

BRITISH COLUMBIA
INSTITUTE OF TECHNOLOGY

**WINTER 1989** 

### CONNECTION

# BCIT CELEBRATES SCIENCE AND TECHNOLOGY WEEK

Photo: Courtesy of Vancouver Sun, Raight Bower

And Local Courtesy of Vancouver Sun, Raight Bower

And Local

First-year Computer Systems Technology students start fresh in BCIT's new advanced micro-computer labs, opened during Science and Technology Week.

education and Job Training Stan
Hagen (now Minister of Regional and
Economic Development) was at the BCIT
Campus October 23 to view the latest
interactive videodisc technology and
open the Institute's new advanced microcomputer laboratories as part of the

celebrations for Science and Technology week.

The Minister, IBM Western Region Vice-President John Wetmore, BCIT President John Watson, BCIT Chairman Wynne Powell and members of the BCIT Board of Governors, representatives from industry, alumni, faculty and staff were given a special demonstration of the IBM/BCIT Interactive Videodisc Development Project.

Following the demonstration Powell presented the Minister with the first completed interactive videodisc. Entitled "The Anatomy and Physiology of the Heart", the disc is the result of a project begun at BCIT in early 1987 with funding from the Ministry of Advanced Education

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and Job Training.

The Minister then toured part of the campus, meeting and talking with students, some from his own Comox riding, on his way to open the new advanced micro-computer laboratories.

At the ribbon-cutting ceremony Watson recognized the funding provided by the Ministry of Advanced Education and Job Training and the efforts of BCIT faculty and staff involved in the establishment of the micro-computer laboratories.

"This \$2.5 million project," said Watson, "involving over 30 labs, has increased BCIT's micro-computer capacity by 50 per cent, and should keep us current for the next five years."

The new micro-computer laboratories are outfitted with the latest IBM 286 and 386 micro-computers, SUN equipment and computer furniture.

"These new labs are first-class, in terms of number and quality of microcomputer equipment," added President Watson. "The technology provided here means that BCIT can expand into new areas of training at industry's level."

BCIT kicked off Science and Technology Week (October 22–28) on Saturday, October 21 with Engineering Technology Career Day, a one-day engineering career information session, and visits from high-school science teachers from around the province. The week-long celebrations also included media appearances by President Watson.

"Science and technology is the way of the future,"says Watson. "Research shows that many of our young people, especially girls, become indifferent to science and mathematics by grade eight. We want to change that situation."



Then Minister of Advanced Education and Job Training Stan Hagen was on campus October 23 to view the latest interactive videodisc technology and open the Institute's new advanced micro-computer laboratories as part of the celebrations for Science and Technology Week.

Pictured at the ribbon-cutting ceremony for the micro-computer laboratories are (from left) BCIT President John Watson, Shirley Clarke, representing the Purchasing Department, BCIT Chairman Wynne Powell, IBM Western Region Vice-President John Wetmore, Minister Stan Hagen, Margaret Moran, representing Physical Plant and Jeanine James, Systems Analyst, representing Computer Resources.



BCIT Plastics Laboratory faculty Ed Pretzlaff (immediate left) explains the capabilities of the new laboratory to science teachers (from left) John Riley, Hope School District, Rod Eldridge, MacDonald Elementary School, Summerland, and Ken Abramson, Dr. A.R. Lord Elementary School, Vancouver. Science teachers from across the province were at BCIT during Science and Technology Week to tour facilities and meet with faculty.

### SCIENCE AND TECHNOLOGY AT A GLANCE

- Most jobs require a higher skill level, as both blue and white collar workers are increasingly affected by technology.
- There is a growing shortage of personnel in applied science and high technology industries
- British Columbian companies are already making scientific and technological contributions of international importance:

Robotic Systems International Robotic arms used in underwater wreckage salvage for the Challenger Space Shuttle and the Air India plane crash.

International Submarine Engineering

The production of the world's deepest diving remote-control submarine.

MacDonald Dettwiler
The development of technology used by NASA and the European Space
Agency to process satellite photographs of the earth.

- BCIT's Engineering Technology students will increasingly need training in areas such as entrepreneurship, management of technology and international competitiveness.
- Through the convergence of computers and communications technology, the scope of BCIT's technology training is expanding. Many remote parts of B.C. are already receiving "distance education" technology training from BCIT, and an increase in this mode of programming is expected.



