVITY: AN INSTRUCTOR WORKING WITH A TABLET PC IN A SMART LECTURE THEATRE.

Enhancing classrooms and labs with the technology to create new opportunities for teaching and learning is a key TEK Initiative goal. Smart classrooms are the most popular type of smart learning space. Equipped with presentation technologies and wireless Internet access, they give the instructors the flexibility to teach the way they choose.

The suite of smart learning spaces available at all five BCIT campuses is growing. All 15 lecture theatres are wireless and have projection technology. There are 76 smart learning spaces available and many more in progress. For rooms that aren't yet smart, portable projection devices and sound systems can be booked from Audiovisual Services.

When revisions to learning spaces are required, a team from the Learning and Teaching Centre (LTC), including Lawrence Parisotto, director of Media and Technology Services, and instructional development consultant Kathy Siedlaczek, work with stakeholders to ensure their teaching and learning needs are reflected in the room's physical design. Lawrence and Kathy were involved early in the design phase of the substantial renovations in NE1, where a vacated workshop area was converted into ten new classrooms and an innovation studio for the pipefitting and carpentry trades.

As more and more students bring their laptops into classrooms, more power for portable devices will be required. Laptop zones, where students have access to power, may soon be a new feature of lecture theatres.

There is also the question of whether to keep building more dedicated computer labs or to build more flex rooms. With a cupboard full of laptops, a raised floor, wireless Internet access and power, and a space divider, a flex room can be configured as a classroom or computer lab—or both.

The LTC provides training for those interested in smart learning spaces and encourages instructors to use technology in teaching. It's true that learning will take place regardless of the space, but learning can be more effective when spaces are designed with learning in mind. So get smart!



#### DID YOU KNOW THE LTC WEBSITE PROVIDES:

> descriptions of smart learning spaces > locations of smart learning spaces > equipment available > instructions for using the equipment

If you need equipment that is not readily available in a room, you can reserve it through Audiovisual Services at 604.432.8780 or avserves@bcit.ca. To find this information visit bcit.ca/tek/portfolios/support/sls.

#### CONVERGING VOICE AND DATA

As of April 1, one of BCIT's most forward-thinking infrastructure initiatives will go live—and you probably won't even notice a thing. On this date, the administration of all telecommunications services will transfer from Facilities Management to Information Technology Services (ITS), a massive undertaking that will treat telephony just like networks, email, and other data services. Like so many other ITS initiatives, the telephony transfer will take place behind-the-scenes—the kind of seamless service enhancement that we have come to take for granted at BCIT.

Most major universities and colleges in North America and Europe have already integrated their IT and telecom services. The benefits include reduced long-distance costs, reduced cabling costs, and combined support services. Since the telephony and network technologies are interdependent, so must be the staff who manage them.

This initiative will pave the way for a lot of enhancements that you will notice, such as voicemail distribution lists. In the not-too-distant future, telephone calls will be routed over Internet lines, not phone lines. This voice-over-Internet-protocol (VOIP) system is already in place at the Aerospace Technology Campus (ATC), and will eventually be the norm across all BCIT campuses.

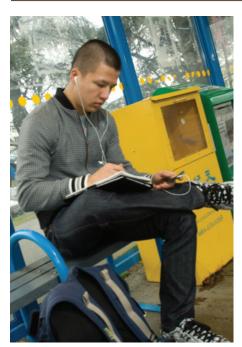
Right now, an ITS-led project is diligently reviewing all aspects of BCIT's telecom processes, technical support, hours of operation, help desk, spares inventory, afterhours support, and escalation procedures to ensure a smooth transition from Facilities Management to ITS.

## STREAMING APPRENTICESHIP FNROI MENT

Amanda Hill of Apprenticeship Services was tasked with changing the frustrating situation of long wait lists and no-shows that occured during the application process. A commitment fee of \$200 was implemented, ensuring that applicants were serious about enrolling in an apprenticeship program. From there, Margo Slater and Mike Smolnicki from Information Technology Services (ITS) were asked to review and estimate the efforts required to create an online reservation system. After examining the process, they found that the Customer Service Representatives spent large amounts of time on processes that could be streamlined.