During Science and Technology Week celebrations, BCIT Board of Governors Chairman Wynne Powell (left) presented former Minister of Advanced Education and Job Training Stan Hagen with BCIT's interactive videodisc on the heart.

### WYNNE POWELL CHAIRMAN OF THE BOARD

ynne Powell knows BCIT as well as any Chairman of the Board could. His relationship with the Institute began over 20 years ago when he was a student in business administration. After graduation, he continued his involvement with BCIT through the Business Administration Advisory Committee and, in 1987, he became a member of the Board of Governors.

His recent appointment to Chairman of the Board makes him the second BCIT alumnus to hold such a position.

Powell recalls choosing BCIT over a university program because he "wanted a fast track education". After graduating

at the top of his year, he began a professional career that has covered a range of management positions in sales, marketing, administration and accounting. He even made time to sharpen his skills by attending night school to earn his Certified General Accountant designation.

Currently, Powell is Vice President, Marketing and Retail Technical Group at London Drugs Limited. His work involves regular travel to Mainland China, Hong Kong, Taiwan, Korea, Japan and other parts of the world. He says this experience has influenced the way

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he views his role as Chairman of the BCIT Board of Governors.

"When I look at how competitive the global marketplace is and how rapidly technology is advancing, I realize the importance of keeping BCIT as current as possible," says Powell.

"Through my involvement on the Board, I want to help BCIT to continue to provide technology programs at the leading-edge. I also want to share the vision of BCIT's role in making our province more competitive."

According to Powell, the Ministry of Education has been "very supportive of the role of BCIT" and, with capital funding restored, he feels it is time to re-focus the Institute to prepare for the next century.

"We're currently working on a strategic planning process which I view to be one of my most important jobs," explains Powell. "When we have a strategic plan in place for the 10 to 15 year horizon, then the tactical planning becomes possible.

"There will always be economic cycles and pressures that we'll have to cope with, but we must never ignore the foundation of our institution."

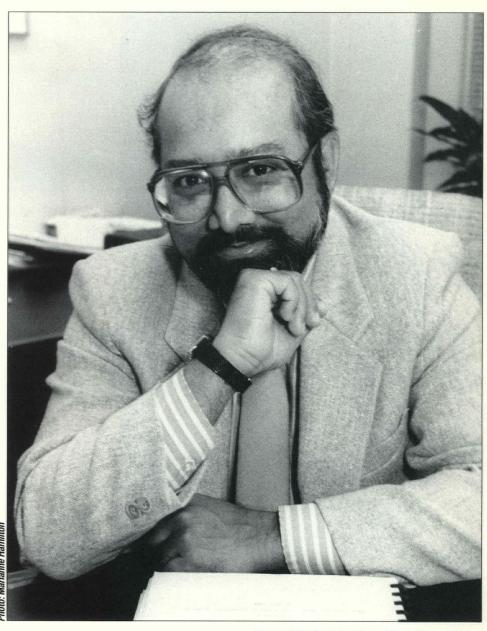
BCIT's foundation, in Powell's view, is the core educational programming which is regularly updated through input from industry advisory committees. Powell refers to these advisory committees as BCIT's "quality circles." Equally important, however, is the introduction of new advanced technology courses, applied research and technology transfer to industry.

"Part of our mandate is to produce job-ready grads and I think BCIT is fulfilling that function," says Powell. "We must also give our grads opportunities to come back to BCIT to retrain to take advantage of advanced technology."

Advanced technology does not come cheaply, says Powell. The Board is planning a major fundraising initiative in the near future with the goal of reducing the Institute's dependence on government for capital expenditures.

"I'm fortunate to have a very hardworking Board," says Powell. "I'm a builder. I like to make things happen."

# DAVE CHOWDHURY APPOINTED DEAN OF ENGINEERING



Dean of Engineering Dave Chowdhury: "Our mandate sees BCIT becoming the flagship institution of technological training in B.C."

s BCIT enters the next decade, the newly-appointed Dean of Engineering, Dave Chowdhury, thinks it is an exciting and challenging time for the School of Engineering.

"Our mandate sees BCIT becoming the flagship institution of technological training in B.C.," explains Chowdhury. "We interpret that to mean that it is our challenge to make this school the first choice for students who are pursuing a career in engineering technology, and the first choice for employers who want to hire graduates of engineering technology."

Chowdhury is no stranger to BCIT. He has worked his way up through the ranks, starting at the Institute in 1979 as an instructor in Marketing Management. He was program head of Advanced Technology Marketing, a program he developed, before becoming Acting Dean of Engineering in 1988.

Chowdhury's academic and professional background equip him with both the technological knowledge and the business savvy the School of Engineering needs to carry out its new mandate. He holds a B.Sc. (Hons) in mathematics, a post-graduate diploma in aeronautical engineering, an M.A. in computer science, an MBA, and a Ph.D. in management science and information systems.

Before joining BCIT, he worked as a manager at B.C. Tel in management information systems, corporate planning and marketing, and at IBM Canada as a systems engineer.

It's not without a hint of pride that Chowdhury describes the changes the School of Engineering has undergone over the last decade.

"The number and type of programs offered by the school has grown to meet industry's changing need for engineering technologists. We now have over 30 offerings covering a broad range of specialities, from computers and electronics, manufacturing and building, surveying and structural to forestry and environmental science, plastics and biotechnology.

"Currently, there is a greater emphasis on offering advanced level programs," he adds. Over the next decade, Chowdhury explains, the School of Engineering will emphasize training at the leading-edge of technology combined with technology transfer and applied research.

"We are moving beyond training at the entry level to dealing directly with the needs of the high technology industry and research community," he says.

"Our faculty will be going back into industry once every five years to exchange and sharpen skills. Industry will be a partner in accessing the facilities and services of the School of Engineering. Our students, as part of their programs, will be undertaking projects for industry to meet industry's expressed needs."

Chowdhury sits on one of the B.C. Science Council's research granting committees. He sees part of his role as creating awareness in industry and the academic community of the changes at BCIT in the area of advanced technology.

A major challenge facing BCIT is recruiting students who may not have been attracted to engineering technology in the past. While industry's need for technologists is growing, says Chowdhury, the number of 18 – 25 year-olds interested in pursuing careers in science and technology appears to be shrinking.

"We are reaching out to the four corners of the province with our information packages and, in particular, we're trying to attract women students into technology right now," says Chowdhury.

The school is also involved in a university degree bridging program with the University of Victoria. It's a pilot program in which five BCIT engineering graduates are taking a six-month bridging program, the successful completion of which allows them entry into the third year of the UVic engineering program.

Now, Chowdhury explains, with initiatives like advanced level training and university bridging programs, students will find more options open when they graduate.

"People want choices that are not limiting," he adds.



Marie Taylor has been appointed the new Chair of BCIT's Development Council. Under her leadership, the Council will undertake a major fundraising drive for BCIT next year. Watch for details in the next issue of Connection.



**Newly appointed Minister** of Advanced Education. Training and Technology. Bruce Strachan, was the guest of honour at the November 28 Alumni **Celebration of Success** Breakfast, a special event in which 11 BCIT students received entrance awards from the Alumni Association, BCIT President John Watson. sitting on the right of **Board of Governors** Chairman Wynne Powell, met with Minister Strachan on his first day in office November 2.



International Education trainees Augustious Mukasa-Kizito (left) and Francis Kissame-Bagoole are participating in fellowships at BCIT. Both are employees of the Ugandan Ministry of Labour, which is responsible for all trades and vocational training in Uganda.

t's not often that a project comes along in Electronics Engineering technology that matches so well the needs of the students with the needs of industry. But for John Paulsen, Paul Lukianiuk, and The Bay department store, the project they undertook together this year was ideal.

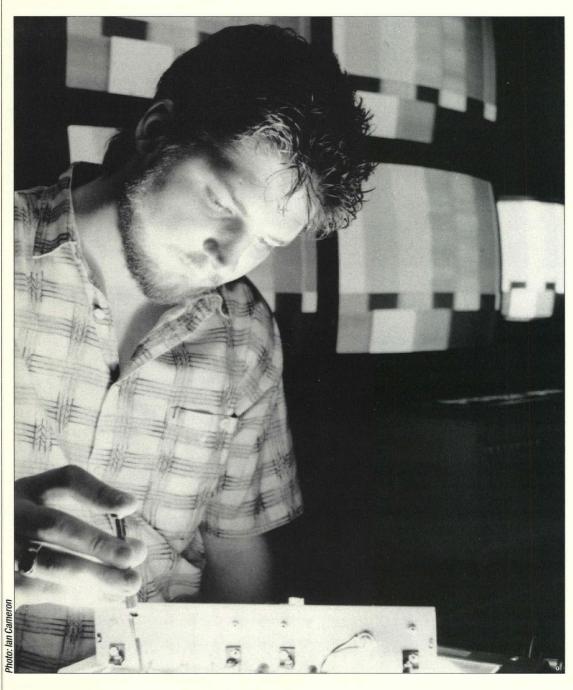
Paulsen and Lukianiuk were students in their final term of Electronics
Engineering technology at BCIT last spring. Like all their classmates, they had to complete a "project course" to gain their diplomas in June. The Bay wanted to explore the possibilities of developing an electronically programmed wall of video screens which could display either pre-taped shows or live shows simultaneously in Bay stores throughout Canada.