With this resolved, Margo and Mike have made longer-term recommendations, including moving to a self-service online model. Technology and process improvement proved to be a winning combination for Apprenticeship Services and the apprentices.

### LOOK. LISTEN. AND LEARN WITH MEDIA CASTING



A STUDENT REVIEWS A LECTURE ON HIS IPOD WHILE WAITING FOR A BUS — MAKING GREAT USE OF TIME AND TECHNOLOGY.

Educational media casting or "podcasting" takes look, listen and learn to new territory. Reading on the bus has morphed into listening to a lecture or viewing a presentation thanks to BCIT's virtual campus on Apple's iTunes U, giving subscribers access anytime, anywhere.

"It's a great way to learn," says Tom Wells, BCIT Health Sciences instructor. "Students take the technology for granted, and instructors are working to keep up."

Tom is building a video playlist of lecture notes and review materials. Right now, his casts are for a small group of medical laboratory technologists (MLSC 1027), but next term, his audience will number over 70. It's strictly do-it-yourself. With a laptop and a microphone, he creates slide presentations with a voice track, using software that takes care of matching the audio to the images.

"Histology is a very visual field," Tom explains. "It's nice to be able to combine the slides with the voice."

Media casting enhances online courses too, bringing in social interaction. When course BCST 1033 went online, instructor Dawn Swift had to find a way to adapt the class presentation component, which involved an interview with someone from industry. Lisa O'Neill, an instructional development consultant with the Learning and Teaching Centre (LTC), suggested using podcasts. Now, instead of just receiving an in-class summary, students can sit in by downloading the full interview.

"Without the podcasts," says Dawn,
"students wouldn't have as much information
available to them; that's the value of having
access to the technology."

"It's all about options and opportunity," says Lisa.

Interest is growing, and the number of downloads—all of which are free—from iTunes U is climbing. The LTC plans to expand its capabilities with a purpose-built media casting studio, under the leadership of Lawrence Parisotto.

Check out bcit.ca/ltc/casting for more information, and use the online Educational Media Mapping Tool to determine what kind of support you might need to get started. If you want to get involved, please contact the LTC at 604.432.8406.

### "THREE-YEAR TECHNOLOGY PLAN"

Did you know BCIT has:

- > over 600 km of network wires and fibres
- > 700 network switches directing the traffic to and from over 5,000 computers and laptops
- > over 240,000 emails received daily, 122,000 of which get trapped as spam and are never delivered to the recipient
- > 200 applications
- > 150 central servers
- > over 14 terabytes of consumed storage
- > 300 program areas, each of which has access to the information and computer technology that is current in the relevant industries.

Information Technology Services (ITS) manages this complex infrastructure, and with such an extensive network, it's no surprise that ITS is big on planning. As a new technology is considered, it must be assessed by ITS to meet the criteria developed in the "Three-year Technology Plan."

Now in the planning process for the next three years, ITS is examining trends in society and information technology and exploring the implications of these trends for the institute. Thirty such studies are being carried out at present. At the same time, we are conducting a series of in-depth interviews with the senior leaders of BCIT. Each interviewee is asked to think three years into the future to help analyze future operating needs. ITS will then develop the activities and initiatives that will be rolled out over the next three years.

ITS has been eager to involve as many people from the BCIT community as possible so that the technology plan is coherent and that BCIT's place in the post-secondary marketplace is sustained and elevated. This will become an annual exercise to ensure that BCIT has a three-year plan to guide us in the ways we use information technology in the years to come.

For further information, or if you would like to have the current "Three-year Technology Plan" presented to your staff, please contact Will Hopkins at 604.432.8624 or Dave Cresswell at 604.432.8729.