When managers of The Bay's Electronics Communication department approached BCIT, they knew there was no guarantee that the project would be successful, or even completed, as student work. But from what they had seen at BCIT's Open House two years previously, they knew that Electronics Engineering technology students were involved in electronic video programming, albeit at a simpler level. They wanted to support that interest with a practical project.

With 16 video screens arranged four high and four across, purchased by The Bay, Paulsen and Lukianiuk set to work even before the project course officially began. Initially using a test pattern, the students were able to program that pattern to appear in only one screen or magnify it to appear in all 16 as one image, or any combination in between. From there they moved to using a videotape that BCIT had produced for promotional purposes, manipulating it to appear in various arrangements and with special effects.

"They put in a lot of extra time on this project," explains Joe Casimir, Associate Dean of Electronics Technology, "because they were doing five or six other courses as well. But we had specially chosen these two students for this project because we felt they had a pretty good

## ELECTRONICS STUDENTS DEVELOP VIDEO WALL FOR THE BAY



Electronics Engineering graduate John Paulsen refines the electronic operating board for his video wall project.

chance of making it work."

By May, The Bay felt the project had progressed so far that they employed Paulsen permanently to work in their Electronics Communication department and complete the project.

In late November, the "video wall" was ready to be shown to Bay managers from across Canada meeting in Toronto.

Plans are being made to purchase screens for major Bay stores so that through satellite link they can simultaneously display promotions or live fashion shows.

"These kinds of practical projects don't come along very often," says Casimir. "They need to be in an area and at a level that final term students can work on, and in a short time frame. But we welcome them when we can because they not only help students, but also help industries with a project that they may have had on their back burner for a while.

"This is the sort of technology transfer that the new BCIT mandate is all about," he adds. ■



BCIT Technology Centre Director Norman Streat: "BCIT's new mandate sets the stage for the Institute to become involved in a large way in research activities."

### TECHNOLOGY CENTRE – A CATALYST BETWEEN INDUSTRY AND FACULTY

he BCIT Technology Centre is about to open a new chapter in the Institute's efforts to provide development assistance and technology transfer to business and industry. When the Centre moved into new premises on campus in November, it came under the direction of recently appointed Technology Centre Director Dr. Norman Streat.

Streat acknowledges that most of the groundwork has already been prepared through activities which have been underway over the past two years. The most significant encouragement has come from BCIT's new mandate which specifically calls upon the Institute to establish expertise and develop applications for B.C. business and industry, and to facilitate technology transfer by providing innovation, industrial assistance and contract applied research.

Streat envisions "a whole range of new projects" getting started through the Technology Centre, which he views as "the catalyst" between industry, funding organizations and BCIT faculty who wish to become involved in applied research.

"This job offers tremendous scope for me personally," explains Streat. "BCIT's new mandate sets the stage for the Institute to become involved in a large way in applied research activities.

"I have come at a time when the adventure is just beginning and I sincerely hope that I can make it happen."

Streat's background has certainly prepared him for the job. He holds a Bachelor of Science degree in engineering and a Ph.D. in metallurgy. For the past decade, he headed the mechanical research team of B.C.

Hydro's R&D Division, now called Powertech Labs Inc.

Streat joined B.C. Hydro when its research effort was in its infancy. He built a team of industrial trouble-shooters which solved failures in equipment such as turbines, transmission lines and generators.

"I was really proud of the group's inventiveness," he recalls. "They developed some new processes and techniques which we patented and which are being commercialized."

The Technology Centre already brings together a number of well-established operating units. These include the Applied Research in Computer Systems (ARCS) lab, an artificial intelligence research project, interactive videodisc projects, biomedical engineering projects, a variety of research projects with small business, the Venture Program, and two Industrial Technical Advisors funded through the National Research Council.

A Construction Technology Advisor, whose position is funded through the National Research Council and the Royal Architectural Institute of Canada, will also set up offices in the Technology Centre's premises.

"The Construction Technology Advisor will be in an ideal spot to tap BCIT's resources," says Ernie Iannacone, manager of the Development Assistance Centre. "Located on campus are Building Technology and the trades, plus the R2000 home."

The Development Assistance Centre, which was previously a non-profit society, is now integrated with the Technology Centre. It will continue to assist with the marketing and patenting of BCIT's applied research activities.

Streat's priorities for the Technology Centre will be getting business and industry involved and raising the funds to support applied research activities.

"The beneficiaries of these applied research activities," he says, "will be our students, who will enjoy an enhanced educational climate, our faculty, who will feel recharged from their interaction with business and industry, and British Columbians, who should see increased economic growth as a result of these efforts."

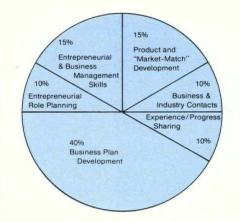
### VENTURE PROGRAM LAUNCHES ENTREPRENEURS

hat does an organic farmer have in common with an adventure tourism organizer or a floral designer with a computer software developer?

An entrepreneurial drive and the commitment to learn the skills needed to turn an idea into a thriving business.

That would also explain why these four business people, along with 12 others from a variety of different academic and professional backgrounds, are enrolled in the first class of BCIT's new Venture Program.

The program is an intensive threemonth course that concentrates on successful business planning and business start-up. It is geared to individuals whose business idea has reached



the "prototype" stage. The focus is on defining a product or service for the marketplace and on establishing the related business.

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Budding entrepreneurs from the first class of the Venture Program are (left o right) Charles Holmes, Elk Ebert, Cliff Neyedli, Wayne Wolchuk, Karen Garton and Adam Fishman.

"The program is geared towards the practical situations that a start-up business would encounter," says Program Advisor Ken Takeuchi. "It is definitely not a business theory course, although some theory is covered.

"The bulk of the course involves participants rolling up their sleeves and developing their own business plans. Each leaves the program with a plan in hand which will be used to approach potential investors or financiers."

According to Takeuchi, the Venture Program participant may be someone who has an idea which is close to the prototype, product or service stage; someone who already has a business but it is not progressing to his/her satisfaction; or someone who is working for a company but has developed a product independently which he/she feels may have potential.

Participants wish to learn how to maximize their business opportunities. Some, who may have come into the program earlier in the conceptual stage of their business ideas, want to find out if they really have sound business opportunities in mind.

"When we review applications for the program," Takeuchi explains, "we're looking for a probability of business success that will create jobs and improve the economy. That's the bottom-line as far as we're concerned.

"I'm sold on the program," adds
Takeuchi, whose background includes
a broad range of corporate and entrepreneurial activities. "If this program
had been available when I was starting
out, I would have saved myself years of
time and thousands of dollars just by
having this kind of condensed training.

"I'm impressed with the quality of the individuals who have applied. They're very success-oriented."



Robyn Marriott (left) and Virginia Welk are students in the 10-month Electricity and Industrial Electronics Program.

### WOMEN IN TRADES AN ANSWER TO SKILL SHORTAGES

C is likely to enjoy accelerated industrial growth well into the next century, but many experts are worried the volume of skilled labour won't keep up with the pace. For women interested in a career in the trades, this represents a great opportunity and BCIT's Women in Trades initiative is the gateway.

Since it received a \$50,000 grant from the B.C. Women's Secretariat last year, the program has been encouraging greater numbers of women into non-traditional trades such as carpentry, machining and mechanics. Program Co-ordinator Kate Pelletier and her

predecessor Valerie Perkio (now with the Open Learning Agency) have been promoting the program both to women and industry with great success.

"We're taking a two-pronged approach," says Pelletier. "We want to help both women and industry by providing more workers, but of course it also helps the economy in the long run."

Dean of Trades Len McNeely praises the work of Pelletier and Perkio who have created a climate in the trades program that is more conducive to women in this traditionally maledominated field. McNeely points to a new part-time exploratory course designed to give prospective students a taste of the trades as an example of the efforts to bring more women into the program. The 30-hour course, due to begin this January, has already received a great deal of interest, he says.

A network/support group for women in the trades is also being organized and the viablity of an on-campus daycare is being examined. Women instructors in carpentry, piping and motorcycle shops serve as visible role-models for the female students in these programs.

Robyn Marriott and Virginia Welk are students in the 10-month Electricity and Industrial Electronics Program. Welk, a 26-year-old native of Kimberley, says she entered the program after an aptitude test showed she could do well in a number of different careers. Electronics was her choice. Marriott already had experience as an electrician's helper when she decided "to go a little further into a field where it is possible to get good employment with equal-opportunity employers."

Welk admits to doing "quite well" in the program. She says her instructors have been encouraging in what she describes as a very challenging course.

Marriott, too, is finding the work challenging and also has the responsibilities of a family. She hopes eventually to apprentice with either B.C. Hydro or the International Brotherhood of Electrical Workers.

BCIT's efforts have already brought the issue of women in trades to both industry and the labour movement. Dean McNeely says that more effort is needed in working with industry to make individuals aware of the value of employing women in the trades.

According to McNeely, the Amalgamated Construction Association and B.C. Hydro are now encouraging women to consider the types of jobs that were traditionally filled by men. The aviation and automotive industries, among others, are beginning to see that, demographically, women are the logical group to remedy their growing skill shortages.

"It really depends on how forwardthinking industries are in facing these impending skill shortages," he adds.

## DISTANCE EDUCATION DELIVERS NURSING COURSES AROUND B.C.

when the provincial government transferred responsibility for advanced nursing programs to BCIT, officials and instructors knew it was a tall order. Among the professions, nurses are one of the most active groups in seeking knowledge and skills upgrading.

Given the wide geographic distribution of nurses and the heavy demands on their time, the Institute had to find ways of delivering courses in the most

flexible manner possible.

The School of Health Sciences found the answer in distance education, says Director of Health Part-Time Studies, Kathleen Bach. Distance education refers to guided-learning courses using print materials, cassettes and other resources to deliver programs off-campus, often outside the Lower Mainland. Students also have access to a "telephone tutor", an individual instructor who is available for consultation toll-free from anywhere in Canada.

The School of Health Sciences currently delivers nearly 70 distance education courses to more than 800 students in all corners of the province at any given time of year. About half the students are enroled in advanced nursing, nursing refresher programs, qualifying courses or diploma courses for nursing programs.

"It's hard enough for many nurses to take courses, let alone travel around the province to access them," Bach says. "Many are mothers who work long rotating shifts. They struggle to get enough sleep and take care of their families, and here they are taking courses!

"We have a great responsibility to these people to be flexible and to deliver

the best programs we can."

The clinical portions of the advanced nursing programs, due to their specializations, are delivered in designated hospitals. This means travel for nurses from more remote locations. When possible, some clinicals and labs are delivered around the province. One example is the Trauma Management nursing lab which is being held on the Sunshine Coast this term and will be offered in Kamloops next term.

"The School of Health Sciences has the advantage of being able to plan its programs in direct response to demands from the health care system," Bach

explains.

"Each program has an advisory committee of specialists who work in the system. Advanced Nursing also has an overall advisory committee comprising the chairmen of the specialty nursing advisory committees. The members who volunteer to serve on these committees keep us up-to-date on the needs of the health care system."

Bach adds that course "packages" are developed in self-contained modules with clear objectives and accompanying resources. The modules can then be used for alternative projects in addition to the course for which they were designed, either as distance education or class-room lectures.

"We're never in the position of wondering what programs to offer or how to offer them," Bach says. "The nurses and hospitals tell us what they need. Every time a course is developed, revised or changed in any way, it goes through the advisory committee. The whole process works extremely well."



Inuvik nurses, Marilyn McCormick (standing) and Jan Ettie, completed the Advanced Operating Room training course through BCIT's distance education program.

## INUVIK NURSES TAKE ADVANCED OPERATING ROOM TRAINING

few months ago, Jim Curtain was alarmed at the chronic shortage of qualified nursing personnel to staff the operating room at Inuvik Hospital. As the hospital's only Registered Nurse qualified to work in the operating room, Curtain knew he could not adequately run the 24-hour emergency and obstetrical care facility with the present staff complement.

But as a BCIT alumnus, he also knew that the Institute's School of Health

Sciences was well-equipped with the expertise, training facilities and the flexibility to help him out of his predicament. At his suggestion, Inuvik Hospital's director of Nursing contacted the School of Health Sciences. Soon after, the co-ordinator of the Operating Room Training program, Marnie Simon, was flown to Inuvik to conduct the tutorial and skills lab of the first two courses in the certificate program.

In September, the two nurses who completed the lab, came to the Lower Mainland to do their practicum at North Vancouver's Lions Gate Hospital. Now that they have returned to Inuvik, Jim Curtain's operating room will run a little smoother.

Simoother.

"We're versatile and can meet the needs of a hospital in a hurry if need be," says Simon.

It may sound glamourous for BCIT's Advanced Nursing Diploma program to send instructors to such distant places as Inuvik, but as Simon says, travel isn't the motivating factor.

"It's the industry itself," she explains.
"A compressed time-frame program which we're now preparing for Burnaby General Hospital carries just the same motivation as a chance to go to Inuvik."

The key to the program's flexibility is the way the components are structured. The first part of the program consists of a combination of a directed independent study and a 10-week clinical practicum. Level two continues with a mix of directed independent study and clinical preceptorship.

The advanced level component to the program offers training in a variety of operating room specialties including vascular, thoracic, two levels of orthopaedics and neurosurgery. Units on opthalmology, cardio-vascular, and ear, nose and throat are currently under development. Also under development are a refresher course and an optional pediatric clinical practicum for operating room nurses.

The success of Simon's program is easily measurable in the number of hospitals that are taking on Advanced nursing students. As president-elect of the B.C. Operating Nurses Group, Simon also has ready access to a network of employers.

# TRANSPORTATION INDUSTRY TRAINING A NATIONAL EFFORT

The automotive industry has strongly felt the impact of advanced technology and, faced with growing skill shortages, industry officials have grown increasingly alarmed. With technology advancing at a quickening pace and fewer people choosing the automotive field as a career, the industry was in danger of falling behind.

Two years ago, the industry began actively promoting the automotive field as an attractive career option in order to draw in more personnel. But it was the recent formation of the Canadian Transportation Institute (CTI) that answered the need for advanced technology training in the transportation industry.

Founded by BCIT in conjunction with Ontario's Centennial College and the Southern Alberta Institute of Technology, CTI is a national network of 14 colleges and training institutions that provides "comprehensive, unified, management and technical service training to the transportation industry of the 1990's."

Dean of Trades Len McNeely is pleased with the co-operative effort of developing and standardizing automotive training programs in colleges across the country. A major part of CTI's work, he says, has been co-ordinating the donations of training equipment and automobiles among the colleges that have automotive training programs.

"When colleges, institutes and high schools go to General Motors or Ford asking for donations such as training aids or automobiles, GM wants a representative in each province to co-ordinate all the requests," says McNeely. "BCIT is setting up that network of colleges with automotive programs right now."

McNeely is also keen on the growing list of clients which CTI is building. Along with General Motors, CTI is working on training with Midas and Sears. Canadian Tire ranks as a potential client as it is actively enlisting the support of the colleges and institutes to attract students to its industry. Canadian Tire also advocates the liaison of CTI and the automotive sector to deliver a standardized curriculum for training.

The benefits of CTI's national structure are now being realized. With the opening in Toronto of Sears' new automotive centre, Sears mechanics need upgraded training to cope with new technology. According to McNeely, present discussions between Sears Toronto and CTI may well lead to colleges across the nation delivering training to Sears employees.

### AWARDS LINK BETWEEN STUDENTS AND INDUSTRY

large mining company in British Columbia has quietly helped six BCIT students make it through the second year of their studies. Not donated with a loud public fanfare, these scholarships have added up to more than \$71,000 over that period, a gift from Placer Dome Inc. to BCIT students.

"Over the years we haven't changed our minds about the value of giving scholarships," says Hugh Leggatt of the Corporate Communications department at Placer Dome, an international company with three operating mines in B.C. "Our youth in B.C. represent our future, and the scholarships benefit not only the students, but also the future of our own industry in this province."

Placer Dome is just one of more than 600 donors of awards to BCIT students, and their reasoning is echoed in one way or another across the range of businesses, individuals, groups and service clubs who each year make it easier for some to afford an education.

Although Placer Dome restricts its awards to students in Financial Management, Mining, Surveying and Chemical Sciences, it doesn't do so with the expectation that their scholarship winners will become future employees. "It's an arm's length thing, really," explains Leggatt. "We see it as an investment in the community."

As BCIT's links with companies throughout the province have increased over the life of the Institute, more and more donors are seeing value in giving financial help to students which will result in qualified potential employees in the future. Teck Corporation, for example, gave its first scholarship this year. Their award of \$1,200 is specifically for a student entering the first year of a two-year mining program at BCIT.

While some donors want to encourage students who are halfway through their programs, other donors want to reward students for their hard work at the end of their programs. Many professional

organizations, for example, donate graduating awards to encourage excellence in their fields. The Society of the Plastics Industry of Canada covers both options. It awards a scholarship to a student in the Plastics Technology program, and a graduating award at Convocation in June of each year.

There has also been a very significant increase lately in the number of memorial awards available to students, according to Jennifer Orum, head of BCIT's Financial Aid and Awards office. People who have been affiliated with BCIT over the years are beginning to set up memorial awards in the name of friends or family.

"This appears to be a natural outgrowth of BCIT's high profile in the community built over 25 years," says Orum. The Malcolm Wickson Memorial Fund, established only last year to honor the former BCIT Board Chairman, has already generated enough interest to cover awards to second-year students who demonstrated both academic achievement and leadership. Some memorial scholarships are even being established now in the name of people who have had no previous connection with BCIT, according to Orum. The reputation of BCIT programs is enough to spark family and associates to launch a memorial award.

"Awards and scholarships form a very important milestone for students," says Michael Harrison, dean of BCIT's School of Business. "Although the financial help is always appreciated, scholarships are a great motivation for students because they recognize the students' achievements.

"They also form a vital link among students, the school and industry," Harrison adds. "And they are a source of great satisfaction to faculty, who have helped those students who receive awards to reach this achievement," he says.



### CAMPUS MASTER PLAN ENVISIONS BCIT OF THE FUTURE

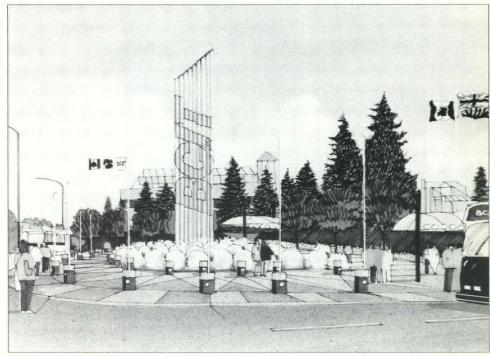
beautifully landscaped academic village linked by two ring roads, with covered walkways and open communal areas – these are some of the features envisioned in a new plan for the BCIT campus, currently being considered by the Board of Governors.

The result of four months research and analysis by a team of architects, engineering experts, traffic engineers, landscape architects and quantity surveyors, the BCIT Campus Master Plan is an all-encompassing blueprint for the campus. It includes, among other things, physical layout, traffic considerations, campus image and character and provisions for handicapped accessibility.

One of the Board's central concerns is the capital funding required for the plan's implementation, estimated at over \$60 million. This would cover improvements around the perimeter of the campus, upgrading existing structures, new classrooms and laboratories to replace portable buildings, building the Campus Centre, and making numerous building improvements on campus.

Additional phases over 10 to 15 years allow for additional building requirements to meet enrolment increases.





Top: Artist's rendering of proposed new campus entrance. Above: BCIT Plaza at Canada Way, envisioned by Hotson Bakker Architects.

### PLAN TO ATTEND OPEN HOUSE 1990

BCIT OPEN HOUSE 1990
April 6th, 7th & 8th

pisplays designed and built by BCIT students, sporting events, and live entertainment are only some of the activities planned for visitors to BCIT's Open House '90. The theme of Open House is "Challenging The Future Today" and it runs for three days beginning Friday, April 6.

The student organized and operated Open House aims to create awareness of BCIT among potential students, prospective employers, alumni and the general public. According to Open House Co-ordinator Lori De Cou, her team of student volunteers will be transforming the campus into a "mini-Expo". As visitors make their way to the various displays and demonstrations, she promises they will be "continuously entertained" by a rich variety of street performers.

Other events will include logger sports demonstrations (with audience participation), an exhibition soccer match on Saturday, April 7th featuring the Vancouver 86'ers, and on the same Saturday evening a dance highlighting a popular local band.

Watch in January for a province-wide student contest promoting BCIT's Open House through participating Shopper's Drug Mart stores. Be sure to mark April 6th, 7th and 8th on your calendar because Open House '90 is designed to interest every member of your family. Admission is free.

Alistair Black. chief construction engineer of **Associated** Engineering (B.C.) Ltd., receives the **Advisory Committee** Award from President John Watson. The award is presented twice annually to outstanding advisory committee members. Black is the chairman of the civil and structural advisory committee.

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